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Project: Assignment Week 6 Model: B3_Frame Date: 18/10/2021

STRUCTURAL ANALYSIS

PROJECT

B3_Frame

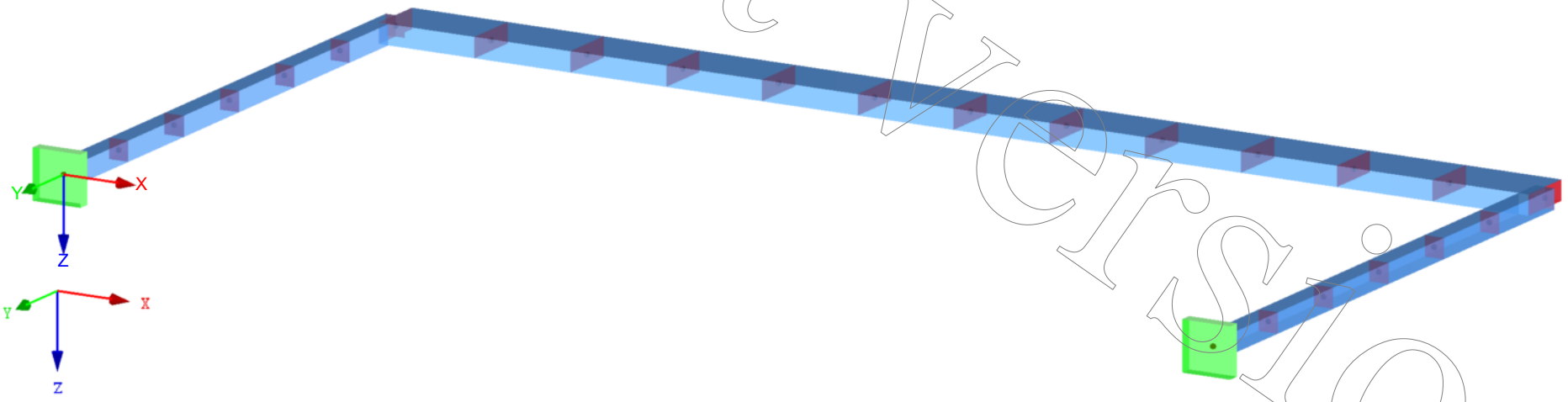
CLIENT

ENG-A2001

CREATED BY

NGUYEN XUAN BINH 887799

Isometric



Student version

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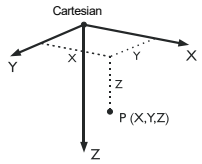
MODEL - GENERAL DATA

General	Model name	:	B3_Frame	
	Project name	:	Assignment Week 6	
	Type of model	:	3D	
	Positive direction of global axis Z	:	Downward	
	Classification of load cases and combinations	:	According to Standard: EN 1990 National Annex: SFS - Finland	
	☒ Automatically create combinations	:	☒ Load Combinations	
Options	☐ RF-FORM-FINDING - Find initial equilibrium shapes of membrane and cable structures			
	☑ RF-CUTTING-PATTERN			
	☐ Piping analysis			
	☐ Use CQC Rule			
	☐ Enable CAD/BIM model			
	Standard Gravity			
	g	:	10.00 m/s²	

FE MESH SETTINGS

General	Target length of finite elements	l_{FE}	:	0.500 m	
	Maximum distance between a node and a line to integrate it into the line	ε	:	0.001 m	
	Maximum number of mesh nodes (in thousands)		:	500	
Members	Number of divisions of members with cable, elastic foundation, taper, or plastic characteristic		:	10	
	☒ Activate member divisions for large deformation or post-critical analysis				
	☒ Use division for members with node lying on them				
Surfaces	Maximum ratio of FE rectangle diagonals	Δ_D	:	1.800	
	Maximum out-of-plane inclination of two finite elements	α	:	0.50 °	
	Shape direction of finite elements		:	Triangles and quadrangles ☒ Same squares where possible	

1.1 NODES



Node No.	Node Type	Reference Node	Coordinate System	Node Coordinates X [m]	Y [m]	Z [m]	Comment
1	Standard	-	Cartesian	0.000	0.000	0.000	
2	Standard	-	Cartesian	0.000	-6.000	0.000	
3	Standard	-	Cartesian	12.000	-6.000	0.000	
4	Standard	-	Cartesian	12.000	0.000	0.000	
5	Standard	-	Cartesian	1.000	-6.000	0.000	
6	Standard	-	Cartesian	2.000	-6.000	0.000	
7	Standard	-	Cartesian	3.000	-6.000	0.000	
8	Standard	-	Cartesian	4.000	-6.000	0.000	
9	Standard	-	Cartesian	5.000	-6.000	0.000	
10	Standard	-	Cartesian	6.000	-6.000	0.000	
11	Standard	-	Cartesian	7.000	-6.000	0.000	
12	Standard	-	Cartesian	8.000	-6.000	0.000	

1.1 NODES

Node No.	Node Type	Reference Node	Coordinate System	Node Coordinates X [m]	Y [m]	Z [m]	Comment
13	Standard	-	Cartesian	9.000	-6.000	0.000	
14	Standard	-	Cartesian	10.000	-6.000	0.000	
15	Standard	-	Cartesian	11.000	-6.000	0.000	
16	Standard	-	Cartesian	0.000	-1.000	0.000	
17	Standard	-	Cartesian	0.000	-2.000	0.000	
18	Standard	-	Cartesian	0.000	-3.000	0.000	
19	Standard	-	Cartesian	0.000	-4.000	0.000	
20	Standard	-	Cartesian	0.000	-5.000	0.000	
21	Standard	-	Cartesian	12.000	-1.000	0.000	
22	Standard	-	Cartesian	12.000	-2.000	0.000	
23	Standard	-	Cartesian	12.000	-3.000	0.000	
24	Standard	-	Cartesian	12.000	-4.000	0.000	
25	Standard	-	Cartesian	12.000	-5.000	0.000	

1.2 LINES

Line No.	Line Type	Nodes No.	Line Length L [m]		Comment
1	Polyline	16,1	1.000	Y	
2	Polyline	5,2	1.000	X	
3	Polyline	4,21	1.000	Y	
4	Polyline	6,5	1.000	X	
5	Polyline	7,6	1.000	X	
6	Polyline	8,7	1.000	X	
7	Polyline	9,8	1.000	X	
8	Polyline	10,9	1.000	X	
9	Polyline	11,10	1.000	X	
10	Polyline	12,11	1.000	X	
11	Polyline	13,12	1.000	X	
12	Polyline	14,13	1.000	X	
13	Polyline	15,14	1.000	X	
14	Polyline	3,15	1.000	X	
15	Polyline	17,16	1.000	Y	
16	Polyline	18,17	1.000	Y	
17	Polyline	19,18	1.000	Y	
18	Polyline	20,19	1.000	Y	
19	Polyline	2,20	1.000	Y	
20	Polyline	21,22	1.000	Y	
21	Polyline	22,23	1.000	Y	
22	Polyline	23,24	1.000	Y	
23	Polyline	24,25	1.000	Y	
24	Polyline	25,3	1.000	Y	

1.3 MATERIALS

Matl. No.	Modulus E [MN/m²]	Modulus G [MN/m²]	Poisson's Ratio ν [-]	Spec. Weight γ [kN/m³]	Coeff. of Th. Exp. α [1/°C]	Partial Factor γ_M [-]	Material Model
1	Steel S 235 | SFS EN 1993-1-1:2005						
	210000.000	80769.200	0.300	78.50	1.20E-05	1.00	Isotropic Linear Elastic
2	Steel A992 | ANSI/AISC 360-16:2016						
	199948.000	77221.300	0.295	78.49	1.20E-05	1.00	Isotropic Linear Elastic
3	Beam & Column Material						
	36000.000	15000.000	0.200	25.00	0.00E+00	1.00	Isotropic Linear Elastic

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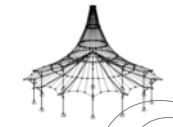
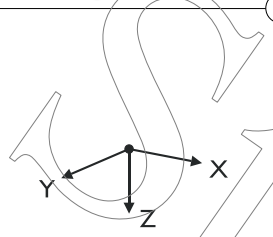


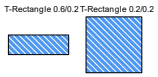


1.7 NODAL SUPPORTS

Support No.	Nodes No.	Axis System	Column in Z	Support Conditions $u_{X'}$	$u_{Y'}$	$u_{Z'}$	$\varphi_{X'}$	$\varphi_{Y'}$	$\varphi_{Z'}$
1	1	User Defined X',Y',Z'	☐	☒	☒	☒	☒	☒	☒
2	4	User Defined X',Y',Z'	☐	☒	☒	☒	☒	☒	☒

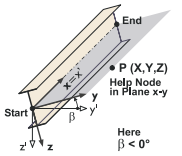
1.7.10 NODAL SUPPORTS - USER-DEFINED AXIS SYSTEM

Support No.	Direction Type	Sequence	Rotation [°] about X	about Y	about Z	Coordinate System	1st axis	Node 1 No.	Node 2 No.	2nd axis	Reference Node	Member/Line No.
1	Rotated	ZYX	0.00	0.00	-90.00							
2	Rotated	ZYX	0.00	0.00	90.00							



1.13 CROSS-SECTIONS

Section No.	Matl. No.	J [cm⁴] / A [cm²]	I_y [cm⁴] / A_y [cm²]	I_z [cm⁴] / A_z [cm²]	Principal Axes α [°]	Rotation α' [°]	Overall Dimensions [m] Width b	Height h
1	T-Rectangle 0.6/0.2							
	3	126434.23	40000.00	360000.00	0.00	0.00	0.600	0.200
		1200.00	1000.00	1000.00				
2	T-Rectangle 0.2/0.2							
	3	22506.67	13333.33	13333.33	0.00	0.00	0.200	0.200
		400.00	333.33	333.33				



1.17 MEMBERS

Mbr. No.	Line No.	Member	Rotation Type	Rotation β[°]	Cross-Section Start	Cross-Section End	Hinge No. Start	Hinge No. End	Ecc. No.	Div. No.	Length L [m]	
1	1	Beam	Angle	0.00	2	2	-	-	-	-	1.000	Y
2	2	Beam	Angle	0.00	1	1	-	-	-	-	1.000	X
3	3	Beam	Angle	0.00	2	2	-	-	-	-	1.000	Y
4	4	Beam	Angle	0.00	1	1	-	-	-	-	1.000	X
5	5	Beam	Angle	0.00	1	1	-	-	-	-	1.000	X
6	6	Beam	Angle	0.00	1	1	-	-	-	-	1.000	X
7	7	Beam	Angle	0.00	1	1	-	-	-	-	1.000	X
8	8	Beam	Angle	0.00	1	1	-	-	-	-	1.000	X
9	9	Beam	Angle	0.00	1	1	-	-	-	-	1.000	X
10	10	Beam	Angle	0.00	1	1	-	-	-	-	1.000	X
11	11	Beam	Angle	0.00	1	1	-	-	-	-	1.000	X
12	12	Beam	Angle	0.00	1	1	-	-	-	-	1.000	X
13	13	Beam	Angle	0.00	1	1	-	-	-	-	1.000	X
14	14	Beam	Angle	0.00	1	1	-	-	-	-	1.000	X
15	15	Beam	Angle	0.00	2	2	-	-	-	-	1.000	Y
16	16	Beam	Angle	0.00	2	2	-	-	-	-	1.000	Y
17	17	Beam	Angle	0.00	2	2	-	-	-	-	1.000	Y
18	18	Beam	Angle	0.00	2	2	-	-	-	-	1.000	Y
19	19	Beam	Angle	0.00	2	2	-	-	-	-	1.000	Y
20	20	Beam	Angle	0.00	2	2	-	-	-	-	1.000	Y
21	21	Beam	Angle	0.00	2	2	-	-	-	-	1.000	Y
22	22	Beam	Angle	0.00	2	2	-	-	-	-	1.000	Y
23	23	Beam	Angle	0.00	2	2	-	-	-	-	1.000	Y
24	24	Beam	Angle	0.00	2	2	-	-	-	-	1.000	Y

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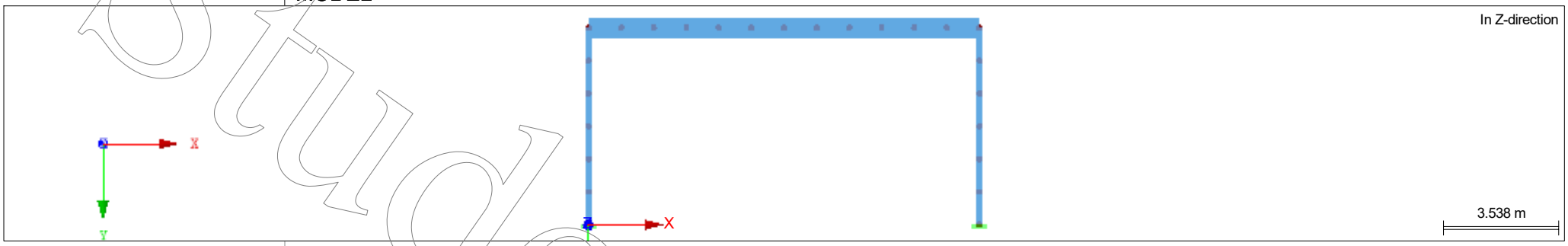
MODEL



2.1 LOAD CASES

Load Case	Load Case Description	EN 1990 | SFS Action Category	Active	Self-Weight - Factor in Direction X	Y	Z
LC1	Self-weight	Permanent	☒	0.000	1.000	0.000
LC2	Wind	Wind	☐			
LC3	Snow	Snow - s-k < 2.75 kN/m^2	☐			

2.1.1 LOAD CASES - CALCULATION PARAMETERS

Load Case	Load Case Description		Calculation Parameters
LC1	Self-weight	Method of analysis	: ◉ Geometrically linear analysis
		Method for solving system of nonlinear algebraic equations	: ◉ Newton-Raphson
		Activate stiffness factors of:	: ☒ Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: ☒ Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
LC2	Wind	Method of analysis	: ◉ Geometrically linear analysis
		Method for solving system of nonlinear algebraic equations	: ◉ Newton-Raphson
		Activate stiffness factors of:	: ☒ Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: ☒ Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
LC3	Snow	Method of analysis	: ◉ Geometrically linear analysis
		Method for solving system of nonlinear algebraic equations	: ◉ Newton-Raphson
		Activate stiffness factors of:	: ☒ Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: ☒ Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)

2.5 LOAD COMBINATIONS

Load Combin.	DS	Load Combination Description	No.	Factor	Load Case	
CO1	ULS'	1.35G	1	1.35	LC1	Self-weight
CO2	ULS'	1.15G + 1.5Qw	1	1.15	LC1	Self-weight
			2	1.50	LC2	Wind

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2.5 LOAD COMBINATIONS

Load Combin.	DS	Load Combination Description	No.	Factor		Load Case
CO3	ULS'	1.15G + 1.5Qw + 1.05Qs	1	1.15	LC1	Self-weight
			2	1.50	LC2	Wind
			3	1.05	LC3	Snow
CO4	ULS'	1.15G + 1.5Qs	1	1.15	LC1	Self-weight
			2	1.50	LC3	Snow
CO5	ULS'	1.15G + 0.9Qw + 1.5Qs	1	1.15	LC1	Self-weight
			2	0.90	LC2	Wind
			3	1.50	LC3	Snow
CO6	S Ch	G	1	1.00	LC1	Self-weight
CO7	S Ch	G + Qw	1	1.00	LC1	Self-weight
			2	1.00	LC2	Wind
CO8	S Ch	G + Qw + 0.7Qs	1	1.00	LC1	Self-weight
			2	1.00	LC2	Wind
			3	0.70	LC3	Snow
CO9	S Ch	G + Qs	1	1.00	LC1	Self-weight
			2	1.00	LC3	Snow
CO10	S Ch	G + 0.6Qw + Qs	1	1.00	LC1	Self-weight
			2	0.60	LC2	Wind
			3	1.00	LC3	Snow
CO11	S Fr	G	1	1.00	LC1	Self-weight
CO12	S Fr	G + 0.2Qw	1	1.00	LC1	Self-weight
			2	0.20	LC2	Wind
CO13	S Fr	G + 0.2Qw + 0.2Qs	1	1.00	LC1	Self-weight
			2	0.20	LC2	Wind
			3	0.20	LC3	Snow
CO14	S Fr	G + 0.4Qs	1	1.00	LC1	Self-weight
			2	0.40	LC3	Snow
CO15	S Qp	G	1	1.00	LC1	Self-weight
CO16	S Qp	G + 0.2Qs	1	1.00	LC1	Self-weight
			2	0.20	LC3	Snow
CO17		1.35G + 1.5Qw + 1.05Qs	1	1.35	LC1	Self-weight
			2	1.50	LC2	Wind
			3	1.05	LC3	Snow

2.5.2 LOAD COMBINATIONS - CALCULATION PARAMETERS

Load Combin.	Description	Calculation Parameters		
CO1	1.35G	Method of analysis	:	◉ Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	:	◉ Picard
		Options	:	☒ Consider favorable effects due to tension
			:	☒ Refer internal forces to deformed system for:
				☒ Normal forces N
				☒ Shear forces V_y and V_z
				☒ Moments M_y, M_z and M_T
		Activate stiffness factors of:	:	☒ Materials (partial factor γM)
			:	☒ Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			:	☒ Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO2	1.15G + 1.5Qw	Method of analysis	:	◉ Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	:	◉ Picard
		Options	:	☒ Consider favorable effects due to tension
			:	☒ Refer internal forces to deformed system for:
				☒ Normal forces N

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2.5.2 LOAD COMBINATIONS - CALCULATION PARAMETERS

Load Combin.	Description		Calculation Parameters
			☒ Shear forces V_y and V_z ☒ Moments M_y, M_z and M_T
		Activate stiffness factors of:	: ☒ Materials (partial factor γM) : ☒ Cross-sections (factor for J, I_y, I_z, A, A_y, A_z) : ☒ Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO3	1.15G + 1.5Qw + 1.05Qs	Method of analysis	: ⊙ Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: ⊙ Picard
		Options	: ☒ Consider favorable effects due to tension : ☒ Refer internal forces to deformed system for: ☒ Normal forces N ☒ Shear forces V_y and V_z ☒ Moments M_y, M_z and M_T
		Activate stiffness factors of:	: ☒ Materials (partial factor γM) : ☒ Cross-sections (factor for J, I_y, I_z, A, A_y, A_z) : ☒ Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO4	1.15G + 1.5Qs	Method of analysis	: ⊙ Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: ⊙ Picard
		Options	: ☒ Consider favorable effects due to tension : ☒ Refer internal forces to deformed system for: ☒ Normal forces N ☒ Shear forces V_y and V_z ☒ Moments M_y, M_z and M_T
		Activate stiffness factors of:	: ☒ Materials (partial factor γM) : ☒ Cross-sections (factor for J, I_y, I_z, A, A_y, A_z) : ☒ Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO5	1.15G + 0.9Qw + 1.5Qs	Method of analysis	: ⊙ Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: ⊙ Picard
		Options	: ☒ Consider favorable effects due to tension : ☒ Refer internal forces to deformed system for: ☒ Normal forces N ☒ Shear forces V_y and V_z ☒ Moments M_y, M_z and M_T
		Activate stiffness factors of:	: ☒ Materials (partial factor γM) : ☒ Cross-sections (factor for J, I_y, I_z, A, A_y, A_z) : ☒ Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO6	G	Method of analysis	: ⊙ Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: ⊙ Picard
		Options	: ☒ Consider favorable effects due to tension : ☒ Refer internal forces to deformed system for: ☒ Normal forces N ☒ Shear forces V_y and V_z ☒ Moments M_y, M_z and M_T
		Activate stiffness factors of:	: ☒ Materials (partial factor γM) : ☒ Cross-sections (factor for J, I_y, I_z, A, A_y, A_z) : ☒ Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO7	G + Qw	Method of analysis	: ⊙ Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: ⊙ Picard
		Options	: ☒ Consider favorable effects due to tension : ☒ Refer internal forces to deformed system for: ☒ Normal forces N ☒ Shear forces V_y and V_z

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2.5.2 LOAD COMBINATIONS - CALCULATION PARAMETERS

Load Combin.	Description		Calculation Parameters
			☒ Moments M_y, M_z and M_T
		Activate stiffness factors of:	: ☒ Materials (partial factor γM) : ☒ Cross-sections (factor for J, I_y, I_z, A, A_y, A_z) : ☒ Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO8	G + Qw + 0.7Qs	Method of analysis	: ⊙ Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: ⊙ Picard
		Options	: ☒ Consider favorable effects due to tension : ☒ Refer internal forces to deformed system for: ☒ Normal forces N ☒ Shear forces V_y and V_z ☒ Moments M_y, M_z and M_T
		Activate stiffness factors of:	: ☒ Materials (partial factor γM) : ☒ Cross-sections (factor for J, I_y, I_z, A, A_y, A_z) : ☒ Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO9	G + Qs	Method of analysis	: ⊙ Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: ⊙ Picard
		Options	: ☒ Consider favorable effects due to tension : ☒ Refer internal forces to deformed system for: ☒ Normal forces N ☒ Shear forces V_y and V_z ☒ Moments M_y, M_z and M_T
		Activate stiffness factors of:	: ☒ Materials (partial factor γM) : ☒ Cross-sections (factor for J, I_y, I_z, A, A_y, A_z) : ☒ Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO10	G + 0.6Qw + Qs	Method of analysis	: ⊙ Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: ⊙ Picard
		Options	: ☒ Consider favorable effects due to tension : ☒ Refer internal forces to deformed system for: ☒ Normal forces N ☒ Shear forces V_y and V_z ☒ Moments M_y, M_z and M_T
		Activate stiffness factors of:	: ☒ Materials (partial factor γM) : ☒ Cross-sections (factor for J, I_y, I_z, A, A_y, A_z) : ☒ Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO11	G	Method of analysis	: ⊙ Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: ⊙ Picard
		Options	: ☒ Consider favorable effects due to tension : ☒ Refer internal forces to deformed system for: ☒ Normal forces N ☒ Shear forces V_y and V_z ☒ Moments M_y, M_z and M_T
		Activate stiffness factors of:	: ☒ Materials (partial factor γM) : ☒ Cross-sections (factor for J, I_y, I_z, A, A_y, A_z) : ☒ Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO12	G + 0.2Qw	Method of analysis	: ⊙ Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: ⊙ Picard
		Options	: ☒ Consider favorable effects due to tension : ☒ Refer internal forces to deformed system for: ☒ Normal forces N ☒ Shear forces V_y and V_z ☒ Moments M_y, M_z and M_T

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2.5.2 LOAD COMBINATIONS - CALCULATION PARAMETERS

Load Combin.	Description		Calculation Parameters
		Activate stiffness factors of:	: ☒ Materials (partial factor γM) : ☒ Cross-sections (factor for J, I_y, I_z, A, A_y, A_z) : ☒ Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO13	G + 0.2Qw + 0.2Qs	Method of analysis	: ⊙ Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: ⊙ Picard
		Options	: ☒ Consider favorable effects due to tension : ☒ Refer internal forces to deformed system for: ☒ Normal forces N ☒ Shear forces V_y and V_z ☒ Moments M_y, M_z and M_T
		Activate stiffness factors of:	: ☒ Materials (partial factor γM) : ☒ Cross-sections (factor for J, I_y, I_z, A, A_y, A_z) : ☒ Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO14	G + 0.4Qs	Method of analysis	: ⊙ Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: ⊙ Picard
		Options	: ☒ Consider favorable effects due to tension : ☒ Refer internal forces to deformed system for: ☒ Normal forces N ☒ Shear forces V_y and V_z ☒ Moments M_y, M_z and M_T
		Activate stiffness factors of:	: ☒ Materials (partial factor γM) : ☒ Cross-sections (factor for J, I_y, I_z, A, A_y, A_z) : ☒ Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO15	G	Method of analysis	: ⊙ Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: ⊙ Picard
		Options	: ☒ Consider favorable effects due to tension : ☒ Refer internal forces to deformed system for: ☒ Normal forces N ☒ Shear forces V_y and V_z ☒ Moments M_y, M_z and M_T
		Activate stiffness factors of:	: ☒ Materials (partial factor γM) : ☒ Cross-sections (factor for J, I_y, I_z, A, A_y, A_z) : ☒ Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO16	G + 0.2Qs	Method of analysis	: ⊙ Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: ⊙ Picard
		Options	: ☒ Consider favorable effects due to tension : ☒ Refer internal forces to deformed system for: ☒ Normal forces N ☒ Shear forces V_y and V_z ☒ Moments M_y, M_z and M_T
		Activate stiffness factors of:	: ☒ Materials (partial factor γM) : ☒ Cross-sections (factor for J, I_y, I_z, A, A_y, A_z) : ☒ Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO17	1.35G + 1.5Qw + 1.05Qs	Method of analysis	: ⊙ Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: ⊙ Picard
		Options	: ☒ Consider favorable effects due to tension : ☒ Refer internal forces to deformed system for: ☒ Normal forces N ☒ Shear forces V_y and V_z ☒ Moments M_y, M_z and M_T
		Activate stiffness factors of:	: ☒ Materials (partial factor γM)

Student Version

2.5.2 LOAD COMBINATIONS - CALCULATION PARAMETERS

Load Combin.	Description	Calculation Parameters
		: ☒ Cross-sections (factor for J, I_y, I_z, A, A_y, A_z) : ☒ Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)

2.7 RESULT COMBINATIONS

Result Combin	Description	Loading
RC1	ULS (STR/GEO) - Permanent / transient - Eq. 6.10a and 6.10b	CO1/p or to CO5
RC2	SLS - Characteristic	CO6/p or to CO10
RC3	SLS - Frequent	CO11/p or to CO14
RC4	SLS - Quasi-permanent	CO15/p or CO16/p

LC2
Wind

3.2 MEMBER LOADS

LC2: Wind

No.	Reference to	On Members No.	Load Type	Load Distribution	Load Direction	Reference Length	Load Parameters Symbol	Value	Unit
1	Members	1,15-19	Force	Uniform	XP	Projected Length	p	1.000	kN/m

3.2/1 MEMBER LOADS - LOAD ECCENTRICITY

LC2: Wind

No.	Reference to	On Members No.	Absolute Offset Mbr. Start e_Y [m]	Absolute Offset Mbr. Start e_Z [m]	Absolute Offset Mbr. End e_Y [m]	Absolute Offset Mbr. End e_Z [m]	Relative Offset Mbr. Start y-Axis	Relative Offset Mbr. Start z-Axis	Relative Offset Mbr. End y-Axis	Relative Offset Mbr. End z-Axis
1	Members	1,15-19	0.000	0.000	0.000	0.000	Middle	Middle	Middle	Middle

LC3
Snow

3.2 MEMBER LOADS

LC3: Snow

No.	Reference to	On Members No.	Load Type	Load Distribution	Load Direction	Reference Length	Load Parameters Symbol	Value	Unit
1	Members	2,4-14	Force	Uniform	YP	Projected Length	p	4.000	kN/m

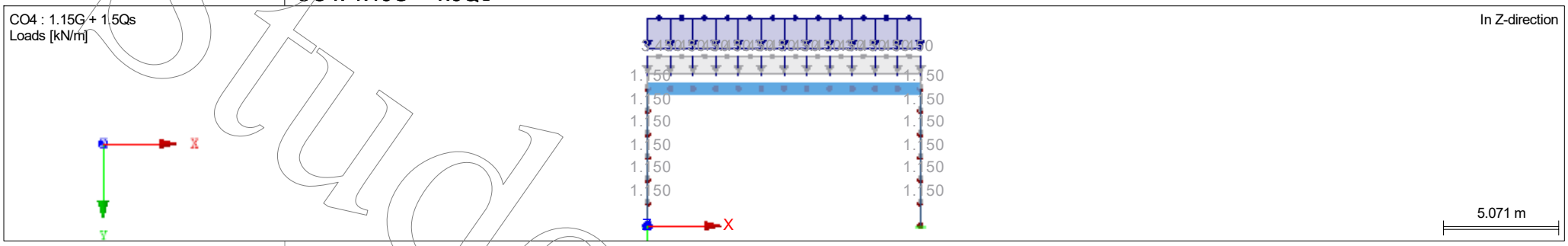
3.2/1 MEMBER LOADS - LOAD ECCENTRICITY

LC3: Snow

No.	Reference to	On Members No.	Absolute Offset Mbr. Start e_Y [m]	Absolute Offset Mbr. Start e_Z [m]	Absolute Offset Mbr. End e_Y [m]	Absolute Offset Mbr. End e_Z [m]	Relative Offset Mbr. Start y-Axis	Relative Offset Mbr. Start z-Axis	Relative Offset Mbr. End y-Axis	Relative Offset Mbr. End z-Axis
1	Members	2,4-14	0.000	0.000	0.000	0.000	Middle	Middle	Middle	Middle

Student Version

CO4: 1.15G + 1.5QS



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4.0 RESULTS - SUMMARY

	Description	Value	Unit	Comment
Load Case LC1 - Self-weight				
	Sum of loads in X	0.00	kN	
	Sum of support reactions in X	0.00	kN	
	Sum of loads in Y	48.00	kN	
	Sum of support reactions in Y	48.00	kN	Deviation 0.00%
	Sum of loads in Z	0.00	kN	
	Sum of support reactions in Z	0.00	kN	
	Resultant of reactions about X	0.000	kNm	At center of gravity of model (X:6.000, Y:-5.250, Z:0.000 m)
	Resultant of reactions about Y	0.000	kNm	At center of gravity of model
	Resultant of reactions about Z	0.000	kNm	At center of gravity of model
	Max. displacement in X	-1.29	mm	Member No. 17, x: 0.000 m
	Max. displacement in Y	5.73	mm	Member No. 8, x: 0.000 m
	Max. displacement in Z	0.00	mm	
	Max. vector displacement	5.73	mm	Member No. 8, x: 0.000 m
	Max. rotation about X	0.0	mrad	
	Max. rotation about Y	0.0	mrad	
	Max. rotation about Z	1.5	mrad	Member No. 2, x: 0.700 m
	Maximum member strain	0.00000	-	Member No. 0, x: 0.000 m
	Method of analysis	Linear		Geometrically linear analysis
	Reduction of stiffness			Cross-sections, Members, Surfaces
	Number of load increments	1		
	Number of iterations	1		
	Maximum value of element of stiffness matrix on diagonal	8.64E+09		
	Minimum value of element of stiffness matrix on diagonal	6.752E+06		
	Stiffness matrix determinant	2.522E+1095		
	Infinity Norm	1.728E+10		
Load Case LC2 - Wind				
	Sum of loads in X	6.00	kN	
	Sum of support reactions in X	6.00	kN	Deviation 0.00%
	Sum of loads in Y	0.00	kN	
	Sum of support reactions in Y	0.00	kN	
	Sum of loads in Z	0.00	kN	
	Sum of support reactions in Z	0.00	kN	
	Resultant of reactions about X	0.000	kNm	At center of gravity of model (X:6.000, Y:-5.250, Z:0.000 m)
	Resultant of reactions about Y	0.000	kNm	At center of gravity of model
	Resultant of reactions about Z	-13.500	kNm	At center of gravity of model
	Max. displacement in X	5.78	mm	Member No. 2, x: 1.000 m
	Max. displacement in Y	-0.20	mm	Member No. 10, x: 0.300 m
	Max. displacement in Z	0.00	mm	
	Max. vector displacement	5.79	mm	Member No. 10, x: 0.900 m
	Max. rotation about X	0.0	mrad	
	Max. rotation about Y	0.0	mrad	
	Max. rotation about Z	1.6	mrad	Member No. 16, x: 0.800 m
	Maximum member strain	0.00000	-	Member No. 0, x: 0.000 m
	Method of analysis	Linear		Geometrically linear analysis
	Reduction of stiffness			Cross-sections, Members, Surfaces
	Number of load increments	1		
	Number of iterations	1		
	Maximum value of element of stiffness matrix on diagonal	8.64E+09		
	Minimum value of element of stiffness matrix on diagonal	6.752E+06		
	Stiffness matrix determinant	2.522E+1095		
	Infinity Norm	1.728E+10		
Load Case LC3 - Snow				
	Sum of loads in X	0.00	kN	
	Sum of support reactions in X	0.00	kN	
	Sum of loads in Y	48.00	kN	

Student Version

4.0 RESULTS - SUMMARY

	Description	Value	Unit	Comment
	Sum of support reactions in Y	48.00	kN	Deviation 0.00%
	Sum of loads in Z	0.00	kN	
	Sum of support reactions in Z	0.00	kN	
	Resultant of reactions about X	0.000	kNm	At center of gravity of model (X:6.000, Y:-5.250, Z:0.000 m)
	Resultant of reactions about Y	0.000	kNm	At center of gravity of model
	Resultant of reactions about Z	0.000	kNm	At center of gravity of model
	Max. displacement in X	-1.72	mm	Member No. 17, x: 0.000 m
	Max. displacement in Y	7.62	mm	Member No. 8, x: 0.000 m
	Max. displacement in Z	0.00	mm	
	Max. vector displacement	7.62	mm	Member No. 8, x: 0.000 m
	Max. rotation about X	0.0	mrad	
	Max. rotation about Y	0.0	mrad	
	Max. rotation about Z	1.9	mrad	Member No. 2, x: 0.700 m
	Maximum member strain	0.00000	-	Member No. 0, x: 0.000 m
	Method of analysis	Linear		Geometrically linear analysis
	Reduction of stiffness			Cross-sections, Members, Surfaces
	Number of load increments	1		
	Number of iterations	1		
	Maximum value of element of stiffness matrix on diagonal	8.64E+09		
	Minimum value of element of stiffness matrix on diagonal	6.752E+06		
	Stiffness matrix determinant	2.522E+1095		
	Infinity Norm	1.728E+10		
Load Combination CO1 - 1.35G				
	Sum of loads in X	0.00	kN	
	Sum of support reactions in X	0.00	kN	
	Sum of loads in Y	64.80	kN	
	Sum of support reactions in Y	64.80	kN	Deviation 0.00%
	Sum of loads in Z	0.00	kN	
	Sum of support reactions in Z	0.00	kN	
	Resultant of reactions about X	0.0	kNm	At center of gravity of model (X:6.0, Y:-5.3, Z:0.0 m)
	Resultant of reactions about Y	0.0	kNm	At center of gravity of model
	Resultant of reactions about Z	0.0	kNm	At center of gravity of model
	Max. displacement in X	-1.75	mm	Member No. 17, x: 0.000 m
	Max. displacement in Y	7.74	mm	Member No. 8, x: 0.000 m
	Max. displacement in Z	0.00	mm	
	Max. vector displacement	7.74	mm	Member No. 8, x: 0.000 m
	Max. rotation about X	0.0	mrad	
	Max. rotation about Y	0.0	mrad	
	Max. rotation about Z	2.0	mrad	Member No. 2, x: 0.700 m
	Maximum member strain	0.00000	-	Member No. 0, x: 0.000 m
	Method of analysis	2nd Order		Second order analysis (Nonlinear, Timoshenko)
	Internal forces referred to deformed system for...	☒		N, V_y, V_z, M_y, M_z, M_T
	Reduction of stiffness			Materials, Cross-sections, Members, Surfaces
	Consider favorable effects of tensile forces	☒		
	Divide results by CO factor	☐		
	Number of load increments	1		
	Number of iterations	2		
	Maximum value of element of stiffness matrix on diagonal	8.64E+09		
	Minimum value of element of stiffness matrix on diagonal	6.752E+06		
	Stiffness matrix determinant	2.067E+1095		
	Infinity Norm	1.728E+10		
Load Combination CO2 - 1.15G + 1.5Qw				
	Sum of loads in X	9.00	kN	
	Sum of support reactions in X	9.00	kN	Deviation 0.00%
	Sum of loads in Y	55.20	kN	
	Sum of support reactions in Y	55.20	kN	Deviation 0.00%

Student Version

4.0 RESULTS - SUMMARY

	Description	Value	Unit	Comment
	Sum of loads in Z	0.00	kN	
	Sum of support reactions in Z	0.00	kN	
	Resultant of reactions about X	0.0	kNm	At center of gravity of model (X:6.0, Y:-5.3, Z:0.0 m)
	Resultant of reactions about Y	0.0	kNm	At center of gravity of model
	Resultant of reactions about Z	-19.8	kNm	At center of gravity of model
	Max. displacement in X	9.32	mm	Member No. 24, x: 0.300 m
	Max. displacement in Y	6.32	mm	Member No. 8, x: 0.100 m
	Max. displacement in Z	0.00	mm	
	Max. vector displacement	10.87	mm	Member No. 8, x: 0.100 m
	Max. rotation about X	0.0	mrad	
	Max. rotation about Y	0.0	mrad	
	Max. rotation about Z	2.6	mrad	Member No. 21, x: 0.700 m
	Maximum member strain	0.00000	-	Member No. 0, x: 0.000 m
	Method of analysis	2nd Order		Second order analysis (Nonlinear, Timoshenko)
	Internal forces referred to deformed system for...	☒		N, V_y, V_z, M_y, M_z, M_T
	Reduction of stiffness			Materials, Cross-sections, Members, Surfaces
	Consider favorable effects of tensile forces	☒		
	Divide results by CO factor	☐		
	Number of load increments	1		
	Number of iterations	2		
	Maximum value of element of stiffness matrix on diagonal	8.64E+09		
	Minimum value of element of stiffness matrix on diagonal	6.752E+06		
	Stiffness matrix determinant	2.118E+1095		
	Infinity Norm	1.728E+10		
Load Combination CO3 - 1.15G + 1.5Qw + 1.05Qs				
	Sum of loads in X	9.00	kN	
	Sum of support reactions in X	9.00	kN	Deviation 0.00%
	Sum of loads in Y	105.60	kN	
	Sum of support reactions in Y	105.60	kN	Deviation 0.00%
	Sum of loads in Z	0.00	kN	
	Sum of support reactions in Z	0.00	kN	
	Resultant of reactions about X	0.0	kNm	At center of gravity of model (X:6.0, Y:-5.3, Z:0.0 m)
	Resultant of reactions about Y	0.0	kNm	At center of gravity of model
	Resultant of reactions about Z	-19.4	kNm	At center of gravity of model
	Max. displacement in X	10.82	mm	Member No. 23, x: 0.900 m
	Max. displacement in Y	14.34	mm	Member No. 8, x: 0.000 m
	Max. displacement in Z	0.00	mm	
	Max. vector displacement	16.94	mm	Member No. 8, x: 0.000 m
	Max. rotation about X	0.0	mrad	
	Max. rotation about Y	0.0	mrad	
	Max. rotation about Z	3.7	mrad	Member No. 2, x: 0.800 m
	Maximum member strain	0.00000	-	Member No. 0, x: 0.000 m
	Method of analysis	2nd Order		Second order analysis (Nonlinear, Timoshenko)
	Internal forces referred to deformed system for...	☒		N, V_y, V_z, M_y, M_z, M_T
	Reduction of stiffness			Materials, Cross-sections, Members, Surfaces
	Consider favorable effects of tensile forces	☒		
	Divide results by CO factor	☐		
	Number of load increments	1		
	Number of iterations	2		
	Maximum value of element of stiffness matrix on diagonal	8.64E+09		
	Minimum value of element of stiffness matrix on diagonal	6.752E+06		
	Stiffness matrix determinant	1.751E+1095		
	Infinity Norm	1.728E+10		
Load Combination CO4 - 1.15G + 1.5Qs				
	Sum of loads in X	0.00	kN	
	Sum of support reactions in X	0.00	kN	

Student Version

4.0 RESULTS - SUMMARY

	Description	Value	Unit	Comment
	Sum of loads in Y	127.20	kN	
	Sum of support reactions in Y	127.20	kN	Deviation 0.00%
	Sum of loads in Z	0.00	kN	
	Sum of support reactions in Z	0.00	kN	
	Resultant of reactions about X	0.0	kNm	At center of gravity of model (X:6.0, Y:-5.3, Z:0.0 m)
	Resultant of reactions about Y	0.0	kNm	At center of gravity of model
	Resultant of reactions about Z	0.0	kNm	At center of gravity of model
	Max. displacement in X	-4.10	mm	Member No. 17, x: 0.000 m
	Max. displacement in Y	18.06	mm	Member No. 8, x: 0.000 m
	Max. displacement in Z	0.00	mm	
	Max. vector displacement	18.06	mm	Member No. 8, x: 0.000 m
	Max. rotation about X	0.0	mrad	
	Max. rotation about Y	0.0	mrad	
	Max. rotation about Z	4.6	mrad	Member No. 2, x: 0.700 m
	Maximum member strain	0.00000	-	Member No. 0, x: 0.000 m
	Method of analysis	2nd Order		Second order analysis (Nonlinear, Timoshenko)
	Internal forces referred to deformed system for...	☒		N, V_y, V_z, M_y, M_z, M_T
	Reduction of stiffness			Materials, Cross-sections, Members, Surfaces
	Consider favorable effects of tensile forces	☒		
	Divide results by CO factor	☐		
	Number of load increments	1		
	Number of iterations	2		
	Maximum value of element of stiffness matrix on diagonal	8.64E+09		
	Minimum value of element of stiffness matrix on diagonal	6.752E+06		
	Stiffness matrix determinant	1.619E+1095		
	Infinity Norm	1.728E+10		
Load Combination CO5 - 1.15G + 0.9Qw + 1.5Qs				
	Sum of loads in X	5.40	kN	
	Sum of support reactions in X	5.40	kN	Deviation 0.00%
	Sum of loads in Y	127.20	kN	
	Sum of support reactions in Y	127.20	kN	Deviation 0.00%
	Sum of loads in Z	0.00	kN	
	Sum of support reactions in Z	0.00	kN	
	Resultant of reactions about X	0.0	kNm	At center of gravity of model (X:6.0, Y:-5.3, Z:0.0 m)
	Resultant of reactions about Y	0.0	kNm	At center of gravity of model
	Resultant of reactions about Z	-11.5	kNm	At center of gravity of model
	Max. displacement in X	8.41	mm	Member No. 23, x: 0.600 m
	Max. displacement in Y	17.89	mm	Member No. 8, x: 0.000 m
	Max. displacement in Z	0.00	mm	
	Max. vector displacement	18.71	mm	Member No. 8, x: 0.000 m
	Max. rotation about X	0.0	mrad	
	Max. rotation about Y	0.0	mrad	
	Max. rotation about Z	4.6	mrad	Member No. 2, x: 0.800 m
	Maximum member strain	0.00000	-	Member No. 0, x: 0.000 m
	Method of analysis	2nd Order		Second order analysis (Nonlinear, Timoshenko)
	Internal forces referred to deformed system for...	☒		N, V_y, V_z, M_y, M_z, M_T
	Reduction of stiffness			Materials, Cross-sections, Members, Surfaces
	Consider favorable effects of tensile forces	☒		
	Divide results by CO factor	☐		
	Number of load increments	1		
	Number of iterations	2		
	Maximum value of element of stiffness matrix on diagonal	8.64E+09		
	Minimum value of element of stiffness matrix on diagonal	6.752E+06		
	Stiffness matrix determinant	1.613E+1095		
	Infinity Norm	1.728E+10		
Load Combination CO6 - G				

Student Version

4.0 RESULTS - SUMMARY

	Description	Value	Unit	Comment
	Sum of loads in X	0.00	kN	
	Sum of support reactions in X	0.00	kN	
	Sum of loads in Y	48.00	kN	
	Sum of support reactions in Y	48.00	kN	Deviation 0.00%
	Sum of loads in Z	0.00	kN	
	Sum of support reactions in Z	0.00	kN	
	Resultant of reactions about X	0.0	kNm	At center of gravity of model (X:6.0, Y:-5.3, Z:0.0 m)
	Resultant of reactions about Y	0.0	kNm	At center of gravity of model
	Resultant of reactions about Z	0.0	kNm	At center of gravity of model
	Max. displacement in X	-1.29	mm	Member No. 17, x: 0.000 m
	Max. displacement in Y	5.73	mm	Member No. 8, x: 0.000 m
	Max. displacement in Z	0.00	mm	
	Max. vector displacement	5.73	mm	Member No. 8, x: 0.000 m
	Max. rotation about X	0.0	mrad	
	Max. rotation about Y	0.0	mrad	
	Max. rotation about Z	1.5	mrad	Member No. 2, x: 0.700 m
	Maximum member strain	0.00000	-	Member No. 0, x: 0.000 m
	Method of analysis	2nd Order		Second order analysis (Nonlinear, Timoshenko)
	Internal forces referred to deformed system for...	☒		N, V_y, V_z, M_y, M_z, M_T
	Reduction of stiffness			Materials, Cross-sections, Members, Surfaces
	Consider favorable effects of tensile forces	☒		
	Divide results by CO factor	☐		
	Number of load increments	1		
	Number of iterations	2		
	Maximum value of element of stiffness matrix on diagonal	8.64E+09		
	Minimum value of element of stiffness matrix on diagonal	6.752E+06		
	Stiffness matrix determinant	2.178E+1095		
	Infinity Norm	1.728E+10		
Load Combination CO7 - G + Qw				
	Sum of loads in X	6.00	kN	
	Sum of support reactions in X	6.00	kN	Deviation 0.00%
	Sum of loads in Y	48.00	kN	
	Sum of support reactions in Y	48.00	kN	Deviation 0.00%
	Sum of loads in Z	0.00	kN	
	Sum of support reactions in Z	0.00	kN	
	Resultant of reactions about X	0.0	kNm	At center of gravity of model (X:6.0, Y:-5.3, Z:0.0 m)
	Resultant of reactions about Y	0.0	kNm	At center of gravity of model
	Resultant of reactions about Z	-13.3	kNm	At center of gravity of model
	Max. displacement in X	6.40	mm	Member No. 24, x: 0.200 m
	Max. displacement in Y	5.55	mm	Member No. 8, x: 0.100 m
	Max. displacement in Z	0.00	mm	
	Max. vector displacement	8.09	mm	Member No. 8, x: 0.100 m
	Max. rotation about X	0.0	mrad	
	Max. rotation about Y	0.0	mrad	
	Max. rotation about Z	1.8	mrad	Member No. 21, x: 0.600 m
	Maximum member strain	0.00000	-	Member No. 0, x: 0.000 m
	Method of analysis	2nd Order		Second order analysis (Nonlinear, Timoshenko)
	Internal forces referred to deformed system for...	☒		N, V_y, V_z, M_y, M_z, M_T
	Reduction of stiffness			Materials, Cross-sections, Members, Surfaces
	Consider favorable effects of tensile forces	☒		
	Divide results by CO factor	☐		
	Number of load increments	1		
	Number of iterations	2		
	Maximum value of element of stiffness matrix on diagonal	8.64E+09		
	Minimum value of element of stiffness matrix on diagonal	6.752E+06		
	Stiffness matrix determinant	2.170E+1095		
	Infinity Norm	1.728E+10		

Student Version

4.0 RESULTS - SUMMARY

	Description	Value	Unit	Comment
Load Combination CO8 - G + Qw + 0.7Qs				
	Sum of loads in X	6.00	kN	
	Sum of support reactions in X	6.00	kN	Deviation 0.00%
	Sum of loads in Y	81.60	kN	
	Sum of support reactions in Y	81.60	kN	Deviation 0.00%
	Sum of loads in Z	0.00	kN	
	Sum of support reactions in Z	0.00	kN	
	Resultant of reactions about X	0.0	kNm	At center of gravity of model (X:6.0, Y:-5.3, Z:0.0 m)
	Resultant of reactions about Y	0.0	kNm	At center of gravity of model
	Resultant of reactions about Z	-13.0	kNm	At center of gravity of model
	Max. displacement in X	7.41	mm	Member No. 23, x: 0.800 m
	Max. displacement in Y	10.90	mm	Member No. 8, x: 0.000 m
	Max. displacement in Z	0.00	mm	
	Max. vector displacement	12.42	mm	Member No. 8, x: 0.000 m
	Max. rotation about X	0.0	mrad	
	Max. rotation about Y	0.0	mrad	
	Max. rotation about Z	2.8	mrad	Member No. 2, x: 0.800 m
	Maximum member strain	0.00000	-	Member No. 0, x: 0.000 m
	Method of analysis	2nd Order		Second order analysis (Nonlinear, Timoshenko)
	Internal forces referred to deformed system for...	☒		$N, V_y, V_z, M_y, M_z, M_T$
	Reduction of stiffness			Materials, Cross-sections, Members, Surfaces
	Consider favorable effects of tensile forces	☒		
	Divide results by CO factor	☐		
	Number of load increments	1		
	Number of iterations	2		
	Maximum value of element of stiffness matrix on diagonal	8.64E+09		
	Minimum value of element of stiffness matrix on diagonal	6.752E+06		
	Stiffness matrix determinant	1.915E+1095		
	Infinity Norm	1.728E+10		
Load Combination CO9 - G + Qs				
	Sum of loads in X	0.00	kN	
	Sum of support reactions in X	0.00	kN	
	Sum of loads in Y	96.00	kN	
	Sum of support reactions in Y	96.00	kN	Deviation 0.00%
	Sum of loads in Z	0.00	kN	
	Sum of support reactions in Z	0.00	kN	
	Resultant of reactions about X	0.0	kNm	At center of gravity of model (X:6.0, Y:-5.3, Z:0.0 m)
	Resultant of reactions about Y	0.0	kNm	At center of gravity of model
	Resultant of reactions about Z	0.0	kNm	At center of gravity of model
	Max. displacement in X	-3.03	mm	Member No. 17, x: 0.000 m
	Max. displacement in Y	13.37	mm	Member No. 8, x: 0.000 m
	Max. displacement in Z	0.00	mm	
	Max. vector displacement	13.37	mm	Member No. 8, x: 0.000 m
	Max. rotation about X	0.0	mrad	
	Max. rotation about Y	0.0	mrad	
	Max. rotation about Z	3.4	mrad	Member No. 2, x: 0.700 m
	Maximum member strain	0.00000	-	Member No. 0, x: 0.000 m
	Method of analysis	2nd Order		Second order analysis (Nonlinear, Timoshenko)
	Internal forces referred to deformed system for...	☒		$N, V_y, V_z, M_y, M_z, M_T$
	Reduction of stiffness			Materials, Cross-sections, Members, Surfaces
	Consider favorable effects of tensile forces	☒		
	Divide results by CO factor	☐		
	Number of load increments	1		
	Number of iterations	2		
	Maximum value of element of stiffness matrix on diagonal	8.64E+09		
	Minimum value of element of stiffness matrix on diagonal	6.752E+06		

Student Version

4.0 RESULTS - SUMMARY

	Description	Value	Unit	Comment
	Stiffness matrix determinant	1.820E+1095		
	Infinity Norm	1.728E+10		
Load Combination CO10 - G + 0.6Qw + Qs				
	Sum of loads in X	3.60	kN	
	Sum of support reactions in X	3.60	kN	Deviation 0.00%
	Sum of loads in Y	96.00	kN	
	Sum of support reactions in Y	96.00	kN	Deviation 0.00%
	Sum of loads in Z	0.00	kN	
	Sum of support reactions in Z	0.00	kN	
	Resultant of reactions about X	0.0	kNm	At center of gravity of model (X:6.0, Y:-5.3, Z:0.0 m)
	Resultant of reactions about Y	0.0	kNm	At center of gravity of model
	Resultant of reactions about Z	-7.8	kNm	At center of gravity of model
	Max. displacement in X	5.85	mm	Member No. 23, x: 0.500 m
	Max. displacement in Y	13.26	mm	Member No. 8, x: 0.000 m
	Max. displacement in Z	0.00	mm	
	Max. vector displacement	13.74	mm	Member No. 8, x: 0.000 m
	Max. rotation about X	0.0	mrad	
	Max. rotation about Y	0.0	mrad	
	Max. rotation about Z	3.4	mrad	Member No. 2, x: 0.800 m
	Maximum member strain	0.00000	-	Member No. 0, x: 0.000 m
	Method of analysis	2nd Order		Second order analysis (Nonlinear, Timoshenko)
	Internal forces referred to deformed system for...	☒		N, V_y, V_z, M_y, M_z, M_T
	Reduction of stiffness			Materials, Cross-sections, Members, Surfaces
	Consider favorable effects of tensile forces	☒		
	Divide results by CO factor	☐		
	Number of load increments	1		
	Number of iterations	2		
	Maximum value of element of stiffness matrix on diagonal	8.64E+09		
	Minimum value of element of stiffness matrix on diagonal	6.752E+06		
	Stiffness matrix determinant	1.816E+1095		
	Infinity Norm	1.728E+10		
Load Combination CO11 - G				
	Sum of loads in X	0.00	kN	
	Sum of support reactions in X	0.00	kN	
	Sum of loads in Y	48.00	kN	
	Sum of support reactions in Y	48.00	kN	Deviation 0.00%
	Sum of loads in Z	0.00	kN	
	Sum of support reactions in Z	0.00	kN	
	Resultant of reactions about X	0.0	kNm	At center of gravity of model (X:6.0, Y:-5.3, Z:0.0 m)
	Resultant of reactions about Y	0.0	kNm	At center of gravity of model
	Resultant of reactions about Z	0.0	kNm	At center of gravity of model
	Max. displacement in X	-1.29	mm	Member No. 17, x: 0.000 m
	Max. displacement in Y	5.73	mm	Member No. 8, x: 0.000 m
	Max. displacement in Z	0.00	mm	
	Max. vector displacement	5.73	mm	Member No. 8, x: 0.000 m
	Max. rotation about X	0.0	mrad	
	Max. rotation about Y	0.0	mrad	
	Max. rotation about Z	1.5	mrad	Member No. 2, x: 0.700 m
	Maximum member strain	0.00000	-	Member No. 0, x: 0.000 m
	Method of analysis	2nd Order		Second order analysis (Nonlinear, Timoshenko)
	Internal forces referred to deformed system for...	☒		N, V_y, V_z, M_y, M_z, M_T
	Reduction of stiffness			Materials, Cross-sections, Members, Surfaces
	Consider favorable effects of tensile forces	☒		
	Divide results by CO factor	☐		
	Number of load increments	1		
	Number of iterations	2		

Student Version

4.0 RESULTS - SUMMARY

	Description	Value	Unit	Comment
	Maximum value of element of stiffness matrix on diagonal	8.64E+09		
	Minimum value of element of stiffness matrix on diagonal	6.752E+06		
	Stiffness matrix determinant	2.178E+1095		
	Infinity Norm	1.728E+10		
Load Combination CO12 - G + 0.2Qw				
	Sum of loads in X	1.20	kN	
	Sum of support reactions in X	1.20	kN	Deviation 0.00%
	Sum of loads in Y	48.00	kN	
	Sum of support reactions in Y	48.00	kN	Deviation 0.00%
	Sum of loads in Z	0.00	kN	
	Sum of support reactions in Z	0.00	kN	
	Resultant of reactions about X	0.0	kNm	At center of gravity of model (X:6.0, Y:-5.3, Z:0.0 m)
	Resultant of reactions about Y	0.0	kNm	At center of gravity of model
	Resultant of reactions about Z	-2.7	kNm	At center of gravity of model
	Max. displacement in X	2.20	mm	Member No. 23, x: 0.400 m
	Max. displacement in Y	5.70	mm	Member No. 8, x: 0.000 m
	Max. displacement in Z	0.00	mm	
	Max. vector displacement	5.82	mm	Member No. 8, x: 0.000 m
	Max. rotation about X	0.0	mrad	
	Max. rotation about Y	0.0	mrad	
	Max. rotation about Z	1.5	mrad	Member No. 2, x: 0.800 m
	Maximum member strain	0.00000	-	Member No. 0, x: 0.000 m
	Method of analysis	2nd Order		Second order analysis (Nonlinear, Timoshenko)
	Internal forces referred to deformed system for...	☒		N, V_y, V_z, M_y, M_z, M_T
	Reduction of stiffness			Materials, Cross-sections, Members, Surfaces
	Consider favorable effects of tensile forces	☒		
	Divide results by CO factor	☐		
	Number of load increments	1		
	Number of iterations	2		
	Maximum value of element of stiffness matrix on diagonal	8.64E+09		
	Minimum value of element of stiffness matrix on diagonal	6.752E+06		
	Stiffness matrix determinant	2.177E+1095		
	Infinity Norm	1.728E+10		
Load Combination CO13 - G + 0.2Qw + 0.2Qs				
	Sum of loads in X	1.20	kN	
	Sum of support reactions in X	1.20	kN	Deviation 0.00%
	Sum of loads in Y	57.60	kN	
	Sum of support reactions in Y	57.60	kN	Deviation 0.00%
	Sum of loads in Z	0.00	kN	
	Sum of support reactions in Z	0.00	kN	
	Resultant of reactions about X	0.0	kNm	At center of gravity of model (X:6.0, Y:-5.3, Z:0.0 m)
	Resultant of reactions about Y	0.0	kNm	At center of gravity of model
	Resultant of reactions about Z	-2.6	kNm	At center of gravity of model
	Max. displacement in X	2.54	mm	Member No. 23, x: 0.400 m
	Max. displacement in Y	7.22	mm	Member No. 8, x: 0.000 m
	Max. displacement in Z	0.00	mm	
	Max. vector displacement	7.32	mm	Member No. 8, x: 0.000 m
	Max. rotation about X	0.0	mrad	
	Max. rotation about Y	0.0	mrad	
	Max. rotation about Z	1.8	mrad	Member No. 2, x: 0.800 m
	Maximum member strain	0.00000	-	Member No. 0, x: 0.000 m
	Method of analysis	2nd Order		Second order analysis (Nonlinear, Timoshenko)
	Internal forces referred to deformed system for...	☒		N, V_y, V_z, M_y, M_z, M_T
	Reduction of stiffness			Materials, Cross-sections, Members, Surfaces
	Consider favorable effects of tensile forces	☒		
	Divide results by CO factor	☐		

Student Version

4.0 RESULTS - SUMMARY

	Description	Value	Unit	Comment
	Number of load increments	1		
	Number of iterations	2		
	Maximum value of element of stiffness matrix on diagonal	8.64E+09		
	Minimum value of element of stiffness matrix on diagonal	6.752E+06		
	Stiffness matrix determinant	2.101E+1095		
	Infinity Norm	1.728E+10		
Load Combination CO14 - G + 0.4Qs				
	Sum of loads in X	0.00	kN	
	Sum of support reactions in X	0.00	kN	
	Sum of loads in Y	67.20	kN	
	Sum of support reactions in Y	67.20	kN	Deviation 0.00%
	Sum of loads in Z	0.00	kN	
	Sum of support reactions in Z	0.00	kN	
	Resultant of reactions about X	0.0	kNm	At center of gravity of model (X:6.0, Y:-5.3, Z:0.0 m)
	Resultant of reactions about Y	0.0	kNm	At center of gravity of model
	Resultant of reactions about Z	0.0	kNm	At center of gravity of model
	Max. displacement in X	-1.99	mm	Member No. 17, x: 0.000 m
	Max. displacement in Y	8.79	mm	Member No. 8, x: 0.000 m
	Max. displacement in Z	0.00	mm	
	Max. vector displacement	8.79	mm	Member No. 8, x: 0.000 m
	Max. rotation about X	0.0	mrad	
	Max. rotation about Y	0.0	mrad	
	Max. rotation about Z	2.2	mrad	Member No. 2, x: 0.700 m
	Maximum member strain	0.00000	-	Member No. 0, x: 0.000 m
	Method of analysis	2nd Order		Second order analysis (Nonlinear, Timoshenko)
	Internal forces referred to deformed system for...	☒		N, V_y, V_z, M_y, M_z, M_T
	Reduction of stiffness			Materials, Cross-sections, Members, Surfaces
	Consider favorable effects of tensile forces	☒		
	Divide results by CO factor	☐		
	Number of load increments	1		
	Number of iterations	2		
	Maximum value of element of stiffness matrix on diagonal	8.64E+09		
	Minimum value of element of stiffness matrix on diagonal	6.752E+06		
	Stiffness matrix determinant	2.029E+1095		
	Infinity Norm	1.728E+10		
Load Combination CO15 - G				
	Sum of loads in X	0.00	kN	
	Sum of support reactions in X	0.00	kN	
	Sum of loads in Y	48.00	kN	
	Sum of support reactions in Y	48.00	kN	Deviation 0.00%
	Sum of loads in Z	0.00	kN	
	Sum of support reactions in Z	0.00	kN	
	Resultant of reactions about X	0.0	kNm	At center of gravity of model (X:6.0, Y:-5.3, Z:0.0 m)
	Resultant of reactions about Y	0.0	kNm	At center of gravity of model
	Resultant of reactions about Z	0.0	kNm	At center of gravity of model
	Max. displacement in X	-1.29	mm	Member No. 17, x: 0.000 m
	Max. displacement in Y	5.73	mm	Member No. 8, x: 0.000 m
	Max. displacement in Z	0.00	mm	
	Max. vector displacement	5.73	mm	Member No. 8, x: 0.000 m
	Max. rotation about X	0.0	mrad	
	Max. rotation about Y	0.0	mrad	
	Max. rotation about Z	1.5	mrad	Member No. 2, x: 0.700 m
	Maximum member strain	0.00000	-	Member No. 0, x: 0.000 m
	Method of analysis	2nd Order		Second order analysis (Nonlinear, Timoshenko)
	Internal forces referred to deformed system for...	☒		N, V_y, V_z, M_y, M_z, M_T
	Reduction of stiffness			Materials, Cross-sections, Members, Surfaces

Student Version

4.0 RESULTS - SUMMARY

	Description	Value	Unit	Comment
	Consider favorable effects of tensile forces	☒		
	Divide results by CO factor	☐		
	Number of load increments	1		
	Number of iterations	2		
	Maximum value of element of stiffness matrix on diagonal	8.64E+09		
	Minimum value of element of stiffness matrix on diagonal	6.752E+06		
	Stiffness matrix determinant	2.178E+1095		
	Infinity Norm	1.728E+10		
Load Combination CO16 - G + 0.2Qs				
	Sum of loads in X	0.00	kN	
	Sum of support reactions in X	0.00	kN	
	Sum of loads in Y	57.60	kN	
	Sum of support reactions in Y	57.60	kN	Deviation 0.00%
	Sum of loads in Z	0.00	kN	
	Sum of support reactions in Z	0.00	kN	
	Resultant of reactions about X	0.0	kNm	At center of gravity of model (X:6.0, Y:-5.3, Z:0.0 m)
	Resultant of reactions about Y	0.0	kNm	At center of gravity of model
	Resultant of reactions about Z	0.0	kNm	At center of gravity of model
	Max. displacement in X	-1.64	mm	Member No. 17, x: 0.000 m
	Max. displacement in Y	7.26	mm	Member No. 8, x: 0.000 m
	Max. displacement in Z	0.00	mm	
	Max. vector displacement	7.26	mm	Member No. 8, x: 0.000 m
	Max. rotation about X	0.0	mrad	
	Max. rotation about Y	0.0	mrad	
	Max. rotation about Z	1.8	mrad	Member No. 2, x: 0.700 m
	Maximum member strain	0.00000	-	Member No. 0, x: 0.000 m
	Method of analysis	2nd Order		Second order analysis (Nonlinear, Timoshenko)
	Internal forces referred to deformed system for...	☒		N, V_y, V_z, M_y, M_z, M_T
	Reduction of stiffness			Materials, Cross-sections, Members, Surfaces
	Consider favorable effects of tensile forces	☒		
	Divide results by CO factor	☐		
	Number of load increments	1		
	Number of iterations	2		
	Maximum value of element of stiffness matrix on diagonal	8.64E+09		
	Minimum value of element of stiffness matrix on diagonal	6.752E+06		
	Stiffness matrix determinant	2.103E+1095		
	Infinity Norm	1.728E+10		
Load Combination CO17 - 1.35G + 1.5Qw + 1.05Qs				
	Sum of loads in X	9.00	kN	
	Sum of support reactions in X	9.00	kN	Deviation 0.00%
	Sum of loads in Y	115.20	kN	
	Sum of support reactions in Y	115.20	kN	Deviation 0.00%
	Sum of loads in Z	0.00	kN	
	Sum of support reactions in Z	0.00	kN	
	Resultant of reactions about X	0.0	kNm	At center of gravity of model (X:6.0, Y:-5.3, Z:0.0 m)
	Resultant of reactions about Y	0.0	kNm	At center of gravity of model
	Resultant of reactions about Z	-19.3	kNm	At center of gravity of model
	Max. displacement in X	11.07	mm	Member No. 23, x: 0.900 m
	Max. displacement in Y	15.49	mm	Member No. 8, x: 0.000 m
	Max. displacement in Z	0.00	mm	
	Max. vector displacement	17.94	mm	Member No. 8, x: 0.000 m
	Max. rotation about X	0.0	mrad	
	Max. rotation about Y	0.0	mrad	
	Max. rotation about Z	4.0	mrad	Member No. 2, x: 0.800 m
	Maximum member strain	0.00000	-	Member No. 0, x: 0.000 m
	Method of analysis	2nd Order		Second order analysis (Nonlinear, Timoshenko)

Student Version

4.0 RESULTS - SUMMARY

	Description	Value	Unit	Comment
	Internal forces referred to deformed system for...	☒		N, V_y, V_z, M_y, M_z, M_T
	Reduction of stiffness			Materials, Cross-sections, Members, Surfaces
	Consider favorable effects of tensile forces	☒		
	Divide results by CO factor	☐		
	Number of load increments	1		
	Number of iterations	2		
	Maximum value of element of stiffness matrix on diagonal	8.64E+09		
	Minimum value of element of stiffness matrix on diagonal	6.752E+06		
	Stiffness matrix determinant	1.697E+1095		
	Infinity Norm	1.728E+10		
Summary				
	Max. displacement in X	11.07	mm	CO17, Member No. 23, x: 0.900 m
	Max. displacement in Y	18.06	mm	CO4, Member No. 8, x: 0.000 m
	Max. displacement in Z	0.00		
	Max. vector displacement	18.71	mm	CO5, Member No. 8, x: 0.000 m
	Max. rotation about X	0.0		
	Max. rotation about Y	0.0		
	Max. rotation about Z	4.6	mrad	CO4, Member No. 2, x: 0.700 m
	Other Settings:			
	Number of 1D finite elements	24		
	Number of 2D finite elements	0		
	Number of 3D finite elements	0		
	Number of FE mesh nodes	25		
	Number of equations	150		
	Internal forces referred to deformed system for...:			
	Max. number of iterations	100		
	Number of divisions for member results	10		
	Division of cable/foundation/tapered members	10		
	Number of member divisions for searching maximum values	10		
	Subdivisions of FE mesh for graphical results	3		
	Percentage of iterations according to Picard method in combination with Newton-Raphson method	5	%	
	Options:			
	Activate shear stiffness of members (Ay, Az)	☒		
	Activate member divisions for large deformation or post-critical analysis	☒		
	Activate entered stiffness modifications	☒		
	Ignore rotational degrees of freedom	☐		
	Check of critical forces of members	☒		
	Nonsymmetric direct solver if demanded by nonlinear model	☐		
	Method for the system of equations	Direct		
	Plate bending theory	Mindlin		
	Solver version	64-bit		
	Precision and Tolerance:			
	Change default setting	☐		

Student Version

4.1 NODES - SUPPORT FORCES

Node No.	LC/CO	Support Forces [kN] P_X	P_Y	P_Z	Support Moments [kNm] M_X	M_Y	M_Z	
1*	LC1	-24.00	-1.16	0.00	0.00	0.00	-2.31	Self-weight
	LC2	0.49	4.55	0.00	0.00	0.00	7.63	Wind
	LC3	-24.00	-1.54	0.00	0.00	0.00	-3.08	Snow
	CO1	-32.40	-1.56	0.00	0.00	0.00	-3.13	
	CO2	-26.84	5.50	0.00	0.00	0.00	8.91	
	CO3	-52.03	3.89	0.00	0.00	0.00	5.77	
	CO4	-63.60	-3.63	0.00	0.00	0.00	-7.35	
	CO5	-63.13	0.47	0.00	0.00	0.00	-0.29	
	CO6	-24.00	-1.15	0.00	0.00	0.00	-2.32	
	CO7	-23.50	3.39	0.00	0.00	0.00	5.39	
	CO8	-40.29	2.32	0.00	0.00	0.00	3.27	
	CO9	-48.00	-2.69	0.00	0.00	0.00	-5.43	
	CO10	-47.69	0.04	0.00	0.00	0.00	-0.76	
	CO11	-24.00	-1.15	0.00	0.00	0.00	-2.32	
	CO12	-23.90	-0.25	0.00	0.00	0.00	-0.78	
	CO13	-28.70	-0.55	0.00	0.00	0.00	-1.39	
	CO14	-33.60	-1.77	0.00	0.00	0.00	-3.56	
	CO15	-24.00	-1.15	0.00	0.00	0.00	-2.32	
	CO16	-28.80	-1.46	0.00	0.00	0.00	-2.94	
	CO17	-56.82	3.66	0.00	0.00	0.00	5.32	
4*	LC1	24.00	-1.16	0.00	0.00	0.00	2.31	Self-weight
	LC2	0.49	-1.45	0.00	0.00	0.00	4.44	Wind
	LC3	24.00	-1.54	0.00	0.00	0.00	3.08	Snow
	CO1	32.40	-1.56	0.00	0.00	0.00	3.13	
	CO2	28.36	-3.50	0.00	0.00	0.00	9.44	
	CO3	53.57	-5.11	0.00	0.00	0.00	12.83	
	CO4	63.60	-3.63	0.00	0.00	0.00	7.35	
	CO5	64.07	-4.93	0.00	0.00	0.00	11.52	
	CO6	24.00	-1.15	0.00	0.00	0.00	2.32	
	CO7	24.50	-2.61	0.00	0.00	0.00	6.82	
	CO8	41.31	-3.68	0.00	0.00	0.00	9.05	
	CO9	48.00	-2.69	0.00	0.00	0.00	5.43	
	CO10	48.31	-3.56	0.00	0.00	0.00	8.18	
	CO11	24.00	-1.15	0.00	0.00	0.00	2.32	
	CO12	24.10	-1.45	0.00	0.00	0.00	3.22	
	CO13	28.90	-1.75	0.00	0.00	0.00	3.84	
	CO14	33.60	-1.77	0.00	0.00	0.00	3.56	
	CO15	24.00	-1.15	0.00	0.00	0.00	2.32	
	CO16	28.80	-1.46	0.00	0.00	0.00	2.94	
	CO17	58.38	-5.34	0.00	0.00	0.00	13.32	
Σ Supp.	LC1	0.00	48.00	0.00				
Σ Loads	LC1	0.00	48.00	0.00				
Σ Supp.	LC2	6.00	0.00	0.00				
Σ Loads	LC2	6.00	0.00	0.00				
Σ Supp.	LC3	0.00	48.00	0.00				
Σ Loads	LC3	0.00	48.00	0.00				
Σ Supp.	CO1	0.00	64.80	0.00				
Σ Supp.	CO1	0.00	64.80	0.00				
Σ Supp.	CO2	9.00	55.20	0.00				
Σ Supp.	CO2	9.00	55.20	0.00				
Σ Supp.	CO3	9.00	105.60	0.00				
Σ Supp.	CO3	9.00	105.60	0.00				
Σ Supp.	CO4	0.00	127.20	0.00				
Σ Supp.	CO4	0.00	127.20	0.00				
Σ Supp.	CO5	5.40	127.20	0.00				
Σ Supp.	CO5	5.40	127.20	0.00				
Σ Supp.	CO6	0.00	48.00	0.00				
Σ Supp.	CO6	0.00	48.00	0.00				

Student Version

4.1 NODES - SUPPORT FORCES

Node No.	LC/CO	Support Forces [kN] P_X	P_Y	P_Z	Support Moments [kNm] M_X	M_Y	M_Z
Σ Supp.	CO7	6.00	48.00	0.00			
Σ Supp.	CO7	6.00	48.00	0.00			
Σ Supp.	CO8	6.00	81.60	0.00			
Σ Supp.	CO8	6.00	81.60	0.00			
Σ Supp.	CO9	0.00	96.00	0.00			
Σ Supp.	CO9	0.00	96.00	0.00			
Σ Supp.	CO10	3.60	96.00	0.00			
Σ Supp.	CO10	3.60	96.00	0.00			
Σ Supp.	CO11	0.00	48.00	0.00			
Σ Supp.	CO11	0.00	48.00	0.00			
Σ Supp.	CO12	1.20	48.00	0.00			
Σ Supp.	CO12	1.20	48.00	0.00			
Σ Supp.	CO13	1.20	57.60	0.00			
Σ Supp.	CO13	1.20	57.60	0.00			
Σ Supp.	CO14	0.00	67.20	0.00			
Σ Supp.	CO14	0.00	67.20	0.00			
Σ Supp.	CO15	0.00	48.00	0.00			
Σ Supp.	CO15	0.00	48.00	0.00			
Σ Supp.	CO16	0.00	57.60	0.00			
Σ Supp.	CO16	0.00	57.60	0.00			
Σ Supp.	CO17	9.00	115.20	0.00			
Σ Supp.	CO17	9.00	115.20	0.00			

4.12 CROSS-SECTIONS - INTERNAL FORCES

Member No.	LC/CO	Node No.	Location x [m]	Forces [kN] N	V_y	V_z	Moments [kNm] M_T	M_y	M_z
	Section No. 1: T-Rectangle 0.6/0.2								
2	LC1	5	0.000	-1.16	15.00	0.00	0.00	0.00	11.87
		2	1.000	-1.16	18.00	0.00	0.00	0.00	-4.63
	LC2	5	0.000	-1.45	-0.49	0.00	0.00	0.00	1.16
		2	1.000	-1.45	-0.49	0.00	0.00	0.00	1.66
	LC3	5	0.000	-1.54	20.00	0.00	0.00	0.00	15.82
		2	1.000	-1.54	24.00	0.00	0.00	0.00	-6.18
	CO1	5	0.000	-1.52	20.25	-0.00	0.00	0.00	16.06
		2	1.000	-1.51	24.30	0.00	0.00	0.00	-6.22
	CO2	5	0.000	-3.48	16.50	0.00	0.00	0.00	15.50
		2	1.000	-3.47	19.95	0.00	0.00	0.00	-2.73
	CO3	5	0.000	-4.98	37.49	0.00	0.00	0.00	32.30
		2	1.000	-4.95	45.14	0.00	0.00	0.00	-9.02
	CO4	5	0.000	-3.41	47.27	0.00	0.00	0.00	37.58
		2	1.000	-3.37	56.72	0.00	0.00	0.00	-14.42
	CO5	5	0.000	-4.72	46.80	0.00	0.00	0.00	38.74
		2	1.000	-4.67	56.25	-0.00	0.00	-0.00	-12.79
	CO6	5	0.000	-1.13	15.00	0.00	0.00	0.00	11.89
		2	1.000	-1.13	18.00	0.00	0.00	0.00	-4.61
	CO7	5	0.000	-2.59	14.50	-0.00	0.00	0.00	13.09
		2	1.000	-2.58	17.50	0.00	0.00	0.00	-2.91
	CO8	5	0.000	-3.60	28.50	-0.00	0.00	0.00	24.26
		2	1.000	-3.58	34.30	0.00	0.00	0.00	-7.14
	CO9	5	0.000	-2.57	35.01	0.00	0.00	0.00	27.80
		2	1.000	-2.55	42.01	0.00	0.00	0.00	-10.71
	CO10	5	0.000	-3.45	34.70	0.00	0.00	0.00	28.55
		2	1.000	-3.42	41.70	0.00	0.00	0.00	-9.65
	CO11	5	0.000	-1.13	15.00	0.00	0.00	0.00	11.89

Student Version

4.12 CROSS-SECTIONS - INTERNAL FORCES

Member No.	LC/CO	Node No.	Location x [m]	Forces [kN] N	V_y	V_z	Moments [kNm] M_T	M_y	M_z
2	CO11	2	1.000	-1.13	18.00	0.00	0.00	0.00	-4.61
	CO12	5	0.000	-1.42	14.90	0.00	0.00	0.00	12.13
		2	1.000	-1.42	17.90	0.00	0.00	0.00	-4.27
	CO13	5	0.000	-1.72	18.90	0.00	0.00	0.00	15.31
		2	1.000	-1.71	22.70	0.00	0.00	0.00	-5.50
	CO14	5	0.000	-1.72	23.00	-0.00	0.00	0.00	18.24
		2	1.000	-1.71	27.60	0.00	0.00	0.00	-7.06
	CO15	5	0.000	-1.13	15.00	0.00	0.00	0.00	11.89
		2	1.000	-1.13	18.00	0.00	0.00	0.00	-4.61
	CO16	5	0.000	-1.43	19.00	-0.00	0.00	0.00	15.06
		2	1.000	-1.42	22.80	-0.00	0.00	-0.00	-5.84
	CO17	5	0.000	-5.19	40.49	0.00	0.00	0.00	34.70
		2	1.000	-5.15	48.74	-0.00	0.00	-0.00	-9.91
4	LC1	6	0.000	-1.16	12.00	0.00	0.00	0.00	25.37
		5	1.000	-1.16	15.00	0.00	0.00	0.00	11.87
	LC2	6	0.000	-1.45	-0.49	0.00	0.00	0.00	0.67
		5	1.000	-1.45	-0.49	0.00	0.00	0.00	1.16
	LC3	6	0.000	-1.54	16.00	0.00	0.00	0.00	33.82
		5	1.000	-1.54	20.00	0.00	0.00	0.00	15.82
	CO1	6	0.000	-1.53	16.20	0.00	0.00	0.00	34.28
		5	1.000	-1.52	20.25	-0.00	0.00	0.00	16.06
	CO2	6	0.000	-3.49	13.05	0.00	0.00	0.00	30.27
		5	1.000	-3.48	16.50	0.00	0.00	0.00	15.50
	CO3	6	0.000	-5.02	29.84	-0.00	0.00	0.00	65.96
		5	1.000	-4.98	37.49	0.00	0.00	0.00	32.30
	CO4	6	0.000	-3.47	37.81	0.00	0.00	0.00	80.12
		5	1.000	-3.41	47.27	0.00	0.00	0.00	37.58
	CO5	6	0.000	-4.78	37.35	0.00	0.00	0.00	80.82
		5	1.000	-4.72	46.80	0.00	0.00	0.00	38.74
	CO6	6	0.000	-1.14	12.00	-0.00	0.00	0.00	25.39
		5	1.000	-1.13	15.00	0.00	0.00	0.00	11.89
	CO7	6	0.000	-2.59	11.50	0.00	0.00	0.00	26.09
		5	1.000	-2.59	14.50	-0.00	0.00	0.00	13.09
	CO8	6	0.000	-3.63	22.70	0.00	0.00	0.00	49.86
		5	1.000	-3.60	28.50	-0.00	0.00	0.00	24.26
	CO9	6	0.000	-2.61	28.01	0.00	0.00	0.00	59.30
		5	1.000	-2.57	35.01	0.00	0.00	0.00	27.80
	CO10	6	0.000	-3.48	27.70	0.00	0.00	0.00	59.76
		5	1.000	-3.45	34.70	0.00	0.00	0.00	28.55
	CO11	6	0.000	-1.14	12.00	-0.00	0.00	0.00	25.39
		5	1.000	-1.13	15.00	0.00	0.00	0.00	11.89
	CO12	6	0.000	-1.43	11.90	0.00	0.00	0.00	25.53
		5	1.000	-1.42	14.90	0.00	0.00	0.00	12.13
	CO13	6	0.000	-1.73	15.10	-0.00	0.00	0.00	32.31
		5	1.000	-1.72	18.90	0.00	0.00	0.00	15.31
	CO14	6	0.000	-1.73	18.40	0.00	0.00	0.00	38.95
		5	1.000	-1.72	23.00	-0.00	0.00	0.00	18.24
	CO15	6	0.000	-1.14	12.00	-0.00	0.00	0.00	25.39
		5	1.000	-1.13	15.00	0.00	0.00	0.00	11.89
	CO16	6	0.000	-1.44	15.20	0.00	0.00	0.00	32.17
		5	1.000	-1.43	19.00	-0.00	0.00	0.00	15.06
	CO17	6	0.000	-5.23	32.24	-0.00	0.00	0.00	71.07
		5	1.000	-5.19	40.49	0.00	0.00	0.00	34.70
5	LC1	7	0.000	-1.16	9.00	0.00	0.00	0.00	35.87
		6	1.000	-1.16	12.00	0.00	0.00	0.00	25.37
	LC2	7	0.000	-1.45	-0.49	0.00	0.00	0.00	0.18
		6	1.000	-1.45	-0.49	0.00	0.00	0.00	0.67
	LC3	7	0.000	-1.54	12.00	0.00	0.00	0.00	47.82

Student Version

4.12 CROSS-SECTIONS - INTERNAL FORCES

Member No.	LC/CO	Node No.	Location x [m]	Forces [kN] N	V_y	V_z	Moments [kNm] M_T	M_y	M_z	
5	LC3	6	1.000	-1.54	16.00	0.00	0.00	0.00	33.82	
	CO1	7	0.000	-1.54	12.15	0.00	0.00	0.00	48.46	
		6	1.000	-1.53	16.20	0.00	0.00	0.00	34.28	
	CO2	7	0.000	-3.49	9.60	0.00	0.00	0.00	41.59	
		6	1.000	-3.49	13.05	0.00	0.00	0.00	30.27	
	CO3	7	0.000	-5.06	22.19	0.00	0.00	0.00	91.98	
		6	1.000	-5.02	29.84	-0.00	0.00	0.00	65.96	
	CO4	7	0.000	-3.53	28.36	0.00	0.00	0.00	113.21	
		6	1.000	-3.47	37.81	0.00	0.00	0.00	80.12	
	CO5	7	0.000	-4.84	27.90	0.00	0.00	0.00	113.44	
		6	1.000	-4.78	37.35	0.00	0.00	0.00	80.82	
	CO6	7	0.000	-1.15	9.00	0.00	0.00	0.00	35.89	
		6	1.000	-1.14	12.00	-0.00	0.00	0.00	25.39	
	CO7	7	0.000	-2.60	8.50	-0.00	0.00	0.00	36.09	
		6	1.000	-2.59	11.50	0.00	0.00	0.00	26.09	
	CO8	7	0.000	-3.65	16.90	0.00	0.00	0.00	69.66	
		6	1.000	-3.63	22.70	0.00	0.00	0.00	49.86	
	CO9	7	0.000	-2.64	21.01	-0.00	0.00	0.00	83.81	
		6	1.000	-2.61	28.01	0.00	0.00	0.00	59.30	
	CO10	7	0.000	-3.51	20.70	-0.00	0.00	0.00	83.96	
		6	1.000	-3.48	27.70	0.00	0.00	0.00	59.76	
	CO11	7	0.000	-1.15	9.00	0.00	0.00	0.00	35.89	
		6	1.000	-1.14	12.00	-0.00	0.00	0.00	25.39	
	CO12	7	0.000	-1.44	8.90	-0.00	0.00	0.00	35.93	
		6	1.000	-1.43	11.90	0.00	0.00	0.00	25.53	
	CO13	7	0.000	-1.74	11.30	0.00	0.00	0.00	45.51	
		6	1.000	-1.73	15.10	-0.00	0.00	0.00	32.31	
	CO14	7	0.000	-1.75	13.80	0.00	0.00	0.00	55.05	
		6	1.000	-1.73	18.40	0.00	0.00	0.00	38.95	
	CO15	7	0.000	-1.15	9.00	0.00	0.00	0.00	35.89	
		6	1.000	-1.14	12.00	-0.00	0.00	0.00	25.39	
	CO16	7	0.000	-1.45	11.40	-0.00	0.00	0.00	45.47	
		6	1.000	-1.44	15.20	0.00	0.00	0.00	32.17	
	CO17	7	0.000	-5.28	23.99	0.00	0.00	0.00	99.19	
		6	1.000	-5.23	32.24	-0.00	0.00	0.00	71.07	
6	LC1	8	0.000	-1.16	6.00	0.00	0.00	0.00	43.37	
		7	1.000	-1.16	9.00	0.00	0.00	0.00	35.87	
	LC2	8	0.000	-1.45	-0.49	0.00	0.00	0.00	-0.32	
		7	1.000	-1.45	-0.49	0.00	0.00	0.00	0.18	
	LC3	8	0.000	-1.54	8.00	0.00	0.00	0.00	57.82	
		7	1.000	-1.54	12.00	0.00	0.00	0.00	47.82	
	CO1	8	0.000	-1.55	8.10	-0.00	0.00	0.00	58.59	
		7	1.000	-1.54	12.15	0.00	0.00	0.00	48.46	
	CO2	8	0.000	-3.50	6.15	0.00	0.00	0.00	49.46	
		7	1.000	-3.49	9.60	0.00	0.00	0.00	41.59	
	CO3	8	0.000	-5.09	14.53	0.00	0.00	0.00	110.34	
		7	1.000	-5.06	22.19	0.00	0.00	0.00	91.98	
	CO4	8	0.000	-3.58	18.91	0.00	0.00	0.00	136.84	
		7	1.000	-3.53	28.36	0.00	0.00	0.00	113.21	
	CO5	8	0.000	-4.89	18.44	0.00	0.00	0.00	136.61	
		7	1.000	-4.84	27.90	0.00	0.00	0.00	113.44	
	CO6	8	0.000	-1.15	6.00	0.00	0.00	0.00	43.39	
		7	1.000	-1.15	9.00	0.00	0.00	0.00	35.89	
	CO7	8	0.000	-2.60	5.50	0.00	0.00	0.00	43.09	
		7	1.000	-2.60	8.50	-0.00	0.00	0.00	36.09	
	CO8	8	0.000	-3.67	11.09	0.00	0.00	0.00	83.65	
		7	1.000	-3.65	16.90	0.00	0.00	0.00	69.66	
	CO9	8	0.000	-2.67	14.00	-0.00	0.00	0.00	101.32	

Document Version

4.12 CROSS-SECTIONS - INTERNAL FORCES

Member No.	LC/CO	Node No.	Location x [m]	Forces [kN] N	V_y	V_z	Moments [kNm] M_T	M_y	M_z	
6	CO9	7	1.000	-2.64	21.01	-0.00	0.00	0.00	83.81	
	CO10	8	0.000	-3.54	13.70	-0.00	0.00	0.00	101.16	
		7	1.000	-3.51	20.70	-0.00	0.00	0.00	83.96	
	CO11	8	0.000	-1.15	6.00	0.00	0.00	0.00	43.39	
		7	1.000	-1.15	9.00	0.00	0.00	0.00	35.89	
	CO12	8	0.000	-1.44	5.90	0.00	0.00	0.00	43.33	
		7	1.000	-1.44	8.90	-0.00	0.00	0.00	35.93	
	CO13	8	0.000	-1.75	7.50	0.00	0.00	0.00	54.91	
		7	1.000	-1.74	11.30	0.00	0.00	0.00	45.51	
	CO14	8	0.000	-1.76	9.20	0.00	0.00	0.00	66.55	
		7	1.000	-1.75	13.80	0.00	0.00	0.00	55.05	
	CO15	8	0.000	-1.15	6.00	0.00	0.00	0.00	43.39	
		7	1.000	-1.15	9.00	0.00	0.00	0.00	35.89	
	CO16	8	0.000	-1.46	7.60	-0.00	0.00	0.00	54.97	
		7	1.000	-1.45	11.40	-0.00	0.00	0.00	45.47	
	CO17	8	0.000	-5.31	15.73	-0.00	0.00	0.00	119.05	
		7	1.000	-5.28	23.99	0.00	0.00	0.00	99.19	
7	LC1	9	0.000	-1.16	3.00	0.00	0.00	0.00	47.87	
		8	1.000	-1.16	6.00	0.00	0.00	0.00	43.37	
	LC2	9	0.000	-1.45	-0.49	0.00	0.00	0.00	-0.81	
		8	1.000	-1.45	-0.49	0.00	0.00	0.00	-0.32	
	LC3	9	0.000	-1.54	4.00	0.00	0.00	0.00	63.82	
		8	1.000	-1.54	8.00	0.00	0.00	0.00	57.82	
	CO1	9	0.000	-1.56	4.05	0.00	0.00	0.00	64.67	
		8	1.000	-1.55	8.10	-0.00	0.00	0.00	58.59	
	CO2	9	0.000	-3.50	2.69	0.00	0.00	0.00	53.88	
		8	1.000	-3.50	6.15	0.00	0.00	0.00	49.46	
	CO3	9	0.000	-5.11	6.88	0.00	0.00	0.00	121.05	
		8	1.000	-5.09	14.53	0.00	0.00	0.00	110.34	
	CO4	9	0.000	-3.61	9.45	0.00	0.00	0.00	151.02	
		8	1.000	-3.58	18.91	0.00	0.00	0.00	136.84	
	CO5	9	0.000	-4.92	8.99	0.00	0.00	0.00	150.33	
		8	1.000	-4.89	18.44	0.00	0.00	0.00	136.61	
	CO6	9	0.000	-1.15	3.00	0.00	0.00	0.00	47.89	
		8	1.000	-1.15	6.00	0.00	0.00	0.00	43.39	
	CO7	9	0.000	-2.61	2.50	0.00	0.00	0.00	47.09	
		8	1.000	-2.60	5.50	0.00	0.00	0.00	43.09	
	CO8	9	0.000	-3.68	5.29	0.00	0.00	0.00	91.85	
		8	1.000	-3.67	11.09	0.00	0.00	0.00	83.65	
	CO9	9	0.000	-2.68	7.00	0.00	0.00	0.00	111.82	
		8	1.000	-2.67	14.00	-0.00	0.00	0.00	101.32	
	CO10	9	0.000	-3.55	6.69	0.00	0.00	0.00	111.35	
		8	1.000	-3.54	13.70	-0.00	0.00	0.00	101.16	
	CO11	9	0.000	-1.15	3.00	0.00	0.00	0.00	47.89	
		8	1.000	-1.15	6.00	0.00	0.00	0.00	43.39	
	CO12	9	0.000	-1.44	2.90	-0.00	0.00	0.00	47.73	
		8	1.000	-1.44	5.90	0.00	0.00	0.00	43.33	
	CO13	9	0.000	-1.75	3.70	0.00	0.00	0.00	60.51	
		8	1.000	-1.75	7.50	0.00	0.00	0.00	54.91	
	CO14	9	0.000	-1.77	4.60	0.00	0.00	0.00	73.45	
		8	1.000	-1.76	9.20	0.00	0.00	0.00	66.55	
	CO15	9	0.000	-1.15	3.00	0.00	0.00	0.00	47.89	
		8	1.000	-1.15	6.00	0.00	0.00	0.00	43.39	
	CO16	9	0.000	-1.46	3.80	0.00	0.00	0.00	60.67	
		8	1.000	-1.46	7.60	-0.00	0.00	0.00	54.97	
	CO17	9	0.000	-5.34	7.48	0.00	0.00	0.00	130.65	
		8	1.000	-5.31	15.73	-0.00	0.00	0.00	119.05	
8	LC1	10	0.000	-1.16	0.00	0.00	0.00	0.00	49.37	

Student Version

4.12 CROSS-SECTIONS - INTERNAL FORCES

Member No.	LC/CO	Node No.	Location x [m]	Forces [kN] N	V_y	V_z	Moments [kNm] M_T	M_y	M_z	
8	LC1	9	1.000	-1.16	3.00	0.00	0.00	0.00	47.87	
	LC2	10	0.000	-1.45	-0.49	0.00	0.00	0.00	-1.31	
		9	1.000	-1.45	-0.49	0.00	0.00	0.00	-0.81	
	LC3	10	0.000	-1.54	0.00	0.00	0.00	0.00	65.82	
		9	1.000	-1.54	4.00	0.00	0.00	0.00	63.82	
	CO1	10	0.000	-1.56	0.00	0.00	0.00	0.00	66.69	
		9	1.000	-1.56	4.05	0.00	0.00	0.00	64.67	
	CO2	10	0.000	-3.50	-0.76	0.00	0.00	0.00	54.85	
		9	1.000	-3.50	2.69	0.00	0.00	0.00	53.88	
	CO3	10	0.000	-5.11	-0.77	0.00	0.00	0.00	124.10	
		9	1.000	-5.11	6.88	0.00	0.00	0.00	121.05	
	CO4	10	0.000	-3.63	0.00	0.00	0.00	0.00	155.75	
		9	1.000	-3.61	9.45	0.00	0.00	0.00	151.02	
	CO5	10	0.000	-4.93	-0.47	0.00	0.00	0.00	154.58	
		9	1.000	-4.92	8.99	0.00	0.00	0.00	150.33	
	CO6	10	0.000	-1.15	0.00	0.00	0.00	0.00	49.39	
		9	1.000	-1.15	3.00	0.00	0.00	0.00	47.89	
	CO7	10	0.000	-2.61	-0.50	0.00	0.00	0.00	48.09	
		9	1.000	-2.61	2.50	0.00	0.00	0.00	47.09	
	CO8	10	0.000	-3.68	-0.51	0.00	0.00	0.00	94.24	
		9	1.000	-3.68	5.29	0.00	0.00	0.00	91.85	
	CO9	10	0.000	-2.69	0.00	0.00	0.00	0.00	115.32	
		9	1.000	-2.68	7.00	0.00	0.00	0.00	111.82	
	CO10	10	0.000	-3.56	-0.31	0.00	0.00	0.00	114.54	
		9	1.000	-3.55	6.69	0.00	0.00	0.00	111.35	
	CO11	10	0.000	-1.15	0.00	0.00	0.00	0.00	49.39	
		9	1.000	-1.15	3.00	0.00	0.00	0.00	47.89	
	CO12	10	0.000	-1.45	-0.10	0.00	0.00	0.00	49.13	
		9	1.000	-1.44	2.90	0.00	0.00	0.00	47.73	
	CO13	10	0.000	-1.75	-0.10	0.00	0.00	0.00	62.31	
		9	1.000	-1.75	3.70	0.00	0.00	0.00	60.51	
	CO14	10	0.000	-1.77	0.00	0.00	0.00	0.00	75.75	
		9	1.000	-1.77	4.60	0.00	0.00	0.00	73.45	
	CO15	10	0.000	-1.15	0.00	0.00	0.00	0.00	49.39	
		9	1.000	-1.15	3.00	0.00	0.00	0.00	47.89	
	CO16	10	0.000	-1.46	0.00	0.00	0.00	0.00	62.57	
		9	1.000	-1.46	3.80	0.00	0.00	0.00	60.67	
	CO17	10	0.000	-5.34	-0.78	0.00	0.00	0.00	134.00	
		9	1.000	-5.34	7.48	0.00	0.00	0.00	130.65	
9	LC1	11	0.000	-1.16	-3.00	0.00	0.00	0.00	47.87	
		10	1.000	-1.16	0.00	0.00	0.00	0.00	49.37	
	LC2	11	0.000	-1.45	-0.49	0.00	0.00	0.00	-1.80	
		10	1.000	-1.45	-0.49	0.00	0.00	0.00	-1.31	
	LC3	11	0.000	-1.54	-4.00	0.00	0.00	0.00	63.82	
		10	1.000	-1.54	0.00	0.00	0.00	0.00	65.82	
	CO1	11	0.000	-1.56	-4.05	0.00	0.00	0.00	64.67	
		10	1.000	-1.56	-0.00	0.00	0.00	0.00	66.69	
	CO2	11	0.000	-3.50	-4.21	0.00	0.00	0.00	52.37	
		10	1.000	-3.50	-0.76	0.00	0.00	0.00	54.85	
	CO3	11	0.000	-5.11	-8.43	0.00	0.00	0.00	119.50	
		10	1.000	-5.11	-0.77	0.00	0.00	0.00	124.10	
	CO4	11	0.000	-3.61	-9.45	0.00	0.00	0.00	151.02	
		10	1.000	-3.63	-0.00	0.00	0.00	0.00	155.75	
	CO5	11	0.000	-4.92	-9.93	0.00	0.00	0.00	149.39	
		10	1.000	-4.93	-0.47	0.00	0.00	0.00	154.58	
	CO6	11	0.000	-1.15	-3.00	0.00	0.00	0.00	47.89	
		10	1.000	-1.15	-0.00	0.00	0.00	0.00	49.39	
	CO7	11	0.000	-2.60	-3.50	0.00	0.00	0.00	46.09	

Document Version

4.12 CROSS-SECTIONS - INTERNAL FORCES

Member No.	LC/CO	Node No.	Location x [m]	Forces [kN] N	V_y	V_z	Moments [kNm] M_T	M_y	M_z
9	CO7	10	1.000	-2.61	-0.50	0.00	0.00	0.00	48.09
	CO8	11	0.000	-3.68	-6.31	0.00	0.00	0.00	90.82
		10	1.000	-3.68	-0.51	0.00	0.00	0.00	94.24
	CO9	11	0.000	-2.68	-7.00	0.00	0.00	0.00	111.82
		10	1.000	-2.69	-0.00	0.00	0.00	0.00	115.32
	CO10	11	0.000	-3.55	-7.31	0.00	0.00	0.00	110.73
		10	1.000	-3.56	-0.31	0.00	0.00	0.00	114.54
	CO11	11	0.000	-1.15	-3.00	0.00	0.00	0.00	47.89
		10	1.000	-1.15	-0.00	0.00	0.00	0.00	49.39
	CO12	11	0.000	-1.44	-3.10	0.00	0.00	0.00	47.53
		10	1.000	-1.45	-0.10	0.00	0.00	0.00	49.13
	CO13	11	0.000	-1.75	-3.90	0.00	0.00	0.00	60.31
		10	1.000	-1.75	-0.10	0.00	0.00	0.00	62.31
	CO14	11	0.000	-1.77	-4.60	0.00	0.00	0.00	73.45
		10	1.000	-1.77	-0.00	0.00	0.00	0.00	75.75
	CO15	11	0.000	-1.15	-3.00	0.00	0.00	0.00	47.89
		10	1.000	-1.15	-0.00	0.00	0.00	0.00	49.39
	CO16	11	0.000	-1.46	-3.80	0.00	0.00	0.00	60.67
		10	1.000	-1.46	-0.00	0.00	0.00	0.00	62.57
	CO17	11	0.000	-5.33	-9.03	0.00	0.00	0.00	129.10
		10	1.000	-5.34	-0.78	0.00	0.00	0.00	134.00
10	LC1	12	0.000	-1.16	-6.00	0.00	0.00	0.00	43.37
		11	1.000	-1.16	-3.00	0.00	0.00	0.00	47.87
	LC2	12	0.000	-1.45	-0.49	0.00	0.00	0.00	-2.29
		11	1.000	-1.45	-0.49	0.00	0.00	0.00	-1.80
	LC3	12	0.000	-1.54	-8.00	0.00	0.00	0.00	57.82
		11	1.000	-1.54	-4.00	0.00	0.00	0.00	63.82
	CO1	12	0.000	-1.55	-8.10	0.00	0.00	0.00	58.59
		11	1.000	-1.56	-4.05	0.00	0.00	0.00	64.67
	CO2	12	0.000	-3.50	-7.66	0.00	0.00	0.00	46.44
		11	1.000	-3.50	-4.21	0.00	0.00	0.00	52.37
	CO3	12	0.000	-5.08	-16.08	0.00	0.00	0.00	107.24
		11	1.000	-5.11	-8.43	0.00	0.00	0.00	119.50
	CO4	12	0.000	-3.58	-18.91	0.00	0.00	0.00	136.84
		11	1.000	-3.61	-9.45	0.00	0.00	0.00	151.02
	CO5	12	0.000	-4.89	-19.38	0.00	0.00	0.00	134.73
		11	1.000	-4.92	-9.93	0.00	0.00	0.00	149.39
	CO6	12	0.000	-1.15	-6.00	0.00	0.00	0.00	43.39
		11	1.000	-1.15	-3.00	0.00	0.00	0.00	47.89
	CO7	12	0.000	-2.60	-6.51	0.00	0.00	0.00	41.08
		11	1.000	-2.60	-3.50	0.00	0.00	0.00	46.09
	CO8	12	0.000	-3.66	-12.12	0.00	0.00	0.00	81.61
		11	1.000	-3.68	-6.31	0.00	0.00	0.00	90.82
	CO9	12	0.000	-2.67	-14.00	0.00	0.00	0.00	101.32
		11	1.000	-2.68	-7.00	0.00	0.00	0.00	111.82
	CO10	12	0.000	-3.54	-14.31	0.00	0.00	0.00	99.92
		11	1.000	-3.55	-7.31	0.00	0.00	0.00	110.73
	CO11	12	0.000	-1.15	-6.00	0.00	0.00	0.00	43.39
		11	1.000	-1.15	-3.00	0.00	0.00	0.00	47.89
	CO12	12	0.000	-1.44	-6.10	0.00	0.00	0.00	42.93
		11	1.000	-1.44	-3.10	0.00	0.00	0.00	47.53
	CO13	12	0.000	-1.75	-7.70	0.00	0.00	0.00	54.51
		11	1.000	-1.75	-3.90	0.00	0.00	0.00	60.31
	CO14	12	0.000	-1.76	-9.20	0.00	0.00	0.00	66.55
		11	1.000	-1.77	-4.60	0.00	0.00	0.00	73.45
	CO15	12	0.000	-1.15	-6.00	0.00	0.00	0.00	43.39
		11	1.000	-1.15	-3.00	0.00	0.00	0.00	47.89
	CO16	12	0.000	-1.46	-7.60	0.00	0.00	0.00	54.97

Document Version

4.12 CROSS-SECTIONS - INTERNAL FORCES

Member No.	LC/CO	Node No.	Location x [m]	Forces [kN] N	V_y	V_z	Moments [kNm] M_T	M_y	M_z
10	CO16	11	1.000	-1.46	-3.80	0.00	0.00	0.00	60.67
	CO17	12	0.000	-5.31	-17.29	0.00	0.00	0.00	115.93
		11	1.000	-5.33	-9.03	0.00	0.00	0.00	129.10
11	LC1	13	0.000	-1.16	-9.00	0.00	0.00	0.00	35.87
		12	1.000	-1.16	-6.00	0.00	0.00	0.00	43.37
	LC2	13	0.000	-1.45	-0.49	0.00	0.00	0.00	-2.79
		12	1.000	-1.45	-0.49	0.00	0.00	0.00	-2.29
	LC3	13	0.000	-1.54	-12.00	0.00	0.00	0.00	47.82
		12	1.000	-1.54	-8.00	0.00	0.00	0.00	57.82
	CO1	13	0.000	-1.54	-12.15	0.00	0.00	0.00	48.46
		12	1.000	-1.55	-8.10	0.00	0.00	0.00	58.59
	CO2	13	0.000	-3.49	-11.11	0.00	0.00	0.00	37.05
		12	1.000	-3.50	-7.66	0.00	0.00	0.00	46.44
	CO3	13	0.000	-5.05	-23.74	0.00	0.00	0.00	87.33
		12	1.000	-5.08	-16.08	0.00	0.00	0.00	107.24
	CO4	13	0.000	-3.53	-28.36	0.00	0.00	0.00	113.21
		12	1.000	-3.58	-18.91	0.00	0.00	0.00	136.84
	CO5	13	0.000	-4.84	-28.84	0.00	0.00	0.00	110.62
		12	1.000	-4.89	-19.38	0.00	0.00	0.00	134.73
	CO6	13	0.000	-1.15	-9.00	0.00	0.00	0.00	35.89
		12	1.000	-1.15	-6.00	0.00	0.00	0.00	43.39
	CO7	13	0.000	-2.60	-9.51	0.00	0.00	0.00	33.08
		12	1.000	-2.60	-6.51	0.00	0.00	0.00	41.08
	CO8	13	0.000	-3.65	-17.92	0.00	0.00	0.00	66.59
		12	1.000	-3.66	-12.12	0.00	0.00	0.00	81.61
	CO9	13	0.000	-2.64	-21.01	0.00	0.00	0.00	83.81
		12	1.000	-2.67	-14.00	0.00	0.00	0.00	101.32
	CO10	13	0.000	-3.51	-21.32	0.00	0.00	0.00	82.10
		12	1.000	-3.54	-14.31	0.00	0.00	0.00	99.92
	CO11	13	0.000	-1.15	-9.00	0.00	0.00	0.00	35.89
		12	1.000	-1.15	-6.00	0.00	0.00	0.00	43.39
	CO12	13	0.000	-1.44	-9.10	0.00	0.00	0.00	35.33
		12	1.000	-1.44	-6.10	0.00	0.00	0.00	42.93
	CO13	13	0.000	-1.74	-11.50	0.00	0.00	0.00	44.90
		12	1.000	-1.75	-7.70	0.00	0.00	0.00	54.51
	CO14	13	0.000	-1.75	-13.80	0.00	0.00	0.00	55.05
		12	1.000	-1.76	-9.20	0.00	0.00	0.00	66.55
	CO15	13	0.000	-1.15	-9.00	0.00	0.00	0.00	35.89
		12	1.000	-1.15	-6.00	0.00	0.00	0.00	43.39
	CO16	13	0.000	-1.45	-11.40	0.00	0.00	0.00	45.47
		12	1.000	-1.46	-7.60	0.00	0.00	0.00	54.97
	CO17	13	0.000	-5.27	-25.54	0.00	0.00	0.00	94.52
		12	1.000	-5.31	-17.29	0.00	0.00	0.00	115.93
12	LC1	14	0.000	-1.16	-12.00	0.00	0.00	0.00	25.37
		13	1.000	-1.16	-9.00	0.00	0.00	0.00	35.87
	LC2	14	0.000	-1.45	-0.49	0.00	0.00	0.00	-3.28
		13	1.000	-1.45	-0.49	0.00	0.00	0.00	-2.79
	LC3	14	0.000	-1.54	-16.00	0.00	0.00	0.00	33.82
		13	1.000	-1.54	-12.00	0.00	0.00	0.00	47.82
	CO1	14	0.000	-1.53	-16.20	0.00	0.00	0.00	34.28
		13	1.000	-1.54	-12.15	0.00	0.00	0.00	48.46
	CO2	14	0.000	-3.48	-14.56	0.00	0.00	0.00	24.21
		13	1.000	-3.49	-11.11	0.00	0.00	0.00	37.05
	CO3	14	0.000	-5.01	-31.39	0.00	0.00	0.00	59.76
		13	1.000	-5.05	-23.74	0.00	0.00	0.00	87.33
	CO4	14	0.000	-3.47	-37.81	0.00	0.00	0.00	80.12
		13	1.000	-3.53	-28.36	0.00	0.00	0.00	113.21
	CO5	14	0.000	-4.78	-38.29	0.00	0.00	0.00	77.06

Document Version

4.12 CROSS-SECTIONS - INTERNAL FORCES

Member No.	LC/CO	Node No.	Location x [m]	Forces [kN] N	V_y	V_z	Moments [kNm] M_T	M_y	M_z	
12	CO5	13	1.000	-4.84	-28.84	0.00	0.00	0.00	110.62	
	CO6	14	0.000	-1.14	-12.00	0.00	0.00	0.00	25.39	
		13	1.000	-1.15	-9.00	0.00	0.00	0.00	35.89	
	CO7	14	0.000	-2.59	-12.51	0.00	0.00	0.00	22.07	
		13	1.000	-2.60	-9.51	0.00	0.00	0.00	33.08	
	CO8	14	0.000	-3.62	-23.72	0.00	0.00	0.00	45.77	
		13	1.000	-3.65	-17.92	0.00	0.00	0.00	66.59	
	CO9	14	0.000	-2.61	-28.01	0.00	0.00	0.00	59.30	
		13	1.000	-2.64	-21.01	0.00	0.00	0.00	83.81	
	CO10	14	0.000	-3.48	-28.32	0.00	0.00	0.00	57.29	
		13	1.000	-3.51	-21.32	0.00	0.00	0.00	82.10	
	CO11	14	0.000	-1.14	-12.00	0.00	0.00	0.00	25.39	
		13	1.000	-1.15	-9.00	0.00	0.00	0.00	35.89	
	CO12	14	0.000	-1.43	-12.10	0.00	0.00	0.00	24.72	
		13	1.000	-1.44	-9.10	0.00	0.00	0.00	35.33	
	CO13	14	0.000	-1.73	-15.30	0.00	0.00	0.00	31.50	
		13	1.000	-1.74	-11.50	0.00	0.00	0.00	44.90	
	CO14	14	0.000	-1.73	-18.40	0.00	0.00	0.00	38.95	
		13	1.000	-1.75	-13.80	0.00	0.00	0.00	55.05	
	CO15	14	0.000	-1.14	-12.00	0.00	0.00	0.00	25.39	
		13	1.000	-1.15	-9.00	0.00	0.00	0.00	35.89	
	CO16	14	0.000	-1.44	-15.20	0.00	0.00	0.00	32.17	
		13	1.000	-1.45	-11.40	0.00	0.00	0.00	45.47	
	CO17	14	0.000	-5.23	-33.80	0.00	0.00	0.00	64.85	
		13	1.000	-5.27	-25.54	0.00	0.00	0.00	94.52	
13	LC1	15	0.000	-1.16	-15.00	0.00	0.00	0.00	11.87	
		14	1.000	-1.16	-12.00	0.00	0.00	0.00	25.37	
	LC2	15	0.000	-1.45	-0.49	0.00	0.00	0.00	-3.77	
		14	1.000	-1.45	-0.49	0.00	0.00	0.00	-3.28	
	LC3	15	0.000	-1.54	-20.00	0.00	0.00	0.00	15.82	
		14	1.000	-1.54	-16.00	0.00	0.00	0.00	33.82	
	CO1	15	0.000	-1.52	-20.25	0.00	0.00	0.00	16.06	
		14	1.000	-1.53	-16.20	0.00	0.00	0.00	34.28	
	CO2	15	0.000	-3.48	-18.01	0.00	0.00	0.00	7.93	
		14	1.000	-3.48	-14.56	0.00	0.00	0.00	24.21	
	CO3	15	0.000	-4.98	-39.04	0.00	0.00	0.00	24.55	
		14	1.000	-5.01	-31.39	0.00	0.00	0.00	59.76	
	CO4	15	0.000	-3.41	-47.27	0.00	0.00	0.00	37.58	
		14	1.000	-3.47	-37.81	0.00	0.00	0.00	80.12	
	CO5	15	0.000	-4.72	-47.74	0.00	0.00	0.00	34.05	
		14	1.000	-4.78	-38.29	0.00	0.00	0.00	77.06	
	CO6	15	0.000	-1.13	-15.00	0.00	0.00	0.00	11.89	
		14	1.000	-1.14	-12.00	0.00	0.00	0.00	25.39	
	CO7	15	0.000	-2.59	-15.51	0.00	0.00	0.00	8.06	
		14	1.000	-2.59	-12.51	0.00	0.00	0.00	22.07	
	CO8	15	0.000	-3.60	-29.52	0.00	0.00	0.00	19.15	
		14	1.000	-3.62	-23.72	0.00	0.00	0.00	45.77	
	CO9	15	0.000	-2.57	-35.01	0.00	0.00	0.00	27.80	
		14	1.000	-2.61	-28.01	0.00	0.00	0.00	59.30	
	CO10	15	0.000	-3.44	-35.32	0.00	0.00	0.00	25.47	
		14	1.000	-3.48	-28.32	0.00	0.00	0.00	57.29	
	CO11	15	0.000	-1.13	-15.00	0.00	0.00	0.00	11.89	
		14	1.000	-1.14	-12.00	0.00	0.00	0.00	25.39	
	CO12	15	0.000	-1.42	-15.10	0.00	0.00	0.00	11.12	
		14	1.000	-1.43	-12.10	0.00	0.00	0.00	24.72	
	CO13	15	0.000	-1.72	-19.10	0.00	0.00	0.00	14.30	
		14	1.000	-1.73	-15.30	0.00	0.00	0.00	31.50	
	CO14	15	0.000	-1.72	-23.00	0.00	0.00	0.00	18.24	

Student Version

4.12 CROSS-SECTIONS - INTERNAL FORCES

Member No.	LC/CO	Node No.	Location x [m]	Forces [kN] N	V_y	V_z	Moments [kNm] M_T	M_y	M_z
13	CO14	14	1.000	-1.73	-18.40	0.00	0.00	0.00	38.95
	CO15	15	0.000	-1.13	-15.00	0.00	0.00	0.00	11.89
		14	1.000	-1.14	-12.00	0.00	0.00	0.00	25.39
	CO16	15	0.000	-1.43	-19.00	0.00	0.00	0.00	15.06
		14	1.000	-1.44	-15.20	0.00	0.00	0.00	32.17
	CO17	15	0.000	-5.18	-42.05	0.00	0.00	0.00	26.93
		14	1.000	-5.23	-33.80	0.00	0.00	0.00	64.85
14	LC1	3	0.000	-1.16	-18.00	0.00	0.00	0.00	-4.63
		15	1.000	-1.16	-15.00	0.00	0.00	0.00	11.87
	LC2	3	0.000	-1.45	-0.49	0.00	0.00	0.00	-4.27
		15	1.000	-1.45	-0.49	0.00	0.00	0.00	-3.77
	LC3	3	0.000	-1.54	-24.00	0.00	0.00	0.00	-6.18
		15	1.000	-1.54	-20.00	0.00	0.00	0.00	15.82
	CO1	3	0.000	-1.51	-24.30	0.00	0.00	0.00	-6.22
		15	1.000	-1.52	-20.25	0.00	0.00	0.00	16.06
	CO2	3	0.000	-3.47	-21.46	0.00	0.00	-0.00	-11.81
		15	1.000	-3.48	-18.01	0.00	0.00	0.00	7.93
	CO3	3	0.000	-4.95	-46.69	0.00	0.00	-0.00	-18.32
		15	1.000	-4.98	-39.04	0.00	0.00	0.00	24.55
	CO4	3	0.000	-3.37	-56.72	0.00	0.00	0.00	-14.42
		15	1.000	-3.41	-47.27	0.00	0.00	0.00	37.58
	CO5	3	0.000	-4.68	-57.19	0.00	0.00	0.00	-18.42
		15	1.000	-4.72	-47.74	0.00	0.00	0.00	34.05
	CO6	3	0.000	-1.13	-18.00	0.00	0.00	0.00	-4.61
		15	1.000	-1.13	-15.00	0.00	0.00	0.00	11.89
	CO7	3	0.000	-2.58	-18.51	0.00	0.00	0.00	-8.94
		15	1.000	-2.59	-15.51	0.00	0.00	0.00	8.06
	CO8	3	0.000	-3.59	-35.32	0.00	0.00	0.00	-13.27
		15	1.000	-3.60	-29.52	0.00	0.00	0.00	19.15
	CO9	3	0.000	-2.55	-42.01	0.00	0.00	0.00	-10.71
		15	1.000	-2.57	-35.01	0.00	0.00	0.00	27.80
	CO10	3	0.000	-3.42	-42.32	0.00	0.00	0.00	-13.35
		15	1.000	-3.44	-35.32	0.00	0.00	0.00	25.47
	CO11	3	0.000	-1.13	-18.00	0.00	0.00	0.00	-4.61
		15	1.000	-1.13	-15.00	0.00	0.00	0.00	11.89
	CO12	3	0.000	-1.42	-18.10	0.00	0.00	0.00	-5.48
		15	1.000	-1.42	-15.10	0.00	0.00	0.00	11.12
	CO13	3	0.000	-1.71	-22.90	0.00	0.00	-0.00	-6.71
		15	1.000	-1.72	-19.10	0.00	0.00	0.00	14.30
	CO14	3	0.000	-1.71	-27.60	0.00	0.00	0.00	-7.06
		15	1.000	-1.72	-23.00	0.00	0.00	0.00	18.24
	CO15	3	0.000	-1.13	-18.00	0.00	0.00	0.00	-4.61
		15	1.000	-1.13	-15.00	0.00	0.00	0.00	11.89
	CO16	3	0.000	-1.42	-22.80	0.00	0.00	-0.00	-5.84
		15	1.000	-1.43	-19.00	0.00	0.00	0.00	15.06
	CO17	3	0.000	-5.15	-50.30	0.00	0.00	0.00	-19.25
		15	1.000	-5.18	-42.05	0.00	0.00	0.00	26.93
	Section No. 2: T-Rectangle 0.2/0.2								
1	LC1	16	0.000	-23.00	-1.16	0.00	0.00	0.00	1.15
		1	1.000	-24.00	-1.16	0.00	0.00	0.00	2.31
	LC2	16	0.000	0.49	3.55	0.00	0.00	0.00	-3.59
		1	1.000	0.49	4.55	0.00	0.00	0.00	-7.63
	LC3	16	0.000	-24.00	-1.54	0.00	0.00	0.00	1.54
		1	1.000	-24.00	-1.54	0.00	0.00	0.00	3.08
	CO1	16	0.000	-31.05	-1.57	0.00	0.00	0.00	1.57
		1	1.000	-32.40	-1.56	0.00	0.00	0.00	3.13
	CO2	16	0.000	-25.69	4.03	0.00	0.00	0.00	-4.14
		1	1.000	-26.84	5.50	0.00	0.00	0.00	-8.91

Student Version

4.12 CROSS-SECTIONS - INTERNAL FORCES

Member No.	LC/CO	Node No.	Location x [m]	Forces [kN] N	V_y	V_z	Moments [kNm] M_T	M_y	M_z	
1	CO3	16	0.000	-50.87	2.43	-0.00	0.00	-0.00	-2.61	
		1	1.000	-52.03	3.89	0.00	0.00	0.00	-5.77	
	CO4	16	0.000	-62.45	-3.70	0.00	0.00	0.00	3.69	
		1	1.000	-63.60	-3.63	0.00	0.00	0.00	7.35	
	CO5	16	0.000	-61.98	-0.44	0.00	0.00	0.00	0.31	
		1	1.000	-63.13	0.47	0.00	0.00	0.00	0.29	
	CO6	16	0.000	-23.00	-1.16	0.00	0.00	0.00	1.16	
		1	1.000	-24.00	-1.15	0.00	0.00	0.00	2.32	
	CO7	16	0.000	-22.49	2.41	-0.00	0.00	-0.00	-2.48	
		1	1.000	-23.50	3.39	0.00	0.00	0.00	-5.39	
	CO8	16	0.000	-39.29	1.34	0.00	0.00	0.00	-1.44	
		1	1.000	-40.29	2.32	0.00	0.00	0.00	-3.27	
	CO9	16	0.000	-47.00	-2.73	0.00	0.00	0.00	2.72	
		1	1.000	-48.00	-2.69	0.00	0.00	0.00	5.43	
	CO10	16	0.000	-46.69	-0.57	0.00	0.00	0.00	0.49	
		1	1.000	-47.69	0.04	0.00	0.00	0.00	0.76	
	CO11	16	0.000	-23.00	-1.16	0.00	0.00	0.00	1.16	
		1	1.000	-24.00	-1.15	0.00	0.00	0.00	2.32	
	CO12	16	0.000	-22.90	-0.45	0.00	0.00	0.00	0.43	
		1	1.000	-23.90	-0.25	0.00	0.00	0.00	0.78	
	CO13	16	0.000	-27.70	-0.76	0.00	0.00	0.00	0.74	
		1	1.000	-28.70	-0.55	0.00	0.00	0.00	1.39	
	CO14	16	0.000	-32.60	-1.79	0.00	0.00	0.00	1.78	
		1	1.000	-33.60	-1.77	0.00	0.00	0.00	3.56	
	CO15	16	0.000	-23.00	-1.16	0.00	0.00	0.00	1.16	
		1	1.000	-24.00	-1.15	0.00	0.00	0.00	2.32	
	CO16	16	0.000	-27.80	-1.48	0.00	0.00	0.00	1.47	
		1	1.000	-28.80	-1.46	0.00	0.00	0.00	2.94	
	CO17	16	0.000	-55.47	2.20	0.00	0.00	0.00	-2.39	
		1	1.000	-56.82	3.66	0.00	0.00	0.00	-5.32	
3	LC1	4	0.000	-24.00	1.16	0.00	0.00	0.00	2.31	
		21	1.000	-23.00	1.16	0.00	0.00	0.00	1.15	
	LC2	4	0.000	-0.49	1.45	0.00	0.00	0.00	4.44	
		21	1.000	-0.49	1.45	0.00	0.00	0.00	2.99	
	LC3	4	0.000	-24.00	1.54	0.00	0.00	0.00	3.08	
		21	1.000	-24.00	1.54	0.00	0.00	0.00	1.54	
	CO1	4	0.000	-32.40	1.56	0.00	0.00	0.00	3.13	
		21	1.000	-31.05	1.57	0.00	0.00	0.00	1.57	
	CO2	4	0.000	-28.36	3.50	0.00	0.00	0.00	9.44	
		21	1.000	-27.20	3.55	-0.00	0.00	0.00	5.91	
	CO3	4	0.000	-53.57	5.11	0.00	0.00	0.00	12.83	
		21	1.000	-52.41	5.23	0.00	0.00	0.00	7.65	
	CO4	4	0.000	-63.60	3.63	0.00	0.00	0.00	7.35	
		21	1.000	-62.45	3.70	0.00	0.00	0.00	3.69	
	CO5	4	0.000	-64.07	4.93	0.00	0.00	0.00	11.52	
		21	1.000	-62.91	5.05	-0.00	0.00	0.00	6.52	
	CO6	4	0.000	-24.00	1.15	0.00	0.00	0.00	2.32	
		21	1.000	-23.00	1.16	0.00	0.00	0.00	1.16	
	CO7	4	0.000	-24.50	2.61	0.00	0.00	0.00	6.82	
		21	1.000	-23.50	2.63	-0.00	0.00	0.00	4.20	
	CO8	4	0.000	-41.31	3.68	0.00	0.00	0.00	9.05	
		21	1.000	-40.31	3.74	0.00	0.00	0.00	5.34	
	CO9	4	0.000	-48.00	2.69	0.00	0.00	0.00	5.43	
		21	1.000	-47.00	2.73	0.00	0.00	0.00	2.72	
	CO10	4	0.000	-48.31	3.56	0.00	0.00	0.00	8.18	
		21	1.000	-47.30	3.62	0.00	0.00	0.00	4.58	
	CO11	4	0.000	-24.00	1.15	0.00	0.00	0.00	2.32	
		21	1.000	-23.00	1.16	0.00	0.00	0.00	1.16	

Student Version

4.12 CROSS-SECTIONS - INTERNAL FORCES

Member No.	LC/CO	Node No.	Location x [m]	Forces [kN] N	V_y	V_z	Moments [kNm] M_T	M_y	M_z	
3	CO12	4	0.000	-24.10	1.45	0.00	0.00	0.00	3.22	
		21	1.000	-23.10	1.46	0.00	0.00	0.00	1.77	
	CO13	4	0.000	-28.90	1.75	0.00	0.00	0.00	3.84	
		21	1.000	-27.90	1.77	-0.00	0.00	0.00	2.08	
	CO14	4	0.000	-33.60	1.77	0.00	0.00	0.00	3.56	
		21	1.000	-32.60	1.79	0.00	0.00	0.00	1.78	
	CO15	4	0.000	-24.00	1.15	0.00	0.00	0.00	2.32	
		21	1.000	-23.00	1.16	0.00	0.00	0.00	1.16	
	CO16	4	0.000	-28.80	1.46	0.00	0.00	0.00	2.94	
		21	1.000	-27.80	1.48	0.00	0.00	0.00	1.47	
	CO17	4	0.000	-58.38	5.34	0.00	0.00	0.00	13.32	
		21	1.000	-57.02	5.47	-0.00	0.00	0.00	7.91	
15	LC1	17	0.000	-22.00	-1.16	0.00	0.00	0.00	-0.00	
		16	1.000	-23.00	-1.16	0.00	0.00	0.00	1.15	
	LC2	17	0.000	0.49	2.55	0.00	0.00	0.00	-0.54	
		16	1.000	0.49	3.55	0.00	0.00	0.00	-3.59	
	LC3	17	0.000	-24.00	-1.54	0.00	0.00	0.00	-0.01	
		16	1.000	-24.00	-1.54	0.00	0.00	0.00	1.54	
	CO1	17	0.000	-29.70	-1.58	0.00	0.00	0.00	-0.01	
		16	1.000	-31.05	-1.57	0.00	0.00	0.00	1.57	
	CO2	17	0.000	-24.54	2.54	0.00	0.00	0.00	-0.86	
		16	1.000	-25.69	4.03	0.00	0.00	0.00	-4.14	
	CO3	17	0.000	-49.72	0.95	-0.00	0.00	-0.00	-0.92	
		16	1.000	-50.87	2.43	-0.00	0.00	-0.00	-2.61	
	CO4	17	0.000	-61.29	-3.72	0.00	0.00	0.00	-0.03	
		16	1.000	-62.45	-3.70	0.00	0.00	0.00	3.69	
	CO5	17	0.000	-60.83	-1.34	0.00	0.00	0.00	-0.58	
		16	1.000	-61.98	-0.44	0.00	0.00	0.00	0.31	
	CO6	17	0.000	-22.00	-1.17	0.00	0.00	0.00	-0.01	
		16	1.000	-23.00	-1.16	0.00	0.00	0.00	1.16	
	CO7	17	0.000	-21.50	1.42	0.00	0.00	0.00	-0.57	
		16	1.000	-22.49	2.41	-0.00	0.00	-0.00	-2.48	
	CO8	17	0.000	-38.29	0.34	0.00	0.00	0.00	-0.60	
		16	1.000	-39.29	1.34	0.00	0.00	0.00	-1.44	
	CO9	17	0.000	-46.00	-2.74	0.00	0.00	0.00	-0.02	
		16	1.000	-47.00	-2.73	0.00	0.00	0.00	2.72	
	CO10	17	0.000	-45.69	-1.17	0.00	0.00	0.00	-0.37	
		16	1.000	-46.69	-0.57	0.00	0.00	0.00	0.49	
	CO11	17	0.000	-22.00	-1.17	0.00	0.00	0.00	-0.01	
		16	1.000	-23.00	-1.16	0.00	0.00	0.00	1.16	
	CO12	17	0.000	-21.90	-0.65	0.00	0.00	0.00	-0.12	
		16	1.000	-22.90	-0.45	0.00	0.00	0.00	0.43	
	CO13	17	0.000	-26.70	-0.96	0.00	0.00	0.00	-0.12	
		16	1.000	-27.70	-0.76	0.00	0.00	0.00	0.74	
	CO14	17	0.000	-31.60	-1.79	0.00	0.00	0.00	-0.01	
		16	1.000	-32.60	-1.79	0.00	0.00	0.00	1.78	
	CO15	17	0.000	-22.00	-1.17	0.00	0.00	0.00	-0.01	
		16	1.000	-23.00	-1.16	0.00	0.00	0.00	1.16	
	CO16	17	0.000	-26.80	-1.48	0.00	0.00	0.00	-0.01	
		16	1.000	-27.80	-1.48	0.00	0.00	0.00	1.47	
	CO17	17	0.000	-54.12	0.72	0.00	0.00	0.00	-0.93	
		16	1.000	-55.47	2.20	0.00	0.00	0.00	-2.39	
16	LC1	18	0.000	-21.00	-1.16	0.00	0.00	0.00	-1.16	
		17	1.000	-22.00	-1.16	0.00	0.00	0.00	-0.00	
	LC2	18	0.000	0.49	1.55	0.00	0.00	0.00	1.51	
		17	1.000	0.49	2.55	0.00	0.00	0.00	-0.54	
	LC3	18	0.000	-24.00	-1.54	0.00	0.00	0.00	-1.55	
		17	1.000	-24.00	-1.54	0.00	0.00	0.00	-0.01	

Student Version

4.12 CROSS-SECTIONS - INTERNAL FORCES

Member No.	LC/CO	Node No.	Location x [m]	Forces [kN] N	V_y	V_z	Moments [kNm] M_T	M_y	M_z	
16	CO1	18	0.000	-28.35	-1.57	0.00	0.00	0.00	-1.58	
		17	1.000	-29.70	-1.58	0.00	0.00	0.00	-0.01	
	CO2	18	0.000	-23.39	1.04	0.00	0.00	0.00	0.93	
		17	1.000	-24.54	2.54	0.00	0.00	0.00	-0.86	
	CO3	18	0.000	-48.58	-0.55	0.00	0.00	0.00	-0.72	
		17	1.000	-49.72	0.95	-0.00	0.00	-0.00	-0.92	
	CO4	18	0.000	-60.15	-3.69	0.00	0.00	0.00	-3.74	
		17	1.000	-61.29	-3.72	0.00	0.00	0.00	-0.03	
	CO5	18	0.000	-59.68	-2.22	0.00	0.00	0.00	-2.36	
		17	1.000	-60.83	-1.34	0.00	0.00	0.00	-0.58	
	CO6	18	0.000	-21.00	-1.16	0.00	0.00	0.00	-1.17	
		17	1.000	-22.00	-1.17	0.00	0.00	0.00	-0.01	
	CO7	18	0.000	-20.50	0.42	0.00	0.00	0.00	0.35	
		17	1.000	-21.50	1.42	0.00	0.00	0.00	-0.57	
	CO8	18	0.000	-37.29	-0.65	0.00	0.00	0.00	-0.75	
		17	1.000	-38.29	0.34	0.00	0.00	0.00	-0.60	
	CO9	18	0.000	-45.00	-2.73	0.00	0.00	-0.00	-2.75	
		17	1.000	-46.00	-2.74	0.00	0.00	0.00	-0.02	
	CO10	18	0.000	-44.69	-1.76	0.00	0.00	0.00	-1.84	
		17	1.000	-45.69	-1.17	0.00	0.00	0.00	-0.37	
	CO11	18	0.000	-21.00	-1.16	0.00	0.00	0.00	-1.17	
		17	1.000	-22.00	-1.17	0.00	0.00	0.00	-0.01	
	CO12	18	0.000	-20.90	-0.85	0.00	0.00	0.00	-0.87	
		17	1.000	-21.90	-0.65	0.00	0.00	0.00	-0.12	
	CO13	18	0.000	-25.70	-1.16	0.00	0.00	0.00	-1.18	
		17	1.000	-26.70	-0.96	0.00	0.00	0.00	-0.12	
	CO14	18	0.000	-30.60	-1.79	0.00	0.00	0.00	-1.80	
		17	1.000	-31.60	-1.79	0.00	0.00	0.00	-0.01	
	CO15	18	0.000	-21.00	-1.16	0.00	0.00	0.00	-1.17	
		17	1.000	-22.00	-1.17	0.00	0.00	0.00	-0.01	
	CO16	18	0.000	-25.80	-1.47	0.00	0.00	0.00	-1.48	
		17	1.000	-26.80	-1.48	0.00	0.00	0.00	-0.01	
	CO17	18	0.000	-52.77	-0.78	0.00	0.00	0.00	-0.96	
		17	1.000	-54.12	0.72	0.00	0.00	0.00	-0.93	
17	LC1	19	0.000	-20.00	-1.16	0.00	0.00	0.00	-2.32	
		18	1.000	-21.00	-1.16	0.00	0.00	0.00	-1.16	
	LC2	19	0.000	0.49	0.55	0.00	0.00	0.00	2.56	
		18	1.000	0.49	1.55	0.00	0.00	0.00	1.51	
	LC3	19	0.000	-24.00	-1.54	0.00	0.00	0.00	-3.09	
		18	1.000	-24.00	-1.54	0.00	0.00	0.00	-1.55	
	CO1	19	0.000	-27.00	-1.56	0.00	0.00	0.00	-3.15	
		18	1.000	-28.35	-1.57	0.00	0.00	0.00	-1.58	
	CO2	19	0.000	-22.24	-0.47	0.00	0.00	0.00	1.22	
		18	1.000	-23.39	1.04	0.00	0.00	0.00	0.93	
	CO3	19	0.000	-47.43	-2.04	0.00	0.00	0.00	-2.02	
		18	1.000	-48.58	-0.55	0.00	0.00	0.00	-0.72	
	CO4	19	0.000	-59.00	-3.62	0.00	0.00	0.00	-7.40	
		18	1.000	-60.15	-3.69	0.00	0.00	0.00	-3.74	
	CO5	19	0.000	-58.53	-3.07	0.00	0.00	0.00	-5.01	
		18	1.000	-59.68	-2.22	0.00	0.00	0.00	-2.36	
	CO6	19	0.000	-20.00	-1.15	0.00	0.00	0.00	-2.33	
		18	1.000	-21.00	-1.16	0.00	0.00	0.00	-1.17	
	CO7	19	0.000	-19.50	-0.59	0.00	0.00	0.00	0.26	
		18	1.000	-20.50	0.42	0.00	0.00	0.00	0.35	
	CO8	19	0.000	-36.29	-1.64	0.00	0.00	0.00	-1.90	
		18	1.000	-37.29	-0.65	0.00	0.00	0.00	-0.75	
	CO9	19	0.000	-44.00	-2.69	0.00	0.00	0.00	-5.46	
		18	1.000	-45.00	-2.73	0.00	0.00	-0.00	-2.75	

Document Version

4.12 CROSS-SECTIONS - INTERNAL FORCES

Member No.	LC/CO	Node No.	Location x [m]	Forces [kN] N	V_y	V_z	Moments [kNm] M_T	M_y	M_z
17	CO10	19	0.000	-43.69	-2.33	0.00	0.00	-0.00	-3.88
		18	1.000	-44.69	-1.76	0.00	0.00	0.00	-1.84
	CO11	19	0.000	-20.00	-1.15	0.00	0.00	0.00	-2.33
		18	1.000	-21.00	-1.16	0.00	0.00	0.00	-1.17
	CO12	19	0.000	-19.90	-1.04	0.00	0.00	0.00	-1.81
		18	1.000	-20.90	-0.85	0.00	0.00	0.00	-0.87
	CO13	19	0.000	-24.70	-1.35	0.00	0.00	0.00	-2.43
		18	1.000	-25.70	-1.16	0.00	0.00	0.00	-1.18
	CO14	19	0.000	-29.60	-1.77	0.00	0.00	0.00	-3.58
		18	1.000	-30.60	-1.79	0.00	0.00	0.00	-1.80
	CO15	19	0.000	-20.00	-1.15	0.00	0.00	0.00	-2.33
		18	1.000	-21.00	-1.16	0.00	0.00	0.00	-1.17
	CO16	19	0.000	-24.80	-1.46	0.00	0.00	0.00	-2.95
		18	1.000	-25.80	-1.47	0.00	0.00	0.00	-1.48
	CO17	19	0.000	-51.43	-2.26	0.00	0.00	0.00	-2.48
		18	1.000	-52.77	-0.78	0.00	0.00	0.00	-0.96
18	LC1	20	0.000	-19.00	-1.16	0.00	0.00	0.00	-3.48
		19	1.000	-20.00	-1.16	0.00	0.00	0.00	-2.32
	LC2	20	0.000	0.49	-0.45	0.00	0.00	0.00	2.61
		19	1.000	0.49	0.55	0.00	0.00	0.00	2.56
	LC3	20	0.000	-24.00	-1.54	0.00	0.00	0.00	-4.64
		19	1.000	-24.00	-1.54	0.00	0.00	0.00	-3.09
	CO1	20	0.000	-25.65	-1.54	0.00	0.00	0.00	-4.70
		19	1.000	-27.00	-1.56	0.00	0.00	0.00	-3.15
	CO2	20	0.000	-21.10	-1.97	0.00	0.00	0.00	-0.00
		19	1.000	-22.24	-0.47	0.00	0.00	0.00	1.22
	CO3	20	0.000	-46.28	-3.51	0.00	0.00	0.00	-4.79
		19	1.000	-47.43	-2.04	0.00	0.00	0.00	-2.02
	CO4	20	0.000	-57.86	-3.51	0.00	0.00	0.00	-10.97
		19	1.000	-59.00	-3.62	0.00	0.00	0.00	-7.40
	CO5	20	0.000	-57.39	-3.90	0.00	0.00	0.00	-8.50
		19	1.000	-58.53	-3.07	0.00	0.00	0.00	-5.01
	CO6	20	0.000	-19.00	-1.14	0.00	0.00	-0.00	-3.48
		19	1.000	-20.00	-1.15	0.00	0.00	0.00	-2.33
	CO7	20	0.000	-18.50	-1.59	0.00	0.00	0.00	-0.82
		19	1.000	-19.50	-0.59	0.00	0.00	0.00	0.26
	CO8	20	0.000	-35.29	-2.62	0.00	0.00	-0.00	-4.03
		19	1.000	-36.29	-1.64	0.00	0.00	0.00	-1.90
	CO9	20	0.000	-43.00	-2.63	0.00	0.00	0.00	-8.12
		19	1.000	-44.00	-2.69	0.00	0.00	0.00	-5.46
	CO10	20	0.000	-42.70	-2.89	0.00	0.00	0.00	-6.50
		19	1.000	-43.69	-2.33	0.00	0.00	-0.00	-3.88
	CO11	20	0.000	-19.00	-1.14	0.00	0.00	-0.00	-3.48
		19	1.000	-20.00	-1.15	0.00	0.00	0.00	-2.33
	CO12	20	0.000	-18.90	-1.23	0.00	0.00	0.00	-2.95
		19	1.000	-19.90	-1.04	0.00	0.00	0.00	-1.81
	CO13	20	0.000	-23.70	-1.53	0.00	0.00	0.00	-3.87
		19	1.000	-24.70	-1.35	0.00	0.00	0.00	-2.43
	CO14	20	0.000	-28.60	-1.74	0.00	0.00	0.00	-5.34
		19	1.000	-29.60	-1.77	0.00	0.00	0.00	-3.58
	CO15	20	0.000	-19.00	-1.14	0.00	0.00	-0.00	-3.48
		19	1.000	-20.00	-1.15	0.00	0.00	0.00	-2.33
	CO16	20	0.000	-23.80	-1.44	0.00	0.00	0.00	-4.41
		19	1.000	-24.80	-1.46	0.00	0.00	0.00	-2.95
	CO17	20	0.000	-50.08	-3.72	0.00	0.00	0.00	-5.47
		19	1.000	-51.43	-2.26	0.00	0.00	0.00	-2.48
19	LC1	2	0.000	-18.00	-1.16	0.00	0.00	0.00	-4.63
		20	1.000	-19.00	-1.16	0.00	0.00	0.00	-3.48

Student Version

4.12 CROSS-SECTIONS - INTERNAL FORCES

Member No.	LC/CO	Node No.	Location x [m]	Forces [kN] N	V_y	V_z	Moments [kNm] M_T	M_y	M_z	
19	LC2	2	0.000	0.49	-1.45	0.00	0.00	0.00	1.66	
		20	1.000	0.49	-0.45	0.00	0.00	0.00	2.61	
	LC3	2	0.000	-24.00	-1.54	0.00	0.00	0.00	-6.18	
		20	1.000	-24.00	-1.54	0.00	0.00	0.00	-4.64	
	CO1	2	0.000	-24.30	-1.51	0.00	0.00	0.00	-6.22	
		20	1.000	-25.65	-1.54	0.00	0.00	0.00	-4.70	
	CO2	2	0.000	-19.95	-3.47	0.00	0.00	0.00	-2.73	
		20	1.000	-21.10	-1.97	0.00	0.00	0.00	-0.00	
	CO3	2	0.000	-45.14	-4.95	0.00	0.00	0.00	-9.02	
		20	1.000	-46.28	-3.51	0.00	0.00	0.00	-4.79	
	CO4	2	0.000	-56.72	-3.37	0.00	0.00	0.00	-14.42	
		20	1.000	-57.86	-3.51	0.00	0.00	0.00	-10.97	
	CO5	2	0.000	-56.25	-4.67	0.00	0.00	-0.00	-12.79	
		20	1.000	-57.39	-3.90	0.00	0.00	0.00	-8.50	
	CO6	2	0.000	-18.00	-1.13	0.00	0.00	0.00	-4.61	
		20	1.000	-19.00	-1.14	0.00	0.00	-0.00	-3.48	
	CO7	2	0.000	-17.50	-2.58	0.00	0.00	0.00	-2.91	
		20	1.000	-18.50	-1.59	0.00	0.00	0.00	-0.82	
	CO8	2	0.000	-34.30	-3.58	0.00	0.00	0.00	-7.14	
		20	1.000	-35.29	-2.62	0.00	0.00	-0.00	-4.03	
	CO9	2	0.000	-42.01	-2.55	0.00	0.00	0.00	-10.71	
		20	1.000	-43.00	-2.63	0.00	0.00	0.00	-8.12	
	CO10	2	0.000	-41.70	-3.42	0.00	0.00	0.00	-9.65	
		20	1.000	-42.70	-2.89	0.00	0.00	0.00	-6.50	
	CO11	2	0.000	-18.00	-1.13	0.00	0.00	0.00	-4.61	
		20	1.000	-19.00	-1.14	0.00	0.00	-0.00	-3.48	
	CO12	2	0.000	-17.90	-1.42	0.00	0.00	0.00	-4.27	
		20	1.000	-18.90	-1.23	0.00	0.00	0.00	-2.95	
	CO13	2	0.000	-22.70	-1.71	0.00	0.00	0.00	-5.50	
		20	1.000	-23.70	-1.53	0.00	0.00	0.00	-3.87	
	CO14	2	0.000	-27.60	-1.71	0.00	0.00	0.00	-7.06	
		20	1.000	-28.60	-1.74	0.00	0.00	0.00	-5.34	
	CO15	2	0.000	-18.00	-1.13	0.00	0.00	0.00	-4.61	
		20	1.000	-19.00	-1.14	0.00	0.00	-0.00	-3.48	
	CO16	2	0.000	-22.80	-1.42	0.00	0.00	-0.00	-5.84	
		20	1.000	-23.80	-1.44	0.00	0.00	0.00	-4.41	
	CO17	2	0.000	-48.74	-5.15	0.00	0.00	-0.00	-9.91	
		20	1.000	-50.08	-3.72	0.00	0.00	0.00	-5.47	
20	LC1	21	0.000	-23.00	1.16	0.00	0.00	0.00	1.15	
		22	1.000	-22.00	1.16	0.00	0.00	0.00	-0.00	
	LC2	21	0.000	-0.49	1.45	0.00	0.00	0.00	2.99	
		22	1.000	-0.49	1.45	0.00	0.00	0.00	1.54	
	LC3	21	0.000	-24.00	1.54	0.00	0.00	0.00	1.54	
		22	1.000	-24.00	1.54	0.00	0.00	0.00	-0.01	
	CO1	21	0.000	-31.05	1.57	0.00	0.00	0.00	1.57	
		22	1.000	-29.70	1.58	0.00	0.00	0.00	-0.01	
	CO2	21	0.000	-27.20	3.55	-0.00	0.00	0.00	5.91	
		22	1.000	-26.05	3.57	0.00	0.00	0.00	2.35	
	CO3	21	0.000	-52.41	5.23	0.00	0.00	0.00	7.65	
		22	1.000	-51.26	5.28	0.00	0.00	0.00	2.39	
	CO4	21	0.000	-62.45	3.70	0.00	0.00	0.00	3.69	
		22	1.000	-61.29	3.72	0.00	0.00	0.00	-0.03	
	CO5	21	0.000	-62.91	5.05	-0.00	0.00	0.00	6.52	
		22	1.000	-61.76	5.10	0.00	0.00	0.00	1.44	
	CO6	21	0.000	-23.00	1.16	0.00	0.00	0.00	1.16	
		22	1.000	-22.00	1.17	0.00	0.00	0.00	-0.01	
	CO7	21	0.000	-23.50	2.63	-0.00	0.00	0.00	4.20	
		22	1.000	-22.50	2.65	0.00	0.00	0.00	1.56	

Document Version

4.12 CROSS-SECTIONS - INTERNAL FORCES

Member No.	LC/CO	Node No.	Location x [m]	Forces [kN] N	V_y	V_z	Moments [kNm] M_T	M_y	M_z
20	CO8	21	0.000	-40.31	3.74	0.00	0.00	0.00	5.34
		22	1.000	-39.30	3.77	0.00	0.00	0.00	1.58
	CO9	21	0.000	-47.00	2.73	0.00	0.00	0.00	2.72
		22	1.000	-46.00	2.74	-0.00	0.00	0.00	-0.02
	CO10	21	0.000	-47.30	3.62	0.00	0.00	0.00	4.58
		22	1.000	-46.30	3.65	0.00	0.00	0.00	0.94
	CO11	21	0.000	-23.00	1.16	0.00	0.00	0.00	1.16
		22	1.000	-22.00	1.17	0.00	0.00	0.00	-0.01
	CO12	21	0.000	-23.10	1.46	0.00	0.00	0.00	1.77
		22	1.000	-22.10	1.46	-0.00	0.00	0.00	0.31
	CO13	21	0.000	-27.90	1.77	-0.00	0.00	0.00	2.08
		22	1.000	-26.90	1.78	0.00	0.00	0.00	0.31
	CO14	21	0.000	-32.60	1.79	0.00	0.00	0.00	1.78
		22	1.000	-31.60	1.79	0.00	0.00	0.00	-0.01
	CO15	21	0.000	-23.00	1.16	0.00	0.00	0.00	1.16
		22	1.000	-22.00	1.17	0.00	0.00	0.00	-0.01
	CO16	21	0.000	-27.80	1.48	0.00	0.00	0.00	1.47
		22	1.000	-26.80	1.48	0.00	0.00	0.00	-0.01
	CO17	21	0.000	-57.02	5.47	-0.00	0.00	0.00	7.91
		22	1.000	-55.66	5.53	-0.00	0.00	0.00	2.40
21	LC1	22	0.000	-22.00	1.16	0.00	0.00	0.00	-0.00
		23	1.000	-21.00	1.16	0.00	0.00	0.00	-1.16
	LC2	22	0.000	-0.49	1.45	0.00	0.00	0.00	1.54
		23	1.000	-0.49	1.45	0.00	0.00	0.00	0.09
	LC3	22	0.000	-24.00	1.54	0.00	0.00	0.00	-0.01
		23	1.000	-24.00	1.54	0.00	0.00	0.00	-1.55
	CO1	22	0.000	-29.70	1.58	0.00	0.00	0.00	-0.01
		23	1.000	-28.35	1.57	0.00	0.00	0.00	-1.58
	CO2	22	0.000	-26.05	3.57	0.00	0.00	0.00	2.35
		23	1.000	-24.90	3.57	0.00	0.00	0.00	-1.22
	CO3	22	0.000	-51.26	5.28	0.00	0.00	0.00	2.39
		23	1.000	-50.11	5.27	0.00	0.00	0.00	-2.89
	CO4	22	0.000	-61.29	3.72	0.00	0.00	0.00	-0.03
		23	1.000	-60.15	3.69	0.00	0.00	0.00	-3.74
	CO5	22	0.000	-61.76	5.10	0.00	0.00	0.00	1.44
		23	1.000	-60.61	5.08	0.00	0.00	0.00	-3.66
	CO6	22	0.000	-22.00	1.17	0.00	0.00	0.00	-0.01
		23	1.000	-21.00	1.16	0.00	0.00	0.00	-1.17
	CO7	22	0.000	-22.50	2.65	0.00	0.00	0.00	1.56
		23	1.000	-21.50	2.64	0.00	0.00	0.00	-1.09
	CO8	22	0.000	-39.30	3.77	0.00	0.00	0.00	1.58
		23	1.000	-38.30	3.76	0.00	0.00	0.00	-2.19
	CO9	22	0.000	-46.00	2.74	-0.00	0.00	0.00	-0.02
		23	1.000	-45.00	2.73	-0.00	0.00	-0.00	-2.75
	CO10	22	0.000	-46.30	3.65	0.00	0.00	0.00	0.94
		23	1.000	-45.30	3.64	0.00	0.00	0.00	-2.70
	CO11	22	0.000	-22.00	1.17	0.00	0.00	0.00	-0.01
		23	1.000	-21.00	1.16	0.00	0.00	0.00	-1.17
	CO12	22	0.000	-22.10	1.46	-0.00	0.00	0.00	0.31
		23	1.000	-21.10	1.46	0.00	0.00	0.00	-1.15
	CO13	22	0.000	-26.90	1.78	0.00	0.00	0.00	0.31
		23	1.000	-25.90	1.77	0.00	0.00	0.00	-1.47
	CO14	22	0.000	-31.60	1.79	0.00	0.00	0.00	-0.01
		23	1.000	-30.60	1.79	0.00	0.00	0.00	-1.80
	CO15	22	0.000	-22.00	1.17	0.00	0.00	0.00	-0.01
		23	1.000	-21.00	1.16	0.00	0.00	0.00	-1.17
	CO16	22	0.000	-26.80	1.48	0.00	0.00	0.00	-0.01
		23	1.000	-25.80	1.47	0.00	0.00	0.00	-1.48

Student Version

4.12 CROSS-SECTIONS - INTERNAL FORCES

Member No.	LC/CO	Node No.	Location x [m]	Forces [kN] N	V_y	V_z	Moments [kNm] M_T	M_y	M_z	
21	CO17	22	0.000	-55.66	5.53	-0.00	0.00	0.00	2.40	
		23	1.000	-54.31	5.52	0.00	0.00	0.00	-3.13	
22	LC1	23	0.000	-21.00	1.16	0.00	0.00	0.00	-1.16	
		24	1.000	-20.00	1.16	0.00	0.00	0.00	-2.32	
	LC2	23	0.000	-0.49	1.45	0.00	0.00	0.00	0.09	
		24	1.000	-0.49	1.45	0.00	0.00	0.00	-1.37	
	LC3	23	0.000	-24.00	1.54	0.00	0.00	0.00	-1.55	
		24	1.000	-24.00	1.54	0.00	0.00	0.00	-3.09	
	CO1	23	0.000	-28.35	1.57	0.00	0.00	0.00	-1.58	
		24	1.000	-27.00	1.56	0.00	0.00	0.00	-3.15	
	CO2	23	0.000	-24.90	3.57	0.00	0.00	0.00	-1.22	
		24	1.000	-23.75	3.55	0.00	0.00	0.00	-4.78	
	CO3	23	0.000	-50.11	5.27	0.00	0.00	0.00	-2.89	
		24	1.000	-48.96	5.21	0.00	0.00	0.00	-8.13	
	CO4	23	0.000	-60.15	3.69	0.00	0.00	0.00	-3.74	
		24	1.000	-59.00	3.62	0.00	0.00	0.00	-7.40	
	CO5	23	0.000	-60.61	5.08	0.00	0.00	0.00	-3.66	
		24	1.000	-59.46	5.00	0.00	0.00	0.00	-8.71	
	CO6	23	0.000	-21.00	1.16	0.00	0.00	0.00	-1.17	
		24	1.000	-20.00	1.15	0.00	0.00	0.00	-2.33	
	CO7	23	0.000	-21.50	2.64	0.00	0.00	0.00	-1.09	
		24	1.000	-20.50	2.63	0.00	0.00	0.00	-3.72	
	CO8	23	0.000	-38.30	3.76	0.00	0.00	0.00	-2.19	
		24	1.000	-37.31	3.73	0.00	0.00	0.00	-5.94	
	CO9	23	0.000	-45.00	2.73	-0.00	0.00	-0.00	-2.75	
		24	1.000	-44.00	2.69	0.00	0.00	0.00	-5.46	
	CO10	23	0.000	-45.30	3.64	0.00	0.00	0.00	-2.70	
		24	1.000	-44.31	3.59	-0.00	0.00	-0.00	-6.32	
	CO11	23	0.000	-21.00	1.16	0.00	0.00	0.00	-1.17	
		24	1.000	-20.00	1.15	0.00	0.00	0.00	-2.33	
	CO12	23	0.000	-21.10	1.46	0.00	0.00	0.00	-1.15	
		24	1.000	-20.10	1.45	0.00	0.00	0.00	-2.61	
	CO13	23	0.000	-25.90	1.77	0.00	0.00	0.00	-1.47	
		24	1.000	-24.90	1.76	0.00	0.00	0.00	-3.23	
	CO14	23	0.000	-30.60	1.79	0.00	0.00	0.00	-1.80	
		24	1.000	-29.60	1.77	0.00	0.00	0.00	-3.58	
	CO15	23	0.000	-21.00	1.16	0.00	0.00	0.00	-1.17	
		24	1.000	-20.00	1.15	0.00	0.00	0.00	-2.33	
	CO16	23	0.000	-25.80	1.47	0.00	0.00	0.00	-1.48	
		24	1.000	-24.80	1.46	0.00	0.00	0.00	-2.95	
	CO17	23	0.000	-54.31	5.52	0.00	0.00	0.00	-3.13	
		24	1.000	-52.97	5.45	-0.00	0.00	-0.00	-8.61	
23	LC1	24	0.000	-20.00	1.16	0.00	0.00	0.00	-2.32	
		25	1.000	-19.00	1.16	0.00	0.00	0.00	-3.48	
	LC2	24	0.000	-0.49	1.45	0.00	0.00	0.00	-1.37	
		25	1.000	-0.49	1.45	0.00	0.00	0.00	-2.82	
	LC3	24	0.000	-24.00	1.54	0.00	0.00	0.00	-3.09	
		25	1.000	-24.00	1.54	0.00	0.00	0.00	-4.64	
	CO1	24	0.000	-27.00	1.56	0.00	0.00	0.00	-3.15	
		25	1.000	-25.65	1.54	0.00	0.00	0.00	-4.70	
	CO2	24	0.000	-23.75	3.55	0.00	0.00	0.00	-4.78	
		25	1.000	-22.60	3.52	-0.00	0.00	-0.00	-8.32	
	CO3	24	0.000	-48.96	5.21	0.00	0.00	0.00	-8.13	
		25	1.000	-47.83	5.10	0.00	0.00	0.00	-13.29	
	CO4	24	0.000	-59.00	3.62	0.00	0.00	0.00	-7.40	
		25	1.000	-57.86	3.51	0.00	0.00	0.00	-10.97	
	CO5	24	0.000	-59.46	5.00	0.00	0.00	0.00	-8.71	
		25	1.000	-58.33	4.87	-0.00	0.00	-0.00	-13.65	

Student Version

4.12 CROSS-SECTIONS - INTERNAL FORCES

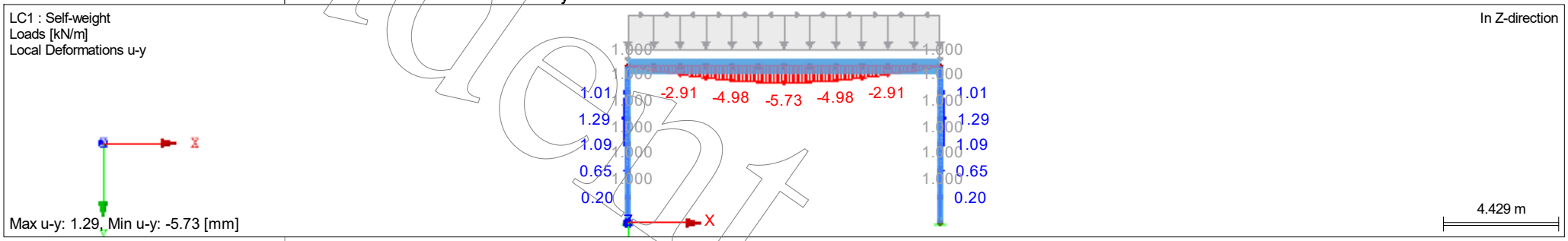
Member No.	LC/CO	Node No.	Location x [m]	Forces [kN] N	V_y	V_z	Moments [kNm] M_T	M_y	M_z
23	CO6	24	0.000	-20.00	1.15	0.00	0.00	0.00	-2.33
		25	1.000	-19.00	1.14	-0.00	0.00	-0.00	-3.48
	CO7	24	0.000	-20.50	2.63	0.00	0.00	0.00	-3.72
		25	1.000	-19.50	2.61	0.00	0.00	0.00	-6.35
	CO8	24	0.000	-37.31	3.73	0.00	0.00	0.00	-5.94
		25	1.000	-36.31	3.67	0.00	0.00	0.00	-9.64
	CO9	24	0.000	-44.00	2.69	0.00	0.00	0.00	-5.46
		25	1.000	-43.00	2.63	0.00	0.00	0.00	-8.12
	CO10	24	0.000	-44.31	3.59	-0.00	0.00	-0.00	-6.32
		25	1.000	-43.31	3.52	0.00	0.00	0.00	-9.88
	CO11	24	0.000	-20.00	1.15	0.00	0.00	0.00	-2.33
		25	1.000	-19.00	1.14	-0.00	0.00	-0.00	-3.48
	CO12	24	0.000	-20.10	1.45	0.00	0.00	0.00	-2.61
		25	1.000	-19.10	1.44	0.00	0.00	0.00	-4.05
	CO13	24	0.000	-24.90	1.76	0.00	0.00	0.00	-3.23
		25	1.000	-23.90	1.74	0.00	0.00	0.00	-4.98
	CO14	24	0.000	-29.60	1.77	0.00	0.00	0.00	-3.58
		25	1.000	-28.60	1.74	0.00	0.00	0.00	-5.34
	CO15	24	0.000	-20.00	1.15	0.00	0.00	0.00	-2.33
		25	1.000	-19.00	1.14	-0.00	0.00	-0.00	-3.48
	CO16	24	0.000	-24.80	1.46	0.00	0.00	0.00	-2.95
		25	1.000	-23.80	1.44	0.00	0.00	0.00	-4.41
	CO17	24	0.000	-52.97	5.45	-0.00	0.00	-0.00	-8.61
		25	1.000	-51.63	5.32	-0.00	0.00	-0.00	-14.01
24	LC1	25	0.000	-19.00	1.16	0.00	0.00	0.00	-3.48
		3	1.000	-18.00	1.16	0.00	0.00	0.00	-4.63
	LC2	25	0.000	-0.49	1.45	0.00	0.00	0.00	-2.82
		3	1.000	-0.49	1.45	0.00	0.00	0.00	-4.27
	LC3	25	0.000	-24.00	1.54	0.00	0.00	0.00	-4.64
		3	1.000	-24.00	1.54	0.00	0.00	0.00	-6.18
	CO1	25	0.000	-25.65	1.54	0.00	0.00	0.00	-4.70
		3	1.000	-24.30	1.51	0.00	0.00	0.00	-6.22
	CO2	25	0.000	-22.60	3.52	-0.00	0.00	-0.00	-8.32
		3	1.000	-21.46	3.47	-0.00	0.00	-0.00	-11.81
	CO3	25	0.000	-47.83	5.10	0.00	0.00	0.00	-13.29
		3	1.000	-46.69	4.95	-0.00	0.00	-0.00	-18.32
	CO4	25	0.000	-57.86	3.51	0.00	0.00	0.00	-10.97
		3	1.000	-56.72	3.37	0.00	0.00	0.00	-14.42
	CO5	25	0.000	-58.33	4.87	-0.00	0.00	-0.00	-13.65
		3	1.000	-57.19	4.68	0.00	0.00	0.00	-18.42
	CO6	25	0.000	-19.00	1.14	-0.00	0.00	-0.00	-3.48
		3	1.000	-18.00	1.13	0.00	0.00	0.00	-4.61
	CO7	25	0.000	-19.50	2.61	0.00	0.00	0.00	-6.35
		3	1.000	-18.51	2.58	0.00	0.00	0.00	-8.94
	CO8	25	0.000	-36.31	3.67	0.00	0.00	0.00	-9.64
		3	1.000	-35.32	3.59	0.00	0.00	0.00	-13.27
	CO9	25	0.000	-43.00	2.63	0.00	0.00	0.00	-8.12
		3	1.000	-42.01	2.55	0.00	0.00	0.00	-10.71
	CO10	25	0.000	-43.31	3.52	0.00	0.00	0.00	-9.88
		3	1.000	-42.32	3.42	0.00	0.00	0.00	-13.35
	CO11	25	0.000	-19.00	1.14	-0.00	0.00	-0.00	-3.48
		3	1.000	-18.00	1.13	0.00	0.00	0.00	-4.61
	CO12	25	0.000	-19.10	1.44	0.00	0.00	0.00	-4.05
		3	1.000	-18.10	1.42	0.00	0.00	0.00	-5.48
	CO13	25	0.000	-23.90	1.74	0.00	0.00	0.00	-4.98
		3	1.000	-22.90	1.71	-0.00	0.00	-0.00	-6.71
	CO14	25	0.000	-28.60	1.74	0.00	0.00	0.00	-5.34
		3	1.000	-27.60	1.71	0.00	0.00	0.00	-7.06

Student Version

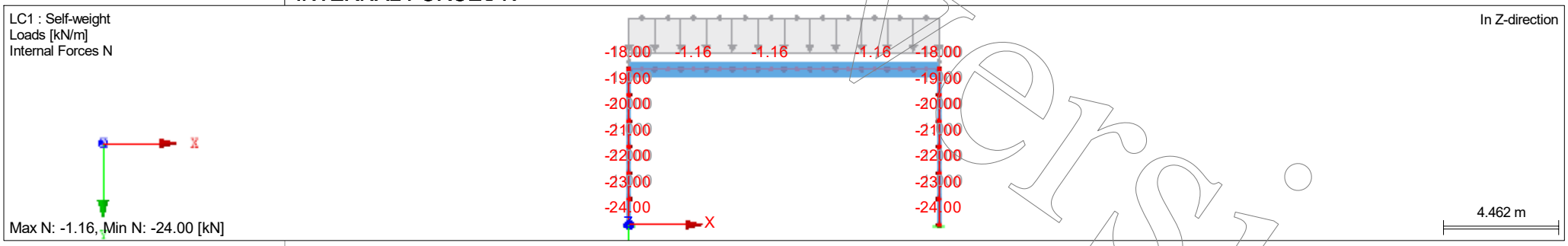
4.12 CROSS-SECTIONS - INTERNAL FORCES

Member No.	LC/CO	Node No.	Location x [m]	Forces [kN] N	V_y	V_z	Moments [kNm] M_T	M_y	M_z	
24	CO15	25	0.000	-19.00	1.14	-0.00	0.00	-0.00	-3.48	
		3	1.000	-18.00	1.13	0.00	0.00	0.00	-4.61	
	CO16	25	0.000	-23.80	1.44	0.00	0.00	0.00	-4.41	
		3	1.000	-22.80	1.42	-0.00	0.00	-0.00	-5.84	
	CO17	25	0.000	-51.63	5.32	-0.00	0.00	-0.00	-14.01	
		3	1.000	-50.30	5.15	0.00	0.00	0.00	-19.25	

LOCAL DEFORMATIONS u_y



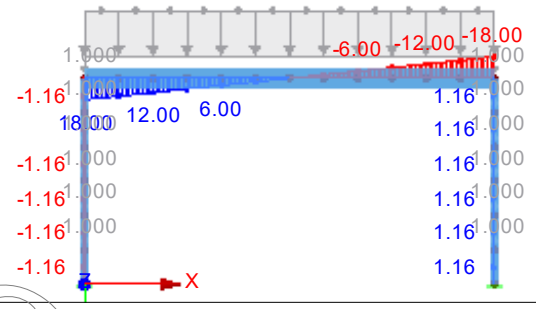
INTERNAL FORCES N



Student Version

INTERNAL FORCES V_y

LC1 : Self-weight
Loads [kN/m]
Internal Forces V-y



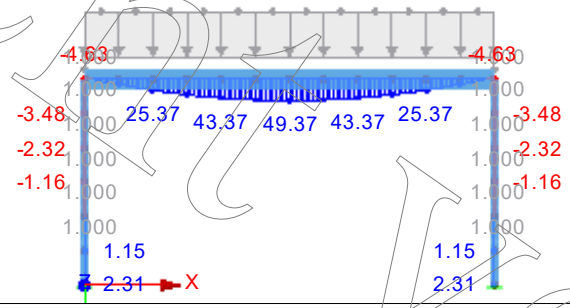
In Z-direction

Max V-y: 18.00, Min V-y: -18.00 [kN]

4.429 m

INTERNAL FORCES M_z

LC1 : Self-weight
Loads [kN/m]
Internal Forces M-z



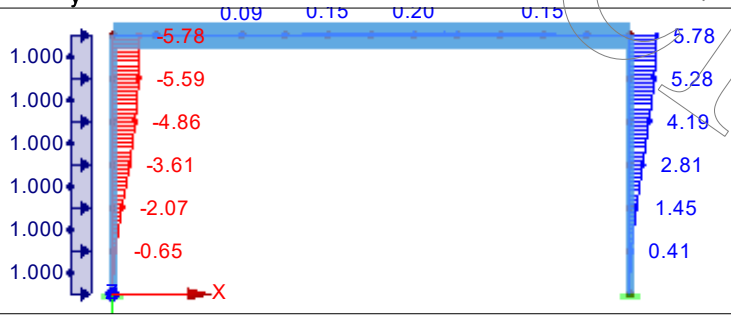
In Z-direction

Max M-z: 49.37, Min M-z: -4.63 [kNm]

4.429 m

LOCAL DEFORMATIONS u_y

LC2 : Wind
Loads [kN/m]
Local Deformations u-y



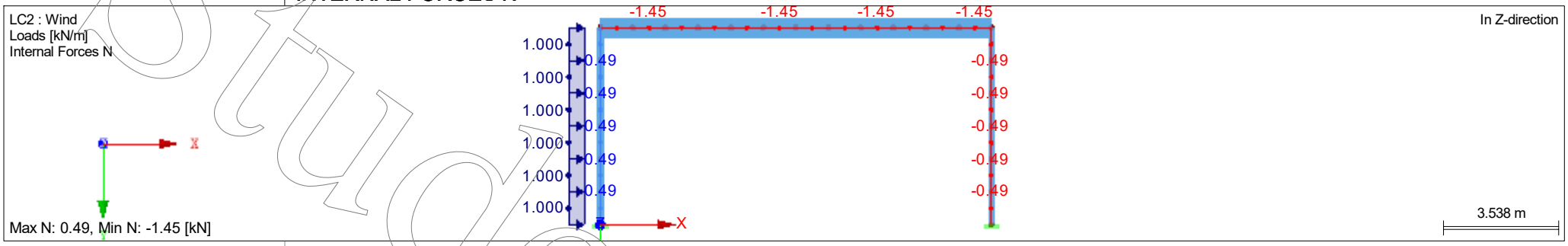
In Z-direction

Max u-y: 5.78, Min u-y: -5.78 [mm]

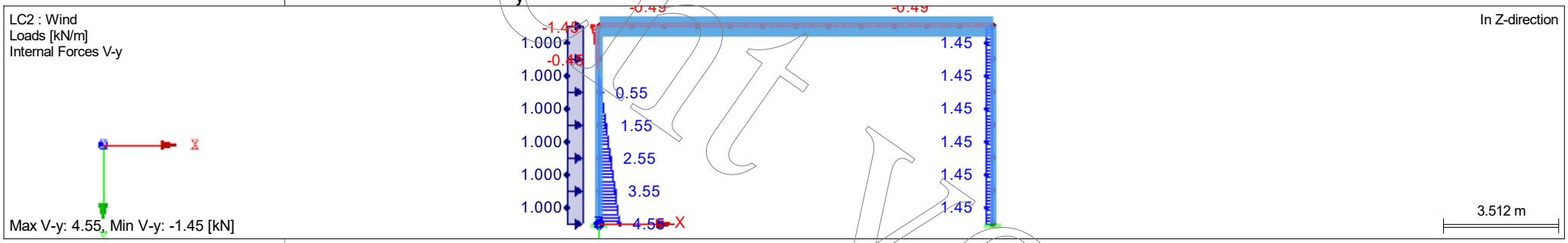
3.512 m

Student Version

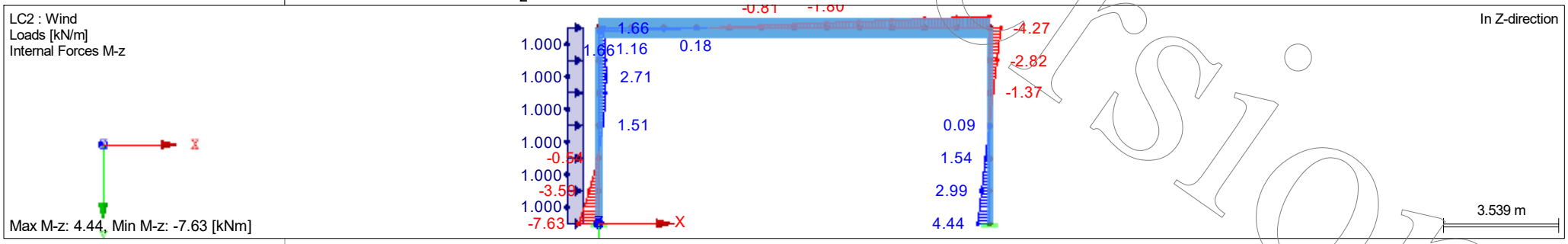
INTERNAL FORCES N



INTERNAL FORCES V_y



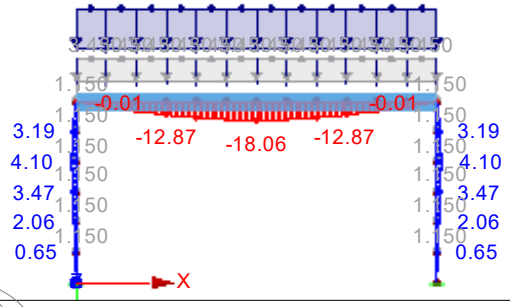
INTERNAL FORCES M_z



Student version

LOCAL DEFORMATIONS u_y

CO4 : 1.15G + 1.5Qs
Loads [kN/m]
Local Deformations u-y



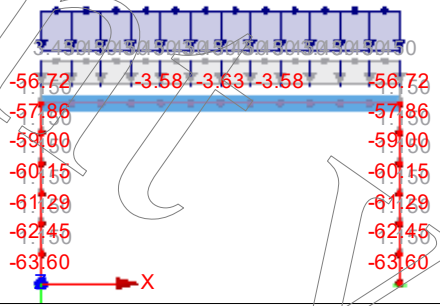
In Z-direction

Max u-y: 4.10, Min u-y: -18.06 [mm]

5.034 m

INTERNAL FORCES N

CO4 : 1.15G + 1.5Qs
Loads [kN/m]
Internal Forces N



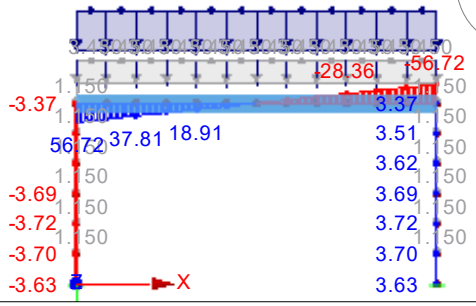
In Z-direction

Max N: -3.37, Min N: -63.60 [kN]

5.071 m

INTERNAL FORCES V_y

CO4 : 1.15G + 1.5Qs
Loads [kN/m]
Internal Forces V-y



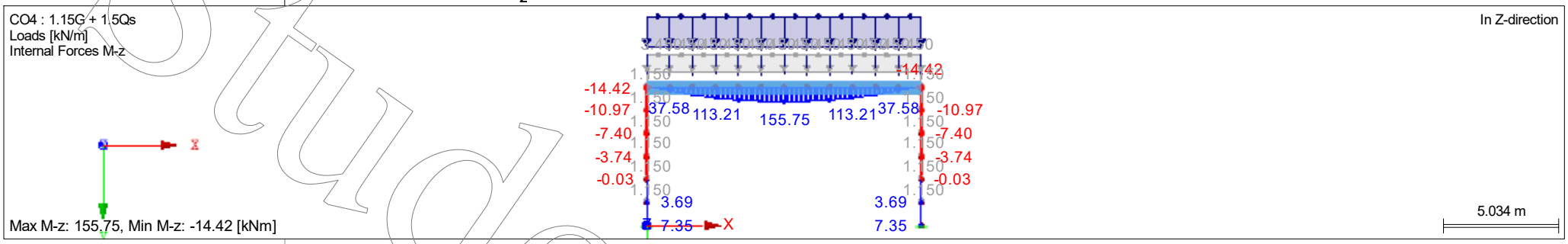
In Z-direction

Max V-y: 56.72, Min V-y: -56.72 [kN]

5.034 m

Student version

■ INTERNAL FORCES M_z



■ 4.1 NODES - SUPPORT FORCES

Result Combinations

Node No.	RC		Support Forces [kN] $P_{X'}$	$P_{Y'}$	$P_{Z'}$	Support Moments [kNm] $M_{X'}$	$M_{Y'}$	$M_{Z'}$	
1*	RC1	Max	-26.84	5.50	0.00	0.00	0.00	8.91	ULS (STR/GEO) - Permanent / transient - Eq. 6.10a and 6.10b
		Min	-63.60	-3.63	0.00	0.00	0.00	-7.35	ULS (STR/GEO) - Permanent / transient - Eq. 6.10a and 6.10b
	RC2	Max	-23.50	3.39	0.00	0.00	0.00	5.39	SLS - Characteristic
		Min	-48.00	-2.69	0.00	0.00	0.00	-5.43	SLS - Characteristic
	RC3	Max	-23.90	-0.25	0.00	0.00	0.00	-0.78	SLS - Frequent
		Min	-33.60	-1.77	0.00	0.00	0.00	-3.56	SLS - Frequent
	RC4	Max	-24.00	-1.15	0.00	0.00	0.00	-2.32	SLS - Quasi-permanent
		Min	-28.80	-1.46	0.00	0.00	0.00	-2.94	SLS - Quasi-permanent
4*	RC1	Max	64.07	-1.56	0.00	0.00	0.00	12.83	ULS (STR/GEO) - Permanent / transient - Eq. 6.10a and 6.10b
		Min	28.36	-5.11	0.00	0.00	0.00	3.13	ULS (STR/GEO) - Permanent / transient - Eq. 6.10a and 6.10b
	RC2	Max	48.31	-1.15	0.00	0.00	0.00	9.05	SLS - Characteristic
		Min	24.00	-3.68	0.00	0.00	0.00	2.32	SLS - Characteristic
	RC3	Max	33.60	-1.15	0.00	0.00	0.00	3.84	SLS - Frequent
		Min	24.00	-1.77	0.00	0.00	0.00	2.32	SLS - Frequent
	RC4	Max	28.80	-1.15	0.00	0.00	0.00	2.94	SLS - Quasi-permanent
		Min	24.00	-1.46	0.00	0.00	0.00	2.32	SLS - Quasi-permanent

■ 4.12 CROSS-SECTIONS - INTERNAL FORCES

Result Combinations

Member No.	RC	Node No.	Location x [m]		Forces [kN] N	V_y	V_z	Moments [kNm] M_T	M_y	M_z	Corresponding Load Cases
	Section No. 1: T-Rectangle 0.6/0.2										
2	RC1	5	0.000	Max N	▷ -1.52	20.25	-0.00	0.00	0.00	16.06	CO 1
				Min N	▷ -4.98	37.49	0.00	0.00	0.00	32.30	CO 3
				Max V_y	-3.41	▷ 47.27	0.00	0.00	0.00	37.58	CO 4
				Min V_y	-3.48	▷ 16.50	0.00	0.00	0.00	15.50	CO 2
				Max V_z	-3.48	16.50	▷ 0.00	0.00	0.00	15.50	CO 2
				Min V_z	-1.52	20.25	▷ -0.00	0.00	0.00	16.06	CO 1
				Max M_T	-1.52	20.25	-0.00	▷ 0.00	0.00	16.06	CO 1

Student version

4.12 CROSS-SECTIONS - INTERNAL FORCES

Result Combinations

Member No.	RC	Node No.	Location x [m]		Forces [kN] N		V_y		V_z	Moments [kNm] M_T		M_y		M_z	Corresponding Load Cases
2	RC1			Min M_T	-1.52		20.25		-0.00	▷ 0.00		0.00		16.06	CO 1
				Max M_y	-1.52		20.25		-0.00	0.00	▷	0.00		16.06	CO 1
				Min M_y	-3.48		16.50		0.00	0.00	▷	0.00		15.50	CO 2
				Max M_z	-4.72		46.80		0.00	0.00		0.00	▷	38.74	CO 5
				Min M_z	-3.48		16.50		0.00	0.00		0.00	▷	15.50	CO 2
		2	1.000	Max N	▷ -1.51		24.30		0.00	0.00		0.00		-6.22	CO 1
				Min N	▷ -4.95		45.14		0.00	0.00		0.00		-9.02	CO 3
				Max V_y	-3.37	▷	56.72		0.00	0.00		0.00		-14.42	CO 4
				Min V_y	-3.47	▷	19.95		0.00	0.00		0.00		-2.73	CO 2
				Max V_z	-1.51		24.30	▷	0.00	0.00		0.00		-6.22	CO 1
				Min V_z	-4.67		56.25	▷	-0.00	0.00		-0.00		-12.79	CO 5
				Max M_T	-1.51		24.30		0.00	▷ 0.00		0.00		-6.22	CO 1
				Min M_T	-1.51		24.30		0.00	▷ 0.00		0.00		-6.22	CO 1
				Max M_y	-1.51		24.30		0.00	0.00	▷	0.00		-6.22	CO 1
				Min M_y	-4.67		56.25		-0.00	0.00	▷	-0.00		-12.79	CO 5
				Max M_z	-3.47		19.95		0.00	0.00		0.00	▷	-2.73	CO 2
				Min M_z	-3.37		56.72		0.00	0.00		0.00	▷	-14.42	CO 4
	RC2	5	0.000	Max N	▷ -1.13		15.00		0.00	0.00		0.00		11.89	CO 6
				Min N	▷ -3.60		28.50		-0.00	0.00		0.00		24.26	CO 8
				Max V_y	-2.57	▷	35.01		0.00	0.00		0.00		27.80	CO 9
				Min V_y	-2.59	▷	14.50		-0.00	0.00		0.00		13.09	CO 7
				Max V_z	-1.13		15.00	▷	0.00	0.00		0.00		11.89	CO 6
				Min V_z	-3.60		28.50	▷	-0.00	0.00		0.00		24.26	CO 8
				Max M_T	-1.13		15.00		0.00	▷ 0.00		0.00		11.89	CO 6
				Min M_T	-1.13		15.00		0.00	▷ 0.00		0.00		11.89	CO 6
				Max M_y	-3.60		28.50		-0.00	0.00	▷	0.00		24.26	CO 8
				Min M_y	-1.13		15.00		0.00	0.00	▷	0.00		11.89	CO 6
				Max M_z	-3.45		34.70		0.00	0.00		0.00	▷	28.55	CO 10
				Min M_z	-1.13		15.00		0.00	0.00		0.00	▷	11.89	CO 6
		2	1.000	Max N	▷ -1.13		18.00		0.00	0.00		0.00		-4.61	CO 6
				Min N	▷ -3.58		34.30		0.00	0.00		0.00		-7.14	CO 8
				Max V_y	-2.55	▷	42.01		0.00	0.00		0.00		-10.71	CO 9
				Min V_y	-2.58	▷	17.50		0.00	0.00		0.00		-2.91	CO 7
				Max V_z	-1.13		18.00	▷	0.00	0.00		0.00		-4.61	CO 6
				Min V_z	-1.13		18.00	▷	0.00	0.00		0.00		-4.61	CO 6
				Max M_T	-1.13		18.00		0.00	▷ 0.00		0.00		-4.61	CO 6
				Min M_T	-1.13		18.00		0.00	▷ 0.00		0.00		-4.61	CO 6
				Max M_y	-1.13		18.00		0.00	0.00	▷	0.00		-4.61	CO 6
				Min M_y	-1.13		18.00		0.00	0.00	▷	0.00		-4.61	CO 6
				Max M_z	-2.58		17.50		0.00	0.00		0.00	▷	-2.91	CO 7
				Min M_z	-2.55		42.01		0.00	0.00		0.00	▷	-10.71	CO 9
	RC3	5	0.000	Max N	▷ -1.13		15.00		0.00	0.00		0.00		11.89	CO 11
				Min N	▷ -1.72		23.00		-0.00	0.00		0.00		18.24	CO 14
				Max V_y	-1.72	▷	23.00		-0.00	0.00		0.00		18.24	CO 14
				Min V_y	-1.42	▷	14.90		0.00	0.00		0.00		12.13	CO 12
				Max V_z	-1.13		15.00	▷	0.00	0.00		0.00		11.89	CO 11
				Min V_z	-1.72		23.00	▷	-0.00	0.00		0.00		18.24	CO 14
				Max M_T	-1.13		15.00		0.00	▷ 0.00		0.00		11.89	CO 11
				Min M_T	-1.13		15.00		0.00	▷ 0.00		0.00		11.89	CO 11
				Max M_y	-1.72		23.00		-0.00	0.00	▷	0.00		18.24	CO 14
				Min M_y	-1.13		15.00		0.00	0.00	▷	0.00		11.89	CO 11
				Max M_z	-1.72		23.00		-0.00	0.00		0.00	▷	18.24	CO 14
				Min M_z	-1.13		15.00		0.00	0.00		0.00	▷	11.89	CO 11

Student Version

4.12 CROSS-SECTIONS - INTERNAL FORCES

Result Combinations

Member No.	RC	Node No.	Location x [m]		Forces [kN] N		V_y		V_z	Moments [kNm] M_T		M_y		M_z	Corresponding Load Cases
2	RC3	2	1.000	Max N	▷	-1.13		18.00		0.00		0.00		-4.61	CO 11
				Min N	▷	-1.71		22.70		0.00		0.00		-5.50	CO 13
				Max V_y		-1.71	▷	27.60		0.00		0.00		-7.06	CO 14
				Min V_y		-1.42	▷	17.90		0.00		0.00		-4.27	CO 12
				Max V_z		-1.13		18.00	▷	0.00		0.00		-4.61	CO 11
				Min V_z		-1.13		18.00	▷	0.00		0.00		-4.61	CO 11
				Max M_T		-1.13		18.00		0.00	▷	0.00		-4.61	CO 11
				Min M_T		-1.13		18.00		0.00	▷	0.00		-4.61	CO 11
				Max M_y		-1.13		18.00		0.00		0.00	▷	-4.61	CO 11
				Min M_y		-1.13		18.00		0.00		0.00	▷	-4.61	CO 11
				Max M_z		-1.42		17.90		0.00		0.00		-4.27	CO 12
				Min M_z		-1.71		27.60		0.00		0.00		-7.06	CO 14
	RC4	5	0.000	Max N	▷	-1.13		15.00		0.00		0.00		11.89	CO 15
				Min N	▷	-1.43		19.00		-0.00		0.00		15.06	CO 16
				Max V_y		-1.43	▷	19.00		-0.00		0.00		15.06	CO 16
				Min V_y		-1.13	▷	15.00		0.00		0.00		11.89	CO 15
				Max V_z		-1.13		15.00	▷	0.00		0.00		11.89	CO 15
				Min V_z		-1.43		19.00	▷	-0.00		0.00		15.06	CO 16
				Max M_T		-1.13		15.00		0.00	▷	0.00		11.89	CO 15
				Min M_T		-1.13		15.00		0.00	▷	0.00		11.89	CO 15
				Max M_y		-1.43		19.00		-0.00		0.00	▷	15.06	CO 16
				Min M_y		-1.13		15.00		0.00		0.00	▷	11.89	CO 15
				Max M_z		-1.43		19.00		-0.00		0.00	▷	15.06	CO 16
				Min M_z		-1.13		15.00		0.00		0.00	▷	11.89	CO 15
		2	1.000	Max N	▷	-1.13		18.00		0.00		0.00		-4.61	CO 15
				Min N	▷	-1.42		22.80		-0.00		-0.00		-5.84	CO 16
				Max V_y		-1.42	▷	22.80		-0.00		-0.00		-5.84	CO 16
				Min V_y		-1.13	▷	18.00		0.00		0.00		-4.61	CO 15
				Max V_z		-1.13		18.00	▷	0.00		0.00		-4.61	CO 15
				Min V_z		-1.42		22.80	▷	-0.00		-0.00		-5.84	CO 16
				Max M_T		-1.13		18.00		0.00	▷	0.00		-4.61	CO 15
				Min M_T		-1.13		18.00		0.00	▷	0.00		-4.61	CO 15
				Max M_y		-1.13		18.00		0.00		0.00	▷	-4.61	CO 15
				Min M_y		-1.42		22.80		-0.00		0.00	▷	-5.84	CO 16
				Max M_z		-1.13		18.00		0.00		0.00	▷	-4.61	CO 15
				Min M_z		-1.42		22.80		-0.00		-0.00	▷	-5.84	CO 16
4	RC1	6	0.000	Max N	▷	-1.53		16.20		0.00		0.00		34.28	CO 1
				Min N	▷	-5.02		29.84		-0.00		0.00		65.96	CO 3
				Max V_y		-3.47	▷	37.81		0.00		0.00		80.12	CO 4
				Min V_y		-3.49	▷	13.05		0.00		0.00		30.27	CO 2
				Max V_z		-1.53		16.20	▷	0.00		0.00		34.28	CO 1
				Min V_z		-5.02		29.84	▷	-0.00		0.00		65.96	CO 3
				Max M_T		-1.53		16.20		0.00	▷	0.00		34.28	CO 1
				Min M_T		-1.53		16.20		0.00	▷	0.00		34.28	CO 1
				Max M_y		-5.02		29.84		-0.00		0.00	▷	65.96	CO 3
				Min M_y		-1.53		16.20		0.00		0.00	▷	34.28	CO 1
				Max M_z		-4.78		37.35		0.00		0.00	▷	80.82	CO 5
				Min M_z		-3.49		13.05		0.00		0.00	▷	30.27	CO 2
		5	1.000	Max N	▷	-1.52		20.25		-0.00		0.00		16.06	CO 1
				Min N	▷	-4.98		37.49		0.00		0.00		32.30	CO 3
				Max V_y		-3.41	▷	47.27		0.00		0.00		37.58	CO 4
				Min V_y		-3.48	▷	16.50		0.00		0.00		15.50	CO 2
				Max V_z		-3.48		16.50	▷	0.00		0.00		15.50	CO 2

Student Version

4.12 CROSS-SECTIONS - INTERNAL FORCES

Result Combinations

Member No.	RC	Node No.	Location x [m]		Forces [kN] N		V_y		V_z	Moments [kNm] M_T		M_y		M_z	Corresponding Load Cases
4	RC1			Min V_z	-1.52		20.25	▷	-0.00	0.00		0.00		16.06	CO 1
				Max M_T	-1.52		20.25		-0.00	▷ 0.00		0.00		16.06	CO 1
				Min M_T	-1.52		20.25		-0.00	▷ 0.00		0.00		16.06	CO 1
				Max M_y	-1.52		20.25		-0.00	0.00	▷	0.00		16.06	CO 1
				Min M_y	-3.48		16.50		0.00	0.00	▷	0.00		15.50	CO 2
				Max M_z	-4.72		46.80		0.00	0.00		0.00	▷	38.74	CO 5
				Min M_z	-3.48		16.50		0.00	0.00		0.00	▷	15.50	CO 2
	RC2	6	0.000	Max N	▷ -1.14		12.00		-0.00	0.00		0.00		25.39	CO 6
				Min N	▷ -3.63		22.70		0.00	0.00		0.00		49.86	CO 8
				Max V_y	-2.61	▷	28.01		0.00	0.00		0.00		59.30	CO 9
				Min V_y	-2.59	▷	11.50		0.00	0.00		0.00		26.09	CO 7
				Max V_z	-2.59		11.50	▷	0.00	0.00		0.00		26.09	CO 7
				Min V_z	-1.14		12.00	▷	-0.00	0.00		0.00		25.39	CO 6
				Max M_T	-1.14		12.00		-0.00	▷ 0.00		0.00		25.39	CO 6
				Min M_T	-1.14		12.00		-0.00	▷ 0.00		0.00		25.39	CO 6
				Max M_y	-1.14		12.00		-0.00	0.00	▷	0.00		25.39	CO 6
				Min M_y	-2.59		11.50		0.00	0.00	▷	0.00		26.09	CO 7
				Max M_z	-3.48		27.70		0.00	0.00		0.00	▷	59.76	CO 10
				Min M_z	-1.14		12.00		-0.00	0.00		0.00	▷	25.39	CO 6
		5	1.000	Max N	▷ -1.13		15.00		0.00	0.00		0.00		11.89	CO 6
				Min N	▷ -3.60		28.50		-0.00	0.00		0.00		24.26	CO 8
				Max V_y	-2.57	▷	35.01		0.00	0.00		0.00		27.80	CO 9
				Min V_y	-2.59	▷	14.50		-0.00	0.00		0.00		13.09	CO 7
				Max V_z	-1.13		15.00	▷	0.00	0.00		0.00		11.89	CO 6
				Min V_z	-3.60		28.50	▷	-0.00	0.00		0.00		24.26	CO 8
				Max M_T	-1.13		15.00		0.00	▷ 0.00		0.00		11.89	CO 6
				Min M_T	-1.13		15.00		0.00	▷ 0.00		0.00		11.89	CO 6
				Max M_y	-3.60		28.50		-0.00	0.00	▷	0.00		24.26	CO 8
				Min M_y	-1.13		15.00		0.00	0.00	▷	0.00		11.89	CO 6
				Max M_z	-3.45		34.70		0.00	0.00		0.00	▷	28.55	CO 10
				Min M_z	-1.13		15.00		0.00	0.00		0.00	▷	11.89	CO 6
	RC3	6	0.000	Max N	▷ -1.14		12.00		-0.00	0.00		0.00		25.39	CO 11
				Min N	▷ -1.73		18.40		0.00	0.00		0.00		38.95	CO 14
				Max V_y	-1.73	▷	18.40		0.00	0.00		0.00		38.95	CO 14
				Min V_y	-1.43	▷	11.90		0.00	0.00		0.00		25.53	CO 12
				Max V_z	-1.43		11.90	▷	0.00	0.00		0.00		25.53	CO 12
				Min V_z	-1.73		15.10	▷	-0.00	0.00		0.00		32.31	CO 13
				Max M_T	-1.14		12.00		-0.00	▷ 0.00		0.00		25.39	CO 11
				Min M_T	-1.14		12.00		-0.00	▷ 0.00		0.00		25.39	CO 11
				Max M_y	-1.73		15.10		-0.00	0.00	▷	0.00		32.31	CO 13
				Min M_y	-1.43		11.90		0.00	0.00	▷	0.00		25.53	CO 12
				Max M_z	-1.73		18.40		0.00	0.00		0.00	▷	38.95	CO 14
				Min M_z	-1.14		12.00		-0.00	0.00		0.00	▷	25.39	CO 11
		5	1.000	Max N	▷ -1.13		15.00		0.00	0.00		0.00		11.89	CO 11
				Min N	▷ -1.72		23.00		-0.00	0.00		0.00		18.24	CO 14
				Max V_y	-1.72	▷	23.00		-0.00	0.00		0.00		18.24	CO 14
				Min V_y	-1.42	▷	14.90		0.00	0.00		0.00		12.13	CO 12
				Max V_z	-1.13		15.00	▷	0.00	0.00		0.00		11.89	CO 11
				Min V_z	-1.72		23.00	▷	-0.00	0.00		0.00		18.24	CO 14
				Max M_T	-1.13		15.00		0.00	▷ 0.00		0.00		11.89	CO 11
				Min M_T	-1.13		15.00		0.00	▷ 0.00		0.00		11.89	CO 11
				Max M_y	-1.72		23.00		-0.00	0.00	▷	0.00		18.24	CO 14
				Min M_y	-1.13		15.00		0.00	0.00	▷	0.00		11.89	CO 11

4.12 CROSS-SECTIONS - INTERNAL FORCES

Result Combinations

Member No.	RC	Node No.	Location x [m]		Forces [kN] N		V_y	V_z	Moments [kNm] M_T		M_y		M_z		Corresponding Load Cases
4	RC3			Max M_z		-1.72	23.00	-0.00	0.00		0.00	▷	18.24		CO 14
				Min M_z		-1.13	15.00	0.00	0.00		0.00	▷	11.89		CO 11
	RC4	6	0.000	Max N	▷	-1.14	12.00	-0.00	0.00		0.00		25.39		CO 15
				Min N	▷	-1.44	15.20	0.00	0.00		0.00		32.17		CO 16
				Max V_y		-1.44	▷ 15.20	0.00	0.00		0.00		32.17		CO 16
				Min V_y		-1.14	▷ 12.00	-0.00	0.00		0.00		25.39		CO 15
				Max V_z		-1.44	15.20	▷ 0.00	0.00		0.00		32.17		CO 16
				Min V_z		-1.14	12.00	▷ -0.00	0.00		0.00		25.39		CO 15
				Max M_T		-1.14	12.00	-0.00	▷ 0.00		0.00		25.39		CO 15
				Min M_T		-1.14	12.00	-0.00	▷ 0.00		0.00		25.39		CO 15
				Max M_y		-1.14	12.00	-0.00	0.00	▷	0.00		25.39		CO 15
				Min M_y		-1.44	15.20	0.00	0.00	▷	0.00		32.17		CO 16
				Max M_z		-1.44	15.20	0.00	0.00		0.00	▷	32.17		CO 16
				Min M_z		-1.14	12.00	-0.00	0.00		0.00	▷	25.39		CO 15
		5	1.000	Max N	▷	-1.13	15.00	0.00	0.00		0.00		11.89		CO 15
				Min N	▷	-1.43	19.00	-0.00	0.00		0.00		15.06		CO 16
				Max V_y		-1.43	▷ 19.00	-0.00	0.00		0.00		15.06		CO 16
				Min V_y		-1.13	▷ 15.00	0.00	0.00		0.00		11.89		CO 15
				Max V_z		-1.13	15.00	▷ 0.00	0.00		0.00		11.89		CO 15
				Min V_z		-1.43	19.00	▷ -0.00	0.00		0.00		15.06		CO 16
				Max M_T		-1.13	15.00	0.00	▷ 0.00		0.00		11.89		CO 15
				Min M_T		-1.13	15.00	0.00	▷ 0.00		0.00		11.89		CO 15
				Max M_y		-1.43	19.00	-0.00	0.00	▷	0.00		15.06		CO 16
				Min M_y		-1.13	15.00	0.00	0.00	▷	0.00		11.89		CO 15
				Max M_z		-1.43	19.00	-0.00	0.00		0.00	▷	15.06		CO 16
				Min M_z		-1.13	15.00	0.00	0.00		0.00	▷	11.89		CO 15
5	RC1	7	0.000	Max N	▷	-1.54	12.15	0.00	0.00		0.00		48.46		CO 1
				Min N	▷	-5.06	22.19	0.00	0.00		0.00		91.98		CO 3
				Max V_y		-3.53	▷ 28.36	0.00	0.00		0.00		113.21		CO 4
				Min V_y		-3.49	▷ 9.60	0.00	0.00		0.00		41.59		CO 2
				Max V_z		-1.54	12.15	▷ 0.00	0.00		0.00		48.46		CO 1
				Min V_z		-1.54	12.15	▷ 0.00	0.00		0.00		48.46		CO 1
				Max M_T		-1.54	12.15	0.00	▷ 0.00		0.00		48.46		CO 1
				Min M_T		-1.54	12.15	0.00	▷ 0.00		0.00		48.46		CO 1
				Max M_y		-1.54	12.15	0.00	0.00	▷	0.00		48.46		CO 1
				Min M_y		-1.54	12.15	0.00	0.00	▷	0.00		48.46		CO 1
				Max M_z		-4.84	27.90	0.00	0.00		0.00	▷	113.44		CO 5
				Min M_z		-3.49	9.60	0.00	0.00		0.00	▷	41.59		CO 2
		6	1.000	Max N	▷	-1.53	16.20	0.00	0.00		0.00		34.28		CO 1
				Min N	▷	-5.02	29.84	-0.00	0.00		0.00		65.96		CO 3
				Max V_y		-3.47	▷ 37.81	0.00	0.00		0.00		80.12		CO 4
				Min V_y		-3.49	▷ 13.05	0.00	0.00		0.00		30.27		CO 2
				Max V_z		-1.53	16.20	▷ 0.00	0.00		0.00		34.28		CO 1
				Min V_z		-5.02	29.84	▷ -0.00	0.00		0.00		65.96		CO 3
				Max M_T		-1.53	16.20	0.00	▷ 0.00		0.00		34.28		CO 1
				Min M_T		-1.53	16.20	0.00	▷ 0.00		0.00		34.28		CO 1
				Max M_y		-5.02	29.84	-0.00	0.00	▷	0.00		65.96		CO 3
				Min M_y		-1.53	16.20	0.00	0.00	▷	0.00		34.28		CO 1
				Max M_z		-4.78	37.35	0.00	0.00		0.00	▷	80.82		CO 5
				Min M_z		-3.49	13.05	0.00	0.00		0.00	▷	30.27		CO 2
	RC2	7	0.000	Max N	▷	-1.15	9.00	0.00	0.00		0.00		35.89		CO 6
				Min N	▷	-3.65	16.90	0.00	0.00		0.00		69.66		CO 8
				Max V_y		-2.64	▷ 21.01	-0.00	0.00		0.00		83.81		CO 9

4.12 CROSS-SECTIONS - INTERNAL FORCES

Result Combinations

Member No.	RC	Node No.	Location x [m]		Forces [kN] N		Forces [kN] V_y		Forces [kN] V_z		Moments [kNm] M_T		Moments [kNm] M_y		Moments [kNm] M_z		Corresponding Load Cases
5	RC2			Min V_y	-2.60	▷	8.50		-0.00		0.00		0.00		36.09		CO 7
				Max V_z	-1.15		9.00	▷	0.00		0.00		0.00		35.89		CO 6
				Min V_z	-2.64		21.01	▷	-0.00		0.00		0.00		83.81		CO 9
				Max M_T	-1.15		9.00		0.00	▷	0.00		0.00		35.89		CO 6
				Min M_T	-1.15		9.00		0.00	▷	0.00		0.00		35.89		CO 6
				Max M_y	-3.51		20.70		-0.00		0.00	▷	0.00		83.96		CO 10
				Min M_y	-1.15		9.00		0.00		0.00	▷	0.00		35.89		CO 6
				Max M_z	-3.51		20.70		-0.00		0.00		0.00	▷	83.96		CO 10
				Min M_z	-1.15		9.00		0.00		0.00		0.00	▷	35.89		CO 6
		6	1.000	Max N	-1.14	▷	12.00		-0.00		0.00		0.00		25.39		CO 6
				Min N	-3.63	▷	22.70		0.00		0.00		0.00		49.86		CO 8
				Max V_y	-2.61	▷	28.01		0.00		0.00		0.00		59.30		CO 9
				Min V_y	-2.59	▷	11.50		0.00		0.00		0.00		26.09		CO 7
				Max V_z	-2.59		11.50	▷	0.00		0.00		0.00		26.09		CO 7
				Min V_z	-1.14		12.00	▷	-0.00		0.00		0.00		25.39		CO 6
				Max M_T	-1.14		12.00		-0.00	▷	0.00		0.00		25.39		CO 6
				Min M_T	-1.14		12.00		-0.00	▷	0.00		0.00		25.39		CO 6
				Max M_y	-1.14		12.00		-0.00		0.00	▷	0.00		25.39		CO 6
				Min M_y	-2.59		11.50		0.00		0.00	▷	0.00		26.09		CO 7
				Max M_z	-3.48		27.70		0.00		0.00		0.00	▷	59.76		CO 10
				Min M_z	-1.14		12.00		-0.00		0.00		0.00	▷	25.39		CO 6
	RC3	7	0.000	Max N	-1.15	▷	9.00		0.00		0.00		0.00		35.89		CO 11
				Min N	-1.75	▷	13.80		0.00		0.00		0.00		55.05		CO 14
				Max V_y	-1.75	▷	13.80		0.00		0.00		0.00		55.05		CO 14
				Min V_y	-1.44	▷	8.90		-0.00		0.00		0.00		35.93		CO 12
				Max V_z	-1.15		9.00	▷	0.00		0.00		0.00		35.89		CO 11
				Min V_z	-1.44		8.90	▷	-0.00		0.00		0.00		35.93		CO 12
				Max M_T	-1.15		9.00		0.00	▷	0.00		0.00		35.89		CO 11
				Min M_T	-1.15		9.00		0.00	▷	0.00		0.00		35.89		CO 11
				Max M_y	-1.44		8.90		-0.00		0.00	▷	0.00		35.93		CO 12
				Min M_y	-1.15		9.00		0.00		0.00	▷	0.00		35.89		CO 11
				Max M_z	-1.75		13.80		0.00		0.00		0.00	▷	55.05		CO 14
				Min M_z	-1.15		9.00		0.00		0.00		0.00	▷	35.89		CO 11
		6	1.000	Max N	-1.14	▷	12.00		-0.00		0.00		0.00		25.39		CO 11
				Min N	-1.73	▷	18.40		0.00		0.00		0.00		38.95		CO 14
				Max V_y	-1.73	▷	18.40		0.00		0.00		0.00		38.95		CO 14
				Min V_y	-1.43	▷	11.90		0.00		0.00		0.00		25.53		CO 12
				Max V_z	-1.43		11.90	▷	0.00		0.00		0.00		25.53		CO 12
				Min V_z	-1.73		15.10	▷	-0.00		0.00		0.00		32.31		CO 13
				Max M_T	-1.14		12.00		-0.00	▷	0.00		0.00		25.39		CO 11
				Min M_T	-1.14		12.00		-0.00	▷	0.00		0.00		25.39		CO 11
				Max M_y	-1.73		15.10		-0.00		0.00	▷	0.00		32.31		CO 13
				Min M_y	-1.43		11.90		0.00		0.00	▷	0.00		25.53		CO 12
				Max M_z	-1.73		18.40		0.00		0.00		0.00	▷	38.95		CO 14
				Min M_z	-1.14		12.00		-0.00		0.00		0.00	▷	25.39		CO 11
	RC4	7	0.000	Max N	-1.15	▷	9.00		0.00		0.00		0.00		35.89		CO 15
				Min N	-1.45	▷	11.40		-0.00		0.00		0.00		45.47		CO 16
				Max V_y	-1.45	▷	11.40		-0.00		0.00		0.00		45.47		CO 16
				Min V_y	-1.15	▷	9.00		0.00		0.00		0.00		35.89		CO 15
				Max V_z	-1.15		9.00	▷	0.00		0.00		0.00		35.89		CO 15
				Min V_z	-1.45		11.40	▷	-0.00		0.00		0.00		45.47		CO 16
				Max M_T	-1.15		9.00		0.00	▷	0.00		0.00		35.89		CO 15
				Min M_T	-1.15		9.00		0.00	▷	0.00		0.00		35.89		CO 15

Student Version

4.12 CROSS-SECTIONS - INTERNAL FORCES

Result Combinations

Member No.	RC	Node No.	Location x [m]		Forces [kN] N		V_y		V_z	Moments [kNm] M_T		M_y		M_z	Corresponding Load Cases
5	RC4			Max M_y		-1.45		11.40		-0.00		0.00	▷	0.00	45.47	CO 16
				Min M_y		-1.15		9.00		0.00		0.00	▷	0.00	35.89	CO 15
				Max M_z		-1.45		11.40		-0.00		0.00		0.00 ▷	45.47	CO 16
				Min M_z		-1.15		9.00		0.00		0.00		0.00 ▷	35.89	CO 15
		6	1.000	Max N	▷	-1.14		12.00		-0.00		0.00		0.00	25.39	CO 15
				Min N	▷	-1.44		15.20		0.00		0.00		0.00	32.17	CO 16
				Max V_y		-1.44	▷	15.20		0.00		0.00		0.00	32.17	CO 16
				Min V_y		-1.14	▷	12.00		-0.00		0.00		0.00	25.39	CO 15
				Max V_z		-1.44		15.20	▷	0.00		0.00		0.00	32.17	CO 16
				Min V_z		-1.14		12.00	▷	-0.00		0.00		0.00	25.39	CO 15
				Max M_T		-1.14		12.00		-0.00	▷	0.00		0.00	25.39	CO 15
				Min M_T		-1.14		12.00		-0.00	▷	0.00		0.00	25.39	CO 15
				Max M_y		-1.14		12.00		-0.00		0.00	▷	0.00	25.39	CO 15
				Min M_y		-1.44		15.20		0.00		0.00	▷	0.00	32.17	CO 16
				Max M_z		-1.44		15.20		0.00		0.00		0.00 ▷	32.17	CO 16
				Min M_z		-1.14		12.00		-0.00		0.00		0.00 ▷	25.39	CO 15
6	RC1	8	0.000	Max N	▷	-1.55		8.10		-0.00		0.00		0.00	58.59	CO 1
				Min N	▷	-5.09		14.53		0.00		0.00		0.00	110.34	CO 3
				Max V_y		-3.58	▷	18.91		0.00		0.00		0.00	136.84	CO 4
				Min V_y		-3.50	▷	6.15		0.00		0.00		0.00	49.46	CO 2
				Max V_z		-3.50		6.15	▷	0.00		0.00		0.00	49.46	CO 2
				Min V_z		-1.55		8.10	▷	-0.00		0.00		0.00	58.59	CO 1
				Max M_T		-1.55		8.10		-0.00	▷	0.00		0.00	58.59	CO 1
				Min M_T		-1.55		8.10		-0.00	▷	0.00		0.00	58.59	CO 1
				Max M_y		-1.55		8.10		-0.00		0.00	▷	0.00	58.59	CO 1
				Min M_y		-3.50		6.15		0.00		0.00	▷	0.00	49.46	CO 2
				Max M_z		-3.58		18.91		0.00		0.00		0.00 ▷	136.84	CO 4
				Min M_z		-3.50		6.15		0.00		0.00		0.00 ▷	49.46	CO 2
		7	1.000	Max N	▷	-1.54		12.15		0.00		0.00		0.00	48.46	CO 1
				Min N	▷	-5.06		22.19		0.00		0.00		0.00	91.98	CO 3
				Max V_y		-3.53	▷	28.36		0.00		0.00		0.00	113.21	CO 4
				Min V_y		-3.49	▷	9.60		0.00		0.00		0.00	41.59	CO 2
				Max V_z		-1.54		12.15	▷	0.00		0.00		0.00	48.46	CO 1
				Min V_z		-1.54		12.15	▷	0.00		0.00		0.00	48.46	CO 1
				Max M_T		-1.54		12.15		0.00	▷	0.00		0.00	48.46	CO 1
				Min M_T		-1.54		12.15		0.00	▷	0.00		0.00	48.46	CO 1
				Max M_y		-1.54		12.15		0.00		0.00	▷	0.00	48.46	CO 1
				Min M_y		-1.54		12.15		0.00		0.00	▷	0.00	48.46	CO 1
				Max M_z		-4.84		27.90		0.00		0.00		0.00 ▷	113.44	CO 5
				Min M_z		-3.49		9.60		0.00		0.00		0.00 ▷	41.59	CO 2
	RC2	8	0.000	Max N	▷	-1.15		6.00		0.00		0.00		0.00	43.39	CO 6
				Min N	▷	-3.67		11.09		0.00		0.00		0.00	83.65	CO 8
				Max V_y		-2.67	▷	14.00		-0.00		0.00		0.00	101.32	CO 9
				Min V_y		-2.60	▷	5.50		0.00		0.00		0.00	43.09	CO 7
				Max V_z		-1.15		6.00	▷	0.00		0.00		0.00	43.39	CO 6
				Min V_z		-2.67		14.00	▷	-0.00		0.00		0.00	101.32	CO 9
				Max M_T		-1.15		6.00		0.00	▷	0.00		0.00	43.39	CO 6
				Min M_T		-1.15		6.00		0.00	▷	0.00		0.00	43.39	CO 6
				Max M_y		-2.67		14.00		-0.00		0.00	▷	0.00	101.32	CO 9
				Min M_y		-1.15		6.00		0.00		0.00	▷	0.00	43.39	CO 6
				Max M_z		-2.67		14.00		-0.00		0.00		0.00 ▷	101.32	CO 9
				Min M_z		-2.60		5.50		0.00		0.00		0.00 ▷	43.09	CO 7
		7	1.000	Max N	▷	-1.15		9.00		0.00		0.00		0.00	35.89	CO 6

4.12 CROSS-SECTIONS - INTERNAL FORCES

Result Combinations

Member No.	RC	Node No.	Location x [m]		Forces [kN] N		V_y		V_z	Moments [kNm] M_T		M_y		M_z	Corresponding Load Cases
6	RC2			Min N	▷	-3.65	16.90		0.00	0.00		0.00		69.66	CO 8
				Max V_y		-2.64	▷ 21.01		-0.00	0.00		0.00		83.81	CO 9
				Min V_y		-2.60	▷ 8.50		-0.00	0.00		0.00		36.09	CO 7
				Max V_z		-1.15	9.00	▷	0.00	0.00		0.00		35.89	CO 6
				Min V_z		-2.64	21.01	▷	-0.00	0.00		0.00		83.81	CO 9
				Max M_T		-1.15	9.00		0.00	▷ 0.00		0.00		35.89	CO 6
				Min M_T		-1.15	9.00		0.00	▷ 0.00		0.00		35.89	CO 6
				Max M_y		-3.51	20.70		-0.00	0.00	▷	0.00		83.96	CO 10
				Min M_y		-1.15	9.00		0.00	0.00	▷	0.00		35.89	CO 6
				Max M_z		-3.51	20.70		-0.00	0.00		0.00	▷	83.96	CO 10
				Min M_z		-1.15	9.00		0.00	0.00		0.00	▷	35.89	CO 6
	RC3	8	0.000	Max N	▷	-1.15	6.00		0.00	0.00		0.00		43.39	CO 11
				Min N	▷	-1.76	9.20		0.00	0.00		0.00		66.55	CO 14
				Max V_y		-1.76	▷ 9.20		0.00	0.00		0.00		66.55	CO 14
				Min V_y		-1.44	▷ 5.90		0.00	0.00		0.00		43.33	CO 12
				Max V_z		-1.15	6.00	▷	0.00	0.00		0.00		43.39	CO 11
				Min V_z		-1.15	6.00	▷	0.00	0.00		0.00		43.39	CO 11
				Max M_T		-1.15	6.00		0.00	▷ 0.00		0.00		43.39	CO 11
				Min M_T		-1.15	6.00		0.00	▷ 0.00		0.00		43.39	CO 11
				Max M_y		-1.15	6.00		0.00	0.00	▷	0.00		43.39	CO 11
				Min M_y		-1.15	6.00		0.00	0.00	▷	0.00		43.39	CO 11
				Max M_z		-1.76	9.20		0.00	0.00		0.00	▷	66.55	CO 14
				Min M_z		-1.44	5.90		0.00	0.00		0.00	▷	43.33	CO 12
		7	1.000	Max N	▷	-1.15	9.00		0.00	0.00		0.00		35.89	CO 11
				Min N	▷	-1.75	13.80		0.00	0.00		0.00		55.05	CO 14
				Max V_y		-1.75	▷ 13.80		0.00	0.00		0.00		55.05	CO 14
				Min V_y		-1.44	▷ 8.90		-0.00	0.00		0.00		35.93	CO 12
				Max V_z		-1.15	9.00	▷	0.00	0.00		0.00		35.89	CO 11
				Min V_z		-1.44	8.90	▷	-0.00	0.00		0.00		35.93	CO 12
				Max M_T		-1.15	9.00		0.00	▷ 0.00		0.00		35.89	CO 11
				Min M_T		-1.15	9.00		0.00	▷ 0.00		0.00		35.89	CO 11
				Max M_y		-1.44	8.90		-0.00	0.00	▷	0.00		35.93	CO 12
				Min M_y		-1.15	9.00		0.00	0.00	▷	0.00		35.89	CO 11
				Max M_z		-1.75	13.80		0.00	0.00		0.00	▷	55.05	CO 14
				Min M_z		-1.15	9.00		0.00	0.00		0.00	▷	35.89	CO 11
	RC4	8	0.000	Max N	▷	-1.15	6.00		0.00	0.00		0.00		43.39	CO 15
				Min N	▷	-1.46	7.60		-0.00	0.00		0.00		54.97	CO 16
				Max V_y		-1.46	▷ 7.60		-0.00	0.00		0.00		54.97	CO 16
				Min V_y		-1.15	▷ 6.00		0.00	0.00		0.00		43.39	CO 15
				Max V_z		-1.15	6.00	▷	0.00	0.00		0.00		43.39	CO 15
				Min V_z		-1.46	7.60	▷	-0.00	0.00		0.00		54.97	CO 16
				Max M_T		-1.15	6.00		0.00	▷ 0.00		0.00		43.39	CO 15
				Min M_T		-1.15	6.00		0.00	▷ 0.00		0.00		43.39	CO 15
				Max M_y		-1.46	7.60		-0.00	0.00	▷	0.00		54.97	CO 16
				Min M_y		-1.15	6.00		0.00	0.00	▷	0.00		43.39	CO 15
				Max M_z		-1.46	7.60		-0.00	0.00		0.00	▷	54.97	CO 16
				Min M_z		-1.15	6.00		0.00	0.00		0.00	▷	43.39	CO 15
		7	1.000	Max N	▷	-1.15	9.00		0.00	0.00		0.00		35.89	CO 15
				Min N	▷	-1.45	11.40		-0.00	0.00		0.00		45.47	CO 16
				Max V_y		-1.45	▷ 11.40		-0.00	0.00		0.00		45.47	CO 16
				Min V_y		-1.15	▷ 9.00		0.00	0.00		0.00		35.89	CO 15
				Max V_z		-1.15	9.00	▷	0.00	0.00		0.00		35.89	CO 15
				Min V_z		-1.45	11.40	▷	-0.00	0.00		0.00		45.47	CO 16

Student Version

4.12 CROSS-SECTIONS - INTERNAL FORCES

Result Combinations

Member No.	RC	Node No.	Location x [m]		Forces [kN] N		V_y		V_z	Moments [kNm] M_T		M_y		M_z		Corresponding Load Cases
6	RC4			Max M_T	-1.15		9.00		0.00	0.00	▷	0.00		35.89		CO 15
				Min M_T	-1.15		9.00		0.00	0.00	▷	0.00		35.89		CO 15
				Max M_y	-1.45		11.40		-0.00	0.00		0.00	▷	45.47		CO 16
				Min M_y	-1.15		9.00		0.00	0.00		0.00	▷	35.89		CO 15
				Max M_z	-1.45		11.40		-0.00	0.00		0.00		0.00	▷	45.47	CO 16
				Min M_z	-1.15		9.00		0.00	0.00		0.00		0.00	▷	35.89	CO 15
7	RC1	9	0.000	Max N	▷	-1.56	4.05		0.00	0.00		0.00		64.67		CO 1
				Min N	▷	-5.11	6.88		0.00	0.00		0.00		121.05		CO 3
				Max V_y		-3.61	▷ 9.45		0.00	0.00		0.00		151.02		CO 4
				Min V_y		-3.50	▷ 2.69		0.00	0.00		0.00		53.88		CO 2
				Max V_z		-1.56	4.05	▷	0.00	0.00		0.00		64.67		CO 1
				Min V_z		-1.56	4.05	▷	0.00	0.00		0.00		64.67		CO 1
				Max M_T		-1.56	4.05		0.00	▷ 0.00		0.00		64.67		CO 1
				Min M_T		-1.56	4.05		0.00	▷ 0.00		0.00		64.67		CO 1
				Max M_y		-1.56	4.05		0.00	0.00	▷	0.00		64.67		CO 1
				Min M_y		-1.56	4.05		0.00	0.00	▷	0.00		64.67		CO 1
				Max M_z		-3.61	9.45		0.00	0.00		0.00		151.02	▷	CO 4
				Min M_z		-3.50	2.69		0.00	0.00		0.00		53.88	▷	CO 2
		8	1.000	Max N	▷	-1.55	8.10		-0.00	0.00		0.00		58.59		CO 1
				Min N	▷	-5.09	14.53		0.00	0.00		0.00		110.34		CO 3
				Max V_y		-3.58	▷ 18.91		0.00	0.00		0.00		136.84		CO 4
				Min V_y		-3.50	▷ 6.15		0.00	0.00		0.00		49.46		CO 2
				Max V_z		-3.50	6.15	▷	0.00	0.00		0.00		49.46		CO 2
				Min V_z		-1.55	8.10	▷	-0.00	0.00		0.00		58.59		CO 1
				Max M_T		-1.55	8.10		-0.00	▷ 0.00		0.00		58.59		CO 1
				Min M_T		-1.55	8.10		-0.00	▷ 0.00		0.00		58.59		CO 1
				Max M_y		-1.55	8.10		-0.00	0.00	▷	0.00		58.59		CO 1
				Min M_y		-3.50	6.15		0.00	0.00	▷	0.00		49.46		CO 2
				Max M_z		-3.58	18.91		0.00	0.00		0.00		136.84	▷	CO 4
				Min M_z		-3.50	6.15		0.00	0.00		0.00		49.46	▷	CO 2
	RC2	9	0.000	Max N	▷	-1.15	3.00		0.00	0.00		0.00		47.89		CO 6
				Min N	▷	-3.68	5.29		0.00	0.00		0.00		91.85		CO 8
				Max V_y		-2.68	▷ 7.00		0.00	0.00		0.00		111.82		CO 9
				Min V_y		-2.61	▷ 2.50		0.00	0.00		0.00		47.09		CO 7
				Max V_z		-1.15	3.00	▷	0.00	0.00		0.00		47.89		CO 6
				Min V_z		-1.15	3.00	▷	0.00	0.00		0.00		47.89		CO 6
				Max M_T		-1.15	3.00		0.00	▷ 0.00		0.00		47.89		CO 6
				Min M_T		-1.15	3.00		0.00	▷ 0.00		0.00		47.89		CO 6
				Max M_y		-1.15	3.00		0.00	0.00	▷	0.00		47.89		CO 6
				Min M_y		-1.15	3.00		0.00	0.00	▷	0.00		47.89		CO 6
				Max M_z		-2.68	7.00		0.00	0.00		0.00		111.82	▷	CO 9
				Min M_z		-2.61	2.50		0.00	0.00		0.00		47.09	▷	CO 7
		8	1.000	Max N	▷	-1.15	6.00		0.00	0.00		0.00		43.39		CO 6
				Min N	▷	-3.67	11.09		0.00	0.00		0.00		83.65		CO 8
				Max V_y		-2.67	▷ 14.00		-0.00	0.00		0.00		101.32		CO 9
				Min V_y		-2.60	▷ 5.50		0.00	0.00		0.00		43.09		CO 7
				Max V_z		-1.15	6.00	▷	0.00	0.00		0.00		43.39		CO 6
				Min V_z		-2.67	14.00	▷	-0.00	0.00		0.00		101.32		CO 9
				Max M_T		-1.15	6.00		0.00	▷ 0.00		0.00		43.39		CO 6
				Min M_T		-1.15	6.00		0.00	▷ 0.00		0.00		43.39		CO 6
				Max M_y		-2.67	14.00		-0.00	0.00	▷	0.00		101.32		CO 9
				Min M_y		-1.15	6.00		0.00	0.00	▷	0.00		43.39		CO 6
				Max M_z		-2.67	14.00		-0.00	0.00		0.00		101.32	▷	CO 9

Student Version

4.12 CROSS-SECTIONS - INTERNAL FORCES

Result Combinations

Member No.	RC	Node No.	Location x [m]		Forces [kN] N		V_y	V_z	Moments [kNm] M_T		M_y		M_z	Corresponding Load Cases
7	RC2			Min M_z	-2.60		5.50	0.00	0.00		0.00	▷	43.09	CO 7
	RC3	9	0.000	Max N	▷ -1.15		3.00	0.00	0.00		0.00		47.89	CO 11
				Min N	▷ -1.77		4.60	0.00	0.00		0.00		73.45	CO 14
				Max V_y	-1.77	▷	4.60	0.00	0.00		0.00		73.45	CO 14
				Min V_y	-1.44	▷	2.90	-0.00	0.00		0.00		47.73	CO 12
				Max V_z	-1.15		3.00	▷ 0.00	0.00		0.00		47.89	CO 11
				Min V_z	-1.44		2.90	▷ -0.00	0.00		0.00		47.73	CO 12
				Max M_T	-1.15		3.00	0.00	▷ 0.00		0.00		47.89	CO 11
				Min M_T	-1.15		3.00	0.00	▷ 0.00		0.00		47.89	CO 11
				Max M_y	-1.44		2.90	-0.00	0.00	▷	0.00		47.73	CO 12
				Min M_y	-1.15		3.00	0.00	0.00	▷	0.00		47.89	CO 11
				Max M_z	-1.77		4.60	0.00	0.00		0.00	▷	73.45	CO 14
				Min M_z	-1.44		2.90	-0.00	0.00		0.00	▷	47.73	CO 12
		8	1.000	Max N	▷ -1.15		6.00	0.00	0.00		0.00		43.39	CO 11
				Min N	▷ -1.76		9.20	0.00	0.00		0.00		66.55	CO 14
				Max V_y	-1.76	▷	9.20	0.00	0.00		0.00		66.55	CO 14
				Min V_y	-1.44	▷	5.90	0.00	0.00		0.00		43.33	CO 12
				Max V_z	-1.15		6.00	▷ 0.00	0.00		0.00		43.39	CO 11
				Min V_z	-1.15		6.00	▷ 0.00	0.00		0.00		43.39	CO 11
				Max M_T	-1.15		6.00	0.00	▷ 0.00		0.00		43.39	CO 11
				Min M_T	-1.15		6.00	0.00	▷ 0.00		0.00		43.39	CO 11
				Max M_y	-1.15		6.00	0.00	0.00	▷	0.00		43.39	CO 11
				Min M_y	-1.15		6.00	0.00	0.00	▷	0.00		43.39	CO 11
				Max M_z	-1.76		9.20	0.00	0.00		0.00	▷	66.55	CO 14
				Min M_z	-1.44		5.90	0.00	0.00		0.00	▷	43.33	CO 12
	RC4	9	0.000	Max N	▷ -1.15		3.00	0.00	0.00		0.00		47.89	CO 15
				Min N	▷ -1.46		3.80	0.00	0.00		0.00		60.67	CO 16
				Max V_y	-1.46	▷	3.80	0.00	0.00		0.00		60.67	CO 16
				Min V_y	-1.15	▷	3.00	0.00	0.00		0.00		47.89	CO 15
				Max V_z	-1.15		3.00	▷ 0.00	0.00		0.00		47.89	CO 15
				Min V_z	-1.15		3.00	▷ 0.00	0.00		0.00		47.89	CO 15
				Max M_T	-1.15		3.00	0.00	▷ 0.00		0.00		47.89	CO 15
				Min M_T	-1.15		3.00	0.00	▷ 0.00		0.00		47.89	CO 15
				Max M_y	-1.15		3.00	0.00	0.00	▷	0.00		47.89	CO 15
				Min M_y	-1.15		3.00	0.00	0.00	▷	0.00		47.89	CO 15
				Max M_z	-1.46		3.80	0.00	0.00		0.00	▷	60.67	CO 16
				Min M_z	-1.15		3.00	0.00	0.00		0.00	▷	47.89	CO 15
		8	1.000	Max N	▷ -1.15		6.00	0.00	0.00		0.00		43.39	CO 15
				Min N	▷ -1.46		7.60	-0.00	0.00		0.00		54.97	CO 16
				Max V_y	-1.46	▷	7.60	-0.00	0.00		0.00		54.97	CO 16
				Min V_y	-1.15	▷	6.00	0.00	0.00		0.00		43.39	CO 15
				Max V_z	-1.15		6.00	▷ 0.00	0.00		0.00		43.39	CO 15
				Min V_z	-1.46		7.60	▷ -0.00	0.00		0.00		54.97	CO 16
				Max M_T	-1.15		6.00	0.00	▷ 0.00		0.00		43.39	CO 15
				Min M_T	-1.15		6.00	0.00	▷ 0.00		0.00		43.39	CO 15
				Max M_y	-1.46		7.60	-0.00	0.00	▷	0.00		54.97	CO 16
				Min M_y	-1.15		6.00	0.00	0.00	▷	0.00		43.39	CO 15
				Max M_z	-1.46		7.60	-0.00	0.00		0.00	▷	54.97	CO 16
				Min M_z	-1.15		6.00	0.00	0.00		0.00	▷	43.39	CO 15
8	RC1	10	0.000	Max N	▷ -1.56		0.00	0.00	0.00		0.00		66.69	CO 1
				Min N	▷ -5.11		-0.77	0.00	0.00		0.00		124.10	CO 3
				Max V_y	-3.63	▷	0.00	0.00	0.00		0.00		155.75	CO 4
				Min V_y	-5.11	▷	-0.77	0.00	0.00		0.00		124.10	CO 3

4.12 CROSS-SECTIONS - INTERNAL FORCES

Result Combinations

Member No.	RC	Node No.	Location x [m]		Forces [kN] N		V_y		V_z	Moments [kNm] M_T		M_y		M_z	Corresponding Load Cases
8	RC1			Max V_z	-1.56		0.00	▷	0.00	0.00		0.00		66.69	CO 1
				Min V_z	-1.56		0.00	▷	0.00	0.00		0.00		66.69	CO 1
				Max M_T	-1.56		0.00		0.00	▷ 0.00		0.00		66.69	CO 1
				Min M_T	-1.56		0.00		0.00	▷ 0.00		0.00		66.69	CO 1
				Max M_y	-1.56		0.00		0.00	0.00	▷	0.00		66.69	CO 1
				Min M_y	-1.56		0.00		0.00	0.00	▷	0.00		66.69	CO 1
				Max M_z	-3.63		0.00		0.00	0.00		0.00	▷	155.75	CO 4
				Min M_z	-3.50		-0.76		0.00	0.00		0.00	▷	54.85	CO 2
		9	1.000	Max N	▷ -1.56		4.05		0.00	0.00		0.00		64.67	CO 1
				Min N	▷ -5.11		6.88		0.00	0.00		0.00		121.05	CO 3
				Max V_y	-3.61	▷	9.45		0.00	0.00		0.00		151.02	CO 4
				Min V_y	-3.50	▷	2.69		0.00	0.00		0.00		53.88	CO 2
				Max V_z	-1.56		4.05	▷	0.00	0.00		0.00		64.67	CO 1
				Min V_z	-1.56		4.05	▷	0.00	0.00		0.00		64.67	CO 1
				Max M_T	-1.56		4.05		0.00	▷ 0.00		0.00		64.67	CO 1
				Min M_T	-1.56		4.05		0.00	▷ 0.00		0.00		64.67	CO 1
				Max M_y	-1.56		4.05		0.00	0.00	▷	0.00		64.67	CO 1
				Min M_y	-1.56		4.05		0.00	0.00	▷	0.00		64.67	CO 1
				Max M_z	-3.61		9.45		0.00	0.00		0.00	▷	151.02	CO 4
				Min M_z	-3.50		2.69		0.00	0.00		0.00	▷	53.88	CO 2
	RC2	10	0.000	Max N	▷ -1.15		0.00		0.00	0.00		0.00		49.39	CO 6
				Min N	▷ -3.68		-0.51		0.00	0.00		0.00		94.24	CO 8
				Max V_y	-2.69	▷	0.00		0.00	0.00		0.00		115.32	CO 9
				Min V_y	-3.68	▷	-0.51		0.00	0.00		0.00		94.24	CO 8
				Max V_z	-1.15		0.00	▷	0.00	0.00		0.00		49.39	CO 6
				Min V_z	-1.15		0.00	▷	0.00	0.00		0.00		49.39	CO 6
				Max M_T	-1.15		0.00		0.00	▷ 0.00		0.00		49.39	CO 6
				Min M_T	-1.15		0.00		0.00	▷ 0.00		0.00		49.39	CO 6
				Max M_y	-1.15		0.00		0.00	0.00	▷	0.00		49.39	CO 6
				Min M_y	-1.15		0.00		0.00	0.00	▷	0.00		49.39	CO 6
				Max M_z	-2.69		0.00		0.00	0.00		0.00	▷	115.32	CO 9
				Min M_z	-2.61		-0.50		0.00	0.00		0.00	▷	48.09	CO 7
		9	1.000	Max N	▷ -1.15		3.00		0.00	0.00		0.00		47.89	CO 6
				Min N	▷ -3.68		5.29		0.00	0.00		0.00		91.85	CO 8
				Max V_y	-2.68	▷	7.00		0.00	0.00		0.00		111.82	CO 9
				Min V_y	-2.61	▷	2.50		0.00	0.00		0.00		47.09	CO 7
				Max V_z	-1.15		3.00	▷	0.00	0.00		0.00		47.89	CO 6
				Min V_z	-1.15		3.00	▷	0.00	0.00		0.00		47.89	CO 6
				Max M_T	-1.15		3.00		0.00	▷ 0.00		0.00		47.89	CO 6
				Min M_T	-1.15		3.00		0.00	▷ 0.00		0.00		47.89	CO 6
				Max M_y	-1.15		3.00		0.00	0.00	▷	0.00		47.89	CO 6
				Min M_y	-1.15		3.00		0.00	0.00	▷	0.00		47.89	CO 6
				Max M_z	-2.68		7.00		0.00	0.00		0.00	▷	111.82	CO 9
				Min M_z	-2.61		2.50		0.00	0.00		0.00	▷	47.09	CO 7
	RC3	10	0.000	Max N	▷ -1.15		0.00		0.00	0.00		0.00		49.39	CO 11
				Min N	▷ -1.77		0.00		0.00	0.00		0.00		75.75	CO 14
				Max V_y	-1.77	▷	0.00		0.00	0.00		0.00		75.75	CO 14
				Min V_y	-1.75	▷	-0.10		0.00	0.00		0.00		62.31	CO 13
				Max V_z	-1.15		0.00	▷	0.00	0.00		0.00		49.39	CO 11
				Min V_z	-1.15		0.00	▷	0.00	0.00		0.00		49.39	CO 11
				Max M_T	-1.15		0.00		0.00	▷ 0.00		0.00		49.39	CO 11
				Min M_T	-1.15		0.00		0.00	▷ 0.00		0.00		49.39	CO 11
				Max M_y	-1.15		0.00		0.00	0.00	▷	0.00		49.39	CO 11

Student Version

4.12 CROSS-SECTIONS - INTERNAL FORCES

Result Combinations

Member No.	RC	Node No.	Location x [m]		Forces [kN] N		V_y		V_z	Moments [kNm] M_T		M_y		M_z	Corresponding Load Cases
8	RC3			Min M_y	-1.15		0.00		0.00	0.00	▷	0.00		49.39	CO 11
				Max M_z	-1.77		0.00		0.00	0.00		0.00	▷	75.75	CO 14
				Min M_z	-1.45		-0.10		0.00	0.00		0.00	▷	49.13	CO 12
		9	1.000	Max N	▷ -1.15		3.00		0.00	0.00		0.00		47.89	CO 11
				Min N	▷ -1.77		4.60		0.00	0.00		0.00		73.45	CO 14
				Max V_y	-1.77	▷	4.60		0.00	0.00		0.00		73.45	CO 14
				Min V_y	-1.44	▷	2.90		-0.00	0.00		0.00		47.73	CO 12
				Max V_z	-1.15		3.00	▷	0.00	0.00		0.00		47.89	CO 11
				Min V_z	-1.44		2.90	▷	-0.00	0.00		0.00		47.73	CO 12
				Max M_T	-1.15		3.00		0.00	▷ 0.00		0.00		47.89	CO 11
				Min M_T	-1.15		3.00		0.00	▷ 0.00		0.00		47.89	CO 11
				Max M_y	-1.44		2.90		-0.00	0.00	▷	0.00		47.73	CO 12
				Min M_y	-1.15		3.00		0.00	0.00	▷	0.00		47.89	CO 11
				Max M_z	-1.77		4.60		0.00	0.00		0.00	▷	73.45	CO 14
				Min M_z	-1.44		2.90		-0.00	0.00		0.00	▷	47.73	CO 12
	RC4	10	0.000	Max N	▷ -1.15		0.00		0.00	0.00		0.00		49.39	CO 15
				Min N	▷ -1.46		0.00		0.00	0.00		0.00		62.57	CO 16
				Max V_y	-1.46	▷	0.00		0.00	0.00		0.00		62.57	CO 16
				Min V_y	-1.15	▷	0.00		0.00	0.00		0.00		49.39	CO 15
				Max V_z	-1.15		0.00	▷	0.00	0.00		0.00		49.39	CO 15
				Min V_z	-1.15		0.00	▷	0.00	0.00		0.00		49.39	CO 15
				Max M_T	-1.15		0.00		0.00	▷ 0.00		0.00		49.39	CO 15
				Min M_T	-1.15		0.00		0.00	▷ 0.00		0.00		49.39	CO 15
				Max M_y	-1.15		0.00		0.00	0.00	▷	0.00		49.39	CO 15
				Min M_y	-1.15		0.00		0.00	0.00	▷	0.00		49.39	CO 15
				Max M_z	-1.46		0.00		0.00	0.00		0.00	▷	62.57	CO 16
				Min M_z	-1.15		0.00		0.00	0.00		0.00	▷	49.39	CO 15
		9	1.000	Max N	▷ -1.15		3.00		0.00	0.00		0.00		47.89	CO 15
				Min N	▷ -1.46		3.80		0.00	0.00		0.00		60.67	CO 16
				Max V_y	-1.46	▷	3.80		0.00	0.00		0.00		60.67	CO 16
				Min V_y	-1.15	▷	3.00		0.00	0.00		0.00		47.89	CO 15
				Max V_z	-1.15		3.00	▷	0.00	0.00		0.00		47.89	CO 15
				Min V_z	-1.15		3.00	▷	0.00	0.00		0.00		47.89	CO 15
				Max M_T	-1.15		3.00		0.00	▷ 0.00		0.00		47.89	CO 15
				Min M_T	-1.15		3.00		0.00	▷ 0.00		0.00		47.89	CO 15
				Max M_y	-1.15		3.00		0.00	0.00	▷	0.00		47.89	CO 15
				Min M_y	-1.15		3.00		0.00	0.00	▷	0.00		47.89	CO 15
				Max M_z	-1.46		3.80		0.00	0.00		0.00	▷	60.67	CO 16
				Min M_z	-1.15		3.00		0.00	0.00		0.00	▷	47.89	CO 15
9	RC1	11	0.000	Max N	▷ -1.56		-4.05		0.00	0.00		0.00		64.67	CO 1
				Min N	▷ -5.11		-8.43		0.00	0.00		0.00		119.50	CO 3
				Max V_y	-1.56	▷	-4.05		0.00	0.00		0.00		64.67	CO 1
				Min V_y	-4.92	▷	-9.93		0.00	0.00		0.00		149.39	CO 5
				Max V_z	-1.56		-4.05	▷	0.00	0.00		0.00		64.67	CO 1
				Min V_z	-1.56		-4.05	▷	0.00	0.00		0.00		64.67	CO 1
				Max M_T	-1.56		-4.05		0.00	▷ 0.00		0.00		64.67	CO 1
				Min M_T	-1.56		-4.05		0.00	▷ 0.00		0.00		64.67	CO 1
				Max M_y	-1.56		-4.05		0.00	0.00	▷	0.00		64.67	CO 1
				Min M_y	-1.56		-4.05		0.00	0.00	▷	0.00		64.67	CO 1
				Max M_z	-3.61		-9.45		0.00	0.00		0.00	▷	151.02	CO 4
				Min M_z	-3.50		-4.21		0.00	0.00		0.00	▷	52.37	CO 2
		10	1.000	Max N	▷ -1.56		-0.00		0.00	0.00		0.00		66.69	CO 1
				Min N	▷ -5.11		-0.77		0.00	0.00		0.00		124.10	CO 3

Student Version

4.12 CROSS-SECTIONS - INTERNAL FORCES

Result Combinations

Member No.	RC	Node No.	Location x [m]		Forces [kN] N		V_y		V_z	Moments [kNm] M_T		M_y		M_z	Corresponding Load Cases
9	RC1			Max V_y	-1.56	▷	-0.00		0.00	0.00		0.00		66.69	CO 1
				Min V_y	-5.11	▷	-0.77		0.00	0.00		0.00		124.10	CO 3
				Max V_z	-1.56		-0.00	▷	0.00	0.00		0.00		66.69	CO 1
				Min V_z	-1.56		-0.00	▷	0.00	0.00		0.00		66.69	CO 1
				Max M_T	-1.56		-0.00		0.00	▷ 0.00		0.00		66.69	CO 1
				Min M_T	-1.56		-0.00		0.00	▷ 0.00		0.00		66.69	CO 1
				Max M_y	-1.56		-0.00		0.00	0.00	▷	0.00		66.69	CO 1
				Min M_y	-1.56		-0.00		0.00	0.00	▷	0.00		66.69	CO 1
				Max M_z	-3.63		-0.00		0.00	0.00		0.00	▷	155.75	CO 4
				Min M_z	-3.50		-0.76		0.00	0.00		0.00	▷	54.85	CO 2
	RC2	11	0.000	Max N	▷ -1.15		-3.00		0.00	0.00		0.00		47.89	CO 6
				Min N	▷ -3.68		-6.31		0.00	0.00		0.00		90.82	CO 8
				Max V_y	-1.15	▷	-3.00		0.00	0.00		0.00		47.89	CO 6
				Min V_y	-3.55	▷	-7.31		0.00	0.00		0.00		110.73	CO 10
				Max V_z	-3.55		-7.31	▷	0.00	0.00		0.00		110.73	CO 10
				Min V_z	-1.15		-3.00	▷	0.00	0.00		0.00		47.89	CO 6
				Max M_T	-1.15		-3.00		0.00	▷ 0.00		0.00		47.89	CO 6
				Min M_T	-1.15		-3.00		0.00	▷ 0.00		0.00		47.89	CO 6
				Max M_y	-3.55		-7.31		0.00	0.00	▷	0.00		110.73	CO 10
				Min M_y	-1.15		-3.00		0.00	0.00	▷	0.00		47.89	CO 6
				Max M_z	-2.68		-7.00		0.00	0.00		0.00	▷	111.82	CO 9
				Min M_z	-2.60		-3.50		0.00	0.00		0.00	▷	46.09	CO 7
		10	1.000	Max N	▷ -1.15		-0.00		0.00	0.00		0.00		49.39	CO 6
				Min N	▷ -3.68		-0.51		0.00	0.00		0.00		94.24	CO 8
				Max V_y	-1.15	▷	-0.00		0.00	0.00		0.00		49.39	CO 6
				Min V_y	-3.68	▷	-0.51		0.00	0.00		0.00		94.24	CO 8
				Max V_z	-1.15		-0.00	▷	0.00	0.00		0.00		49.39	CO 6
				Min V_z	-1.15		-0.00	▷	0.00	0.00		0.00		49.39	CO 6
				Max M_T	-1.15		-0.00		0.00	▷ 0.00		0.00		49.39	CO 6
				Min M_T	-1.15		-0.00		0.00	▷ 0.00		0.00		49.39	CO 6
				Max M_y	-1.15		-0.00		0.00	0.00	▷	0.00		49.39	CO 6
				Min M_y	-1.15		-0.00		0.00	0.00	▷	0.00		49.39	CO 6
				Max M_z	-2.69		-0.00		0.00	0.00		0.00	▷	115.32	CO 9
				Min M_z	-2.61		-0.50		0.00	0.00		0.00	▷	48.09	CO 7
	RC3	11	0.000	Max N	▷ -1.15		-3.00		0.00	0.00		0.00		47.89	CO 11
				Min N	▷ -1.77		-4.60		0.00	0.00		0.00		73.45	CO 14
				Max V_y	-1.15	▷	-3.00		0.00	0.00		0.00		47.89	CO 11
				Min V_y	-1.77	▷	-4.60		0.00	0.00		0.00		73.45	CO 14
				Max V_z	-1.44		-3.10	▷	0.00	0.00		0.00		47.53	CO 12
				Min V_z	-1.15		-3.00	▷	0.00	0.00		0.00		47.89	CO 11
				Max M_T	-1.15		-3.00		0.00	▷ 0.00		0.00		47.89	CO 11
				Min M_T	-1.15		-3.00		0.00	▷ 0.00		0.00		47.89	CO 11
				Max M_y	-1.44		-3.10		0.00	0.00	▷	0.00		47.53	CO 12
				Min M_y	-1.15		-3.00		0.00	0.00	▷	0.00		47.89	CO 11
				Max M_z	-1.77		-4.60		0.00	0.00		0.00	▷	73.45	CO 14
				Min M_z	-1.44		-3.10		0.00	0.00		0.00	▷	47.53	CO 12
		10	1.000	Max N	▷ -1.15		-0.00		0.00	0.00		0.00		49.39	CO 11
				Min N	▷ -1.77		-0.00		0.00	0.00		0.00		75.75	CO 14
				Max V_y	-1.15	▷	-0.00		0.00	0.00		0.00		49.39	CO 11
				Min V_y	-1.75	▷	-0.10		0.00	0.00		0.00		62.31	CO 13
				Max V_z	-1.15		-0.00	▷	0.00	0.00		0.00		49.39	CO 11
				Min V_z	-1.15		-0.00	▷	0.00	0.00		0.00		49.39	CO 11
				Max M_T	-1.15		-0.00		0.00	▷ 0.00		0.00		49.39	CO 11

Student Version

4.12 CROSS-SECTIONS - INTERNAL FORCES

Result Combinations

Member No.	RC	Node No.	Location x [m]		Forces [kN] N		V_y		V_z	Moments [kNm] M_T		M_y		M_z	Corresponding Load Cases
9	RC3			Min M_T	-1.15		-0.00		0.00	▷ 0.00		0.00		49.39	CO 11
				Max M_y	-1.15		-0.00		0.00	0.00	▷	0.00		49.39	CO 11
				Min M_y	-1.15		-0.00		0.00	0.00	▷	0.00		49.39	CO 11
				Max M_z	-1.77		-0.00		0.00	0.00		0.00	▷	75.75	CO 14
				Min M_z	-1.45		-0.10		0.00	0.00		0.00	▷	49.13	CO 12
	RC4	11	0.000	Max N	▷ -1.15		-3.00		0.00	0.00		0.00		47.89	CO 15
				Min N	▷ -1.46		-3.80		0.00	0.00		0.00		60.67	CO 16
				Max V_y	-1.15	▷	-3.00		0.00	0.00		0.00		47.89	CO 15
				Min V_y	-1.46	▷	-3.80		0.00	0.00		0.00		60.67	CO 16
				Max V_z	-1.15		-3.00	▷	0.00	0.00		0.00		47.89	CO 15
				Min V_z	-1.15		-3.00	▷	0.00	0.00		0.00		47.89	CO 15
				Max M_T	-1.15		-3.00		0.00	▷ 0.00		0.00		47.89	CO 15
				Min M_T	-1.15		-3.00		0.00	▷ 0.00		0.00		47.89	CO 15
				Max M_y	-1.15		-3.00		0.00	0.00	▷	0.00		47.89	CO 15
				Min M_y	-1.15		-3.00		0.00	0.00	▷	0.00		47.89	CO 15
				Max M_z	-1.46		-3.80		0.00	0.00		0.00	▷	60.67	CO 16
				Min M_z	-1.15		-3.00		0.00	0.00		0.00	▷	47.89	CO 15
		10	1.000	Max N	▷ -1.15		-0.00		0.00	0.00		0.00		49.39	CO 15
				Min N	▷ -1.46		-0.00		0.00	0.00		0.00		62.57	CO 16
				Max V_y	-1.15	▷	-0.00		0.00	0.00		0.00		49.39	CO 15
				Min V_y	-1.46	▷	-0.00		0.00	0.00		0.00		62.57	CO 16
				Max V_z	-1.15		-0.00	▷	0.00	0.00		0.00		49.39	CO 15
				Min V_z	-1.15		-0.00	▷	0.00	0.00		0.00		49.39	CO 15
				Max M_T	-1.15		-0.00		0.00	▷ 0.00		0.00		49.39	CO 15
				Min M_T	-1.15		-0.00		0.00	▷ 0.00		0.00		49.39	CO 15
				Max M_y	-1.15		-0.00		0.00	0.00	▷	0.00		49.39	CO 15
				Min M_y	-1.15		-0.00		0.00	0.00	▷	0.00		49.39	CO 15
				Max M_z	-1.46		-0.00		0.00	0.00		0.00	▷	62.57	CO 16
				Min M_z	-1.15		-0.00		0.00	0.00		0.00	▷	49.39	CO 15
10	RC1	12	0.000	Max N	▷ -1.55		-8.10		0.00	0.00		0.00		58.59	CO 1
				Min N	▷ -5.08		-16.08		0.00	0.00		0.00		107.24	CO 3
				Max V_y	-3.50	▷	-7.66		0.00	0.00		0.00		46.44	CO 2
				Min V_y	-4.89	▷	-19.38		0.00	0.00		0.00		134.73	CO 5
				Max V_z	-5.08		-16.08	▷	0.00	0.00		0.00		107.24	CO 3
				Min V_z	-3.50		-7.66	▷	0.00	0.00		0.00		46.44	CO 2
				Max M_T	-1.55		-8.10		0.00	▷ 0.00		0.00		58.59	CO 1
				Min M_T	-1.55		-8.10		0.00	▷ 0.00		0.00		58.59	CO 1
				Max M_y	-5.08		-16.08		0.00	0.00	▷	0.00		107.24	CO 3
				Min M_y	-3.50		-7.66		0.00	0.00	▷	0.00		46.44	CO 2
				Max M_z	-3.58		-18.91		0.00	0.00		0.00	▷	136.84	CO 4
				Min M_z	-3.50		-7.66		0.00	0.00		0.00	▷	46.44	CO 2
		11	1.000	Max N	▷ -1.56		-4.05		0.00	0.00		0.00		64.67	CO 1
				Min N	▷ -5.11		-8.43		0.00	0.00		0.00		119.50	CO 3
				Max V_y	-1.56	▷	-4.05		0.00	0.00		0.00		64.67	CO 1
				Min V_y	-4.92	▷	-9.93		0.00	0.00		0.00		149.39	CO 5
				Max V_z	-1.56		-4.05	▷	0.00	0.00		0.00		64.67	CO 1
				Min V_z	-1.56		-4.05	▷	0.00	0.00		0.00		64.67	CO 1
				Max M_T	-1.56		-4.05		0.00	▷ 0.00		0.00		64.67	CO 1
				Min M_T	-1.56		-4.05		0.00	▷ 0.00		0.00		64.67	CO 1
				Max M_y	-1.56		-4.05		0.00	0.00	▷	0.00		64.67	CO 1
				Min M_y	-1.56		-4.05		0.00	0.00	▷	0.00		64.67	CO 1
				Max M_z	-3.61		-9.45		0.00	0.00		0.00	▷	151.02	CO 4
				Min M_z	-3.50		-4.21		0.00	0.00		0.00	▷	52.37	CO 2

Student Version

4.12 CROSS-SECTIONS - INTERNAL FORCES

Result Combinations

Member No.	RC	Node No.	Location x [m]		Forces [kN] N		V_y		V_z	Moments [kNm] M_T		M_y		M_z	Corresponding Load Cases
10	RC2	12	0.000	Max N	▷	-1.15	-6.00		0.00	0.00		0.00		43.39	CO 6
				Min N	▷	-3.66	-12.12		0.00	0.00		0.00		81.61	CO 8
				Max V_y		-1.15	▷ -6.00		0.00	0.00		0.00		43.39	CO 6
				Min V_y		-3.54	▷ -14.31		0.00	0.00		0.00		99.92	CO 10
				Max V_z		-2.67	-14.00	▷	0.00	0.00		0.00		101.32	CO 9
				Min V_z		-1.15	-6.00	▷	0.00	0.00		0.00		43.39	CO 6
				Max M_T		-1.15	-6.00		0.00	▷ 0.00		0.00		43.39	CO 6
				Min M_T		-1.15	-6.00		0.00	▷ 0.00		0.00		43.39	CO 6
				Max M_y		-2.67	-14.00		0.00	0.00	▷	0.00		101.32	CO 9
				Min M_y		-1.15	-6.00		0.00	0.00	▷	0.00		43.39	CO 6
				Max M_z		-2.67	-14.00		0.00	0.00		0.00	▷	101.32	CO 9
				Min M_z		-2.60	-6.51		0.00	0.00		0.00	▷	41.08	CO 7
		11	1.000	Max N	▷	-1.15	-3.00		0.00	0.00		0.00		47.89	CO 6
				Min N	▷	-3.68	-6.31		0.00	0.00		0.00		90.82	CO 8
				Max V_y		-1.15	▷ -3.00		0.00	0.00		0.00		47.89	CO 6
				Min V_y		-3.55	▷ -7.31		0.00	0.00		0.00		110.73	CO 10
				Max V_z		-3.55	-7.31	▷	0.00	0.00		0.00		110.73	CO 10
				Min V_z		-1.15	-3.00	▷	0.00	0.00		0.00		47.89	CO 6
				Max M_T		-1.15	-3.00		0.00	▷ 0.00		0.00		47.89	CO 6
				Min M_T		-1.15	-3.00		0.00	▷ 0.00		0.00		47.89	CO 6
				Max M_y		-3.55	-7.31		0.00	0.00	▷	0.00		110.73	CO 10
				Min M_y		-1.15	-3.00		0.00	0.00	▷	0.00		47.89	CO 6
				Max M_z		-2.68	-7.00		0.00	0.00		0.00	▷	111.82	CO 9
				Min M_z		-2.60	-3.50		0.00	0.00		0.00	▷	46.09	CO 7
	RC3	12	0.000	Max N	▷	-1.15	-6.00		0.00	0.00		0.00		43.39	CO 11
				Min N	▷	-1.76	-9.20		0.00	0.00		0.00		66.55	CO 14
				Max V_y		-1.15	▷ -6.00		0.00	0.00		0.00		43.39	CO 11
				Min V_y		-1.76	▷ -9.20		0.00	0.00		0.00		66.55	CO 14
				Max V_z		-1.44	-6.10	▷	0.00	0.00		0.00		42.93	CO 12
				Min V_z		-1.15	-6.00	▷	0.00	0.00		0.00		43.39	CO 11
				Max M_T		-1.15	-6.00		0.00	▷ 0.00		0.00		43.39	CO 11
				Min M_T		-1.15	-6.00		0.00	▷ 0.00		0.00		43.39	CO 11
				Max M_y		-1.44	-6.10		0.00	0.00	▷	0.00		42.93	CO 12
				Min M_y		-1.15	-6.00		0.00	0.00	▷	0.00		43.39	CO 11
				Max M_z		-1.76	-9.20		0.00	0.00		0.00	▷	66.55	CO 14
				Min M_z		-1.44	-6.10		0.00	0.00		0.00	▷	42.93	CO 12
		11	1.000	Max N	▷	-1.15	-3.00		0.00	0.00		0.00		47.89	CO 11
				Min N	▷	-1.77	-4.60		0.00	0.00		0.00		73.45	CO 14
				Max V_y		-1.15	▷ -3.00		0.00	0.00		0.00		47.89	CO 11
				Min V_y		-1.77	▷ -4.60		0.00	0.00		0.00		73.45	CO 14
				Max V_z		-1.44	-3.10	▷	0.00	0.00		0.00		47.53	CO 12
				Min V_z		-1.15	-3.00	▷	0.00	0.00		0.00		47.89	CO 11
				Max M_T		-1.15	-3.00		0.00	▷ 0.00		0.00		47.89	CO 11
				Min M_T		-1.15	-3.00		0.00	▷ 0.00		0.00		47.89	CO 11
				Max M_y		-1.44	-3.10		0.00	0.00	▷	0.00		47.53	CO 12
				Min M_y		-1.15	-3.00		0.00	0.00	▷	0.00		47.89	CO 11
				Max M_z		-1.77	-4.60		0.00	0.00		0.00	▷	73.45	CO 14
				Min M_z		-1.44	-3.10		0.00	0.00		0.00	▷	47.53	CO 12
	RC4	12	0.000	Max N	▷	-1.15	-6.00		0.00	0.00		0.00		43.39	CO 15
				Min N	▷	-1.46	-7.60		0.00	0.00		0.00		54.97	CO 16
				Max V_y		-1.15	▷ -6.00		0.00	0.00		0.00		43.39	CO 15
				Min V_y		-1.46	▷ -7.60		0.00	0.00		0.00		54.97	CO 16
				Max V_z		-1.46	-7.60	▷	0.00	0.00		0.00		54.97	CO 16

Student Version

4.12 CROSS-SECTIONS - INTERNAL FORCES

Result Combinations

Member No.	RC	Node No.	Location x [m]		Forces [kN] N		V_y		V_z	Moments [kNm] M_T		M_y		M_z	Corresponding Load Cases
10	RC4			Min V_z	-1.15		-6.00	▷	0.00	0.00		0.00		43.39	CO 15
				Max M_T	-1.15		-6.00		0.00	▷ 0.00		0.00		43.39	CO 15
				Min M_T	-1.15		-6.00		0.00	▷ 0.00		0.00		43.39	CO 15
				Max M_y	-1.46		-7.60		0.00	0.00	▷	0.00		54.97	CO 16
				Min M_y	-1.15		-6.00		0.00	0.00	▷	0.00		43.39	CO 15
				Max M_z	-1.46		-7.60		0.00	0.00		0.00	▷	54.97	CO 16
				Min M_z	-1.15		-6.00		0.00	0.00		0.00	▷	43.39	CO 15
		11	1.000	Max N	▷ -1.15		-3.00		0.00	0.00		0.00		47.89	CO 15
				Min N	▷ -1.46		-3.80		0.00	0.00		0.00		60.67	CO 16
				Max V_y	-1.15	▷	-3.00		0.00	0.00		0.00		47.89	CO 15
				Min V_y	-1.46	▷	-3.80		0.00	0.00		0.00		60.67	CO 16
				Max V_z	-1.15		-3.00	▷	0.00	0.00		0.00		47.89	CO 15
				Min V_z	-1.15		-3.00	▷	0.00	0.00		0.00		47.89	CO 15
				Max M_T	-1.15		-3.00		0.00	▷ 0.00		0.00		47.89	CO 15
				Min M_T	-1.15		-3.00		0.00	▷ 0.00		0.00		47.89	CO 15
				Max M_y	-1.15		-3.00		0.00	0.00	▷	0.00		47.89	CO 15
				Min M_y	-1.15		-3.00		0.00	0.00	▷	0.00		47.89	CO 15
				Max M_z	-1.46		-3.80		0.00	0.00		0.00	▷	60.67	CO 16
				Min M_z	-1.15		-3.00		0.00	0.00		0.00	▷	47.89	CO 15
11	RC1	13	0.000	Max N	▷ -1.54		-12.15		0.00	0.00		0.00		48.46	CO 1
				Min N	▷ -5.05		-23.74		0.00	0.00		0.00		87.33	CO 3
				Max V_y	-3.49	▷	-11.11		0.00	0.00		0.00		37.05	CO 2
				Min V_y	-4.84	▷	-28.84		0.00	0.00		0.00		110.62	CO 5
				Max V_z	-1.54		-12.15	▷	0.00	0.00		0.00		48.46	CO 1
				Min V_z	-1.54		-12.15	▷	0.00	0.00		0.00		48.46	CO 1
				Max M_T	-1.54		-12.15		0.00	▷ 0.00		0.00		48.46	CO 1
				Min M_T	-1.54		-12.15		0.00	▷ 0.00		0.00		48.46	CO 1
				Max M_y	-1.54		-12.15		0.00	0.00	▷	0.00		48.46	CO 1
				Min M_y	-1.54		-12.15		0.00	0.00	▷	0.00		48.46	CO 1
				Max M_z	-3.53		-28.36		0.00	0.00		0.00	▷	113.21	CO 4
				Min M_z	-3.49		-11.11		0.00	0.00		0.00	▷	37.05	CO 2
		12	1.000	Max N	▷ -1.55		-8.10		0.00	0.00		0.00		58.59	CO 1
				Min N	▷ -5.08		-16.08		0.00	0.00		0.00		107.24	CO 3
				Max V_y	-3.50	▷	-7.66		0.00	0.00		0.00		46.44	CO 2
				Min V_y	-4.89	▷	-19.38		0.00	0.00		0.00		134.73	CO 5
				Max V_z	-5.08		-16.08	▷	0.00	0.00		0.00		107.24	CO 3
				Min V_z	-3.50		-7.66	▷	0.00	0.00		0.00		46.44	CO 2
				Max M_T	-1.55		-8.10		0.00	▷ 0.00		0.00		58.59	CO 1
				Min M_T	-1.55		-8.10		0.00	▷ 0.00		0.00		58.59	CO 1
				Max M_y	-5.08		-16.08		0.00	0.00	▷	0.00		107.24	CO 3
				Min M_y	-3.50		-7.66		0.00	0.00	▷	0.00		46.44	CO 2
				Max M_z	-3.58		-18.91		0.00	0.00		0.00	▷	136.84	CO 4
				Min M_z	-3.50		-7.66		0.00	0.00		0.00	▷	46.44	CO 2
	RC2	13	0.000	Max N	▷ -1.15		-9.00		0.00	0.00		0.00		35.89	CO 6
				Min N	▷ -3.65		-17.92		0.00	0.00		0.00		66.59	CO 8
				Max V_y	-1.15	▷	-9.00		0.00	0.00		0.00		35.89	CO 6
				Min V_y	-3.51	▷	-21.32		0.00	0.00		0.00		82.10	CO 10
				Max V_z	-2.64		-21.01	▷	0.00	0.00		0.00		83.81	CO 9
				Min V_z	-1.15		-9.00	▷	0.00	0.00		0.00		35.89	CO 6
				Max M_T	-1.15		-9.00		0.00	▷ 0.00		0.00		35.89	CO 6
				Min M_T	-1.15		-9.00		0.00	▷ 0.00		0.00		35.89	CO 6
				Max M_y	-2.64		-21.01		0.00	0.00	▷	0.00		83.81	CO 9
				Min M_y	-1.15		-9.00		0.00	0.00	▷	0.00		35.89	CO 6

4.12 CROSS-SECTIONS - INTERNAL FORCES

Result Combinations

Member No.	RC	Node No.	Location x [m]		Forces [kN] N	Forces [kN] V_y	Forces [kN] V_z	Moments [kNm] M_T	Moments [kNm] M_y	Moments [kNm] M_z	Corresponding Load Cases
11	RC2			Max M_z	-2.64	-21.01	0.00	0.00	0.00 ▷	83.81	CO 9
				Min M_z	-2.60	-9.51	0.00	0.00	0.00 ▷	33.08	CO 7
		12	1.000	Max N ▷	-1.15	-6.00	0.00	0.00	0.00	43.39	CO 6
				Min N ▷	-3.66	-12.12	0.00	0.00	0.00	81.61	CO 8
				Max V_y	-1.15 ▷	-6.00	0.00	0.00	0.00	43.39	CO 6
				Min V_y	-3.54 ▷	-14.31	0.00	0.00	0.00	99.92	CO 10
				Max V_z	-2.67	-14.00 ▷	0.00	0.00	0.00	101.32	CO 9
				Min V_z	-1.15	-6.00 ▷	0.00	0.00	0.00	43.39	CO 6
				Max M_T	-1.15	-6.00	0.00 ▷	0.00	0.00	43.39	CO 6
				Min M_T	-1.15	-6.00	0.00 ▷	0.00	0.00	43.39	CO 6
				Max M_y	-2.67	-14.00	0.00	0.00 ▷	0.00	101.32	CO 9
				Min M_y	-1.15	-6.00	0.00	0.00 ▷	0.00	43.39	CO 6
				Max M_z	-2.67	-14.00	0.00	0.00	0.00 ▷	101.32	CO 9
				Min M_z	-2.60	-6.51	0.00	0.00	0.00 ▷	41.08	CO 7
	RC3	13	0.000	Max N ▷	-1.15	-9.00	0.00	0.00	0.00	35.89	CO 11
				Min N ▷	-1.75	-13.80	0.00	0.00	0.00	55.05	CO 14
				Max V_y	-1.15 ▷	-9.00	0.00	0.00	0.00	35.89	CO 11
				Min V_y	-1.75 ▷	-13.80	0.00	0.00	0.00	55.05	CO 14
				Max V_z	-1.15	-9.00 ▷	0.00	0.00	0.00	35.89	CO 11
				Min V_z	-1.15	-9.00 ▷	0.00	0.00	0.00	35.89	CO 11
				Max M_T	-1.15	-9.00	0.00 ▷	0.00	0.00	35.89	CO 11
				Min M_T	-1.15	-9.00	0.00 ▷	0.00	0.00	35.89	CO 11
				Max M_y	-1.15	-9.00	0.00	0.00 ▷	0.00	35.89	CO 11
				Min M_y	-1.15	-9.00	0.00	0.00 ▷	0.00	35.89	CO 11
				Max M_z	-1.75	-13.80	0.00	0.00	0.00 ▷	55.05	CO 14
				Min M_z	-1.44	-9.10	0.00	0.00	0.00 ▷	35.33	CO 12
		12	1.000	Max N ▷	-1.15	-6.00	0.00	0.00	0.00	43.39	CO 11
				Min N ▷	-1.76	-9.20	0.00	0.00	0.00	66.55	CO 14
				Max V_y	-1.15 ▷	-6.00	0.00	0.00	0.00	43.39	CO 11
				Min V_y	-1.76 ▷	-9.20	0.00	0.00	0.00	66.55	CO 14
				Max V_z	-1.44	-6.10 ▷	0.00	0.00	0.00	42.93	CO 12
				Min V_z	-1.15	-6.00 ▷	0.00	0.00	0.00	43.39	CO 11
				Max M_T	-1.15	-6.00	0.00 ▷	0.00	0.00	43.39	CO 11
				Min M_T	-1.15	-6.00	0.00 ▷	0.00	0.00	43.39	CO 11
				Max M_y	-1.44	-6.10	0.00	0.00 ▷	0.00	42.93	CO 12
				Min M_y	-1.15	-6.00	0.00	0.00 ▷	0.00	43.39	CO 11
				Max M_z	-1.76	-9.20	0.00	0.00	0.00 ▷	66.55	CO 14
				Min M_z	-1.44	-6.10	0.00	0.00	0.00 ▷	42.93	CO 12
	RC4	13	0.000	Max N ▷	-1.15	-9.00	0.00	0.00	0.00	35.89	CO 15
				Min N ▷	-1.45	-11.40	0.00	0.00	0.00	45.47	CO 16
				Max V_y	-1.15 ▷	-9.00	0.00	0.00	0.00	35.89	CO 15
				Min V_y	-1.45 ▷	-11.40	0.00	0.00	0.00	45.47	CO 16
				Max V_z	-1.45	-11.40 ▷	0.00	0.00	0.00	45.47	CO 16
				Min V_z	-1.15	-9.00 ▷	0.00	0.00	0.00	35.89	CO 15
				Max M_T	-1.15	-9.00	0.00 ▷	0.00	0.00	35.89	CO 15
				Min M_T	-1.15	-9.00	0.00 ▷	0.00	0.00	35.89	CO 15
				Max M_y	-1.45	-11.40	0.00	0.00 ▷	0.00	45.47	CO 16
				Min M_y	-1.15	-9.00	0.00	0.00 ▷	0.00	35.89	CO 15
				Max M_z	-1.45	-11.40	0.00	0.00	0.00 ▷	45.47	CO 16
				Min M_z	-1.15	-9.00	0.00	0.00	0.00 ▷	35.89	CO 15
		12	1.000	Max N ▷	-1.15	-6.00	0.00	0.00	0.00	43.39	CO 15
				Min N ▷	-1.46	-7.60	0.00	0.00	0.00	54.97	CO 16
				Max V_y	-1.15 ▷	-6.00	0.00	0.00	0.00	43.39	CO 15

4.12 CROSS-SECTIONS - INTERNAL FORCES

Result Combinations

Member No.	RC	Node No.	Location x [m]		Forces [kN] N		V_y		V_z	Moments [kNm] M_T		M_y		M_z	Corresponding Load Cases
11	RC4			Min V_y	-1.46	▷	-7.60		0.00	0.00		0.00		54.97	CO 16
				Max V_z	-1.46		-7.60	▷	0.00	0.00		0.00		54.97	CO 16
				Min V_z	-1.15		-6.00	▷	0.00	0.00		0.00		43.39	CO 15
				Max M_T	-1.15		-6.00		0.00	▷ 0.00		0.00		43.39	CO 15
				Min M_T	-1.15		-6.00		0.00	▷ 0.00		0.00		43.39	CO 15
				Max M_y	-1.46		-7.60		0.00	0.00	▷	0.00		54.97	CO 16
				Min M_y	-1.15		-6.00		0.00	0.00	▷	0.00		43.39	CO 15
				Max M_z	-1.46		-7.60		0.00	0.00		0.00	▷	54.97	CO 16
				Min M_z	-1.15		-6.00		0.00	0.00		0.00	▷	43.39	CO 15
12	RC1	14	0.000	Max N	▷ -1.53		-16.20		0.00	0.00		0.00		34.28	CO 1
				Min N	▷ -5.01		-31.39		0.00	0.00		0.00		59.76	CO 3
				Max V_y	-3.48	▷	-14.56		0.00	0.00		0.00		24.21	CO 2
				Min V_y	-4.78	▷	-38.29		0.00	0.00		0.00		77.06	CO 5
				Max V_z	-5.01		-31.39	▷	0.00	0.00		0.00		59.76	CO 3
				Min V_z	-1.53		-16.20	▷	0.00	0.00		0.00		34.28	CO 1
				Max M_T	-1.53		-16.20		0.00	▷ 0.00		0.00		34.28	CO 1
				Min M_T	-1.53		-16.20		0.00	▷ 0.00		0.00		34.28	CO 1
				Max M_y	-5.01		-31.39		0.00	0.00	▷	0.00		59.76	CO 3
				Min M_y	-1.53		-16.20		0.00	0.00	▷	0.00		34.28	CO 1
				Max M_z	-3.47		-37.81		0.00	0.00		0.00	▷	80.12	CO 4
				Min M_z	-3.48		-14.56		0.00	0.00		0.00	▷	24.21	CO 2
		13	1.000	Max N	▷ -1.54		-12.15		0.00	0.00		0.00		48.46	CO 1
				Min N	▷ -5.05		-23.74		0.00	0.00		0.00		87.33	CO 3
				Max V_y	-3.49	▷	-11.11		0.00	0.00		0.00		37.05	CO 2
				Min V_y	-4.84	▷	-28.84		0.00	0.00		0.00		110.62	CO 5
				Max V_z	-1.54		-12.15	▷	0.00	0.00		0.00		48.46	CO 1
				Min V_z	-1.54		-12.15	▷	0.00	0.00		0.00		48.46	CO 1
				Max M_T	-1.54		-12.15		0.00	▷ 0.00		0.00		48.46	CO 1
				Min M_T	-1.54		-12.15		0.00	▷ 0.00		0.00		48.46	CO 1
				Max M_y	-1.54		-12.15		0.00	0.00	▷	0.00		48.46	CO 1
				Min M_y	-1.54		-12.15		0.00	0.00	▷	0.00		48.46	CO 1
				Max M_z	-3.53		-28.36		0.00	0.00		0.00	▷	113.21	CO 4
				Min M_z	-3.49		-11.11		0.00	0.00		0.00	▷	37.05	CO 2
	RC2	14	0.000	Max N	▷ -1.14		-12.00		0.00	0.00		0.00		25.39	CO 6
				Min N	▷ -3.62		-23.72		0.00	0.00		0.00		45.77	CO 8
				Max V_y	-1.14	▷	-12.00		0.00	0.00		0.00		25.39	CO 6
				Min V_y	-3.48	▷	-28.32		0.00	0.00		0.00		57.29	CO 10
				Max V_z	-3.48		-28.32	▷	0.00	0.00		0.00		57.29	CO 10
				Min V_z	-2.59		-12.51	▷	0.00	0.00		0.00		22.07	CO 7
				Max M_T	-1.14		-12.00		0.00	▷ 0.00		0.00		25.39	CO 6
				Min M_T	-1.14		-12.00		0.00	▷ 0.00		0.00		25.39	CO 6
				Max M_y	-3.48		-28.32		0.00	0.00	▷	0.00		57.29	CO 10
				Min M_y	-2.59		-12.51		0.00	0.00	▷	0.00		22.07	CO 7
				Max M_z	-2.61		-28.01		0.00	0.00		0.00	▷	59.30	CO 9
				Min M_z	-2.59		-12.51		0.00	0.00		0.00	▷	22.07	CO 7
		13	1.000	Max N	▷ -1.15		-9.00		0.00	0.00		0.00		35.89	CO 6
				Min N	▷ -3.65		-17.92		0.00	0.00		0.00		66.59	CO 8
				Max V_y	-1.15	▷	-9.00		0.00	0.00		0.00		35.89	CO 6
				Min V_y	-3.51	▷	-21.32		0.00	0.00		0.00		82.10	CO 10
				Max V_z	-2.64		-21.01	▷	0.00	0.00		0.00		83.81	CO 9
				Min V_z	-1.15		-9.00	▷	0.00	0.00		0.00		35.89	CO 6
				Max M_T	-1.15		-9.00		0.00	▷ 0.00		0.00		35.89	CO 6
				Min M_T	-1.15		-9.00		0.00	▷ 0.00		0.00		35.89	CO 6

4.12 CROSS-SECTIONS - INTERNAL FORCES

Result Combinations

Member No.	RC	Node No.	Location x [m]		Forces [kN] N		V_y		V_z	Moments [kNm] M_T		M_y		M_z	Corresponding Load Cases
12	RC2			Max M_y	-2.64		-21.01		0.00	0.00	▷	0.00		83.81	CO 9
				Min M_y	-1.15		-9.00		0.00	0.00	▷	0.00		35.89	CO 6
				Max M_z	-2.64		-21.01		0.00	0.00		0.00	▷	83.81	CO 9
				Min M_z	-2.60		-9.51		0.00	0.00		0.00	▷	33.08	CO 7
	RC3	14	0.000	Max N	▷ -1.14		-12.00		0.00	0.00		0.00		25.39	CO 11
				Min N	▷ -1.73		-18.40		0.00	0.00		0.00		38.95	CO 14
				Max V_y	-1.14	▷	-12.00		0.00	0.00		0.00		25.39	CO 11
				Min V_y	-1.73	▷	-18.40		0.00	0.00		0.00		38.95	CO 14
				Max V_z	-1.73		-15.30	▷	0.00	0.00		0.00		31.50	CO 13
				Min V_z	-1.43		-12.10	▷	0.00	0.00		0.00		24.72	CO 12
				Max M_T	-1.14		-12.00		0.00	▷ 0.00		0.00		25.39	CO 11
				Min M_T	-1.14		-12.00		0.00	▷ 0.00		0.00		25.39	CO 11
				Max M_y	-1.73		-15.30		0.00	0.00	▷	0.00		31.50	CO 13
				Min M_y	-1.43		-12.10		0.00	0.00	▷	0.00		24.72	CO 12
				Max M_z	-1.73		-18.40		0.00	0.00		0.00	▷	38.95	CO 14
				Min M_z	-1.43		-12.10		0.00	0.00		0.00	▷	24.72	CO 12
		13	1.000	Max N	▷ -1.15		-9.00		0.00	0.00		0.00		35.89	CO 11
				Min N	▷ -1.75		-13.80		0.00	0.00		0.00		55.05	CO 14
				Max V_y	-1.15	▷	-9.00		0.00	0.00		0.00		35.89	CO 11
				Min V_y	-1.75	▷	-13.80		0.00	0.00		0.00		55.05	CO 14
				Max V_z	-1.15		-9.00	▷	0.00	0.00		0.00		35.89	CO 11
				Min V_z	-1.15		-9.00	▷	0.00	0.00		0.00		35.89	CO 11
				Max M_T	-1.15		-9.00		0.00	▷ 0.00		0.00		35.89	CO 11
				Min M_T	-1.15		-9.00		0.00	▷ 0.00		0.00		35.89	CO 11
				Max M_y	-1.15		-9.00		0.00	0.00	▷	0.00		35.89	CO 11
				Min M_y	-1.15		-9.00		0.00	0.00	▷	0.00		35.89	CO 11
				Max M_z	-1.75		-13.80		0.00	0.00		0.00	▷	55.05	CO 14
				Min M_z	-1.44		-9.10		0.00	0.00		0.00	▷	35.33	CO 12
	RC4	14	0.000	Max N	▷ -1.14		-12.00		0.00	0.00		0.00		25.39	CO 15
				Min N	▷ -1.44		-15.20		0.00	0.00		0.00		32.17	CO 16
				Max V_y	-1.14	▷	-12.00		0.00	0.00		0.00		25.39	CO 15
				Min V_y	-1.44	▷	-15.20		0.00	0.00		0.00		32.17	CO 16
				Max V_z	-1.14		-12.00	▷	0.00	0.00		0.00		25.39	CO 15
				Min V_z	-1.44		-15.20	▷	0.00	0.00		0.00		32.17	CO 16
				Max M_T	-1.14		-12.00		0.00	▷ 0.00		0.00		25.39	CO 15
				Min M_T	-1.14		-12.00		0.00	▷ 0.00		0.00		25.39	CO 15
				Max M_y	-1.14		-12.00		0.00	0.00	▷	0.00		25.39	CO 15
				Min M_y	-1.44		-15.20		0.00	0.00	▷	0.00		32.17	CO 16
				Max M_z	-1.44		-15.20		0.00	0.00		0.00	▷	32.17	CO 16
				Min M_z	-1.14		-12.00		0.00	0.00		0.00	▷	25.39	CO 15
		13	1.000	Max N	▷ -1.15		-9.00		0.00	0.00		0.00		35.89	CO 15
				Min N	▷ -1.45		-11.40		0.00	0.00		0.00		45.47	CO 16
				Max V_y	-1.15	▷	-9.00		0.00	0.00		0.00		35.89	CO 15
				Min V_y	-1.45	▷	-11.40		0.00	0.00		0.00		45.47	CO 16
				Max V_z	-1.45		-11.40	▷	0.00	0.00		0.00		45.47	CO 16
				Min V_z	-1.15		-9.00	▷	0.00	0.00		0.00		35.89	CO 15
				Max M_T	-1.15		-9.00		0.00	▷ 0.00		0.00		35.89	CO 15
				Min M_T	-1.15		-9.00		0.00	▷ 0.00		0.00		35.89	CO 15
				Max M_y	-1.45		-11.40		0.00	0.00	▷	0.00		45.47	CO 16
				Min M_y	-1.15		-9.00		0.00	0.00	▷	0.00		35.89	CO 15
				Max M_z	-1.45		-11.40		0.00	0.00		0.00	▷	45.47	CO 16
				Min M_z	-1.15		-9.00		0.00	0.00		0.00	▷	35.89	CO 15
13	RC1	15	0.000	Max N	▷ -1.52		-20.25		0.00	0.00		0.00		16.06	CO 1

4.12 CROSS-SECTIONS - INTERNAL FORCES

Result Combinations

Member No.	RC	Node No.	Location x [m]		Forces [kN] N		V_y		V_z	Moments [kNm] M_T		M_y		M_z	Corresponding Load Cases
13	RC1			Min N	▷	-4.98		-39.04		0.00		0.00		24.55	CO 3
				Max V_y		-3.48	▷	-18.01		0.00		0.00		7.93	CO 2
				Min V_y		-4.72	▷	-47.74		0.00		0.00		34.05	CO 5
				Max V_z		-1.52		-20.25	▷	0.00		0.00		16.06	CO 1
				Min V_z		-3.48		-18.01	▷	0.00		0.00		7.93	CO 2
				Max M_T		-1.52		-20.25		0.00	▷	0.00		16.06	CO 1
				Min M_T		-1.52		-20.25		0.00	▷	0.00		16.06	CO 1
				Max M_y		-1.52		-20.25		0.00		0.00	▷	16.06	CO 1
				Min M_y		-3.48		-18.01		0.00		0.00	▷	7.93	CO 2
				Max M_z		-3.41		-47.27		0.00		0.00	▷	37.58	CO 4
				Min M_z		-3.48		-18.01		0.00		0.00	▷	7.93	CO 2
		14	1.000	Max N	▷	-1.53		-16.20		0.00		0.00		34.28	CO 1
				Min N	▷	-5.01		-31.39		0.00		0.00		59.76	CO 3
				Max V_y		-3.48	▷	-14.56		0.00		0.00		24.21	CO 2
				Min V_y		-4.78	▷	-38.29		0.00		0.00		77.06	CO 5
				Max V_z		-5.01		-31.39	▷	0.00		0.00		59.76	CO 3
				Min V_z		-1.53		-16.20	▷	0.00		0.00		34.28	CO 1
				Max M_T		-1.53		-16.20		0.00	▷	0.00		34.28	CO 1
				Min M_T		-1.53		-16.20		0.00	▷	0.00		34.28	CO 1
				Max M_y		-5.01		-31.39		0.00		0.00	▷	59.76	CO 3
				Min M_y		-1.53		-16.20		0.00		0.00	▷	34.28	CO 1
				Max M_z		-3.47		-37.81		0.00		0.00	▷	80.12	CO 4
				Min M_z		-3.48		-14.56		0.00		0.00	▷	24.21	CO 2
	RC2	15	0.000	Max N	▷	-1.13		-15.00		0.00		0.00		11.89	CO 6
				Min N	▷	-3.60		-29.52		0.00		0.00		19.15	CO 8
				Max V_y		-1.13	▷	-15.00		0.00		0.00		11.89	CO 6
				Min V_y		-3.44	▷	-35.32		0.00		0.00		25.47	CO 10
				Max V_z		-1.13		-15.00	▷	0.00		0.00		11.89	CO 6
				Min V_z		-1.13		-15.00	▷	0.00		0.00		11.89	CO 6
				Max M_T		-1.13		-15.00		0.00	▷	0.00		11.89	CO 6
				Min M_T		-1.13		-15.00		0.00	▷	0.00		11.89	CO 6
				Max M_y		-1.13		-15.00		0.00		0.00	▷	11.89	CO 6
				Min M_y		-1.13		-15.00		0.00		0.00	▷	11.89	CO 6
				Max M_z		-2.57		-35.01		0.00		0.00	▷	27.80	CO 9
				Min M_z		-2.59		-15.51		0.00		0.00	▷	8.06	CO 7
		14	1.000	Max N	▷	-1.14		-12.00		0.00		0.00		25.39	CO 6
				Min N	▷	-3.62		-23.72		0.00		0.00		45.77	CO 8
				Max V_y		-1.14	▷	-12.00		0.00		0.00		25.39	CO 6
				Min V_y		-3.48	▷	-28.32		0.00		0.00		57.29	CO 10
				Max V_z		-3.48		-28.32	▷	0.00		0.00		57.29	CO 10
				Min V_z		-2.59		-12.51	▷	0.00		0.00		22.07	CO 7
				Max M_T		-1.14		-12.00		0.00	▷	0.00		25.39	CO 6
				Min M_T		-1.14		-12.00		0.00	▷	0.00		25.39	CO 6
				Max M_y		-3.48		-28.32		0.00		0.00	▷	57.29	CO 10
				Min M_y		-2.59		-12.51		0.00		0.00	▷	22.07	CO 7
				Max M_z		-2.61		-28.01		0.00		0.00	▷	59.30	CO 9
				Min M_z		-2.59		-12.51		0.00		0.00	▷	22.07	CO 7
	RC3	15	0.000	Max N	▷	-1.13		-15.00		0.00		0.00		11.89	CO 11
				Min N	▷	-1.72		-23.00		0.00		0.00		18.24	CO 14
				Max V_y		-1.13	▷	-15.00		0.00		0.00		11.89	CO 11
				Min V_y		-1.72	▷	-23.00		0.00		0.00		18.24	CO 14
				Max V_z		-1.72		-23.00	▷	0.00		0.00		18.24	CO 14
				Min V_z		-1.13		-15.00	▷	0.00		0.00		11.89	CO 11

4.12 CROSS-SECTIONS - INTERNAL FORCES

Result Combinations

Member No.	RC	Node No.	Location x [m]		Forces [kN] N		V_y		V_z	Moments [kNm] M_T		M_y		M_z	Corresponding Load Cases
13	RC3			Max M_T	-1.13		-15.00		0.00	0.00	▷	0.00		11.89	CO 11
				Min M_T	-1.13		-15.00		0.00	0.00	▷	0.00		11.89	CO 11
				Max M_y	-1.72		-23.00		0.00	0.00		0.00	▷	18.24	CO 14
				Min M_y	-1.13		-15.00		0.00	0.00		0.00	▷	11.89	CO 11
				Max M_z	-1.72		-23.00		0.00	0.00		0.00		18.24 ▷	CO 14
				Min M_z	-1.42		-15.10		0.00	0.00		0.00		11.12 ▷	CO 12
		14	1.000	Max N	-1.14	▷	-12.00		0.00	0.00		0.00		25.39	CO 11
				Min N	-1.73	▷	-18.40		0.00	0.00		0.00		38.95	CO 14
				Max V_y	-1.14		-12.00	▷	0.00	0.00		0.00		25.39	CO 11
				Min V_y	-1.73		-18.40	▷	0.00	0.00		0.00		38.95	CO 14
				Max V_z	-1.73		-15.30		0.00 ▷	0.00		0.00		31.50	CO 13
				Min V_z	-1.43		-12.10		0.00 ▷	0.00		0.00		24.72	CO 12
				Max M_T	-1.14		-12.00		0.00	0.00	▷	0.00		25.39	CO 11
				Min M_T	-1.14		-12.00		0.00	0.00	▷	0.00		25.39	CO 11
				Max M_y	-1.73		-15.30		0.00	0.00		0.00	▷	31.50	CO 13
				Min M_y	-1.43		-12.10		0.00	0.00		0.00	▷	24.72	CO 12
				Max M_z	-1.73		-18.40		0.00	0.00		0.00		38.95 ▷	CO 14
				Min M_z	-1.43		-12.10		0.00	0.00		0.00		24.72 ▷	CO 12
	RC4	15	0.000	Max N	-1.13	▷	-15.00		0.00	0.00		0.00		11.89	CO 15
				Min N	-1.43	▷	-19.00		0.00	0.00		0.00		15.06	CO 16
				Max V_y	-1.13		-15.00	▷	0.00	0.00		0.00		11.89	CO 15
				Min V_y	-1.43		-19.00	▷	0.00	0.00		0.00		15.06	CO 16
				Max V_z	-1.43		-19.00		0.00 ▷	0.00		0.00		15.06	CO 16
				Min V_z	-1.13		-15.00		0.00 ▷	0.00		0.00		11.89	CO 15
				Max M_T	-1.13		-15.00		0.00	0.00	▷	0.00		11.89	CO 15
				Min M_T	-1.13		-15.00		0.00	0.00	▷	0.00		11.89	CO 15
				Max M_y	-1.43		-19.00		0.00	0.00		0.00	▷	15.06	CO 16
				Min M_y	-1.13		-15.00		0.00	0.00		0.00	▷	11.89	CO 15
				Max M_z	-1.43		-19.00		0.00	0.00		0.00	▷	15.06	CO 16
				Min M_z	-1.13		-15.00		0.00	0.00		0.00	▷	11.89	CO 15
		14	1.000	Max N	-1.14	▷	-12.00		0.00	0.00		0.00		25.39	CO 15
				Min N	-1.44	▷	-15.20		0.00	0.00		0.00		32.17	CO 16
				Max V_y	-1.14		-12.00	▷	0.00	0.00		0.00		25.39	CO 15
				Min V_y	-1.44		-15.20	▷	0.00	0.00		0.00		32.17	CO 16
				Max V_z	-1.14		-12.00		0.00 ▷	0.00		0.00		25.39	CO 15
				Min V_z	-1.44		-15.20		0.00 ▷	0.00		0.00		32.17	CO 16
				Max M_T	-1.14		-12.00		0.00	0.00	▷	0.00		25.39	CO 15
				Min M_T	-1.14		-12.00		0.00	0.00	▷	0.00		25.39	CO 15
				Max M_y	-1.14		-12.00		0.00	0.00		0.00	▷	25.39	CO 15
				Min M_y	-1.44		-15.20		0.00	0.00		0.00	▷	32.17	CO 16
				Max M_z	-1.44		-15.20		0.00	0.00		0.00	▷	32.17	CO 16
				Min M_z	-1.14		-12.00		0.00	0.00		0.00	▷	25.39	CO 15
14	RC1	3	0.000	Max N	-1.51	▷	-24.30		0.00	0.00		0.00		-6.22	CO 1
				Min N	-4.95	▷	-46.69		0.00	0.00		-0.00		-18.32	CO 3
				Max V_y	-3.47		-21.46	▷	0.00	0.00		-0.00		-11.81	CO 2
				Min V_y	-4.68		-57.19	▷	0.00	0.00		0.00		-18.42	CO 5
				Max V_z	-4.95		-46.69		0.00 ▷	0.00		-0.00		-18.32	CO 3
				Min V_z	-1.51		-24.30		0.00 ▷	0.00		0.00		-6.22	CO 1
				Max M_T	-1.51		-24.30		0.00	0.00	▷	0.00		-6.22	CO 1
				Min M_T	-1.51		-24.30		0.00	0.00	▷	0.00		-6.22	CO 1
				Max M_y	-1.51		-24.30		0.00	0.00		0.00	▷	-6.22	CO 1
				Min M_y	-4.95		-46.69		0.00	0.00		-0.00	▷	-18.32	CO 3
				Max M_z	-1.51		-24.30		0.00	0.00		0.00	▷	-6.22	CO 1

Student Version

4.12 CROSS-SECTIONS - INTERNAL FORCES

Result Combinations

Member No.	RC	Node No.	Location x [m]		Forces [kN] N		V_y	V_z	Moments [kNm] M_T		M_y		M_z	Corresponding Load Cases
14	RC1			Min M_z		-4.68	-57.19	0.00	0.00		0.00	▷	-18.42	CO 5
		15	1.000	Max N	▷	-1.52	-20.25	0.00	0.00		0.00		16.06	CO 1
				Min N	▷	-4.98	-39.04	0.00	0.00		0.00		24.55	CO 3
				Max V_y		-3.48	▷ -18.01	0.00	0.00		0.00		7.93	CO 2
				Min V_y		-4.72	▷ -47.74	0.00	0.00		0.00		34.05	CO 5
				Max V_z		-1.52	-20.25	▷ 0.00	0.00		0.00		16.06	CO 1
				Min V_z		-3.48	-18.01	▷ 0.00	0.00		0.00		7.93	CO 2
				Max M_T		-1.52	-20.25	0.00	▷ 0.00		0.00		16.06	CO 1
				Min M_T		-1.52	-20.25	0.00	▷ 0.00		0.00		16.06	CO 1
				Max M_y		-1.52	-20.25	0.00	0.00	▷	0.00		16.06	CO 1
				Min M_y		-3.48	-18.01	0.00	0.00	▷	0.00		7.93	CO 2
				Max M_z		-3.41	-47.27	0.00	0.00		0.00	▷	37.58	CO 4
				Min M_z		-3.48	-18.01	0.00	0.00		0.00	▷	7.93	CO 2
	RC2	3	0.000	Max N	▷	-1.13	-18.00	0.00	0.00		0.00		-4.61	CO 6
				Min N	▷	-3.59	-35.32	0.00	0.00		0.00		-13.27	CO 8
				Max V_y		-1.13	▷ -18.00	0.00	0.00		0.00		-4.61	CO 6
				Min V_y		-3.42	▷ -42.32	0.00	0.00		0.00		-13.35	CO 10
				Max V_z		-1.13	-18.00	▷ 0.00	0.00		0.00		-4.61	CO 6
				Min V_z		-1.13	-18.00	▷ 0.00	0.00		0.00		-4.61	CO 6
				Max M_T		-1.13	-18.00	0.00	▷ 0.00		0.00		-4.61	CO 6
				Min M_T		-1.13	-18.00	0.00	▷ 0.00		0.00		-4.61	CO 6
				Max M_y		-1.13	-18.00	0.00	0.00	▷	0.00		-4.61	CO 6
				Min M_y		-1.13	-18.00	0.00	0.00	▷	0.00		-4.61	CO 6
				Max M_z		-1.13	-18.00	0.00	0.00		0.00	▷	-4.61	CO 6
				Min M_z		-3.42	-42.32	0.00	0.00		0.00	▷	-13.35	CO 10
		15	1.000	Max N	▷	-1.13	-15.00	0.00	0.00		0.00		11.89	CO 6
				Min N	▷	-3.60	-29.52	0.00	0.00		0.00		19.15	CO 8
				Max V_y		-1.13	▷ -15.00	0.00	0.00		0.00		11.89	CO 6
				Min V_y		-3.44	▷ -35.32	0.00	0.00		0.00		25.47	CO 10
				Max V_z		-1.13	-15.00	▷ 0.00	0.00		0.00		11.89	CO 6
				Min V_z		-1.13	-15.00	▷ 0.00	0.00		0.00		11.89	CO 6
				Max M_T		-1.13	-15.00	0.00	▷ 0.00		0.00		11.89	CO 6
				Min M_T		-1.13	-15.00	0.00	▷ 0.00		0.00		11.89	CO 6
				Max M_y		-1.13	-15.00	0.00	0.00	▷	0.00		11.89	CO 6
				Min M_y		-1.13	-15.00	0.00	0.00	▷	0.00		11.89	CO 6
				Max M_z		-2.57	-35.01	0.00	0.00		0.00	▷	27.80	CO 9
				Min M_z		-2.59	-15.51	0.00	0.00		0.00	▷	8.06	CO 7
	RC3	3	0.000	Max N	▷	-1.13	-18.00	0.00	0.00		0.00		-4.61	CO 11
				Min N	▷	-1.71	-22.90	0.00	0.00		-0.00		-6.71	CO 13
				Max V_y		-1.13	▷ -18.00	0.00	0.00		0.00		-4.61	CO 11
				Min V_y		-1.71	▷ -27.60	0.00	0.00		0.00		-7.06	CO 14
				Max V_z		-1.71	-22.90	▷ 0.00	0.00		-0.00		-6.71	CO 13
				Min V_z		-1.13	-18.00	▷ 0.00	0.00		0.00		-4.61	CO 11
				Max M_T		-1.13	-18.00	0.00	▷ 0.00		0.00		-4.61	CO 11
				Min M_T		-1.13	-18.00	0.00	▷ 0.00		0.00		-4.61	CO 11
				Max M_y		-1.13	-18.00	0.00	0.00	▷	0.00		-4.61	CO 11
				Min M_y		-1.71	-22.90	0.00	0.00	▷	-0.00		-6.71	CO 13
				Max M_z		-1.13	-18.00	0.00	0.00		0.00	▷	-4.61	CO 11
				Min M_z		-1.71	-27.60	0.00	0.00		0.00	▷	-7.06	CO 14
		15	1.000	Max N	▷	-1.13	-15.00	0.00	0.00		0.00		11.89	CO 11
				Min N	▷	-1.72	-23.00	0.00	0.00		0.00		18.24	CO 14
				Max V_y		-1.13	▷ -15.00	0.00	0.00		0.00		11.89	CO 11
				Min V_y		-1.72	▷ -23.00	0.00	0.00		0.00		18.24	CO 14

4.12 CROSS-SECTIONS - INTERNAL FORCES

Result Combinations

Member No.	RC	Node No.	Location x [m]		Forces [kN] N		V_y		V_z	Moments [kNm] M_T		M_y		M_z	Corresponding Load Cases
14	RC3			Max V_z		-1.72		-23.00	▷ 0.00		0.00		0.00		18.24	CO 14
				Min V_z		-1.13		-15.00	▷ 0.00		0.00		0.00		11.89	CO 11
				Max M_T		-1.13		-15.00	0.00	▷	0.00		0.00		11.89	CO 11
				Min M_T		-1.13		-15.00	0.00	▷	0.00		0.00		11.89	CO 11
				Max M_y		-1.72		-23.00	0.00		0.00	▷	0.00		18.24	CO 14
				Min M_y		-1.13		-15.00	0.00		0.00	▷	0.00		11.89	CO 11
				Max M_z		-1.72		-23.00	0.00		0.00		0.00	▷	18.24	CO 14
				Min M_z		-1.42		-15.10	0.00		0.00		0.00	▷	11.12	CO 12
	RC4	3	0.000	Max N	▷	-1.13		-18.00	0.00		0.00		0.00		-4.61	CO 15
				Min N	▷	-1.42		-22.80	0.00		0.00		-0.00		-5.84	CO 16
				Max V_y		-1.13	▷	-18.00	0.00		0.00		0.00		-4.61	CO 15
				Min V_y		-1.42	▷	-22.80	0.00		0.00		-0.00		-5.84	CO 16
				Max V_z		-1.42		-22.80	▷ 0.00		0.00		-0.00		-5.84	CO 16
				Min V_z		-1.13		-18.00	▷ 0.00		0.00		0.00		-4.61	CO 15
				Max M_T		-1.13		-18.00	0.00	▷	0.00		0.00		-4.61	CO 15
				Min M_T		-1.13		-18.00	0.00	▷	0.00		0.00		-4.61	CO 15
				Max M_y		-1.13		-18.00	0.00		0.00	▷	0.00		-4.61	CO 15
				Min M_y		-1.42		-22.80	0.00		0.00	▷	-0.00		-5.84	CO 16
				Max M_z		-1.13		-18.00	0.00		0.00		0.00	▷	-4.61	CO 15
				Min M_z		-1.42		-22.80	0.00		0.00		-0.00	▷	-5.84	CO 16
		15	1.000	Max N	▷	-1.13		-15.00	0.00		0.00		0.00		11.89	CO 15
				Min N	▷	-1.43		-19.00	0.00		0.00		0.00		15.06	CO 16
				Max V_y		-1.13	▷	-15.00	0.00		0.00		0.00		11.89	CO 15
				Min V_y		-1.43	▷	-19.00	0.00		0.00		0.00		15.06	CO 16
				Max V_z		-1.43		-19.00	▷ 0.00		0.00		0.00		15.06	CO 16
				Min V_z		-1.13		-15.00	▷ 0.00		0.00		0.00		11.89	CO 15
				Max M_T		-1.13		-15.00	0.00	▷	0.00		0.00		11.89	CO 15
				Min M_T		-1.13		-15.00	0.00	▷	0.00		0.00		11.89	CO 15
				Max M_y		-1.43		-19.00	0.00		0.00	▷	0.00		15.06	CO 16
				Min M_y		-1.13		-15.00	0.00		0.00	▷	0.00		11.89	CO 15
				Max M_z		-1.43		-19.00	0.00		0.00		0.00	▷	15.06	CO 16
				Min M_z		-1.13		-15.00	0.00		0.00		0.00	▷	11.89	CO 15
	Section No. 2: T-Rectangle 0.2/0.2															
1	RC1	16	0.000	Max N	▷	-25.69		4.03	0.00		0.00		0.00		-4.14	CO 2
				Min N	▷	-62.45		-3.70	0.00		0.00		0.00		3.69	CO 4
				Max V_y		-25.69	▷	4.03	0.00		0.00		0.00		-4.14	CO 2
				Min V_y		-62.45	▷	-3.70	0.00		0.00		0.00		3.69	CO 4
				Max V_z		-31.05		-1.57	▷ 0.00		0.00		0.00		1.57	CO 1
				Min V_z		-50.87		2.43	▷ -0.00		0.00		-0.00		-2.61	CO 3
				Max M_T		-31.05		-1.57	0.00	▷	0.00		0.00		1.57	CO 1
				Min M_T		-31.05		-1.57	0.00	▷	0.00		0.00		1.57	CO 1
				Max M_y		-31.05		-1.57	0.00		0.00	▷	0.00		1.57	CO 1
				Min M_y		-50.87		2.43	-0.00		0.00	▷	-0.00		-2.61	CO 3
				Max M_z		-62.45		-3.70	0.00		0.00		0.00	▷	3.69	CO 4
				Min M_z		-25.69		4.03	0.00		0.00		0.00	▷	-4.14	CO 2
		1	1.000	Max N	▷	-26.84		5.50	0.00		0.00		0.00		-8.91	CO 2
				Min N	▷	-63.60		-3.63	0.00		0.00		0.00		7.35	CO 4
				Max V_y		-26.84	▷	5.50	0.00		0.00		0.00		-8.91	CO 2
				Min V_y		-63.60	▷	-3.63	0.00		0.00		0.00		7.35	CO 4
				Max V_z		-32.40		-1.56	▷ 0.00		0.00		0.00		3.13	CO 1
				Min V_z		-32.40		-1.56	▷ 0.00		0.00		0.00		3.13	CO 1
				Max M_T		-32.40		-1.56	0.00	▷	0.00		0.00		3.13	CO 1
				Min M_T		-32.40		-1.56	0.00	▷	0.00		0.00		3.13	CO 1

4.12 CROSS-SECTIONS - INTERNAL FORCES

Result Combinations

Member No.	RC	Node No.	Location x [m]		Forces [kN] N		V_y		V_z	Moments [kNm] M_T		M_y		M_z	Corresponding Load Cases
1	RC1			Max M_y	-32.40		-1.56		0.00	0.00	▷	0.00		3.13	CO 1
				Min M_y	-32.40		-1.56		0.00	0.00	▷	0.00		3.13	CO 1
				Max M_z	-63.60		-3.63		0.00	0.00		0.00	▷	7.35	CO 4
				Min M_z	-26.84		5.50		0.00	0.00		0.00	▷	-8.91	CO 2
	RC2	16	0.000	Max N	▷ -22.49		2.41		-0.00	0.00		-0.00		-2.48	CO 7
				Min N	▷ -47.00		-2.73		0.00	0.00		0.00		2.72	CO 9
				Max V_y	-22.49	▷	2.41		-0.00	0.00		-0.00		-2.48	CO 7
				Min V_y	-47.00	▷	-2.73		0.00	0.00		0.00		2.72	CO 9
				Max V_z	-23.00		-1.16	▷	0.00	0.00		0.00		1.16	CO 6
				Min V_z	-22.49		2.41	▷	-0.00	0.00		-0.00		-2.48	CO 7
				Max M_T	-23.00		-1.16		0.00	▷ 0.00		0.00		1.16	CO 6
				Min M_T	-23.00		-1.16		0.00	▷ 0.00		0.00		1.16	CO 6
				Max M_y	-23.00		-1.16		0.00	0.00	▷	0.00		1.16	CO 6
				Min M_y	-22.49		2.41		-0.00	0.00	▷	-0.00		-2.48	CO 7
				Max M_z	-47.00		-2.73		0.00	0.00		0.00	▷	2.72	CO 9
				Min M_z	-22.49		2.41		-0.00	0.00		-0.00	▷	-2.48	CO 7
		1	1.000	Max N	▷ -23.50		3.39		0.00	0.00		0.00		-5.39	CO 7
				Min N	▷ -48.00		-2.69		0.00	0.00		0.00		5.43	CO 9
				Max V_y	-23.50	▷	3.39		0.00	0.00		0.00		-5.39	CO 7
				Min V_y	-48.00	▷	-2.69		0.00	0.00		0.00		5.43	CO 9
				Max V_z	-24.00		-1.15	▷	0.00	0.00		0.00		2.32	CO 6
				Min V_z	-24.00		-1.15	▷	0.00	0.00		0.00		2.32	CO 6
				Max M_T	-24.00		-1.15		0.00	▷ 0.00		0.00		2.32	CO 6
				Min M_T	-24.00		-1.15		0.00	▷ 0.00		0.00		2.32	CO 6
				Max M_y	-24.00		-1.15		0.00	0.00	▷	0.00		2.32	CO 6
				Min M_y	-24.00		-1.15		0.00	0.00	▷	0.00		2.32	CO 6
				Max M_z	-48.00		-2.69		0.00	0.00		0.00	▷	5.43	CO 9
				Min M_z	-23.50		3.39		0.00	0.00		0.00	▷	-5.39	CO 7
	RC3	16	0.000	Max N	▷ -22.90		-0.45		0.00	0.00		0.00		0.43	CO 12
				Min N	▷ -32.60		-1.79		0.00	0.00		0.00		1.78	CO 14
				Max V_y	-22.90	▷	-0.45		0.00	0.00		0.00		0.43	CO 12
				Min V_y	-32.60	▷	-1.79		0.00	0.00		0.00		1.78	CO 14
				Max V_z	-23.00		-1.16	▷	0.00	0.00		0.00		1.16	CO 11
				Min V_z	-23.00		-1.16	▷	0.00	0.00		0.00		1.16	CO 11
				Max M_T	-23.00		-1.16		0.00	▷ 0.00		0.00		1.16	CO 11
				Min M_T	-23.00		-1.16		0.00	▷ 0.00		0.00		1.16	CO 11
				Max M_y	-23.00		-1.16		0.00	0.00	▷	0.00		1.16	CO 11
				Min M_y	-23.00		-1.16		0.00	0.00	▷	0.00		1.16	CO 11
				Max M_z	-32.60		-1.79		0.00	0.00		0.00	▷	1.78	CO 14
				Min M_z	-22.90		-0.45		0.00	0.00		0.00	▷	0.43	CO 12
		1	1.000	Max N	▷ -23.90		-0.25		0.00	0.00		0.00		0.78	CO 12
				Min N	▷ -33.60		-1.77		0.00	0.00		0.00		3.56	CO 14
				Max V_y	-23.90	▷	-0.25		0.00	0.00		0.00		0.78	CO 12
				Min V_y	-33.60	▷	-1.77		0.00	0.00		0.00		3.56	CO 14
				Max V_z	-24.00		-1.15	▷	0.00	0.00		0.00		2.32	CO 11
				Min V_z	-24.00		-1.15	▷	0.00	0.00		0.00		2.32	CO 11
				Max M_T	-24.00		-1.15		0.00	▷ 0.00		0.00		2.32	CO 11
				Min M_T	-24.00		-1.15		0.00	▷ 0.00		0.00		2.32	CO 11
				Max M_y	-24.00		-1.15		0.00	0.00	▷	0.00		2.32	CO 11
				Min M_y	-24.00		-1.15		0.00	0.00	▷	0.00		2.32	CO 11
				Max M_z	-33.60		-1.77		0.00	0.00		0.00	▷	3.56	CO 14
				Min M_z	-23.90		-0.25		0.00	0.00		0.00	▷	0.78	CO 12
	RC4	16	0.000	Max N	▷ -23.00		-1.16		0.00	0.00		0.00		1.16	CO 15

4.12 CROSS-SECTIONS - INTERNAL FORCES

Result Combinations

Member No.	RC	Node No.	Location x [m]		Forces [kN] N		V_y		V_z	Moments [kNm] M_T		M_y		M_z	Corresponding Load Cases
1	RC4			Min N	▷	-27.80		-1.48	0.00	0.00		0.00		1.47	CO 16
				Max V_y		-23.00	▷	-1.16	0.00	0.00		0.00		1.16	CO 15
				Min V_y		-27.80	▷	-1.48	0.00	0.00		0.00		1.47	CO 16
				Max V_z		-23.00		-1.16	▷ 0.00	0.00		0.00		1.16	CO 15
				Min V_z		-23.00		-1.16	▷ 0.00	0.00		0.00		1.16	CO 15
				Max M_T		-23.00		-1.16	0.00	▷ 0.00		0.00		1.16	CO 15
				Min M_T		-23.00		-1.16	0.00	▷ 0.00		0.00		1.16	CO 15
				Max M_y		-23.00		-1.16	0.00	0.00	▷	0.00		1.16	CO 15
				Min M_y		-23.00		-1.16	0.00	0.00	▷	0.00		1.16	CO 15
				Max M_z		-27.80		-1.48	0.00	0.00		0.00	▷	1.47	CO 16
				Min M_z		-23.00		-1.16	0.00	0.00		0.00	▷	1.16	CO 15
		1	1.000	Max N	▷	-24.00		-1.15	0.00	0.00		0.00		2.32	CO 15
				Min N	▷	-28.80		-1.46	0.00	0.00		0.00		2.94	CO 16
				Max V_y		-24.00	▷	-1.15	0.00	0.00		0.00		2.32	CO 15
				Min V_y		-28.80	▷	-1.46	0.00	0.00		0.00		2.94	CO 16
				Max V_z		-24.00		-1.15	▷ 0.00	0.00		0.00		2.32	CO 15
				Min V_z		-24.00		-1.15	▷ 0.00	0.00		0.00		2.32	CO 15
				Max M_T		-24.00		-1.15	0.00	▷ 0.00		0.00		2.32	CO 15
				Min M_T		-24.00		-1.15	0.00	▷ 0.00		0.00		2.32	CO 15
				Max M_y		-24.00		-1.15	0.00	0.00	▷	0.00		2.32	CO 15
				Min M_y		-24.00		-1.15	0.00	0.00	▷	0.00		2.32	CO 15
				Max M_z		-28.80		-1.46	0.00	0.00		0.00	▷	2.94	CO 16
				Min M_z		-24.00		-1.15	0.00	0.00		0.00	▷	2.32	CO 15
3	RC1	4	0.000	Max N	▷	-28.36		3.50	0.00	0.00		0.00		9.44	CO 2
				Min N	▷	-64.07		4.93	0.00	0.00		0.00		11.52	CO 5
				Max V_y		-53.57	▷	5.11	0.00	0.00		0.00		12.83	CO 3
				Min V_y		-32.40	▷	1.56	0.00	0.00		0.00		3.13	CO 1
				Max V_z		-32.40		1.56	▷ 0.00	0.00		0.00		3.13	CO 1
				Min V_z		-32.40		1.56	▷ 0.00	0.00		0.00		3.13	CO 1
				Max M_T		-32.40		1.56	0.00	▷ 0.00		0.00		3.13	CO 1
				Min M_T		-32.40		1.56	0.00	▷ 0.00		0.00		3.13	CO 1
				Max M_y		-32.40		1.56	0.00	0.00	▷	0.00		3.13	CO 1
				Min M_y		-32.40		1.56	0.00	0.00	▷	0.00		3.13	CO 1
				Max M_z		-53.57		5.11	0.00	0.00		0.00	▷	12.83	CO 3
				Min M_z		-32.40		1.56	0.00	0.00		0.00	▷	3.13	CO 1
		21	1.000	Max N	▷	-27.20		3.55	-0.00	0.00		0.00		5.91	CO 2
				Min N	▷	-62.91		5.05	-0.00	0.00		0.00		6.52	CO 5
				Max V_y		-52.41	▷	5.23	0.00	0.00		0.00		7.65	CO 3
				Min V_y		-31.05	▷	1.57	0.00	0.00		0.00		1.57	CO 1
				Max V_z		-31.05		1.57	▷ 0.00	0.00		0.00		1.57	CO 1
				Min V_z		-62.91		5.05	▷ -0.00	0.00		0.00		6.52	CO 5
				Max M_T		-31.05		1.57	0.00	▷ 0.00		0.00		1.57	CO 1
				Min M_T		-31.05		1.57	0.00	▷ 0.00		0.00		1.57	CO 1
				Max M_y		-62.91		5.05	-0.00	0.00	▷	0.00		6.52	CO 5
				Min M_y		-31.05		1.57	0.00	0.00	▷	0.00		1.57	CO 1
				Max M_z		-52.41		5.23	0.00	0.00		0.00	▷	7.65	CO 3
				Min M_z		-31.05		1.57	0.00	0.00		0.00	▷	1.57	CO 1
	RC2	4	0.000	Max N	▷	-24.00		1.15	0.00	0.00		0.00		2.32	CO 6
				Min N	▷	-48.31		3.56	0.00	0.00		0.00		8.18	CO 10
				Max V_y		-41.31	▷	3.68	0.00	0.00		0.00		9.05	CO 8
				Min V_y		-24.00	▷	1.15	0.00	0.00		0.00		2.32	CO 6
				Max V_z		-24.00		1.15	▷ 0.00	0.00		0.00		2.32	CO 6
				Min V_z		-24.00		1.15	▷ 0.00	0.00		0.00		2.32	CO 6

Student Version

4.12 CROSS-SECTIONS - INTERNAL FORCES

Result Combinations

Member No.	RC	Node No.	Location x [m]		Forces [kN] N	V_y	V_z	Moments [kNm] M_T	M_y	M_z	Corresponding Load Cases
3	RC2			Max M_T	-24.00	1.15	0.00	0.00	0.00	2.32	CO 6
				Min M_T	-24.00	1.15	0.00	0.00	0.00	2.32	CO 6
				Max M_y	-24.00	1.15	0.00	0.00	0.00	2.32	CO 6
				Min M_y	-24.00	1.15	0.00	0.00	0.00	2.32	CO 6
				Max M_z	-41.31	3.68	0.00	0.00	0.00	9.05	CO 8
				Min M_z	-24.00	1.15	0.00	0.00	0.00	2.32	CO 6
		21	1.000	Max N	-23.00	1.16	0.00	0.00	0.00	1.16	CO 6
				Min N	-47.30	3.62	0.00	0.00	0.00	4.58	CO 10
				Max V_y	-40.31	3.74	0.00	0.00	0.00	5.34	CO 8
				Min V_y	-23.00	1.16	0.00	0.00	0.00	1.16	CO 6
				Max V_z	-23.00	1.16	0.00	0.00	0.00	1.16	CO 6
				Min V_z	-23.50	2.63	-0.00	0.00	0.00	4.20	CO 7
				Max M_T	-23.00	1.16	0.00	0.00	0.00	1.16	CO 6
				Min M_T	-23.00	1.16	0.00	0.00	0.00	1.16	CO 6
				Max M_y	-23.50	2.63	-0.00	0.00	0.00	4.20	CO 7
				Min M_y	-23.00	1.16	0.00	0.00	0.00	1.16	CO 6
				Max M_z	-40.31	3.74	0.00	0.00	0.00	5.34	CO 8
				Min M_z	-23.00	1.16	0.00	0.00	0.00	1.16	CO 6
	RC3	4	0.000	Max N	-24.00	1.15	0.00	0.00	0.00	2.32	CO 11
				Min N	-33.60	1.77	0.00	0.00	0.00	3.56	CO 14
				Max V_y	-33.60	1.77	0.00	0.00	0.00	3.56	CO 14
				Min V_y	-24.00	1.15	0.00	0.00	0.00	2.32	CO 11
				Max V_z	-24.00	1.15	0.00	0.00	0.00	2.32	CO 11
				Min V_z	-24.00	1.15	0.00	0.00	0.00	2.32	CO 11
				Max M_T	-24.00	1.15	0.00	0.00	0.00	2.32	CO 11
				Min M_T	-24.00	1.15	0.00	0.00	0.00	2.32	CO 11
				Max M_y	-24.00	1.15	0.00	0.00	0.00	2.32	CO 11
				Min M_y	-24.00	1.15	0.00	0.00	0.00	2.32	CO 11
				Max M_z	-28.90	1.75	0.00	0.00	0.00	3.84	CO 13
				Min M_z	-24.00	1.15	0.00	0.00	0.00	2.32	CO 11
		21	1.000	Max N	-23.00	1.16	0.00	0.00	0.00	1.16	CO 11
				Min N	-32.60	1.79	0.00	0.00	0.00	1.78	CO 14
				Max V_y	-32.60	1.79	0.00	0.00	0.00	1.78	CO 14
				Min V_y	-23.00	1.16	0.00	0.00	0.00	1.16	CO 11
				Max V_z	-23.00	1.16	0.00	0.00	0.00	1.16	CO 11
				Min V_z	-27.90	1.77	-0.00	0.00	0.00	2.08	CO 13
				Max M_T	-23.00	1.16	0.00	0.00	0.00	1.16	CO 11
				Min M_T	-23.00	1.16	0.00	0.00	0.00	1.16	CO 11
				Max M_y	-27.90	1.77	-0.00	0.00	0.00	2.08	CO 13
				Min M_y	-23.00	1.16	0.00	0.00	0.00	1.16	CO 11
				Max M_z	-27.90	1.77	-0.00	0.00	0.00	2.08	CO 13
				Min M_z	-23.00	1.16	0.00	0.00	0.00	1.16	CO 11
	RC4	4	0.000	Max N	-24.00	1.15	0.00	0.00	0.00	2.32	CO 15
				Min N	-28.80	1.46	0.00	0.00	0.00	2.94	CO 16
				Max V_y	-28.80	1.46	0.00	0.00	0.00	2.94	CO 16
				Min V_y	-24.00	1.15	0.00	0.00	0.00	2.32	CO 15
				Max V_z	-24.00	1.15	0.00	0.00	0.00	2.32	CO 15
				Min V_z	-24.00	1.15	0.00	0.00	0.00	2.32	CO 15
				Max M_T	-24.00	1.15	0.00	0.00	0.00	2.32	CO 15
				Min M_T	-24.00	1.15	0.00	0.00	0.00	2.32	CO 15
				Max M_y	-24.00	1.15	0.00	0.00	0.00	2.32	CO 15
				Min M_y	-24.00	1.15	0.00	0.00	0.00	2.32	CO 15
				Max M_z	-28.80	1.46	0.00	0.00	0.00	2.94	CO 16

Student Version

4.12 CROSS-SECTIONS - INTERNAL FORCES

Result Combinations

Member No.	RC	Node No.	Location x [m]		Forces [kN] N	Forces [kN] V_y	Forces [kN] V_z	Moments [kNm] M_T	Moments [kNm] M_y	Moments [kNm] M_z	Corresponding Load Cases
3	RC4			Min M_z	-24.00	1.15	0.00	0.00	0.00	2.32	CO 15
		21	1.000	Max N	-23.00	1.16	0.00	0.00	0.00	1.16	CO 15
				Min N	-27.80	1.48	0.00	0.00	0.00	1.47	CO 16
				Max V_y	-27.80	1.48	0.00	0.00	0.00	1.47	CO 16
				Min V_y	-23.00	1.16	0.00	0.00	0.00	1.16	CO 15
				Max V_z	-23.00	1.16	0.00	0.00	0.00	1.16	CO 15
				Min V_z	-23.00	1.16	0.00	0.00	0.00	1.16	CO 15
				Max M_T	-23.00	1.16	0.00	0.00	0.00	1.16	CO 15
				Min M_T	-23.00	1.16	0.00	0.00	0.00	1.16	CO 15
				Max M_y	-23.00	1.16	0.00	0.00	0.00	1.16	CO 15
				Min M_y	-23.00	1.16	0.00	0.00	0.00	1.16	CO 15
				Max M_z	-27.80	1.48	0.00	0.00	0.00	1.47	CO 16
				Min M_z	-23.00	1.16	0.00	0.00	0.00	1.16	CO 15
15	RC1	17	0.000	Max N	-24.54	2.54	0.00	0.00	0.00	-0.86	CO 2
				Min N	-61.29	-3.72	0.00	0.00	0.00	-0.03	CO 4
				Max V_y	-24.54	2.54	0.00	0.00	0.00	-0.86	CO 2
				Min V_y	-61.29	-3.72	0.00	0.00	0.00	-0.03	CO 4
				Max V_z	-29.70	-1.58	0.00	0.00	0.00	-0.01	CO 1
				Min V_z	-49.72	0.95	-0.00	0.00	-0.00	-0.92	CO 3
				Max M_T	-29.70	-1.58	0.00	0.00	0.00	-0.01	CO 1
				Min M_T	-29.70	-1.58	0.00	0.00	0.00	-0.01	CO 1
				Max M_y	-29.70	-1.58	0.00	0.00	0.00	-0.01	CO 1
				Min M_y	-49.72	0.95	-0.00	0.00	-0.00	-0.92	CO 3
				Max M_z	-29.70	-1.58	0.00	0.00	0.00	-0.01	CO 1
				Min M_z	-49.72	0.95	-0.00	0.00	-0.00	-0.92	CO 3
		16	1.000	Max N	-25.69	4.03	0.00	0.00	0.00	-4.14	CO 2
				Min N	-62.45	-3.70	0.00	0.00	0.00	3.69	CO 4
				Max V_y	-25.69	4.03	0.00	0.00	0.00	-4.14	CO 2
				Min V_y	-62.45	-3.70	0.00	0.00	0.00	3.69	CO 4
				Max V_z	-31.05	-1.57	0.00	0.00	0.00	1.57	CO 1
				Min V_z	-50.87	2.43	-0.00	0.00	-0.00	-2.61	CO 3
				Max M_T	-31.05	-1.57	0.00	0.00	0.00	1.57	CO 1
				Min M_T	-31.05	-1.57	0.00	0.00	0.00	1.57	CO 1
				Max M_y	-31.05	-1.57	0.00	0.00	0.00	1.57	CO 1
				Min M_y	-50.87	2.43	-0.00	0.00	-0.00	-2.61	CO 3
				Max M_z	-62.45	-3.70	0.00	0.00	0.00	3.69	CO 4
				Min M_z	-25.69	4.03	0.00	0.00	0.00	-4.14	CO 2
	RC2	17	0.000	Max N	-21.50	1.42	0.00	0.00	0.00	-0.57	CO 7
				Min N	-46.00	-2.74	0.00	0.00	0.00	-0.02	CO 9
				Max V_y	-21.50	1.42	0.00	0.00	0.00	-0.57	CO 7
				Min V_y	-46.00	-2.74	0.00	0.00	0.00	-0.02	CO 9
				Max V_z	-46.00	-2.74	0.00	0.00	0.00	-0.02	CO 9
				Min V_z	-22.00	-1.17	0.00	0.00	0.00	-0.01	CO 6
				Max M_T	-22.00	-1.17	0.00	0.00	0.00	-0.01	CO 6
				Min M_T	-22.00	-1.17	0.00	0.00	0.00	-0.01	CO 6
				Max M_y	-22.00	-1.17	0.00	0.00	0.00	-0.01	CO 6
				Min M_y	-22.00	-1.17	0.00	0.00	0.00	-0.01	CO 6
				Max M_z	-22.00	-1.17	0.00	0.00	0.00	-0.01	CO 6
				Min M_z	-38.29	0.34	0.00	0.00	0.00	-0.60	CO 8
		16	1.000	Max N	-22.49	2.41	-0.00	0.00	-0.00	-2.48	CO 7
				Min N	-47.00	-2.73	0.00	0.00	0.00	2.72	CO 9
				Max V_y	-22.49	2.41	-0.00	0.00	-0.00	-2.48	CO 7
				Min V_y	-47.00	-2.73	0.00	0.00	0.00	2.72	CO 9

Student Version

4.12 CROSS-SECTIONS - INTERNAL FORCES

Result Combinations

Member No.	RC	Node No.	Location x [m]		Forces [kN] N		V_y		V_z	Moments [kNm] M_T		M_y		M_z	Corresponding Load Cases
15	RC2			Max V_z	-23.00		-1.16	▷	0.00	0.00		0.00		1.16	CO 6
				Min V_z	-22.49		2.41	▷	-0.00	0.00		-0.00		-2.48	CO 7
				Max M_T	-23.00		-1.16		0.00	▷ 0.00		0.00		1.16	CO 6
				Min M_T	-23.00		-1.16		0.00	▷ 0.00		0.00		1.16	CO 6
				Max M_y	-23.00		-1.16		0.00	0.00	▷	0.00		1.16	CO 6
				Min M_y	-22.49		2.41		-0.00	0.00	▷	-0.00		-2.48	CO 7
				Max M_z	-47.00		-2.73		0.00	0.00		0.00	▷	2.72	CO 9
				Min M_z	-22.49		2.41		-0.00	0.00		-0.00	▷	-2.48	CO 7
	RC3	17	0.000	Max N	▷ -21.90		-0.65		0.00	0.00		0.00		-0.12	CO 12
				Min N	▷ -31.60		-1.79		0.00	0.00		0.00		-0.01	CO 14
				Max V_y	-21.90	▷	-0.65		0.00	0.00		0.00		-0.12	CO 12
				Min V_y	-31.60	▷	-1.79		0.00	0.00		0.00		-0.01	CO 14
				Max V_z	-22.00		-1.17	▷	0.00	0.00		0.00		-0.01	CO 11
				Min V_z	-22.00		-1.17	▷	0.00	0.00		0.00		-0.01	CO 11
				Max M_T	-22.00		-1.17		0.00	▷ 0.00		0.00		-0.01	CO 11
				Min M_T	-22.00		-1.17		0.00	▷ 0.00		0.00		-0.01	CO 11
				Max M_y	-22.00		-1.17		0.00	0.00	▷	0.00		-0.01	CO 11
				Min M_y	-22.00		-1.17		0.00	0.00	▷	0.00		-0.01	CO 11
				Max M_z	-22.00		-1.17		0.00	0.00		0.00	▷	-0.01	CO 11
				Min M_z	-26.70		-0.96		0.00	0.00		0.00	▷	-0.12	CO 13
		16	1.000	Max N	▷ -22.90		-0.45		0.00	0.00		0.00		0.43	CO 12
				Min N	▷ -32.60		-1.79		0.00	0.00		0.00		1.78	CO 14
				Max V_y	-22.90	▷	-0.45		0.00	0.00		0.00		0.43	CO 12
				Min V_y	-32.60	▷	-1.79		0.00	0.00		0.00		1.78	CO 14
				Max V_z	-23.00		-1.16	▷	0.00	0.00		0.00		1.16	CO 11
				Min V_z	-23.00		-1.16	▷	0.00	0.00		0.00		1.16	CO 11
				Max M_T	-23.00		-1.16		0.00	▷ 0.00		0.00		1.16	CO 11
				Min M_T	-23.00		-1.16		0.00	▷ 0.00		0.00		1.16	CO 11
				Max M_y	-23.00		-1.16		0.00	0.00	▷	0.00		1.16	CO 11
				Min M_y	-23.00		-1.16		0.00	0.00	▷	0.00		1.16	CO 11
				Max M_z	-32.60		-1.79		0.00	0.00		0.00	▷	1.78	CO 14
				Min M_z	-22.90		-0.45		0.00	0.00		0.00	▷	0.43	CO 12
	RC4	17	0.000	Max N	▷ -22.00		-1.17		0.00	0.00		0.00		-0.01	CO 15
				Min N	▷ -26.80		-1.48		0.00	0.00		0.00		-0.01	CO 16
				Max V_y	-22.00	▷	-1.17		0.00	0.00		0.00		-0.01	CO 15
				Min V_y	-26.80	▷	-1.48		0.00	0.00		0.00		-0.01	CO 16
				Max V_z	-22.00		-1.17	▷	0.00	0.00		0.00		-0.01	CO 15
				Min V_z	-22.00		-1.17	▷	0.00	0.00		0.00		-0.01	CO 15
				Max M_T	-22.00		-1.17		0.00	▷ 0.00		0.00		-0.01	CO 15
				Min M_T	-22.00		-1.17		0.00	▷ 0.00		0.00		-0.01	CO 15
				Max M_y	-22.00		-1.17		0.00	0.00	▷	0.00		-0.01	CO 15
				Min M_y	-22.00		-1.17		0.00	0.00	▷	0.00		-0.01	CO 15
				Max M_z	-22.00		-1.17		0.00	0.00		0.00	▷	-0.01	CO 15
				Min M_z	-26.80		-1.48		0.00	0.00		0.00	▷	-0.01	CO 16
		16	1.000	Max N	▷ -23.00		-1.16		0.00	0.00		0.00		1.16	CO 15
				Min N	▷ -27.80		-1.48		0.00	0.00		0.00		1.47	CO 16
				Max V_y	-23.00	▷	-1.16		0.00	0.00		0.00		1.16	CO 15
				Min V_y	-27.80	▷	-1.48		0.00	0.00		0.00		1.47	CO 16
				Max V_z	-23.00		-1.16	▷	0.00	0.00		0.00		1.16	CO 15
				Min V_z	-23.00		-1.16	▷	0.00	0.00		0.00		1.16	CO 15
				Max M_T	-23.00		-1.16		0.00	▷ 0.00		0.00		1.16	CO 15
				Min M_T	-23.00		-1.16		0.00	▷ 0.00		0.00		1.16	CO 15
				Max M_y	-23.00		-1.16		0.00	0.00	▷	0.00		1.16	CO 15

4.12 CROSS-SECTIONS - INTERNAL FORCES

Result Combinations

Member No.	RC	Node No.	Location x [m]		Forces [kN] N		V_y		V_z	Moments [kNm] M_T		M_y		M_z	Corresponding Load Cases
15	RC4			Min M_y	-23.00		-1.16		0.00	0.00	▷	0.00		1.16	CO 15
				Max M_z	-27.80		-1.48		0.00	0.00		0.00	▷	1.47	CO 16
				Min M_z	-23.00		-1.16		0.00	0.00		0.00	▷	1.16	CO 15
16	RC1	18	0.000	Max N	▷ -23.39		1.04		0.00	0.00		0.00		0.93	CO 2
				Min N	▷ -60.15		-3.69		0.00	0.00		0.00		-3.74	CO 4
				Max V_y	-23.39	▷	1.04		0.00	0.00		0.00		0.93	CO 2
				Min V_y	-60.15	▷	-3.69		0.00	0.00		0.00		-3.74	CO 4
				Max V_z	-28.35		-1.57	▷	0.00	0.00		0.00		-1.58	CO 1
				Min V_z	-28.35		-1.57	▷	0.00	0.00		0.00		-1.58	CO 1
				Max M_T	-28.35		-1.57		0.00	▷ 0.00		0.00		-1.58	CO 1
				Min M_T	-28.35		-1.57		0.00	▷ 0.00		0.00		-1.58	CO 1
				Max M_y	-28.35		-1.57		0.00	0.00	▷	0.00		-1.58	CO 1
				Min M_y	-28.35		-1.57		0.00	0.00	▷	0.00		-1.58	CO 1
				Max M_z	-23.39		1.04		0.00	0.00		0.00	▷	0.93	CO 2
				Min M_z	-60.15		-3.69		0.00	0.00		0.00	▷	-3.74	CO 4
		17	1.000	Max N	▷ -24.54		2.54		0.00	0.00		0.00		-0.86	CO 2
				Min N	▷ -61.29		-3.72		0.00	0.00		0.00		-0.03	CO 4
				Max V_y	-24.54	▷	2.54		0.00	0.00		0.00		-0.86	CO 2
				Min V_y	-61.29	▷	-3.72		0.00	0.00		0.00		-0.03	CO 4
				Max V_z	-29.70		-1.58	▷	0.00	0.00		0.00		-0.01	CO 1
				Min V_z	-49.72		0.95	▷	-0.00	0.00		-0.00		-0.92	CO 3
				Max M_T	-29.70		-1.58		0.00	▷ 0.00		0.00		-0.01	CO 1
				Min M_T	-29.70		-1.58		0.00	▷ 0.00		0.00		-0.01	CO 1
				Max M_y	-29.70		-1.58		0.00	0.00	▷	0.00		-0.01	CO 1
				Min M_y	-49.72		0.95		-0.00	0.00	▷	-0.00		-0.92	CO 3
				Max M_z	-29.70		-1.58		0.00	0.00		0.00	▷	-0.01	CO 1
				Min M_z	-49.72		0.95		-0.00	0.00		-0.00	▷	-0.92	CO 3
	RC2	18	0.000	Max N	▷ -20.50		0.42		0.00	0.00		0.00		0.35	CO 7
				Min N	▷ -45.00		-2.73		0.00	0.00		-0.00		-2.75	CO 9
				Max V_y	-20.50	▷	0.42		0.00	0.00		0.00		0.35	CO 7
				Min V_y	-45.00	▷	-2.73		0.00	0.00		-0.00		-2.75	CO 9
				Max V_z	-45.00		-2.73	▷	0.00	0.00		-0.00		-2.75	CO 9
				Min V_z	-21.00		-1.16	▷	0.00	0.00		0.00		-1.17	CO 6
				Max M_T	-21.00		-1.16		0.00	▷ 0.00		0.00		-1.17	CO 6
				Min M_T	-21.00		-1.16		0.00	▷ 0.00		0.00		-1.17	CO 6
				Max M_y	-21.00		-1.16		0.00	0.00	▷	0.00		-1.17	CO 6
				Min M_y	-45.00		-2.73		0.00	0.00	▷	-0.00		-2.75	CO 9
				Max M_z	-20.50		0.42		0.00	0.00		0.00	▷	0.35	CO 7
				Min M_z	-45.00		-2.73		0.00	0.00		-0.00	▷	-2.75	CO 9
		17	1.000	Max N	▷ -21.50		1.42		0.00	0.00		0.00		-0.57	CO 7
				Min N	▷ -46.00		-2.74		0.00	0.00		0.00		-0.02	CO 9
				Max V_y	-21.50	▷	1.42		0.00	0.00		0.00		-0.57	CO 7
				Min V_y	-46.00	▷	-2.74		0.00	0.00		0.00		-0.02	CO 9
				Max V_z	-46.00		-2.74	▷	0.00	0.00		0.00		-0.02	CO 9
				Min V_z	-22.00		-1.17	▷	0.00	0.00		0.00		-0.01	CO 6
				Max M_T	-22.00		-1.17		0.00	▷ 0.00		0.00		-0.01	CO 6
				Min M_T	-22.00		-1.17		0.00	▷ 0.00		0.00		-0.01	CO 6
				Max M_y	-22.00		-1.17		0.00	0.00	▷	0.00		-0.01	CO 6
				Min M_y	-22.00		-1.17		0.00	0.00	▷	0.00		-0.01	CO 6
				Max M_z	-22.00		-1.17		0.00	0.00		0.00	▷	-0.01	CO 6
				Min M_z	-38.29		0.34		0.00	0.00		0.00	▷	-0.60	CO 8
	RC3	18	0.000	Max N	▷ -20.90		-0.85		0.00	0.00		0.00		-0.87	CO 12
				Min N	▷ -30.60		-1.79		0.00	0.00		0.00		-1.80	CO 14

4.12 CROSS-SECTIONS - INTERNAL FORCES

Result Combinations

Member No.	RC	Node No.	Location x [m]		Forces [kN] N		V_y		V_z	Moments [kNm] M_T		M_y		M_z	Corresponding Load Cases
16	RC3			Max V_y	-20.90	▷	-0.85		0.00	0.00		0.00		-0.87	CO 12
				Min V_y	-30.60	▷	-1.79		0.00	0.00		0.00		-1.80	CO 14
				Max V_z	-21.00		-1.16	▷	0.00	0.00		0.00		-1.17	CO 11
				Min V_z	-21.00		-1.16	▷	0.00	0.00		0.00		-1.17	CO 11
				Max M_T	-21.00		-1.16		0.00	▷ 0.00		0.00		-1.17	CO 11
				Min M_T	-21.00		-1.16		0.00	▷ 0.00		0.00		-1.17	CO 11
				Max M_y	-21.00		-1.16		0.00	0.00	▷	0.00		-1.17	CO 11
				Min M_y	-21.00		-1.16		0.00	0.00	▷	0.00		-1.17	CO 11
				Max M_z	-20.90		-0.85		0.00	0.00		0.00	▷	-0.87	CO 12
				Min M_z	-30.60		-1.79		0.00	0.00		0.00	▷	-1.80	CO 14
		17	1.000	Max N	▷ -21.90		-0.65		0.00	0.00		0.00		-0.12	CO 12
				Min N	▷ -31.60		-1.79		0.00	0.00		0.00		-0.01	CO 14
				Max V_y	-21.90	▷	-0.65		0.00	0.00		0.00		-0.12	CO 12
				Min V_y	-31.60	▷	-1.79		0.00	0.00		0.00		-0.01	CO 14
				Max V_z	-22.00		-1.17	▷	0.00	0.00		0.00		-0.01	CO 11
				Min V_z	-22.00		-1.17	▷	0.00	0.00		0.00		-0.01	CO 11
				Max M_T	-22.00		-1.17		0.00	▷ 0.00		0.00		-0.01	CO 11
				Min M_T	-22.00		-1.17		0.00	▷ 0.00		0.00		-0.01	CO 11
				Max M_y	-22.00		-1.17		0.00	0.00	▷	0.00		-0.01	CO 11
				Min M_y	-22.00		-1.17		0.00	0.00	▷	0.00		-0.01	CO 11
				Max M_z	-22.00		-1.17		0.00	0.00		0.00	▷	-0.01	CO 11
				Min M_z	-26.70		-0.96		0.00	0.00		0.00	▷	-0.12	CO 13
	RC4	18	0.000	Max N	▷ -21.00		-1.16		0.00	0.00		0.00		-1.17	CO 15
				Min N	▷ -25.80		-1.47		0.00	0.00		0.00		-1.48	CO 16
				Max V_y	-21.00	▷	-1.16		0.00	0.00		0.00		-1.17	CO 15
				Min V_y	-25.80	▷	-1.47		0.00	0.00		0.00		-1.48	CO 16
				Max V_z	-21.00		-1.16	▷	0.00	0.00		0.00		-1.17	CO 15
				Min V_z	-21.00		-1.16	▷	0.00	0.00		0.00		-1.17	CO 15
				Max M_T	-21.00		-1.16		0.00	▷ 0.00		0.00		-1.17	CO 15
				Min M_T	-21.00		-1.16		0.00	▷ 0.00		0.00		-1.17	CO 15
				Max M_y	-21.00		-1.16		0.00	0.00	▷	0.00		-1.17	CO 15
				Min M_y	-21.00		-1.16		0.00	0.00	▷	0.00		-1.17	CO 15
				Max M_z	-21.00		-1.16		0.00	0.00		0.00	▷	-1.17	CO 15
				Min M_z	-25.80		-1.47		0.00	0.00		0.00	▷	-1.48	CO 16
		17	1.000	Max N	▷ -22.00		-1.17		0.00	0.00		0.00		-0.01	CO 15
				Min N	▷ -26.80		-1.48		0.00	0.00		0.00		-0.01	CO 16
				Max V_y	-22.00	▷	-1.17		0.00	0.00		0.00		-0.01	CO 15
				Min V_y	-26.80	▷	-1.48		0.00	0.00		0.00		-0.01	CO 16
				Max V_z	-22.00		-1.17	▷	0.00	0.00		0.00		-0.01	CO 15
				Min V_z	-22.00		-1.17	▷	0.00	0.00		0.00		-0.01	CO 15
				Max M_T	-22.00		-1.17		0.00	▷ 0.00		0.00		-0.01	CO 15
				Min M_T	-22.00		-1.17		0.00	▷ 0.00		0.00		-0.01	CO 15
				Max M_y	-22.00		-1.17		0.00	0.00	▷	0.00		-0.01	CO 15
				Min M_y	-22.00		-1.17		0.00	0.00	▷	0.00		-0.01	CO 15
				Max M_z	-22.00		-1.17		0.00	0.00		0.00	▷	-0.01	CO 15
				Min M_z	-26.80		-1.48		0.00	0.00		0.00	▷	-0.01	CO 16
17	RC1	19	0.000	Max N	▷ -22.24		-0.47		0.00	0.00		0.00		1.22	CO 2
				Min N	▷ -59.00		-3.62		0.00	0.00		0.00		-7.40	CO 4
				Max V_y	-22.24	▷	-0.47		0.00	0.00		0.00		1.22	CO 2
				Min V_y	-59.00	▷	-3.62		0.00	0.00		0.00		-7.40	CO 4
				Max V_z	-27.00		-1.56	▷	0.00	0.00		0.00		-3.15	CO 1
				Min V_z	-27.00		-1.56	▷	0.00	0.00		0.00		-3.15	CO 1
				Max M_T	-27.00		-1.56		0.00	▷ 0.00		0.00		-3.15	CO 1

Student Version

4.12 CROSS-SECTIONS - INTERNAL FORCES

Result Combinations

Member No.	RC	Node No.	Location x [m]		Forces [kN] N		V_y		V_z	Moments [kNm] M_T		M_y		M_z	Corresponding Load Cases
17	RC1			Min M_T	-27.00		-1.56		0.00	▷ 0.00		0.00		-3.15	CO 1
				Max M_y	-22.24		-0.47		0.00	0.00	▷	0.00		1.22	CO 2
				Min M_y	-27.00		-1.56		0.00	0.00	▷	0.00		-3.15	CO 1
				Max M_z	-22.24		-0.47		0.00	0.00		0.00	▷	1.22	CO 2
				Min M_z	-59.00		-3.62		0.00	0.00		0.00	▷	-7.40	CO 4
		18	1.000	Max N	▷ -23.39		1.04		0.00	0.00		0.00		0.93	CO 2
				Min N	▷ -60.15		-3.69		0.00	0.00		0.00		-3.74	CO 4
				Max V_y	-23.39	▷	1.04		0.00	0.00		0.00		0.93	CO 2
				Min V_y	-60.15	▷	-3.69		0.00	0.00		0.00		-3.74	CO 4
				Max V_z	-28.35		-1.57	▷	0.00	0.00		0.00		-1.58	CO 1
				Min V_z	-28.35		-1.57	▷	0.00	0.00		0.00		-1.58	CO 1
				Max M_T	-28.35		-1.57		0.00	▷ 0.00		0.00		-1.58	CO 1
				Min M_T	-28.35		-1.57		0.00	▷ 0.00		0.00		-1.58	CO 1
				Max M_y	-28.35		-1.57		0.00	0.00	▷	0.00		-1.58	CO 1
				Min M_y	-28.35		-1.57		0.00	0.00	▷	0.00		-1.58	CO 1
				Max M_z	-23.39		1.04		0.00	0.00		0.00	▷	0.93	CO 2
				Min M_z	-60.15		-3.69		0.00	0.00		0.00	▷	-3.74	CO 4
	RC2	19	0.000	Max N	▷ -19.50		-0.59		0.00	0.00		0.00		0.26	CO 7
				Min N	▷ -44.00		-2.69		0.00	0.00		0.00		-5.46	CO 9
				Max V_y	-19.50	▷	-0.59		0.00	0.00		0.00		0.26	CO 7
				Min V_y	-44.00	▷	-2.69		0.00	0.00		0.00		-5.46	CO 9
				Max V_z	-43.69		-2.33	▷	0.00	0.00		-0.00		-3.88	CO 10
				Min V_z	-20.00		-1.15	▷	0.00	0.00		0.00		-2.33	CO 6
				Max M_T	-20.00		-1.15		0.00	▷ 0.00		0.00		-2.33	CO 6
				Min M_T	-20.00		-1.15		0.00	▷ 0.00		0.00		-2.33	CO 6
				Max M_y	-20.00		-1.15		0.00	0.00	▷	0.00		-2.33	CO 6
				Min M_y	-43.69		-2.33		0.00	0.00	▷	-0.00		-3.88	CO 10
				Max M_z	-19.50		-0.59		0.00	0.00		0.00	▷	0.26	CO 7
				Min M_z	-44.00		-2.69		0.00	0.00		0.00	▷	-5.46	CO 9
		18	1.000	Max N	▷ -20.50		0.42		0.00	0.00		0.00		0.35	CO 7
				Min N	▷ -45.00		-2.73		0.00	0.00		-0.00		-2.75	CO 9
				Max V_y	-20.50	▷	0.42		0.00	0.00		0.00		0.35	CO 7
				Min V_y	-45.00	▷	-2.73		0.00	0.00		-0.00		-2.75	CO 9
				Max V_z	-45.00		-2.73	▷	0.00	0.00		-0.00		-2.75	CO 9
				Min V_z	-21.00		-1.16	▷	0.00	0.00		0.00		-1.17	CO 6
				Max M_T	-21.00		-1.16		0.00	▷ 0.00		0.00		-1.17	CO 6
				Min M_T	-21.00		-1.16		0.00	▷ 0.00		0.00		-1.17	CO 6
				Max M_y	-21.00		-1.16		0.00	0.00	▷	0.00		-1.17	CO 6
				Min M_y	-45.00		-2.73		0.00	0.00	▷	-0.00		-2.75	CO 9
				Max M_z	-20.50		0.42		0.00	0.00		0.00	▷	0.35	CO 7
				Min M_z	-45.00		-2.73		0.00	0.00		-0.00	▷	-2.75	CO 9
	RC3	19	0.000	Max N	▷ -19.90		-1.04		0.00	0.00		0.00		-1.81	CO 12
				Min N	▷ -29.60		-1.77		0.00	0.00		0.00		-3.58	CO 14
				Max V_y	-19.90	▷	-1.04		0.00	0.00		0.00		-1.81	CO 12
				Min V_y	-29.60	▷	-1.77		0.00	0.00		0.00		-3.58	CO 14
				Max V_z	-20.00		-1.15	▷	0.00	0.00		0.00		-2.33	CO 11
				Min V_z	-20.00		-1.15	▷	0.00	0.00		0.00		-2.33	CO 11
				Max M_T	-20.00		-1.15		0.00	▷ 0.00		0.00		-2.33	CO 11
				Min M_T	-20.00		-1.15		0.00	▷ 0.00		0.00		-2.33	CO 11
				Max M_y	-20.00		-1.15		0.00	0.00	▷	0.00		-2.33	CO 11
				Min M_y	-20.00		-1.15		0.00	0.00	▷	0.00		-2.33	CO 11
				Max M_z	-19.90		-1.04		0.00	0.00		0.00	▷	-1.81	CO 12
				Min M_z	-29.60		-1.77		0.00	0.00		0.00	▷	-3.58	CO 14

Student Version

4.12 CROSS-SECTIONS - INTERNAL FORCES

Result Combinations

Member No.	RC	Node No.	Location x [m]		Forces [kN] N	Forces [kN] V_y	Forces [kN] V_z	Moments [kNm] M_T	Moments [kNm] M_y	Moments [kNm] M_z	Corresponding Load Cases
17	RC3	18	1.000	Max N	-20.90	-0.85	0.00	0.00	0.00	-0.87	CO 12
				Min N	-30.60	-1.79	0.00	0.00	0.00	-1.80	CO 14
				Max V_y	-20.90	-0.85	0.00	0.00	0.00	-0.87	CO 12
				Min V_y	-30.60	-1.79	0.00	0.00	0.00	-1.80	CO 14
				Max V_z	-21.00	-1.16	0.00	0.00	0.00	-1.17	CO 11
				Min V_z	-21.00	-1.16	0.00	0.00	0.00	-1.17	CO 11
				Max M_T	-21.00	-1.16	0.00	0.00	0.00	-1.17	CO 11
				Min M_T	-21.00	-1.16	0.00	0.00	0.00	-1.17	CO 11
				Max M_y	-21.00	-1.16	0.00	0.00	0.00	-1.17	CO 11
				Min M_y	-21.00	-1.16	0.00	0.00	0.00	-1.17	CO 11
				Max M_z	-20.90	-0.85	0.00	0.00	0.00	-0.87	CO 12
				Min M_z	-30.60	-1.79	0.00	0.00	0.00	-1.80	CO 14
	RC4	19	0.000	Max N	-20.00	-1.15	0.00	0.00	0.00	-2.33	CO 15
				Min N	-24.80	-1.46	0.00	0.00	0.00	-2.95	CO 16
				Max V_y	-20.00	-1.15	0.00	0.00	0.00	-2.33	CO 15
				Min V_y	-24.80	-1.46	0.00	0.00	0.00	-2.95	CO 16
				Max V_z	-20.00	-1.15	0.00	0.00	0.00	-2.33	CO 15
				Min V_z	-20.00	-1.15	0.00	0.00	0.00	-2.33	CO 15
				Max M_T	-20.00	-1.15	0.00	0.00	0.00	-2.33	CO 15
				Min M_T	-20.00	-1.15	0.00	0.00	0.00	-2.33	CO 15
				Max M_y	-20.00	-1.15	0.00	0.00	0.00	-2.33	CO 15
				Min M_y	-20.00	-1.15	0.00	0.00	0.00	-2.33	CO 15
				Max M_z	-20.00	-1.15	0.00	0.00	0.00	-2.33	CO 15
				Min M_z	-24.80	-1.46	0.00	0.00	0.00	-2.95	CO 16
		18	1.000	Max N	-21.00	-1.16	0.00	0.00	0.00	-1.17	CO 15
				Min N	-25.80	-1.47	0.00	0.00	0.00	-1.48	CO 16
				Max V_y	-21.00	-1.16	0.00	0.00	0.00	-1.17	CO 15
				Min V_y	-25.80	-1.47	0.00	0.00	0.00	-1.48	CO 16
				Max V_z	-21.00	-1.16	0.00	0.00	0.00	-1.17	CO 15
				Min V_z	-21.00	-1.16	0.00	0.00	0.00	-1.17	CO 15
				Max M_T	-21.00	-1.16	0.00	0.00	0.00	-1.17	CO 15
				Min M_T	-21.00	-1.16	0.00	0.00	0.00	-1.17	CO 15
				Max M_y	-21.00	-1.16	0.00	0.00	0.00	-1.17	CO 15
				Min M_y	-21.00	-1.16	0.00	0.00	0.00	-1.17	CO 15
				Max M_z	-21.00	-1.16	0.00	0.00	0.00	-1.17	CO 15
				Min M_z	-25.80	-1.47	0.00	0.00	0.00	-1.48	CO 16
18	RC1	20	0.000	Max N	-21.10	-1.97	0.00	0.00	0.00	-0.00	CO 2
				Min N	-57.86	-3.51	0.00	0.00	0.00	-10.97	CO 4
				Max V_y	-25.65	-1.54	0.00	0.00	0.00	-4.70	CO 1
				Min V_y	-57.39	-3.90	0.00	0.00	0.00	-8.50	CO 5
				Max V_z	-21.10	-1.97	0.00	0.00	0.00	-0.00	CO 2
				Min V_z	-25.65	-1.54	0.00	0.00	0.00	-4.70	CO 1
				Max M_T	-25.65	-1.54	0.00	0.00	0.00	-4.70	CO 1
				Min M_T	-25.65	-1.54	0.00	0.00	0.00	-4.70	CO 1
				Max M_y	-25.65	-1.54	0.00	0.00	0.00	-4.70	CO 1
				Min M_y	-25.65	-1.54	0.00	0.00	0.00	-4.70	CO 1
				Max M_z	-21.10	-1.97	0.00	0.00	0.00	-0.00	CO 2
				Min M_z	-57.86	-3.51	0.00	0.00	0.00	-10.97	CO 4
		19	1.000	Max N	-22.24	-0.47	0.00	0.00	0.00	1.22	CO 2
				Min N	-59.00	-3.62	0.00	0.00	0.00	-7.40	CO 4
				Max V_y	-22.24	-0.47	0.00	0.00	0.00	1.22	CO 2
				Min V_y	-59.00	-3.62	0.00	0.00	0.00	-7.40	CO 4
				Max V_z	-27.00	-1.56	0.00	0.00	0.00	-3.15	CO 1

Student Version

4.12 CROSS-SECTIONS - INTERNAL FORCES

Result Combinations

Member No.	RC	Node No.	Location x [m]		Forces [kN] N		V_y		V_z	Moments [kNm] M_T		M_y		M_z	Corresponding Load Cases
18	RC1			Min V_z	-27.00		-1.56	▷	0.00	0.00		0.00		-3.15	CO 1
				Max M_T	-27.00		-1.56		0.00	▷ 0.00		0.00		-3.15	CO 1
				Min M_T	-27.00		-1.56		0.00	▷ 0.00		0.00		-3.15	CO 1
				Max M_y	-22.24		-0.47		0.00	0.00	▷	0.00		1.22	CO 2
				Min M_y	-27.00		-1.56		0.00	0.00	▷	0.00		-3.15	CO 1
				Max M_z	-22.24		-0.47		0.00	0.00		0.00	▷	1.22	CO 2
				Min M_z	-59.00		-3.62		0.00	0.00		0.00	▷	-7.40	CO 4
	RC2	20	0.000	Max N	▷ -18.50		-1.59		0.00	0.00		0.00		-0.82	CO 7
				Min N	▷ -43.00		-2.63		0.00	0.00		0.00		-8.12	CO 9
				Max V_y	-19.00	▷	-1.14		0.00	0.00		-0.00		-3.48	CO 6
				Min V_y	-42.70	▷	-2.89		0.00	0.00		0.00		-6.50	CO 10
				Max V_z	-35.29		-2.62	▷	0.00	0.00		-0.00		-4.03	CO 8
				Min V_z	-18.50		-1.59	▷	0.00	0.00		0.00		-0.82	CO 7
				Max M_T	-19.00		-1.14		0.00	▷ 0.00		-0.00		-3.48	CO 6
				Min M_T	-19.00		-1.14		0.00	▷ 0.00		-0.00		-3.48	CO 6
				Max M_y	-18.50		-1.59		0.00	0.00	▷	0.00		-0.82	CO 7
				Min M_y	-19.00		-1.14		0.00	0.00	▷	-0.00		-3.48	CO 6
				Max M_z	-18.50		-1.59		0.00	0.00		0.00	▷	-0.82	CO 7
				Min M_z	-43.00		-2.63		0.00	0.00		0.00	▷	-8.12	CO 9
		19	1.000	Max N	▷ -19.50		-0.59		0.00	0.00		0.00		0.26	CO 7
				Min N	▷ -44.00		-2.69		0.00	0.00		0.00		-5.46	CO 9
				Max V_y	-19.50	▷	-0.59		0.00	0.00		0.00		0.26	CO 7
				Min V_y	-44.00	▷	-2.69		0.00	0.00		0.00		-5.46	CO 9
				Max V_z	-43.69		-2.33	▷	0.00	0.00		-0.00		-3.88	CO 10
				Min V_z	-20.00		-1.15	▷	0.00	0.00		0.00		-2.33	CO 6
				Max M_T	-20.00		-1.15		0.00	▷ 0.00		0.00		-2.33	CO 6
				Min M_T	-20.00		-1.15		0.00	▷ 0.00		0.00		-2.33	CO 6
				Max M_y	-20.00		-1.15		0.00	0.00	▷	0.00		-2.33	CO 6
				Min M_y	-43.69		-2.33		0.00	0.00	▷	-0.00		-3.88	CO 10
				Max M_z	-19.50		-0.59		0.00	0.00		0.00	▷	0.26	CO 7
				Min M_z	-44.00		-2.69		0.00	0.00		0.00	▷	-5.46	CO 9
	RC3	20	0.000	Max N	▷ -18.90		-1.23		0.00	0.00		0.00		-2.95	CO 12
				Min N	▷ -28.60		-1.74		0.00	0.00		0.00		-5.34	CO 14
				Max V_y	-19.00	▷	-1.14		0.00	0.00		-0.00		-3.48	CO 11
				Min V_y	-28.60	▷	-1.74		0.00	0.00		0.00		-5.34	CO 14
				Max V_z	-19.00		-1.14	▷	0.00	0.00		-0.00		-3.48	CO 11
				Min V_z	-18.90		-1.23	▷	0.00	0.00		0.00		-2.95	CO 12
				Max M_T	-19.00		-1.14		0.00	▷ 0.00		-0.00		-3.48	CO 11
				Min M_T	-19.00		-1.14		0.00	▷ 0.00		-0.00		-3.48	CO 11
				Max M_y	-18.90		-1.23		0.00	0.00	▷	0.00		-2.95	CO 12
				Min M_y	-19.00		-1.14		0.00	0.00	▷	-0.00		-3.48	CO 11
				Max M_z	-18.90		-1.23		0.00	0.00		0.00	▷	-2.95	CO 12
				Min M_z	-28.60		-1.74		0.00	0.00		0.00	▷	-5.34	CO 14
		19	1.000	Max N	▷ -19.90		-1.04		0.00	0.00		0.00		-1.81	CO 12
				Min N	▷ -29.60		-1.77		0.00	0.00		0.00		-3.58	CO 14
				Max V_y	-19.90	▷	-1.04		0.00	0.00		0.00		-1.81	CO 12
				Min V_y	-29.60	▷	-1.77		0.00	0.00		0.00		-3.58	CO 14
				Max V_z	-20.00		-1.15	▷	0.00	0.00		0.00		-2.33	CO 11
				Min V_z	-20.00		-1.15	▷	0.00	0.00		0.00		-2.33	CO 11
				Max M_T	-20.00		-1.15		0.00	▷ 0.00		0.00		-2.33	CO 11
				Min M_T	-20.00		-1.15		0.00	▷ 0.00		0.00		-2.33	CO 11
				Max M_y	-20.00		-1.15		0.00	0.00	▷	0.00		-2.33	CO 11
				Min M_y	-20.00		-1.15		0.00	0.00	▷	0.00		-2.33	CO 11

4.12 CROSS-SECTIONS - INTERNAL FORCES

Result Combinations

Member No.	RC	Node No.	Location x [m]		Forces [kN] N		V_y		V_z	Moments [kNm] M_T		M_y		M_z	Corresponding Load Cases
18	RC3			Max M_z	-19.90		-1.04		0.00	0.00		0.00	▷	-1.81	CO 12
				Min M_z	-29.60		-1.77		0.00	0.00		0.00	▷	-3.58	CO 14
	RC4	20	0.000	Max N	▷ -19.00		-1.14		0.00	0.00		-0.00		-3.48	CO 15
				Min N	▷ -23.80		-1.44		0.00	0.00		0.00		-4.41	CO 16
				Max V_y	-19.00	▷	-1.14		0.00	0.00		-0.00		-3.48	CO 15
				Min V_y	-23.80	▷	-1.44		0.00	0.00		0.00		-4.41	CO 16
				Max V_z	-19.00		-1.14	▷	0.00	0.00		-0.00		-3.48	CO 15
				Min V_z	-23.80		-1.44	▷	0.00	0.00		0.00		-4.41	CO 16
				Max M_T	-19.00		-1.14		0.00	▷ 0.00		-0.00		-3.48	CO 15
				Min M_T	-19.00		-1.14		0.00	▷ 0.00		-0.00		-3.48	CO 15
				Max M_y	-23.80		-1.44		0.00	0.00	▷	0.00		-4.41	CO 16
				Min M_y	-19.00		-1.14		0.00	0.00	▷	-0.00		-3.48	CO 15
				Max M_z	-19.00		-1.14		0.00	0.00		-0.00	▷	-3.48	CO 15
				Min M_z	-23.80		-1.44		0.00	0.00		0.00	▷	-4.41	CO 16
		19	1.000	Max N	▷ -20.00		-1.15		0.00	0.00		0.00		-2.33	CO 15
				Min N	▷ -24.80		-1.46		0.00	0.00		0.00		-2.95	CO 16
				Max V_y	-20.00	▷	-1.15		0.00	0.00		0.00		-2.33	CO 15
				Min V_y	-24.80	▷	-1.46		0.00	0.00		0.00		-2.95	CO 16
				Max V_z	-20.00		-1.15	▷	0.00	0.00		0.00		-2.33	CO 15
				Min V_z	-20.00		-1.15	▷	0.00	0.00		0.00		-2.33	CO 15
				Max M_T	-20.00		-1.15		0.00	▷ 0.00		0.00		-2.33	CO 15
				Min M_T	-20.00		-1.15		0.00	▷ 0.00		0.00		-2.33	CO 15
				Max M_y	-20.00		-1.15		0.00	0.00	▷	0.00		-2.33	CO 15
				Min M_y	-20.00		-1.15		0.00	0.00	▷	0.00		-2.33	CO 15
				Max M_z	-20.00		-1.15		0.00	0.00		0.00	▷	-2.33	CO 15
				Min M_z	-24.80		-1.46		0.00	0.00		0.00	▷	-2.95	CO 16
19	RC1	2	0.000	Max N	▷ -19.95		-3.47		0.00	0.00		0.00		-2.73	CO 2
				Min N	▷ -56.72		-3.37		0.00	0.00		0.00		-14.42	CO 4
				Max V_y	-24.30	▷	-1.51		0.00	0.00		0.00		-6.22	CO 1
				Min V_y	-45.14	▷	-4.95		0.00	0.00		0.00		-9.02	CO 3
				Max V_z	-56.25		-4.67	▷	0.00	0.00		-0.00		-12.79	CO 5
				Min V_z	-24.30		-1.51	▷	0.00	0.00		0.00		-6.22	CO 1
				Max M_T	-24.30		-1.51		0.00	▷ 0.00		0.00		-6.22	CO 1
				Min M_T	-24.30		-1.51		0.00	▷ 0.00		0.00		-6.22	CO 1
				Max M_y	-24.30		-1.51		0.00	0.00	▷	0.00		-6.22	CO 1
				Min M_y	-56.25		-4.67		0.00	0.00	▷	-0.00		-12.79	CO 5
				Max M_z	-19.95		-3.47		0.00	0.00		0.00	▷	-2.73	CO 2
				Min M_z	-56.72		-3.37		0.00	0.00		0.00	▷	-14.42	CO 4
		20	1.000	Max N	▷ -21.10		-1.97		0.00	0.00		0.00		-0.00	CO 2
				Min N	▷ -57.86		-3.51		0.00	0.00		0.00		-10.97	CO 4
				Max V_y	-25.65	▷	-1.54		0.00	0.00		0.00		-4.70	CO 1
				Min V_y	-57.39	▷	-3.90		0.00	0.00		0.00		-8.50	CO 5
				Max V_z	-21.10		-1.97	▷	0.00	0.00		0.00		-0.00	CO 2
				Min V_z	-25.65		-1.54	▷	0.00	0.00		0.00		-4.70	CO 1
				Max M_T	-25.65		-1.54		0.00	▷ 0.00		0.00		-4.70	CO 1
				Min M_T	-25.65		-1.54		0.00	▷ 0.00		0.00		-4.70	CO 1
				Max M_y	-25.65		-1.54		0.00	0.00	▷	0.00		-4.70	CO 1
				Min M_y	-25.65		-1.54		0.00	0.00	▷	0.00		-4.70	CO 1
				Max M_z	-21.10		-1.97		0.00	0.00		0.00	▷	-0.00	CO 2
				Min M_z	-57.86		-3.51		0.00	0.00		0.00	▷	-10.97	CO 4
	RC2	2	0.000	Max N	▷ -17.50		-2.58		0.00	0.00		0.00		-2.91	CO 7
				Min N	▷ -42.01		-2.55		0.00	0.00		0.00		-10.71	CO 9
				Max V_y	-18.00	▷	-1.13		0.00	0.00		0.00		-4.61	CO 6

Student Version

4.12 CROSS-SECTIONS - INTERNAL FORCES

Result Combinations

Member No.	RC	Node No.	Location x [m]		Forces [kN] N		V_y	V_z	Moments [kNm] M_T		M_y	M_z	Corresponding Load Cases
19	RC2			Min V_y	-34.30	▷	-3.58	0.00	0.00		0.00	-7.14	CO 8
				Max V_z	-18.00		-1.13	▷ 0.00	0.00		0.00	-4.61	CO 6
				Min V_z	-18.00		-1.13	▷ 0.00	0.00		0.00	-4.61	CO 6
				Max M_T	-18.00		-1.13	0.00	▷ 0.00		0.00	-4.61	CO 6
				Min M_T	-18.00		-1.13	0.00	▷ 0.00		0.00	-4.61	CO 6
				Max M_y	-18.00		-1.13	0.00	0.00	▷	0.00	-4.61	CO 6
				Min M_y	-18.00		-1.13	0.00	0.00	▷	0.00	-4.61	CO 6
				Max M_z	-17.50		-2.58	0.00	0.00		0.00	▷ -2.91	CO 7
				Min M_z	-42.01		-2.55	0.00	0.00		0.00	▷ -10.71	CO 9
		20	1.000	Max N	▷ -18.50		-1.59	0.00	0.00		0.00	-0.82	CO 7
				Min N	▷ -43.00		-2.63	0.00	0.00		0.00	-8.12	CO 9
				Max V_y	-19.00	▷	-1.14	0.00	0.00		-0.00	-3.48	CO 6
				Min V_y	-42.70	▷	-2.89	0.00	0.00		0.00	-6.50	CO 10
				Max V_z	-35.29		-2.62	▷ 0.00	0.00		-0.00	-4.03	CO 8
				Min V_z	-18.50		-1.59	▷ 0.00	0.00		0.00	-0.82	CO 7
				Max M_T	-19.00		-1.14	0.00	▷ 0.00		-0.00	-3.48	CO 6
				Min M_T	-19.00		-1.14	0.00	▷ 0.00		-0.00	-3.48	CO 6
				Max M_y	-18.50		-1.59	0.00	0.00	▷	0.00	-0.82	CO 7
				Min M_y	-19.00		-1.14	0.00	0.00	▷	-0.00	-3.48	CO 6
				Max M_z	-18.50		-1.59	0.00	0.00		0.00	▷ -0.82	CO 7
				Min M_z	-43.00		-2.63	0.00	0.00		0.00	▷ -8.12	CO 9
	RC3	2	0.000	Max N	▷ -17.90		-1.42	0.00	0.00		0.00	-4.27	CO 12
				Min N	▷ -27.60		-1.71	0.00	0.00		0.00	-7.06	CO 14
				Max V_y	-18.00	▷	-1.13	0.00	0.00		0.00	-4.61	CO 11
				Min V_y	-22.70	▷	-1.71	0.00	0.00		0.00	-5.50	CO 13
				Max V_z	-18.00		-1.13	▷ 0.00	0.00		0.00	-4.61	CO 11
				Min V_z	-18.00		-1.13	▷ 0.00	0.00		0.00	-4.61	CO 11
				Max M_T	-18.00		-1.13	0.00	▷ 0.00		0.00	-4.61	CO 11
				Min M_T	-18.00		-1.13	0.00	▷ 0.00		0.00	-4.61	CO 11
				Max M_y	-18.00		-1.13	0.00	0.00	▷	0.00	-4.61	CO 11
				Min M_y	-18.00		-1.13	0.00	0.00	▷	0.00	-4.61	CO 11
				Max M_z	-17.90		-1.42	0.00	0.00		0.00	▷ -4.27	CO 12
				Min M_z	-27.60		-1.71	0.00	0.00		0.00	▷ -7.06	CO 14
		20	1.000	Max N	▷ -18.90		-1.23	0.00	0.00		0.00	-2.95	CO 12
				Min N	▷ -28.60		-1.74	0.00	0.00		0.00	-5.34	CO 14
				Max V_y	-19.00	▷	-1.14	0.00	0.00		-0.00	-3.48	CO 11
				Min V_y	-28.60	▷	-1.74	0.00	0.00		0.00	-5.34	CO 14
				Max V_z	-19.00		-1.14	▷ 0.00	0.00		-0.00	-3.48	CO 11
				Min V_z	-18.90		-1.23	▷ 0.00	0.00		0.00	-2.95	CO 12
				Max M_T	-19.00		-1.14	0.00	▷ 0.00		-0.00	-3.48	CO 11
				Min M_T	-19.00		-1.14	0.00	▷ 0.00		-0.00	-3.48	CO 11
				Max M_y	-18.90		-1.23	0.00	0.00	▷	0.00	-2.95	CO 12
				Min M_y	-19.00		-1.14	0.00	0.00	▷	-0.00	-3.48	CO 11
				Max M_z	-18.90		-1.23	0.00	0.00		0.00	▷ -2.95	CO 12
				Min M_z	-28.60		-1.74	0.00	0.00		0.00	▷ -5.34	CO 14
	RC4	2	0.000	Max N	▷ -18.00		-1.13	0.00	0.00		0.00	-4.61	CO 15
				Min N	▷ -22.80		-1.42	0.00	0.00		-0.00	-5.84	CO 16
				Max V_y	-18.00	▷	-1.13	0.00	0.00		0.00	-4.61	CO 15
				Min V_y	-22.80	▷	-1.42	0.00	0.00		-0.00	-5.84	CO 16
				Max V_z	-22.80		-1.42	▷ 0.00	0.00		-0.00	-5.84	CO 16
				Min V_z	-18.00		-1.13	▷ 0.00	0.00		0.00	-4.61	CO 15
				Max M_T	-18.00		-1.13	0.00	▷ 0.00		0.00	-4.61	CO 15
				Min M_T	-18.00		-1.13	0.00	▷ 0.00		0.00	-4.61	CO 15

Student Version

4.12 CROSS-SECTIONS - INTERNAL FORCES

Result Combinations

Member No.	RC	Node No.	Location x [m]		Forces [kN] N		V_y		V_z	Moments [kNm] M_T		M_y		M_z	Corresponding Load Cases
19	RC4			Max M_y	-18.00		-1.13		0.00	0.00	▷	0.00		-4.61	CO 15
				Min M_y	-22.80		-1.42		0.00	0.00	▷	-0.00		-5.84	CO 16
				Max M_z	-18.00		-1.13		0.00	0.00		0.00	▷	-4.61	CO 15
				Min M_z	-22.80		-1.42		0.00	0.00		-0.00	▷	-5.84	CO 16
		20	1.000	Max N	▷ -19.00		-1.14		0.00	0.00		-0.00		-3.48	CO 15
				Min N	▷ -23.80		-1.44		0.00	0.00		0.00		-4.41	CO 16
				Max V_y	-19.00	▷	-1.14		0.00	0.00		-0.00		-3.48	CO 15
				Min V_y	-23.80	▷	-1.44		0.00	0.00		0.00		-4.41	CO 16
				Max V_z	-19.00		-1.14	▷	0.00	0.00		-0.00		-3.48	CO 15
				Min V_z	-23.80		-1.44	▷	0.00	0.00		0.00		-4.41	CO 16
				Max M_T	-19.00		-1.14		0.00	▷ 0.00		-0.00		-3.48	CO 15
				Min M_T	-19.00		-1.14		0.00	▷ 0.00		-0.00		-3.48	CO 15
				Max M_y	-23.80		-1.44		0.00	0.00	▷	0.00		-4.41	CO 16
				Min M_y	-19.00		-1.14		0.00	0.00	▷	-0.00		-3.48	CO 15
				Max M_z	-19.00		-1.14		0.00	0.00		-0.00	▷	-3.48	CO 15
				Min M_z	-23.80		-1.44		0.00	0.00		0.00	▷	-4.41	CO 16
20	RC1	21	0.000	Max N	▷ -27.20		3.55		-0.00	0.00		0.00		5.91	CO 2
				Min N	▷ -62.91		5.05		-0.00	0.00		0.00		6.52	CO 5
				Max V_y	-52.41	▷	5.23		0.00	0.00		0.00		7.65	CO 3
				Min V_y	-31.05	▷	1.57		0.00	0.00		0.00		1.57	CO 1
				Max V_z	-31.05		1.57	▷	0.00	0.00		0.00		1.57	CO 1
				Min V_z	-62.91		5.05	▷	-0.00	0.00		0.00		6.52	CO 5
				Max M_T	-31.05		1.57		0.00	▷ 0.00		0.00		1.57	CO 1
				Min M_T	-31.05		1.57		0.00	▷ 0.00		0.00		1.57	CO 1
				Max M_y	-62.91		5.05		-0.00	0.00	▷	0.00		6.52	CO 5
				Min M_y	-31.05		1.57		0.00	0.00	▷	0.00		1.57	CO 1
				Max M_z	-52.41		5.23		0.00	0.00		0.00	▷	7.65	CO 3
				Min M_z	-31.05		1.57		0.00	0.00		0.00	▷	1.57	CO 1
		22	1.000	Max N	▷ -26.05		3.57		0.00	0.00		0.00		2.35	CO 2
				Min N	▷ -61.76		5.10		0.00	0.00		0.00		1.44	CO 5
				Max V_y	-51.26	▷	5.28		0.00	0.00		0.00		2.39	CO 3
				Min V_y	-29.70	▷	1.58		0.00	0.00		0.00		-0.01	CO 1
				Max V_z	-29.70		1.58	▷	0.00	0.00		0.00		-0.01	CO 1
				Min V_z	-29.70		1.58	▷	0.00	0.00		0.00		-0.01	CO 1
				Max M_T	-29.70		1.58		0.00	▷ 0.00		0.00		-0.01	CO 1
				Min M_T	-29.70		1.58		0.00	▷ 0.00		0.00		-0.01	CO 1
				Max M_y	-29.70		1.58		0.00	0.00	▷	0.00		-0.01	CO 1
				Min M_y	-29.70		1.58		0.00	0.00	▷	0.00		-0.01	CO 1
				Max M_z	-51.26		5.28		0.00	0.00		0.00	▷	2.39	CO 3
				Min M_z	-61.29		3.72		0.00	0.00		0.00	▷	-0.03	CO 4
	RC2	21	0.000	Max N	▷ -23.00		1.16		0.00	0.00		0.00		1.16	CO 6
				Min N	▷ -47.30		3.62		0.00	0.00		0.00		4.58	CO 10
				Max V_y	-40.31	▷	3.74		0.00	0.00		0.00		5.34	CO 8
				Min V_y	-23.00	▷	1.16		0.00	0.00		0.00		1.16	CO 6
				Max V_z	-23.00		1.16	▷	0.00	0.00		0.00		1.16	CO 6
				Min V_z	-23.50		2.63	▷	-0.00	0.00		0.00		4.20	CO 7
				Max M_T	-23.00		1.16		0.00	▷ 0.00		0.00		1.16	CO 6
				Min M_T	-23.00		1.16		0.00	▷ 0.00		0.00		1.16	CO 6
				Max M_y	-23.50		2.63		-0.00	0.00	▷	0.00		4.20	CO 7
				Min M_y	-23.00		1.16		0.00	0.00	▷	0.00		1.16	CO 6
				Max M_z	-40.31		3.74		0.00	0.00		0.00	▷	5.34	CO 8
				Min M_z	-23.00		1.16		0.00	0.00		0.00	▷	1.16	CO 6
		22	1.000	Max N	▷ -22.00		1.17		0.00	0.00		0.00		-0.01	CO 6

Student Version

4.12 CROSS-SECTIONS - INTERNAL FORCES

Result Combinations

Member No.	RC	Node No.	Location x [m]		Forces [kN] N		V_y		V_z	Moments [kNm] M_T		M_y		M_z	Corresponding Load Cases
20	RC2			Min N	▷	-46.30	3.65		0.00	0.00		0.00		0.94	CO 10
				Max V_y		-39.30	▷ 3.77		0.00	0.00		0.00		1.58	CO 8
				Min V_y		-22.00	▷ 1.17		0.00	0.00		0.00		-0.01	CO 6
				Max V_z		-22.00	1.17	▷	0.00	0.00		0.00		-0.01	CO 6
				Min V_z		-46.00	2.74	▷	-0.00	0.00		0.00		-0.02	CO 9
				Max M_T		-22.00	1.17		0.00	▷ 0.00		0.00		-0.01	CO 6
				Min M_T		-22.00	1.17		0.00	▷ 0.00		0.00		-0.01	CO 6
				Max M_y		-22.00	1.17		0.00	0.00	▷	0.00		-0.01	CO 6
				Min M_y		-22.00	1.17		0.00	0.00	▷	0.00		-0.01	CO 6
				Max M_z		-39.30	3.77		0.00	0.00		0.00	▷	1.58	CO 8
				Min M_z		-46.00	2.74		-0.00	0.00		0.00	▷	-0.02	CO 9
	RC3	21	0.000	Max N	▷	-23.00	1.16		0.00	0.00		0.00		1.16	CO 11
				Min N	▷	-32.60	1.79		0.00	0.00		0.00		1.78	CO 14
				Max V_y		-32.60	▷ 1.79		0.00	0.00		0.00		1.78	CO 14
				Min V_y		-23.00	▷ 1.16		0.00	0.00		0.00		1.16	CO 11
				Max V_z		-23.00	1.16	▷	0.00	0.00		0.00		1.16	CO 11
				Min V_z		-27.90	1.77	▷	-0.00	0.00		0.00		2.08	CO 13
				Max M_T		-23.00	1.16		0.00	▷ 0.00		0.00		1.16	CO 11
				Min M_T		-23.00	1.16		0.00	▷ 0.00		0.00		1.16	CO 11
				Max M_y		-27.90	1.77		-0.00	0.00	▷	0.00		2.08	CO 13
				Min M_y		-23.00	1.16		0.00	0.00	▷	0.00		1.16	CO 11
				Max M_z		-27.90	1.77		-0.00	0.00		0.00	▷	2.08	CO 13
				Min M_z		-23.00	1.16		0.00	0.00		0.00	▷	1.16	CO 11
		22	1.000	Max N	▷	-22.00	1.17		0.00	0.00		0.00		-0.01	CO 11
				Min N	▷	-31.60	1.79		0.00	0.00		0.00		-0.01	CO 14
				Max V_y		-31.60	▷ 1.79		0.00	0.00		0.00		-0.01	CO 14
				Min V_y		-22.00	▷ 1.17		0.00	0.00		0.00		-0.01	CO 11
				Max V_z		-22.00	1.17	▷	0.00	0.00		0.00		-0.01	CO 11
				Min V_z		-22.10	1.46	▷	-0.00	0.00		0.00		0.31	CO 12
				Max M_T		-22.00	1.17		0.00	▷ 0.00		0.00		-0.01	CO 11
				Min M_T		-22.00	1.17		0.00	▷ 0.00		0.00		-0.01	CO 11
				Max M_y		-22.00	1.17		0.00	0.00	▷	0.00		-0.01	CO 11
				Min M_y		-22.00	1.17		0.00	0.00	▷	0.00		-0.01	CO 11
				Max M_z		-22.10	1.46		-0.00	0.00		0.00	▷	0.31	CO 12
				Min M_z		-31.60	1.79		0.00	0.00		0.00	▷	-0.01	CO 14
	RC4	21	0.000	Max N	▷	-23.00	1.16		0.00	0.00		0.00		1.16	CO 15
				Min N	▷	-27.80	1.48		0.00	0.00		0.00		1.47	CO 16
				Max V_y		-27.80	▷ 1.48		0.00	0.00		0.00		1.47	CO 16
				Min V_y		-23.00	▷ 1.16		0.00	0.00		0.00		1.16	CO 15
				Max V_z		-23.00	1.16	▷	0.00	0.00		0.00		1.16	CO 15
				Min V_z		-23.00	1.16	▷	0.00	0.00		0.00		1.16	CO 15
				Max M_T		-23.00	1.16		0.00	▷ 0.00		0.00		1.16	CO 15
				Min M_T		-23.00	1.16		0.00	▷ 0.00		0.00		1.16	CO 15
				Max M_y		-23.00	1.16		0.00	0.00	▷	0.00		1.16	CO 15
				Min M_y		-23.00	1.16		0.00	0.00	▷	0.00		1.16	CO 15
				Max M_z		-27.80	1.48		0.00	0.00		0.00	▷	1.47	CO 16
				Min M_z		-23.00	1.16		0.00	0.00		0.00	▷	1.16	CO 15
		22	1.000	Max N	▷	-22.00	1.17		0.00	0.00		0.00		-0.01	CO 15
				Min N	▷	-26.80	1.48		0.00	0.00		0.00		-0.01	CO 16
				Max V_y		-26.80	▷ 1.48		0.00	0.00		0.00		-0.01	CO 16
				Min V_y		-22.00	▷ 1.17		0.00	0.00		0.00		-0.01	CO 15
				Max V_z		-22.00	1.17	▷	0.00	0.00		0.00		-0.01	CO 15
				Min V_z		-22.00	1.17	▷	0.00	0.00		0.00		-0.01	CO 15

Student Version

4.12 CROSS-SECTIONS - INTERNAL FORCES

Result Combinations

Member No.	RC	Node No.	Location x [m]		Forces [kN] N	V_y	V_z	Moments [kNm] M_T	M_y	M_z	Corresponding Load Cases
20	RC4			Max M_T	-22.00	1.17	0.00	0.00	0.00	-0.01	CO 15
				Min M_T	-22.00	1.17	0.00	0.00	0.00	-0.01	CO 15
				Max M_y	-22.00	1.17	0.00	0.00	0.00	-0.01	CO 15
				Min M_y	-22.00	1.17	0.00	0.00	0.00	-0.01	CO 15
				Max M_z	-22.00	1.17	0.00	0.00	0.00	-0.01	CO 15
				Min M_z	-26.80	1.48	0.00	0.00	0.00	-0.01	CO 16
21	RC1	22	0.000	Max N	-26.05	3.57	0.00	0.00	0.00	2.35	CO 2
				Min N	-61.76	5.10	0.00	0.00	0.00	1.44	CO 5
				Max V_y	-51.26	5.28	0.00	0.00	0.00	2.39	CO 3
				Min V_y	-29.70	1.58	0.00	0.00	0.00	-0.01	CO 1
				Max V_z	-29.70	1.58	0.00	0.00	0.00	-0.01	CO 1
				Min V_z	-29.70	1.58	0.00	0.00	0.00	-0.01	CO 1
				Max M_T	-29.70	1.58	0.00	0.00	0.00	-0.01	CO 1
				Min M_T	-29.70	1.58	0.00	0.00	0.00	-0.01	CO 1
				Max M_y	-29.70	1.58	0.00	0.00	0.00	-0.01	CO 1
				Min M_y	-29.70	1.58	0.00	0.00	0.00	-0.01	CO 1
				Max M_z	-51.26	5.28	0.00	0.00	0.00	2.39	CO 3
				Min M_z	-61.29	3.72	0.00	0.00	0.00	-0.03	CO 4
		23	1.000	Max N	-24.90	3.57	0.00	0.00	0.00	-1.22	CO 2
				Min N	-60.61	5.08	0.00	0.00	0.00	-3.66	CO 5
				Max V_y	-50.11	5.27	0.00	0.00	0.00	-2.89	CO 3
				Min V_y	-28.35	1.57	0.00	0.00	0.00	-1.58	CO 1
				Max V_z	-28.35	1.57	0.00	0.00	0.00	-1.58	CO 1
				Min V_z	-28.35	1.57	0.00	0.00	0.00	-1.58	CO 1
				Max M_T	-28.35	1.57	0.00	0.00	0.00	-1.58	CO 1
				Min M_T	-28.35	1.57	0.00	0.00	0.00	-1.58	CO 1
				Max M_y	-28.35	1.57	0.00	0.00	0.00	-1.58	CO 1
				Min M_y	-28.35	1.57	0.00	0.00	0.00	-1.58	CO 1
				Max M_z	-24.90	3.57	0.00	0.00	0.00	-1.22	CO 2
				Min M_z	-60.15	3.69	0.00	0.00	0.00	-3.74	CO 4
	RC2	22	0.000	Max N	-22.00	1.17	0.00	0.00	0.00	-0.01	CO 6
				Min N	-46.30	3.65	0.00	0.00	0.00	0.94	CO 10
				Max V_y	-39.30	3.77	0.00	0.00	0.00	1.58	CO 8
				Min V_y	-22.00	1.17	0.00	0.00	0.00	-0.01	CO 6
				Max V_z	-22.00	1.17	0.00	0.00	0.00	-0.01	CO 6
				Min V_z	-46.00	2.74	-0.00	0.00	0.00	-0.02	CO 9
				Max M_T	-22.00	1.17	0.00	0.00	0.00	-0.01	CO 6
				Min M_T	-22.00	1.17	0.00	0.00	0.00	-0.01	CO 6
				Max M_y	-22.00	1.17	0.00	0.00	0.00	-0.01	CO 6
				Min M_y	-22.00	1.17	0.00	0.00	0.00	-0.01	CO 6
				Max M_z	-39.30	3.77	0.00	0.00	0.00	1.58	CO 8
				Min M_z	-46.00	2.74	-0.00	0.00	0.00	-0.02	CO 9
		23	1.000	Max N	-21.00	1.16	0.00	0.00	0.00	-1.17	CO 6
				Min N	-45.30	3.64	0.00	0.00	0.00	-2.70	CO 10
				Max V_y	-38.30	3.76	0.00	0.00	0.00	-2.19	CO 8
				Min V_y	-21.00	1.16	0.00	0.00	0.00	-1.17	CO 6
				Max V_z	-21.00	1.16	0.00	0.00	0.00	-1.17	CO 6
				Min V_z	-45.00	2.73	-0.00	0.00	-0.00	-2.75	CO 9
				Max M_T	-21.00	1.16	0.00	0.00	0.00	-1.17	CO 6
				Min M_T	-21.00	1.16	0.00	0.00	0.00	-1.17	CO 6
				Max M_y	-21.00	1.16	0.00	0.00	0.00	-1.17	CO 6
				Min M_y	-45.00	2.73	-0.00	0.00	-0.00	-2.75	CO 9
				Max M_z	-21.50	2.64	0.00	0.00	0.00	-1.09	CO 7

4.12 CROSS-SECTIONS - INTERNAL FORCES

Result Combinations

Member No.	RC	Node No.	Location x [m]		Forces [kN] N	Forces [kN] V_y	Forces [kN] V_z	Moments [kNm] M_T	Moments [kNm] M_y	Moments [kNm] M_z	Corresponding Load Cases
21	RC2			Min M_z	-45.00	2.73	-0.00	0.00	-0.00 ▷	-2.75	CO 9
	RC3	22	0.000	Max N	▷ -22.00	1.17	0.00	0.00	0.00	-0.01	CO 11
				Min N	▷ -31.60	1.79	0.00	0.00	0.00	-0.01	CO 14
				Max V_y	-31.60 ▷	1.79	0.00	0.00	0.00	-0.01	CO 14
				Min V_y	-22.00 ▷	1.17	0.00	0.00	0.00	-0.01	CO 11
				Max V_z	-22.00	1.17 ▷	0.00	0.00	0.00	-0.01	CO 11
				Min V_z	-22.10	1.46 ▷	-0.00	0.00	0.00	0.31	CO 12
				Max M_T	-22.00	1.17	0.00 ▷	0.00	0.00	-0.01	CO 11
				Min M_T	-22.00	1.17	0.00 ▷	0.00	0.00	-0.01	CO 11
				Max M_y	-22.00	1.17	0.00	0.00 ▷	0.00	-0.01	CO 11
				Min M_y	-22.00	1.17	0.00	0.00 ▷	0.00	-0.01	CO 11
				Max M_z	-22.10	1.46	-0.00	0.00	0.00 ▷	0.31	CO 12
				Min M_z	-31.60	1.79	0.00	0.00	0.00 ▷	-0.01	CO 14
		23	1.000	Max N	▷ -21.00	1.16	0.00	0.00	0.00	-1.17	CO 11
				Min N	▷ -30.60	1.79	0.00	0.00	0.00	-1.80	CO 14
				Max V_y	-30.60 ▷	1.79	0.00	0.00	0.00	-1.80	CO 14
				Min V_y	-21.00 ▷	1.16	0.00	0.00	0.00	-1.17	CO 11
				Max V_z	-21.00	1.16 ▷	0.00	0.00	0.00	-1.17	CO 11
				Min V_z	-21.00	1.16 ▷	0.00	0.00	0.00	-1.17	CO 11
				Max M_T	-21.00	1.16	0.00 ▷	0.00	0.00	-1.17	CO 11
				Min M_T	-21.00	1.16	0.00 ▷	0.00	0.00	-1.17	CO 11
				Max M_y	-21.00	1.16	0.00	0.00 ▷	0.00	-1.17	CO 11
				Min M_y	-21.00	1.16	0.00	0.00 ▷	0.00	-1.17	CO 11
				Max M_z	-21.10	1.46	0.00	0.00	0.00 ▷	-1.15	CO 12
				Min M_z	-30.60	1.79	0.00	0.00	0.00 ▷	-1.80	CO 14
	RC4	22	0.000	Max N	▷ -22.00	1.17	0.00	0.00	0.00	-0.01	CO 15
				Min N	▷ -26.80	1.48	0.00	0.00	0.00	-0.01	CO 16
				Max V_y	-26.80 ▷	1.48	0.00	0.00	0.00	-0.01	CO 16
				Min V_y	-22.00 ▷	1.17	0.00	0.00	0.00	-0.01	CO 15
				Max V_z	-22.00	1.17 ▷	0.00	0.00	0.00	-0.01	CO 15
				Min V_z	-22.00	1.17 ▷	0.00	0.00	0.00	-0.01	CO 15
				Max M_T	-22.00	1.17	0.00 ▷	0.00	0.00	-0.01	CO 15
				Min M_T	-22.00	1.17	0.00 ▷	0.00	0.00	-0.01	CO 15
				Max M_y	-22.00	1.17	0.00	0.00 ▷	0.00	-0.01	CO 15
				Min M_y	-22.00	1.17	0.00	0.00 ▷	0.00	-0.01	CO 15
				Max M_z	-22.00	1.17	0.00	0.00	0.00 ▷	-0.01	CO 15
				Min M_z	-26.80	1.48	0.00	0.00	0.00 ▷	-0.01	CO 16
		23	1.000	Max N	▷ -21.00	1.16	0.00	0.00	0.00	-1.17	CO 15
				Min N	▷ -25.80	1.47	0.00	0.00	0.00	-1.48	CO 16
				Max V_y	-25.80 ▷	1.47	0.00	0.00	0.00	-1.48	CO 16
				Min V_y	-21.00 ▷	1.16	0.00	0.00	0.00	-1.17	CO 15
				Max V_z	-21.00	1.16 ▷	0.00	0.00	0.00	-1.17	CO 15
				Min V_z	-21.00	1.16 ▷	0.00	0.00	0.00	-1.17	CO 15
				Max M_T	-21.00	1.16	0.00 ▷	0.00	0.00	-1.17	CO 15
				Min M_T	-21.00	1.16	0.00 ▷	0.00	0.00	-1.17	CO 15
				Max M_y	-21.00	1.16	0.00	0.00 ▷	0.00	-1.17	CO 15
				Min M_y	-21.00	1.16	0.00	0.00 ▷	0.00	-1.17	CO 15
				Max M_z	-21.00	1.16	0.00	0.00	0.00 ▷	-1.17	CO 15
				Min M_z	-25.80	1.47	0.00	0.00	0.00 ▷	-1.48	CO 16
22	RC1	23	0.000	Max N	▷ -24.90	3.57	0.00	0.00	0.00	-1.22	CO 2
				Min N	▷ -60.61	5.08	0.00	0.00	0.00	-3.66	CO 5
				Max V_y	-50.11 ▷	5.27	0.00	0.00	0.00	-2.89	CO 3
				Min V_y	-28.35 ▷	1.57	0.00	0.00	0.00	-1.58	CO 1

4.12 CROSS-SECTIONS - INTERNAL FORCES

Result Combinations

Member No.	RC	Node No.	Location x [m]		Forces [kN] N		V_y		V_z	Moments [kNm] M_T		M_y		M_z	Corresponding Load Cases
22	RC1			Max V_z	-28.35		1.57	▷	0.00	0.00		0.00		-1.58	CO 1
				Min V_z	-28.35		1.57	▷	0.00	0.00		0.00		-1.58	CO 1
				Max M_T	-28.35		1.57		0.00	▷ 0.00		0.00		-1.58	CO 1
				Min M_T	-28.35		1.57		0.00	▷ 0.00		0.00		-1.58	CO 1
				Max M_y	-28.35		1.57		0.00	0.00	▷	0.00		-1.58	CO 1
				Min M_y	-28.35		1.57		0.00	0.00	▷	0.00		-1.58	CO 1
				Max M_z	-24.90		3.57		0.00	0.00		0.00	▷	-1.22	CO 2
				Min M_z	-60.15		3.69		0.00	0.00		0.00	▷	-3.74	CO 4
		24	1.000	Max N	▷ -23.75		3.55		0.00	0.00		0.00		-4.78	CO 2
				Min N	▷ -59.46		5.00		0.00	0.00		0.00		-8.71	CO 5
				Max V_y	-48.96	▷	5.21		0.00	0.00		0.00		-8.13	CO 3
				Min V_y	-27.00	▷	1.56		0.00	0.00		0.00		-3.15	CO 1
				Max V_z	-27.00		1.56	▷	0.00	0.00		0.00		-3.15	CO 1
				Min V_z	-27.00		1.56	▷	0.00	0.00		0.00		-3.15	CO 1
				Max M_T	-27.00		1.56		0.00	▷ 0.00		0.00		-3.15	CO 1
				Min M_T	-27.00		1.56		0.00	▷ 0.00		0.00		-3.15	CO 1
				Max M_y	-27.00		1.56		0.00	0.00	▷	0.00		-3.15	CO 1
				Min M_y	-27.00		1.56		0.00	0.00	▷	0.00		-3.15	CO 1
				Max M_z	-27.00		1.56		0.00	0.00		0.00	▷	-3.15	CO 1
				Min M_z	-59.46		5.00		0.00	0.00		0.00	▷	-8.71	CO 5
	RC2	23	0.000	Max N	▷ -21.00		1.16		0.00	0.00		0.00		-1.17	CO 6
				Min N	▷ -45.30		3.64		0.00	0.00		0.00		-2.70	CO 10
				Max V_y	-38.30	▷	3.76		0.00	0.00		0.00		-2.19	CO 8
				Min V_y	-21.00	▷	1.16		0.00	0.00		0.00		-1.17	CO 6
				Max V_z	-21.00		1.16	▷	0.00	0.00		0.00		-1.17	CO 6
				Min V_z	-45.00		2.73	▷	-0.00	0.00		-0.00		-2.75	CO 9
				Max M_T	-21.00		1.16		0.00	▷ 0.00		0.00		-1.17	CO 6
				Min M_T	-21.00		1.16		0.00	▷ 0.00		0.00		-1.17	CO 6
				Max M_y	-21.00		1.16		0.00	0.00	▷	0.00		-1.17	CO 6
				Min M_y	-45.00		2.73		-0.00	0.00	▷	-0.00		-2.75	CO 9
				Max M_z	-21.50		2.64		0.00	0.00		0.00	▷	-1.09	CO 7
				Min M_z	-45.00		2.73		-0.00	0.00		-0.00	▷	-2.75	CO 9
		24	1.000	Max N	▷ -20.00		1.15		0.00	0.00		0.00		-2.33	CO 6
				Min N	▷ -44.31		3.59		-0.00	0.00		-0.00		-6.32	CO 10
				Max V_y	-37.31	▷	3.73		0.00	0.00		0.00		-5.94	CO 8
				Min V_y	-20.00	▷	1.15		0.00	0.00		0.00		-2.33	CO 6
				Max V_z	-20.00		1.15	▷	0.00	0.00		0.00		-2.33	CO 6
				Min V_z	-44.31		3.59	▷	-0.00	0.00		-0.00		-6.32	CO 10
				Max M_T	-20.00		1.15		0.00	▷ 0.00		0.00		-2.33	CO 6
				Min M_T	-20.00		1.15		0.00	▷ 0.00		0.00		-2.33	CO 6
				Max M_y	-20.00		1.15		0.00	0.00	▷	0.00		-2.33	CO 6
				Min M_y	-44.31		3.59		-0.00	0.00	▷	-0.00		-6.32	CO 10
				Max M_z	-20.00		1.15		0.00	0.00		0.00	▷	-2.33	CO 6
				Min M_z	-44.31		3.59		-0.00	0.00		-0.00	▷	-6.32	CO 10
	RC3	23	0.000	Max N	▷ -21.00		1.16		0.00	0.00		0.00		-1.17	CO 11
				Min N	▷ -30.60		1.79		0.00	0.00		0.00		-1.80	CO 14
				Max V_y	-30.60	▷	1.79		0.00	0.00		0.00		-1.80	CO 14
				Min V_y	-21.00	▷	1.16		0.00	0.00		0.00		-1.17	CO 11
				Max V_z	-21.00		1.16	▷	0.00	0.00		0.00		-1.17	CO 11
				Min V_z	-21.00		1.16	▷	0.00	0.00		0.00		-1.17	CO 11
				Max M_T	-21.00		1.16		0.00	▷ 0.00		0.00		-1.17	CO 11
				Min M_T	-21.00		1.16		0.00	▷ 0.00		0.00		-1.17	CO 11
				Max M_y	-21.00		1.16		0.00	0.00	▷	0.00		-1.17	CO 11

Student Version

4.12 CROSS-SECTIONS - INTERNAL FORCES

Result Combinations

Member No.	RC	Node No.	Location x [m]		Forces [kN] N	V_y	V_z	Moments [kNm] M_T	M_y	M_z	Corresponding Load Cases
22	RC3			Min M_y	-21.00	1.16	0.00	0.00	0.00	-1.17	CO 11
				Max M_z	-21.10	1.46	0.00	0.00	0.00	-1.15	CO 12
				Min M_z	-30.60	1.79	0.00	0.00	0.00	-1.80	CO 14
		24	1.000	Max N	-20.00	1.15	0.00	0.00	0.00	-2.33	CO 11
				Min N	-29.60	1.77	0.00	0.00	0.00	-3.58	CO 14
				Max V_y	-29.60	1.77	0.00	0.00	0.00	-3.58	CO 14
				Min V_y	-20.00	1.15	0.00	0.00	0.00	-2.33	CO 11
				Max V_z	-20.00	1.15	0.00	0.00	0.00	-2.33	CO 11
				Min V_z	-20.00	1.15	0.00	0.00	0.00	-2.33	CO 11
				Max M_T	-20.00	1.15	0.00	0.00	0.00	-2.33	CO 11
				Min M_T	-20.00	1.15	0.00	0.00	0.00	-2.33	CO 11
				Max M_y	-20.00	1.15	0.00	0.00	0.00	-2.33	CO 11
				Min M_y	-20.00	1.15	0.00	0.00	0.00	-2.33	CO 11
				Max M_z	-20.00	1.15	0.00	0.00	0.00	-2.33	CO 11
				Min M_z	-29.60	1.77	0.00	0.00	0.00	-3.58	CO 14
	RC4	23	0.000	Max N	-21.00	1.16	0.00	0.00	0.00	-1.17	CO 15
				Min N	-25.80	1.47	0.00	0.00	0.00	-1.48	CO 16
				Max V_y	-25.80	1.47	0.00	0.00	0.00	-1.48	CO 16
				Min V_y	-21.00	1.16	0.00	0.00	0.00	-1.17	CO 15
				Max V_z	-21.00	1.16	0.00	0.00	0.00	-1.17	CO 15
				Min V_z	-21.00	1.16	0.00	0.00	0.00	-1.17	CO 15
				Max M_T	-21.00	1.16	0.00	0.00	0.00	-1.17	CO 15
				Min M_T	-21.00	1.16	0.00	0.00	0.00	-1.17	CO 15
				Max M_y	-21.00	1.16	0.00	0.00	0.00	-1.17	CO 15
				Min M_y	-21.00	1.16	0.00	0.00	0.00	-1.17	CO 15
				Max M_z	-21.00	1.16	0.00	0.00	0.00	-1.17	CO 15
				Min M_z	-25.80	1.47	0.00	0.00	0.00	-1.48	CO 16
		24	1.000	Max N	-20.00	1.15	0.00	0.00	0.00	-2.33	CO 15
				Min N	-24.80	1.46	0.00	0.00	0.00	-2.95	CO 16
				Max V_y	-24.80	1.46	0.00	0.00	0.00	-2.95	CO 16
				Min V_y	-20.00	1.15	0.00	0.00	0.00	-2.33	CO 15
				Max V_z	-20.00	1.15	0.00	0.00	0.00	-2.33	CO 15
				Min V_z	-20.00	1.15	0.00	0.00	0.00	-2.33	CO 15
				Max M_T	-20.00	1.15	0.00	0.00	0.00	-2.33	CO 15
				Min M_T	-20.00	1.15	0.00	0.00	0.00	-2.33	CO 15
				Max M_y	-20.00	1.15	0.00	0.00	0.00	-2.33	CO 15
				Min M_y	-20.00	1.15	0.00	0.00	0.00	-2.33	CO 15
				Max M_z	-20.00	1.15	0.00	0.00	0.00	-2.33	CO 15
				Min M_z	-24.80	1.46	0.00	0.00	0.00	-2.95	CO 16
23	RC1	24	0.000	Max N	-23.75	3.55	0.00	0.00	0.00	-4.78	CO 2
				Min N	-59.46	5.00	0.00	0.00	0.00	-8.71	CO 5
				Max V_y	-48.96	5.21	0.00	0.00	0.00	-8.13	CO 3
				Min V_y	-27.00	1.56	0.00	0.00	0.00	-3.15	CO 1
				Max V_z	-27.00	1.56	0.00	0.00	0.00	-3.15	CO 1
				Min V_z	-27.00	1.56	0.00	0.00	0.00	-3.15	CO 1
				Max M_T	-27.00	1.56	0.00	0.00	0.00	-3.15	CO 1
				Min M_T	-27.00	1.56	0.00	0.00	0.00	-3.15	CO 1
				Max M_y	-27.00	1.56	0.00	0.00	0.00	-3.15	CO 1
				Min M_y	-27.00	1.56	0.00	0.00	0.00	-3.15	CO 1
				Max M_z	-27.00	1.56	0.00	0.00	0.00	-3.15	CO 1
				Min M_z	-59.46	5.00	0.00	0.00	0.00	-8.71	CO 5
		25	1.000	Max N	-22.60	3.52	-0.00	0.00	-0.00	-8.32	CO 2
				Min N	-58.33	4.87	-0.00	0.00	-0.00	-13.65	CO 5

Student Version

4.12 CROSS-SECTIONS - INTERNAL FORCES

Result Combinations

Member No.	RC	Node No.	Location x [m]		Forces [kN] N		V_y		V_z	Moments [kNm] M_T		M_y		M_z	Corresponding Load Cases
23	RC1			Max V_y	-47.83	▷	5.10		0.00	0.00		0.00		-13.29	CO 3
				Min V_y	-25.65	▷	1.54		0.00	0.00		0.00		-4.70	CO 1
				Max V_z	-25.65		1.54	▷	0.00	0.00		0.00		-4.70	CO 1
				Min V_z	-58.33		4.87	▷	-0.00	0.00		-0.00		-13.65	CO 5
				Max M_T	-25.65		1.54		0.00	▷ 0.00		0.00		-4.70	CO 1
				Min M_T	-25.65		1.54		0.00	▷ 0.00		0.00		-4.70	CO 1
				Max M_y	-25.65		1.54		0.00	0.00	▷	0.00		-4.70	CO 1
				Min M_y	-58.33		4.87		-0.00	0.00	▷	-0.00		-13.65	CO 5
				Max M_z	-25.65		1.54		0.00	0.00		0.00	▷	-4.70	CO 1
				Min M_z	-58.33		4.87		-0.00	0.00		-0.00	▷	-13.65	CO 5
	RC2	24	0.000	Max N	▷ -20.00		1.15		0.00	0.00		0.00		-2.33	CO 6
				Min N	▷ -44.31		3.59		-0.00	0.00		-0.00		-6.32	CO 10
				Max V_y	-37.31	▷	3.73		0.00	0.00		0.00		-5.94	CO 8
				Min V_y	-20.00	▷	1.15		0.00	0.00		0.00		-2.33	CO 6
				Max V_z	-20.00		1.15	▷	0.00	0.00		0.00		-2.33	CO 6
				Min V_z	-44.31		3.59	▷	-0.00	0.00		-0.00		-6.32	CO 10
				Max M_T	-20.00		1.15		0.00	▷ 0.00		0.00		-2.33	CO 6
				Min M_T	-20.00		1.15		0.00	▷ 0.00		0.00		-2.33	CO 6
				Max M_y	-20.00		1.15		0.00	0.00	▷	0.00		-2.33	CO 6
				Min M_y	-44.31		3.59		-0.00	0.00	▷	-0.00		-6.32	CO 10
				Max M_z	-20.00		1.15		0.00	0.00		0.00	▷	-2.33	CO 6
				Min M_z	-44.31		3.59		-0.00	0.00		-0.00	▷	-6.32	CO 10
		25	1.000	Max N	▷ -19.00		1.14		-0.00	0.00		-0.00		-3.48	CO 6
				Min N	▷ -43.31		3.52		0.00	0.00		0.00		-9.88	CO 10
				Max V_y	-36.31	▷	3.67		0.00	0.00		0.00		-9.64	CO 8
				Min V_y	-19.00	▷	1.14		-0.00	0.00		-0.00		-3.48	CO 6
				Max V_z	-19.50		2.61	▷	0.00	0.00		0.00		-6.35	CO 7
				Min V_z	-19.00		1.14	▷	-0.00	0.00		-0.00		-3.48	CO 6
				Max M_T	-19.00		1.14		-0.00	▷ 0.00		-0.00		-3.48	CO 6
				Min M_T	-19.00		1.14		-0.00	▷ 0.00		-0.00		-3.48	CO 6
				Max M_y	-19.50		2.61		0.00	0.00	▷	0.00		-6.35	CO 7
				Min M_y	-19.00		1.14		-0.00	0.00	▷	-0.00		-3.48	CO 6
				Max M_z	-19.00		1.14		-0.00	0.00		-0.00	▷	-3.48	CO 6
				Min M_z	-43.31		3.52		0.00	0.00		0.00	▷	-9.88	CO 10
	RC3	24	0.000	Max N	▷ -20.00		1.15		0.00	0.00		0.00		-2.33	CO 11
				Min N	▷ -29.60		1.77		0.00	0.00		0.00		-3.58	CO 14
				Max V_y	-29.60	▷	1.77		0.00	0.00		0.00		-3.58	CO 14
				Min V_y	-20.00	▷	1.15		0.00	0.00		0.00		-2.33	CO 11
				Max V_z	-20.00		1.15	▷	0.00	0.00		0.00		-2.33	CO 11
				Min V_z	-20.00		1.15	▷	0.00	0.00		0.00		-2.33	CO 11
				Max M_T	-20.00		1.15		0.00	▷ 0.00		0.00		-2.33	CO 11
				Min M_T	-20.00		1.15		0.00	▷ 0.00		0.00		-2.33	CO 11
				Max M_y	-20.00		1.15		0.00	0.00	▷	0.00		-2.33	CO 11
				Min M_y	-20.00		1.15		0.00	0.00	▷	0.00		-2.33	CO 11
				Max M_z	-20.00		1.15		0.00	0.00		0.00	▷	-2.33	CO 11
				Min M_z	-29.60		1.77		0.00	0.00		0.00	▷	-3.58	CO 14
		25	1.000	Max N	▷ -19.00		1.14		-0.00	0.00		-0.00		-3.48	CO 11
				Min N	▷ -28.60		1.74		0.00	0.00		0.00		-5.34	CO 14
				Max V_y	-28.60	▷	1.74		0.00	0.00		0.00		-5.34	CO 14
				Min V_y	-19.00	▷	1.14		-0.00	0.00		-0.00		-3.48	CO 11
				Max V_z	-19.10		1.44	▷	0.00	0.00		0.00		-4.05	CO 12
				Min V_z	-19.00		1.14	▷	-0.00	0.00		-0.00		-3.48	CO 11
				Max M_T	-19.00		1.14		-0.00	▷ 0.00		-0.00		-3.48	CO 11

Student Version

4.12 CROSS-SECTIONS - INTERNAL FORCES

Result Combinations

Member No.	RC	Node No.	Location x [m]		Forces [kN] N		V_y		V_z	Moments [kNm] M_T		M_y		M_z	Corresponding Load Cases
23	RC3			Min M_T	-19.00		1.14		-0.00	▷ 0.00		-0.00		-3.48	CO 11
				Max M_y	-19.10		1.44		0.00	0.00	▷	0.00		-4.05	CO 12
				Min M_y	-19.00		1.14		-0.00	0.00	▷	-0.00		-3.48	CO 11
				Max M_z	-19.00		1.14		-0.00	0.00		-0.00	▷	-3.48	CO 11
				Min M_z	-28.60		1.74		0.00	0.00		0.00	▷	-5.34	CO 14
	RC4	24	0.000	Max N	▷ -20.00		1.15		0.00	0.00		0.00		-2.33	CO 15
				Min N	▷ -24.80		1.46		0.00	0.00		0.00		-2.95	CO 16
				Max V_y	-24.80	▷	1.46		0.00	0.00		0.00		-2.95	CO 16
				Min V_y	-20.00	▷	1.15		0.00	0.00		0.00		-2.33	CO 15
				Max V_z	-20.00		1.15	▷	0.00	0.00		0.00		-2.33	CO 15
				Min V_z	-20.00		1.15	▷	0.00	0.00		0.00		-2.33	CO 15
				Max M_T	-20.00		1.15		0.00	▷ 0.00		0.00		-2.33	CO 15
				Min M_T	-20.00		1.15		0.00	▷ 0.00		0.00		-2.33	CO 15
				Max M_y	-20.00		1.15		0.00	0.00	▷	0.00		-2.33	CO 15
				Min M_y	-20.00		1.15		0.00	0.00	▷	0.00		-2.33	CO 15
				Max M_z	-20.00		1.15		0.00	0.00		0.00	▷	-2.33	CO 15
				Min M_z	-24.80		1.46		0.00	0.00		0.00	▷	-2.95	CO 16
		25	1.000	Max N	▷ -19.00		1.14		-0.00	0.00		-0.00		-3.48	CO 15
				Min N	▷ -23.80		1.44		0.00	0.00		0.00		-4.41	CO 16
				Max V_y	-23.80	▷	1.44		0.00	0.00		0.00		-4.41	CO 16
				Min V_y	-19.00	▷	1.14		-0.00	0.00		-0.00		-3.48	CO 15
				Max V_z	-23.80		1.44	▷	0.00	0.00		0.00		-4.41	CO 16
				Min V_z	-19.00		1.14	▷	-0.00	0.00		-0.00		-3.48	CO 15
				Max M_T	-19.00		1.14		-0.00	▷ 0.00		-0.00		-3.48	CO 15
				Min M_T	-19.00		1.14		-0.00	▷ 0.00		-0.00		-3.48	CO 15
				Max M_y	-23.80		1.44		0.00	0.00	▷	0.00		-4.41	CO 16
				Min M_y	-19.00		1.14		-0.00	0.00	▷	-0.00		-3.48	CO 15
				Max M_z	-19.00		1.14		-0.00	0.00		-0.00	▷	-3.48	CO 15
				Min M_z	-23.80		1.44		0.00	0.00		0.00	▷	-4.41	CO 16
24	RC1	25	0.000	Max N	▷ -22.60		3.52		-0.00	0.00		-0.00		-8.32	CO 2
				Min N	▷ -58.33		4.87		-0.00	0.00		-0.00		-13.65	CO 5
				Max V_y	-47.83	▷	5.10		0.00	0.00		0.00		-13.29	CO 3
				Min V_y	-25.65	▷	1.54		0.00	0.00		0.00		-4.70	CO 1
				Max V_z	-25.65		1.54	▷	0.00	0.00		0.00		-4.70	CO 1
				Min V_z	-58.33		4.87	▷	-0.00	0.00		-0.00		-13.65	CO 5
				Max M_T	-25.65		1.54		0.00	▷ 0.00		0.00		-4.70	CO 1
				Min M_T	-25.65		1.54		0.00	▷ 0.00		0.00		-4.70	CO 1
				Max M_y	-25.65		1.54		0.00	0.00	▷	0.00		-4.70	CO 1
				Min M_y	-58.33		4.87		-0.00	0.00	▷	-0.00		-13.65	CO 5
				Max M_z	-25.65		1.54		0.00	0.00		0.00	▷	-4.70	CO 1
				Min M_z	-58.33		4.87		-0.00	0.00		-0.00	▷	-13.65	CO 5
		3	1.000	Max N	▷ -21.46		3.47		-0.00	0.00		-0.00		-11.81	CO 2
				Min N	▷ -57.19		4.68		0.00	0.00		0.00		-18.42	CO 5
				Max V_y	-46.69	▷	4.95		-0.00	0.00		-0.00		-18.32	CO 3
				Min V_y	-24.30	▷	1.51		0.00	0.00		0.00		-6.22	CO 1
				Max V_z	-24.30		1.51	▷	0.00	0.00		0.00		-6.22	CO 1
				Min V_z	-46.69		4.95	▷	-0.00	0.00		-0.00		-18.32	CO 3
				Max M_T	-24.30		1.51		0.00	▷ 0.00		0.00		-6.22	CO 1
				Min M_T	-24.30		1.51		0.00	▷ 0.00		0.00		-6.22	CO 1
				Max M_y	-24.30		1.51		0.00	0.00	▷	0.00		-6.22	CO 1
				Min M_y	-46.69		4.95		-0.00	0.00	▷	-0.00		-18.32	CO 3
				Max M_z	-24.30		1.51		0.00	0.00		0.00	▷	-6.22	CO 1
				Min M_z	-57.19		4.68		0.00	0.00		0.00	▷	-18.42	CO 5

4.12 CROSS-SECTIONS - INTERNAL FORCES

Result Combinations

Member No.	RC	Node No.	Location x [m]		Forces [kN] N		V_y		V_z	Moments [kNm] M_T		M_y		M_z	Corresponding Load Cases
24	RC2	25	0.000	Max N	▷	-19.00	1.14		-0.00	0.00		-0.00		-3.48	CO 6
				Min N	▷	-43.31	3.52		0.00	0.00		0.00		-9.88	CO 10
				Max V_y		-36.31	▷ 3.67		0.00	0.00		0.00		-9.64	CO 8
				Min V_y		-19.00	▷ 1.14		-0.00	0.00		-0.00		-3.48	CO 6
				Max V_z		-19.50	2.61	▷	0.00	0.00		0.00		-6.35	CO 7
				Min V_z		-19.00	1.14	▷	-0.00	0.00		-0.00		-3.48	CO 6
				Max M_T		-19.00	1.14		-0.00	▷ 0.00		-0.00		-3.48	CO 6
				Min M_T		-19.00	1.14		-0.00	▷ 0.00		-0.00		-3.48	CO 6
				Max M_y		-19.50	2.61		0.00	0.00	▷	0.00		-6.35	CO 7
				Min M_y		-19.00	1.14		-0.00	0.00	▷	-0.00		-3.48	CO 6
				Max M_z		-19.00	1.14		-0.00	0.00		-0.00	▷	-3.48	CO 6
				Min M_z		-43.31	3.52		0.00	0.00		0.00	▷	-9.88	CO 10
		3	1.000	Max N	▷	-18.00	1.13		0.00	0.00		0.00		-4.61	CO 6
				Min N	▷	-42.32	3.42		0.00	0.00		0.00		-13.35	CO 10
				Max V_y		-35.32	▷ 3.59		0.00	0.00		0.00		-13.27	CO 8
				Min V_y		-18.00	▷ 1.13		0.00	0.00		0.00		-4.61	CO 6
				Max V_z		-18.00	1.13	▷	0.00	0.00		0.00		-4.61	CO 6
				Min V_z		-18.00	1.13	▷	0.00	0.00		0.00		-4.61	CO 6
				Max M_T		-18.00	1.13		0.00	▷ 0.00		0.00		-4.61	CO 6
				Min M_T		-18.00	1.13		0.00	▷ 0.00		0.00		-4.61	CO 6
				Max M_y		-18.00	1.13		0.00	0.00	▷	0.00		-4.61	CO 6
				Min M_y		-18.00	1.13		0.00	0.00	▷	0.00		-4.61	CO 6
				Max M_z		-18.00	1.13		0.00	0.00		0.00	▷	-4.61	CO 6
				Min M_z		-42.32	3.42		0.00	0.00		0.00	▷	-13.35	CO 10
	RC3	25	0.000	Max N	▷	-19.00	1.14		-0.00	0.00		-0.00		-3.48	CO 11
				Min N	▷	-28.60	1.74		0.00	0.00		0.00		-5.34	CO 14
				Max V_y		-28.60	▷ 1.74		0.00	0.00		0.00		-5.34	CO 14
				Min V_y		-19.00	▷ 1.14		-0.00	0.00		-0.00		-3.48	CO 11
				Max V_z		-19.10	1.44	▷	0.00	0.00		0.00		-4.05	CO 12
				Min V_z		-19.00	1.14	▷	-0.00	0.00		-0.00		-3.48	CO 11
				Max M_T		-19.00	1.14		-0.00	▷ 0.00		-0.00		-3.48	CO 11
				Min M_T		-19.00	1.14		-0.00	▷ 0.00		-0.00		-3.48	CO 11
				Max M_y		-19.10	1.44		0.00	0.00	▷	0.00		-4.05	CO 12
				Min M_y		-19.00	1.14		-0.00	0.00	▷	-0.00		-3.48	CO 11
				Max M_z		-19.00	1.14		-0.00	0.00		-0.00	▷	-3.48	CO 11
				Min M_z		-28.60	1.74		0.00	0.00		0.00	▷	-5.34	CO 14
		3	1.000	Max N	▷	-18.00	1.13		0.00	0.00		0.00		-4.61	CO 11
				Min N	▷	-27.60	1.71		0.00	0.00		0.00		-7.06	CO 14
				Max V_y		-22.90	▷ 1.71		-0.00	0.00		-0.00		-6.71	CO 13
				Min V_y		-18.00	▷ 1.13		0.00	0.00		0.00		-4.61	CO 11
				Max V_z		-18.00	1.13	▷	0.00	0.00		0.00		-4.61	CO 11
				Min V_z		-22.90	1.71	▷	-0.00	0.00		-0.00		-6.71	CO 13
				Max M_T		-18.00	1.13		0.00	▷ 0.00		0.00		-4.61	CO 11
				Min M_T		-18.00	1.13		0.00	▷ 0.00		0.00		-4.61	CO 11
				Max M_y		-18.00	1.13		0.00	0.00	▷	0.00		-4.61	CO 11
				Min M_y		-22.90	1.71		-0.00	0.00	▷	-0.00		-6.71	CO 13
				Max M_z		-18.00	1.13		0.00	0.00		0.00	▷	-4.61	CO 11
				Min M_z		-27.60	1.71		0.00	0.00		0.00	▷	-7.06	CO 14
	RC4	25	0.000	Max N	▷	-19.00	1.14		-0.00	0.00		-0.00		-3.48	CO 15
				Min N	▷	-23.80	1.44		0.00	0.00		0.00		-4.41	CO 16
				Max V_y		-23.80	▷ 1.44		0.00	0.00		0.00		-4.41	CO 16
				Min V_y		-19.00	▷ 1.14		-0.00	0.00		-0.00		-3.48	CO 15
				Max V_z		-23.80	1.44	▷	0.00	0.00		0.00		-4.41	CO 16

4.12 CROSS-SECTIONS - INTERNAL FORCES

Result Combinations

Member No.	RC	Node No.	Location x [m]		Forces [kN] N	V_y	V_z	Moments [kNm] M_T	M_y	M_z	Corresponding Load Cases
24	RC4			Min V_z	-19.00	1.14	-0.00	0.00	-0.00	-3.48	CO 15
				Max M_T	-19.00	1.14	-0.00	0.00	-0.00	-3.48	CO 15
				Min M_T	-19.00	1.14	-0.00	0.00	-0.00	-3.48	CO 15
				Max M_y	-23.80	1.44	0.00	0.00	0.00	-4.41	CO 16
				Min M_y	-19.00	1.14	-0.00	0.00	-0.00	-3.48	CO 15
				Max M_z	-19.00	1.14	-0.00	0.00	-0.00	-3.48	CO 15
				Min M_z	-23.80	1.44	0.00	0.00	0.00	-4.41	CO 16
		3	1.000	Max N	-18.00	1.13	0.00	0.00	0.00	-4.61	CO 15
				Min N	-22.80	1.42	-0.00	0.00	-0.00	-5.84	CO 16
				Max V_y	-22.80	1.42	-0.00	0.00	-0.00	-5.84	CO 16
				Min V_y	-18.00	1.13	0.00	0.00	0.00	-4.61	CO 15
				Max V_z	-18.00	1.13	0.00	0.00	0.00	-4.61	CO 15
				Min V_z	-22.80	1.42	-0.00	0.00	-0.00	-5.84	CO 16
				Max M_T	-18.00	1.13	0.00	0.00	0.00	-4.61	CO 15
				Min M_T	-18.00	1.13	0.00	0.00	0.00	-4.61	CO 15
				Max M_y	-18.00	1.13	0.00	0.00	0.00	-4.61	CO 15
				Min M_y	-22.80	1.42	-0.00	0.00	-0.00	-5.84	CO 16
				Max M_z	-18.00	1.13	0.00	0.00	0.00	-4.61	CO 15
				Min M_z	-22.80	1.42	-0.00	0.00	-0.00	-5.84	CO 16

Student version