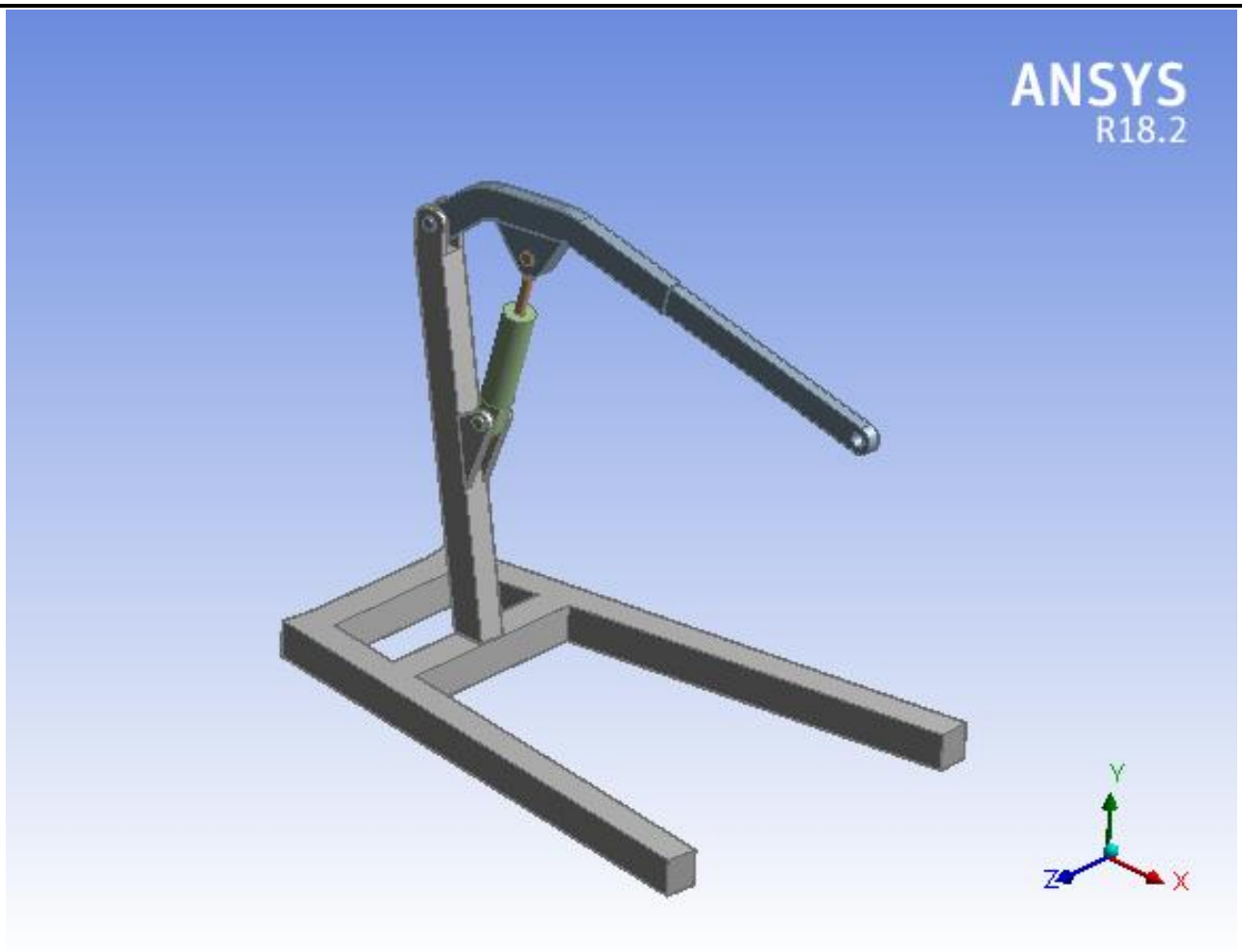
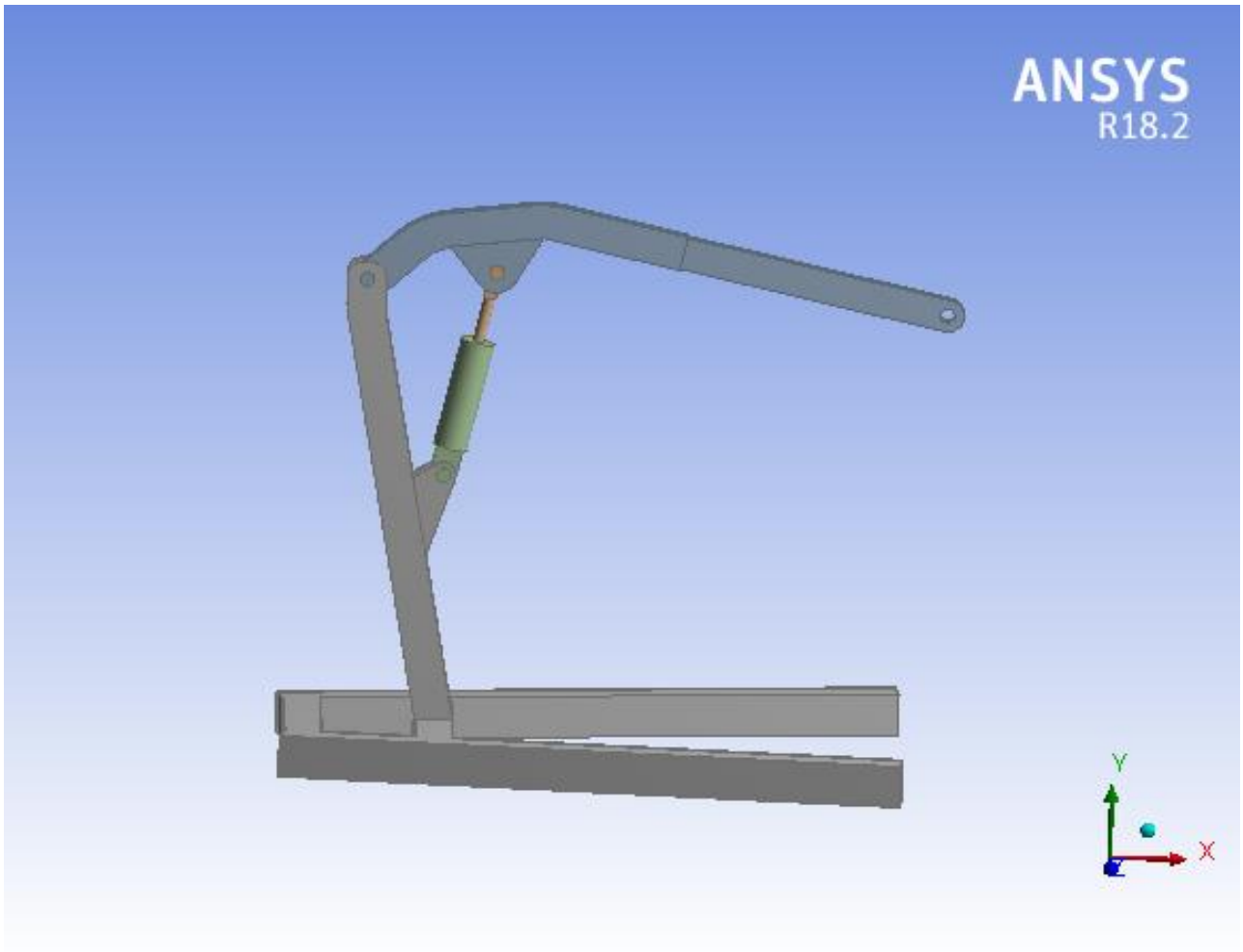
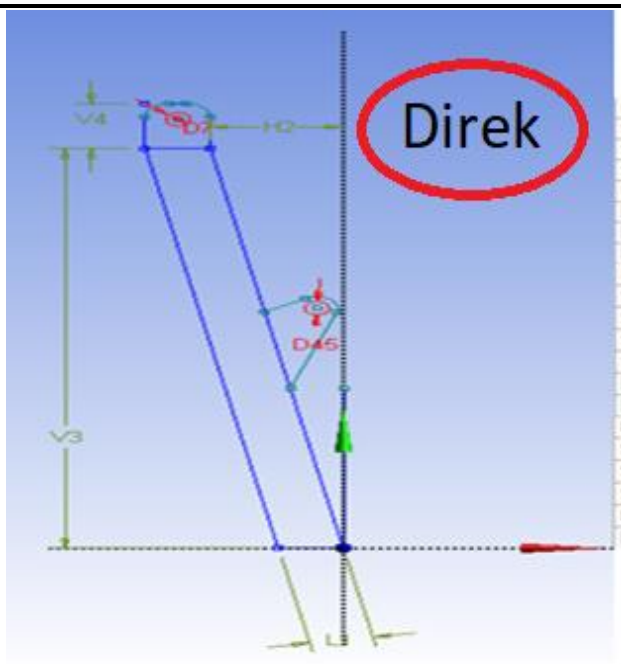
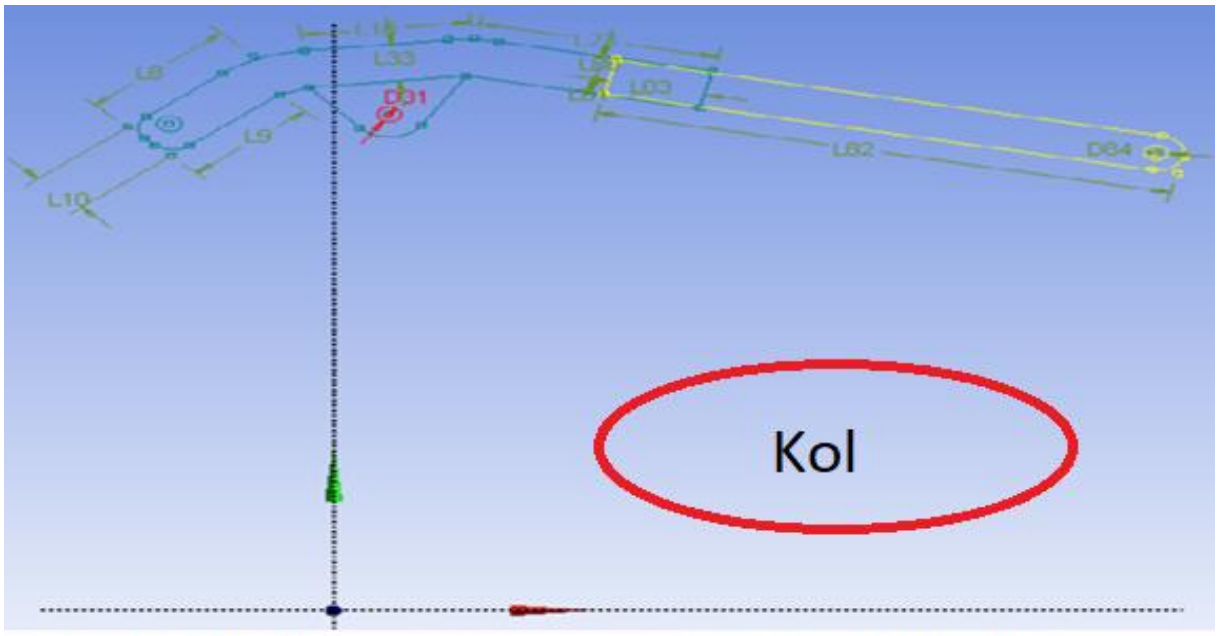

ANSYS
R18.2
Y
Z
X


ANSYS
R18.2
Y
X



Details of Sketch1Direk	
Sketch	Sketch1Direk
Sketch Visibility	Show Sketch
Show Constraints?	No
Dimensions: 3	
H2	270 mm
L1	130 mm
V3	1500 mm
Details of Sketch2KolTutucu	
Sketch	Sketch2KolTutucu
Sketch Visibility	Show Sketch
Show Constraints?	No
Dimensions: 2	
D7	50 mm
V4	170 mm
Details of Sketch5PistonTutucuAlt	
Sketch	Sketch5PistonTutucuAlt
Sketch Visibility	Show Sketch
Show Constraints?	No
Dimensions: 1	
D45	50 mm

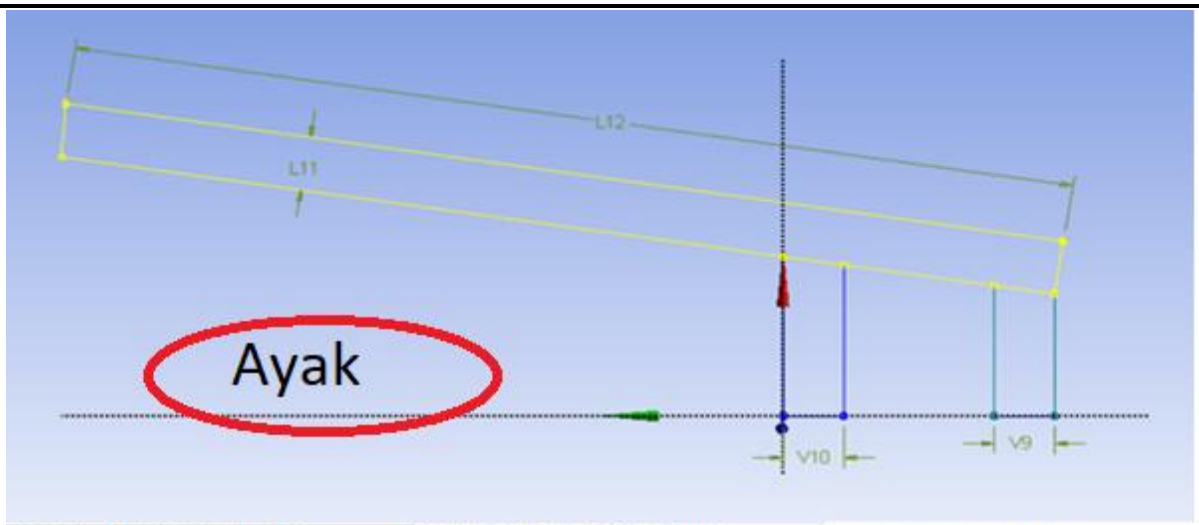


Details of Sketch3Kol1	
Sketch	Sketch3Kol1
Sketch Visibility	Show Sketch
Show Constraints?	No
Dimensions: 9	
L10	130 mm
L18	250 mm
L23	500 mm
L33	122,33 mm
L8	350 mm
L80	5 mm
L81	5 mm
L85	200 mm
L9	300 mm

Details of Sketch4PistonTutucuÜst	
Sketch	Sketch4PistonTutucuÜst
Sketch Visibility	Show Sketch
Show Constraints?	No
Dimensions: 2	
D31	50 mm
L33	122,33 mm

Details of Sketch8Kol2	
Sketch	Sketch8Kol2
Sketch Visibility	Show Sketch
Show Constraints?	No
Dimensions: 5	
D84	50 mm
L80	5 mm
L81	5 mm
L82	1200 mm
L83	200 mm

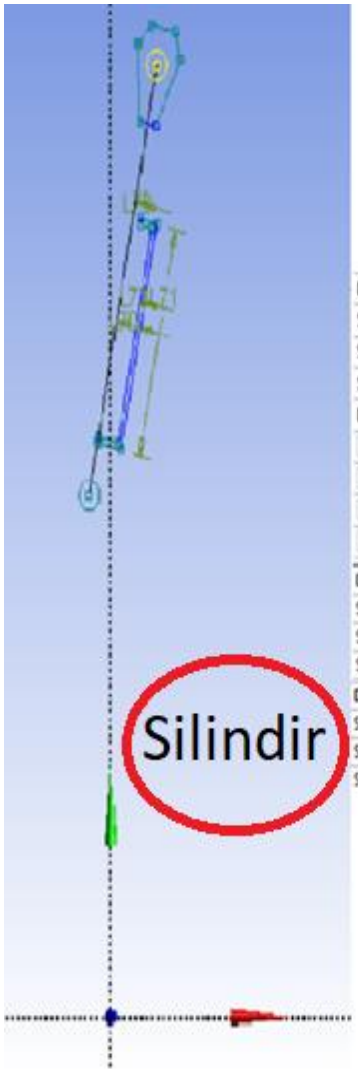
Details of Sketch11Pim1	
Sketch	Sketch11Pim1
Sketch Visibility	Show Sketch
Show Constraints?	No



Details of Sketch9Baglanti1	
Sketch	Sketch9Baglanti1
Sketch Visibility	Show Sketch
Show Constraints?	No
Dimensions: 1	
V9	130 mm

Details of Sketch10Baglanti2	
Sketch	Sketch10Baglanti2
Sketch Visibility	Show Sketch
Show Constraints?	No
Dimensions: 1	
V10	130 mm

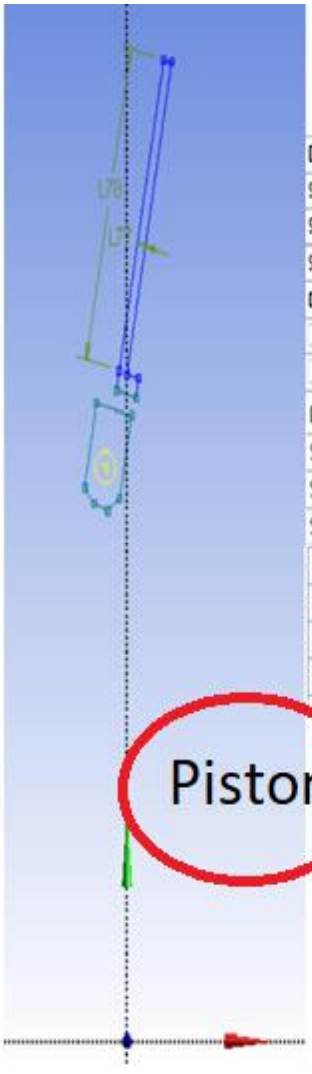
Details of Sketch16Ayak	
Sketch	Sketch16Ayak
Sketch Visibility	Show Sketch
Show Constraints?	No
Dimensions: 2	
L11	130 mm
L12	2175,6 mm



Details of Sketch6Piston	
Sketch	Sketch6Piston
Sketch Visibility	Show Sketch
Show Constraints?	No
Dimensions: 4	
L70	60 mm
L71	400 mm
L72	10 mm
L73	20 mm

Details of Sketch14Tutucu1	
Sketch	Sketch14Tutucu1
Sketch Visibility	Show Sketch
Show Constraints?	No

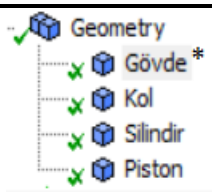
Details of Sketch15Pim2	
Sketch	Sketch15Pim2
Sketch Visibility	Show Sketch
Show Constraints?	No



Details of Sketch7Silindir	
Sketch	Sketch7Silindir
Sketch Visibility	Show Sketch
Show Constraints?	No
Dimensions: 2	
L77	20 mm
L78	500 mm

Details of Sketch12Tutucu2	
Sketch	Sketch12Tutucu2
Sketch Visibility	Show Sketch
Show Constraints?	No

Details of Sketch13Pim3	
Sketch	Sketch13Pim3
Sketch Visibility	Show Sketch
Show Constraints?	No



Details of "Gövde"

Thermal Strain Effects	Yes
Bounding Box	
Properties	
Volume	1,3177e+007 mm³
Mass	103,44 kg
Centroid X	166,31 mm
Centroid Y	188,31 mm
Centroid Z	1,2161e-007 mm
Moment of Inertia ...	3,5447e+007 kg·mm²
Moment of Inertia ...	6,1077e+007 kg·mm²

Details of "Kol"

Thermal Strain Effects	Yes
Bounding Box	
Properties	
Volume	4,5687e+006 mm³
Mass	35,865 kg
Centroid X	521,05 mm
Centroid Y	1690,9 mm
Centroid Z	-2,0669e-008 mm
Moment of Inertia Ip1	2,8773e+005 kg·mm²
Moment of Inertia Ip2	1,3156e+007 kg·mm²

Details of "Silindir"

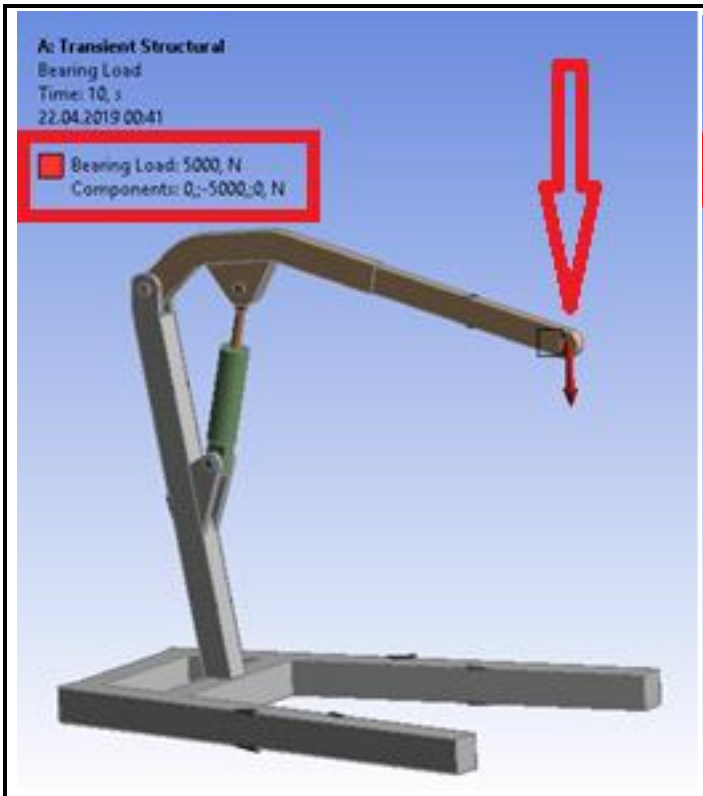
Properties	
Volume	2,4808e+006 mm³
Mass	19,474 kg
Centroid X	-12,504 mm
Centroid Y	1080,3 mm
Centroid Z	2,6202e-007 mm
Moment of Inertia Ip1	5,7282e+005 kg·mm²
Moment of Inertia Ip2	43486 kg·mm²
Moment of Inertia Ip3	5,7182e+005 kg·mm²
Statistics	

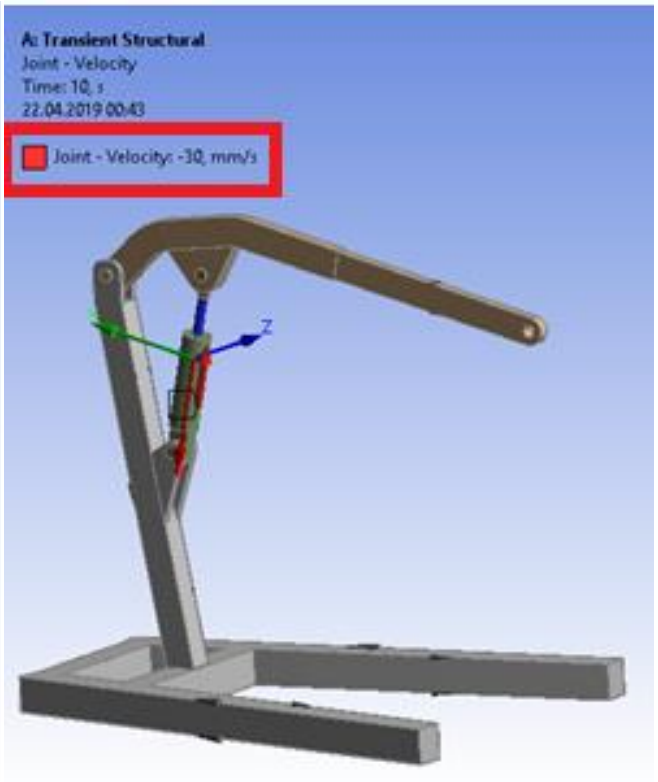
Details of "Piston"

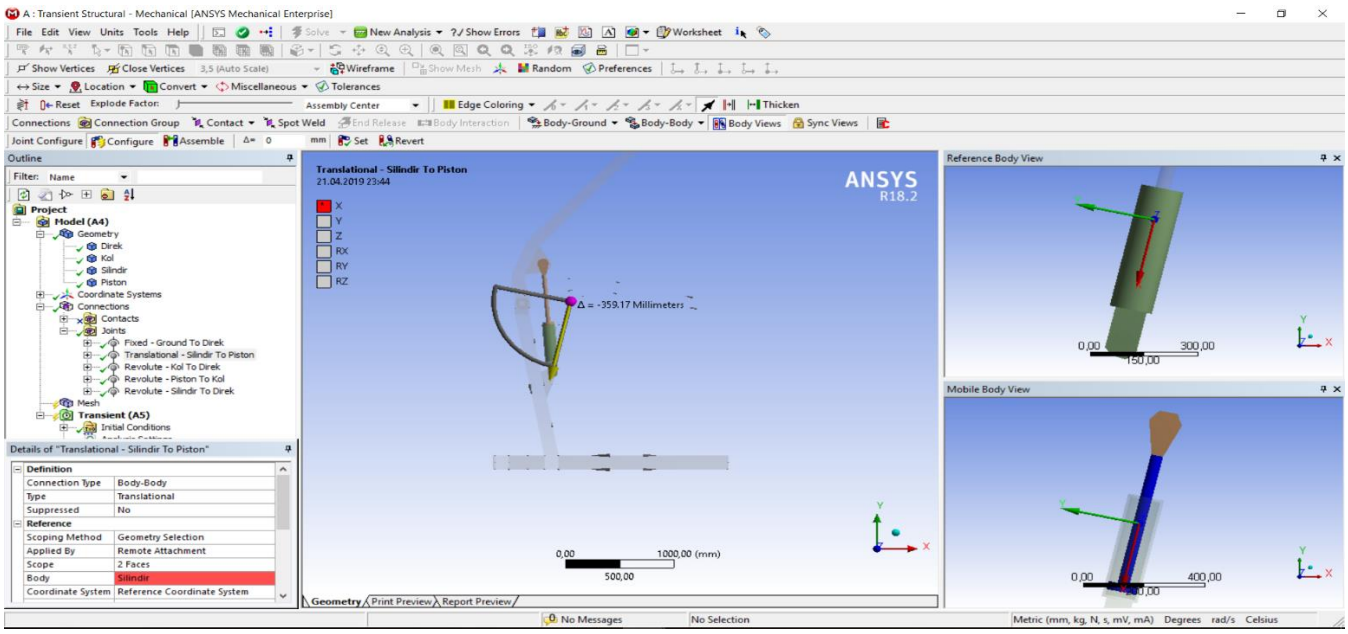
Properties	
Volume	1,2698e+006 mm³
Mass	9,9682 kg
Centroid X	48,499 mm
Centroid Y	1351,5 mm
Centroid Z	-2,4926e-005 mm
Moment of Inertia Ip1	5,8631e+005 kg·mm²
Moment of Inertia Ip2	5706,9 kg·mm²
Moment of Inertia Ip3	5,8669e+005 kg·mm²
Statistics	

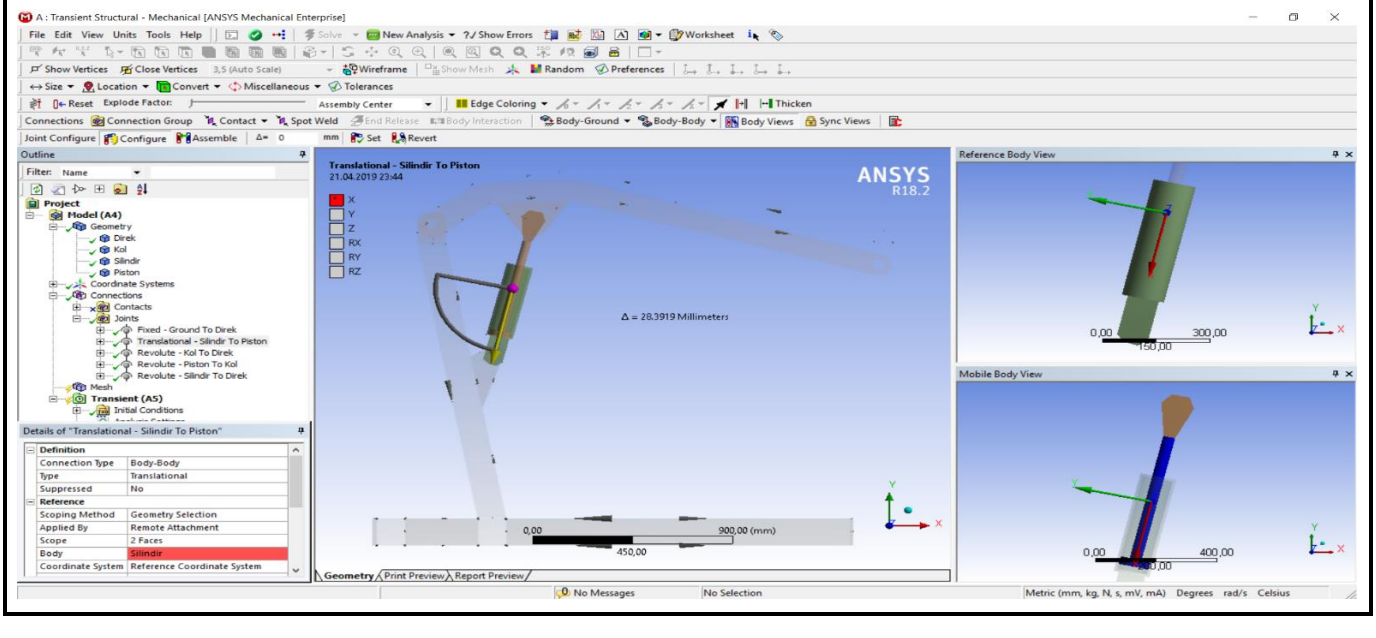
*Gövde,Direk ve Ayak'ın birleşimidir.

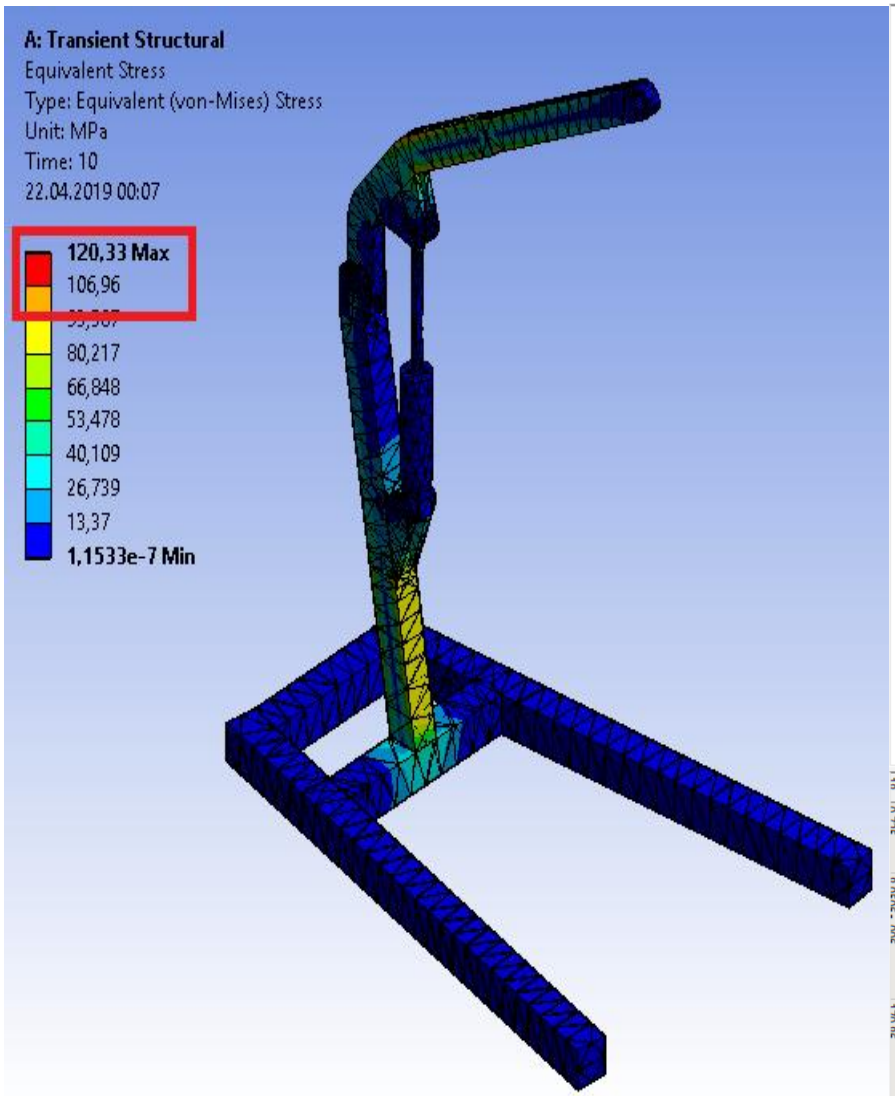
Tasarımın toplam ağırlığı 168,7472kg'dır.

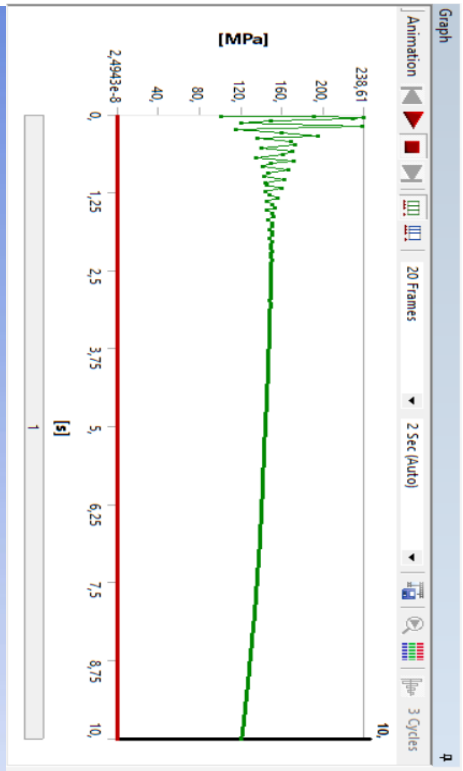

A: Transient Structural
Bearing Load
Time: 10, s
22.04.2019 00:41
Bearing Load: 5000, N
Components: 0,;-5000,;0, N


A: Transient Structural
Joint - Velocity
Time: 10, s
22.04.2019 00:43
Joint - Velocity: -30, mm/s


A : Transient Structural - Mechanical [ANSYS Mechanical Enterprise]
Translational - Silindir To Piston
21.04.2019 23:44
ANSYS
R18.2
Δ = -359.17 Millimeters
Reference Body View
Mobile Body View
Details of "Translational - Silindir To Piston"

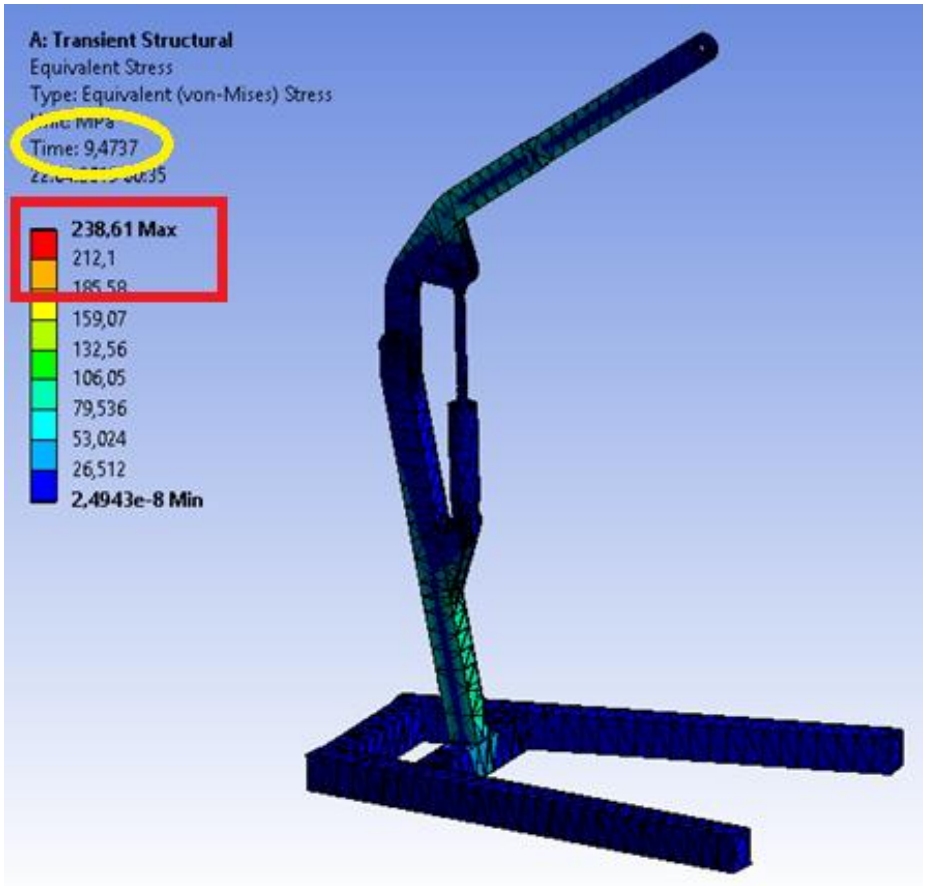

A : Transient Structural - Mechanical [ANSYS Mechanical Enterprise]
Translational - Silindir To Piston
21.04.2019 23:44
ANSYS
R18.2
Δ = 28.3919 Millimeters
Reference Body View
Mobile Body View
Details of "Translational - Silindir To Piston"

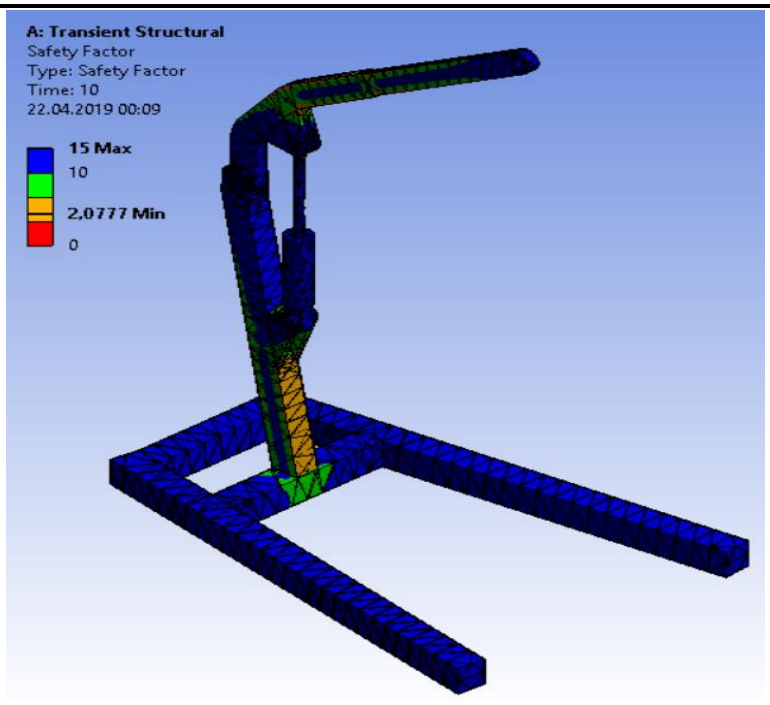


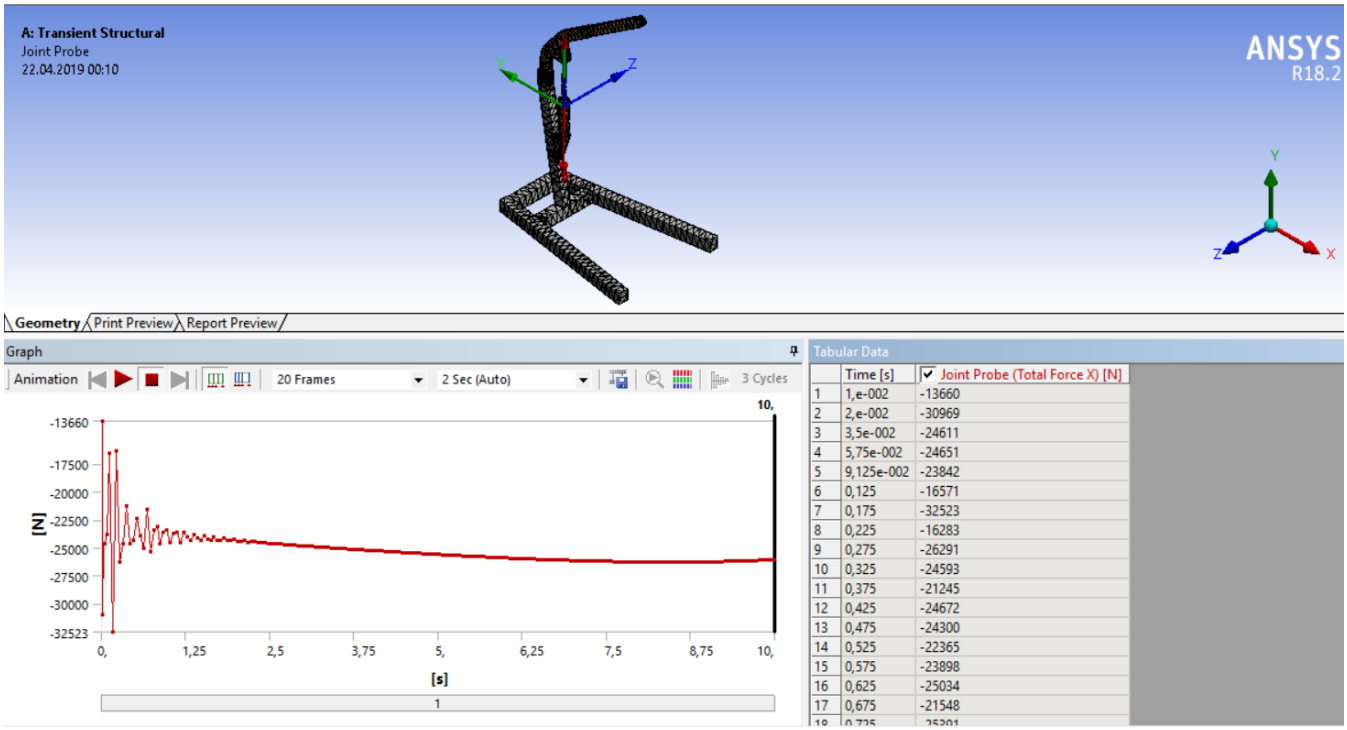


Tabular Data

	Time [s]	Minimum [MPa]	Maximum [MPa]
1	1,e-002	6,1633e-006	100,47
2	2,e-002	9,9915e-006	189,96
3	3,5e-002	1,5372e-005	238,61
4	5,75e-002	3,5429e-005	227,84
5	9,125e-002	1,7159e-005	148,13
6	0,125	1,3625e-005	119,67
7	0,175	1,4029e-005	236,65
8	0,225	7,2576e-006	114,7
9	0,275	4,6134e-006	159,16
10	0,325	2,2118e-005	194,09
11	0,375	1,5079e-005	135,8
12	0,425	6,2663e-006	167,78
13	0,475	8,3141e-006	171,96
14	0,525	8,2593e-006	139,73
15	0,575	8,0042e-006	169,35
16	0,625	2,2009e-006	159,91
17	0,675	3,74e-006	134,69







$$P=F*V \text{ ----> } P=30969*0,03=929,07kW$$

Ölçek	Ad Soyad	CENGİZHAN TOPÇU	KARABÜK ÜNİVERSİTESİ MÜHENDİSLİK FAKÜLTESİ MEKATRONİK MÜHENDİSLİĞİ
	Numara	2017010225048	
	ATÖLYE VİNVİ TASARIMI		