

Nº de ident.: 9842523/95738/ Pieza de articulación de pluma principal: Radio de descarga: 360°

2821-1 Cabeza de pluma principal: 2821-1

2 - Vía ancha Valor de vuelco: Lastre trasero [t]: 114.0 Lastre central [t]: 52.6

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de principa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				20.0 ו		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 5	3.5 m Pl	eza de p umín	lumín				
15.0	78.0	75.3	40.6												
16.0	76.9	75.0	39.9												
18.0	74.7	74.5	31.9												
20.0	72.4	73.9	26.8												
21.3				73.0	73.8	30.1									
22.0	70.2	73.2	23.0	72.2	73.6	30.1									
24.0	67.8	72.4	20.0	69.9	72.9	26.0									
26.0	65.5	71.5	17.5	67.6	72.1	22.2									
28.0	63.1	70.5	15.7	65.2	71.2	19.3									
30.0	61.1	69.6	14.7	62.8	70.2	17.0	25.0	70.4	00.0						
31.0	58.6	00.4	13.5	00.4	69.1	45.5	65.0	70.4 69.9	22.0 21.7						
32.0 34.0	58.6 56.0	68.4 67.1	13.5	60.4 57.9	67.9	15.5 14.0	63.8 61.3	68.9	18.7						
36.0	53.4	65.7	11.5	55.3	66.5	12.8	58.9	67.7	16.7						
38.0	50.6	64.1	10.7	53.1	65.3	11.9	56.4	66.4	15.0						
40.0	47.3	62.0	9.9	50.4	63.7	11.1	53.8	65.0	13.6						
42.0	44.3	60.0	9.2	47.5	61.9	10.2	51.5	63.7	12.8						
42.3		00.0	0.2		01.0		01.0	00	.2.0	55.0	64.3	12.6			
44.0	41.1	57.8	8.5	44.0	59.6	9.5	48.7	62.0	11.9	53.3	63.4	13.1			
46.0	37.7	55.3	7.9	40.8	57.4	8.9	45.7	60.1	10.9	50.6	61.8	11.4			
48.0	34.0	52.5	7.4	37.3	54.8	8.4	42.6	58.0	10.0	47.7	60.0	10.2			
50.0	29.8	49.2	7.0	33.6	52.0	7.9	38.7	55.2	9.4	44.7	58.0	9.1			
55.0	15.6	36.9	5.9	21.8	42.2	6.6	29.0	47.6	7.9	35.8	51.6	7.3			
57.0				16.1	37.2	5.6									
60.0							15.3	35.8	6.0	25.0	42.9	6.1			
60.9													35.0	46.6	8.0
63.0										15.4	34.4	5.4			
65.0													26.7	40.0	7.0
69.0													15.5	30.2	5.4



Nº de ident.: 9842523/95738/ Radio de descarga: 360°

2 - Vía ancha Valor de vuelco: Lastre trasero [t]: 114.0 Lastre central [t]: 52.6 Pieza de articulación de pluma principal: 2821-1 Cabeza de pluma principal: 2821-1

		gulo de principal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				20.0		eza de p	al, Punto dumín (2 n] Posici	316-1) 5	6.5 m Pl	eza de p umín	lumín				
15.6	78.0	78.2	37.5												
16.0	77.6	78.1	37.5												
18.0	75.5	77.6	31.9												
20.0	73.4	77.1	27.6												
22.0	71.3	76.4	22.9												
22.2				73.0	76.7	29.1									
24.0	69.1	75.6	19.8	71.0	76.1	26.6									
26.0	66.9	74.8	17.4	68.8	75.3	22.3									
28.0	64.7	73.9	15.5	66.6	74.5	19.4									
30.0	62.8	73.0	14.6	64.4	73.5	17.0									
32.0 32.3	60.4	71.9	13.7	62.1	72.5	15.4	65.0	73.1	20.4						
32.3 34.0	58.1	70.7	12.4	60.2	71.6	14.2	63.0	73.1	19.2						
36.0	55.6	69.4	11.3	57.8	70.4	12.9	60.8	71.2	16.8						
38.0	53.1	67.9	10.4	55.4	69.0	11.8	58.4	70.0	15.2						
40.0	50.1	66.0	9.8	52.9	67.6	10.9	56.4	68.9	13.8						
42.0	47.4	64.3	9.1	50.2	65.9	10.1	53.9	67.5	12.6						
44.0	44.5	62.3	8.4	47.1	63.8	9.4	51.3	65.9	11.7	55.0	66.8	11.6	i		
46.0	41.5	60.1	7.8	44.2	61.8	8.8	48.6	64.2	10.8	53.0	65.6	11.7	i		
48.0	38.3	57.7	7.3	41.2	59.6	8.2	45.9	62.3	9.9	50.4	64.0	10.3			
50.0	34.9	54.9	6.8	38.0	57.2	7.7	42.4	59.9	9.3	47.7	62.2	9.2			
55.0	24.4	45.9	5.8	28.6	49.4	6.6	34.1	53.4	7.9	39.8	56.6	7.3			
58.0	15.2	37.3	5.2										<u> </u>		
60.0				15.6	37.6	5.0	23.4	44.1	6.6	31.0	49.4	6.1			
62.0							17.4	38.6	6.0						
63.3													35.0	48.4	7.3
65.0										18.6	38.3	5.0	32.3	46.2	7.2
66.0										16.2	36.0	4.5			
70.0													20.8	35.9	5.7
72.0													15.1	30.6	4.8



Nº de ident.: 9842523/95738/ Pieza

Radio de descarga: 360

95738/ Pieza de articulación de pluma principal: 2821-1 360 ° Cabeza de pluma principal: 2821-1

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				20.0 ו		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 5	9.5 m Pli	eza de p umín	lumín				
16.2	78.0	81.2	34.7												
18.0	76.2	80.7	32.0												
20.0	74.3	80.2	27.0												
22.0	72.2	79.6	22.8												
23.0				73.0	79.6	25.7									
24.0	70.2	78.9	19.4	72.0	79.3	26.8									
26.0 28.0	68.1 66.0	78.1 77.2	17.1 15.3	70.0 67.9	78.6 77.8	22.4 19.4							ł		
30.0	63.9	77.2 76.3	13.8	65.8	77.8 76.9	17.0									
32.0	62.1	75.4	13.6	63.7	76.9 75.9	15.2									
33.5	02.1	75.4	10.2	03.1	75.5	15.2	65.0	75.9	18.9						
34.0	59.9	74.2	12.0	61.9	75.0	14.8	64.5	75.6	18.9				i		
36.0	57.6	73.0	10.8	59.6	73.9	13.3	62.3	74.6	17.0						
38.0	54.9	71.4	9.9	57.4	72.7	11.9	60.5	73.7	15.1						
40.0	52.5	69.9	9.2	55.0	71.3	10.7	58.3	72.5	14.8						
42.0	50.0	68.3	8.6	52.6	69.8	9.8	56.0	71.2	13.1						
44.0	47.4	66.5	8.0	49.7	67.9	9.1	53.6	69.7	11.7						
45.7										55.0	69.2	10.6			
46.0	44.7	64.5	7.5	47.1	66.1	8.5	51.2	68.2	10.6	54.8	69.1	10.8			
48.0	41.9	62.4	7.0	44.4	64.1	7.9	48.6	66.5	9.7	52.8	67.9	10.4			
50.0	38.9	60.0	6.5	41.6	61.9	7.4	45.5	64.2	9.1	50.3	66.2	9.1			
55.0	30.2 18.3	52.6 41.2	5.6 4.7	33.6	55.3	6.3	38.2	58.6	7.6	43.2	61.1 54.9	7.2 5.9			
60.0 61.0	16.0	41.2 38.9	4.7 4.1	23.3	45.8	5.3	29.5	51.0	6.5	35.5	54.9	5.9	ł		
63.0	16.0	36.9	4.1	15.2	37.9	4.3									
65.0				13.2	31.8	4.3	17.0	39.0	5.2	26.0	46.3	4.9			
65.8							17.0	55.0	0.2	20.0	70.0	7.0	35.0	50.1	6.5
69.0										15.8	36.4	3.8	33.0	30.1	0.5
70.0												0.0	27.5	43.4	5.7
74.0													17.1	33.4	4.7



Nº de ident.: 9842523/95738/

Radio de descarga: 360 $^{\circ}$

Pieza de articulación de pluma principal: 2821-1 Cabeza de pluma principal: 2821-1

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				20.0 ו		eza de p	ıl, Punto llumín (2 ı] Posici	316-1) 6	2.5 m Pli	eza de p umín	lumín				
16.9	78.0	84.1	32.3												
18.0	76.9	83.8	32.1												
20.0	75.1	83.3	26.7												
22.0	73.1	82.7	22.9												
23.9				73.0	82.5	25.0									
24.0	71.2	82.0	19.3	72.9	82.4	25.0									
26.0	69.2	81.3	16.8	71.0	81.8	22.9									
28.0	67.2	80.5	15.1	69.0	81.0	19.4									
30.0	65.2 63.5	79.6 78.8	13.6 12.5	67.0 65.0	80.2 79.3	17.1 15.2									
32.0 34.0	61.5	77.7	11.8	63.3	79.3	13.9									
34.8	01.5	11.1	11.0	03.3	70.4	13.9	65.0	78.6	17.6						
36.0	59.3	76.5	10.6	61.2	77.4	13.3	63.8	78.0	17.5						
38.0	57.2	75.3	9.6	59.1	76.2	11.9	61.7	77.0	15.3						
40.0	54.6	73.7	8.9	56.9	74.9	10.7	60.0	76.0	14.2						
42.0	52.3	72.2	8.2	54.7	73.5	9.6	57.8	74.8	13.3						
44.0	49.9	70.5	7.7	52.0	71.8	9.0	55.6	73.4	11.8						
46.0	47.4	68.7	7.2	49.7	70.1	8.4	53.4	72.0	10.6						
47.4										55.0	71.7	9.8			
48.0	44.9	66.8	6.7	47.2	68.3	7.8	51.0	70.4	9.6	54.9	71.6	10.1			
50.0	42.2	64.6	6.3	44.6	66.3	7.3	48.2	68.4	9.0	52.6	70.1	9.4			
55.0	34.7	58.2	5.3	37.6	60.5	6.2	41.6	63.3	7.5	46.1	65.4	7.3			
60.0	25.4	49.4	4.6	29.1	52.8	5.2	34.1	56.7	6.4	39.3	59.9	5.8			
64.0	15.6	39.3	3.6	47.4	40.7	4.0	04.0	4		04.0	50 7	4.0			
65.0				17.1	40.7	4.3	24.6	47.7	5.3	31.2	52.7	4.8			
68.0 68.3							16.5	39.4	4.6				35.0	51.8	5.8
70.0										20.5	42.2	3.9	35.0 32.5	51.8 49.5	5.8 5.8
70.0 72.0										20.5 15.4	36.8	3.3	32.3	49.0	3.6
75.0										10.7	30.0	0.0	22.3	39.6	4.6
77.0													16.7	33.8	4.2



2821-1

2821-1

Nº de ident.: 9842523/95738/ Pieza de articulación de pluma principal: Radio de descarga: 360° Cabeza de pluma principal:

2 - Vía ancha Valor de vuelco: Lastre trasero [t]: 114.0 Lastre central [t]: 52.6

		gulo de principal			gulo de orincipa										
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				20.0	m Pluma Cab	eza de p	lumín (2:	316-1) 6	5.5 m Plı	eza de p umín	lumín				
L						31.0[11] Posici	on midia	11 (2316)						1
17.5	78.0	87.0	29.8												
18.0 20.0	77.6 75.8	86.9 86.4	29.8 26.9												
20.0	75.8	85.9	26.9												
24.0	72.1	85.2	19.2												
24.8	72.1	03.2	13.2	73.0	85.3	23.3									
26.0	70.2	84.5	16.6	71.9	84.9	23.3									
28.0	68.3	83.7	14.9	70.0	84.2	19.6									
30.0	66.4	82.9	13.4	68.1	83.4	17.0									
32.0	64.8	82.1	12.2	66.2	82.6	15.1									
34.0	62.9	81.1	11.2	64.3	81.6	13.6									
36.0	60.9	80.0	10.3	62.7	80.8	12.7									
36.1							65.0	81.3	16.2						
38.0	58.5	78.6	9.4	60.7	79.7	11.7	63.2	80.4	15.5						
40.0	56.4	77.3	8.6	58.6	78.5	10.5	61.5	79.5	14.2						
42.0	54.3	75.9	7.9	56.6	77.2	9.5	59.5	78.3	13.1						
44.0	52.1	74.4	7.3	54.1	75.6	8.7	57.4	77.1	11.9						
46.0	49.8	72.8	6.8	51.9	74.0	8.1	55.3	75.7	10.6						
48.0 49.2	47.5	71.0	6.4	49.6	72.4	7.5	53.1	74.2	9.5	55.0	74.1	9.0			
50.0	45.0	69.0	6.0	47.2	70.6	7.0	50.5	72.4	8.8	54.2	73.6	9.0			
55.0	38.4	63.3	5.0	40.9	65.3	5.9	44.5	67.7	7.3	48.6	69.6	7.1			
60.0	30.4	55.9	4.3	33.6	58.6	5.0	37.8	61.9	6.1	42.4	64.6	5.7			
65.0	20.2	45.1	3.6	24.4	49.4	4.1	29.9	54.3	5.2	35.4	58.2	4.6			
67.0	15.2	39.7	3.0												
68.0				16.7	41.2	3.6									
70.0							19.1	43.1	4.2	26.8	49.8	3.8			
70.7													35.0	53.5	5.2
71.0							16.1	39.8	3.9						
75.0										15.0	37.2	2.7	28.1	46.8	4.6
80.0													16.3	34.2	3.5



Nº de ident.: 9842523/95738/

Radio de descarga: 360°

2 - Vía ancha

Pieza de articulación de pluma principal: 2821-1 Cabeza de pluma principal: 2821-1

Valor de vuelco: Lastre trasero [t]: 114.0 Lastre central [t]: 52.6

		gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				20.0		eza de p	il, Punto lumín (2 n] Posici	316-1) 6	8.5 m Pli	eza de p umín	lumín				
18.1 20.0 22.0 24.0	78.0 76.4 74.7 72.9	90.0 89.5 89.0 88.4	27.6 26.4 22.2 19.1	70.0	00.0	20.0									
25.7 26.0 28.0 30.0 32.0 34.0	71.1 69.6 67.8 66.0 64.2	87.7 87.1 86.3 85.4 84.5	16.5 15.1 13.8 12.3 11.1	73.0 72.7 70.9 69.1 67.4 65.8	88.2 88.1 87.4 86.7 85.9 85.1	22.0 22.0 20.0 17.1 15.2 13.6									
36.0 37.3 38.0 40.0 42.0	62.3 60.0 58.1 56.1	83.4 82.1 80.9 79.6	9.3 8.5 7.8	64.0 62.1 60.2 58.2	83.1 83.1 82.0 80.8	12.4 11.6 10.5 9.4	65.0 64.4 62.9 60.9	84.0 83.7 82.9 81.8	15.1 15.2 15.1 13.4						
44.0 46.0 48.0 50.0 50.9	54.0 51.9 49.8 47.5	78.2 76.6 75.0 73.2	7.2 6.7 6.2 5.8	55.9 53.8 51.7 49.5	79.2 77.8 76.3 74.6	8.6 7.9 7.4 6.9	59.0 57.0 55.0 52.6	80.6 79.3 78.0 76.2	12.0 10.8 9.6 8.7	55.0	76.6	8.3			
55.0 60.0 65.0 69.0 70.0	41.5 34.6 26.3 17.0	68.0 61.5 52.9 42.5	4.9 4.2 3.5 3.0	43.7 37.2 29.5 19.2	69.8 63.8 56.1 44.8	5.7 4.8 4.1 3.3	47.1 41.0 34.0 25.5	71.9 66.7 60.1 51.1	7.2 6.0 5.1	50.8 45.1 38.8 31.4	73.5 68.9 63.3 56.0	7.2 5.7 4.5			
71.0 73.2 74.0 75.0 77.0				16.4	41.6	3.1	15.8	40.3	3.4	22.0 16.8	45.9 40.1	2.9 2.6	35.0 32.6	55.3 52.8	4.7
80.0 83.0													23.5 15.9	43.2 34.7	3.6 3.1



2821-1

2821-1

Nº de ident.: 9842523/95738/ Pieza de articulación de pluma principal: Radio de descarga: 360 ° Cabeza de pluma principal:

		gulo de principa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de principa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				20.0		eza de p	al, Punto olumín (2 n] Posici	316-1) 7	1.5 m Pl	eza de p umín	lumín				
18.7	78.0	92.9	25.7												
20.0	77.0	92.6	25.7												
22.0	75.3	92.1	21.9												
24.0	73.6	91.5	18.9												
26.0	72.0	90.9	16.3												
26.5				73.0	91.1	20.2									
28.0	70.5	90.3	14.5	71.8	90.6	20.6									
30.0	68.8	89.5	13.9	70.1	89.9	17.4	•						<u> </u>		
32.0	67.1	88.7	12.3	68.6	89.2	15.1									
34.0	65.3	87.8	10.9	66.9	88.4	14.1									
36.0	63.5	86.8	9.8	65.1	87.5	12.6									
38.0	61.4	85.6	9.0	63.4	86.5	11.3									
38.6							65.0	86.7	14.1						
40.0	59.6	84.4	8.2	61.5	85.4	10.3	64.1	86.2	14.8						
42.0	57.7	83.2	7.5	59.7	84.3	9.3	62.3	85.2	13.7						
44.0	55.8	81.9	6.9	57.5	82.9	8.4	60.4	84.1	12.0						
46.0	53.8	80.4	6.4	55.6	81.5	7.7	58.6	82.9	10.8						
48.0	51.8	78.9	5.9	53.6	80.1	7.1	56.7	81.6	9.6						
50.0	49.7	77.2	5.5	51.6	78.5	6.5	54.4	80.0	8.6						
52.6										55.0	79.0	7.5			
55.0	44.2	72.5	4.6	46.2	74.1	5.5	49.3	76.0	7.0	52.7	77.4	7.2			
60.0	38.0 30.8	66.7	3.8	40.3	68.7	4.5	43.7 37.5	71.2 65.2	5.8	47.5	73.1	5.6			
65.0		59.2 48.9	3.2 2.6	33.6	61.9	3.8			4.8	41.7	68.0	4.4 3.5			
70.0	21.6		2.6	25.3	52.9	3.1	30.2	57.7	4.0	35.2	61.6	3.5			
72.0 74.0	16.6	43.0	2.4	16.0	42.0	2.5									
74.0 75.0				10.0	42.0	2.5	20.7	46.9	3.1	27.4	53.2	2.8			
75.0 75.6							20.7	40.9	3.1	27.4	53.2	2.8	35.0	57.0	4.1
77.0				I			15.4	40.7	2.8				33.0	37.0	4.1
80.0							13.4	40.7	2.0				28.6	50.2	3.5
85.0							i e						18.4	38.4	2.5
86.0													15.6	35.1	2.3



Nº de ident.: 9842523/95738/ Radio de descarga: 360°

2 - Vía ancha Valor de vuelco: Lastre trasero [t]: 114.0 52.6 Lastre central [t]:

Pieza de articulación de pluma principal: 2821-1 Cabeza de pluma principal: 2821-1

	88° Án	gulo de orincipa	pluma I		gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				20.0 i		eza de p	II, Punto Ilumín (2: I] Posici	316-1) 7	4.5 m Pl		lumín				
19.3	78.0	95.8	24.2												
20.0	77.5	95.7	24.2												
22.0	75.9	95.2	21.9							•			•		
24.0	74.3	94.6	18.6												
26.0	72.7	94.0	16.2												
27.4				73.0	93.9	19.7									
28.0	71.1	93.4	14.3	72.5	93.8	19.7									
30.0	69.7	92.8	13.4	70.9	93.1	18.0				•			<u> </u>		
32.0	68.1	92.0	12.2	69.3	92.3	15.3									
34.0	66.4	91.1	10.8	67.9	91.7	15.0									
36.0	64.7	90.2	9.6	66.2	90.8	13.1									
38.0	62.7	89.0	8.8	64.5	89.9	11.5				<u> </u>					
39.9							65.0	89.5	13.2						
40.0	60.9	87.9	8.1	62.8	88.8	10.2	64.9	89.4	13.2						
42.0	59.1	86.7	7.4	61.0	87.8	9.2	63.5	88.6	13.4						
44.0	57.3	85.5	6.8	59.0	86.4	8.4	61.8	87.5	12.1						
46.0	55.5	84.1	6.2	57.1	85.1	7.6	60.0	86.4	10.7						
48.0	53.6	82.7	5.7	55.3	83.8	7.0	58.2	85.2	9.7						
50.0	51.6	81.1	5.3	53.4	82.3	6.4	56.3	83.9	8.7						
54.3										55.0	81.5	6.9			
55.0	46.5	76.7	4.4	48.4	78.2	5.3	51.2	79.9	6.9	54.5	81.1	7.0			
60.0	40.9	71.4	3.6	43.0	73.2	4.4	46.1	75.5	5.7	49.6	77.1	5.6			
65.0	34.5	64.9	3.0	36.9	67.2	3.6	40.4	70.1	4.7	44.3	72.4	4.4			
70.0	26.9	56.3	2.5	29.9	59.5	3.0	34.0	63.4	3.9	38.4	66.6	3.4			
75.0				20.7	48.7	2.3	26.2	54.6	3.1	31.6	59.4	2.7			
78.1													35.0	58.7	3.6
80.0							15.1	41.0	2.3				32.6	56.1	3.6
85.0													24.5	46.8	2.6



Nº de ident.:9842523/95738/Pieza de articulación de pluma principal:2821-1Radio de descarga:360 °Cabeza de pluma principal:2821-1

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				20.0 ו	m Pluma Cab	eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 7	7.5 m Pl	eza de p umín	lumín		_		
20.0	78.0	98.8	21.4												
22.0	76.5	98.3	20.8												
24.0	75.0	97.8	18.0							•					
26.0	73.4	97.2	16.0												
28.0	71.8	96.5	14.0												
28.3				73.0	96.8	18.1									
30.0	70.5	96.0	12.8	71.7	96.2	17.9									
32.0	69.0	95.2	11.9	70.1	95.5	15.6									
34.0	67.4	94.4	10.5	68.8	94.9	14.1									
36.0	65.7	93.5	9.3	67.2	94.1	13.1									
38.0	63.8	92.4	8.4	65.6	93.2	11.4									
40.0	62.2	91.3	7.7	63.9	92.2	10.0									
41.1							65.0	92.2	12.0						
42.0	60.5	90.2	7.1	62.3	91.2	8.9	64.6	91.9	12.4						
44.0	58.7	89.0	6.5	60.6	90.1	8.1	62.9	90.9	11.9						
46.0	57.0	87.8	5.9	58.6	88.7	7.4	61.3	89.9	10.7						
48.0	55.2	86.4	5.4	56.8	87.4	6.7	59.6	88.7	9.5						
50.0	53.4	84.9	5.0	55.0	86.0	6.1	57.8	87.5	8.6						
55.0	48.6	80.8	4.1	50.3	82.2	5.0	53.0	83.7	6.7						
56.0										55.0	84.0	6.2			
60.0	43.4	75.9	3.4	45.3	77.6	4.1	48.2	79.6	5.5	51.4	81.1	5.5			
65.0	37.7	70.0	2.8	39.8	72.0	3.3	43.0	74.6	4.5	46.5	76.6	4.3			
70.0	31.1	62.6	2.3	33.6	65.2	2.7	37.2	68.6	3.6	40.9	71.1	3.2			
75.0							30.5	61.0	2.9	35.1	64.9	2.5			
80.0							22.0	50.7	2.2				25.0	00.4	0.4
80.5 85.0													35.0	60.4 53.5	3.1 2.6
85.0 88.0													29.0 24.6	53.5 48.2	2.6



Nº de ident.:9842523/95738/Pieza de articulación de pluma principal:2821-1Radio de descarga:360 °Cabeza de pluma principal:2821-1

		gulo de orincipa			gulo de orincipa			gulo de principa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				20.0 ו	m Pluma Cab	eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 8	0.5 m Pl		lumín		_		
20.6	78.0	101.7	19.5												
22.0	77.0	101.4	19.5												
24.0	75.5	100.9	17.7												
26.0	74.0	100.3	15.8												
28.0	72.5	99.7	14.0												
29.2				73.0	99.7	17.0									
30.0	71.3	99.1	12.6	72.4	99.4	17.0									
32.0	69.8	98.4	11.5	70.9	98.7	16.1									
34.0	68.2	97.6	10.4	69.6	98.1	14.0									
36.0	66.7	96.8	9.2	68.1	97.3	13.0									
38.0	64.9	95.7	8.3	66.5	96.5	11.5									
40.0	63.3	94.7	7.5	65.0	95.6	10.1									
42.0	61.7	93.7	6.9	63.4	94.6	8.9				l					
42.4							65.0	94.9	11.3						
44.0	60.0	92.5	6.3	61.5	93.3	8.0	64.0	94.3	11.5						
46.0	58.4	91.3	5.8	59.9	92.2	7.3	62.4	93.3	10.7						
48.0	56.7	90.0	5.3	58.2	91.0	6.6	60.8	92.2	9.5						
50.0	55.0	88.7	4.8	56.5	89.7	6.0	59.2	91.0	8.6						
55.0	50.5	84.8	3.9	52.1	86.0	4.8	54.6	87.5	6.7						
57.8										55.0	86.4	5.7			
60.0	45.6	80.2	3.2	47.4	81.7	3.9	50.1	83.6	5.4	53.1	84.9	5.5			
65.0	40.4	74.8	2.6	42.3	76.6	3.2	45.2	78.9	4.4	48.5	80.7	4.2			
70.0 75.0				36.4	70.2	2.5	39.9 34.0	73.4 66.7	3.5 2.8	43.5 38.0	75.8 70.0	3.3 2.4			
75.0 80.0							34.0 26.8	58.0	2.8	38.0	/0.0	2.4			
83.0							∠0.8	56.0	2.2	-			35.0	62.1	2.6
85.0 85.0													35.0 32.4	59.1	2.6
89.0										l			32.4 27.4	53.0	2.0



Nº de ident.: 9842523/95738/

Radio de descarga: 360 $^{\circ}$

Pieza de articulación de pluma principal: 2821-1 Cabeza de pluma principal: 2821-1

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				20.0 ו		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 8	3.5 m Pli	eza de p umín	lumín				
21.2	78.0	104.6	18.0												
22.0	77.5	104.5	18.0												
24.0	76.0	104.0	17.3							•			•		
26.0	74.6	103.4	15.3												
28.0	73.4	102.9	14.5												
30.0	72.0	102.3	12.7												
30.1				73.0	102.5	15.8									
32.0	70.5	101.6	11.2	71.6	101.9	15.6									
34.0	69.1	100.9	10.1	70.4	101.3	14.0									
36.0	67.6	100.0	9.0	68.9	100.6	12.7									
38.0	65.8	99.0	8.1	67.4	99.7	11.6									
40.0	64.3	98.1	7.3	65.9	98.9	10.1									
42.0	62.8	97.1	6.7	64.4	97.9	8.8				ł					
43.7							65.0	97.6	10.4						
44.0	61.2	96.0	6.1	62.6	96.7	7.8	65.0	97.6	10.5						
46.0	59.6	94.8	5.6	61.1	95.7	7.2	63.5	96.7	10.3						
48.0	58.0	93.6	5.1	59.5	94.5	6.5	62.0	95.6	9.4						
50.0	56.4	92.3	4.6	57.9	93.3	5.9	60.1	94.3	8.5						
55.0	52.1	88.7	3.7	53.7	89.8	4.6	56.1	91.1	6.7						
59.5	47.6	04.4	0.0	40.0	05.0	0.7	54.0	87.4	5.0	55.0	88.9	5.0			
60.0		84.4	3.0	49.3	85.8	3.7	51.8		5.2	54.7	88.6	5.1			
65.0 70.0	42.6	79.1	2.4	44.6 39.4	81.0 75.4	2.9 2.3	47.3 42.4	83.1 78.0	4.2 3.3	50.3 45.7	84.7 80.1	4.1 3.2			
70.0 75.0				39.4	75.4	2.3	42.4 36.9	78.0 71.9	2.6	45.7 40.6	74.7	2.3			
75.0 85.5							30.9	71.9	2.0	40.6	/4./	2.3	35.0	63.9	2.3
00.0													55.0	03.9	2.3



2821-1

2821-1

 N° de ident.: 9842523/95738/ Pieza de articulación de pluma principal:

Radio de descarga: 360 $^{\circ}$

360 ° Cabeza de pluma principal:

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa		45° Án	gulo de orincipa	pluma I
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				20.0 ı	m Pluma Cab	eza de p	il, Punto lumín (2 n] Posici	316-1) 8(6.5 m Plı	eza de p umín	lumín				
21.8	78.0	107.6	16.8												
22.0	77.9	107.5	16.8												
24.0	76.5	107.1	16.6												
26.0	75.2	106.5	15.1												
28.0	74.0	106.1	14.3												
30.0	72.6	105.5	12.6												
30.9				73.0	105.4	14.9									
32.0	71.2	104.8	11.1	72.3	105.1	14.9									
34.0	69.8	104.1	9.9	70.9	104.4	14.2									
36.0	68.4	103.3	8.9	69.7	103.8	12.5									
38.0	66.7	102.3	8.0	68.3	103.0	11.4									
40.0	65.3 63.8	101.4 100.4	7.2 6.5	66.8 65.4	102.1 101.2	10.2 8.9									
42.0 44.0	62.3	99.4	6.0	63.9	101.2	7.8									
44.0 44.9	02.3	99.4	6.0	63.9	100.3	7.0	65.0	100.3	9.6						
46.0	60.8	98.3	5.5	62.2	99.1	7.1	64.3	99.8	9.8						
48.0	59.3	96.3	5.0	60.6	98.0	6.4	63.0	99.0	9.8						
50.0	57.7	95.9	4.5	59.1	96.8	5.8	61.3	97.8	8.5						
55.0	53.7	92.4	3.5	55.1	93.5	4.5	57.4	94.7	6.7						
60.0	49.4	88.4	2.8	51.0	89.7	3.6	53.4	91.2	5.1						
61.2				00		0.0		· · · <u>-</u>	U. 1	55.0	91.3	4.6			
65.0	44.9	83.7	2.3	46.6	85.3	2.8	49.1	87.2	4.1	52.0	88.6	4.2			
70.0				41.8	80.1	2.1	44.5	82.4	3.2	47.6	84.3	3.1			
75.0							39.3	76.5	2.4	42.9	79.3	2.3			
76.0										41.7	77.9	2.1			
87.9													35.0	65.6	2.0
89.0													34.0	64.3	2.1



N° de ident.: 9842523/95738/ Pieza de Radio de descarga: 360 ° Cabeza de

Pieza de articulación de pluma principal: 2821-1 Cabeza de pluma principal: 2821-1

	88° Án	gulo de principa	pluma I	83° Án I	gulo de orincipa	pluma I	75° Án	gulo de orincipa	pluma I	65° Án	gulo de orincipa	pluma I	45° Án	gulo de orincipa	pluma I
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				20.0	m Pluma Cab	eza de p	al, Punto dumín (2 n] Posici	316-1) 8	9.5 m Pl	eza de p umín	lumín				
22.5	78.0	110.5	14.6												
24.0	77.0	110.2	14.6												
26.0	75.7	109.7	13.8							•			<u> </u>		
28.0	74.4	109.1	13.0												
30.0	73.2	108.6	12.0												
31.8				73.0	108.3	13.3									
32.0	71.9	108.0	10.6	72.9	108.2	13.3									
34.0	70.5	107.3	9.4	71.5	107.6	13.1									
36.0	69.2	106.5	8.5	70.2	106.8	12.0									
38.0	67.8	105.7	7.6	69.0	106.2	10.9									
40.0	66.4	104.9	6.8	67.6	105.4	10.2									
42.0	64.7	103.8	6.2	66.2	104.5	8.9									
44.0	63.3	102.8	5.6	64.8	103.6	7.7									
46.0	61.8	101.7	5.1	63.4	102.6	6.8									
46.2							65.0	103.1	8.8						
48.0	60.3	100.6	4.6	61.7	101.4	6.1	64.0	102.4	8.8						
50.0	58.8	99.4	4.2	60.2	100.2	5.5	62.6	101.3	8.2						
55.0	55.0	96.1	3.2	56.4	97.1	4.2	58.6	98.2	6.6						
60.0	50.9	92.2	2.5	52.4	93.4	3.2	54.7	94.9	4.9						
62.9										55.0	93.8	4.0			
65.0				48.2	89.2	2.5	50.6	91.0	3.7	53.4	92.3	3.9			
68.0				45.6	86.4	2.1									
70.0							46.3	86.5	2.9	49.2	88.2	2.9			
75.0				I			41.6	81.2	2.1	45.2	84.0	2.1			



Nº de ident.: 9842523/95738/

Radio de descarga: 360 $^{\circ}$

Pieza de articulación de pluma principal: 2821-1 Cabeza de pluma principal: 2821-1

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				20.0 ו		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 9:	2.5 m Pli		lumín		_		
23.1	78.0	113.4	13.3												
24.0	77.5	113.2	13.3												
26.0	76.2	112.8	12.9												
28.0	74.9	112.2	12.3												
30.0	73.6	111.6	11.8												
32.0	72.3	111.0	10.4												
32.7				73.0	111.1	12.1									
34.0	71.0	110.3	9.2	72.2	110.7	12.1									
36.0	69.6	109.6	8.3	70.8	110.0	11.8									
38.0	68.3	108.8	7.5	69.5	109.3	10.6									
40.0	67.2	108.1	6.7	68.4	108.7	9.8									
42.0	65.6	107.1	6.0	67.1	107.8	9.0									
44.0	64.2	106.1	5.4	65.7	106.9	7.8									
46.0	62.8	105.1	4.9	64.3	106.0	6.8									
47.5							65.0	105.8	8.2						
48.0	61.4	104.0	4.5	63.0	105.0	6.0	64.6	105.5	8.2						
50.0	60.0	102.9	4.1	61.3	103.7	5.4	63.2	104.5	8.0						
55.0	56.3	99.7	3.1	57.6	100.7	4.1	59.7	101.8	6.5						
60.0	52.4	96.1	2.4	53.9	97.2	3.1	56.0	98.5	5.0						
64.7										55.0	96.2	3.6			
65.0				49.9	93.2	2.4	52.1	94.9	3.7	54.7	96.0	3.6			
67.0				48.2	91.5	2.1									
70.0							48.5	91.1	2.7	50.8	92.1	2.9			
74.0							44.6	86.7	2.1						



N° de ident.: 9842523/95738/

Radio de descarga: 360 $^{\circ}$

Pieza de articulación de pluma principal: 2821-1 Cabeza de pluma principal: 2821-1

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				20.0 i	m Pluma Cab	eza de p	ıl, Punto llumín (2 ı] Posici	316-1) 9	5.5 m Plı	eza de p umín	lumín				
23.8	78.0	116.4	12.2												
24.0	77.9	116.3	12.2												
26.0 28.0	76.6 75.4	115.8 115.3	12.0 11.6										ł		
30.0	74.1	114.8	11.0										ł		
32.0	72.9	114.2	10.2												
33.6	72.0	117.2	10.2	73.0	114.0	11.1							i		
34.0	71.6	113.5	9.0	72.7	113.9	11.1							İ		
36.0	70.3	112.8	8.0	71.5	113.2	11.0									
38.0	69.0	112.0	7.2	70.2	112.5	10.3									
40.0	67.7	111.2	6.5	68.9	111.7	9.3									
42.0	66.4	110.4	5.8	67.8	111.1	8.6									
44.0	65.1	109.5	5.2	66.5	110.2	7.6									
46.0	63.7 62.4	108.5	4.6 4.2	65.2	109.3	6.6 5.9									
48.0 48.7	62.4	107.4	4.2	63.6	108.1	5.9	65.0	108.5	7.6						
50.0	61.0	106.3	3.8	62.3	107.1	5.2	64.2	108.5	7.6						
55.0	57.5	103.3	2.8	58.8	104.2	3.9	60.7	105.2	6.3				i		
60.0	07.0	100.0	2.0	55.2	100.9	2.9	57.5	102.4	4.9						
65.0				51.4	97.1	2.1	53.9	99.0	3.5						
66.4										55.0	98.7	3.1			
70.0							49.7	94.6	2.6	52.3	96.0	2.9			
73.0							47.6	92.4	2.1	49.9	93.5	2.2			



Nº de ident.: 9842523/95738/ Radio de descarga:

360°

Pieza de articulación de pluma principal: 2821-1 Cabeza de pluma principal: 2821-1

2 - Vía ancha Valor de vuelco: Lastre trasero [t]: 114.0 Lastre central [t]: 52.6

		gulo de principa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				20.0 ו		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 9	8.5 m Pl	eza de p umín	lumín		_		
24.4	78.0	119.3	11.3												
26.0	77.0	118.9	11.2												
28.0	75.8	118.4	10.9												
30.0	74.6	117.9	10.7												
32.0	73.4	117.3	10.1												
34.0	72.2	116.7	8.9												
34.5				73.0	116.9	10.2									
36.0	70.9	116.0	7.8	72.1	116.4	10.2									
38.0	69.7	115.3	7.0	70.8	115.7	10.0									
40.0	68.4	114.5	6.3	69.6	115.0	9.1									
42.0	67.2	113.6	5.6	68.3	114.2	8.4									
44.0	65.9	112.8	5.0	67.1	113.3	7.6									
46.0	64.6	111.8	4.5	65.8	112.4	6.7									
48.0	63.3	110.8	4.0	64.5	111.5	5.8									
50.0	62.0	109.8	3.6	63.2	110.5	5.1	65.0	111.2	7.0						
55.0	58.6	106.9	2.7	60.1	108.0	3.8	61.7	108.7	6.2						
60.0				56.4	104.6	2.8	58.3	105.7	5.0						
64.0				53.5	101.7	2.1									
65.0							55.1	102.7	3.5						
68.1										55.0	101.2	2.7			
70.0							51.2	98.5	2.5	53.6	99.8	2.7			
73.0										51.8	97.8	2.2			



Nº de ident.: 9842523/95738/ 360°

Radio de descarga:

Pieza de articulación de pluma principal: 2821-1 Cabeza de pluma principal: 2821-1

2 - Vía ancha Valor de vuelco: Lastre trasero [t]: 114.0 52.6 Lastre central [t]:

		gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				20.0 ו		eża de pl	il, Punto umín (23 i] Posici	316-1) ĬC	1.5 m P		lumín				
25.0	78.0	122.2	10.4												
26.0	77.4	122.0	10.4												
28.0	76.3	121.5	10.2							•			•		
30.0	75.1	121.0	9.9												
32.0	73.9	120.4	9.7												
34.0	72.7	119.8	8.7												
35.3				73.0	119.8	9.4									
36.0	71.5	119.2	7.6	72.6	119.5	9.4									
38.0	70.3	118.5	6.8	71.4	118.9	9.3									
40.0	69.1	117.7	6.1	70.2	118.2	8.8									
42.0	67.9	116.9	5.4	69.0	117.4	8.1									
44.0	66.7	116.0	4.8	67.8	116.6	7.6									
46.0	65.4	115.1	4.3	66.5	115.7	6.7									
48.0	64.2	114.2	3.8	65.3	114.8	5.8									
50.0	62.9	113.2	3.4	64.0	113.9	5.0									
51.3							65.0	113.9	6.4						
55.0	59.9	110.6	2.4	60.8	111.2	3.7	62.6	112.1	6.0	l					
57.0	58.6	109.4	2.1							ł					
60.0				57.8	108.4	2.6	59.4	109.2	4.8						
63.0				55.5	106.1	2.1	50.0	100.0	0.5						
65.0							56.3	106.3	3.5		400.0	0.0			
69.8							50.0	400 7	0.0	55.0	103.6	2.3			
70.0							52.8	102.7	2.3	54.9	103.5	2.3			
71.0							51.8	101.6	2.2	50.0	404.0	0.4			
73.0										52.8	101.3	2.1			



360°

Cargas pluma principal + plumín abatible + midfall

Nº de ident.: 9842523/95738/

Radio de descarga:

Pieza de articulación de pluma principal: 2821-1 Cabeza de pluma principal: 2821-1

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				20.0 i	m Pluma Cabe	eża de pl	ıl, Punto umín (23 ı] Posici	316-1) 10	4.5 m P	eza de p lumín	lumín				
25.6	78.0	125.2	9.7												
26.0	77.8	125.1	9.7												
28.0	76.7	124.6	9.6												
30.0	75.5	124.1	9.4												
32.0	74.4	123.6	9.1												
34.0	73.2	123.0	8.5												
36.0	72.1	122.3	7.5												
36.2				73.0	122.6	8.7									
38.0	70.9	121.6	6.6	72.0	122.0	8.7									
40.0	69.7	120.9	5.9	70.8	121.4	8.6									
42.0	68.6	120.1	5.3	69.6	120.6	7.9									
44.0	67.4	119.3	4.7	68.4	119.8	7.4									
46.0	66.2	118.4	4.2	67.3	119.0	6.8									
48.0	65.2	117.7	3.6	66.1	118.1	5.9									
50.0	63.7	116.5	3.2	64.8	117.2	5.1	25.0	440.0	5.0						
52.5		440.0		04.7	4440	0.0	65.0	116.6	5.9						
55.0	60.6	113.9	2.3	61.7	114.6	3.6	63.5	115.4	5.8				ł		
56.0 60.0	60.2	113.5	2.1	58.8	112.0	2.5	60.4	112.7	4.6				ł		
62.0				58.8 57.5	112.0	2.5	00.4	112.7	4.0						
65.0				51.5	110.7	Z. I	57.4	109.9	3.5						
70.0							57.4 54.1	109.9	2.3						
70.0							53.4	105.7	2.3						



Nº de ident.: 9842523/95738/

Pieza de articulación de pluma principal: 2821-1

Radio de descarga:

360°

Cabeza de pluma principal: 2821-1

2 - Vía ancha Valor de vuelco: Lastre trasero [t]: 114.0 52.6 Lastre central [t]:

		gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de principa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				20.0 i	m Pluma Cabe	eza de pl	ıl, Punto umín (23 ı] Posici	316-1) 10	17.5 m P		lumín				
26.3	78.0	128.1	8.7												
28.0	77.0	127.7	8.7												
30.0	75.9	127.2	8.5												
32.0	74.8	126.7	8.2												
34.0	73.7	126.1	8.0												
36.0	72.6	125.5	7.1												
37.1				73.0	125.5	7.7									
38.0	71.5	124.8	6.3	72.5	125.2	7.7							<u> </u>		
40.0	70.3	124.1	5.6	71.4	124.5	7.7									
42.0	69.2	123.4	5.1	70.2	123.8	7.3									
44.0	68.0	122.6	4.5	69.1	123.1	6.9									
46.0	66.9	121.7	3.9	67.9	122.3	6.6									
48.0	65.7	120.8	3.4	66.8	121.4	5.8									
50.0	64.5	119.9	3.0	65.6	120.5	5.0									
53.8							65.0	119.4	5.3						
55.0	61.5	117.3	2.1	62.6	118.0	3.4	64.3	118.8	5.3						
60.0				59.8	115.5	2.3	61.3	116.2	4.4						
61.0				58.9	114.6	2.2									
65.0							58.4	113.5	3.5						
70.0							55.2	110.2	2.2						
71.0	l						54.6	109.5	2.0						



N° de ident.: 9842523/95738/

Radio de descarga: 360 $^{\circ}$

Pieza de articulación de pluma principal: 2821-1 Cabeza de pluma principal: 2821-1

		gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				20.0		eża de pl	ıl, Punto umín (23 ı] Posici	316-1) 11	0.5 m P		lumín				
26.9	78.0	131.0	7.9												
28.0	77.4	130.8	7.9												
30.0	76.3	130.3	7.7												
32.0	75.3	129.8	7.5												
34.0	74.2	129.2	7.3												
36.0	73.1	128.6	6.7												
38.0	72.0	128.0	5.9	73.0	128.4	7.0									
40.0 42.0	70.9 69.8	127.3 126.6	5.3 4.8	71.9 70.8	127.7 127.0	7.0 6.8							ł		
44.0	68.7	125.8	4.6	69.7	126.3	6.5							i		
46.0	67.6	125.0	3.8	68.6	125.5	6.2									
48.0	66.6	124.3	3.2	67.4	124.7	5.8							i		
50.0	65.3	123.2	2.8	66.3	123.8	5.0									
55.0				63.4	121.4	3.3							İ		
55.1							65.0	122.1	4.8						
60.0				60.7	118.9	2.2	62.1	119.6	4.3						
61.0				60.1	118.4	2.0									
65.0							59.4	117.0	3.3						
70.0							56.3	113.8	2.2						



2821-1

2821-1

N° de ident.: 9842523/95738/

52.6

Radio de descarga: 360 $^{\circ}$

3/95738/ Pieza de articulación de pluma principal: 360 ° Cabeza de pluma principal:

Valor de vuelco: 2 - Vía ancha Lastre trasero [t]: 114.0

Lastre central [t]:

		gulo de principa			gulo de orincipa			gulo de principa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				23.0	m Pluma Cab	eza de p	al, Punto dumín (2: n] Posici	316-1) 3	8.5 m Pl		lumín				
12.0	78.0	63.6	64.7												
13.0	76.4	63.4	62.9												
14.0	74.9	63.1	58.4	•									<u> </u>		
16.0	71.8	62.5	49.1												
17.3				73.0	62.5	53.4									
18.0	68.6	61.7	42.6	71.8	62.2	53.2									
20.0	65.3	60.8	35.2	68.7	61.5	46.4									
22.0	61.9	59.8	30.1	65.4	60.6	38.8							<u> </u>		
24.0	58.4	58.6	26.6	62.1	59.6	33.0									
25.4							65.0	59.7	30.1						
26.0	54.7	57.2	23.6	58.6	58.4	28.7	64.1	59.5	42.0						
28.0	51.2	55.7	21.5	55.0	57.1	25.3	60.7	58.4	37.0						
30.0	47.2	53.9	19.7	51.0	55.4	23.0	57.2	57.1	32.7						
32.0	42.9	51.9	18.1	47.3	53.7	21.0	53.6	55.7	28.2						
34.0	38.3	49.5	16.7	43.0	51.7	19.3	49.4	54.0	25.6						
34.9										55.0	54.7	29.6			
36.0	33.0	46.6	15.5	38.4	49.3	17.9	45.3	52.0	23.0	53.0	53.9	28.9			
38.0	26.9	43.0	14.6	33.2	46.4	16.7	41.3	50.1	20.9	49.1	52.2	24.8			
40.0	19.0	38.1	13.6	27.1	42.9	15.5	36.4	47.5	19.2	44.9	50.3	21.7			
41.0	15.5	35.8	13.0												
42.0				19.3	38.0	14.3	31.0	44.4	17.8	40.9	48.3	19.2			
43.0				15.8	35.8	13.7									
44.0				•			24.4	40.5	16.4	36.0	45.7	17.3			
46.0							15.2	34.6	14.9	30.5	42.5	15.9			
48.0										23.7	38.5	14.6			
50.0										16.1	33.7	13.4			
50.7													35.0	40.2	18.1
55.0													22.0	32.4	16.4
56.0	1	I	1	I	1	ı		ı	1			1	17 4	29.5	15.3



2821-1

2821-1

Nº de ident.: 9842523/95738/ Pieza de articulación de pluma principal: Radio de descarga: 360 ° Cabeza de pluma principal:

		gulo de principa			gulo de orincipa			gulo de principa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				23.0		eza de p	al, Punto Ilumín (2 n] Posici	316-1) 4	1.5 m Pl		lumín				
12.6	78.0	66.5	59.5				Ĺ		<u> </u>						
13.0	77.4	66.4	59.5	i					İ	İ		İ	İ		
14.0	76.0	66.2	56.7	i						İ			İ		
16.0	73.1	65.6	48.9												
18.0	70.2	64.9	40.7												
18.1				73.0	65.3	49.1									
20.0	67.2	64.1	34.9	70.3	64.7	45.3									
22.0	64.2	63.2	29.4	67.3	63.9	39.8									
24.0	60.9	62.1	26.1	64.3	63.0	33.2									
26.0	57.6	60.8	23.3	61.0	61.9	29.3									
26.7				!			65.0	62.4	38.9						
28.0	54.5	59.5	21.0	57.7	60.6	25.7	63.1	61.8	37.9						
30.0	50.9	57.9	19.3	54.3	59.2	22.8	59.9	60.7	32.9						
32.0	47.3	56.2	17.8	51.0	57.8	20.7	56.6	59.4	28.9						
34.0	43.3	54.1	16.4	47.4	56.0	19.1	53.2	58.0	25.3						
36.0	39.1	51.8	15.2	43.4	54.0	17.6	49.4	56.2	23.0						
36.7										55.0	57.2	27.2			
38.0	35.2	49.5	14.3	39.2	51.6	16.3	45.9	54.5	20.9	52.7	56.2	26.0			
40.0	29.9	46.3	13.4	34.5	48.9	15.2	41.8	52.3	19.1	49.0	54.5	22.3			
42.0	22.4	41.4	12.5	29.1	45.5	14.2	37.4	49.8	17.7	45.5	52.7	19.7			
43.0	18.3	38.6	12.0	l											
44.0				22.6	41.3	13.2	32.5	46.9	16.4	41.5	50.6	17.6			
46.0				15.2	36.2	12.1	26.8	43.3	15.2	37.0	48.1	15.9			
48.0							19.5	38.4	13.9	32.9	45.6	14.7			
49.0							16.4	36.3	13.2	07.0	40.0	40.0			
50.0										27.3	42.0	13.6			
53.0										15.5	34.1	11.9	25.0	44.0	40.0
53.2 55.0													35.0 30.9	41.9 39.3	16.8 16.5
55.0 59.0													18.3	39.3 31.0	14.0
59.U										I	l		10.3	J 31.U	14.0



Nº de ident.:9842523/95738/Pieza de articulación de pluma principal:2821-1Radio de descarga:360 °Cabeza de pluma principal:2821-1

		gulo de principa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				23.0		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 4	4.5 m Pl	eza de p umín	lumín				
13.2	78.0	69.5	55.3												
14.0	77.0	69.3	55.3												
16.0	74.3	68.8	48.6												
18.0	71.6	68.1	40.4												
19.0				73.0	68.2	45.9									
20.0	68.8	67.4	34.8	71.7	67.9	45.4									
22.0	66.0	66.5	29.3	68.9	67.1	39.4									
24.0 26.0	63.2 60.1	65.5 64.4	25.2 22.7	66.1 63.3	66.3 65.3	33.9 28.8				ł					
28.0	57.2	63.2	20.6	60.2	64.2	26.0	65.0	65.2	36.5	i					
30.0	54.0	61.8	18.9	57.1	62.9	23.0	62.1	64.1	34.0						
32.0	50.8	60.2	17.6	54.1	61.6	20.6	59.0	62.9	30.0						
34.0	47.3	58.4	16.3	50.9	60.0	18.9	55.9	61.6	26.6	i			i		
36.0	43.7	56.4	15.1	47.4	58.2	17.5	52.7	60.1	23.3	i			i		
38.0	39.7	54.1	14.0	43.8	56.2	16.2	49.5	58.6	21.0	i			İ		
38.4										55.0	59.6	25.3			
40.0	35.4	51.4	13.1	39.8	53.9	15.0	46.0	56.7	19.2	52.4	58.4	23.6			
42.0	30.6	48.3	12.3	36.3	51.7	14.3	42.3	54.6	17.7	49.0	56.7	20.3			
44.0	25.0	44.3	11.6	31.6	48.7	13.3	38.2	52.2	16.4	45.7	55.0	18.2			
46.0	17.6	39.0	10.8	26.1	44.9	12.3	33.8	49.3	15.3	41.9	52.8	16.3			
48.0				17.9	39.0	11.4	28.7	46.0	14.2	37.9	50.4	14.8			
50.0							22.6	41.7	13.1	34.1	48.0	14.2			
52.0							15.8	36.7	11.9						
55.0										19.5	37.8	11.2			
55.6													35.0	43.6	15.7
60.0													25.0	36.8	14.3
62.0	I	1	1	I	l	1		l	1	I	l	1	17.6	31.5	12.7



2821-1

2821-1

Nº de ident.: 9842523/95738/ Pieza de articulación de pluma principal: Radio de descarga: 360 ° Cabeza de pluma principal:

Altura Ode Final Ode Final Ode Final Ode Final Ode Final Ode Final Ode Ode Final Ode	a- s
Cabeza de plumín (2316-1) 47.5 m Plumín 25.0 [m] Posición midfall (2316) 13.8	
14.0 77.8 72.4 51.0 16.0 75.3 71.9 46.7 18.0 72.8 71.3 40.5 19.9 73.0 71.1 42.2 20.0 70.2 70.6 34.0 72.9 71.1 42.2 22.0 67.6 69.8 29.2 70.3 70.4 38.8 24.0 65.0 68.9 25.1 67.7 69.6 34.1 26.0 62.2 67.8 22.2 65.1 68.7 29.0 28.0 59.5 66.7 20.2 62.3 67.6 25.6 29.2 30.0 56.6 65.4 18.5 59.5 66.5 23.0 64.0 67.5 34.0 32.0 53.7 64.0 17.1 56.6 65.2 20.5 61.3 66.5 30.2 34.0 50.6 62.4 16.0 53.8 63.8 18.6 58.4 65.2 27.3 36.0 47.4 60.6 14.8 50.7 62.2 17.2 55.4 63.9 23.8	
16.0 75.3 71.9 46.7 18.0 72.8 71.3 40.5 19.9 70.2 70.6 34.0 72.9 71.1 42.2 20.0 67.6 69.8 29.2 70.3 70.4 38.8 24.0 66.0 68.9 29.2 70.3 70.4 38.8 24.0 66.0 68.9 29.1 69.6 34.1 26.0 62.2 67.8 22.2 65.1 68.7 29.0 28.0 59.5 66.7 20.2 62.3 67.6 25.6 29.2 30.0 56.6 65.4 18.5 59.5 66.5 23.0 64.0 67.5 34.0 32.0 53.7 64.0 17.1 56.6 65.2 20.5 61.3 66.5 30.2 34.0 50.6 62.4 16.0 53.8 63.8 18.6 58.4 65.2 27.3 36.0 47.4 60.6 14.8 50.7 62.2 17.2 55.4 63.9 23.8 <td></td>	
18.0 72.8 71.3 40.5 19.9 70.2 70.6 34.0 72.9 71.1 42.2 20.0 67.6 69.8 29.2 70.3 70.4 38.8 24.0 65.0 68.9 25.1 67.7 69.6 34.1 26.0 62.2 67.8 22.2 65.1 68.7 29.0 28.0 59.5 66.7 20.2 62.3 67.6 25.6 29.2 30.0 56.6 65.4 18.5 59.5 66.5 23.0 64.0 67.5 34.0 32.0 53.7 64.0 17.1 56.6 65.2 20.5 61.3 66.5 30.2 34.0 50.6 62.4 16.0 53.8 63.8 18.6 58.4 65.2 27.3 36.0 47.4 60.6 14.8 50.7 62.2 17.2 55.4 63.9 23.8	
19.9 73.0 71.1 42.2 20.0 70.2 70.6 34.0 72.9 71.1 42.2 22.0 67.6 69.8 29.2 70.3 70.4 38.8 24.0 65.0 68.9 25.1 67.7 69.6 34.1 26.0 62.2 67.8 22.2 65.1 68.7 29.0 28.0 59.5 66.7 20.2 62.3 67.6 25.6 29.2 30.0 56.6 65.4 18.5 59.5 66.5 23.0 64.0 67.5 34.0 32.0 53.7 64.0 17.1 56.6 65.2 20.5 61.3 66.5 30.2 34.0 50.6 62.4 16.0 53.8 63.8 18.6 58.4 65.2 27.3 36.0 47.4 60.6 14.8 50.7 62.2 17.2 55.4 63.9 23.8	
20.0 70.2 70.6 34.0 72.9 71.1 42.2 22.0 67.6 69.8 29.2 70.3 70.4 38.8 24.0 65.0 68.9 25.1 67.7 69.6 34.1 26.0 62.2 67.8 22.2 65.1 68.7 29.0 28.0 59.5 66.7 20.2 62.3 67.6 25.6 29.2 30.0 56.6 65.4 18.5 59.5 66.5 23.0 64.0 67.5 34.0 32.0 53.7 64.0 17.1 56.6 65.2 20.5 61.3 66.5 30.2 34.0 50.6 62.4 16.0 53.8 63.8 18.6 58.4 65.2 27.3 36.0 47.4 60.6 14.8 50.7 62.2 17.2 55.4 63.9 23.8	
22.0 67.6 69.8 29.2 70.3 70.4 38.8 24.0 65.0 68.9 25.1 67.7 69.6 34.1 26.0 62.2 67.8 22.2 65.1 68.7 29.0 28.0 59.5 66.7 20.2 62.3 67.6 25.6 29.2 30.0 56.6 65.4 18.5 59.5 66.5 23.0 64.0 67.5 34.0 32.0 53.7 64.0 17.1 56.6 65.2 20.5 61.3 66.5 30.2 34.0 50.6 62.4 16.0 53.8 63.8 18.6 58.4 65.2 27.3 36.0 47.4 60.6 14.8 50.7 62.2 17.2 55.4 63.9 23.8	
24.0 65.0 68.9 25.1 67.7 69.6 34.1 26.0 62.2 67.8 22.2 65.1 68.7 29.0 28.0 59.5 66.7 20.2 62.3 67.6 25.6 29.2 30.0 56.6 65.4 18.5 59.5 66.5 23.0 64.0 67.5 34.0 32.0 53.7 64.0 17.1 56.6 65.2 20.5 61.3 66.5 30.2 34.0 50.6 62.4 16.0 53.8 63.8 18.6 58.4 65.2 27.3 36.0 47.4 60.6 14.8 50.7 62.2 17.2 55.4 63.9 23.8	
26.0 62.2 67.8 22.2 65.1 68.7 29.0 28.0 59.5 66.7 20.2 62.3 67.6 25.6 29.2 30.0 56.6 65.4 18.5 59.5 66.5 23.0 64.0 67.5 34.0 32.0 53.7 64.0 17.1 56.6 65.2 20.5 61.3 66.5 30.2 34.0 50.6 62.4 16.0 53.8 63.8 18.6 58.4 65.2 27.3 36.0 47.4 60.6 14.8 50.7 62.2 17.2 55.4 63.9 23.8	
28.0 59.5 66.7 20.2 62.3 67.6 25.6 29.2 30.0 56.6 65.4 18.5 59.5 66.5 23.0 64.0 67.5 34.0 32.0 53.7 64.0 17.1 56.6 65.2 20.5 61.3 66.5 30.2 34.0 50.6 62.4 16.0 53.8 63.8 18.6 58.4 65.2 27.3 36.0 47.4 60.6 14.8 50.7 62.2 17.2 55.4 63.9 23.8	
29.2 65.0 67.9 30.1 30.0 56.6 65.4 18.5 59.5 66.5 23.0 64.0 67.5 34.0 32.0 53.7 64.0 17.1 56.6 65.2 20.5 61.3 66.5 30.2 34.0 50.6 62.4 16.0 53.8 63.8 18.6 58.4 65.2 27.3 36.0 47.4 60.6 14.8 50.7 62.2 17.2 55.4 63.9 23.8	
30.0 56.6 65.4 18.5 59.5 66.5 23.0 64.0 67.5 34.0 32.0 53.7 64.0 17.1 56.6 65.2 20.5 61.3 66.5 30.2 34.0 50.6 62.4 16.0 53.8 63.8 18.6 58.4 65.2 27.3 36.0 47.4 60.6 14.8 50.7 62.2 17.2 55.4 63.9 23.8	
32.0 53.7 64.0 17.1 56.6 65.2 20.5 61.3 66.5 30.2 34.0 50.6 62.4 16.0 53.8 63.8 18.6 58.4 65.2 27.3 36.0 47.4 60.6 14.8 50.7 62.2 17.2 55.4 63.9 23.8	
34.0 50.6 62.4 16.0 53.8 63.8 18.6 58.4 65.2 27.3 36.0 47.4 60.6 14.8 50.7 62.2 17.2 55.4 63.9 23.8	
36.0 47.4 60.6 14.8 50.7 62.2 17.2 55.4 63.9 23.8	
1 38 0 44 0 58 6 13 7 1 47 5 60 5 15 0 1 52 4 62 4 21 0 1	
40.0 40.3 56.4 12.7 44.1 58.5 14.8 49.5 60.8 19.2	
40.1 55.0 62.1 23.2	
42.0 36.4 53.8 11.9 40.4 56.2 13.8 46.2 58.9 17.6 52.1 60.7 21.3	
44.0 32.0 50.8 11.2 36.5 53.6 12.9 42.7 56.9 16.3 49.2 59.1 18.5	
46.0 27.0 47.1 10.6 32.9 51.1 12.1 38.9 54.5 15.1 45.9 57.2 16.7	
48.0 20.9 42.5 9.9 27.1 47.0 11.3 35.5 52.2 14.5 42.4 55.1 15.1	
49.0 17.1 39.5 9.6 50.0 21.1 42.4 10.6 31.1 49.1 13.4 38.6 52.7 13.6	
1	1
	-
	1
58.0 17.5 37.3 9.9 35.0 45	3 14.5
58.1 35.0 45	
65.0	



N° de ident.: 9842523/95738/

Radio de descarga: 360 $^{\circ}$

Pieza de articulación de pluma principal: 2821-1 Cabeza de pluma principal: 2821-1

		gulo de orincipal			gulo de orincipa			gulo de principa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				23.0		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 5	0.5 m Pl	eza de p umín	lumín				
14.5	78.0	75.3	47.5												
16.0	76.2	75.0	46.0												
18.0	73.9	74.4	40.9												
20.0	71.5	73.8	33.8												
20.8				73.0	74.0	39.4									
22.0	69.0	73.0	29.7	71.5	73.5	38.9									
24.0	66.5	72.2	25.6	69.1	72.8	33.5									
26.0	64.0	71.2	22.3	66.7	72.0	29.3									
28.0	61.5	70.2	20.0	64.1	71.0	25.5									
30.0 30.5	58.9	69.0	18.3	61.5	69.9	23.2	65.0	70.6	32.0						
32.0	56.2	67.7	16.9	58.8	68.7	20.6	63.2	69.9	31.3						
34.0	53.4	66.3	15.6	56.6 56.2	67.5	18.7	60.5	68.7	27.3						
36.0	50.9	64.9	15.0	53.4	66.1	17.1	57.8	67.5	24.6				i		
38.0	47.9	63.2	13.8	50.5	64.5	15.8	55.0	66.1	21.6						
40.0	44.8	61.2	12.7	47.5	62.7	14.7	52.3	64.7	19.3						
41.8		-		1	-					55.0	64.6	21.4	i		
42.0	40.8	58.7	11.8	44.3	60.7	13.7	49.4	63.0	17.7	54.8	64.4	21.4	İ		
44.0	37.2	56.1	11.0	40.9	58.5	12.7	46.3	61.2	16.4	51.9	62.9	19.5			
46.0	33.2	53.2	10.4	37.3	56.0	11.9	43.0	59.1	15.1	49.1	61.3	17.1			
48.0	28.7	49.8	9.8	33.3	53.1	11.2	39.5	56.8	14.1	46.0	59.5	15.5			
50.0	23.4	45.6	9.2	28.8	49.7	10.5	36.4	54.6	13.3	42.7	57.4	14.0			
52.0	16.5	39.9	8.6												
54.0				16.7	39.8	9.2									
55.0							24.2	45.2	11.0	34.1	51.3	11.4			
57.0							17.6	39.8	10.1						
60.0										20.6	40.8	9.3	25.0	47.0	40.0
60.5										40.0	37.7	0.0	35.0	47.0	13.6
61.0										16.9	3/./	8.9	20.4	40.0	10.4
65.0 68.0													26.1 16.5	40.3 32.3	12.4 10.1
00.0	l			I				l					10.5	32.3	10.1



Nº de ident.: 9842523/95738/

Radio de descarga: 360°

Valor de vuelco: Lastre trasero [t]:

Lastre central [t]:

2 - Vía ancha 114.0 52.6 Pieza de articulación de pluma principal: 2821-1 2821-1 Cabeza de pluma principal:

		gulo de principa		ı	gulo de orincipa		ı	gulo de orincipa		1	gulo de orincipa		1	gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				23.0	m Pluma Cab	eza de p	al, Punto dumín (2 n] Posici	316-1) 5	3.5 m Pl	eza de p umín	lumín				
15.1	78.0	78.3	43.4												
16.0	77.0	78.1	43.4												
18.0	74.8 72.5	77.5	38.9												
20.0 21.6	12.5	76.9	33.7	73.0	76.8	36.4									
22.0	70.3	76.2	28.4	72.6	76.7	36.4									
24.0	67.9	75.4	25.3	70.3	76.0	33.6									
26.0	65.6	74.6	22.1	68.0	75.2	30.1									
28.0	63.2	73.6	19.6	65.7	74.3	26.4									
30.0	60.8	72.5	17.9	63.2	73.3	23.1									
31.8							65.0	73.3	29.9						
32.0	58.3	71.3	16.5	60.8	72.2	20.7	64.8	73.2	29.9						
34.0	55.7	70.0	15.2	58.4	71.1	18.6	62.4	72.2	28.6						
36.0	53.1	68.5	14.1	55.8	69.8	16.9	59.8	71.0	24.8						
38.0	50.8	67.2	13.5	53.2	68.3	15.5	57.3	69.8	22.2						
40.0	47.9	65.4	12.5	50.9	67.0	14.8	54.6	68.4	19.6						
42.0	45.0	63.5	11.5	48.0	65.2	13.7	52.1	66.9	17.7	55.0	67.0	40.0			
43.6 44.0	41.3	60.9	10.7	45.0	63.3	12.6	49.3	65.3	16.3	55.0 54.4	66.7	19.6 19.6			
46.0	37.9	58.5	10.7	41.9	61.1	11.6	46.4	63.4	15.0	51.9	65.3	17.8			
48.0	34.2	55.7	9.4	38.0	58.3	10.9	43.3	61.4	13.9	49.1	63.6	15.7			
50.0	30.1	52.4	8.9	34.3	55.5	10.3	40.1	59.1	12.9	46.6	62.0	15.1			
55.0	16.0	40.3	7.7	22.8	46.1	8.7	30.7	51.9	10.9	38.6	56.5	11.4			
57.0				16.2	40.3	8.1									
60.0							17.1	40.3	9.0	28.1	48.2	9.3			
63.0													35.0	48.8	12.6
64.0										16.4	38.1	7.9			
65.0													32.2	46.6	12.2
70.0													19.6	36.0	9.6



Nº de ident.: 9842523/95738/ Pieza de articulación de pluma principal: Radio de descarga: 360°

2821-1 Cabeza de pluma principal: 2821-1

2 - Vía ancha Valor de vuelco: Lastre trasero [t]: 114.0 Lastre central [t]: 52.6

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de principa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				23.0 ו		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 5	6.5 m Pl	eza de p umín	lumín				
15.7	78.0	81.2	40.0												
16.0	77.7	81.2	40.0												
18.0	75.6	80.7	37.9												
20.0	73.5	80.1	34.0												
22.0	71.4	79.4	28.3												
22.5				73.0	79.7	34.1									
24.0	69.2	78.7	25.0	71.4	79.2	33.5									
26.0	67.0	77.8	21.9	69.3	78.5	29.5									
28.0	64.7 62.5	76.9	19.4	67.0	77.6 76.7	27.1				ł			ł		
30.0 32.0	60.2	75.9 74.8	17.6 16.3	64.8 62.5	75.7	23.5									
33.0	60.2	74.0	10.3	02.5	75.7	20.7	65.0	76.0	27.8	l					
34.0	57.8	73.6	15.0	60.2	74.6	18.7	64.0	75.6	28.3	l			ł		
36.0	55.4	72.2	13.9	57.9	73.4	17.0	61.7	74.5	25.9						
38.0	52.8	70.8	13.0	55.4	72.0	15.5	59.2	73.3	22.7				i		
40.0	50.7	69.4	12.3	52.9	70.6	14.2	56.8	72.0	20.3						
42.0	47.5	67.4	11.4	50.7	69.2	13.5	54.5	70.7	18.1						
44.0	44.7	65.4	10.6	48.0	67.5	12.5	51.9	69.2	16.4	i			İ		
45.3										55.0	69.5	18.1			
46.0	41.7	63.2	9.9	45.2	65.5	11.5	49.3	67.5	15.1	54.2	69.0	18.2			
48.0	38.5	60.8	9.3	41.8	63.0	10.7	46.5	65.7	14.0	51.7	67.5	16.5			
50.0	35.0	58.1	8.7	38.6	60.6	10.1	43.6	63.6	13.0	49.0	65.8	14.6			
55.0	24.7	49.1	7.6	29.3	53.0	8.7	35.5	57.5	10.9	42.3	61.1	11.9			
58.0	15.6	40.7	6.9												
60.0				15.8	40.7	7.3	25.3	48.8	9.2	33.4	54.2	9.4			
63.0							16.6	40.7	8.1						
65.0										22.3	44.5	7.7			
65.5										40.0	20.5	7.4	35.0	50.5	11.7
67.0 70.0										16.0	38.5	7.1	27.0	42.7	10.2
70.0													27.0 15.6	43.7 33.2	10.3 8.0
74.0									l			l	13.0	ე აა.∠	0.0



Nº de ident.: 9842523/95738/ Pieza de articulación de pluma principal: Radio de descarga: 360°

2 - Vía ancha Valor de vuelco: Lastre trasero [t]: 114.0 52.6 Lastre central [t]:

2821-1 Cabeza de pluma principal: 2821-1

		gulo de principal		ŗ	gulo de orincipa			gulo de principa			gulo de orincipa			gulo de principa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				23.0 r		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 5	9.5 m Pl		lumín				
16.3	78.0	84.1	36.6												
18.0	76.4	83.8	36.2												
20.0	74.4	83.2	32.6												
22.0	72.3	82.6	28.2												
23.4				73.0	82.6	31.8									
24.0	70.3	81.9	24.1	72.4	82.4	31.8									
26.0	68.2	81.1	21.5	70.4	81.7	29.7									
28.0	66.1	80.2	19.1	68.3	80.9	27.0									
30.0	64.0	79.3	17.3	66.2	80.0	23.9									
32.0	61.8	78.3	15.9	64.0	79.1	20.8									
34.0	59.6	77.1	14.6	61.9	78.0	18.6				ł					
34.3	F7.0	75.0	40.5	50.7	70.0	40.0	65.0	78.8 77.9	26.6						
36.0 38.0	57.3 55.0	75.9 74.5	13.5 12.5	59.7 57.4	76.9 75.7	16.9 15.4	63.2 61.0	76.9	26.3 23.3	ł					
40.0	52.6	73.0	11.6	57.4 55.1	74.3	14.0	58.7	75.6	20.7						
42.0	50.1	71.4	10.9	52.7	72.8	12.9	56.4	74.3	18.4						
44.0	47.5	69.6	10.3	50.6	71.5	12.3	54.1	73.0	16.6						
46.0	44.8	67.6	9.5	48.0	69.7	11.3	51.7	71.4	15.1	i					
47.0		07.0	0.0	10.0	00		0			55.0	71.9	16.6			
48.0	42.0	65.5	8.9	44.9	67.4	10.5	49.6	70.0	14.5	53.9	71.3	16.8			
50.0	39.0	63.1	8.4	42.1	65.3	9.8	47.0	68.2	13.3	51.5	69.7	15.2			
55.0	30.4	55.7	7.3	34.2	58.8	8.4	39.9	62.9	10.7	45.4	65.5	12.2			
60.0	18.6	44.5	6.2	24.1	49.7	7.2	31.0	55.2	9.1	37.6	59.4	9.4			
61.0	15.2	41.1	6.0												
63.0				15.4	41.1	6.4									
65.0							19.4	44.3	7.5	28.7	51.6	7.8			
66.0							16.2	41.1	7.2						
67.9													35.0	52.2	10.7
70.0										15.6	38.9	6.2	32.3	49.9	10.5
75.0													20.6	38.9	8.2
77.0													15.1	33.5	7.0



2821-1

2821-1

Nº de ident.: 9842523/95738/ Pieza de articulación de pluma principal: Radio de descarga: 360 ° Cabeza de pluma principal:

Valor de vuelco: 2 - Vía ancha
Lastre trasero [t]: 114.0

Lastre trasero [t]: 114.0 Lastre central [t]: 52.6

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				23.0 ı		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 6	2.5 m Pl	eza de p umín	lumín				
17.0	78.0	87.1	33.9												
18.0	77.0	86.8	33.9												
20.0	75.1	86.3	31.3												
22.0	73.2	85.7	28.9												
24.0	71.3	85.1	24.4												
24.3				73.0	85.4	29.9									
26.0	69.3	84.3	21.3	71.3	84.9	29.4									
28.0	67.4	83.5	19.0	69.4	84.1	26.5									
30.0	65.3	82.6	17.1	67.4	83.3	24.6									
32.0	63.3	81.7	15.6	65.4	82.4	21.3									
34.0	61.6	80.8	15.0	63.3	81.4	18.7									
35.6	50.4	- 0.0	40.0	24.0	00.4	47.0	65.0	81.5	25.2 25.2						
36.0 38.0	59.4 57.3	79.6 78.4	13.6 12.4	61.3 59.2	80.4 79.2	17.0 15.4	64.6 62.6	81.3 80.3	25.2 24.4						
40.0	55.1	76.4	11.3	59.2 57.0	79.2 77.9	14.1	60.5	79.2	21.3						
42.0	52.4	75.2	10.5	54.8	76.5	12.9	58.2	77.9	19.0						
44.0	50.0	73.6	9.8	52.5	75.0	11.9	56.1	76.7	17.1						
46.0	47.6	71.8	9.6	50.5	73.7	11.9	53.9	75.2	15.4						
48.0	45.0	69.9	8.7	47.6	71.6	10.4	51.5	73.7	14.0						
48.7	40.0	00.0	0.7	47.0	7 1.0	10.4	01.0	70.7	14.0	55.0	74.4	15.3	i		
50.0	42.3	67.7	8.1	45.1	69.7	9.7	49.5	72.3	13.4	53.7	73.5	15.6			
55.0	34.9	61.4	7.1	38.1	64.0	8.3	43.2	67.4	10.7	48.1	69.7	12.5			
60.0	25.7	52.6	6.1	29.8	56.4	7.1	35.3	60.8	9.0	41.5	64.6	9.6	i		
64.0	16.0	42.7	4.9												
65.0				18.3	44.9	6.0	26.3	52.2	7.6	33.4	57.5	7.8			
66.0				16.1	42.7	5.3									
69.0							15.8	41.5	6.5						
70.0										23.7	48.1	6.4			
70.4													35.0	53.9	9.9
73.0										15.2	39.3	5.5			
75.0													27.1	46.5	8.8
79.0													17.1	36.4	7.1



Nº de ident.:9842523/95738/Pieza de articulación de pluma principal:2821-1Radio de descarga:360 °Cabeza de pluma principal:2821-1

		gulo de principa			gulo de orincipa			gulo de principa			gulo de orincipa			gulo de principa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				23.0 ı		eza de p	al, Punto dumín (2 n] Posici	316-1) 6	5.5 m Pli	eza de p umín	lumín				
17.6 18.0 20.0 22.0 24.0	78.0 77.6 75.8 74.0 72.2	90.0 89.9 89.4 88.9 88.3	29.9 29.9 28.9 27.1 23.7												
25.2 26.0 28.0 30.0 32.0	70.3 68.4 66.5 64.6	87.6 86.8 85.9 85.0	20.8 18.7 16.8 15.3	73.0 72.2 70.4 68.5 66.6	88.3 88.0 87.3 86.6 85.7	26.5 26.5 25.4 23.8 21.6									
34.0 36.0 36.8 38.0 40.0	62.7 61.0 59.0 56.9	84.0 83.1 81.9 80.6	14.0 13.3 12.1 11.0	64.6 62.7 60.7 58.7	84.8 83.8 82.7 81.5	18.8 16.8 15.3 13.9	65.0 63.9 61.9	84.2 83.7 82.6	22.6 23.1 22.0						
42.0 44.0 46.0 48.0	54.4 52.2 49.9 47.6 45.2	79.0 77.5 75.8 74.1 72.1	10.2 9.5 8.9 8.3 7.8	56.6 54.5 52.3 50.0 47.7	80.2 78.8 77.3 75.7 73.9	12.7 11.7 10.8 10.1 9.4	59.9 57.8 55.7 53.6 51.4	81.5 80.2 78.8 77.5 75.9	19.3 17.5 15.6 14.1 12.9						
50.0 50.4 55.0 60.0 65.0 67.0	38.5 30.7 20.4 15.6	66.4 59.1 48.4 43.1	6.7 5.8 5.0 4.3	41.4 34.1 25.2	68.7 62.1 53.2	8.0 6.8 5.8	45.9 38.9 31.2	71.7 65.8 58.6	10.7 8.8 7.5	55.0 50.4 44.5 37.3	76.8 73.7 69.0 62.7	14.1 13.0 9.8 7.7			
69.0 70.0 72.0 72.8 75.0	13.0	70.1	7.0	15.8	43.1	4.6	21.1 15.4	48.2 41.9	6.2 5.6	29.2	54.9	6.3	35.0 31.9	55.7 52.7	9.1 8.9
76.0 80.0 82.0										15.9	40.9	4.5	22.1 16.7	42.6 36.8	7.0 6.3



N° de ident.: 9842523/95738/ Pieza d

Radio de descarga: $$360\ ^{\circ}$$

Valor de vuelco: 2 - Vía ancha Lastre trasero [t]: 114.0 Lastre central [t]: 52.6 Pieza de articulación de pluma principal: 2821-1 Cabeza de pluma principal: 2821-1

		gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				23.0 ı		eza de p	I, Punto Iumín (2: I] Posici	316-1) 6	8.5 m Pl	eza de p umín	lumín				
18.2	78.0	93.0	27.0												
20.0	76.5	92.5	26.6												
22.0	74.7	92.0	25.4												
24.0	73.0	91.4	23.5												
26.0	71.2	90.7	20.7	73.0	91.2	24.0									
28.0	69.4	90.0	18.6	71.3	90.5	23.8									
30.0	67.6	89.2	16.8	69.5	89.8	22.6									
32.0	65.8	88.3	15.2	67.7	89.0	22.1									
34.0	64.0	87.4	13.9	65.8	88.1	19.3									
36.0	62.4	86.5	12.8	64.0	87.2	17.0									
38.0	60.5	85.4	12.0	62.1	86.1	15.3									
38.1							65.0	86.9	20.9						
40.0	58.5	84.2	10.9	60.5	85.2	14.4	63.3	86.0	21.6				<u> </u>		
42.0	56.2	82.7	10.0	58.6	84.0	13.0	61.4	84.9	20.1						
44.0	54.1	81.3	9.3	56.6	82.7	11.8	59.4	83.7	17.8						
46.0	52.0	79.7	8.7	54.5	81.3	10.7	57.4	82.5	16.3						
48.0	49.9	78.1	8.1	52.1	79.5	9.9	55.3	81.1	14.5						
50.0	47.6	76.3	7.6	49.9	77.9	9.3	53.4	79.7	13.1						
52.2										55.0	79.3	13.1			
55.0	41.6	71.2	6.5	44.2	73.2	7.9	48.3	75.9	10.7	52.5	77.5	13.3			
60.0	34.8	64.7	5.7	37.7	67.3	6.7	42.0	70.5	8.8	47.0	73.2	10.1			
65.0	26.5	56.1	4.9	30.1	59.7	5.7	35.2	64.1	7.4	40.5	67.6	7.8			
70.0	15.2	43.5	3.8	20.1	48.8	4.8	27.0	55.7	6.3	33.4	60.8	6.3			
72.0				15.4	43.5	4.1									
75.0							15.0	42.3	5.0	24.7	51.6	5.2			
75.3													35.0	57.4	8.4
79.0										15.6	41.3	3.9			
80.0													27.7	49.9	7.4
85.0													16.3	37.2	5.6



N° de ident.: 9842523/95738/

Radio de descarga: 360 $^{\circ}$

Pieza de articulación de pluma principal: 2821-1
Cabeza de pluma principal: 2821-1

		gulo de principa			gulo de orincipa			gulo de orincipa			gulo de orincipa		45° Án	gulo de orincipa	pluma I
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				23.0 ı	m Pluma Cab	eza de p	il, Punto llumín (2 n] Posici	316-1) 7	1.5 m Pl	eza de p umín	lumín				
18.8 20.0 22.0 24.0 26.0 26.9 28.0 30.0 32.0 34.0 36.0 39.4 40.0	78.0 77.0 75.4 73.7 72.0 70.3 68.6 66.9 65.1 63.3 61.8	95.9 95.6 95.1 94.5 93.9 93.2 92.4 91.6 90.7 89.7 88.8	24.9 24.9 23.7 22.8 20.1 18.0 16.4 14.8 13.5 12.3 11.6	73.0 72.1 70.4 68.7 66.9 65.2 63.4 61.9	94.0 93.7 93.0 92.2 91.4 90.5 89.5	22.2 22.1 21.7 20.9 19.5 17.2 15.3	65.0 64.5	89.6 89.4	20.0						
42.0 44.0 46.0 48.0 50.0 53.9 55.0 60.0	58.1 55.9 53.9 51.9 49.8 44.3 38.1	86.5 84.9 83.5 82.0 80.3 75.6 69.8	9.7 9.0 8.3 7.7 7.3 6.2 5.3	60.0 58.2 56.2 54.3 51.9 46.6 40.8	87.5 86.3 85.0 83.6 81.8 77.4 72.1	13.2 11.9 10.7 9.7 9.0 7.6 6.4	62.7 60.9 58.9 57.0 55.2 50.4 44.6	88.3 87.3 86.0 84.7 83.4 79.8 74.9	19.8 18.2 16.6 15.1 13.5 10.6 8.7	55.0 54.3 49.2	81.8 81.3 77.3	12.1 12.5 10.2			
70.0 72.0 75.0 77.7 78.0 80.0 82.0 85.0 88.0	31.0 21.8 16.9	62.4 52.2 46.3	4.6 3.9 3.6	34.1 26.0 15.1	65.4 56.6 43.9	5.4 4.6 3.5	38.5 31.4 22.4 15.7	69.2 61.9 51.9 43.9	7.2 6.1 5.0 4.0	43.6 37.0 29.6 19.8 15.2	72.4 66.1 58.3 47.2 41.7	7.9 6.2 5.0 4.0 3.3	35.0 31.7 23.3 15.9	59.1 55.6 46.3 37.6	7.6 7.3 5.9 4.9



Nº de ident.: 9842523/95738/

Radio de descarga: 360 $^{\circ}$

Pieza de articulación de pluma principal: 2821-1 Cabeza de pluma principal: 2821-1

		gulo de principa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				23.0 ı	m Pluma Cab	eza de p	il, Punto Ilumín (2 n] Posici	316-1) 7	4.5 m Pl	eza de p umín	lumín				
19.5 20.0 22.0 24.0 26.0	78.0 77.6 76.0 74.4 72.8	98.8 98.7 98.2 97.7 97.1	23.3 23.3 22.7 21.7 20.0												
27.8 28.0 30.0 32.0 34.0	71.2 69.5 67.9 66.2	96.4 95.7 94.9 94.0	17.8 16.2 14.7 13.3	73.0 72.8 71.2 69.6 67.9	96.9 96.8 96.2 95.4 94.7	21.1 21.1 20.9 20.3 19.7									
36.0 38.0 40.0 40.6	64.5 63.1 61.3	93.1 92.2 91.2	12.2 11.2 10.4	66.2 64.5 62.8	93.8 92.9 91.8	17.7 15.6 13.9	65.0	92.4	18.4						
42.0 44.0 46.0 48.0 50.0	59.2 57.4 55.6 53.7 51.7	89.8 88.5 87.2 85.8 84.2	9.6 8.8 8.2 7.6 7.0	61.4 59.6 57.8 55.9 53.7	90.9 89.8 88.6 87.2 85.6	13.2 11.9 10.8 9.7 8.9	63.9 62.1 60.4 58.5 57.1	91.7 90.7 89.6 88.3 87.3	19.0 18.6 16.9 15.7 14.2						
55.0 55.6 60.0 65.0 70.0	46.6 41.0 34.7 27.1	79.8 74.5 68.0 59.5	5.1 4.4 3.7	48.8 43.4 37.4 30.4	76.6 70.6 63.1	6.2 5.3 4.5	52.3 46.9 41.3 35.1	79.1 73.9 67.4	8.7 7.2 6.0	55.0 51.2 46.0 39.9	84.2 81.2 76.7 70.9	11.3 10.6 8.2 6.3			
75.0 77.0 80.0 80.2 81.0 84.0	16.5	46.7	3.1	21.5 16.7	52.6 46.7	3.7	27.6 17.3 15.4	59.1 46.7 44.3	4.0 3.5	25.5 16.8	55.1 44.6	4.0	35.0	60.8	7.0
85.0 90.0 91.0										10.0	44.0	3.2	28.2 18.3 15.6	53.3 41.4 38.0	6.1 4.6 4.3



Nº de ident.: 9842523/95738/

Radio de descarga: 360 $^{\circ}$

Pieza de articulación de pluma principal: 2821-1 Cabeza de pluma principal: 2821-1

		gulo de principa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				23.0 ı		eza de p	al, Punto dumín (2 n] Posici	316-1) 7	7.5 m Pl	eza de p umín	lumín				
20.1 22.0 24.0 26.0 28.0 28.7 30.0 32.0 34.0 36.0 38.0 40.0 41.0 42.0	78.0 76.5 75.0 73.5 71.9 70.4 69.0 67.4 65.8 64.2 62.5	101.8 101.3 100.8 100.2 99.6 98.9 98.2 97.4 96.5 95.6 94.6	21.1 20.8 20.0 19.0 17.2 15.7 15.1 13.5 12.2 11.0 10.1 9.3 8.6	73.0 72.0 70.4 68.8 67.2 65.6 64.0 62.6 60.9	99.8 99.3 98.6 97.9 97.1 96.2 95.2 94.4 93.3	19.1 19.1 18.7 18.1 17.3 15.4 13.8	65.0 65.0 63.3	95.1 95.1 94.1	15.4 16.0 16.0						
46.0 48.0 50.0 55.0 57.3 60.0 65.0 70.0 75.0 78.0 80.0 82.7 84.0 85.0	57.1 55.3 53.5 48.7 43.5 37.8 31.2 23.0 16.2	90.8 89.5 88.0 83.9 79.0 73.1 65.7 55.8 47.2	7.9 7.3 6.8 5.7 4.8 4.1 3.5 2.9 2.5	59.2 57.4 55.3 50.7 45.7 40.2 34.1 26.6	92.1 90.8 89.3 85.4 80.9 75.5 68.8 60.1	10.6 9.6 8.7 7.2 6.0 5.0 4.2 3.5	61.6 59.9 58.2 53.7 49.0 43.8 38.1 31.6 23.5	93.0 91.9 90.7 87.2 83.2 78.3 72.5 65.2 55.5	15.4 14.5 13.9 10.3 7.9 6.4 5.2 4.3 3.4	55.0 52.9 48.1 42.5 36.7 29.9	86.7 85.0 80.9 75.5 69.4 61.6	10.4 10.3 8.2 6.5 4.9 3.9	35.0 32.6	62.5 59.8	6.1
85.0 87.0 90.0 94.0										16.5	45.0	2.7	24.8 15.3	59.8 50.6 38.4	4.8



Nº de ident.: 9842523/95738/ Radio de descarga:

360°

Pieza de articulación de pluma principal: 2821-1 Cabeza de pluma principal: 2821-1

2 - Vía ancha Valor de vuelco: Lastre trasero [t]: 114.0 52.6 Lastre central [t]:

		gulo de principa			gulo de orincipa			gulo de principa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				23.0		eza de p	lumín (2	316-1) 8	0.5 m Pl	eza de p umín	lumín		-		
						34.0 [m	n] Posici	ón midta	II (2316)						
20.7	78.0	104.7	19.4												
22.0	77.1	104.4	19.4												
24.0	75.6	103.9	18.5												
26.0 28.0	74.1 72.6	103.3 102.7	17.9 16.5												
29.5	12.0	102.7	10.5	73.0	102.6	17.5									
30.0	71.1	102.1	15.2	73.0	102.6	17.5									
32.0	69.9	101.4	14.4	71.2	102.3	17.3									
34.0	68.3	100.7	13.5	69.6	101.1	16.9									
36.0	66.8	99.8	12.1	68.1	100.3	16.5									
38.0	65.2	98.9	10.9	66.6	99.5	15.2									
40.0	63.6	97.9	9.9	65.0	98.5	13.7									
42.0	61.8	96.7	9.1	63.4	97.6	12.4									
43.2							65.0	97.8	13.6						
44.0	60.1	95.6	8.4	62.1	96.7	11.6	64.4	97.4	13.6						
46.0	58.5	94.4	7.8	60.4	95.6	10.7	62.8	96.4	13.5						
48.0	56.8	93.1	7.2	58.8	94.4	9.6	61.2	95.3	13.1						
50.0 55.0	55.0 50.6	91.7 87.9	6.6 5.5	57.1 52.4	93.1 89.3	8.7 7.0	59.5 55.3	94.2 90.9	12.8 10.2						
55.0 59.0	50.6	07.9	0.0	52.4	09.3	7.0	55.3	90.9	10.2	55.0	89.1	9.7			
60.0	45.7	83.3	4.7	47.8	85.1	5.9	50.8	87.1	7.4	54.3	88.5	9.9			
65.0	40.5	77.9	3.9	42.7	80.0	4.9	46.0	82.6	5.9	49.7	84.6	8.4			
70.0	34.6	71.3	3.3	37.1	74.0	4.1	40.8	77.3	4.7	44.8	79.9	6.7			
75.0	27.2	62.4	2.7	30.7	66.4	3.4	35.0	70.7	3.7	39.5	74.3	5.1			
80.0	18.4	50.9	2.2	22.6	56.3	2.8	28.1	62.5	2.9	33.5	67.4	3.9			
83.0				16.0	47.5	2.4									
85.0										26.2	58.6	3.1			
85.1													35.0	64.3	5.6
90.0										16.2	45.4	2.2	29.1	57.3	4.7
95.0	-												19.8	45.3	3.8
97.0									1				15.9	40.0	3.0



N° de ident.: 9842523/95738/ Pie

Radio de descarga: 360 $^{\circ}$

Pieza de articulación de pluma principal: 2821-1
Cabeza de pluma principal: 2821-1

		gulo de orincipal			gulo de orincipa			gulo de principa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				23.0 ı		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 8	3.5 m Pli	eza de p umín	lumín				
21.3	78.0	107.6	17.8												
22.0	77.5	107.5	17.8												
24.0	76.1	107.0	17.4												
26.0 28.0	74.7 73.3	106.5 105.9	16.8 16.0												
30.0	73.3	105.9	16.0												
30.4	/ 1.0	105.2	14.7	73.0	105.5	16.2									
32.0	70.6	104.6	13.7	71.9	105.0	16.2							i		
34.0	69.1	103.9	13.3	70.4	104.3	15.9							İ		
36.0	67.7	103.1	12.0	68.9	103.5	15.5									
38.0	66.2	102.2	10.7	67.5	102.7	15.1									
40.0	64.7	101.3	9.6	66.0	101.9	13.6									
42.0	62.9	100.1	8.9	64.4	100.9	12.3							•		
44.0	61.3	99.0	8.2	62.9	99.9	11.2									
44.4							65.0	100.5	13.0						
46.0	59.7	97.9	7.6	61.6	99.0	10.5	63.8	99.8	13.6						
48.0	58.1	96.7	7.0	60.0	97.9	9.6	62.3	98.7	13.4						
50.0 55.0	56.5 52.2	95.4 91.7	6.4 5.3	58.4 54.0	96.7 93.1	8.6 6.9	60.7 56.7	97.6 94.6	13.0 11.4				ł		
60.0	52.2 47.7	91.7 87.5	5.5 4.4	49.6	93.1 89.1	5.7	50.7 52.5	94.6	8.3						
60.8	41.1	67.5	4.4	49.0	09.1	3.7	32.3	91.0	0.3	55.0	91.6	8.9			
65.0	42.9	82.5	3.7	44.9	84.4	4.7	48.0	86.7	6.4	51.4	88.5	8.5			
70.0	37.5	76.5	3.0	39.8	78.8	3.9	43.1	81.8	5.2	46.9	84.1	6.8	i		
75.0	31.4	69.1	2.5	34.0	72.1	3.2	37.8	75.8	4.1	42.0	78.9	5.2			
80.0				27.2	63.5	2.6	31.7	68.5	3.3	36.5	72.7	3.8			
85.0							23.9	58.4	2.5	30.2	65.0	2.9			
87.6													35.0	66.0	4.8
90.0										22.3	54.7	2.2	32.7	63.2	4.4
95.0													25.5	54.0	3.6
100.0													15.6	40.4	2.5



N° de ident.: 9842523/95738/

Radio de descarga: 360 °

Pieza de articulación de pluma principal: 2821-1 Cabeza de pluma principal: 2821-1

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				23.0 ı		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 8	6.5 m Pl	eza de p umín	lumín				
21.9 22.0	78.0 78.0	110.6 110.5	16.5 16.5												
24.0	76.6	110.1	16.3												
26.0	75.2	109.6	15.8												
28.0	73.9	109.0	15.5												
30.0	72.5	108.4	14.3												
31.3				73.0	108.4	15.2									
32.0	71.1	107.7	13.3	72.5	108.2	15.2									
34.0	69.9	107.1	12.6	71.1	107.5	15.0									
36.0	68.5	106.3	11.9	69.7	106.8	14.7									
38.0	67.0	105.5	10.6	68.3	106.0	14.4									
40.0	65.6	104.6	9.5	66.8	105.1	13.6									
42.0	63.9	103.5	8.7	65.4	104.2	12.3									
44.0	62.4	102.5	8.0	63.9	103.3	11.2									
45.7							65.0	103.2	13.0						
46.0	60.9	101.4	7.4	62.4	102.2	10.3	64.8	103.1	13.6						
48.0	59.3	100.2	6.8	61.2	101.3	9.6	63.3	102.1	13.6						
50.0 55.0	57.8 53.8	99.0 95.5	6.3 5.1	59.6 55.4	100.2 96.7	8.7 6.8	61.8 58.0	101.1 98.1	13.3 12.6						
60.0	49.5	95.5 91.5	4.2	51.3	98.7	5.5	54.0	94.7	9.3						
62.5	49.5	91.5	4.2	31.3	93.0	0.0	34.0	94.7	9.3	55.0	94.1	8.3			
65.0	45.0	86.8	3.5	46.9	88.6	4.6	49.8	90.7	6.9	53.0	92.3	8.3			
70.0	40.0	81.3	2.8	42.1	83.4	3.7	45.2	86.1	5.7	48.7	88.2	6.8			
75.0	34.5	74.6	2.3	36.9	77.3	3.0	40.3	80.6	4.6	44.1	83.3	5.4			
80.0	""	•		30.9	69.8	2.5	34.9	74.1	3.7	39.1	77.6	3.9			
85.0							28.5	65.8	2.9	33.5	70.7	2.9			
90.0							20.3	54.6	2.2	26.4	61.4	2.1	35.0	67.7	4.1
95.0											-		29.5	60.6	3.3
100.0													21.7	50.0	2.6
103.0													15.3	40.8	2.1



2821-1

2821-1

Nº de ident.: 9842523/95738/ Pieza de articulación de pluma principal: Radio de descarga: 360 ° Cabeza de pluma principal:

		gulo de orincipal			gulo de orincipa			gulo de principa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				23.0 ı		eza de p	lumín (2	de carga 316-1) 8 ón midfa	9.5 m Pl		lumín				
22.6	78.0	113.5	14.4												
24.0	77.1	113.2	14.4												
26.0	75.8	112.7	13.9												
28.0	74.4	112.1	13.6												
30.0	73.1	111.5	13.0												
32.0	71.7	110.9	12.2												
32.2				73.0	111.3	13.2									
34.0	70.6	110.3	11.6	71.8	110.7	13.2									
36.0	69.2	109.6	11.3	70.4	110.0	12.9									
38.0	67.9	108.8	10.3	69.0	109.2	12.6									
40.0	66.5	107.9	9.2	67.6	108.4	12.3									
42.0	65.1	107.0	8.3	66.2	107.5	11.3									
44.0	63.4	105.8	7.6	64.8	106.6	10.5									
46.0	61.9	104.8	7.0	63.4	105.6	9.7				ł					
47.0	20.4	100.0	0.4	20.0	404.0	0.4	65.0	106.0	11.6						
48.0	60.4	103.6	6.4	62.2	104.8	9.1	64.3	105.5	11.6						
50.0 55.0	58.9 55.1	102.4 99.1	5.9 4.7	60.8 57.0	103.7 100.6	8.5 6.6	62.8 59.1	104.4 101.6	11.5 10.9						
60.0	51.0	95.3	3.8	57.0 52.7	96.7	5.2	55.3	98.3	8.8						
64.2	31.0	95.5	3.0	32.7	90.7	5.2	33.3	96.3	0.0	55.0	96.5	7.6			
65.0	46.7	90.9	3.1	48.5	92.5	4.2	51.3	94.5	6.8	54.4	95.9	7.6			
70.0	42.1	85.7	2.5	44.1	87.7	3.4	47.0	90.1	5.4	50.3	92.0	6.6			
75.0	42.1	05.7	2.5	39.2	81.9	2.7	42.4	85.0	4.2	46.4	87.9	5.3			
80.0				33.7	75.0	2.2	37.3	78.9	3.3	41.7	82.7	3.8			
85.0							31.6	71.5	2.6	36.6	76.5	2.7			
89.0							26.2	64.1	2.1	32.1	70.6	2.1			
92.5										1			35.0	69.4	3.3
95.0													32.7	66.5	3.0
100.0													26.2	57.5	2.3
102.0													23.0	53.1	2.0



Nº de ident.: 9842523/95738/

Radio de descarga: 360 $^{\circ}$

Pieza de articulación de pluma principal: 2821-1 Cabeza de pluma principal: 2821-1

Altura Carga Car			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa		45° Án	gulo de orincipa	pluma I
Cabeza de plumín (2316-1) 92.5 m Plumín 46.0 [m] Posición midfall (2316) 23.3	ce	o de plumín	de rolda- nas		o de plumín	de rolda- nas	Carga [t]	o de plumín	de rolda- nas	Carga [t]	o de plumín	de rolda- nas	Carga [t]	o de plumín	de rolda- nas	Carga [t]
24.0					23.0		eza de p	lumín (2	316-1) 9:	2.5 m Pl		lumín				
26.0 76.2 115.8 12.9 12.6 28.0 75.0 115.3 12.6 12.9 114.7 12.3 114.7 12.3 114.7 12.3 114.7 12.3 114.7 12.3 114.1 12.1 133.1 134.0 71.0 113.4 11.1 72.4 113.8 12.1 133.0 68.6 112.0 10.7 71.1 113.1 11.9 11.6 11.3 11.4 11.6 11.3 11.4 11.6 11.3 11.4 11.6 11.3 11.4 11.6 11.3 11.4 11.6 11.3 11.4 11.6 11.9 11.6 11.3 11.4 11.6 11.6 11.3 11.6 11.3 11.6 11.3 11.6 11.3 11.6 11.3 11.6 11.3 11.6 11.3 11.6 11.3 11.6 11.3 11.6 11.3 11.6 11.3 11.6 11.3 11.6 11.3 11.6 11.3 11.6 11.3 11.6 11.3 11.6 11.3 11.6 11.3 11.6 11.3 11.6																
28.0 75.0 115.3 12.6 30.0 73.7 114.7 12.3 114.0 11.6 32.0 72.4 114.0 11.6 33.1 33.1 73.0 114.1 12.1 33.1 33.1 12.6 10.7 71.1 113.8 12.1 38.0 68.6 112.0 10.0 69.8 112.4 11.6 11.3 11.2 11.0 10.0 69.8 112.4 11.6 11.3 11.3 12.1 13.8 13.2 13.2 13.2 13.2 13.2 13.2 13.2 13.2																
30.0																
32.0																
33.1 34.0 71.0 113.4 11.1 72.4 113.8 12.1 13.6 12.1 13.8 12.1 13.8 12.1 13.8 12.1 13.8 12.1 13.8 12.1 13.8 12.1 13.8 12.1 13.8 12.1 13.8 12.1 13.8 12.1 13.8 12.1 13.8 12.1 13.8																
34.0 71.0 113.4 11.1 72.4 113.8 12.1 38.0 69.7 112.6 10.7 71.1 113.1 11.9 38.0 68.6 112.0 10.0 69.8 112.4 11.6 40.0 67.3 110.1 8.2 67.1 110.8 10.8 44.0 64.3 109.2 7.5 65.7 109.9 10.0 48.0 62.9 108.2 6.8 64.3 109.0 9.4 48.0 62.9 108.2 6.8 64.3 109.0 9.4 48.2 107.1 6.3 62.9 107.9 8.8 107.8 10.4 50.0 60.1 105.9 5.8 61.5 106.9 8.4 63.8 107.8 10.4 55.0 56.4 102.8 4.6 57.9 103.9 6.6 60.3 105.1 9.8 65.0 48.5 95.0 3.0 50.2 96.5 4.1 52.7 98.4 6.7 65.9 70.0 44.1 <td< td=""><td></td><td>72.4</td><td>114.0</td><td>11.6</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>		72.4	114.0	11.6												
36.0 69.7 112.6 10.7 71.1 113.1 11.9 38.0 68.6 112.0 10.0 69.8 112.4 11.6 40.0 67.3 111.2 9.0 68.4 111.6 11.3 42.0 65.7 110.1 8.2 67.1 110.8 10.8 44.0 64.3 109.2 7.5 65.7 109.9 10.0 46.0 62.9 108.2 6.8 64.3 109.0 9.4 48.0 61.5 107.1 6.3 62.9 107.9 8.8 48.2 50.0 60.1 105.9 5.8 61.5 106.9 8.4 63.8 107.8 10.4 55.0 56.4 102.8 4.6 57.9 103.9 6.6 60.3 105.1 9.8 60.0 52.5 99.1 3.7 54.1 100.5 5.1 56.6 102.0 8.6 65.9 70.0 44.1 90.1 2.3 46.0 91.9 3.3 48.7 94.2 5.4 5		74.0	440.4	44.4												
38.0																
40.0 67.3 111.2 9.0 68.4 111.6 11.3 42.0 65.7 110.1 8.2 67.1 110.8 10.8 44.0 64.3 109.2 7.5 65.7 109.9 10.0 48.0 62.9 108.2 6.8 64.3 109.0 9.4 48.2 107.1 6.3 62.9 107.9 8.8 48.2 50.0 60.1 105.9 5.8 61.5 106.9 8.4 63.8 107.8 10.4 55.0 56.4 102.8 4.6 57.9 103.9 6.6 60.3 105.1 9.8 65.0 48.5 95.0 3.0 50.2 96.5 4.1 52.7 98.4 6.7 65.0 48.5 95.0 3.0 50.2 96.5 4.1 52.7 98.4 6.7 65.0 48.1 90.1 2.3 46.0 91.9 3.3 48.7 94.2 5.4 51.8 95.9 6.7 75.0 79.0 37.5 81.7				-		_	-									
42.0 65.7 110.1 8.2 67.1 110.8 10.8 44.0 64.3 109.2 7.5 65.7 109.9 10.0 46.0 62.9 108.2 6.8 64.3 109.0 9.4 48.0 61.5 107.1 6.3 62.9 107.9 8.8 48.2 65.0 108.7 10.4 50.0 60.1 105.9 5.8 61.5 106.9 8.4 63.8 107.8 10.4 55.0 56.4 102.8 4.6 57.9 103.9 6.6 60.3 105.1 9.8 60.0 52.5 99.1 3.7 54.1 100.5 5.1 56.6 102.0 8.6 65.0 48.5 95.0 3.0 50.2 96.5 4.1 52.7 98.4 6.7 65.9 70.0 44.1 90.1 2.3 46.0 91.9 3.3 48.7 94.2 5.4 51.8 95.9 6.7 75.0 79.0 37.5 81.7 2.1 39.7																
44.0 64.3 109.2 7.5 65.7 109.9 10.0 9.4 48.0 62.9 108.2 6.8 64.3 109.0 9.4 48.0 61.5 107.1 6.3 62.9 107.9 8.8 65.0 108.7 10.4 50.0 60.1 105.9 5.8 61.5 106.9 8.4 63.8 107.8 10.4 55.0 56.4 102.8 4.6 57.9 103.9 6.6 60.3 105.1 9.8 60.0 52.5 99.1 3.7 54.1 100.5 5.1 56.6 102.0 8.6 65.0 48.5 95.0 3.0 50.2 96.5 4.1 52.7 98.4 6.7 55.0 99.0 7.0 7.0 75.0 44.4 86.6 2.6 44.4 89.4 4.2 47.7 91.6 5.3 77.0 83.8 3.2 43.8 87.1 4.0 85.0 88.0 99.9 77.5 2.1 36.0 77.5 2.1 35.0 71.1 2.8 2.8 35.0 71.1 2.8 35.0 71.1						_										
46.0 62.9 108.2 6.8 64.3 109.0 9.4 48.0 61.5 107.1 6.3 62.9 107.9 8.8 48.2 50.0 60.1 105.9 5.8 61.5 106.9 8.4 63.8 107.8 10.4 55.0 56.4 102.8 4.6 57.9 103.9 6.6 60.3 105.1 9.8 60.0 52.5 99.1 3.7 54.1 100.5 5.1 56.6 102.0 8.6 65.0 48.5 95.0 3.0 50.2 96.5 4.1 52.7 98.4 6.7 65.9 75.0 44.1 86.6 2.6 44.4 89.4 4.2 47.7 91.6 5.3 79.0 37.5 81.7 2.1 39.7 83.8 3.2 43.8 87.1 4.0 85.0 88.0 94.9 34.5 77.0 2.4 39.1 81.4 2.7 36.0 77.5 2.1 35.0 71.1 2.8																
48.0 61.5 107.1 6.3 62.9 107.9 8.8 65.0 108.7 10.4 10.5 10.6 60.3 105.1 9.8 66.6 60.3 105.1 9.8 66.6 60.3 105.1 9.8 66.6 60.3 105.0 7.0 86.6 65.0 41.4 86.6 7.0 70.0 70.0 <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>																
50.0 60.1 105.9 5.8 61.5 106.9 8.4 63.8 107.8 10.4 10.4 10.4 10.4 10.4 10.4 10.4 10.4 10.4 10.4 10.4 10.4 10.4 10.4 10.4 10.4 10.5 10.1 10.5 10.1 9.8 10.4 10.2 8.6 10.2 8.6 10.2 8.6 6.7 10.2 8.6 6.7 10.4 10.2 10.4 10.2 10.4 10.2 10.4 10.2<		61.5	107.1			107.9										
55.0 56.4 102.8 4.6 57.9 103.9 6.6 60.3 105.1 9.8 9.8 9.1 3.7 54.1 100.5 5.1 56.6 102.0 8.6 6.7 9.1 8.6 65.0 48.5 95.0 3.0 50.2 96.5 4.1 52.7 98.4 6.7 99.0 7.0 <td< td=""><td>48.2</td><td></td><td></td><td></td><td></td><td></td><td></td><td>65.0</td><td>108.7</td><td>10.4</td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	48.2							65.0	108.7	10.4						
60.0 52.5 99.1 3.7 54.1 100.5 5.1 56.6 102.0 8.6 6.7 65.0 48.5 95.0 3.0 50.2 96.5 4.1 52.7 98.4 6.7 70.0 44.1 90.1 2.3 46.0 91.9 3.3 48.7 94.2 5.4 51.8 95.9 6.7 75.0 41.4 86.6 2.6 44.4 89.4 4.2 47.7 91.6 5.3 79.0 80.0 37.5 81.7 2.1 39.7 83.8 3.2 43.8 87.1 4.0 85.0 88.0 34.5 77.0 2.4 39.1 81.4 2.7 94.9 39.9 35.0 71.1 2.8	50.0	60.1	105.9	5.8	61.5	106.9	8.4	63.8	107.8	10.4						
65.0 48.5 95.0 3.0 50.2 96.5 4.1 52.7 98.4 6.7 55.0 99.0 7.0 <t< td=""><td>55.0</td><td>56.4</td><td>102.8</td><td>4.6</td><td>57.9</td><td>103.9</td><td>6.6</td><td>60.3</td><td>105.1</td><td>9.8</td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	55.0	56.4	102.8	4.6	57.9	103.9	6.6	60.3	105.1	9.8						
65.9 70.0 44.1 90.1 2.3 46.0 91.9 3.3 48.7 94.2 5.4 51.8 95.9 6.7 75.0 79.0 80.0 85.0 85.0 85.0 85.0 85.0 81.7 2.1 39.7 83.8 3.2 43.8 87.1 4.0 87.0 87.0 2.4 36.0 77.5 2.1 35.0 71.1 2.8	60.0	52.5	99.1		54.1	100.5		56.6	102.0							
70.0 44.1 90.1 2.3 46.0 91.9 3.3 48.7 94.2 5.4 51.8 95.9 6.7 75.0 79.0 41.4 86.6 2.6 44.4 89.4 4.2 47.7 91.6 5.3 80.0 39.7 83.8 3.2 43.8 87.1 4.0 85.0 34.5 77.0 2.4 39.1 81.4 2.7 88.0 94.9 35.0 71.1 2.8		48.5	95.0	3.0	50.2	96.5	4.1	52.7	98.4	6.7						
75.0 41.4 86.6 2.6 44.4 89.4 4.2 47.7 91.6 5.3 80.0 37.5 81.7 2.1 39.7 83.8 3.2 43.8 87.1 4.0 85.0 34.5 77.0 2.4 39.1 81.4 2.7 88.0 34.9 36.0 77.5 2.1 35.0 71.1 2.8	•												-			
79.0 37.5 81.7 2.1 39.7 83.8 3.2 43.8 87.1 4.0 85.0 34.5 77.0 2.4 39.1 81.4 2.7 88.0 36.0 77.5 2.1 35.0 71.1 2.8		44.1	90.1	2.3				-	-							
80.0 39.7 83.8 3.2 43.8 87.1 4.0 85.0 34.5 77.0 2.4 39.1 81.4 2.7 88.0 36.0 77.5 2.1 35.0 71.1 2.8								44.4	89.4	4.2	47.7	91.6	5.3			
85.0 88.0 94.9 34.5 77.0 2.4 39.1 81.4 2.7 36.0 77.5 2.1 35.0 71.1 2.8					37.5	81.7	2.1									
88.0 94.9 36.0 77.5 2.1 35.0 71.1 2.8												_				
94.9								34.5	77.0	2.4						
											36.0	77.5	2.1	25.0	74.4	2.0
1 90.0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 																
100.0 29.8 64.0 2.1																



N° de ident.: 9842523/95738/

360°

Radio de descarga:

Pieza de articulación de pluma principal: 2821-1 Cabeza de pluma principal: 2821-1

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa		45° Án	gulo de orincipa	pluma I
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				23.0		eza de p	II, Punto Iumín (2: I Posici	316-1) 9	5.5 m Pl	eza de p umín	lumín				
23.9	78.0	119.4	12.1												
24.0	77.9	119.3	12.1												
26.0	76.7	118.9	11.9												
28.0	75.4	118.4	11.6												
30.0	74.2	117.8	11.4	<u> </u>											
32.0	72.9	117.2	10.9	70.0	447.0	44.0									
33.9 34.0	71.7	116.5	10.4	73.0 73.0	117.0 117.0	11.0 11.0				ł					
34.0 36.0	71.7	115.8	10.4	73.0 71.7	116.3	10.9				ł					
38.0	69.1	115.0	9.7	70.4	115.6	10.5									
40.0	67.8	114.3	8.8	69.1	114.9	10.4									
42.0	66.5	113.4	8.0	67.8	114.1	10.2									
44.0	65.2	112.5	7.2	66.5	113.2	9.6				İ					
46.0	63.8	111.5	6.6	65.2	112.3	8.9									
48.0	62.5	110.5	6.0	63.9	111.3	8.4									
49.5							65.0	111.4	9.5						
50.0	61.1	109.4	5.5	62.5	110.3	7.9	64.7	111.2	9.5						
55.0	57.6	106.4	4.4	59.3	107.7	6.5	61.3	108.6	9.2						
60.0	53.9	102.9	3.4	55.4	104.2	5.0	57.8	105.6	8.6						
65.0	50.1	98.9	2.7	51.7	100.4	3.9	54.1	102.1	6.7						
67.6										55.0	101.4	6.4			
70.0	46.0	94.4	2.1	47.7	96.1	3.1	50.3	98.2	5.3	53.2	99.7	6.4			
75.0				43.5 41.7	91.1 88.9	2.4 2.1	46.2	93.6	4.1	49.4	95.6	5.2			
77.0 80.0				41.7	88.9	2.1	41.9	88.4	3.1	45.7	91.4	4.1			
85.0							37.6	88.4 82.9	2.2	45.7	91.4 86.1	2.8			
86.0							36.1	80.8	2.2	41.3	00.1	2.0			
88.0				i			30.1	00.0	2.1	38.4	82.5	2.1			
97.4				i						00.4	02.0	2.1	35.0	72.9	2.1
98.0													35.0	72.9	2.0



Nº de ident.: 9842523/95738/

Radio de descarga: $$360\ ^{\circ}$$

360 ° Cabez 2 - Vía ancha

Pieza de articulación de pluma principal: 2821-1 Cabeza de pluma principal: 2821-1

		gulo de principa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				23.0 r	m Pluma Cab	eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 9	8.5 m Pl	eza de p umín	lumín				
24.5	78.0	122.3	11.1												
26.0	77.1	122.0	11.1												
28.0	75.9	121.5	10.8												
30.0	74.7	120.9	10.6												
32.0	73.5	120.3	10.3												
34.0	72.2	119.7	9.9	70.0	440.0	40.4									
34.8	71.0	110.0	0.5	73.0 72.3	119.9 119.5	10.1									
36.0 38.0	69.8	119.0 118.3	9.5 9.2	72.3 71.0	119.5	10.1 9.9									
40.0	68.5	117.5	8.7	69.8	118.1	9.9									
42.0	67.2	116.7	7.9	68.5	117.3	9.5									
44.0	66.0	115.8	7.1	67.3	116.5	9.2									
46.0	64.7	114.9	6.4	66.0	115.6	8.6									
48.0	63.4	113.9	5.9	64.7	114.7	8.1									
50.0	62.1	112.8	5.4	63.4	113.7	7.6									
50.8							65.0	114.1	8.8						
55.0	58.7	109.9	4.2	60.4	111.2	6.5	62.2	112.0	8.6						
60.0	55.2	106.6	3.3	56.9	108.1	4.9	58.9	109.1	8.3						
65.0	51.5	102.8	2.5	53.4	104.6	3.7	55.4	105.8	6.8						
69.4										55.0	103.9	5.9			
70.0				49.3	100.1	2.9	51.7	102.1	5.3	54.5	103.4	5.9			
75.0				45.3	95.4	2.2	48.3	98.2	4.1	50.9	99.5	5.3			
76.0				44.4	94.4	2.1									
80.0							43.8	92.8	3.1	47.0	95.1	4.2			
85.0							39.4	87.1	2.2	43.2	90.6	3.0			
89.0										39.7	86.0	2.0			



N° de ident.: 9842523/95738/

Radio de descarga: 360 $^{\circ}$

Valor de vuelco: 2 - Vía ancha Lastre trasero [t]: 114.0 Lastre central [t]: 52.6

		gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				23.0	m Pluma Cabe	eza de pl	ıl, Punto umín (23 ı] Posici	316-1) 10	1.5 m P	eza de p lumín	lumín				
25.1	78.0	125.2	10.3												
26.0	77.5	125.0	10.3												
28.0	76.3	124.6	10.1												
30.0	75.2	124.0	9.8												
32.0	74.0	123.5	9.6												
34.0	72.8	122.9	9.3												
35.7				73.0	122.7	9.3									
36.0	71.6	122.2	8.9	72.8	122.6	9.3							<u> </u>		
38.0	70.4	121.5	8.7	71.6	122.0	9.2									
40.0	69.2	120.7	8.4	70.4	121.3	9.0									
42.0	68.0	119.9	7.7	69.2	120.5	8.8									
44.0	66.7	119.1	6.9	68.0	119.7	8.6									
46.0	65.5	118.2	6.2	66.8	118.9	8.2									
48.0	64.2	117.2	5.6	65.5	118.0	7.7									
50.0	63.0	116.2	5.1	64.3	117.0	7.3									
52.1							65.0	116.8	8.0						
55.0	59.7	113.4	4.0	61.3	114.6	6.3	63.1	115.4	8.0						
60.0	56.4	110.3	3.0	58.0	111.6	4.8	59.9	112.6	7.6						
65.0	52.9	106.7	2.3	54.3	108.0	3.6	56.6	109.5	6.7						
66.0	52.5	106.2	2.1												
70.0				50.7	104.1	2.7	53.1	105.9	5.1						
71.1										55.0	106.3	5.4			
75.0							49.8	102.2	4.0	52.2	103.4	5.1			
80.0							45.5	97.1	3.0	48.5	99.2	4.1			
85.0							41.4	91.8	2.1	45.0	94.9	3.1			
89.0										41.7	90.6	2.1			



N° de ident.: 9842523/95738/ Piez

Radio de descarga: $$360\ ^{\circ}$$

Valor de vuelco: Lastre trasero [t]:

Lastre central [t]:

2 - Vía ancha 114.0 52.6

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				23.0	m Pluma Cabe	eża de pl	ıl, Punto umín (23 ı] Posici	316-1) ĬC	4.5 m P	eza de p lumín	lumín				
25.7	78.0	128.2	9.5												
26.0	77.9	128.1	9.5												
28.0	76.7	127.6	9.5												
30.0	75.6	127.1	9.2												
32.0	74.4	126.6	9.0												
34.0	73.3	126.0	8.8												
36.0	72.1	125.4	8.5												
36.6				73.0	125.6	8.6				•			•		
38.0	71.0	124.7	8.2	72.2	125.1	8.6									
40.0	69.8	124.0	8.0	71.0	124.5	8.5									
42.0	68.6	123.2	7.6	69.8	123.7	8.3									
44.0	67.4	122.4	6.9	68.7	123.0	8.1									
46.0	66.2	121.5	6.2	67.5	122.1	7.9									
48.0	65.0	120.6	5.5	66.3	121.3	7.4									
50.0	63.8	119.6	5.0	65.1	120.3	7.0									
53.3							65.0	119.5	7.4						
55.0	60.7	116.9	3.9	62.0	117.8	6.2	64.0	118.7	7.4						
60.0	57.5	113.9	2.9	59.1	115.2	4.8	60.9	116.1	7.1						
65.0	54.1	110.4	2.1	55.5	111.6	3.6	57.6	113.0	6.6						
70.0				52.1	107.9	2.6	54.3	109.6	5.1						
72.8										55.0	108.8	4.9			
75.0							50.8	105.7	3.9	53.5	107.2	4.9			
80.0							47.5	101.8	2.9	50.3	103.6	4.0			
85.0							43.7	96.8	2.0	46.6	99.1	3.2			
90.0										42.7	94.0	2.0			



N° de ident.: 9842523/95738/

Radio de descarga: 360 $^{\circ}$

Valor de vuelco:

Lastre trasero [t]:

Lastre central [t]:

2 - Vía ancha 114.0 52.6

		gulo de orincipal			gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				23.0 ו	n Pluma Cabe	za de pl	ıl, Punto umín (23 ı] Posici	316-1) 10	17.5 m P	eza de p lumín	lumín		-		
26.4 28.0	78.0 77.1	131.1 130.7	8.5 8.5												
30.0 32.0 34.0	76.0 74.9 73.8	130.2 129.7 129.1	8.3 8.1 7.9												
36.0 37.5	72.7	128.5	7.7	73.0	128.5	7.7									
38.0 40.0	71.5 70.4	127.9 127.2	7.4 7.2	72.7 71.6	128.3 127.6	7.7 7.6									
42.0 44.0 46.0	69.3 68.1 66.9	126.4 125.6 124.8	7.1 6.5 5.8	70.4 69.3 68.1	126.9 126.2 125.4	7.4 7.2 7.1									
48.0 50.0 54.6	65.8 64.6	123.9 122.9	5.2 4.7	67.0 65.8	124.5 123.7	6.8 6.5	65.0	122.3	6.5						
55.0 60.0 65.0	61.6 58.5	120.3 117.4	3.6 2.7	62.8 60.0 56.6	121.2 118.7 115.3	5.8 4.8 3.5	64.8 61.8 58.7	122.1 119.5 116.6	6.5 6.3 6.0						
70.0 74.5				53.3	111.7	2.4	55.5	113.3	4.8	55.0	111.3	4.2			
75.0 80.0 85.0							52.1 49.0 45.3	109.6 105.8 101.1	3.8 2.9 2.0	54.7 51.3 47.8	110.9 107.1 102.8	4.2 3.9 3.1			
90.0										44.4	98.4	2.2			



N° de ident.: 9842523/95738/

Radio de descarga: 360 $^{\circ}$

Pieza de articulación de pluma principal: 2821-1 Cabeza de pluma principal: 2821-1

		gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				23.0 ı		eża de pl	ıl, Punto umín (23 ı] Posici	316-1) 11	0.5 m P	eza de p lumín	lumín				
27.0	78.0	134.0	7.7												
28.0	77.5	133.8	7.7												
30.0	76.4	133.3	7.6												
32.0	75.3	132.8	7.4												
34.0	74.2	132.3	7.2												
36.0	73.2	131.7	7.0												
38.0	72.1	131.0	6.8												
38.3				73.0	131.3	6.9							<u> </u>		
40.0	71.0	130.3	6.6	72.1	130.8	6.9									
42.0	69.8	129.6	6.5	71.0	130.1	6.7									
44.0	68.7	128.8	6.2	69.9	129.4	6.5									
46.0	67.6	128.0	5.5	68.8	128.6	6.4									
48.0	66.5	127.2	5.0	67.6	127.8	6.2									
50.0	65.3	126.3	4.4	66.5	126.9	6.0									
55.0	62.4	123.8	3.4	63.6	124.6	5.5									
55.9							65.0	125.0	5.8						
60.0	59.4	120.9	2.5	60.7	121.9	4.8	62.6	122.9	5.6						
62.0	58.2	119.7	2.2												
65.0				57.9	119.1	3.4	59.6	120.1	5.3						
70.0				54.8	115.8	2.3	56.5	116.9	4.6						
71.0				54.1	115.0	2.1									
75.0							53.3	113.4	3.6						
76.2										55.0	113.7	3.7			
80.0							50.0	109.4	2.9	52.6	110.9	3.7			
85.0							46.5	104.8	2.1	49.2	106.8	3.0			
90.0										46.0	102.6	2.3			
91.0										45.3	101.6	2.1			



N° de ident.: 9842523/95738/ Pieza de

Radio de descarga: 360 $^{\circ}$

Valor de vuelco: 2 - Vía ancha Lastre trasero [t]: 114.0 Lastre central [t]: 52.6

		gulo de orincipal		ŗ	gulo de orincipa			gulo de principa			gulo de orincipa			gulo de principa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				26.0 r	m Pluma Cab	eza de p	il, Punto lumín (2 n] Posici	316-1) 3	8.5 m Pl		lumín				
12.1 13.0 14.0 16.0 17.6	78.0 76.6 75.0 71.9	66.6 66.4 66.1 65.5	64.8 63.6 59.3 50.5	73.0	65.5	53.8									
18.0 20.0 22.0 24.0 26.0	68.7 65.5 62.2 58.7 55.1	64.7 63.9 62.8 61.7 60.3	43.5 36.1 31.1 27.6 24.7	72.4 69.3 66.0 62.7 59.3	65.3 64.6 63.8 62.8 61.6	53.7 48.1 42.0 36.6 32.4									
26.2 28.0 30.0 32.0 34.0	51.4 47.4 43.1 38.5	58.8 57.0 55.0 52.6	22.4 20.6 19.0 17.7	55.7 52.0 48.0 43.8	60.3 58.8 57.1 55.1	28.8 26.0 23.8 21.8	65.0 62.1 58.6 55.0 51.3	62.6 61.7 60.5 59.2 57.7	40.3 38.3 34.7 31.4 28.9						
36.0 36.2 38.0 40.0 41.0	33.3 27.3 19.5 16.1	49.8 46.2 41.4 39.2	16.6 15.6 14.6 13.6	39.3 34.2 28.3	52.7 50.0 46.6	20.1 18.7 17.4	47.3 43.0 38.4	55.9 53.8 51.4	26.9 25.0 23.4	55.0 51.9 47.9	57.4 56.2 54.4	27.7 26.5 24.1			
42.0 43.0 44.0 46.0 47.0				20.9 16.0	42.0 38.9	16.1 15.4	33.2 27.1 19.3 15.8	48.6 45.0 40.2 37.9	21.8 20.0 18.2 15.1	43.7 39.2 34.1	52.4 50.1 47.3	22.3 20.8 19.6			
48.0 50.0 51.0 52.8 55.0 58.0										28.2 20.7 15.8	43.9 39.3 36.2	18.5 17.3 16.7	35.0 29.5 18.0	42.3 39.1 32.0	16.5 16.1 14.9



Nº de ident.:9842523/95738/Pieza de articulación de pluma principal:2821-1Radio de descarga:360 °Cabeza de pluma principal:2821-1

		gulo de principa			gulo de orincipa			gulo de principa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				26.0		eza de p	lumín (2	de carga 316-1) 4 ón midfa	1.5 m Pl		lumín		_		
12.7	78.0	69.5	59.3												
13.0	77.6	69.5	59.3												
14.0	76.1	69.2	57.4							<u> </u>					
16.0	73.3	68.6	50.2												
18.0	70.4	68.0	41.9												
18.5				73.0	68.3	49.5									
20.0	67.4	67.2	35.9	70.8	67.8	47.5									
22.0	64.3	66.2	30.5	67.9	67.0	42.0									
24.0	61.2	65.2	26.8	64.8	66.1	36.3									
26.0	58.0	64.0	24.1	61.7	65.1	32.3	05.0	25.0	07.7						
27.5			04.0	50.5	00.0	00.0	65.0	65.3	37.7						
28.0	54.6 51.1	62.6 61.0	21.9 20.2	58.5 55.2	63.9 62.6	28.8 25.8	64.3 61.1	65.1 64.0	37.7 34.4						
30.0 32.0	47.5	59.3	18.7	55.2 51.7	62.6 61.0	25.8	57.9	62.8	34.4						
34.0	43.5	57.2	17.3	48.0	59.3	21.5	54.5	61.5	28.4						
36.0	39.3	54.9	16.1	44.2	57.3	19.8	51.0	59.9	26.2						
37.9	33.3	34.3	10.1	77.2	37.3	13.0	31.0	33.3	20.2	55.0	59.9	25.8			
38.0	34.6	52.2	15.1	40.0	55.0	18.3	47.4	58.1	24.4	54.9	59.9	25.8			
40.0	29.3	48.9	14.2	35.4	52.4	17.0	43.4	56.1	22.7	51.6	58.4	24.3	i		
42.0	22.8	44.6	13.4	30.2	49.2	15.9	39.2	53.8	21.3	48.0	56.7	22.1			
44.0	15.5	39.6	12.0	23.9	45.1	14.8	34.5	51.0	20.0	44.1	54.7	20.5			
46.0				15.4	39.3	13.7	29.1	47.7	18.5	39.9	52.4	19.1			
48.0							22.6	43.4	16.9	35.3	49.7	17.9			
50.0							15.2	38.3	15.0	30.0	46.5	16.9			
54.0										15.2	36.5	14.7			
55.3													35.0	44.0	15.5
60.0													22.9	36.3	14.0
61.0													18.8	33.5	13.6



Nº de ident.: 9842523/95738/ Radio de descarga: 360°

2 - Vía ancha Valor de vuelco: Lastre trasero [t]: 114.0 Lastre central [t]: 52.6

		gulo de principa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				26.0 ו		eza de p	al, Punto llumín (2 n] Posici	316-1) 4	4.5 m Pl	eza de p umín	lumín				
13.3	78.0	72.5	54.8												
14.0	77.1	72.3	54.8												
16.0	74.4	71.8	49.3												
18.0	71.7	71.1	41.8												
19.4	69.0	70.4	25.0	73.0 72.2	71.2 71.0	46.2									
20.0 22.0	66.2	70.4 69.6	35.9 30.5	69.4	71.0	46.1 41.2									
24.0	63.3	68.6	26.4	66.6	69.4	36.7							i		
26.0	60.4	67.5	23.7	63.8	68.5	32.5									
28.0	57.4	66.2	21.7	60.9	67.4	29.5									
28.7							65.0	68.1	30.1						
30.0	54.2	64.8	19.9	57.8	66.2	26.4	63.3	67.5	34.8						
32.0	50.9	63.3	18.6	54.7	64.8	23.9	60.3	66.4	31.4						
34.0	47.5	61.5	17.3	51.5	63.3	21.9	57.1	65.0	28.8						
36.0	43.9	59.5	16.1	48.1	61.5	20.2	54.1	63.7	26.4						
38.0	39.9	57.2	15.0	44.4	59.6	18.6	50.9	62.1	24.5						
39.7	05.7	540	444	40.0		47.0			00.0	55.0	62.4	24.0			
40.0 42.0	35.7 30.9	54.6 51.4	14.1 13.3	40.6 36.4	57.3 54.8	17.2 16.0	47.4 43.8	60.4 58.3	22.9 21.4	54.4 51.4	62.1 60.7	24.0 22.6			
44.0	25.3	47.6	12.5	31.7	54.6 51.7	15.0	43.8 39.8	56.1	20.1	48.0	58.9	20.7			
46.0	18.1	42.4	11.8	26.3	48.0	14.0	35.6	53.4	19.0	44.4	56.9	19.3			
48.0	10.1	72.7	11.0	19.4	43.1	13.0	30.8	50.3	17.7	40.5	54.7	18.0			
49.0				16.5	40.9	12.1	00.0	00.0	.,,,	40.0	04.7	10.0	i		
50.0		İ					25.1	46.4	16.3	36.3	52.1	17.0	ĺ		
52.0							17.9	41.1	14.9						
55.0										22.9	43.1	14.6			
57.0										16.3	38.2	13.4			
57.8													35.0	45.7	14.4
60.0													30.9	43.1	13.9
64.0													16.7	32.9	12.6



Nº de ident.: 9842523/95738/

Radio de descarga: 360 $^{\circ}$

Pieza de articulación de pluma principal: 2821-1 Cabeza de pluma principal: 2821-1

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				26.0 ו	m Pluma Cab	eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 4	7.5 m Pl	eza de p umín	lumín				
13.9	78.0	75.4	50.3			20.0 [11	l 1 00101		(2010)	ı					
14.0	77.9	75.4 75.4	50.3							i					
16.0	75.4	74.9	47.2							i					
18.0	72.9	74.3	41.5												
20.0	70.4	73.6	35.0							İ			İ		
20.3				73.0	74.1	42.5									
22.0	67.8	72.8	30.3	70.8	73.5	40.8									
24.0	65.1	71.9	26.3	68.2	72.7	36.0									
26.0	62.4	70.9	23.3	65.6	71.8	32.0									
28.0	59.7	69.8	21.2	62.9	70.8	29.0									
30.0	56.8	68.5	19.4	60.1	69.7	26.3	65.0	70.8	30.1						
32.0	53.8	67.1	18.0	57.3	68.5	23.7	62.4	69.8	31.7						
34.0	50.8	65.5	16.8	54.3	67.1	21.4	59.6	68.7	28.5						
36.0	47.5	63.7	15.6	51.3 48.1	65.5	19.7	56.6	67.3	26.1						
38.0 40.0	44.1 40.5	61.7 59.5	14.6	48.1	63.8 61.8	18.2 16.9	53.8 50.7	66.0 64.4	24.0 22.4						
40.0	40.5	59.5	13.6	44.7	61.8	16.9	50.7	64.4	22.4	55.0	64.8	22.3			
41.4	36.6	56.9	12.8	41.1	59.6	15.6	47.5	62.6	20.9	55.0 54.1	64.4	22.3			
44.0	32.2	53.9	12.0	37.2	57.1	14.6	44.1	60.6	19.5	51.2	62.9	20.7			
46.0	27.3	50.3	11.4	33.0	54.2	13.7	40.4	58.3	18.3	48.0	61.2	19.1			
48.0	21.3	45.8	10.8	28.1	50.7	12.8	36.5	55.8	17.3	44.6	59.2	17.8			
49.0	17.5	42.8	10.4												
50.0				22.3	46.3	12.0	32.1	52.8	16.1	41.0	57.0	16.6			
52.0				15.9	41.3	10.6									
55.0							17.3	41.5	13.2	30.5	49.9	14.3			
60.0										15.7	38.6	11.8			
60.2													35.0	47.4	13.4
65.0													24.5	39.8	12.1
67.0													16.1	33.3	11.5



Nº de ident.: 9842523/95738/ Pieza de articulación de pluma principal: Radio de descarga: 360°

2821-1 Cabeza de pluma principal: 2821-1

2 - Vía ancha Valor de vuelco: Lastre trasero [t]: 114.0 52.6 Lastre central [t]:

		gulo de principal			gulo de orincipa			gulo de principa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				26.0 ו	m Pluma Cab	eza de p	al, Punto dumín (2 n] Posici	316-1) 5	0.5 m Pl		lumín				
14.6	78.0	78.3	46.6												
16.0	76.3	78.0	45.8												
18.0	74.0	77.4	41.5												
20.0	71.6	76.8	34.9	70.0	70.0	00.0									
21.1 22.0	69.2	76.1	30.3	73.0 72.0	76.9 76.7	39.8 39.7									
24.0	66.7	75.2	26.5	69.6	76.7 75.9	35.7				ł					
26.0	64.2	74.3	23.4	67.1	75.9 75.1	32.2				i					
28.0	61.6	73.2	21.1	64.6	74.2	29.1				i			i		
30.0	59.0	72.1	19.4	62.1	73.2	26.9				Ī					
31.3							65.0	73.5	31.3						
32.0	56.3	70.8	17.9	59.4	72.0	24.4	64.1	73.2	31.3						
34.0	53.5	69.3	16.6	56.7	70.7	22.0	61.6	72.1	28.9						
36.0	50.6	67.7	15.6	54.0	69.3	20.0	58.9	70.9	26.4						
38.0	47.6	66.0	14.5	51.1	67.7	18.5	56.2	69.6	24.3						
40.0	44.4	64.0	13.6	48.1	66.0	17.1	53.4	68.2	22.5						
42.0	41.0	61.8	12.7	44.9	64.1	15.9	50.5	66.6	21.2		07.0	00.7			
43.1 44.0	37.4	59.3	11.9	41.6	61.9	14.7	47.5	64.8	19.8	55.0 53.9	67.3 66.7	20.7 21.0			
44.0	33.4	56.4	11.9	38.0	59.4	13.7	44.3	62.9	18.5	53.9 51.0	65.1	19.4			
48.0	28.9	53.0	10.7	34.0	56.6	12.9	40.9	60.6	17.4	48.0	63.4	18.0			
50.0	23.7	48.8	10.7	29.7	53.3	12.1	37.3	58.1	16.4	44.8	61.4	16.9			
52.0	16.9	43.3	9.5	20.1	00.0	12.1	07.0	00.1	10.4	44.0	01.4	10.0	i		
55.0				15.4	41.7	9.5	26.3	49.8	13.8	36.0	55.4	14.5	i		
58.0							16.7	42.0	12.2						
60.0										24.4	46.6	12.4			
62.7													35.0	49.2	12.5
63.0										15.2	39.0	10.9			
65.0													31.3	46.4	11.9
70.0													15.6	33.7	10.5



2821-1

2821-1

Nº de ident.: 9842523/95738/ Pieza de articulación de pluma principal: Radio de descarga: 360 ° Cabeza de pluma principal:

Valor de vuelco: 2 - Vía ancha Lastre trasero [t]: 114.0 Lastre central [t]: 52.6

		gulo de principal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				26.0 ו		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 5	3.5 m Pl	eza de p umín	lumín				
15.2	78.0	81.3	42.5												
16.0	77.1	81.1	42.5												
18.0	74.9	80.6	39.2												
20.0 22.0	72.7 70.4	80.0 79.3	34.6 29.4	73.0	79.8	36.5									
24.0	68.1	78.5	25.9	70.8	79.6	35.2									
26.0	65.8	77.6	22.9	68.5	78.4	31.4									
28.0	63.4	76.6	20.6	66.1	77.5	28.5									
30.0	60.9	75.6	18.9	63.8	76.5	26.0							i		
32.0	58.4	74.4	17.4	61.3	75.5	24.1									
32.5							65.0	76.2	28.9						
34.0	55.9	73.0	16.1	58.8	74.3	21.8	63.3	75.5	29.0						
36.0	53.2	71.6	15.0	56.3	73.0	19.7	60.9	74.4	26.4						
38.0	50.5	70.0	14.1	53.7	71.6	18.0	58.3	73.2	24.2						
40.0	47.6	68.2	13.1	50.9	70.0	16.6	55.8	71.9	22.2						
42.0	44.6	66.2	12.3	48.1	68.2	15.4	53.2	70.5	20.6						
44.0	41.4	64.1	11.5	45.1	66.3	14.3	50.4	68.8	19.3						
44.8										55.0	69.7	19.2			
46.0	38.1	61.6	10.8	42.0	64.2	13.3	47.5	67.1	18.1	53.6	69.0	19.4			
48.0 50.0	34.4	58.8 55.6	10.2 9.7	38.6 35.0	61.8 59.0	12.4 11.6	44.5 41.4	65.1 62.9	16.9 15.8	50.9 48.0	67.4 65.6	17.8 16.5			
55.0	16.4	43.7	9.7 8.4	23.9	59.0 49.9	10.0	33.0	62.9 56.6	15.8	48.0 40.2	60.4	14.0			
55.0 57.0	16.4	43.7	8.4	23.9 17.6	49.9 44.5	9.3	33.0	50.0	13.7	40.2	60.4	14.0			
60.0				17.0	44.0	9.3	19.8	45.6	11.2	30.9	53.2	12.1			
61.0							16.2	42.4	10.8	00.0	00.2	12.1			
65.0							. 5.2		. 5.0	17.5	41.8	10.1			
65.1													35.0	50.9	11.5
70.0													25.7	43.3	10.3
73.0													15.2	34.1	9.5

Source:a9841388



Nº de ident.: 9842523/95738/

Radio de descarga: 360°

Valor de vuelco:	2 - Vía ancha
Lastre trasero [t]:	114.0
Lastre central [t]:	52.6

		gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				26.0 ו		eza de p	ıl, Punto ılumín (2 ı] Posici	316-1) 5	6.5 m Pli	eza de p umín	lumín				
15.8 16.0 18.0 20.0 22.0	78.0 77.8 75.7 73.6 71.5	84.2 84.2 83.7 83.1 82.5	39.1 39.1 37.7 34.8 29.3												
22.9 24.0 26.0 28.0 30.0	69.3 67.1 64.9 62.6	81.7 80.9 80.0 79.0	25.5 22.8 20.6 18.8	73.0 71.8 69.7 67.4 65.2	82.7 82.3 81.6 80.8 79.9	34.1 34.0 31.2 29.0 26.2									
32.0 33.8 34.0 36.0 38.0	57.9 55.5 53.0	77.9 76.6 75.3 73.8	17.4 16.1 14.9 13.9	63.0 60.7 58.3 55.9	78.9 77.8 76.6 75.3	24.2 22.4 20.3 18.4	65.0 64.8 62.6 60.2	78.9 78.9 77.9 76.7	27.3 27.7 26.9 24.4						
40.0 42.0 44.0 46.0 46.5	50.4 47.6 44.8 41.8	72.2 70.4 68.5 66.3	13.1 12.3 11.5 10.8	53.4 50.8 48.1 45.3	73.8 72.2 70.5 68.6	16.9 15.6 14.5 13.5	57.9 55.4 52.9 50.3	75.5 74.2 72.7 71.1	22.6 20.9 19.4 18.3	55.0	72.2	17.9			
48.0 50.0 55.0 58.0 60.0	38.6 35.2 24.9 16.0	63.9 61.2 52.4 44.1	10.1 9.6 8.4 7.7	42.3 39.2 30.1	66.4 64.1 56.7 44.9	12.5 11.7 10.0	47.6 44.7 36.9 27.2	69.3 67.3 61.4 53.3	17.2 16.1 13.8	53.3 50.7 43.7 35.7	71.2 69.6 64.9 58.8	18.2 16.8 14.3			
64.0 65.0 67.6 68.0 70.0							15.8	42.8	10.0	25.6 17.0	50.1 42.2	10.6	35.0 31.5	52.6 49.7	10.8
75.0 76.0													18.4 16.0	38.0 35.7	9.1 8.2



N° de ident.: 9842523/95738/ Pieza de articula

Radio de descarga: $$360\ ^{\circ}$$

Valor de vuelco: 2 - Vía ancha Lastre trasero [t]: 114.0 Lastre central [t]: 52.6

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa		45° Án I	gulo de orincipa	pluma I
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				26.0 ו		eza de p	lumín (2	316-1) 5	9.5 m Pli	eza de p umín	lumín		_		
						25.0 [m] Posici	on midta	11 (2316)						
16.4	78.0	87.1	35.9												
18.0	76.5	86.8	35.5												
20.0	74.5 72.4	86.2 85.6	32.9 29.1												
22.0 23.8	72.4	85.6	29.1	73.0	85.5	31.6									
24.0	70.4	84.9	25.1	72.8	85.5	31.6									
26.0	68.3	84.2	22.4	70.7	84.8	30.7									
28.0	66.2	83.3	20.2	68.7	84.0	28.0									
30.0	64.1	82.4	18.4	66.5	83.2	25.9							i		
32.0	61.9	81.3	16.9	64.5	82.2	23.6									
34.0	59.7	80.2	15.6	62.3	81.2	21.9									
35.1							65.0	81.7	26.1						
36.0	57.5	78.9	14.5	60.1	80.1	20.2	64.1	81.2	26.1						
38.0	55.1	77.6	13.4	57.8	78.9	18.3	61.9	80.2	24.7						
40.0	52.7	76.1	12.5	55.5	77.5	16.7	59.7	79.0	22.4						
42.0	50.3	74.5	11.8	53.1	76.1	15.3	57.4	77.8	20.7						
44.0	47.7	72.7	11.1	50.6	74.5	14.2	55.1	76.4	19.2						
46.0	45.0	70.7	10.4	48.1	72.7	13.2	52.7	74.9	17.9						
48.0	42.2	68.6	9.7	45.4	70.8	12.3	50.2	73.3	16.8						
48.3										55.0	74.7	16.6			
50.0	39.2	66.2	9.2	42.6	68.7	11.5	47.6	71.5	15.8	53.1	73.5	16.8			
55.0	30.6 18.9	58.9 47.8	8.0 6.9	34.8 25.0	62.3 53.5	9.7 8.4	40.6 32.4	66.3 59.4	13.4 11.5	46.7 39.6	69.2 63.7	14.0 12.0			
60.0 61.0	15.6	47.8 44.5	6.7	25.0	53.5	8.4	32.4	59.4	11.5	39.6	63.7	12.0	ł		
63.0	15.0	44.0	0.7	16.7	45.4	7.5									
65.0				10.7	40.4	1.5	21.6	49.4	9.6	31.2	56.5	10.4			
67.0							15.4	43.2	8.8	01.2	30.5	10.4			
70.0							10.4	70.2	0.0	19.7	45.8	8.6	35.0	54.3	9.9
71.0										16.5	42.6	8.3	l		
75.0													26.6	46.8	8.8
79.0													15.6	36.1	7.3



Nº de ident.: 9842523/95738/ Radio de descarga: 360°

2 - Vía ancha Valor de vuelco: Lastre trasero [t]: 114.0 Lastre central [t]: 52.6

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				26.0 ו		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 6	2.5 m Pl	eza de p umín	lumín				
17.1	78.0	90.1	33.1												
18.0	77.1	89.9	33.1												
20.0	75.2	89.4	31.4												
22.0	73.3	88.8	29.1												
24.0	71.4	88.1	25.1	70.0	20.4	00.5									
24.6	00.4	07.4	00.0	73.0 71.7	88.4	29.5				ł					
26.0 28.0	69.4 67.5	87.4 86.6	22.2 20.1	71.7 69.7	88.0 87.2	29.5 27.7				ł					
30.0	65.4	85.7	18.3	67.7	86.4	25.9				ł					
32.0	63.4	84.7	16.8	65.8	85.6	23.8									
34.0	61.3	83.6	15.6	63.7	84.6	22.0									
36.0	59.2	82.5	14.4	61.7	83.5	20.6									
36.3				•			65.0	84.4	24.2	İ					
38.0	57.0	81.2	13.3	59.5	82.4	18.8	63.4	83.6	24.7						
40.0	54.8	79.8	12.4	57.4	81.1	17.1	61.3	82.5	22.9						
42.0	52.5	78.3	11.5	55.2	79.8	15.7	59.2	81.3	20.9						
44.0	50.2	76.7	10.9	52.9	78.3	14.4	57.0	80.1	19.5						
46.0	47.7	74.9	10.2	50.5	76.7	13.4	54.8	78.7	18.1	•					
48.0	45.1	73.0	9.6	48.1	74.9	12.5	52.5	77.2	16.9						
50.0	42.5	70.9	9.0	45.6	73.0	11.6	50.1	75.6	16.0	55.0	77.1	15.5			
55.0	35.1	64.5	7.9	38.7	67.4	9.8	43.8	70.8	13.6	49.3	73.2	14.2			
60.0	25.9	55.9	6.9	30.5	60.0	8.4	36.6	64.8	11.7	42.8	68.3	12.2			
64.0	15.2	44.9	6.1	40.0	40.0	- 4	07.0				00.4	40.0			
65.0				19.3 16.3	49.0 45.8	7.1	27.8	56.7	9.9	35.5	62.1	10.6			
66.0 70.0				16.3	45.8	6.9	16.1	44.8	7.6	26.5	53.6	9.0			
70.0 72.5							10.1	44.0	7.0	20.5	0.00	9.0	35.0	56.1	9.1
74.0										16.1	43.0	7.7	33.0	JU. I	9.1
75.0										10.1	70.0	1.1	31.7	53.0	8.6
80.0													19.6	41.1	7.5
82.0													15.2	36.5	6.7



2821-1

2821-1

N° de ident.: 9842523/95738/ Pieza de arti Radio de descarga: 360 ° Cabeza de p

Pieza de articulación de pluma principal:
Cabeza de pluma principal:

		gulo de orincipal			gulo de orincipa			gulo de orincipa		65° Án	gulo de orincipa	pluma I		gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				26.0 ו	n Pluma	principa	ıl, Punto lumín (2:	de carga	1 - Cab	eza de p	lumín		_		
					Cab		n] Posici								
17.7	78.0	93.0	29.3												
18.0	77.7	92.9	29.3												
20.0	75.9	92.5	28.5												
22.0	74.1	91.9	27.0												
24.0 25.5	72.3	91.3	24.3	73.0	91.3	26.1									
26.0	70.4	90.6	21.6	73.0	91.3	26.1				ł			ł		
28.0	68.5	89.8	19.7	70.7	90.4	25.7				i			i		
30.0	66.6	89.0	17.8	68.8	89.7	24.2				i			i		
32.0	64.7	88.1	16.3	66.9	88.8	22.8				Ī					
34.0	62.8	87.0	15.0	65.0	87.9	21.0									
36.0	61.1	86.1	13.9	63.1	87.0	19.6									
37.6							65.0	87.1	22.3						
38.0	58.7	84.8	12.9	61.1	85.9	18.4	64.7	86.9	22.8						
40.0	56.6	83.5	11.9	59.1	84.7	16.8	62.7	85.9	22.5						
42.0	54.5	82.1	11.1	57.0	83.4	15.3	60.7	84.8	20.7						
44.0	52.3	80.6	10.4	54.9	82.0	14.0	58.7	83.6	19.2						
46.0 48.0	50.1 47.7	78.9 77.2	9.7 9.2	52.7 50.4	80.6 78.9	12.9 12.1	56.6 54.5	82.3 80.9	17.9 16.6	ł			ł		
50.0	47.7 45.3	77.2 75.2	9.2 8.6	48.1	76.9 77.2	11.2	54.5 52.3	79.4	15.5						
51.7	45.5	13.2	0.0	40.1	11.2	11.2	32.3	13.4	13.3	55.0	79.6	14.4			
55.0	38.7	69.6	7.4	41.9	72.1	9.4	46.5	75.1	13.3	51.9	77.4	14.2			
60.0	30.9	62.3	6.5	34.7	65.7	8.0	40.0	69.7	11.2	45.6	72.7	11.9			
65.0	20.7	51.7	5.6	25.9	56.9	6.9	32.5	62.7	9.6	39.1	67.1	10.2	İ		
67.0	15.9	46.5	4.7												
69.0				15.9	46.2	5.9									
70.0							23.0	53.0	8.1	31.4	59.9	8.8			
73.0							15.7	45.2	6.6				l		
75.0										21.4	49.6	7.2	35.0	57.8	8.3
77.0										15.7	43.4	6.6	07.0	50.0	7.0
80.0													27.3	50.2	7.2
84.0													17.0	39.3	6.4



N° de ident.: 9842523/95738/ Pieza de arti Radio de descarga: 360 ° Cabeza de p

Pieza de articulación de pluma principal: 2821-1 360 ° Cabeza de pluma principal: 2821-1

		gulo de principa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				26.0		eza de p	al, Punto dumín (2 n] Posici	316-1) 6	8.5 m Pli	eza de p umín	lumín				
18.3	78.0	96.0	26.5												
20.0	76.5	95.6	26.1	1											
22.0	74.8	95.0	25.0												
24.0	73.1	94.4	23.5												
26.0	71.3	93.8	21.2												
26.4				73.0	94.1	23.6									
28.0	69.5	93.0	19.6	71.6	93.6	23.5									
30.0	67.7	92.2	17.9	69.8	92.9	22.8									
32.0	65.9	91.4	16.3	68.0	92.1	22.0									
34.0	64.1	90.4	14.9	66.2	91.3	20.7									
36.0	62.2	89.4	13.8	64.3	90.3	19.4									
38.0	60.2	88.3	12.8	62.5	89.3	18.3	05.0	00.0	21.4						
38.9 40.0	58.3	87.1	11.9	60.6	88.2	17.2	65.0 64.0	89.8 89.3	21.4						
42.0	56.3	85.7	11.9	58.6	87.0	15.7	62.1	88.3	21.4						
44.0	54.2	84.3	10.3	56.6	85.7	14.4	60.2	87.1	19.3						
46.0	52.1	82.8	9.6	54.6	84.3	13.2	58.2	85.9	18.1						
48.0	50.0	81.2	9.0	52.5	82.8	12.2	56.2	84.6	16.9						
50.0	47.7	79.4	8.5	50.3	81.2	11.4	54.2	83.2	15.7						
53.4					-					55.0	82.0	13.6			
55.0	41.8	74.3	7.3	44.6	76.5	9.6	48.8	79.2	13.6	53.5	81.0	14.0			
60.0	34.9	67.8	6.3	38.2	70.8	8.1	42.9	74.2	11.5	48.0	76.8	12.0			
65.0	26.7	59.3	5.5	30.7	63.3	6.9	36.3	68.1	9.8	42.1	71.7	10.3			
70.0	15.6	46.9	4.2	21.0	52.8	5.9	28.4	60.1	8.4	35.3	65.4	9.0			
72.0				15.5	46.6	5.4									
75.0							17.4	48.0	6.9	27.2	57.0	7.6			
76.0				I			15.4	45.6	6.1						
77.4													35.0	59.5	7.5
80.0										15.4	43.8	6.1	31.9	56.4	7.0
85.0				-									22.6	46.5	6.0
87.0	l												17.6	40.9	5.7



N° de ident.: 9842523/95738/

Radio de descarga: 360 $^{\circ}$

Pieza de articulación de pluma principal: 2821-1 Cabeza de pluma principal: 2821-1

		gulo de principa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				26.0 ו	m Pluma Cab	eza de p	il, Punto llumín (2 n] Posici	316-1) 7	1.5 m Plı	eza de p umín	lumín				
18.9 20.0 22.0 24.0 26.0	78.0 77.1 75.5 73.8 72.1	98.9 98.6 98.1 97.6 96.9	24.3 24.3 23.3 22.4 20.4												
27.3 28.0 30.0 32.0 34.0 36.0	70.4 68.7 67.0 65.2 63.4	96.2 95.5 94.7 93.7	18.7 17.4 15.8 14.4	73.0 72.4 70.7 69.0 67.3	97.0 96.8 96.1 95.3 94.5	21.8 21.8 21.6 20.9 20.2									
38.0 40.0 40.2 42.0 44.0	61.6 59.8 57.9 56.0	91.7 90.6 89.3 88.0	13.3 12.4 11.4 10.6 9.8	63.7 61.9 60.1 58.2	93.6 92.7 91.6 90.5 89.3	17.4 16.4 15.3	65.0 63.4 61.6	92.5 91.6 90.6	19.8 19.8 19.0						
46.0 48.0 50.0 55.0	56.0 54.0 52.0 49.9 44.4	86.6 85.1 83.4 78.7	9.6 9.1 8.5 8.0 6.9	56.2 56.3 54.3 52.3 47.0	88.0 86.6 85.0 80.7	14.0 12.8 11.8 10.9 9.2	59.7 57.8 55.9 50.9	89.4 88.2 86.9 83.1	19.0 17.7 16.7 15.4 12.9	55.0	04.5	10.0			
55.1 60.0 65.0 70.0 73.0	38.3 31.2 22.1 15.2	72.9 65.6 55.4 47.3	5.9 5.1 4.4 3.6	41.2 34.6 26.6	75.5 69.0 60.4	7.7 6.5 5.6	45.5 39.5 32.6	78.6 73.0 66.0	11.0 9.3 8.0	55.0 50.2 44.7 38.6	84.5 80.8 76.1 70.4	12.6 11.7 10.0 8.5			
75.0 79.0 79.9 80.0 83.0				15.2	47.0	4.6	24.0 15.0	56.6 46.0	6.7 5.3	22.6 15.0	53.2 44.2	7.3 6.0 5.2	35.0 34.8 27.9	61.2 61.0 53.6	6.7 6.6
90.0													27.9 17.2	53.6 41.3	5.7 4.8



360°

Cargas pluma principal + plumín abatible + midfall

N° de ident.: 9842523/95738/

Radio de descarga:

Pieza de articulación de pluma principal: 2821-1 Cabeza de pluma principal: 2821-1

		gulo de orincipa			gulo de orincipa			gulo de principa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				26.0 ו	m Pluma Cab	eza de p	II, Punto Ilumín (2: Il Posici	316-1) 7	4.5 m Plı	eza de p umín	lumín				
19.6 20.0 22.0 24.0 26.0	78.0 77.7 76.1 74.5 72.9	101.8 101.7 101.2 100.7 100.1	22.8 22.8 22.3 21.3 20.1												
28.0 28.2 30.0 32.0 34.0	71.2 69.6 68.0 66.3	99.4 98.7 97.9 97.0	18.4 17.2 15.8 14.4	73.0 71.5 69.9 68.2	99.9 99.3 98.6 97.8	20.7 20.6 20.2 19.7									
36.0 38.0 40.0 41.4 42.0	64.6 62.9 61.1 59.3	96.1 95.1 94.0 92.9	13.2 12.2 11.4	66.5 64.9 63.1	96.9 96.0 95.0	18.7 17.4 16.3	65.0 64.5	95.3 95.0	18.3 18.8						
44.0 46.0 48.0 50.0 55.0	57.5 55.7 53.8 51.8 46.7	91.6 90.3 88.8 87.3 82.9	9.8 9.1 8.5 8.0 6.8	59.6 57.8 56.0 54.1 49.1	92.8 91.6 90.2 88.8 84.8	14.3 13.1 12.0 11.1 9.3	62.8 61.1 59.3 57.5 52.8	94.0 92.9 91.7 90.5 86.9	18.6 17.7 16.7 15.8 13.1						
56.9 60.0 65.0 70.0 75.0	41.1 34.8 27.3 16.8	77.7 71.2 62.7 50.1	5.8 5.0 4.3 3.6	43.8 37.9 31.0 22.3	80.0 74.1 66.7 56.5	7.8 6.5 5.6 4.7	47.7 42.2 36.1 28.8	82.7 77.6 71.4 63.4	11.2 9.5 8.2 6.9	55.0 52.1 47.0 41.5 35.2	86.9 84.7 80.3 75.1 68.7	11.9 11.8 10.1 8.7 7.5			
78.0 78.0 80.0 81.0 82.3 85.0	10.0	30.1	3.0	15.8	48.6	3.8	19.2 16.7	52.0 48.8	5.6 5.4	27.7	60.4	6.3	35.0 32.0	62.9 59.7	5.9 5.4
86.0 90.0 93.0										15.7	45.9	4.5	23.7 16.9	59.7 50.1 41.7	4.6 4.1



2821-1

2821-1

Nº de ident.: 9842523/95738/ Pieza de articulación de pluma principal: Radio de descarga: 360 ° Cabeza de pluma principal:

		gulo de principa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				26.0 ו	m Pluma Cab	eza de p	ıl, Punto ılumín (2 ı] Posici	316-1) 7	7.5 m Pl	eza de p umín	lumín				
20.2 22.0 24.0 26.0 28.0 29.0	78.0 76.6 75.1 73.6 72.0	104.8 104.3 103.8 103.2 102.6	20.7 20.5 19.7 19.0 17.5	73.0	102.8	18.8									
30.0 32.0 34.0 36.0	70.4 68.9 67.3 65.6	101.9 101.1 100.3 99.4	16.4 15.5 14.1 12.9	72.2 70.7 69.1 67.5	102.4 101.8 101.0 100.2	18.8 18.6 18.1 17.7									
38.0 40.0 42.0 42.7 44.0	64.0 62.3 60.6	98.5 97.4 96.3 95.2	11.9 11.0 10.2	65.9 64.3 62.6	99.3 98.4 97.4	16.4 15.4 14.5	65.0 64.0	98.0 97.4	16.4 16.4						
46.0 48.0 50.0 55.0 58.6	57.2 55.4 53.6 48.8	93.9 92.5 91.1 87.0	8.8 8.2 7.6 6.5	59.2 57.5 55.7 51.0	95.1 93.8 92.5 88.7	12.6 11.6 10.7 8.9	62.3 60.6 58.9 54.4	96.3 95.2 94.0 90.7	16.2 15.5 14.9 12.5	55.0	89.4	11.0			
60.0 65.0 70.0 75.0 78.0	43.6 37.9 31.4 23.2 16.5	82.1 76.3 68.9 59.0 50.5	5.5 4.6 4.0 3.4 3.0	46.1 40.7 34.5 27.2	84.2 78.9 72.3 63.8	7.5 6.2 5.3 4.5	49.7 44.7 39.1 32.7	86.7 82.0 76.4 69.4	10.6 9.0 7.5 6.4	53.8 49.1 43.9 38.3	88.5 84.4 79.6 73.8	11.3 9.8 8.5 7.2			
80.0 81.0 84.0 84.8 85.0				17.3 15.5	51.3 49.0	3.6 3.2	24.9 16.4	60.1 49.3	5.3 4.3	31.7	66.5 56.8	5.0	35.0 35.0	64.7 64.7	5.1 5.1
89.0 90.0 95.0 96.0										15.4	46.2	3.8	28.4 19.0 16.5	57.0 45.4 42.2	4.2 3.4 3.3



2821-1

2821-1

Nº de ident.: 9842523/95738/ Pieza de articulación de pluma principal: Radio de descarga: 360 ° Cabeza de pluma principal:

		gulo de orincipa			gulo de orincipa			gulo de principa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				26.0 i	m Pluma Cab	eza de p	al, Punto dumín (2: n] Posici	316-1) 8	0.5 m Pl	eza de p umín	lumín		-		
20.8 22.0 24.0 26.0 28.0 29.9	78.0 77.1 75.7 74.2 72.7	107.7 107.4 106.9 106.4 105.8	19.0 19.0 18.3 17.7 16.8	73.0	105.6	17.3									
30.0 32.0 34.0 36.0 38.0	71.2 69.7 68.2 66.6 65.0	105.1 104.4 103.6 102.7 101.8	15.9 15.2 14.1 12.9 11.8	72.9 71.4 69.9 68.4 66.9	105.6 104.9 104.2 103.4 102.6	17.3 17.2 16.8 16.4 15.8									
40.0 42.0 44.0 46.0	63.5 61.8 60.2 58.6	100.8 99.8 98.7 97.5	10.9 10.1 9.4 8.7	65.3 63.7 62.1 60.5	101.7 100.7 99.7 98.6	14.8 14.1 13.4 12.6	65.0 63.4	100.7 99.7	14.6 14.6						
48.0 50.0 55.0 60.0 60.3	56.9 55.1 50.6 45.8	96.2 94.8 91.0 86.4	8.1 7.5 6.3 5.4	58.8 57.1 52.8 48.1	97.4 96.1 92.6 88.4	11.7 10.8 8.9 7.5	61.8 60.2 56.0 51.5	98.7 97.5 94.4 90.6	14.3 13.9 12.5 10.5	55.0	91.9	10.4			
65.0 70.0 75.0 80.0 81.0	40.6 34.7 27.8 18.6 16.2	81.0 74.5 66.1 54.2 51.0	4.6 3.9 3.3 2.7 2.6	43.1 37.6 31.2 23.3	83.4 77.4 70.0 60.1	6.3 5.3 4.4 3.7	46.8 41.6 35.9 29.2	86.3 81.1 74.7 66.8	9.0 7.5 6.4 5.3	50.9 46.1 40.9 35.1	88.3 83.9 78.5 72.0	9.9 8.6 7.3 6.3			
84.0 85.0 87.0 87.2 90.0				15.2	49.4	2.8	20.7 16.0	55.8 49.7	4.2 3.8	28.2	63.8 52.2	5.2	35.0 32.1	66.4 63.0	4.5 4.1
92.0 95.0 99.0										15.1	46.6	3.4	24.5 16.2	53.6 42.6	3.3 2.7



N° de ident.: 9842523/95738/ Pieza de artic

Radio de descarga: 360 $^{\circ}$

Valor de vuelco:

Lastre trasero [t]:

Lastre central [t]:

2 - Vía ancha 114.0

52.6

		gulo de orincipa			gulo de orincipa			gulo de principa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				26.0 ו		eza de p	al, Punto olumín (2 n] Posici	316-1) 8	3.5 m Pl		lumín				
21.4 22.0 24.0 26.0 30.0 30.8 32.0 34.0 36.0 38.0 40.0 42.0 44.0 45.0 46.0	78.0 77.6 76.2 74.8 73.3 71.9 70.4 69.0 67.5 66.0 64.5 62.9 61.4	110.6 110.5 110.0 109.5 108.9 108.3 107.6 106.8 106.0 105.1 104.2 103.2 102.1	17.5 17.5 17.1 16.6 16.0 15.1 14.4 13.9 12.6 11.5 10.6 9.8 9.1	73.0 72.1 70.7 69.2 67.7 66.2 64.7 63.2 61.6 60.1	108.5 108.1 107.4 106.7 105.9 105.0 104.1 103.1	16.0 16.0 15.7 15.4 15.1 14.3 13.4 12.7	65.0 64.4 62.9	103.4 103.1 102.1	13.3 13.9 13.8						
50.0 55.0 60.0 62.0 65.0 70.0 75.0 80.0 85.0 86.0 89.7	56.6 52.3 47.8 43.0 37.6 31.5 24.1	98.4 94.8 90.6 85.6 79.6 72.2 62.6	7.2 6.0 5.1 4.2 3.5 3.0 2.4	58.5 54.3 49.9 45.3 40.2 34.5 27.7 19.0 16.7	99.7 96.3 92.4 87.7 82.3 75.6 67.2 55.4 52.2	10.5 8.6 7.2 6.0 5.0 4.1 3.4 2.7 2.5	61.3 57.3 53.1 48.7 43.9 38.7 32.8 25.6	90.3 85.5 79.7 72.7 63.6	13.5 12.6 10.5 9.0 7.5 6.2 5.3 4.3	55.0 52.6 48.1 43.2 37.9 31.9	94.3 92.2 88.0 83.0 77.1 69.9	9.6 9.6 8.3 7.1 6.0	35.0	68.1	3.8
90.0 94.0 95.0 100.0 102.0							15.7	50.1	3.3	24.5 16.5	60.4 49.5	4.0 3.1	34.6 28.8 20.4 15.9	67.7 60.4 49.2 43.0	3.7 3.0 2.3 2.0



N° de ident.: 9842523/95738/

Radio de descarga: 360 $^{\circ}$

Valor de vuelco:

Lastre trasero [t]:

Lastre central [t]:

2 - Vía ancha 114.0

52.6

		gulo de orincipa			gulo de orincipa			gulo de principa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				26.0 i		eza de p	al, Punto dumín (2 n] Posici	316-1) 8	6.5 m Pl	eza de p umín	lumín				
22.1	78.0	113.6	16.2												
24.0	76.7	113.1	16.1												
26.0	75.3	112.6	15.6												
28.0	73.9	112.0	15.3												
30.0	72.5	111.4	14.6												
31.7				73.0	111.4	14.9									
32.0	71.1	110.7	13.9	72.8	111.3	14.9									
34.0	69.7	110.0	13.4	71.4	110.6	14.8									
36.0	68.3	109.2	12.7	70.0	109.9	14.5									
38.0	66.9	108.4	11.5	68.5	109.1	14.3									
40.0	65.4	107.5	10.6	67.1	108.3	13.9									
42.0	64.0	106.5	9.7	65.7	107.4	13.1									
44.0	62.5	105.5	9.0	64.2	106.4	12.5									
46.0	61.0	104.4	8.4	62.7	105.4	11.9									
46.5							65.0	106.1	13.4						
48.0	59.4	103.3	7.7	61.2	104.3	11.5	63.9	105.4	13.4						
50.0	57.9	102.0	7.2	59.7	103.2	10.6	62.4	104.4	13.2						
55.0	53.9	98.6	5.9	55.7	100.0	8.7	58.6	101.5	12.6						
60.0	49.6	94.6	5.0	51.6	96.3	7.3	54.6	98.2	10.9						
63.7										55.0	96.8	9.1			
65.0	45.1	89.9	4.1	47.2	91.9	6.1	50.4	94.3	9.4	54.1	95.9	9.3			
70.0	40.2	84.4	3.4	42.5	86.8	5.0	46.0	89.8	7.9	49.8	92.0	8.3			
75.0	34.7	77.8	2.8	37.3	80.8	4.1	41.1	84.4	6.6	45.3	87.4	7.2			
80.0	28.2	69.5	2.3	31.4	73.3	3.4	35.8	78.1	5.6	40.4	81.9	6.1			
85.0				24.2	63.7	2.7	29.5	70.1	4.7	35.0	75.4	5.2			
90.0							21.8	59.6	3.7	28.6	67.2	4.2			
92.2													35.0	69.8	3.1
93.0							15.5	50.5	3.1						
95.0								1		20.5	56.0	3.2	32.2	66.3	2.7



Nº de ident.: 9842523/95738/ Pieza de articulación de pluma principal: Radio de descarga:

360° Cabeza de pluma principal: 2821-1 2821-1

2 - Vía ancha Valor de vuelco: Lastre trasero [t]: 114.0 52.6 Lastre central [t]:

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa		45° Án	gulo de orincipa	pluma I
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				26.0 r						eza de p	lumín				
					Cab		lumín (2: 1] Posici								
22.7	78.0	116.5	14.2												
24.0	77.2	116.2	14.2												
26.0	75.8	115.7	13.8												
28.0	74.5	115.2	13.4												
30.0	73.2	114.6	13.0												
32.0	71.8	113.9	12.5												
32.6				73.0	114.2	13.0									
34.0	70.4	113.2	12.0	72.0	113.8	13.0									
36.0	69.1	112.5	11.7	70.7	113.1	12.8									
38.0	67.7	111.7	10.7	69.3	112.3	12.5									
40.0	66.3	110.8	9.8	67.9	111.5	12.2									
42.0	64.9	109.9	9.0	66.5	110.7	11.7									
44.0	63.4	108.9	8.4	65.1	109.7	11.1									
46.0	62.0	107.8	7.8	63.7	108.8	10.6									
47.8							65.0	108.8	11.5						
48.0	60.5	106.7	7.2	62.2	107.7	10.2	64.8	108.7	11.5						
50.0	59.0	105.5	6.6	60.7	106.6	9.7	63.4	107.7	11.5						
55.0	55.2	102.2	5.4	57.0	103.5	8.0	59.7	105.0	10.9						
60.0	51.1	98.4	4.4	53.0	100.0	6.7	55.9	101.8	9.8						
65.0	46.8	94.0	3.7	48.8	95.8	5.6	51.9	98.1	8.4	55.0	99.2	8.3			
65.5 70.0	42.2	88.8	3.0	44.4	91.0	4.6	47.7	93.8	7.2	55.0 51.3	99.2 95.8	7.9			
70.0 75.0	37.1	82.6	2.4	39.5	91.0 85.4	3.7	47.7	93.6 88.7	6.0	47.1	95.6	6.7			
80.0	37.1	02.0	2.4	39.5	78.6	3.7	38.1	82.8	5.0	47.1	91.4 86.2	5.7			
85.0				27.8	70.1	2.4	32.5	75.6	4.1	37.4	80.2	4.7			
90.0				21.0	70.1	2.4	25.8	66.5	3.3	31.7	72.8	3.9			
94.6							20.0	00.5	0.0	51.7	72.0	0.0	35.0	71.5	2.4
95.0							16.8	53.4	2.5	24.8	63.3	3.0	34.6	71.0	2.4
96.0							16.0	52.1	2.2	24.0	00.0	0.0	04.0	7 1.0	2.0
97.0													32.9	68.8	2.1
100.0										16.7	51.5	2.1			



Nº de ident.: 9842523/95738/ Pieza de articulación de pluma principal: Radio de descarga: 360°

2821-1 Cabeza de pluma principal: 2821-1

2 - Vía ancha Valor de vuelco: Lastre trasero [t]: 114.0 52.6 Lastre central [t]:

Altura Carga Angu- Carga Cit Carga Cit Carga			gulo de principa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Cabeza de plumín (2316-1) 32.5 m Plumín 46.0 [m] Posición midfall (2316) 23.4 78.0 119.4 13.1 24.0 77.6 119.3 13.1 26.0 76.3 118.8 12.8 28.0 75.0 118.3 12.4 30.0 73.7 117.7 12.2 32.0 72.4 117.1 11.7 33.4 73.0 117.1 11.9 33.4 73.1 116.4 11.3 72.6 116.9 11.9 38.0 68.5 114.9 10.4 70.0 115.5 11.5 40.0 67.1 114.1 9.6 68.7 114.8 11.2 42.0 65.7 113.2 8.8 67.3 113.9 10.9 44.0 67.1 114.1 2.2 8.2 66.0 113.1 10.4 42.0 65.7 113.2 8.8 67.3 113.9 10.9 44.0 64.4 112.2 8.2 66.0 113.1 10.4 46.0 63.0 111.2 7.6 64.6 112.1 10.0 48.0 61.6 110.1 7.1 63.2 111.1 9.6 55.0 56.5 105.9 5.3 58.2 107.1 7.9 60.8 108.5 9.9 60.0 52.6 102.2 4.3 54.4 103.7 6.6 57.2 105.4 9.2 66.0 48.6 98.0 3.6 50.5 99.8 5.6 53.4 101.9 8.0 67.2 70.0 44.2 93.2 2.9 46.3 95.3 4.6 49.4 97.8 7.1 52.8 99.6 7.8 75.0 39.5 87.5 2.3 41.8 90.0 3.7 45.1 93.1 5.9 48.8 95.5 6.7 80.0 44.2 93.2 2.9 46.3 95.3 4.6 49.4 97.8 7.1 52.8 99.6 7.8 75.0 39.5 87.5 2.3 41.8 90.0 3.7 45.1 93.1 5.9 48.8 95.5 6.7 80.0 88.0 86.5 13.2 76.3 2.3 35.4 81.1 41.3 39.8 85.0 48.8 90.0 90.0 90.0 90.0 65.8 83.8 2.9 40.5 87.6 4.9 44.5 99.6 5.8 85.0 90.0 90.0 90.0 65.0 13.2 76.3 2.3 35.4 81.1 41.3 39.8 85.0 48.8 90.0 90.0 90.0 90.0 65.0 13.2 76.3 2.3 35.4 81.1 41.3 39.8 85.0 48.8 90.0 90.0 90.0 90.0 65.0 13.2 76.3 2.3 35.4 81.1 41.3 39.8 85.0 48.8	ce	o de plumín	de rolda- nas		o de plumín	de rolda- nas	Carga [t]	o de plumín	de rolda- nas	Carga [t]	o de plumín	de rolda- nas	Carga [t]	o de plumín	de rolda- nas	Carga [t]
24.0 77.6 119.3 13.1 26.0 76.3 118.8 12.8 28.0 75.0 118.3 12.4 30.0 73.7 117.7 12.2 32.0 72.4 117.1 11.7 12.2 33.4 73.0 117.1 11.9 34.0 71.1 116.4 11.3 72.6 116.9 11.9 11.8 38.0 68.5 114.9 10.4 70.0 115.5 11.5 11.8 38.0 68.5 114.9 10.4 70.0 115.5 11.5 11.2 40.0 67.1 114.1 9.6 68.7 114.8 11.2 42.0 65.7 113.2 8.8 67.3 113.9 10.9 44.0 64.4 112.2 8.2 66.0 113.1 10.4 48.0 61.6 110.1 7.1 63.2 111.1 9.6 50.0 60.1 109.0 6.6 61.8 110.0 9.3 64.3 111.1 10.4 55.0 56.5 105.9					26.0 ו		eza de p	lumín (2	316-1) 9:	2.5 m Pli		lumín				
26.0 76.3 118.8 12.8 28.0 75.0 118.3 12.4 30.0 73.7 117.7 12.2 32.0 72.4 117.1 11.7 73.0 117.1 11.9 33.4 34.0 71.1 116.4 11.3 72.6 116.9 11.9 36.0 69.8 115.7 11.0 71.3 116.3 11.8 38.0 68.5 114.9 10.4 70.0 115.5 11.5 40.0 67.1 114.1 9.6 68.7 114.8 11.2 42.0 65.7 113.2 8.8 67.3 113.1 10.4 44.0 64.4 112.2 8.2 66.0 113.1 10.4 48.0 61.6 110.1 7.1 63.2 111.1 9.6 49.0 10.0 6.6 61.8 110.0 9.3 64.3 111.1 10.4 55.0 56.5 105.9 5.3 58.2 107.1 7.9 60.8 108.5 9.9																
28.0 75.0 118.3 12.4 30.0 73.7 117.7 112.2 32.0 72.4 117.1 11.7 11.7 11.9 33.4 34.0 71.1 116.4 11.3 72.6 116.9 11.9 36.0 69.8 115.7 11.0 71.3 116.3 11.8 38.0 68.5 114.9 10.4 70.0 115.5 11.5 40.0 67.1 114.1 9.6 68.7 114.8 11.2 42.0 65.7 132.2 8.8 67.3 113.1 10.4 46.0 63.0 111.2 7.6 64.6 112.1 10.0 48.0 61.6 110.1 7.1 63.2 111.1 9.6 49.0 65.0 65.5 105.9 5.3 58.2 107.1 7.9 60.8 108.5 9.9 60.0 52.6 102.2 4.3 54.4 103.7 6.6 57.2 105.4 9.2 65.0 48.6 98.0 3.6 50.5	24.0	1	ı													
30.0																
32.0																
33.4 34.0 71.1 116.4 11.3 72.6 116.9 11.9 11.9 36.0 69.8 115.7 11.0 71.3 116.3 11.8 38.0 68.5 114.9 10.4 70.0 115.5 11.5 1																
34.0 71.1 116.4 11.3 72.6 116.9 11.9 38.0 69.8 115.7 11.0 71.3 116.3 11.8 38.0 68.5 114.9 10.4 70.0 115.5 11.5 40.0 67.1 114.1 9.6 68.7 114.8 11.2 42.0 65.7 113.2 8.8 67.3 113.9 10.9 44.0 64.4 112.2 8.2 66.0 113.1 10.4 46.0 63.0 111.2 7.6 64.6 112.1 10.0 48.0 61.6 110.1 7.1 63.2 111.1 9.6 49.0 50.0 60.1 109.0 6.6 61.8 110.0 9.3 64.3 111.1 10.4 55.0 56.5 105.9 5.3 58.2 107.1 7.9 60.8 59.9 60.0 52.6 102.2 4.3 54.4 103.7 6.6 57.2 105.4 9.2 65.0 48.6 98.0 3.6 50.5		72.4	117.1	11.7												
36.0 69.8 115.7 11.0 71.3 116.3 11.8 38.0 68.5 114.9 10.4 70.0 115.5 11.5 40.0 67.1 114.1 9.6 68.7 114.8 11.2 42.0 65.7 113.2 8.8 67.3 113.9 10.9 44.0 64.4 112.2 8.2 66.0 113.1 10.4 46.0 63.0 111.2 7.6 64.6 112.1 10.0 48.0 61.6 110.1 7.1 63.2 111.1 9.6 49.0 50.0 60.1 109.0 6.6 61.8 110.0 9.3 64.3 111.1 10.4 55.0 56.5 105.9 5.3 58.2 107.1 7.9 60.8 108.5 9.9 60.0 52.6 102.2 4.3 54.4 103.7 6.6 57.2 105.4 9.2 65.0 48.6 98.0 3.6 50.5 99.8 5.6 53.4 101.9 8.0 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>																
38.0 68.5 114.9 10.4 70.0 115.5 11.5 40.0 67.1 114.1 9.6 68.7 114.8 11.2 42.0 65.7 113.2 8.8 67.3 113.9 10.9 44.0 64.4 112.2 8.2 66.0 113.1 10.4 46.0 63.0 111.2 7.6 64.6 112.1 10.0 48.0 61.6 110.1 7.1 63.2 111.1 9.6 49.0 60.1 109.0 6.6 61.8 110.0 9.3 64.3 111.1 10.4 55.0 56.5 105.9 5.3 58.2 107.1 7.9 60.8 108.5 9.9 60.0 52.6 102.2 4.3 54.4 103.7 6.6 57.2 105.4 9.2 65.0 48.6 98.0 3.6 50.5 99.8 5.6 53.4 101.9 8.0 55.0 101.7 7.9																
40.0 67.1 114.1 9.6 68.7 114.8 11.2 42.0 65.7 113.2 8.8 67.3 113.9 10.9 44.0 64.4 112.2 8.2 66.0 113.1 10.4 46.0 63.0 111.2 7.6 64.6 112.1 10.0 49.0 61.6 110.1 7.1 63.2 111.1 9.6 49.0 60.1 109.0 6.6 61.8 110.0 9.3 64.3 111.1 10.4 55.0 56.5 105.9 5.3 58.2 107.1 7.9 60.8 108.5 9.9 60.0 52.6 102.2 4.3 54.4 103.7 6.6 57.2 105.4 9.2 65.0 48.6 98.0 3.6 50.5 99.8 5.6 53.4 101.9 8.0 67.2 70.0 44.2 93.2 2.9 46.3 95.3 4.6 49.4 97.8 7.1 52.8 99.6 7.8 75.0 39.5 87.5 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							-									
42.0 65.7 113.2 8.8 67.3 113.9 10.9 44.0 64.4 112.2 8.2 66.0 113.1 10.4 46.0 63.0 111.2 7.6 64.6 112.1 10.0 48.0 61.6 110.1 7.1 63.2 111.1 9.6 49.0 60.0 10.9 6.6 61.8 110.0 9.3 64.3 111.1 10.4 55.0 56.5 105.9 5.3 58.2 107.1 7.9 60.8 108.5 9.9 60.0 52.6 102.2 4.3 54.4 103.7 6.6 57.2 105.4 9.2 65.0 48.6 98.0 3.6 50.5 99.8 5.6 53.4 101.9 8.0 67.2 70.0 44.2 93.2 2.9 46.3 95.3 4.6 49.4 97.8 7.1 52.8 99.6 7.8 75.0 39.5 87.5 2.3 41.8 90.0 3.7 45.1 93.1 5.9 48.8																
44.0 64.4 112.2 8.2 66.0 113.1 10.4 46.0 63.0 111.2 7.6 64.6 112.1 10.0 48.0 61.6 110.1 7.1 63.2 111.1 9.6 65.0 111.6 10.4																
46.0 63.0 111.2 7.6 64.6 112.1 10.0 111.6 10.4																
48.0 61.6 110.1 7.1 63.2 111.1 9.6 65.0 111.6 10.4 <t< td=""><td></td><td></td><td>i</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>			i													
49.0 60.1 109.0 6.6 61.8 110.0 9.3 64.3 111.1 10.4			l	-												
50.0 60.1 109.0 6.6 61.8 110.0 9.3 64.3 111.1 10.4 55.0 56.5 105.9 5.3 58.2 107.1 7.9 60.8 108.5 9.9 60.0 52.6 102.2 4.3 54.4 103.7 6.6 57.2 105.4 9.2 65.0 48.6 98.0 3.6 50.5 99.8 5.6 53.4 101.9 8.0 67.2 70.0 44.2 93.2 2.9 46.3 95.3 4.6 49.4 97.8 7.1 52.8 99.6 7.8 75.0 39.5 87.5 2.3 41.8 90.0 3.7 45.1 93.1 5.9 48.8 95.5 6.7 80.0 30.0 36.8 83.8 2.9 40.5 87.6 4.9 44.5 90.6 5.8 85.0 31.2 76.3 2.3 35.4 81.1 4.1 39.8 85.0 4.8 90.0 98.0 16.6 53.8 2.2 26.5 <td< td=""><td></td><td>61.6</td><td>110.1</td><td>7.1</td><td>63.2</td><td>111.1</td><td>9.6</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>		61.6	110.1	7.1	63.2	111.1	9.6									
55.0 56.5 105.9 5.3 58.2 107.1 7.9 60.8 108.5 9.9 9.9 60.0 52.6 102.2 4.3 54.4 103.7 6.6 57.2 105.4 9.2 65.0 48.6 98.0 3.6 50.5 99.8 5.6 53.4 101.9 8.0 101.7 7.9 7.9 7.0 44.2 93.2 2.9 46.3 95.3 4.6 49.4 97.8 7.1 52.8 99.6 7.8 7.8 7.1 52.8 99.6 7.8	•															
60.0 52.6 102.2 4.3 54.4 103.7 6.6 57.2 105.4 9.2 65.0 48.6 98.0 3.6 50.5 99.8 5.6 53.4 101.9 8.0 67.2 70.0 44.2 93.2 2.9 46.3 95.3 4.6 49.4 97.8 7.1 52.8 99.6 7.8 75.0 39.5 87.5 2.3 41.8 90.0 3.7 45.1 93.1 5.9 48.8 95.5 6.7 80.0 36.8 83.8 2.9 40.5 87.6 4.9 44.5 90.6 5.8 85.0 31.2 76.3 2.3 35.4 81.1 4.1 39.8 85.0 4.8 90.0 90.0 29.5 73.0 3.4 34.6 78.3 4.1 98.0 16.6 53.8 2.2 28.6 70.1 3.2										-						
65.0 48.6 98.0 3.6 50.5 99.8 5.6 53.4 101.9 8.0 67.2 70.0 44.2 93.2 2.9 46.3 95.3 4.6 49.4 97.8 7.1 52.8 99.6 7.8 75.0 39.5 87.5 2.3 41.8 90.0 3.7 45.1 93.1 5.9 48.8 95.5 6.7 80.0 36.8 83.8 2.9 40.5 87.6 4.9 44.5 90.6 5.8 85.0 31.2 76.3 2.3 35.4 81.1 4.1 39.8 85.0 4.8 90.0 98.0 22.3 62.5 2.6 28.6 70.1 3.2 98.0 16.6 53.8 2.2 28.6 70.1 3.2																
67.2 70.0 44.2 93.2 2.9 46.3 95.3 4.6 49.4 97.8 7.1 52.8 99.6 7.8 75.0 39.5 87.5 2.3 41.8 90.0 3.7 45.1 93.1 5.9 48.8 95.5 6.7 80.0 36.8 83.8 2.9 40.5 87.6 4.9 44.5 90.6 5.8 85.0 31.2 76.3 2.3 35.4 81.1 4.1 39.8 85.0 4.8 90.0 99.0 29.5 73.0 3.4 34.6 78.3 4.1 98.0 16.6 53.8 2.2			ı					-								
70.0 44.2 93.2 2.9 46.3 95.3 4.6 49.4 97.8 7.1 52.8 99.6 7.8 75.0 39.5 87.5 2.3 41.8 90.0 3.7 45.1 93.1 5.9 48.8 95.5 6.7 80.0 36.8 83.8 2.9 40.5 87.6 4.9 44.5 90.6 5.8 85.0 31.2 76.3 2.3 35.4 81.1 4.1 39.8 85.0 4.8 90.0 99.0 29.5 73.0 3.4 34.6 78.3 4.1 98.0 16.6 53.8 2.2		48.6	98.0	3.6	50.5	99.8	5.6	53.4	101.9	8.0						
75.0 39.5 87.5 2.3 41.8 90.0 3.7 45.1 93.1 5.9 48.8 95.5 6.7 80.0 36.8 83.8 2.9 40.5 87.6 4.9 44.5 90.6 5.8 85.0 31.2 76.3 2.3 35.4 81.1 4.1 39.8 85.0 4.8 90.0 29.5 73.0 3.4 34.6 78.3 4.1 95.0 22.3 62.5 2.6 28.6 70.1 3.2 98.0 16.6 53.8 2.2													-			
80.0 36.8 83.8 2.9 40.5 87.6 4.9 44.5 90.6 5.8 85.0 31.2 76.3 2.3 35.4 81.1 4.1 39.8 85.0 4.8 90.0 29.5 73.0 3.4 34.6 78.3 4.1 95.0 22.3 62.5 2.6 28.6 70.1 3.2 98.0 16.6 53.8 2.2													-			
85.0 31.2 76.3 2.3 35.4 81.1 4.1 39.8 85.0 4.8 90.0 29.5 73.0 3.4 34.6 78.3 4.1 95.0 22.3 62.5 2.6 28.6 70.1 3.2 98.0 16.6 53.8 2.2 53.8 2.2		39.5	87.5	2.3									-			
90.0 95.0 98.0 29.5 73.0 3.4 34.6 78.3 4.1 22.3 62.5 2.6 28.6 70.1 3.2 16.6 53.8 2.2																
95.0 98.0 22.3 62.5 2.6 28.6 70.1 3.2					31.2	76.3	2.3									
98.0																
										-	28.6	70.1	3.2			
1 400 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	98.0 100.0							70.0	53.8	2.2	21.1	59.0	2.4			



2821-1

2821-1

Nº de ident.: 9842523/95738/ Pieza de articulación de pluma principal: Radio de descarga: 360 ° Cabeza de pluma principal:

	88° Án	gulo de principa	pluma I		gulo de orincipa			gulo de principa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
			-	26.0	m Pluma Cab	principa	al, Punto olumín (2	de carga	1 - Cab	eza de p	lumín	-	_		-
					Oab	49.0 [n	n] Posici	ón midfa	II (2316)	ullilli					
24.0	78.0	122.4	11.9												
26.0	76.8	121.9	11.8												
28.0	75.5	121.4	11.5												
30.0	74.3	120.8	11.2												
32.0	73.0	120.2	10.9												
34.0	71.7	119.6	10.5												
34.3				73.0	120.0	10.9									
36.0	70.5	118.9	10.2	71.9	119.4	10.8									
38.0	69.2	118.1	9.9	70.7	118.7	10.6									
40.0	67.9	117.3	9.2	69.4	118.0	10.3									
42.0	66.6	116.5	8.4	68.1	117.2	10.1									
44.0	65.2	115.5	7.8	66.8	116.3	9.8									
46.0	63.9	114.6	7.2	65.4	115.4	9.3									
48.0	62.5	113.5	6.7	64.1	114.5	8.9									
50.0	61.2	112.5	6.3	62.8	113.5	8.6									
50.3							65.0	114.3	9.4						
55.0	57.6	109.4	5.0	59.3	110.6	7.5	61.8	111.9	9.2						
60.0	54.0	106.0	4.0	55.7	107.4	6.2	58.3	109.0	8.8						
65.0	50.1	102.0	3.2	52.0	103.7	5.3	54.7	105.6	7.6						
68.9										55.0	104.1	7.2			
70.0	46.1	97.5	2.6	48.0	99.4	4.3	50.9	101.7	6.7	54.2	103.4	7.2			
75.0				43.8	94.5	3.4	46.9	97.3	5.7	50.4	99.4	6.5			
80.0				39.2	88.7	2.6	42.6	92.2	4.7	46.3	94.9	5.6			
85.0							37.9	86.1	3.8	41.9	89.7	4.6			
90.0							32.6	78.9	3.1	37.2	83.5	3.7			
95.0							26.4	69.9	2.4	31.8	76.1	3.0			
97.0							24.4	66.9	2.1						
100.0				•			•			25.4	66.8	2.3			
101.0		1		I			I	1		24.9	65.9	2.1			1



Nº de ident.: 9842523/95738/ Pieza de articulación de pluma principal: Radio de descarga:

9842523/95738/	Pieza de articulación de pluma principal:	2821-1
360 °	Cabeza de pluma principal:	2821-1
2 Magazaba		

		gulo de orincipa			gulo de orincipa		75° Án I	gulo de orincipa	pluma I		gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				26.0 ו		eza de p	il, Punto lumín (2 n] Posici	316-1) 9	8.5 m Pli		lumín				
24.6	78.0	125.3	10.9												
26.0	77.2	125.0	10.9												
28.0	76.0	124.5	10.7												
30.0	74.8	123.9	10.4												
32.0	73.5	123.4	10.2												
34.0	72.3	122.7	9.8												
35.2		400.4	0.5	73.0	122.8	10.0									
36.0	71.1 69.8	122.1 121.3	9.5	72.5	122.6 121.9	9.9									
38.0			9.3	71.3		9.8									
40.0	68.6	120.6	8.9	70.0	121.2	9.6									
42.0	67.3	119.7	8.2	68.8	120.4	9.4									
44.0	66.0 64.7	118.8 117.9	7.6 7.0	67.5	119.6 118.7	9.2 8.8									
46.0 48.0	63.4	117.9	6.5	66.2 65.0	118.7	8.5									
50.0	62.1	115.9	6.1	63.7	117.8	8.2									
51.6	02.1	115.9	0.1	03.7	110.0	0.2	65.0	117.0	8.7						
55.0	58.8	113.0	4.9	60.3	114.1	7.4	62.8	115.3	8.6						
60.0	55.3	109.7	3.9	56.9	111.0	6.2	59.4	112.5	8.2						
65.0	51.6	105.7	3.1	53.3	107.5	5.2	55.9	109.3	7.5						
70.0	47.8	101.6	2.4	49.6	107.3	4.3	52.3	105.6	6.7						
70.6	77.0	101.0	2.7	40.0	100.4	7.0	02.0	100.0	0.1	55.0	106.6	6.7			
75.0				45.6	98.8	3.4	48.5	101.4	5.9	51.8	103.3	6.5			
80.0				41.3	93.4	2.6	44.4	96.5	4.8	48.0	99.0	5.5			
85.0							40.1	91.0	3.8	43.9	94.1	4.7			
90.0							35.3	84.4	3.1	39.4	88.4	3.9			
95.0							30.5	77.4	2.4	34.6	81.6	3.2			
98.0							26.0	70.6	2.1						
100.0										28.9	73.4	2.5			



N° de ident.: 9842523/95738/

Radio de descarga: 360 $^{\circ}$

Pieza de articulación de pluma principal: 2821-1 Cabeza de pluma principal: 2821-1

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				26.0	m Pluma Cabe	eza de pl	ıl, Punto umín (23 ı] Posici	316-1) 10	1.5 m P	eza de p lumín	lumín		_		
25.2	78.0	128.2	10.1												
26.0	77.6	128.1	10.1												
28.0	76.4	127.6	10.0												
30.0	75.2	127.1	9.7												
32.0	74.0	126.5	9.5												
34.0	72.9	125.9	9.2												
36.0	71.7	125.2	8.9												
36.1				73.0	125.7	9.2							<u> </u>		
38.0	70.5	124.5	8.7	71.8	125.1	9.1									
40.0	69.2	123.8	8.5	70.6	124.4	9.0									
42.0	68.0	123.0	7.9	69.4	123.6	8.7									
44.0	66.8	122.1	7.3	68.2	122.9	8.6									
46.0	65.6	121.2	6.7	67.0	122.0	8.3									
48.0	64.3	120.3	6.2	65.7	121.1	8.0									
50.0	63.0	119.3	5.7	64.5	120.2	7.6									
52.8							65.0	119.7	7.9						
55.0	59.8	116.5	4.7	61.3	117.6	7.0	63.6	118.7	7.9						
60.0	56.4	113.3	3.6	58.0	114.6	5.8	60.4	116.0	7.6						
65.0	52.9	109.7	2.8	54.6	111.2	4.8	57.1	112.9	7.1						
70.0	49.3	105.6	2.1	51.0	107.3	4.0	53.6	109.4	6.2						
72.4										55.0	109.1	6.0			
75.0				47.6	103.4	3.1	50.0	105.4	5.5	53.1	107.1	6.0			
80.0				43.6	98.5	2.3	46.2	100.8	4.5	49.5	103.0	5.3			
85.0							42.1	95.6	3.5	45.6	98.4	4.5			
90.0							37.6	89.5	2.8	41.5	93.1	3.6			
95.0							32.6	82.3	2.2	37.0	86.8	2.8			
96.0							31.6	80.6	2.1						
100.0										31.9	79.4	2.2			



Nº de ident.: 9842523/95738/

Radio de descarga: 360 $^{\circ}$

Pieza de articulación de pluma principal: 2821-1 Cabeza de pluma principal: 2821-1

		gulo de orincipa			gulo de orincipa			gulo de orincipa		65° Án	gulo de orincipa	pluma I	45° Án	gulo de orincipa	pluma I
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				26.0 ו		eża de pl	al, Punto lumín (23 n] Posici	316-1) ĬC	4.5 m P	eza de p lumín	lumín				
25.9 26.0 28.0	78.0 77.9 76.8	131.2 131.1 130.7	9.4 9.4 9.3												
30.0 32.0	75.7 74.5	130.2 129.6	9.1 8.9												
34.0 36.0 36.9	73.4 72.2	129.0 128.4	8.7 8.4	73.0	128.6	8.5									
38.0 40.0 42.0	71.0 69.9 68.7	127.7 127.0 126.2	8.2 8.0 7.7	72.4 71.2 70.1	128.2 127.6 126.8	8.5 8.4 8.2									
44.0 46.0	67.5 66.3	125.4 124.5	7.1 6.5	68.9 67.7	126.1 125.3	8.0 7.9									
48.0 50.0 54.1	65.1 63.9	123.6 122.6	6.0 5.6	66.5 65.3	124.4 123.5	7.6 7.3	65.0	122.4	7.3						
55.0 60.0 65.0	60.7 57.5 54.2	120.0 116.9 113.5	4.6 3.6 2.7	62.2 59.0 55.8	121.0 118.1 114.9	6.7 5.8 4.8	64.4 61.3 58.1	122.0 119.4 116.4	7.3 7.1 6.8						
69.0 70.0 74.1	51.4	110.4	2.1	52.3	111.2	4.0	54.8	113.1	6.0	55.0	111.5	5.5			
75.0 80.0 82.0				48.8 45.0 43.4	107.0 102.3 100.2	3.2 2.4 2.1	51.4 47.7	109.3 104.9	5.3 4.5	54.4 50.9	110.8 107.0	5.5 5.2			
85.0 90.0 95.0 100.0 101.0							43.9 39.7 35.7	100.0 94.3 88.5	3.6 2.8 2.1	47.2 43.3 39.1 35.0 34.1	102.6 97.5 91.7 85.8 84.3	4.5 3.7 2.9 2.2 2.1			



Nº de ident.: 9842523/95738/

360°

Radio de descarga:

Pieza de articulación de pluma principal: 2821-1 Cabeza de pluma principal: 2821-1

2 - Vía ancha Valor de vuelco:

Lastre trasero [t]: 114.0 Lastre central [t]: 52.6

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				26.0 ו	m Pluma Cabe	eza de pl	ıl, Punto umín (23 ı] Posici	316-1) 10	7.5 m P	eza de p lumín	lumín				
26.5	78.0	134.1	8.4												
28.0	77.2	133.8	8.4												
30.0	76.1	133.3	8.2												
32.0	75.0	132.7	8.0												
34.0	73.8	132.2	7.8												
36.0	72.7	131.5	7.6	70.0	404.4	7.0									
37.8 38.0	71.6	130.9	7.4	73.0 72.9	131.4 131.4	7.6 7.6									
40.0	70.5	130.9	7.4	72.9	131.4	7.5									
42.0	69.3	129.4	7.1	70.6	130.7	7.4									
44.0	68.2	128.6	6.6	69.5	129.3	7.2									
46.0	67.0	127.8	6.1	68.3	128.5	7.0									
48.0	65.8	126.9	5.6	67.2	127.7	6.8									
50.0	64.7	126.0	5.1	66.0	126.8	6.6									
55.0	61.6	123.4	4.3	63.0	124.4	6.0									
55.4							65.0	125.2	6.4						
60.0	58.5	120.5	3.3	60.0	121.6	5.4	62.2	122.8	6.3						
65.0	55.3	117.2	2.4	56.8	118.5	4.4	59.1	120.0	6.0						
70.0				53.6	115.0	3.6	56.0	116.7	5.4						
75.0				50.2	111.0	2.9	52.7	113.1	4.7						
75.8										55.0	114.0	4.8			
80.0				46.9	106.9	2.1	49.2	109.0	4.1	52.2	110.8	4.7			
85.0							45.5	104.3	3.3	48.7	106.6	4.1			
90.0							41.6	99.0	2.5	45.0	101.9	3.5			
95.0										41.1	96.4	2.7			
99.0										38.2	92.2	2.1			



N° de ident.: 9842523/95738/ Pieza d

Radio de descarga: 360 $^{\circ}$

Valor de vuelco: 2 - Vía ancha Lastre trasero [t]: 114.0 Lastre central [t]: 52.6

		gulo de orincipal			gulo de orincipa										
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				26.0 ו			ıl, Punto umín (23			eza de p	lumín				
					Cabe		n] Posici			iuiiiiii					
27.1	78.0	137.0	7.6												
28.0	77.5	136.8	7.6												
30.0	76.5	136.4	7.5												
32.0	75.4	135.8	7.3												
34.0	74.3	135.3	7.1												
36.0	73.2	134.7	6.9												
38.0	72.1	134.1	6.7												
38.7				73.0	134.3	6.8									
40.0	71.0	133.4	6.5	72.3	133.9	6.8									
42.0	69.9	132.6	6.4	71.2	133.2	6.6									
44.0	68.8	131.9	6.2	70.1	132.5	6.5									
46.0	67.7	131.1	5.7	69.0	131.7	6.3									
48.0	66.5	130.2	5.2	67.8	130.9	6.2									
50.0	65.4	129.3	4.8	66.7	130.1	6.0									
55.0	62.5	126.8	4.0	63.8	127.7	5.6									
56.6							65.0	127.9	5.7						
60.0	59.5	124.0	3.1	60.9	125.1	5.1	63.0	126.2	5.6						
65.0	56.4	120.8	2.3	57.9	122.1	4.2	60.1	123.5	5.3						
66.0	55.8	120.1	2.1												
70.0				54.7	118.7	3.4	57.0	120.4	4.9						
75.0				51.5	114.9	2.8	53.8	116.9	4.3						
77.5										55.0	116.4	4.2			
80.0				48.4	111.0	2.1	50.5	112.9	3.9	53.4	114.6	4.2			
85.0							47.1	108.5	3.2	50.1	110.6	3.9			
90.0							43.4	103.4	2.5	46.9	106.6	3.3			
95.0										43.2	101.5	2.5			
98.0										40.9	98.2	2.0			



N° de ident.: 9842523/95738/ Piez Radio de descarga: 360 ° Cabo

Pieza de articulación de pluma principal: 2821-1 Cabeza de pluma principal: 2821-1

	88° Ángulo de pluma principal			83° Ángulo de pluma principal			75° Ángulo de pluma principal			65° Ángulo de pluma principal			45° Ángulo de pluma principal		
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
29.0 m Pluma principal, Punto de carga 1 - Cabeza de plumín Cabeza de plumín (2316-1) 38.5 m Plumín 16.0 [m] Posición midfall (2316)															
12.2	78.0	69.6	64.9												
13.0	76.7	69.4	64.3												
14.0	75.2	69.1	60.1												
16.0	72.1	68.5	51.9												
18.0	68.9	67.8	44.8	73.0	68.4	54.2									
20.0	65.7	66.9	37.6	69.8	67.7	50.2									
22.0	62.3	65.9	32.3	66.6	66.9	45.0									
24.0	58.9	64.7	28.6	63.3	65.9	39.9									
26.0 27.0	55.3	63.4	25.6	59.9	64.8	35.8	65.0	65.5	39.0	ł					
28.0	51.6	61.9	23.2	56.4	63.5	31.8	63.4	65.0	38.5						
30.0	47.6	60.1	21.4	52.7	62.1	28.7	60.0	63.9	36.1	l					
32.0	43.4	58.1	19.9	48.8	60.4	26.7	56.4	62.6	33.9	i					
34.0	38.8	55.7	18.5	44.6	58.4	24.0	52.7	61.2	31.8	i			i		
36.0	33.6	52.9	17.4	40.1	56.2	22.0	48.9	59.5	30.1						
37.5										55.0	60.2	26.2			
38.0	27.6	49.4	16.4	35.2	53.5	20.4	44.7	57.6	28.3	54.3	59.9	27.3			
40.0	20.0	44.7	15.4	29.5	50.2	19.0	40.2	55.3	26.8	50.5	58.3	25.8	İ		
41.0	16.7	42.6	14.1												
42.0				22.5	46.0	17.6	35.3	52.7	25.5	46.4	56.5	24.4			
43.0				18.0	43.1	16.9									
44.0							29.6	49.4	23.4	42.1	54.4	23.4			
46.0							22.6	45.2	21.2	37.4	51.9	22.5			
47.0							18.2	42.4	20.2						
48.0										32.0	48.9	21.6			
50.0										25.7	45.1	20.5			
52.0										17.2	39.8	19.4			
55.0													35.0	44.4	15.2
60.0													20.1	35.5	13.7



Nº de ident.:9842523/95738/Pieza de articulación de pluma principal:2821-1Radio de descarga:360 °Cabeza de pluma principal:2821-1

	88° Ángulo de pluma principal			83° Ángulo de pluma principal			75° Ángulo de pluma principal			65° Ángulo de pluma principal			45° Ángulo de pluma principal		
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
29.0 m Pluma principal, Punto de carga 1 - Cabeza de plumín Cabeza de plumín (2316-1) 41.5 m Plumín 19.0 [m] Posición midfall (2316)															
12.8	78.0	72.5	59.0												
13.0	77.7	72.5	59.0												
14.0	76.3	72.2	57.9												
16.0	73.4	71.7	51.4												
18.0	70.5	71.0	43.4												
18.9				73.0	71.3	49.8									
20.0	67.5	70.2	37.3	71.4	70.9	48.9									
22.0	64.5	69.3	31.8	68.4	70.2	44.0									
24.0	61.4	68.2	27.9	65.4	69.3	39.5									
26.0	58.2	67.0	25.2	62.3	68.3	36.0									
28.0	54.8	65.7	22.9	59.1	67.1	32.4									
28.2	51.3	04.4	04.0	55.0	05.0	00.0	65.0	68.2 67.4	30.1 35.4						
30.0 32.0	47.6	64.1 62.4	21.0 19.5	55.8 52.3	65.8 64.3	29.0 26.3	62.4 59.2	67.4 66.2	35.4						
34.0	43.7	60.4	18.2	48.7	62.6	26.3	59.2 55.9	64.9	31.1						
36.0	39.5	58.0	17.0	44.9	60.7	22.1	52.4	63.4	29.3						
38.0	34.9	55.3	16.0	40.8	58.5	20.3	48.8	61.7	29.3						
39.2	34.5	33.3	10.0	40.0	30.3	20.3	40.0	01.7	21.0	55.0	62.6	24.4	i		
40.0	29.6	52.1	15.1	36.3	55.9	18.9	45.0	59.8	26.2	53.8	62.1	25.3	i		
42.0	23.2	47.9	14.3	31.2	52.8	17.6	40.9	57.6	24.8	50.3	60.5	24.0			
44.0	16.0	43.0	12.7	25.2	48.9	16.4	36.4	55.0	23.6	46.6	58.7	22.8			
46.0				17.3	43.6	15.2	31.3	52.0	21.9	42.6	56.6	21.8			
48.0							25.3	48.1	20.1	38.2	54.2	20.9			
50.0							17.5	42.8	18.3	33.4	51.4	20.1			
55.0										16.6	40.3	17.6			
57.4													35.0	46.1	14.2
60.0													29.7	42.8	13.5
63.0													19.4	36.0	12.5



Nº de ident.:9842523/95738/Pieza de articulación de pluma principal:2821-1Radio de descarga:360 °Cabeza de pluma principal:2821-1

		gulo de orincipa			gulo de orincipa			gulo de principa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				29.0 ו		eza de p	al, Punto dumín (2 n] Posici	316-1) 4	4.5 m Pl		lumín				
13.4	78.0	75.5	54.3												
14.0	77.2	75.3	54.3												
16.0	74.6	74.8	49.9												
18.0	71.9	74.2	43.2												
19.7				73.0	74.2	46.4									
20.0	69.1	73.4	37.5	72.7	74.1	46.4									
22.0	66.3	72.6	31.9	69.9	73.4	43.2									
24.0	63.5	71.6 70.5	27.5	67.1	72.6	39.4				ł					
26.0 28.0	60.5 57.5	69.3	24.6 22.5	64.3 61.4	71.6 70.6	35.7 33.2									
29.5	57.5	69.3	22.5	01.4	70.0	33.2	65.0	71.0	30.1						
30.0	54.4	67.9	20.8	58.4	69.4	29.7	64.4	70.7	34.4						
32.0	51.1	66.4	19.4	55.3	68.0	26.7	61.5	69.7	32.7						
34.0	47.7	64.6	18.1	52.1	66.5	24.4	58.5	68.5	30.8	i			i		
36.0	44.1	62.6	16.9	48.7	64.8	22.5	55.4	67.2	28.9						
38.0	40.2	60.3	15.8	45.1	62.9	20.7	52.1	65.7	27.3						
40.0	35.9	57.7	14.8	41.3	60.7	19.0	48.8	64.0	26.0	l					
40.9										55.0	65.1	22.9			
42.0	31.2	54.6	14.1	37.2	58.2	17.7	45.2	62.1	24.5	53.5	64.4	23.7			
44.0	25.6	50.8	13.3	32.6	55.3	16.5	41.4	59.9	23.2	50.2	62.8	22.5			
46.0	18.5	45.7	12.6	27.3	51.7	15.5	37.3	57.4	22.1	46.7	60.9	21.5			
47.0	15.5	43.4	11.4												
48.0				20.8	47.1	14.4	32.7	54.4	20.8	43.0	58.9	20.5			
49.0				16.7	44.0	13.8									
50.0							27.4	50.9	19.2	39.0	56.5	19.6			
53.0							16.9	43.3	16.8		40.0	47.5			
55.0										26.9	48.6	17.5			
58.0 59.9										16.0	40.7	16.1	35.0	47.8	13.3
60.0													34.7	47.6 47.7	13.3
65.0													22.5	39.3	11.8
66.0													18.7	36.5	11.6



N° de ident.: 9842523/95738/

Radio de descarga: 360 $^{\circ}$

360 ° 2 - Vía ancha

Lastre trasero [t]: 114.0 Lastre central [t]: 52.6

Valor de vuelco:

		gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				29.0	m Pluma Cab	eza de p	il, Punto llumín (2 n] Posici	316-1) 4	7.5 m Plı	eza de p umín	lumín				
14.0 16.0 18.0 20.0 20.6	78.0 75.6 73.1 70.5	78.4 77.9 77.3 76.7	49.6 47.6 42.9 36.4	73.0	77.0	42.8									
22.0 24.0 26.0 28.0 30.0	67.9 65.3 62.6 59.8 57.0	75.9 75.0 74.0 72.8 71.6	31.7 27.5 24.4 22.2 20.4	71.3 68.7 66.0 63.4 60.6	76.6 75.8 75.0 74.0 72.9	41.9 38.1 35.1 32.4 30.1									
30.8 32.0 34.0 36.0 38.0	54.0 50.9 47.7 44.3	70.2 68.6 66.8 64.9	18.9 17.7 16.5 15.4	57.8 54.9 51.8 48.7	71.7 70.3 68.8 67.1	27.0 24.4 22.3 20.6	65.0 63.4 60.7 57.8 54.9	73.7 73.1 72.0 70.8 69.4	32.3 32.1 30.0 28.4 26.7						
40.0 42.0 42.6 44.0 46.0	40.7 36.8 32.5 27.6	62.6 60.1 57.1 53.6	14.5 13.6 12.9 12.3	45.3 41.8 38.0 33.8	65.2 63.0 60.6 57.7	19.0 17.6 16.3 15.3	51.9 48.7 45.4 41.9	67.9 66.2 64.3 62.2	25.4 24.2 22.8 21.5	55.0 53.1 50.0	67.5 66.6 65.0	21.4 22.0 21.0			
48.0 49.0 50.0 52.0 55.0	21.6 17.9	49.0 46.2	11.6 11.2	29.1 23.5 16.1	54.4 50.2 44.4	14.4 13.4 12.4	38.1 33.9 20.3	59.7 56.9 46.8	20.4 19.3 15.9	46.8 43.3 33.5	63.2 61.1 54.7	20.1 19.2 17.3			
56.0 60.0 61.0 62.3 65.0							16.3	43.7	15.2	19.6 15.4	44.4 41.1	15.0 14.5	35.0 30.2 18.0	49.6 46.2 37.0	12.3 11.5 10.5



N° de ident.:9842523/95738/Pieza de articulación de pluma principal:2821-1Radio de descarga:360 °Cabeza de pluma principal:2821-1

		gulo de principa			gulo de orincipa										
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
	2	2		29.0	n Pluma	principa	I, Punto	de carga	1 - Cab	eza de p	lumín				
					Cab		lumín (2: 1] Posici			umin					
14.7	78.0	81.3	45.9												
16.0	76.5	81.0	45.6												
18.0	74.1	80.5	42.2												
20.0	71.7	79.8	36.3												
21.5				73.0	79.9	40.0									
22.0	69.3	79.1	31.5	72.4	79.8	40.0									
24.0	66.8	78.3	27.6	70.0	79.0	37.4									
26.0	64.3	77.3	24.5	67.6	78.2	34.7									
28.0	61.8	76.3	22.1	65.1	77.3	32.0									
30.0	59.2	75.1	20.3	62.5	76.3	30.0									
32.0	56.5	73.8	18.7	59.9	75.2	27.6									
32.1							65.0	76.4	30.7						
34.0 36.0	53.7 50.8	72.4 70.8	17.4 16.3	57.2 54.5	74.0 72.6	24.9 22.6	62.6 60.0	75.4 74.3	29.8 28.0						
38.0	47.7	70.8 69.1	15.3	54.5 51.6	72.6 71.0	22.6	57.3	74.3 73.1	26.5						
40.0	44.6	67.1	15.3	48.6	69.3	19.2	57.3	71.7	25.0						
40.0	44.6	64.9	13.5	45.5	69.3 67.4	17.8	54.5 51.7	71.7	23.9						
42.0 44.0	37.6	62.4	12.7	43.5	65.3	16.5	48.7	68.4	23.9						
44.4	37.0	02.4	12.7	42.2	05.5	10.5	40.7	00.4	22.0	55.0	70.0	20.1			
46.0	33.6	59.6	12.0	38.6	62.9	15.3	45.6	66.5	21.4	52.9	68.9	20.8			
48.0	29.2	56.2	11.4	34.8	60.1	14.3	42.3	64.4	20.2	49.9	67.2	19.8			
50.0	24.0	52.1	10.8	30.5	56.9	13.5	38.7	62.0	19.1	46.9	65.4	19.0			
52.0	17.4	46.6	10.2	23.0	23.0	. 3.0		12.0		. 3.0	-3	. 3.0			
55.0				15.6	44.8	11.4	28.3	54.3	16.3	38.4	59.9	17.1			
59.0							15.8	44.1	13.8						
60.0										27.8	52.0	15.1			
64.0										16.4	42.7	13.2			
64.8													35.0	51.3	11.3
65.0													34.6	51.0	11.3
70.0													24.1	42.9	10.1
72.0													17.5	37.4	9.6



N° de ident.: 9842523/95738/ Pieza Radio de descarga: 360 ° Cabe

Pieza de articulación de pluma principal:
360 ° Cabeza de pluma principal:

2821-1 2821-1

		gulo de principa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				29.0 ו	m Pluma Cab	eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 5	3.5 m Plı	eza de p umín	lumín				
15.3 16.0	78.0 77.2	84.3 84.1	41.7 41.7												
18.0	75.0	83.6	39.6												
20.0	72.8	83.0	35.8												
22.0	70.5	82.3	30.5												
22.4				73.0	82.8	36.6									
24.0	68.2	81.5	27.0	71.2	82.2	35.9									
26.0	65.9	80.7	24.0	68.9	81.5	33.3									
28.0	63.5	79.7	21.7	66.6	80.6	31.2									
30.0	61.1	78.6	19.9	64.2	79.7	29.1									
32.0	58.6	77.4	18.4	61.8	78.7	27.6	05.0	70.4	00.0						
33.3 34.0	56.0	76.1	17.0	59.3	77.5	25.1	65.0 64.2	79.1 78.8	28.3 28.7						
36.0	53.4	74.7	15.8	56.8	76.2	22.7	61.8	77.8	27.5						
38.0	50.6	73.1	14.9	54.1	74.8	20.6	59.4	76.6	26.0						
40.0	47.8	71.3	13.9	51.4	73.3	19.0	56.8	75.3	24.6						
42.0	44.8	69.4	13.1	48.6	71.6	17.6	54.2	73.9	23.2						
44.0	41.6	67.2	12.3	45.7	69.7	16.3	51.5	72.4	22.1						
46.0	38.2	64.7	11.6	42.5	67.5	15.1	48.7	70.7	21.1						
46.1										55.0	72.5	18.8			
48.0	34.6	62.0	11.0	39.2	65.2	14.0	45.7	68.8	19.8	52.6	71.1	19.3			
50.0 55.0	30.5 16.8	58.8 47.0	10.4 9.1	35.7 24.8	62.5 53.7	13.1 11.2	42.6 33.8	66.7 60.2	18.7 16.3	49.8 42.3	69.5 64.6	18.4 16.6			
58.0 58.0	10.0	47.0	9.1	15.1	45.2	10.1	33.0	60.2	10.3	42.3	04.0	10.0			
60.0				13.1	43.2	10.1	22.2	50.6	13.6	33.5	58.0	14.9			
62.0							15.3	44.5	12.5	00.0	00.0	14.0			
65.0										21.6	48.2	12.9			
67.0										15.9	43.1	11.8			
67.2													35.0	53.0	10.4
70.0													30.6	49.5	9.8
75.0													17.0	37.9	8.7



2821-1

2821-1

N° de ident.: 9842523/95738/ Pieza de articulación de pluma principal: Radio de descarga: 360 ° Cabeza de pluma principal:

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				29.0 ו		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 5	6.5 m Pl	eza de p umín	lumín				
15.9	78.0	87.2	38.4												
16.0	77.9	87.2	38.4												
18.0	75.8	86.7	37.5												
20.0	73.7	86.1	35.9												
22.0	71.6	85.5	30.4												
23.3				73.0	85.6	34.0									
24.0	69.4	84.8	26.5	72.2	85.4	34.0									
26.0	67.2	83.9	23.8	70.1	84.7	32.5									
28.0	65.0 62.7	83.0	21.6	67.9 65.7	83.9	30.7							ł		
30.0 32.0	60.4	82.0 80.9	19.8 18.3	63.4	83.0 82.1	28.7 27.1									
34.0	58.1	79.7	17.0	61.1	81.0	25.8									
34.0 34.6	56.1	19.1	17.0	01.1	61.0	25.6	65.0	81.8	27.3				ł		
36.0	55.6	78.4	15.7	58.7	79.8	23.2	63.5	81.2	27.2						
38.0	53.1	76.9	14.7	56.3	78.5	21.0	61.2	80.1	25.6				i		
40.0	50.5	75.3	13.9	53.8	77.1	19.2	58.8	78.9	24.3						
42.0	47.8	73.5	13.0	51.3	75.5	17.7	56.4	77.6	23.1						
44.0	45.0	71.6	12.2	48.6	73.8	16.4	53.9	76.2	21.8				İ		
46.0	42.0	69.4	11.5	45.8	71.9	15.2	51.3	74.6	20.9						
47.8										55.0	74.9	17.8			
48.0	38.8	67.1	10.8	42.9	69.8	14.1	48.6	72.9	19.9	54.9	74.9	18.6			
50.0	35.4	64.4	10.3	39.8	67.5	13.1	45.9	71.0	18.7	52.4	73.4	18.2			
55.0	25.2	55.6	9.1	30.9	60.3	11.2	38.2	65.4	16.2	45.6	68.9	16.3			
58.0	16.4	47.5	8.3												
60.0				18.4	49.1	9.5	28.9	57.7	14.0	37.9	63.2	14.8			
61.0				16.0	46.8	8.4									
65.0							16.2	46.1	11.0	28.5	55.4	13.1			_
69.7										45.5	40.5	40.7	35.0	54.7	9.8
70.0										15.5	43.5	10.7	34.5	54.3	9.7
75.0													25.3	46.4	8.7
78.0													16.5	38.3	8.0



30.9

19.3 16.0 52.9

41.9 38.7 8.4

7.3 7.1

2821-1

2821-1

Nº de ident.: 9842523/95738/ Pieza de articulación de pluma principal: Radio de descarga: 360 ° Cabeza de pluma principal:

Valor de vuelco: 2 - Vía ancha Lastre trasero [t]: 114.0 Lastre central [t]: 52.6

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				29.0 ו	n Pluma Cab	eza de p	al, Punto dumín (2: n] Posici	316-1) 5	9.5 m Pl	eza de p umín	lumín				
16.5	78.0	90.1	35.1												
18.0	76.6	89.8	34.9												
20.0	74.6	89.3	33.4												
22.0	72.6	88.7	30.2												
24.0	70.5	88.0	26.2												
24.1				73.0	88.5	31.4									
26.0	68.5	87.2	23.5	71.1	87.9	31.0									
28.0	66.4	86.3	21.3	69.1	87.1	29.5									
30.0	64.2	85.4	19.4	67.0	86.3	28.1									
32.0	62.1	84.4	18.0	64.8	85.4	26.4									
34.0	59.8	83.2	16.7	62.7	84.4	25.0									
35.9							65.0	84.6	25.7						
36.0	57.6	82.0	15.5	60.5	83.3	23.6	64.9	84.5	25.7						
38.0	55.3	80.6	14.4	58.2	82.1	21.3	62.7	83.5	25.2						
40.0	52.9	79.2	13.5	55.9	80.8	19.4	60.5	82.4	23.8						
42.0	50.4	77.5	12.7	53.6	79.3	17.8	58.3	81.2	22.7						
44.0	47.8	75.8	11.9 11.2	51.1 48.6	77.7 76.0	16.4	56.0 53.6	79.9 78.4	21.5 20.4						
46.0 48.0	45.1 42.3	73.8 71.7	11.2 10.5	48.6 45.9	76.0 74.1	15.3 14.2	53.6 51.2	78.4 76.9	20.4 19.5						
48.0 49.5	42.3	/ 1./	10.5	45.9	74.1	14.2	51.2	76.9	19.5	55.0	77.4	16.6			
50.0	39.3	69.4	9.9	43.1	72.1	13.2	48.6	75.1	18.6	54.6	77.1	17.4			
55.0	30.8	62.1	9.9 8.7	35.5	65.8	11.1	41.8	70.1	16.0	48.4	77.1	15.9			
60.0	19.2	51.1	7.7	25.8	57.2	9.5	34.4	64.0	14.1	41.5	68.0	14.4			
61.0	15.9	47.9	7.4	20.0	51.2	0.0	J7.7	07.0	17.1	71.5	00.0	17.7			
64.0	10.0	47.0	7	15.6	47.2	7.4									
65.0							23.6	54.2	11.8	33.5	61.3	13.0			
68.0							15.8	46.5	10.0	00.0	01.0	10.0			
70.0							10.0	70.0	10.0	23.1	51.8	11.2			
72.2							Ī				00		35.0	56.5	8.9
73.0	1					1		l	1	15.0	43.9	9.6			

75.0

80.0

81.0



 N° de ident.: 9842523/95738/ Pieza de articulación de p Radio de descarga: 360 $^{\circ}$ Cabeza de pluma princip

Valor de vuelco: 2 - Vía ancha Lastre trasero [t]: 114.0 Lastre central [t]: 52.6

		gulo de orincipal			gulo de orincipa			gulo de orincipa		65° Án I	gulo de orincipa	pluma I		gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				29.0 ו	m Pluma Cab	principa	ıl, Punto lumín (2	de carga	1 - Cab	eza de p	lumín		_		
					Oub] Posici								
17.2	78.0	93.1	32.5												
18.0	77.2	92.9	32.5												
20.0 22.0	75.3 73.4	92.4 91.8	31.4 30.0							ł			ł		
24.0	73.4 71.5	91.8 91.2	26.0												
25.0	71.5	91.2	20.0	73.0	91.4	29.2									
26.0	69.5	90.4	23.2	72.0	91.1	29.2				i			i		
28.0	67.6	89.6	21.1	70.1	90.4	28.5				İ			İ		
30.0	65.6	88.7	19.3	68.1	89.6	27.4									
32.0	63.5	87.8	17.8	66.1	88.7	26.0									
34.0	61.4	86.7	16.6	64.1	87.8	24.5									
36.0	59.3	85.5	15.4	62.0	86.7	23.4									
37.1							65.0	87.3	23.9						
38.0	57.2	84.3	14.3	59.9	85.6	21.8	64.2	86.9	24.4						
40.0 42.0	54.9 52.6	82.9 81.4	13.3 12.4	57.8 55.6	84.4 83.0	19.8 18.1	62.1 60.0	85.8 84.7	23.7						
44.0	50.3	79.8	11.7	53.3	81.6	16.1	57.8	83.5	21.3						
46.0	47.8	78.0	11.7	51.0	80.0	15.4	55.6	82.1	20.2						
48.0	45.3	76.1	10.4	48.5	78.3	14.3	53.4	80.7	19.2	i			i		
50.0	42.6	74.0	9.8	46.0	76.4	13.3	51.0	79.1	18.5						
51.2										55.0	79.8	15.7			
55.0	35.2	67.7	8.5	39.2	70.8	11.1	44.8	74.5	16.1	50.8	77.0	15.7			
60.0	26.1	59.1	7.5	31.1	63.6	9.6	37.8	68.7	13.9	44.5	72.4	14.2			
64.0	15.5	48.3	6.7												
65.0				20.4	53.0	8.1	29.4	61.0	12.0	37.5	66.5	12.8			
67.0				15.2	47.6	6.7	47.0	40.0	0.0	00.0	50.0				
70.0 71.0							17.6 15.4	49.2 46.9	9.9 9.1	29.0	58.8	11.4			
71.0 74.6							10.4	40.9	9.1	l			35.0	58.2	8.2
75.0										17.0	46.7	9.5	34.4	57.6	8.1
80.0												- 0.0	26.2	49.9	7.0
84.0													15.6	39.1	6.2



Nº de ident.: 9842523/95738/

Pieza de articulación de pluma principal: 2821-1 Cabeza de pluma principal:

Radio de descarga: Valor de vuelco:

360°

2 - Vía ancha

2821-1

Lastre trasero [t]: 114.0 52.6 Lastre central [t]:

Alcan- ce od [m] plun [°	e de iín rolda-	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas	Carga [t]	Ángu- o de	Altura	Carga	Ángu-	Altura	0	4	A 14	C
				[m]		plumín [°]	de rolda- nas [m]	[t]	o de plumín [°]	de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
1			29.0	m Pluma Cab	eza de p	il, Punto lumín (2 n] Posici	316-1) 6	5.5 m Pl	eza de p umín	lumín				
17.8 78.	96.0	28.8												
18.0 77.	96.0	28.8												
20.0 76.	95.5	28.1												
22.0 74.		27.0												
24.0 72.	94.3	24.7												
25.9			73.0	94.3	25.8									
26.0 70.		22.4	72.9	94.2	25.8									
28.0 68.		20.7	71.1	93.6	25.6									
30.0 66.		18.9	69.2	92.8	24.8									
32.0 64.3 34.0 62.3		17.3 16.0	67.3 65.4	92.0 91.1	24.1									
36.0 60.		15.0	63.4	90.1	23.0									
38.0 58.		13.9	61.5	89.1	21.4									
38.4	07.0	13.9	01.3	09.1	21.4	65.0	90.0	22.6						
40.0 56.	86.5	12.9	59.4	87.9	19.8	63.5	89.2	22.6						
42.0 54.		12.0	57.4	86.6	18.0	61.5	88.2	21.7						
44.0 52.	I	11.3	55.2	85.3	16.5	59.5	87.0	20.6						
46.0 50		10.7	53.1	83.8	15.2	57.4	85.8	19.8						
48.0 47.	80.3	10.0	50.8	82.2	14.1	55.3	84.4	18.8						
50.0 45.	78.3	9.4	48.5	80.5	13.1	53.1	82.9	18.0						
53.0									55.0	82.3	14.7			
55.0 38.		8.1	42.3	75.5	10.9	47.4	78.7	16.0	52.9	80.9	15.2			
60.0 31.		7.1	35.3	69.2	9.2	41.1	73.5	13.7	47.2	76.6	13.7			
65.0 21.		6.2	26.7	60.7	7.9	34.3	67.3	11.9	40.8	71.3	12.5			
67.0 15	2 48.7	5.8												
69.0			17.0	50.4	6.9									
70.0						24.7	57.7	10.0	33.5	64.6	11.1			
73.0						17.2	49.7	8.9	04.0	55.4	0.0			
75.0 77.1									24.3	55.4	9.6	35.0	59.9	7.2
77.1									16.6	47.1	8.5	35.0	59.9	1.2
80.0									10.0	47.1	0.0	31.2	56.2	6.7
85.0												21.0	45.8	5.7
87.0						Ī						15.3	39.5	5.3



2821-1

2821-1

Nº de ident.: 9842523/95738/ Pieza de articulación de pluma principal: Radio de descarga: 360 ° Cabeza de pluma principal:

		gulo de principa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				29.0		eza de p	al, Punto dumín (2: n] Posici	316-1) 6	8.5 m Pl	eza de p umín	lumín				
18.4	78.0	98.9	26.1												
20.0	76.6	98.6	25.8	1											
22.0	74.9	98.1	24.6												
24.0	73.2	97.5	23.4												
26.0	71.4	96.8	21.7												
26.8				73.0	97.1	23.3									
28.0	69.6	96.1	20.3	71.9	96.7	23.3									
30.0	67.8	95.3	18.8	70.1	96.0	22.8									
32.0	66.0	94.4	17.2	68.3	95.2	22.3									
34.0	64.1	93.5	15.8	66.5	94.4	21.7									
36.0	62.3	92.4	14.7	64.7	93.5	21.1									
38.0	60.4	91.3	13.7	62.8	92.5	20.6									
39.7							65.0	92.7	21.2						
40.0	58.4	90.1	12.8	60.9	91.4	20.1	64.7	92.6	21.2						
42.0	56.4	88.8	11.9	59.0	90.2	18.3	62.9	91.6	21.0						
44.0	54.4	87.4	11.1	57.0	88.9	16.8	60.9	90.5	20.2						
46.0	52.3	85.9	10.4	55.0	87.5	15.4	59.0	89.3	19.4						
48.0	50.1	84.3	9.8	52.9	86.1	14.2	57.0	88.0	18.6						
50.0	47.9	82.5	9.2	50.7	84.5	13.2	55.0	86.7	17.7						
54.7										55.0	84.7	13.9			
55.0	41.9	77.4	7.9	45.0	79.9	11.1	49.7	82.7	16.1	54.8	84.6	14.6			
60.0	35.1	71.0	6.9	38.7	74.2	9.3	43.9	78.0	13.8	49.5	80.7	13.5			
65.0	26.8	62.5	6.0 4.6	31.3 21.8	66.9 56.8	8.0	37.4	72.0	11.9	43.7	75.8	12.3			
70.0	15.9	50.3	4.0			6.8 6.3	29.8	64.4	10.2	37.1	69.9	10.9			
72.0				16.6	50.9	0.3	10 F	53.2	0.5	29.4	60.1	9.7			
75.0 76.0							19.5 16.8	53.2 50.1	8.5 8.1	29.4	62.1	9.7			
76.0 79.5							10.0	50.1	0.1				35.0	61.6	6.5
80.0				ł						19.0	50.8	8.1	34.3	60.9	6.4
81.0										16.2	47.5	7.8	J4.J	00.8	0.4
85.0				i e						10.2	71.3	7.0	26.9	53.3	5.5
80 N													18 N	43.4	4.8



N° de ident.: 9842523/95738/

Radio de descarga: 360 $^{\circ}$

Pieza de articulación de pluma principal: 2821-1 Cabeza de pluma principal: 2821-1

		gulo de principa			gulo de orincipa			gulo de principa			gulo de orincipa		45° Án	gulo de orincipa	pluma I
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				29.0		eza de p	il, Punto Ilumín (2 i] Posici	316-1) 7	1.5 m Pli	eza de p umín	lumín				
19.0 20.0 22.0 24.0 26.0	78.0 77.2 75.6 73.9 72.2	101.9 101.7 101.2 100.6 100.0	23.8 23.8 22.9 22.1 20.6												
27.6 28.0 30.0 32.0 34.0	70.5 68.8 67.1 65.3	99.3 98.5 97.7 96.8	19.4 18.4 16.8 15.4	73.0 72.7 71.0 69.3 67.6	100.0 99.9 99.2 98.5 97.7	21.5 21.5 21.3 20.8 20.5									
36.0 38.0 40.0 40.9	63.5 61.7 59.9	95.8 94.8 93.6	14.2 13.3 12.4	65.8 64.0 62.2	96.8 95.8 94.8	19.8 19.3 18.8	65.0	95.4	19.1						
42.0 44.0 46.0 48.0 50.0	58.0 56.1 54.1 52.1 50.0	92.4 91.1 89.7 88.1 86.5	11.5 10.7 10.0 9.4 8.9	60.4 58.5 56.6 54.7 52.7	93.7 92.5 91.2 89.8 88.3	18.0 16.5 15.2 14.0 13.0	64.1 62.3 60.4 58.6 56.7	94.9 93.9 92.8 91.6 90.3	19.6 19.4 18.5 17.9 17.1						
55.0 56.4 60.0 65.0 70.0	38.4 31.3 22.3	76.1 68.8 58.7	7.6 6.5 5.7 4.9	47.4 41.7 35.1 27.3	78.9 72.5 64.1	9.1 7.7 6.6	51.7 46.4 40.5 33.8	86.6 82.2 76.9 70.1	15.2 13.4 11.6 10.1	55.0 51.5 46.1 40.2	87.2 84.6 80.1 74.7	13.0 13.0 11.8 10.7			
73.0 75.0 79.0 80.0 82.0 84.0	15.5	50.7	4.1	16.3	51.3	5.5	25.6 16.4	61.2 50.5	8.5 7.2	33.5 25.2 15.8	67.9 58.9 47.9	9.5 8.2 6.9	35.0	63.3	5.7
85.0 90.0 92.0										13.0	41.0	0.5	31.4 22.4 17.6	59.5 49.5 43.8	5.2 4.3 4.0



2821-1

2821-1

N° de ident.: 9842523/95738/ Pieza de articulación de pluma principal: Radio de descarga: 360 ° Cabeza de pluma principal:

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de principa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				29.0 ו	m Pluma Cab	eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 7	4.5 m Pli	eza de p umín	lumín				
19.7 20.0 22.0 24.0 26.0	78.0 77.7 76.2 74.6 73.0	104.8 104.7 104.3 103.7 103.1	22.3 22.3 21.9 21.0 20.1												
28.0 28.5 30.0 32.0 34.0	71.3 69.7 68.0 66.4	102.5 101.7 101.0 100.1	18.9 18.0 16.8 15.4	73.0 71.8 70.2 68.5	102.9 102.4 101.7 100.9	20.4 20.4 20.1 19.7									
36.0 38.0 40.0 42.0 42.2	64.7 63.0 61.2 59.4	99.2 98.2 97.1 95.9	14.1 13.1 12.3 11.4	66.9 65.2 63.5 61.7	100.1 99.2 98.2 97.1	19.2 18.6 18.1 17.7	65.0	98.2	18.7						
44.0 46.0 48.0 50.0 55.0	57.6 55.8 53.9 51.9 46.8	94.7 93.3 91.9 90.4 86.0	10.6 9.9 9.3 8.7 7.5	59.9 58.1 56.3 54.4 49.5	96.0 94.8 93.5 92.1 88.1	16.7 15.3 14.1 13.0 10.9	63.5 61.8 60.0 58.2 53.5	97.3 96.2 95.1 93.9 90.4	18.7 18.3 17.5 16.9						
58.1 60.0 65.0 70.0 75.0	41.3 35.0 27.5 17.1	80.8 74.3 65.9 53.5	6.4 5.5 4.8 4.1	44.2 38.3 31.5 23.0	83.3 77.5 70.3 60.4	9.1 7.6 6.5 5.5	48.5 43.1 37.1 30.1	86.3 81.4 75.4 67.7	13.5 11.6 10.0 8.6	55.0 53.3 48.3 42.9 36.9	89.7 88.4 84.2 79.3 73.2	12.3 12.7 11.5 10.5 9.3			
76.0 78.0 80.0 82.0 84.4	15.2	51.1	3.6	15.9	51.7	4.9	21.0 16.1	57.1 50.9	7.1 6.5	29.8	65.5	8.2	35.0	65.1	4.9
85.0 87.0 90.0 95.0										20.6 15.5	54.6 48.3	6.9 6.3	35.0 27.5 17.2	65.1 56.7 44.3	4.9 4.1 3.3



N° de ident.:9842523/95738/Pieza de articulación de pluma principal:2821-1Radio de descarga:360 °Cabeza de pluma principal:2821-1

		gulo de principa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				29.0 ו		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 7	7.5 m Pli	eza de p umín	lumín				
20.3 22.0 24.0 26.0 28.0	78.0 76.7 75.2 73.6 72.1	107.8 107.4 106.8 106.3 105.6	20.4 20.2 19.4 18.8 17.9												
29.4 30.0 32.0 34.0 36.0	70.5 68.9 67.3 65.7	104.9 104.2 103.4 102.5	17.2 16.6 15.2 13.9	73.0 72.5 71.0 69.4 67.8	105.7 105.5 104.9 104.1 103.3	18.6 18.6 18.4 18.0 17.7									
38.0 40.0 42.0 43.5 44.0	64.1 62.4 60.7 59.0	101.5 100.5 99.4 98.2	12.8 11.9 11.1	66.2 64.6 62.9 61.2	102.5 101.5 100.5 99.4	17.2 16.7 16.3	65.0 64.6	100.9 100.6	16.8 16.8						
46.0 48.0 50.0 55.0 59.9	57.3 55.5 53.7 48.9	97.0 95.6 94.2 90.1	9.6 9.0 8.4 7.2	59.5 57.8 56.0 51.4	98.3 97.1 95.7 92.0	14.9 13.8 12.7 10.7	62.9 61.3 59.6 55.1	99.6 98.6 97.4 94.1	16.8 16.3 15.8 14.5	55.0	92.1	11.6			
60.0 65.0 70.0 75.0 78.0	43.7 38.1 31.5 23.4 16.8	85.3 79.4 72.1 62.3 53.9	6.1 5.2 4.5 3.9 3.5	46.5 41.1 35.0 27.8	87.6 82.3 75.8 67.5	9.0 7.5 6.3 5.4	50.5 45.5 40.0 33.8	90.3 85.7 80.2 73.5	13.3 11.6 9.9 8.6	55.0 50.3 45.3 39.8	92.1 88.2 83.6 78.1	12.0 11.2 10.2 9.0			
80.0 81.0 85.0 86.9 90.0				18.2 15.6	55.5 52.1	4.4 4.2	26.3 15.7	64.7 51.4	7.2 5.8	33.2 25.5 15.2	70.9 61.8 48.7	7.8 6.7 5.6	35.0 31.5	66.8 62.9	4.2 3.7
95.0 98.0													23.4 16.8	53.1 44.7	2.9 2.5



N° de ident.: 9842523/95738/ Piez

Radio de descarga: 360 $^{\circ}$

Valor de vuelco: Lastre trasero [t]:

Lastre central [t]:

2 - Vía ancha 114.0

52.6

		gulo de orincipal			gulo de orincipa			gulo de principa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				29.0	m Pluma Cab	eza de p	il, Punto llumín (2 n] Posici	316-1) 8	0.5 m Pl	eza de p umín	lumín				
20.9	78.0	110.7	18.8				ſ		<u> </u>						
22.0	77.2	110.4	18.8	1											
24.0	75.7	109.9	18.1												
26.0	74.3	109.4	17.5												
28.0	72.8	108.8	16.9												
30.0	71.3	108.1	16.4												
30.3				73.0	108.6	17.1									
32.0	69.8	107.4	16.0	71.7	108.0	17.1									
34.0	68.2	106.6	15.1	70.2	107.3	16.7									
36.0	66.7	105.8	13.8	68.7	106.6	16.4									
38.0 40.0	65.1 63.5	104.9 103.9	12.7 11.7	67.1 65.6	105.7 104.8	16.0 15.6									
40.0 42.0	61.9	103.9	10.9	64.0	104.8	15.6									
44.0	60.3	102.8	10.9	62.4	103.9	14.9				i			i		
44.7	00.0	101.7	10.2	UZ. →	102.0	14.0	65.0	103.6	14.7	i			i		
46.0	58.6	100.5	9.5	60.8	101.8	14.5	64.0	103.0	15.4						
48.0	56.9	99.2	8.8	59.1	100.6	13.5	62.4	102.0	15.2						
50.0	55.2	97.9	8.2	57.4	99.3	12.5	60.8	100.9	14.9	İ			İ		
55.0	50.7	94.0	7.0	53.1	95.8	10.5	56.6	97.8	14.0						
60.0	46.0	89.5	6.0	48.5	91.7	9.0	52.2	94.2	12.9						
61.6										55.0	94.6	11.0			
65.0	40.7	84.2	5.1	43.5	86.8	7.5	47.5	89.9	11.7	52.1	92.1	11.0			
70.0	34.9	77.6	4.3	38.0	80.9	6.3	42.5	84.8	10.0	47.4	87.8	10.0			
75.0	28.0	69.3	3.7	31.7	73.6	5.3	36.9	78.7	8.6	42.3	82.7	8.9			
80.0	18.8 16.4	57.5 54.3	3.1 3.0	24.0	64.0	4.4	30.4	71.1	7.3	36.4	76.2	7.7	-		
81.0 84.0	10.4	54.3	3.0	15.3	52.5	3.7									
85.0				10.5	32.3	3.1	22.2	60.8	6.1	30.6	69.4	6.6	ĺ		
88.0				Ī			15.4	51.8	5.3	30.0	00.4	0.0			
89.4								""	0.0	1			35.0	68.5	3.6
90.0										21.8	58.4	5.7	34.9	68.4	3.6
93.0										15.8	50.4	4.7			
95.0													28.0	60.1	2.8
100.0				I									18.9	48.3	2.1
101.0													16.5	45.1	2.0



2821-1

2821-1

N° de ident.: 9842523/95738/ Pieza de articulación de pluma principal: Radio de descarga: 360 ° Cabeza de pluma principal:

		gulo de orincipal			gulo de orincipa			gulo de principa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				29.0 ו	m Pluma Cab	eza de p	al, Punto Ilumín (2 n] Posici	316-1) 8	3.5 m Pl		lumín				
21.5 22.0 24.0 26.0 28.0 30.0 31.2 32.0 34.0 36.0 38.0 40.0	78.0 77.7 76.3 74.8 73.4 72.0 70.5 69.1 67.6 66.1 64.6 63.0	113.6 113.5 113.0 112.5 111.9 111.3 110.6 109.8 109.0 108.2 107.2 106.2	17.3 17.3 16.9 16.4 16.0 15.5 15.1 14.8 13.6 12.5 11.5	73.0 72.4 70.9 69.5 68.0 66.5 65.0	111.5 111.2 110.5 109.8 109.0 108.1 107.2	15.8 15.8 15.6 15.3 15.0 14.7 14.4									
44.0 46.0 48.0 50.0 55.0 60.0 63.3 65.0	61.5 59.9 58.3 56.6 52.4 47.9	105.2 104.0 102.8 101.5 97.9 93.7	10.0 9.3 8.6 8.0 6.7 5.7	63.5 61.9 60.3 58.8 54.6 50.3	106.2 105.2 104.1 102.9 99.5 95.6	14.1 13.8 13.3 12.4 10.3 8.8	65.0 63.5 62.0 58.0 53.8	106.3 105.3 104.3 101.4 97.9	14.2 14.2 14.0 13.4 12.3	55.0 53.7	97.0 95.9	10.3 10.6			
70.0 75.0 80.0 84.0	37.7 31.7 24.2 16.1	82.7 75.4 65.8 54.7	4.1 3.5 2.9 2.4	40.6 34.9 28.3	85.7 79.1 70.9	6.1 5.1 4.3	44.7 39.5 33.7	89.2 83.6 76.8	9.9 8.4 7.3	49.2 44.5 39.1	91.8 87.1 81.2	9.6 8.6 7.4			
85.0 87.0 90.0 91.0 91.8 95.0 96.0 98.0				19.7 15.0	59.4 52.9	3.4 3.1	26.9 17.6 15.1	55.6 52.1	6.1 4.9 4.6	33.9 27.1 16.5 15.5	75.1 66.5 52.1 50.8	6.4 5.4 4.5 4.1	35.0 31.7 27.5	70.2 66.2 60.8	2.9 2.5 2.1



2821-1

2821-1

N° de ident.: 9842523/95738/ Pieza de articulación de pluma principal: Radio de descarga: 360 ° Cabeza de pluma principal:

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				29.0 ו	m Pluma Cab	eza de p	ıl, Punto lumín (2: ı] Posici	316-1) 8	6.5 m Pl	eza de p umín	lumín		-		
22.2	78.0	116.6	16.0												
24.0	76.7	116.1	15.9												
26.0	75.4	115.6	15.4												
28.0	74.0	115.1	15.1												
30.0	72.6	114.4	14.7												
32.0	71.2	113.8	14.4	73.0	114.3	14.7									
34.0	69.8	113.1	14.1	71.6	113.7	14.7									
36.0	68.4	112.3	13.6	70.2	113.0	14.4									
38.0	67.0	111.4	12.4	68.8	112.2	14.2									
40.0	65.5	110.5	11.4	67.4	111.4	14.0									
42.0	64.0	109.6	10.6	65.9	110.5	13.6									
44.0	62.5	108.6	9.8	64.5	109.6	13.4									
46.0	61.0	107.5	9.2	63.0	108.6	13.1									
47.3							65.0	109.0	13.2						
48.0	59.5	106.3	8.5	61.5	107.5	12.9	64.5	108.7	13.2						
50.0	58.0	105.1	7.9	60.0	106.4	12.3	63.0	107.7	13.2						
55.0	53.9	101.7	6.6	56.0	103.2	10.3	59.2	104.9	12.7						
60.0	49.7	97.7	5.6	51.9	99.5	8.7	55.3	101.6	11.9						
65.0	45.2	93.0	4.7	47.6	95.2	7.4	51.1	97.8	11.1	55.0	99.5	9.7			
70.0	40.3	87.5	3.9	42.9	90.2	6.1	46.7	93.4	9.9	50.9	95.8	9.5			
75.0	34.8	80.9	3.3	37.7	84.2	5.0	41.9	88.2	8.4	46.3	91.2	8.3			
80.0	28.4	72.7	2.7	31.8	76.9	4.2	36.6	82.0	7.2	42.0	86.5	7.1			
85.0				24.7	67.5	3.4	30.6	74.4	6.1	36.8	80.3	6.1			
90.0				15.6	54.5	2.4	23.2	64.4	5.0	30.8	72.7	5.2			
94.0							15.7	53.8	3.7						
94.3													35.0	71.9	2.3
95.0										23.4	62.8	4.3	34.8	71.7	2.2
96.0										45.0	54.0	0.0	33.6	70.2	2.1
99.0	1									15.2	51.2	3.6			



Nº de ident.: 9842523/95738/

Radio de descarga: 360 $^{\circ}$

Pieza de articulación de pluma principal: 2821-1 Cabeza de pluma principal: 2821-1

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				29.0 ו		eza de p	ıl, Punto lumín (2: ı l Posici	316-1) 8	9.5 m Plı	eza de p umín	lumín		-		
22.8	78.0	119.5	14.0			10.0[11	1 1 00101		(2010)						
24.0	77.2	119.3	14.0												
26.0	75.9	118.7	13.6												
28.0	74.6	118.2	13.3												
30.0	73.2	117.6	13.0												
32.0	71.9	117.0	12.7												
32.9				73.0	117.2	12.9									
34.0	70.5	116.3	12.4	72.3	116.9	12.9									
36.0	69.1	115.5	12.2	70.9	116.2	12.7									
38.0	67.8	114.7	11.4	69.5	115.4	12.4									
40.0	66.4	113.8	10.5	68.2	114.6	12.1									
42.0	64.9	112.9	9.8	66.8	113.8	11.9									
44.0	63.5	111.9	9.1	65.3	112.9	11.6									
46.0	62.1	110.9	8.6	63.9	111.9	11.3									
48.0	60.6	109.7	8.0	62.5	110.9	11.1									
48.5							65.0	111.7	11.4						
50.0	59.1	108.6	7.4	61.0	109.8	10.9	64.0	111.0	11.4						
55.0	55.2	105.3	6.1	57.2	106.7	9.4	60.3	108.3	10.9						
60.0	51.2	101.5	5.1	53.3	103.2	8.1	56.5	105.2	10.4						
65.0	46.9	97.1	4.3	49.2	99.1	7.0	52.5	101.6	9.7						
66.7										55.0	101.9	9.1			
70.0	42.3	91.9	3.5	44.7	94.4	5.8	48.3	97.4	9.0	52.4	99.5	8.9			
75.0	37.2	85.8	2.8	39.9	88.8	4.7	43.8	92.5	7.8	48.2	95.3	8.0			
80.0	31.5	78.3	2.3	34.6	82.1	3.8	38.9	86.7	6.7	44.1	90.9	6.8			
85.0				28.3	73.8	3.1	33.4	79.7	5.8	39.3	85.2	5.8			
90.0				20.4	62.5	2.4	27.0	71.0	4.8	33.9	78.4	4.8			
95.0 97.0							18.5 15.4	58.8 54.2	3.7 3.1	27.6	69.9	4.0			
100.0							15.4	54.2	J. I	19.4	58.1	3.2			
100.0										17.3	55.1	3.0			



2821-1

2821-1

N° de ident.: 9842523/95738/ Pieza de artic Radio de descarga: 360 ° Cabeza de pl

Pieza de articulación de pluma principal: Cabeza de pluma principal:

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				29.0 ו	m Pluma Cab	eza de p	al, Punto Jumín (2: n] Posici	316-1) 9:	2.5 m Pl	eza de p umín	lumín				
23.5	78.0	122.4	12.9												
24.0	77.7	122.3	12.9												
26.0	76.4	121.8	12.7										<u> </u>		
28.0	75.1	121.3	12.3												
30.0	73.8	120.7	12.1												
32.0	72.5	120.1	11.7												
33.8				73.0	120.1	11.9									
34.0	71.2	119.4	11.4	72.9	120.0	11.9									
36.0	69.9	118.7	11.2	71.6	119.4	11.8									
38.0	68.5	117.9	10.8	70.2	118.6	11.5									
40.0	67.2	117.1	10.1	68.9	117.9	11.2									
42.0	65.8	116.2	9.4	67.6	117.1	11.0									
44.0	64.4	115.3	8.8	66.2	116.2	10.7									
46.0	63.0	114.3	8.3	64.8	115.3	10.4									
48.0	61.6	113.2	7.8	63.4	114.3	10.2									
49.8							65.0	114.5	10.3						
50.0	60.2	112.1	7.3	62.0	113.2	10.0	64.9	114.4	10.3						
55.0	56.5	108.9	6.0	58.4	110.3	8.9	61.4	111.8	9.9						
60.0	52.7	105.3	4.9	54.7	106.9	7.8	57.7	108.8	9.4						
65.0	48.7	101.1	4.1	50.8	103.1	7.0	54.0	105.3	8.9	55.0	404.4	0.0			
68.5	442	00.0	3.3	46.6	00.0	5.7	50.0	101.4	8.4	55.0 53.8	104.4 103.3	8.6			
70.0	44.3 39.6	96.3 90.7	3.3 2.7	46.6	98.6 93.4	5.7 4.6	50.0	101.4 96.8	8.4 7.4	53.8 49.8	103.3 99.3	8.6			
75.0 80.0	39.6	90.7 83.9	2.7	42.1 37.2	93.4 87.3	3.7	45.8 41.2	96.8 91.4	6.4	49.8 46.0	99.3 95.2	7.8 6.6			
85.0	34.4	03.9	2.1	31.6	79.8	3.7	36.2	85.0	5.6	41.5	95.2 89.9	5.6			
90.0				25.0	79.6	2.4	30.5	77.3	4.7	36.6	83.6	4.6			
95.0				25.0	70.4	2.4	23.5	67.3	3.8	31.0	76.1	3.8			
100.0							15.2	54.6	2.6	24.2	66.3	3.0			
100.0							13.2	34.0	2.0	17.0	55.5	2.4			



N° de ident.: 9842523/95738/ F

Radio de descarga: 360 $^{\circ}$

Valor de vuelco: 2 - Vía ancha Lastre trasero [t]: 114.0 Lastre central [t]: 52.6

		gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				29.0 ו		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 9	5.5 m Pl	eza de p umín	lumín				
24.1	78.0	125.4	11.7												
26.0	76.8	124.9	11.7												
28.0	75.6	124.4	11.3												
30.0	74.3	123.9	11.1												
32.0	73.1	123.3	10.8												
34.0	71.8	122.6	10.5												
34.7				73.0	122.9	10.7									
36.0	70.5	121.9	10.3	72.2	122.5	10.7									
38.0	69.2	121.2	10.1	70.9	121.8	10.6									
40.0	67.9	120.4	9.5	69.6	121.1	10.3									
42.0	66.6	119.5	8.9	68.3	120.3	10.1									
44.0	65.3	118.6	8.3	67.0	119.5	9.9									
46.0	64.0	117.6	7.8	65.7	118.6	9.6									
48.0	62.6	116.6	7.4	64.3	117.6	9.4									
50.0	61.2	115.5	7.0	63.0	116.6	9.2									
51.1							65.0	117.2	9.4						
55.0	57.7	112.5	5.7	59.5	113.8	8.5	62.3	115.2	9.2						
60.0	54.1	109.1	4.6	56.0	110.6	7.4	58.9	112.3	8.8						
65.0	50.2	105.1	3.8	52.2	106.9	6.6	55.3	109.0	8.4						
70.0	46.2	100.6	3.1	48.3	102.7	5.6	51.5	105.3	8.0						
70.2										55.0	106.9	7.9			
75.0	41.8	95.3	2.4	44.1	97.8	4.5	47.5	100.9	7.3	51.4	103.2	7.4			
80.0				39.5	92.2	3.5	43.3	95.9	6.3	47.8	99.3	6.3			
85.0				34.5	85.4	2.7	38.6	90.0	5.3	43.5	94.3	5.3			
90.0							33.5	83.0	4.5	39.0	88.6	4.3			
95.0							27.4	74.4	3.7	33.9	81.7	3.5			
100.0							19.8	62.7	2.8	28.0	73.3	2.7			
102.0							15.8	56.3	2.4						
104.0										22.2	64.6	2.1			



N° de ident.: 9842523/95738/ Pie

Radio de descarga: 360 $^{\circ}$

Valor de vuelco: Lastre trasero [t]:

Lastre central [t]:

2 - Vía ancha 114.0 52.6

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				29.0 ו		eza de p	ıl, Punto lumín (23 ı] Posicio	316-1) 9	8.5 m Pl	eza de p umín	lumín				
24.7	78.0	128.3	10.8												
26.0	77.2	128.0	10.8												
28.0	76.0	127.5	10.5										<u> </u>		
30.0	74.8	127.0	10.3												
32.0	73.6	126.4	10.1												
34.0	72.4	125.8	9.8												
35.6				73.0	125.8	9.8									
36.0	71.1	125.1	9.6	72.7	125.7	9.8									
38.0	69.9	124.4	9.4	71.5	125.0	9.8									
40.0	68.6	123.6	9.1	70.3	124.3	9.6									
42.0	67.4	122.8	8.5	69.0	123.5	9.3									
44.0	66.1	121.9	8.0	67.7	122.7	9.2									
46.0	64.8	121.0	7.5	66.5	121.9	9.0									
48.0	63.5	120.0	7.0	65.2	121.0	8.8									
50.0	62.2	118.9	6.7	63.9	120.0	8.6									
52.3							65.0	119.9	8.6						
55.0	58.8	116.1	5.5	60.6	117.3	8.2	63.3	118.6	8.6						
60.0	55.3	112.8	4.4	57.2	114.2	7.2	59.9	115.8	8.2						
65.0	51.7	109.0	3.6	53.6	110.7	6.3	56.5	112.7	7.9						
70.0 71.9	47.8	104.7	2.9	49.8	106.7	5.5	52.9	109.1	7.6	55.0	109.3	7.4			
71.9 75.0	43.7	99.8	2.2	45.9	102.1	4.4	49.1	105.0	7.4	55.0 52.7	109.3	7.4			
75.0 80.0	43.7	99.8	2.2	45.9 41.6	96.8	3.4	49.1 45.1	105.0	6.2	49.3	107.0	6.0			
80.0 85.0				41.6 37.0	96.8	2.6	45.1 40.8	94.8	5.3	49.3 45.4	98.6	5.0			
90.0				31.0	90.0	2.0	36.0	94.6 88.4	5.3 4.4	45.4 41.1	93.3	4.1			
95.0							30.7	80.6	3.6	36.4	93.3 87.0	3.2			
100.0							24.3	70.9	2.8	30.4	79.4	2.4			
100.0							24.3	70.8	2.0	27.5	79.4	2.4			
103.0							18.8	62.1	2.1	21.5	74.0	2.0			



N° de ident.: 9842523/95738/ P

Radio de descarga: 360 $^{\circ}$

Valor de vuelco: 2 - Vía ancha Lastre trasero [t]: 114.0 Lastre central [t]: 52.6

	88° Án I	gulo de principa	pluma I		gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				29.0 ו		eża de pl	ıl, Punto umín (23 ı] Posici	316-1) 10	1.5 m P	eza de p lumín	lumín				
25.3	78.0	131.2	10.0												
26.0	77.6	131.1	10.0												
28.0	76.4	130.6	9.8												
30.0	75.3	130.1	9.6												
32.0	74.1	129.5	9.4												
34.0	72.9	128.9	9.1												
36.0	71.7	128.3	8.9												
36.4				73.0	128.7	9.1									
38.0	70.5	127.6	8.7	72.1	128.2	9.0									
40.0	69.3	126.8	8.6	70.9	127.5	8.9									
42.0	68.1	126.0	8.1	69.7	126.8	8.7									
44.0	66.9	125.2	7.6	68.4	126.0	8.5									
46.0	65.6	124.3	7.1	67.2	125.1	8.3									
48.0	64.4	123.3	6.7	66.0	124.3	8.1									
50.0	63.1	122.3	6.3	64.7	123.3	8.0									
53.6							65.0	122.6	7.8						
55.0	59.9	119.6	5.3	61.5	120.7	7.6	64.1	121.9	7.8						
60.0	56.5	116.4	4.2	58.2	117.8	6.8	60.9	119.3	7.5						
65.0	53.0	112.8	3.3	54.8	114.4	6.0	57.6	116.3	7.3						
70.0	49.4	108.7	2.6	51.3	110.6	5.4	54.2	112.8	7.0						
73.6										55.0	111.8	6.7			
75.0				47.5	106.3	4.3	50.6	108.9	6.8	54.0	110.8	6.7			
80.0				43.5	101.3	3.3	46.8	104.4	6.0	50.8	107.2	5.7			
85.0				39.2	95.5	2.4	42.7	99.3	5.0	47.0	102.8	4.7			
87.0				37.4	92.9	2.1									
90.0							38.3	93.4	4.2	43.0	97.8	3.7			
95.0							33.5	86.4	3.5	38.7	91.9	2.9			
100.0							27.8	77.8	2.7	33.8	85.0	2.1			
104.0							23.3	70.6	2.0						



N° de ident.: 9842523/95738/ Pieza de articula

Radio de descarga: 360 $^{\circ}$

2 - Vía ancha

Lastre trasero [t]: 114.0 Lastre central [t]: 52.6

Valor de vuelco:

Altura Cerga Car			gulo de principa		83° Án	gulo de orincipa	pluma I		gulo de orincipa			gulo de orincipa		45° Án I	gulo de orincipa	pluma I
Cabeza de plumín (2316-1) 104.5 m Plumín 46.0 [m] Posición midfall (2316) 28.0 78.0 134.2 9.3 30.0 75.7 133.2 9.0 30.0 74.6 132.6 8.8 34.0 73.4 132.1 8.6 36.0 72.3 131.4 8.4 37.3 73.0 131.6 8.4 40.0 69.9 130.0 8.0 71.4 130.7 8.4 40.0 69.9 130.0 8.0 71.4 130.7 8.4 42.0 68.8 129.3 7.8 70.3 130.0 8.2 44.0 67.6 128.4 7.3 69.1 129.2 8.0 44.0 67.6 128.4 7.3 69.1 129.2 8.0 44.0 66.4 127.6 6.8 67.9 128.4 7.8 48.0 65.2 126.7 6.4 66.7 127.5 7.6 50.0 63.9 125.7 6.0 65.5 126.6 7.4 55.0 60.8 123.0 5.2 62.4 124.2 7.1 64.9 125.3 7.2 55.0 60.8 123.0 5.2 62.4 124.2 7.1 64.9 125.3 7.2 60.0 57.6 120.0 4.1 59.3 121.3 6.5 61.8 122.7 7.1 65.0 57.6 120.0 4.1 59.3 121.3 6.5 61.8 122.7 7.1 65.0 50.0 57.6 120.0 4.1 59.3 121.3 6.5 61.8 122.7 7.1 65.0 50.0 50.8 112.7 2.4 52.6 118.1 5.7 58.7 119.8 6.8 75.0 50.0 50.8 112.7 2.4 52.6 118.1 5.7 58.7 119.8 6.8 75.0 50.0 60.0 57.6 120.0 4.1 59.3 121.3 6.5 61.8 122.7 7.1 65.0 50.0 50.8 112.7 2.4 52.6 118.1 5.7 58.7 119.8 6.8 75.0 50.0 60.0 57.6 120.0 4.1 59.3 121.3 6.5 61.8 122.7 7.1 65.0 50.0 50.8 112.7 2.4 52.6 118.1 5.7 58.7 119.8 6.8 75.0 50.0 60.0 50.0 112.7 2.4 52.6 118.1 5.7 58.7 119.8 6.8 75.0 50.0 60.0 50.0 110.3 4.3 51.9 112.8 6.3 75.0 50.0 60.0 50.0 41.2 50.0 41.2 50.0 41.5 51.0 55.4 116.5 6.5 75.0 50.0 60.0 50.0 41.2	ce	o de plumín	de rolda- nas	Carga [t]	o de plumín	de rolda- nas	Carga [t]	o de plumín	de rolda- nas	Carga [t]	o de plumín	de rolda- nas	Carga [t]	o de plumín	de rolda- nas	Carga [t]
28.0 76.8 133.7 9.2 30.0 75.7 133.2 9.0 32.0 74.6 132.6 8.8 34.0 73.4 132.1 8.6 36.0 72.3 131.4 8.4 37.3 37.3 38.0 71.1 130.8 8.2 72.6 131.3 8.4 40.0 69.9 130.0 8.0 71.4 130.7 8.4 42.0 68.8 129.3 7.8 70.3 130.0 8.2 44.0 67.6 128.4 7.3 69.1 129.2 8.0 46.0 66.4 127.6 6.8 67.9 128.4 7.8 48.0 65.2 126.7 6.4 66.7 127.5 7.6 50.0 63.9 125.7 6.0 65.5 126.6 7.4 55.0 60.8 123.0 5.2 62.4 124.2 7.1 64.9 125.3 7.2 65.0 54.3 116.6 3.2 56.0 118.1 5.7 58.7 119.8 6.8 75.3 75.0 49.0 110.3 43.3 51.9 112.8 6.5 80.0 45.					29.0 ı		eża de pl	úmín (23	316-1) ĬC	04.5 m P		lumín				
30.0																
32.0																
34.0 73.4 132.1 8.6 36.0 72.3 131.4 8.4 37.3 33.8 71.1 130.8 8.2 72.6 131.3 8.4 40.0 69.9 130.0 8.0 71.4 130.7 8.4 42.0 68.8 129.3 7.8 70.3 130.0 8.2 44.0 67.6 128.4 7.3 69.1 129.2 8.0 48.0 66.2 128.4 7.3 69.1 129.2 8.0 48.0 65.2 126.7 6.4 66.7 127.5 7.6 50.0 63.9 125.7 6.0 65.5 126.6 7.4 55.0 60.8 123.0 5.2 62.4 124.2 7.1 64.9 125.3 7.2 60.0 57.6 120.0 4.1 59.3 121.3 6.5 61.8 122.7 7.1 65.0 54.3 116.6 3.2 56.0 118.1 5.7 58.7 119.8 6.8 75.0 49.0 110.3 4.3 51.9 112.8 6.3 75.0 49.0 110.3 4.3 51.9 112.8 6.5 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>																
36.0 72.3 131.4 8.4 73.0 131.6 8.4 37.3 38.0 71.1 130.8 8.2 72.6 131.3 8.4 40.0 69.9 130.0 8.0 71.4 130.7 8.4 42.0 68.8 129.3 7.8 70.3 139.0 8.2 44.0 67.6 128.4 7.3 69.1 129.2 8.0 48.0 66.4 127.6 6.8 67.9 128.4 7.8 48.0 65.2 126.7 6.4 66.7 127.5 7.6 50.0 63.9 125.7 6.0 65.5 126.6 7.4 54.9 60.0 57.6 120.0 4.1 59.3 121.3 6.5 61.8 122.7 7.1 65.0 54.9 116.6 3.2 56.0 118.1 5.7 58.7 119.8 6.8 75.0 49.0 110.3 4.3 51.9 112.8 6.3 75.3 49.0 110.3 4.3 108.5 5.9 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>																
37.3 38.0 71.1 130.8 8.2 72.6 131.3 8.4 40.0 69.9 130.0 8.0 71.4 130.7 8.4 42.0 68.8 129.3 7.8 70.3 130.0 8.2 44.0 67.6 128.4 7.3 69.1 129.2 8.0 46.0 66.4 127.6 6.8 67.9 128.4 7.8 48.0 65.2 126.7 6.4 66.7 127.5 7.6 50.0 63.9 125.7 6.0 65.5 126.6 7.4 54.9 125.7 6.0 65.5 126.6 7.4 65.0 57.6 120.0 4.1 59.3 121.3 6.5 61.8 122.7 7.1 65.0 57.6 120.0 4.1 59.3 121.3 6.5 61.8 122.7 7.1 65.0 54.3 116.6 3.2 56.0 118.1 5.7 58.7 119.8 6.8 70.0 50.8 112.7 2.4 52.6 114.5 5.1 55.4 116.5 6.5 75.3 80.0 45.2 105.6 3.3 48.3 108.5																
38.0 71.1 130.8 8.2 72.6 131.3 8.4 40.0 69.9 130.0 8.0 71.4 130.7 8.4 42.0 68.8 129.3 7.8 70.3 130.0 8.2 44.0 67.6 128.4 7.3 69.1 129.2 8.0 46.0 66.4 127.6 6.8 67.9 128.4 7.8 48.0 65.2 126.7 6.4 66.7 127.5 7.6 50.0 63.9 125.7 6.0 65.5 126.6 7.4 54.9 55.0 60.8 123.0 5.2 62.4 124.2 7.1 64.9 125.3 7.2 65.0 57.6 120.0 4.1 59.3 121.3 6.5 61.8 122.7 7.1 65.0 54.3 116.6 3.2 56.0 118.1 5.7 58.7 119.8 6.8 75.0 75.0 49.0 110.3 4.3 51.9 112.8 6.3 80.0 45.2 105.6<		72.3	131.4	8.4												
40.0 69.9 130.0 8.0 71.4 130.7 8.4 42.0 68.8 129.3 7.8 70.3 130.0 8.2 44.0 67.6 128.4 7.3 69.1 129.2 8.0 46.0 66.4 127.6 6.8 67.9 128.4 7.8 48.0 65.2 126.7 6.4 66.7 127.5 7.6 50.0 63.9 125.7 6.0 65.5 126.6 7.4 54.9 125.3 7.2 60.0 57.6 120.0 4.1 59.3 121.3 6.5 61.8 122.7 7.1 65.0 57.6 120.0 4.1 59.3 121.3 6.5 61.8 122.7 7.1 65.0 54.3 116.6 3.2 56.0 118.1 5.7 58.7 119.8 6.8 75.0 49.0 110.3 4.3 51.9 112.8 6.3 75.3 49.0 110.3 4.3 108.5 5.9 51.8 110.7 5.5 <																
42.0 68.8 129.3 7.8 70.3 130.0 8.2 44.0 67.6 128.4 7.3 69.1 129.2 8.0 46.0 66.4 127.6 6.8 67.9 128.4 7.8 48.0 65.2 126.7 6.4 66.7 127.5 7.6 50.0 63.9 125.7 6.0 65.5 126.6 7.4 7.2																
44.0 67.6 128.4 7.3 69.1 129.2 8.0 46.0 66.4 127.6 6.8 67.9 128.4 7.8 48.0 65.2 126.7 6.4 66.7 127.5 7.6 50.0 63.9 125.7 6.0 65.5 126.6 7.4 54.9 55.0 60.8 123.0 5.2 62.4 124.2 7.1 64.9 125.3 7.2 60.0 57.6 120.0 4.1 59.3 121.3 6.5 61.8 122.7 7.1 65.0 54.3 116.6 3.2 56.0 118.1 5.7 58.7 119.8 6.8 70.0 50.8 112.7 2.4 52.6 114.5 5.1 55.4 116.5 6.5 75.3 80.0 45.2 105.6 3.3 48.3 108.5 5.9 51.8 110.7 5.5 85.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0																
46.0 66.4 127.6 6.8 67.9 128.4 7.8 7.8 48.0 65.2 126.7 6.4 66.7 127.5 7.6 7.6 50.0 63.9 125.7 6.0 65.5 126.6 7.4 65.0 125.3 7.2 8.2 8.2 8.8 8.8 8.8 8.8 7.2 8.8 8.8 8.8 8.8 8.8 8.8 8.8 8.8 8.8 8.8 8.8 8.3 8.3 8.3 8.3 8.3 8.3 8.3 8.3 8.3																
48.0 65.2 126.7 6.4 66.7 127.5 7.6 50.0 63.9 125.7 6.0 65.5 126.6 7.4 54.9 60.0 57.6 120.0 4.1 59.3 121.3 6.5 61.8 122.7 7.1 60.0 57.6 120.0 4.1 59.3 121.3 6.5 61.8 122.7 7.1 65.0 54.3 116.6 3.2 56.0 118.1 5.7 58.7 119.8 6.8 70.0 50.8 112.7 2.4 52.6 114.5 5.1 55.4 116.5 6.5 75.0 49.0 110.3 4.3 51.9 112.8 6.3 75.3 49.0 110.3 4.3 51.9 112.8 6.3 75.0 45.2 105.6 3.3 48.3 108.5 5.9 51.8 110.7 5.5 85.0 45.2 105.6 3.3 44.5 103.7 4.9 48.5 106.9 4.5 99.0 35.9 91.7<																
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54.9 65.0 125.3 7.2 55.0 60.8 123.0 5.2 62.4 124.2 7.1 64.9 125.3 7.2 60.0 57.6 120.0 4.1 59.3 121.3 6.5 61.8 122.7 7.1 65.0 54.3 116.6 3.2 56.0 118.1 5.7 58.7 119.8 6.8 70.0 50.8 112.7 2.4 52.6 114.5 5.1 55.4 116.5 6.5 75.3 49.0 110.3 4.3 51.9 112.8 6.3 75.3 45.2 105.6 3.3 48.3 108.5 5.9 51.8 110.7 5.5 85.0 41.2 100.2 2.4 44.5 103.7 4.9 48.5 106.9 4.5 90.0 99.0 35.9 91.7 3.4 40.7 96.7 2.8 99.0 100.0 30.9 84.0 2.7 37.2 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>																
55.0 60.8 123.0 5.2 62.4 124.2 7.1 64.9 125.3 7.2 60.0 57.6 120.0 4.1 59.3 121.3 6.5 61.8 122.7 7.1 65.0 54.3 116.6 3.2 56.0 118.1 5.7 58.7 119.8 6.8 70.0 50.8 112.7 2.4 52.6 114.5 5.1 55.4 116.5 6.5 75.3 49.0 110.3 4.3 51.9 112.8 6.3 75.3 49.0 100.2 2.4 44.5 103.7 4.9 48.5 106.9 4.5 85.0 41.2 100.2 2.4 44.5 103.7 4.9 48.5 106.9 4.5 90.0 45.2 40.4 98.2 4.1 44.7 102.1 3.6 99.0 30.9 84.0 2.7 37.2 91.6 2.1		63.9	125.7	6.0	65.5	126.6	7.4	05.0	405.0	7.0						
60.0 57.6 120.0 4.1 59.3 121.3 6.5 61.8 122.7 7.1 65.0 54.3 116.6 3.2 56.0 118.1 5.7 58.7 119.8 6.8 70.0 50.8 112.7 2.4 52.6 114.5 5.1 55.4 116.5 6.5 75.0 49.0 110.3 4.3 51.9 112.8 6.3 75.3 45.2 105.6 3.3 48.3 108.5 5.9 51.8 110.7 5.5 85.0 41.2 100.2 2.4 44.5 103.7 4.9 48.5 106.9 4.5 90.0 95.0 35.9 91.7 3.4 40.7 96.7 2.8 99.0 30.9 84.0 2.7		20.0	400.0	5.0	20.4	1010	7.4									
65.0 54.3 116.6 3.2 56.0 118.1 5.7 58.7 119.8 6.8 6.8 6.5 6.5 75.0 112.7 2.4 52.6 114.5 5.1 55.4 116.5 6.5 6.5 55.0 114.2 6.1 6.3 <td></td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>					-											
70.0 50.8 112.7 2.4 52.6 114.5 5.1 55.4 116.5 6.5 6.5 6.3 6.3 6.3 75.3 80.0 45.2 105.6 3.3 48.3 108.5 5.9 51.8 110.7 5.5 85.0 85.0 41.2 100.2 2.4 44.5 103.7 4.9 48.5 106.9 4.5 49.0 40.4 98.2 4.1 44.7 102.1 3.6 95.0 99.0 35.9 91.7 3.4 40.7 96.7 2.8 99.0 2.1 30.9 84.0 2.7 2.1 2.1 2.1 2.1 2.1 2.1 2.1 2.1 2.2 2.1 2.2 2.																
75.0 49.0 110.3 4.3 51.9 112.8 6.3 75.3 80.0 45.2 105.6 3.3 48.3 108.5 5.9 51.8 110.7 5.5 85.0 41.2 100.2 2.4 44.5 103.7 4.9 48.5 106.9 4.5 90.0 40.4 98.2 4.1 44.7 102.1 3.6 99.0 35.9 91.7 3.4 40.7 96.7 2.8 99.0 30.9 84.0 2.7 27 91.6 2.1																
75.3 80.0 85.0 90.0 99.0 99.0 100.0 100.0 45.2 105.6 3.3 48.3 108.5 5.9 51.8 110.7 5.5 41.2 100.2 2.4 44.5 103.7 4.9 48.5 106.9 4.5 40.7 96.7 2.8 37.2 91.6 2.1		50.6	112.7	2.4												
80.0 45.2 105.6 3.3 48.3 108.5 5.9 51.8 110.7 5.5 85.0 90.0 2.4 44.5 103.7 4.9 48.5 106.9 4.5 95.0 40.4 98.2 4.1 44.7 102.1 3.6 95.0 35.9 91.7 3.4 40.7 96.7 2.8 99.0 30.9 84.0 2.7					49.0	110.3	4.3	51.9	112.0	0.3	55 O	1112	6.1			
85.0 90.0 95.0 41.2 100.2 2.4 44.5 103.7 40.4 98.2 4.1 44.7 102.1 3.6 95.0 35.9 91.7 3.4 40.7 96.7 2.8 37.2 91.6 2.1					45.0	105.6	2.2	40.0	100 5	F 0			-			
90.0 95.0 95.0 35.9 91.7 3.4 40.7 96.7 2.8 99.0 100.0 30.9 84.0 2.7 31.6 2.1 37.2 91.6 2.1																
95.0 35.9 91.7 3.4 40.7 96.7 2.8 99.0 30.9 37.2 91.6 2.1 30.9 84.0 2.7					41.2	100.2	2.4									
99.0 100.0 30.9 84.0 2.7 37.2 91.6 2.1																
100.0								33.8	91.1	3.4						
								30.0	840	2.7	31.2	91.0	2.1			
■ 104 0 ■ ■ ■ 262 765 21 ■ ■ ■	100.0							26.2	76.5	2.1						



Nº de ident.: 9842523/95738/

Radio de descarga: 360 $^{\circ}$

Pieza de articulación de pluma principal: 2821-1 Cabeza de pluma principal: 2821-1

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				29.0 ו	m Pluma Cabe	eża de pl	ıl, Punto umín (23 ı] Posici	316-1) ĬC	7.5 m P	eza de p lumín	lumín				
26.6	78.0	137.1	8.3												
28.0	77.2	136.8	8.3												
30.0	76.1	136.3	8.1												
32.0	75.0	135.8	7.9												
34.0	73.9	135.2	7.8												
36.0	72.8	134.6	7.5												
38.0	71.7	133.9	7.3												
38.2				73.0	134.4	7.5									
40.0	70.5	133.2	7.2	72.0	133.8	7.5									
42.0	69.4	132.5	7.0	70.8	133.1	7.3									
44.0	68.2	131.7	6.7	69.7	132.4	7.1									
46.0	67.1	130.8	6.3	68.6	131.6	6.9									
48.0	65.9	130.0	5.9	67.4	130.8	6.8				•					
50.0	64.7	129.0	5.6	66.2	129.9	6.6									
55.0	61.7	126.5	4.9	63.3	127.5	6.3									
56.1							65.0	128.1	6.3						
60.0	58.6	123.5	3.8	60.2	124.8	5.9	62.7	126.1	6.2						
65.0	55.4	120.2	2.9	57.1	121.7	5.2	59.6	123.3	5.9	•			<u> </u>		
70.0	52.1	116.5	2.2	53.8	118.2	4.7	56.5	120.2	5.7						
75.0				50.4	114.3	4.1	53.2	116.6	5.5						
77.1										55.0	116.7	5.3			
80.0				47.2	110.3	3.1	49.7	112.5	5.3	53.0	114.5	5.2			
85.0				43.4	105.3	2.2	46.1	108.0	4.6	49.9	110.9	4.2			
86.0				42.6	104.2	2.0									
90.0							42.3	102.7	3.8	46.3	106.3	3.3			
95.0							38.1	96.7	3.2	42.5	101.2	2.4			
97.0										40.9	98.9	2.1			
100.0							33.5	89.7	2.6						



N° de ident.: 9842523/95738/

Radio de descarga: 360 $^{\circ}$

Pieza de articulación de pluma principal: 2821-1 Cabeza de pluma principal: 2821-1

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				29.0 ו		eża de pl	ıl, Punto umín (23 ı] Posici	316-1) 11	0.5 m P	eza de p lumín	lumín				
27.2	78.0	140.0	7.6												
28.0	77.6	139.9	7.6												
30.0	76.5	139.4	7.4												
32.0	75.4	138.9	7.2												
34.0	74.4	138.3	7.0												
36.0	73.3	137.7	6.8												
38.0	72.2	137.1	6.6												
39.1				73.0	137.3	6.7									
40.0	71.1	136.4	6.5	72.5	137.0	6.7									
42.0	70.0	135.7	6.3	71.4	136.3	6.6									
44.0	68.9	134.9	6.2	70.3	135.6	6.4									
46.0	67.7	134.1	5.8	69.2	134.9	6.3									
48.0	66.6	133.3	5.5	68.1	134.1	6.1									
50.0	65.5	132.3	5.2	66.9	133.2	6.0									
55.0	62.5	129.9	4.5	64.1	130.9	5.6									
57.4							65.0	130.8	5.6						
60.0	59.6	127.1	3.7	61.1	128.3	5.4	63.5	129.5	5.6						
65.0	56.5	123.9	2.7	58.1	125.3	4.8	60.5	126.8	5.3						
69.0	53.9	121.1	2.1												
70.0				55.0	121.9	4.3	57.5	123.8	5.1						
75.0				51.7	118.1	3.9	54.3	120.3	4.8						
78.8										55.0	119.1	4.6			
80.0				48.3	113.9	3.1	51.1	116.5	4.7	54.2	118.3	4.6			
85.0				45.0	109.6	2.1	47.6	112.1	4.2	51.2	114.8	3.9			
90.0							44.0	107.2	3.6	47.8	110.5	3.0			
95.0							40.0	101.5	3.0	44.2	105.6	2.2			
96.0										43.4	104.5	2.0			
100.0							35.8	95.0	2.5						
103.0							33.5	91.4	2.1						



N° de ident.: 9842523/95738/ Pieza de

Radio de descarga: $$360\ ^{\circ}$$

Valor de vuelco: Lastre trasero [t]:

Lastre central [t]:

2 - Vía ancha 114.0 52.6

		gulo de orincipal		83° Án	gulo de orincipal	pluma I		gulo de principa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				29.0 r		eza de p	il, Punto lumín (1: n] Posici	916-1) 3:	2.5 m Pl		lumín				
10.9	78.0	63.7	45.5												
11.0	77.9	63.7	45.5												
12.0	76.1	63.5	44.0												
13.0	74.2	63.2	42.1												
14.0	72.4	62.9	40.0												
16.0	68.6	62.1	36.8												
16.2				73.0	62.7	39.2									
18.0	64.7	61.2	33.7	69.7	62.1	37.0				•					
20.0	60.7	60.1	31.4	65.9	61.2	34.1									
22.0	56.6	58.9	28.9	61.9	60.2	31.8									
24.0	52.2	57.4	27.0	57.8	59.0	29.6									
24.4							65.0	60.1	30.1						
26.0	47.5	55.6	25.2	53.5	57.6	27.8	62.0	59.3	31.7						
28.0	42.4	53.6	23.5	48.9	55.9	26.3	57.9	58.1	30.2						
30.0	36.8	51.1	22.0	43.9	53.9	24.7	53.6	56.7	28.5						
32.0	30.2	47.9	20.3	38.5	51.6	23.4	49.0	55.0	27.2						
34.0	21.9	43.7	18.4	32.2	48.6	21.8	44.0	53.1	25.5	55.0	55.3	26.7			
35.0	16.2	40.6	17.4							•					
36.0				24.6	44.8	19.8	38.6	50.7	24.1	50.9	53.8	28.0			
38.0				15.5	40.0	15.1	32.4	47.8	22.6	46.1	52.0	26.7			
40.0							24.8	44.0	20.9	40.9	49.8	25.0			
42.0							15.8	39.2	15.1	35.0	47.1	23.7			
44.0										28.1	43.8	22.3			
46.0										18.9	38.9	20.8			
50.0													35.0	41.0	18.7
55.0													16.4	31.4	15.1



N° de ident.: 9842523/95738/ Pi

Radio de descarga: 360 $^{\circ}$

Valor de vuelco: 2 - Vía ancha Lastre trasero [t]: 114.0 Lastre central [t]: 52.6

	88° Ángulo de pluma principal				gulo de orincipa			gulo de orincipa			gulo de orincipa		45° Án	gulo de orincipa	pluma I
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
29.0 m Pluma principal, Punto de carga 1 - Cabeza de plumín Cabeza de plumín (1916-1) 35.5 m Plumín 16.0 [m] Posición midfall (1916)															
11.6	78.0	66.7	39.8												
12.0	77.3	66.6	39.8												
13.0	75.6	66.3	37.9												
14.0 16.0	73.9 70.5	66.0 65.3	36.5 33.4												
17.1	70.5	05.3	33.4	73.0	65.6	34.1									
18.0	67.0	64.5	30.7	71.5	65.3	33.6									
20.0	63.4	63.6	28.5	68.0	64.5	31.2									
22.0	59.7	62.4	26.6	64.5	63.6	28.8									
24.0	55.9	61.1	24.8	60.8	62.5	27.1									
25.7							65.0	62.8	26.7						
26.0	51.8	59.6	23.4	57.0	61.3	25.4	64.6	62.7	28.6						
28.0	47.6	57.9	22.1	53.0	59.8	24.1	60.9	61.6	27.3						
30.0	42.9	55.8	20.7	48.8	58.1	22.8	57.1	60.4	26.1						
32.0	37.9	53.4	19.5	44.3	56.2	21.5	53.1	58.9	24.8						
34.0	32.1	50.5	18.3	39.4	53.9	20.4	48.9	57.3	23.6						
35.8 36.0	25.2	46.7	16.9	33.9	51.1	19.3	44.4	55.3	22.2	55.0 54.8	57.7 57.6	23.5 25.3			
38.0	25.2 15.4	46.7	15.4	27.3	51.1 47.6	19.3	39.5	55.3 53.0	21.0	54.8	57.6 56.1	25.3			
40.0	15.4	41.0	13.4	18.8	42.7	16.5	34.0	50.3	19.9	46.3	54.2	23.2			
42.0				10.0	72.7	10.0	27.5	46.8	18.7	41.5	52.1	21.9			
44.0							19.0	41.9	17.5	36.3	49.5	20.9			
45.0				i			15.1	39.6	14.7						
46.0										30.3	46.4	19.8			
48.0										22.8	42.2	18.7			
49.0										18.0	39.4	18.1			
52.5													35.0	42.7	17.4
55.0													27.8	38.8	16.9
58.0													15.6	31.8	15.1



2821-1

2821-1

N° de ident.: 9842523/95738/ Pieza de articulación de pluma principal: Radio de descarga: 360 ° Cabeza de pluma principal:

		gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa			45° Ángulo de pl principal		
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	
	29.0 m Pluma principal, Punto de carga 1 - Cabeza de plumín Cabeza de plumín (1916-1) 38.5 m Plumín 19.0 [m] Posición midfall (1916)															
12.2 13.0 14.0 16.0	78.0 76.7 75.2 72.1	69.6 69.4 69.1 68.5	35.6 35.1 33.5 30.8													
18.0 20.0 22.0 24.0 26.0	68.9 65.7 62.3 58.9 55.3	67.8 66.9 65.9 64.7 63.4	28.7 26.4 24.7 23.2 21.8	73.0 69.8 66.6 63.3 59.9	68.4 67.7 66.9 65.9 64.8	30.4 28.7 26.7 25.0 23.6										
27.0 28.0 30.0 32.0	51.6 47.6 43.4	61.9 60.1 58.1	20.8 19.6 18.5	56.4 52.7 48.8	63.5 62.1 60.4	22.4 21.4 20.3	65.0 63.4 60.0 56.4	65.5 65.0 63.9 62.6	25.6 25.3 24.2 23.0							
34.0 36.0 37.5 38.0	38.8 33.6 27.6	55.7 52.9 49.4	17.5 16.7 15.6	44.6 40.1 35.2	58.4 56.2 53.5	19.1 18.1 17.3	52.7 48.9 44.7	61.2 59.5 57.6	22.0 21.0	55.0 54.3	60.2 59.9	20.9 22.5				
40.0 41.0 42.0 43.0	20.0 16.7	44.7 42.6	14.6 12.2	29.5 22.5 18.0	50.2 46.0 43.1	16.3 15.4 14.9	40.2 35.3	55.3 52.7	18.7	50.5 46.4	58.3 56.5	21.6				
44.0 46.0 47.0 48.0							29.6 22.6 18.2	49.4 45.2 42.4	17.0 16.1 15.6	42.1 37.4 32.0	54.4 51.9 48.9	19.5 18.6 17.8				
50.0 52.0 55.0 60.0										25.7 17.2	45.1 39.8	16.9 16.0	35.0 18.6	44.4 34.5	16.4 15.0	



Nº de ident.: 9842523/95738/ Radio de descarga: 360°

2 - Vía ancha Valor de vuelco: Lastre trasero [t]: 114.0 52.6 Lastre central [t]:

	88° Ángulo de pluma principal				gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
	29.0 m Pluma principal, Punto de carga 1 - Cabeza de plumín Cabeza de plumín (1916-1) 41.5 m Plumín 22.0 [m] Posición midfall (1916)														
12.8	78.0	72.5	31.4												
13.0	77.7	72.5	31.4												
14.0	76.3	72.2	30.5												
16.0	73.4	71.7	28.2												
18.0	70.5	71.0	26.0												
18.9				73.0	71.3	26.7									
20.0	67.5	70.2	24.1	71.4	70.9	26.2									
22.0	64.5	69.3	22.4	68.4	70.2	24.4									
24.0	61.4	68.2	21.1	65.4	69.3	22.7									
26.0	58.2	67.0	19.9	62.3	68.3	21.5									
28.0	54.8	65.7	18.8	59.1	67.1	20.3									
28.2							65.0	68.2	21.2						
30.0	51.3	64.1	17.9	55.8	65.8	19.3	62.4	67.4	21.9						
32.0	47.6	62.4	16.9	52.3	64.3	18.5	59.2	66.2	20.9						
34.0	43.7	60.4	16.0	48.7	62.6	17.5	55.9	64.9	19.8						
36.0	39.5	58.0	15.2	44.9	60.7	16.5	52.4	63.4	18.9						
38.0	34.9	55.3	14.5	40.8	58.5	15.7	48.8	61.7	18.1						
39.2				!						55.0	62.6	18.2			
40.0	29.6	52.1	13.7	36.3	55.9	15.0	45.0	59.8	17.1	53.8	62.1	19.5			
42.0	23.2	47.9	12.9	31.2	52.8	14.2	40.9	57.6	16.2	50.3	60.5	18.6			
44.0	16.0	43.0	10.4	25.2	48.9	13.5	36.4	55.0	15.4	46.6	58.7	17.8			
46.0				17.3	43.6	12.7	31.3	52.0	14.7	42.6	56.6	16.9			
48.0				•			25.3	48.1	14.0	38.2	54.2	16.0			
50.0							17.5	42.8	13.2	33.4	51.4	15.4			
55.0										16.6	40.3	13.5			
57.4													35.0	46.1	14.3
60.0													28.7	42.2	14.7
63.0													17.9	35.0	13.8



N° de ident.: 9842523/95738/ Pieza de articulació Radio de descarga: 360 ° Cabeza de pluma p

Valor de vuelco: 2 - Vía ancha Lastre trasero [t]: 114.0 Lastre central [t]: 52.6

	88° Án	gulo de orincipal	pluma		gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de principa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
	29.0 m Pluma principal, Punto de carga 1 - Cabeza de plumín Cabeza de plumín (1916-1) 44.5 m Plumín 25.0 [m] Posición midfall (1916)														
13.4	78.0	75.5	28.5							I					1
14.0	77.2	75.3	28.5												
16.0	74.6	74.8	26.4												
18.0	71.9	74.2	24.3												
19.7				73.0	74.2	24.2									
20.0	69.1	73.4	22.8	72.7	74.1	24.2									
22.0	66.3	72.6	21.0	69.9	73.4	22.7									
24.0	63.5	71.6	19.6	67.1	72.6	21.3									
26.0 28.0	60.5 57.5	70.5 69.3	18.5 17.5	64.3 61.4	71.6 70.6	20.0 19.1									
29.5	57.5	09.3	17.5	01.4	70.0	19.1	65.0	71.0	19.0						
30.0	54.4	67.9	16.6	58.4	69.4	18.0	64.4	71.0	20.3						
32.0	51.1	66.4	15.9	55.3	68.0	17.1	61.5	69.7	19.4						
34.0	47.7	64.6	15.0	52.1	66.5	16.3	58.5	68.5	18.6	i					
36.0	44.1	62.6	14.2	48.7	64.8	15.5	55.4	67.2	17.6	l					
38.0	40.2	60.3	13.5	45.1	62.9	14.7	52.1	65.7	16.8						
40.0	35.9	57.7	12.9	41.3	60.7	14.0	48.8	64.0	16.0						
40.9										55.0	65.1	16.1			
42.0	31.2	54.6	12.3	37.2	58.2	13.3	45.2	62.1	15.1	53.5	64.4	17.3			
44.0	25.6	50.8	11.6	32.6	55.3	12.7	41.4	59.9	14.4	50.2	62.8	16.5			
46.0	18.5	45.7	11.0	27.3	51.7	12.0	37.3	57.4	13.7	46.7	60.9	15.8			
47.0	15.5	43.4	8.9												
48.0				20.8	47.1	11.4	32.7	54.4	13.1	43.0	58.9	15.0			
49.0 50.0				16.7	44.0	11.0	27.4	50.9	12.5	20.0	E6 E	14.2			
53.0							27.4 16.9	43.3	12.5	39.0	56.5	14.2			
55.0 55.0							10.9	43.3	11.5	26.9	48.6	12.7			
58.0 58.0										16.0	40.7	11.7			
59.9										10.0	70.7	11.7	35.0	47.8	12.7
60.0													34.7	47.7	12.7
65.0													21.3	38.4	12.5
66.0													17.2	35.4	12.3