

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]: 124.0 Lastre central [t]: 52.6

		gulo de orincipal		ı	gulo de orincipa			gulo de principa		65° Án	gulo de orincipa	pluma I	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]
				29.0 ו	m Pluma Cab	eza de p	il, Punto lumín (1 n] Posici	916-1) 7	1.5 m Plı	eza de p umín	lumín				
19.1 20.0 22.0 24.0 26.0	78.0 77.3 75.6 73.9 72.2	101.9 101.7 101.2 100.6 100.0	11.1 11.1 10.6 10.2 9.8												
27.7 28.0 30.0 32.0 34.0	70.5 68.8 67.0 65.3	99.3 98.5 97.7 96.8	9.6 9.3 9.1 8.9	73.0 72.7 71.0 69.3 67.5	100.0 99.9 99.2 98.5 97.6	9.8 9.8 9.6 9.4 9.2									
36.0 38.0 40.0 40.9	63.5 61.7 59.8	95.8 94.7 93.6	8.7 8.5 8.3	65.8 64.0 62.2	96.8 95.8 94.8	8.9 8.7 8.6	65.0	95.4	8.8						
42.0 44.0 46.0 48.0 50.0	57.9 56.0 54.0 52.0 49.9	92.3 91.0 89.6 88.0 86.4	8.1 7.9 7.8 7.6 7.5	60.3 58.5 56.5 54.6 52.5	93.6 92.4 91.1 89.7 88.2	8.4 8.2 8.0 7.9 7.7	64.0 62.2 60.4 58.5 56.6	94.9 93.9 92.7 91.5 90.2	8.8 8.6 8.4 8.3 8.1						
55.0 56.4 60.0 65.0 70.0 73.0	38.1 30.9 21.7 15.5	75.8 68.3 58.0 50.7	7.1 6.7 6.2 5.6 4.7	47.2 41.4 34.8 26.8	78.7 72.1 63.6	7.4 7.0 6.7 6.1	51.6 46.2 40.2 33.4	86.5 82.1 76.6 69.8	7.8 7.4 7.1 6.8	55.0 51.4 46.0 40.0	87.2 84.5 80.0 74.5	7.8 7.6 7.3 7.1			
75.0 75.0 79.0 80.0 82.0 84.0	13.3	30.1	4.7	15.4	50.2	5.5	25.0 15.5	60.6 49.5	6.4 6.0	33.1 24.7 16.8	67.6 58.3 49.1	6.9 6.5 5.7	35.0	63.3	6.6
85.0 90.0 92.0										10.0	70.1	-5.1	30.5 21.0 15.8	58.5 47.9 41.7	6.6 6.3 6.1



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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]
				29.0	m Pluma Cab	eza de p	il, Punto lumín (19 n] Posici	916-1) 7	4.5 m Pl		lumín				
19.7	78.0	104.8	10.1												
20.0	77.8	104.8	10.1												
22.0	76.2	104.3	9.7												
24.0	74.6	103.7	9.3												
26.0	73.0	103.1	9.0												
28.0	71.3	102.5	8.8												
28.5				73.0	102.9	8.9									
30.0	69.7	101.7	8.6	71.8	102.4	8.9									
32.0	68.0	100.9	8.4	70.2	101.7	8.6									
34.0	66.3	100.1	8.2	68.5	100.9	8.4 8.2									
36.0 38.0	64.6 62.9	99.1 98.1	8.0 7.8	66.8 65.1	100.1 99.1	8.2 8.0									
38.0 40.0	61.1	98.1	7.8	63.4	99.1	7.9									
42.0	59.4	95.9	7.7	61.7	97.1	7.9									
42.0	35.4	95.9	1.5	01.7	37.1	1.1	65.0	98.2	8.0						
44.0	57.5	94.6	7.4	59.9	95.9	7.6	63.4	97.3	7.9						
46.0	55.7	93.3	7.2	58.1	94.7	7.4	61.7	96.2	7.7						
48.0	53.8	91.8	7.1	56.2	93.4	7.3	59.9	95.1	7.6	i					
50.0	51.8	90.3	7.0	54.3	92.0	7.2	58.1	93.8	7.5	i			i		
55.0	46.7	85.9	6.7	49.4	88.0	6.9	53.4	90.3	7.2						
58.1										55.0	89.7	7.0			
60.0	41.0	80.5	6.4	44.0	83.1	6.7	48.4	86.2	6.9	53.2	88.3	7.0			
65.0	34.7	74.0	6.2	38.1	77.3	6.5	42.9	81.2	6.8	48.2	84.1	6.8			
70.0	27.0	65.4	5.5	31.2	69.9	6.0	36.8	75.1	6.6	42.7	79.1	6.6			
75.0	16.3	52.4	4.9	22.4	59.7	5.4	29.7	67.3	6.2	36.6	72.9	6.5			
76.0	15.2	51.1	4.3												
78.0				15.0	50.6	5.1									
80.0							20.4	56.3	5.7	29.4	65.0	6.2			
82.0							15.2	49.8	5.5				25.0	05.4	0.4
84.4										10.0	F2 0	F.0.	35.0	65.1	6.1 6.1
85.0 87.0										19.9	53.8	5.9	34.2	64.2	6.1
87.0 90.0										16.5	49.5	5.4	26.5	55.5	6.1
95.0													15.4	42.1	5.7
55.0													10.4	74.1	0.7



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2 - Vía ancha Valor de vuelco: Lastre trasero [t]: 124.0 Lastre central [t]: 52.6

	88° Án	gulo de principa	pluma I		gulo de orincipa			gulo de principa			gulo de orincipa		45° Án I	gulo de principa	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]
		2		29.0 ו	n Pluma	principa	I, Punto	de carga	1 - Cab	eza de p	lumín				-
					Cab		olumín (19 n] Posici								
20.3	78.0	107.8	9.1												
22.0	76.7	107.4	8.9												
24.0	75.2	106.8	8.5												
26.0	73.7	106.3	8.2												
28.0	72.1	105.6	8.0												
29.4				73.0	105.7	8.0									
30.0	70.5	104.9	7.8	72.5	105.5	8.0									
32.0	68.9	104.2	7.6	71.0	104.9	7.8									
34.0	67.3	103.4	7.4	69.4	104.1	7.6									
36.0	65.7	102.5	7.2	67.8	103.3	7.4									
38.0	64.0	101.5	7.0	66.2	102.4	7.2									
40.0	62.4	100.5	6.9	64.5	101.5	7.1									
42.0	60.7	99.4	6.8	62.9	100.5	6.9									
43.5							65.0	100.9	7.1						
44.0	58.9	98.2	6.6	61.2	99.4	6.8	64.6	100.6	7.1						
46.0	57.2	96.9	6.5	59.4	98.2	6.6	62.9	99.6	7.0						
48.0	55.4	95.5	6.3	57.7	97.0	6.5	61.2	98.5	6.8						
50.0	53.5	94.1	6.2	55.9	95.7	6.4	59.5	97.3	6.7						
55.0	48.7	90.0	6.0	51.3	91.9	6.1	55.0	94.1	6.4						
59.9										55.0	92.1	6.2			
60.0	43.5	85.1	5.8	46.3	87.4	5.9	50.3	90.2	6.1	54.9	92.0	6.2			
65.0	37.8	79.1	5.5	40.8	82.0	5.7	45.3	85.5	5.9	50.2	88.1	6.0			
70.0	31.1	71.7	5.2	34.7	75.5	5.5	39.7	80.0	5.8	45.1	83.4	5.8			
75.0	22.8 16.0	61.6	4.7	27.4	67.0	5.1	33.4	73.1	5.6	39.5	77.8	5.7			
78.0	16.0	52.8	4.4	17.5	E4 E	4.7	25.0	64.1	5.3	22.2	70.9	5.5			
80.0 81.0				17.5 16.5	54.5 53.3	4.7 4.2	25.8	64.1	5.3	33.2	70.9	5.5			
81.0 85.0				10.5	53.3	4.2	16.6	52.5	4.6	25.5	61.8	5.4			
86.9							10.0	32.3	4.0	20.0	01.0	0.4	35.0	66.8	5.3
90.0										16.1	49.9	4.8	30.7	61.9	5.2
95.0										10.1	73.3	7.0	22.2	51.6	5.2
98.0													15.1	42.4	5.1



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

Altura Carga Angu- ode Carga Carga			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de principa	
Cabeza de plumín (1916-1) 80.5 m Plumín 37.0 [m] Posición midfall (1916) 21.0 78.0 110.7 8.2 22.0 77.2 110.5 8.2 22.0 77.8 110.0 7.8 26.0 74.3 109.4 7.6 28.0 72.8 108.8 7.3 30.0 71.3 108.1 7.1 30.3 30.0 71.3 108.1 7.1 30.3 8.2 32.0 69.8 107.4 6.9 71.7 108.0 7.2 34.0 68.2 106.6 6.7 70.2 107.3 7.0 34.0 68.2 106.6 6.7 70.2 107.3 7.0 34.0 68.2 106.6 6.7 70.2 107.3 7.0 34.0 65.1 104.8 6.4 67.1 105.7 6.6 40.0 63.5 103.9 6.2 65.5 104.8 6.4 44.0 60.2 101.7 6.0 62.3 102.8 6.2 44.0 60.2 101.7 6.0 62.3 102.8 6.2 44.0 60.2 101.7 6.0 62.3 102.8 6.2 44.0 60.2 101.7 6.0 62.3 102.8 6.2 65.0 103.6 6.3 48.0 56.9 99.2 5.7 59.0 100.5 5.9 62.4 101.9 6.2 55.0 50.6 93.9 5.4 53.0 95.7 55.5 56.5 97.7 5.7 56.0 40.5 83.9 5.0 43.3 86.6 5.1 47.4 89.7 5.3 51.9 92.0 5.4 61.6 65.0 40.5 83.9 5.0 43.3 86.6 5.1 47.4 89.7 5.7 75.0 27.5 68.8 4.5 31.3 73.2 4.7 36.6 78.4 50. 42.1 82.5 5.0 80.0 45.8 89.4 5.2 48.3 91.5 53.3 4.9 42.3 84.6 5.1 47.2 87.6 5.2 75.0 27.5 68.8 4.5 31.3 73.2 4.7 36.6 78.4 50. 42.1 82.5 5.0 80.0 18.2 56.6 4.0 23.5 53.3 4.9 37.7 80.8 4.9 42.3 84.6 5.1 47.2 87.6 5.2 5.0 80.0 18.2 56.6 4.0 23.5 53.3 4.9 37.7 80.8 4.9 42.3 84.6 5.1 47.2 87.6 5.2 5.0 80.0 18.2 56.6 4.0 23.5 53.3 4.4 30.0 70.6 4.8 36.4 76.2 4.9 81.0 15.7 53.2 4.0 88.0 16.2 53.7 3.8	ce	o de plumín	de rolda- nas	Carga [t]												
220					29.0		eza de p	lumin (1	916-1) 8	0.5 m Pl	umín '	lumín				
24.0 75.8 110.0 7.8 26.0 74.3 109.4 7.6 28.0 72.8 108.8 7.3 30.0 71.3 108.1 7.1 73.0 108.6 7.2 33.0 30.3 30.3 30.0 69.8 107.4 6.9 71.7 108.0 7.2 34.0 68.2 106.6 6.7 70.2 107.3 7.0 30.0 66.7 105.8 6.5 68.7 108.6 6.8 8.8 9.8 9.8 9.8 9.8 107.4 6.9 71.7 108.0 7.2 34.0 66.2 106.6 6.7 70.2 107.3 7.0 3.0 8.8 8.8 9.8 9.8 9.8 9.8 8.6 6.8 8.8 9.8 9.8 9.8 8.6 6.7 102.8 6.6 6.8 8.8 9.8 9.8 9.8 6.2 65.5 104.8 6.4 4.0 60.2 101.7 6.0 62.3 102.8 6.2 4.0 4.0 60.2 101.7 6.0 64.0 103.0 6.3 4.0 4.0 </td <td>21.0</td> <td>78.0</td> <td>110.7</td> <td>8.2</td> <td></td>	21.0	78.0	110.7	8.2												
28.0 72.8 109.8 7.3 30.0 71.3 108.1 7.1 30.3 30.3 108.6 7.2 32.0 69.8 107.4 6.9 71.7 108.0 7.2 34.0 68.2 106.6 6.7 70.2 107.3 7.0 36.0 66.7 105.8 6.5 68.7 106.6 6.8 38.0 65.1 104.8 6.4 67.1 105.7 6.6 42.0 61.9 102.8 6.1 64.0 103.9 6.2 44.7 60.2 101.7 6.0 62.3 102.8 6.2 44.7 60.2 101.7 6.0 62.3 102.8 6.2 48.0 58.6 100.5 5.9 60.7 101.7 6.0 64.0 103.0 6.3 48.0 56.9 39.9 5.4 53.0 95.7 5.5 56.5 97.7 5.7 50.0	22.0	1	110.5	8.2												
28.0																
30.0																
30.3 32.0 69.8 107.4 6.9 71.7 108.0 7.2 71.7 108.0 7.2 71.7 108.0 7.2 71.7 108.0 7.2 71.7 108.0 7.2 71.7					-											
32.0		71.3	108.1	7.1	70.0	400.0	7.0									
34.0 68.2 106.6 6.7 70.2 107.3 7.0 38.0 66.7 105.8 6.5 68.7 106.6 6.8 38.0 65.1 104.8 6.4 67.1 105.7 6.6 40.0 63.5 103.9 6.2 65.5 104.8 6.4 42.0 61.9 102.8 6.1 64.0 103.9 6.3 44.0 60.2 101.7 6.0 62.3 102.8 6.2 44.0 60.2 101.7 6.0 62.3 102.8 6.2 48.0 58.6 100.5 5.9 60.7 101.7 6.0 64.0 103.0 6.3 48.0 56.9 99.2 5.7 59.0 100.5 5.9 60.7 100.8 6.0 55.0 50.6 93.9 5.4 53.0 95.7 5.5 56.5 97.7 5.7 60.0 48.8 89.4 5.2 48.3 91.5 5.3 52.1 94.1 5.5 65.0 40.0		60.0	107.4	6.0												
36.0 66.7 105.8 6.5 68.7 106.6 6.8 38.0 65.1 104.8 6.4 67.1 105.7 6.6 40.0 63.5 103.9 6.2 65.5 104.8 6.4 42.0 61.9 102.8 6.1 64.0 103.9 6.3 44.0 60.2 101.7 6.0 62.3 102.8 6.2 44.7 6.0 62.3 102.8 6.2 65.0 103.6 6.3 44.7 6.0 62.3 102.8 6.2 44.7 6.0 62.3 102.8 6.2 44.7 6.3 44.7 6.0 62.3 102.8 6.2 44.7 6.3 44.7 6.3 44.7 6.3 44.7 6.2 65.0 103.0 6.3 46.0 58.6 100.5 5.9 60.7 101.7 6.0 64.0 103.0 6.2 65.5 65.5 97.7 5.7 5.0 65.5 59.7 5.5 56.5 97.7 5.7														ł		
38.0 65.1 104.8 6.4 67.1 105.7 6.6 40.0 63.5 103.9 6.2 65.5 104.8 6.4 42.0 61.9 102.8 6.1 64.0 103.9 6.3 44.0 60.2 101.7 6.0 62.3 102.8 6.2 65.0 103.6 6.3 44.7 66.0 62.3 102.8 6.2 65.0 103.6 6.3 46.3 44.7 66.2 65.0 103.6 6.3 46.3 46.0 65.0 103.6 6.3 46.3 46.0 65.0 103.6 6.3 46.3 46.0 65.0 66.0 <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<>																
40.0 63.5 103.9 6.2 65.5 104.8 6.4 42.0 61.9 102.8 6.1 64.0 103.9 6.3 44.0 60.2 101.7 6.0 62.3 102.8 6.2 65.0 103.6 6.3 44.7 46.0 58.6 100.5 5.9 60.7 101.7 6.0 64.0 103.0 6.3 48.0 56.9 99.2 5.7 59.0 100.5 5.9 62.4 101.9 6.2 50.0 55.1 97.8 5.6 57.4 99.3 5.8 60.7 100.8 6.0 55.0 55.1 97.8 5.6 57.4 99.3 5.8 60.7 100.8 6.0 55.0 55.1 97.8 5.6 57.4 99.3 5.8 60.7 5.7 5.5 56.5 97.7 5.7 5.7 60.0 45.8 89.4 5.2 48.3 91.5 5.3 52.1 94.1 5.5 55.0 94.6 5.5 65.0 47.4 89.7 5.3 51.9 92.0 5.4 54.0 57.0 50.0																
44.0 60.2 101.7 6.0 62.3 102.8 6.2 65.0 103.6 6.3 46.0 58.6 100.5 5.9 60.7 101.7 6.0 64.0 103.0 6.3 48.0 56.9 99.2 5.7 59.0 100.5 5.9 62.4 101.9 6.2 50.0 55.1 97.8 5.6 57.4 99.3 5.8 60.7 100.8 6.0 55.0 50.6 93.9 5.4 53.0 95.7 5.5 56.5 97.7 5.7 60.0 45.8 89.4 5.2 48.3 91.5 5.3 52.1 94.1 5.5 61.6 65.0 40.5 83.9 5.0 43.3 86.6 5.1 47.4 89.7 5.3 51.9 92.0 5.4 70.0 34.6 77.3 4.9 37.7 80.6 4.9 42.3 84.6 5.1 47.2 87.6 5.2 75.0 27.5 68.8 4.5 31.3 73.2 4.7 36																
44.7 66.0 103.6 63.3 46.0 58.6 100.5 5.9 60.7 101.7 6.0 64.0 103.0 6.3 48.0 56.9 99.2 5.7 59.0 100.5 5.9 62.4 101.9 6.2 50.0 55.1 97.8 5.6 57.4 99.3 5.8 60.7 100.8 6.0 55.0 50.6 93.9 5.4 53.0 95.7 5.5 56.5 97.7 5.7 60.0 45.8 89.4 5.2 48.3 91.5 5.3 52.1 94.1 5.5 61.6 65.0 40.5 83.9 5.0 43.3 86.6 5.1 47.4 89.7 5.3 51.9 92.0 5.4 70.0 34.6 77.3 4.9 37.7 80.6 4.9 42.3 84.6 5.1 47.2 87.6 5.2 75.0 27.5 68.8 4.5 31.3 73.2 4.7 36.6 78.4 5.0 42.1 82.5 5.0	42.0	61.9	102.8	6.1	64.0	103.9	6.3									
46.0 58.6 100.5 5.9 60.7 101.7 6.0 64.0 103.0 6.3 48.0 56.9 99.2 5.7 59.0 100.5 5.9 62.4 101.9 6.2 50.0 55.1 97.8 5.6 57.4 99.3 5.8 60.7 100.8 6.0 55.0 50.6 93.9 5.4 53.0 95.7 5.5 56.5 97.7 5.7 60.0 45.8 89.4 5.2 48.3 91.5 5.3 52.1 94.1 5.5 61.6 65.0 40.5 83.9 5.0 43.3 86.6 5.1 47.4 89.7 5.3 51.9 92.0 5.4 70.0 34.6 77.3 4.9 37.7 80.6 4.9 42.3 84.6 5.1 47.2 87.6 5.2 75.0 27.5 68.8 4.5 31.3 73.2 4.7 36.6 78.4 50.0	44.0	60.2	101.7	6.0	62.3	102.8	6.2									
48.0 56.9 99.2 5.7 59.0 100.5 5.9 62.4 101.9 6.2 50.0 55.1 97.8 5.6 57.4 99.3 5.8 60.7 100.8 6.0 55.0 50.6 93.9 5.4 53.0 95.7 5.5 56.5 97.7 5.7 60.0 45.8 89.4 5.2 48.3 91.5 5.3 52.1 94.1 5.5 61.6 66.0 40.5 83.9 5.0 43.3 86.6 5.1 47.4 89.7 5.3 51.9 92.0 5.4 70.0 34.6 77.3 4.9 37.7 80.6 4.9 42.3 84.6 5.1 47.2 87.6 5.2 75.0 27.5 68.8 4.5 31.3 73.2 4.7 36.6 78.4 5.0 42.1 82.5 5.0 80.0 18.2 56.6 4.0 23.5 63.3 4.4 30.0 70.6 4.8 36.4 76.2 4.9 85.0 88.0 <td></td>																
50.0 55.1 97.8 5.6 57.4 99.3 5.8 60.7 100.8 6.0 55.7 55.0 56.5 97.7 5.7 5.7 60.0 45.8 89.4 5.2 48.3 91.5 5.3 52.1 94.1 5.5 55.0 94.6 5.5 66.0 40.5 83.9 5.0 43.3 86.6 5.1 47.4 89.7 5.3 51.9 92.0 5.4 55.0 70.0 34.6 77.3 4.9 37.7 80.6 4.9 42.3 84.6 5.1 47.2 87.6 5.2 55.0 87.6 5.2 75.0 27.5 68.8 4.5 31.3 73.2 4.7 36.6 78.4 5.0 42.1 82.5 5.0 87.6 4.9 42.3 84.6 5.1 47.2 87.6 5.2 75.0 48.0 48.2 4.9 48.0 48.0 48.0 48.0 48.0 48.0 48.0 48.0 48.0 48																
55.0 50.6 93.9 5.4 53.0 95.7 5.5 56.5 97.7 5.7 5.7 60.0 45.8 89.4 5.2 48.3 91.5 53.0 52.1 94.1 5.5 55.0 94.6 5.5 55.0 66.0 5.5 55.0 94.6 5.5 55.0 94.6 5.5 55.0 94.6 5.5 55.0 94.6 5.5 55.0 94.6 5.5 55.0 94.6 5.5 55.0 94.6 5.5 55.0 94.6 5.5 55.0 94.6 5.5 55.0 94.6 5.5 55.0 92.0 5.4 47.2 87.6 5.2 75.0 27.5 68.8 4.5 31.3 73.2 4.7 36.6 78.4 5.0 42.1 82.5 5.0 88.0 88.0 84.0 15.7 53.2 4.0 44.2 36.6 78.4 5.0 48.4 4.8 48.8 4.8 48.8 4.8 4.8 4.8 <td></td>																
60.0 45.8 89.4 5.2 48.3 91.5 5.3 52.1 94.1 5.5 55.0 94.6 5.5 61.6 65.0 40.5 83.9 5.0 43.3 86.6 5.1 47.4 89.7 5.3 51.9 92.0 5.4 70.0 34.6 77.3 4.9 37.7 80.6 4.9 42.3 84.6 5.1 47.2 87.6 5.2 75.0 27.5 68.8 4.5 31.3 73.2 4.7 36.6 78.4 5.0 42.1 82.5 5.0 80.0 18.2 56.6 4.0 23.5 63.3 4.4 30.0 70.6 4.8 36.4 76.2 4.9 81.0 15.7 53.2 4.0 16.2 53.7 3.8 21.6 60.0 4.7 29.7 68.4 4.8 88.0 89.4 4 4.8 4.8 4.8 4.8 4.6 99.0 <td></td>																
61.6 65.0 40.5 83.9 5.0 43.3 86.6 5.1 47.4 89.7 5.3 51.9 92.0 5.4 70.0 34.6 77.3 4.9 37.7 80.6 4.9 42.3 84.6 5.1 47.2 87.6 5.2 75.0 27.5 68.8 4.5 31.3 73.2 4.7 36.6 78.4 50.0 42.1 82.5 50.0 88.0 81.0 15.7 53.2 4.0 16.2 53.7 3.8 21.6 60.0 4.7 29.7 68.4 4.8 89.7 5.3 51.9 92.0 5.4 47.2 87.6 5.2 4.9 82.5 5.0 88.0 88.0 88.0 89.4 90.0 93.0																
65.0 40.5 83.9 5.0 43.3 86.6 5.1 47.4 89.7 5.3 51.9 92.0 5.4 70.0 34.6 77.3 4.9 37.7 80.6 4.9 42.3 84.6 5.1 47.2 87.6 5.2 75.0 27.5 68.8 4.5 31.3 73.2 4.7 36.6 78.4 5.0 42.1 82.5 5.0 80.0 18.2 56.6 4.0 23.5 63.3 4.4 30.0 70.6 4.8 36.4 76.2 4.9 84.0 84.0 85.0 88.0 89.4 16.2 53.7 3.8 21.6 60.0 4.7 29.7 68.4 4.8 89.4 35.0 68.5 4.6 90.0 21.3 57.6 4.8 34.2 67.6 4.6 93.0 15.8 50.4 4.4		45.6	09.4	5.2	46.3	91.5	5.3	52.1	94.1	0.0	55.0	04.6	5.5			
70.0 34.6 77.3 4.9 37.7 80.6 4.9 42.3 84.6 5.1 47.2 87.6 5.2 75.0 27.5 68.8 4.5 31.3 73.2 4.7 36.6 78.4 5.0 42.1 82.5 5.0 80.0 18.2 56.6 4.0 23.5 63.3 4.4 30.0 70.6 4.8 36.4 76.2 4.9 81.0 15.7 53.2 4.0 16.2 53.7 3.8 21.6 60.0 4.7 29.7 68.4 4.8 88.0 89.4 16.3 52.9 4.2 35.0 68.5 4.6 90.0 93.0 15.8 50.4 4.4 4.4 4.8 34.2 67.6 4.6		40.5	83.0	5.0	43.3	86.6	5.1	47.4	80.7	5.3						
75.0 27.5 68.8 4.5 31.3 73.2 4.7 36.6 78.4 5.0 42.1 82.5 5.0 80.0 18.2 56.6 4.0 23.5 63.3 4.4 30.0 70.6 4.8 36.4 76.2 4.9 81.0 15.7 53.2 4.0 16.2 53.7 3.8 21.6 60.0 4.7 29.7 68.4 4.8 88.0 88.0 89.4 16.3 52.9 4.2 35.0 68.5 4.6 90.0 93.0 21.3 57.6 4.8 34.2 67.6 4.6																
81.0 15.7 53.2 4.0 84.0 85.0 85.0 21.6 60.0 4.7 85.0 4.2 89.4 35.0 68.5 90.0 21.3 57.6 4.8 93.0 34.2 67.6 4.6 15.8 50.4 4.4																
84.0 16.2 53.7 3.8 21.6 60.0 4.7 29.7 68.4 4.8 88.0 89.4 16.3 52.9 4.2 35.0 68.5 4.6 90.0 21.3 57.6 4.8 34.2 67.6 4.6 93.0 15.8 50.4 4.4	80.0	18.2	56.6	4.0	23.5	63.3	4.4	30.0	70.6	4.8	36.4	76.2	4.9			
85.0 88.0 88.0 16.3 89.4 35.0 90.0 21.3 57.6 4.8 34.2 67.6 4.6 15.8 50.4 4.4	81.0	15.7	53.2	4.0												
88.0 89.4 90.0 21.3 57.6 4.8 34.2 67.6 4.6 93.0 15.8 50.4 4.4					16.2	53.7	3.8									
89.4 35.0 68.5 4.6 90.0 21.3 57.6 4.8 34.2 67.6 4.6 93.0 15.8 50.4 4.4											29.7	68.4	4.8			
90.0 93.0 21.3 57.6 4.8 34.2 67.6 4.6								16.3	52.9	4.2						
93.0					-						04.0	57.0	4.0			
											-			34.2	67.6	4.6
					l						15.6	50.4	4.4	27 1	58.0	4.6
100.0					i											
101.0					I											



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 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	al, Punto blumín (1 n] Posici	916-1) 8	3.5 m Pl	eza de p umín	lumín				
21.6 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 74.9 73.4 72.0 70.5 69.0 67.6 66.0 64.5	113.6 113.5 113.1 112.5 111.9 111.3 110.6 109.8 109.0 108.1 107.2	7.4 7.4 7.1 6.9 6.7 6.5 6.3 6.1 6.0 5.8 5.7	73.0 72.4 70.9 69.5 68.0 66.5	111.5 111.2 110.5 109.8 109.0 108.1	6.5 6.5 6.4 6.2 6.0 5.9									
42.0 44.0 46.0 48.0 50.0 55.0	63.0 61.4 59.8 58.2 56.6 52.3	106.2 105.1 104.0 102.7 101.4 97.8	5.6 5.5 5.3 5.2 5.1 4.9	65.0 63.4 61.9 60.3 58.7 54.5	107.2 106.2 105.2 104.0 102.8 99.5	5.7 5.6 5.5 5.4 5.2 5.0	65.0 63.5 61.9 57.9	106.3 105.3 104.3 101.3	5.7 5.6 5.5 5.2						
60.0 63.3 65.0	47.8 42.9	93.5	4.9	50.1	99.5 95.5 90.9	4.8	53.7	97.8	5.0	55.0 53.5	97.0 95.8	4.9			
70.0 75.0 80.0 84.0	37.5 31.3 23.8 15.4	82.4 75.0 65.2 53.6	4.2 4.0 3.7 3.4	40.3 34.6 27.9	85.4 78.8 70.4	4.4 4.2 4.0	44.5 39.3 33.4	89.0 83.3 76.4	4.6 4.4 4.3	49.1 44.3 39.1	91.7 86.9 81.2	4.7 4.5 4.3			
85.0 87.0 90.0 91.0 91.8				19.1 15.9	58.6 54.1	3.7 3.2	26.4 16.9 16.0	67.5 54.7 53.4	4.1 4.0 3.5	33.2 26.1	74.2 65.2	4.2	35.0	70.2	4.0
95.0 96.0 100.0 104.0										16.5 15.5	52.1 50.8	4.1 3.6	30.9 23.2 16.2	65.2 55.2 45.6	4.0 4.0 3.5



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

		gulo de 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 ı	m Pluma Cab	eza de p	II, Punto Ilumín (1 1] Posici	916-1) 8(6.5 m Plı	eza de p umín	lumín				
22.2 24.0 26.0 28.0 30.0 32.0	78.0 76.8 75.4 74.0 72.6 71.2	116.6 116.1 115.6 115.1 114.5	6.7 6.6 6.3 6.2 6.0	73.0	114.3	5.9									
34.0 36.0 38.0 40.0 42.0	69.8 68.4 66.9 65.5 64.0	113.1 112.3 111.4 110.5 109.6	5.7 5.5 5.4 5.2 5.1	71.6 70.2 68.8 67.4 65.9	113.7 113.0 112.2 111.4 110.5	5.9 5.7 5.5 5.4 5.3									
44.0 46.0 47.3 48.0 50.0	62.5 61.0 59.4 57.9	108.5 107.4 106.3 105.0	5.0 4.9 4.8 4.7	64.4 62.9 61.4 59.9	109.6 108.6 107.5 106.3	5.1 5.0 5.0 4.8	65.0 64.5 63.0	109.0 108.7 107.7	5.1 5.1 5.1						
55.0 60.0 65.0 70.0	53.8 49.6 45.0 40.0	101.6 97.5 92.8 87.3	4.5 4.3 4.0 3.8	55.9 51.8 47.4 42.7	103.1 99.4 95.1 90.0	4.6 4.4 4.1 3.9	59.1 55.2 51.0 46.5	104.8 101.6 97.7 93.3	4.8 4.5 4.4 4.2	55.0 50.8	99.5 95.6	4.4 4.3			
75.0 80.0 85.0 87.0 90.0	34.5 28.0 19.6 15.1	80.6 72.2 60.6 54.0	3.6 3.4 3.1 3.0	37.4 31.5 24.3	83.9 76.5 66.9 54.5	3.7 3.6 3.4	41.7 36.4 30.3	88.0 81.7 74.0	4.0 3.8 3.6 3.5	46.3 41.5 36.2 30.0	91.2 85.9 79.5	4.1 3.9 3.8			
94.0 94.3 95.0 99.0 100.0							15.7	53.8	2.9	22.3 15.2	61.3 51.2	3.5	35.0 34.1 27.6	71.9 70.9 62.3	3.5 3.5 3.5
105.0 107.0													19.0 15.9	50.5 46.0	3.5 3.0



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]: 124.0 52.6 Lastre central [t]:

		gulo de orincipa		ı	gulo de principa	pluma I		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 (19 n] Posici	916-1) 8	9.5 m Pl		lumín				
22.8	78.0	119.5	5.9												
24.0	77.2	119.2	5.9												
26.0	75.9	118.7	5.6												
28.0	74.6	118.2	5.5												
30.0	73.2	117.6	5.3												
32.0	71.9	117.0	5.1												
32.9				73.0	117.2	5.2									
34.0	70.5	116.3	5.0	72.3	116.9	5.2									
36.0	69.1	115.5	4.9	70.9	116.2	5.0									
38.0	67.8	114.7	4.7	69.5	115.4	4.9 4.8									
40.0 42.0	66.4 64.9	113.8 112.9	4.6 4.5	68.2 66.8	114.6 113.8	4.8 4.6									
42.0 44.0	63.5	111.9	4.5	65.3	112.9	4.6									
46.0	62.1	110.9	4.3	63.9	111.9	4.5									
48.0	60.6	109.7	4.2	62.5	110.9	4.4									
48.5	00.0	103.7	7.2	02.0	110.5	7.5	65.0	111.7	4.4						
50.0	59.1	108.6	4.0	61.0	109.8	4.2	64.0	111.0	4.4						
55.0	55.2	105.3	3.8	57.2	106.7	3.9	60.3	108.3	4.1	i			i		
60.0	51.2	101.5	3.6	53.3	103.2	3.7	56.5	105.2	3.9	i			i		i i
65.0	46.9	97.1	3.4	49.2	99.1	3.5	52.5	101.6	3.7						
66.7										55.0	101.9	3.7			
70.0	42.3	91.9	3.2	44.7	94.4	3.3	48.3	97.4	3.5	52.4	99.5	3.6			
75.0	37.2	85.8	3.0	39.9	88.8	3.2	43.8	92.5	3.4	48.2	95.3	3.5			
80.0	31.5	78.3	2.9	34.6	82.1	3.0	38.9	86.7	3.2	43.7	90.3	3.3			
85.0	24.5	68.7	2.7	28.3	73.8	2.8	33.4	79.7	3.1	38.7	84.5	3.2			
90.0	16.4	56.7	2.2	20.4	62.5	2.7	27.0	71.0	2.9	33.2	77.5	3.1			
93.0				15.3	54.9	2.2									
95.0							18.5	58.8	2.8	26.7	68.7	2.9			
96.7													35.0	73.7	2.9
97.0				-			15.4	54.2	2.3	40.4	50.0	0.0	24.4	00.5	0.0
100.0										18.1	56.3	2.8	31.1	68.5	2.9
101.0 105.0				l						15.9	52.9	2.8	24.1	58.8	2.8
1105.0				l									24.1 15.6	58.8 46.4	2.8
110.0													13.0	40.4	4.4



N° de ident.: 9842523/95738/

Radio de descarga:

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

2821-1 2821-1

ce o de de plumín rolda-nas [°] nas [m] o de plumín rolda-nas [m] o de plumín [°] nas [m] o de plumín rolda-nas [m] o de plumín [m] o de plumín rolda-nas [m] o de plumín [m] o de plumín rolda-nas [m] o de plumín [m] o de plumín rolda-nas [m] o de plumín [m	Carga Ángu- [t] o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
Cabeza de plumín (1916-1) 92.5 m Plumín	-		
49.0 [m] Posición midfall (1916)			
23.5 78.0 122.4 5.3			
24.0 77.7 122.3 5.3			
26.0 76.4 121.8 5.1			
28.0 75.1 121.3 4.9			
30.0 73.8 120.7 4.7			
32.0 72.5 120.1 4.6			
33.8 73.0 120.1 4.6			
34.0 71.2 119.4 4.4 72.9 120.0 4.6			
36.0 69.9 118.7 4.3 71.6 119.4 4.5			
38.0 68.5 117.9 4.2 70.2 118.6 4.3			
40.0 67.2 117.1 4.0 68.9 117.9 4.2			
42.0 65.8 116.2 3.9 67.6 117.1 4.1			
44.0 64.4 115.3 3.8 66.2 116.2 4.0			
46.0 63.0 114.3 3.7 64.8 115.3 3.8			
48.0 61.6 113.2 3.6 63.4 114.3 3.7			
49.8 65.0 114.5 3.8			
50.0 60.2 112.1 3.5 62.0 113.2 3.7 64.9 114.4 3.8			
55.0 56.5 108.9 3.3 58.4 110.3 3.4 61.4 111.8 3.6			
60.0 52.7 105.3 3.1 54.7 106.9 3.2 57.7 108.8 3.4			
65.0 48.7 101.1 2.9 50.8 103.1 3.0 54.0 105.3 3.2			
	3.1		
	3.1		
	2.9		
	2.8		
	2.7		
	2.6		
	2.5	75.4	0.4
99.2	35.0 2.4 34.1	75.4 74.2	2.4 2.4
100.0	2.4 34.1	65.7	2.4



N° de ident.: 9842523/95738/

Radio de descarga:

360 °

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

Valor de vuelco: 2 - Vía ancha Lastre trasero [t]: 124.0

Lastre central [t]: 52.6

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de principa		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 ו		eza de p	ıl, Punto lumín (1 ı] Posici	916-1) 9	5.5 m Pl		lumín		-		
24.1	78.0	125.4	4.9												
26.0	76.8	124.9	4.8												
28.0	75.6	124.4	4.6												
30.0	74.3	123.9	4.5												
32.0	73.1	123.3	4.3												
34.0	71.8	122.6	4.1												
34.7				73.0	122.9	4.2									
36.0	70.5	121.9	4.0	72.2	122.5	4.2									
38.0	69.2 67.9	121.2	3.9	70.9	121.8	4.1							ł		
40.0 42.0	66.6	120.4 119.5	3.8	69.6 68.3	121.1 120.3	3.9									
42.0 44.0	65.3	119.5	3.7	67.0	120.3	3.8									
44.0 46.0	64.0	118.6	3.5	65.7	119.5	3.7							ł		
46.0 48.0	62.6	116.6	3.5	64.3	117.6	3.5							ł		
50.0	61.2	115.5	3.3	63.0	116.6	3.4									
51.1	01.2	110.0	0.0	03.0	110.0	0.4	65.0	117.2	3.5						
55.0	57.7	112.5	3.0	59.5	113.8	3.2	62.3	115.2	3.4						
60.0	54.1	109.1	2.8	56.0	110.6	2.9	58.9	112.3	3.2						
65.0	50.2	105.1	2.6	52.2	106.9	2.7	55.3	109.0	2.9				i		
70.0	46.2	100.6	2.3	48.3	102.7	2.5	51.5	105.3	2.7						
70.2										55.0	106.9	2.8			
75.0							47.5	100.9	2.5	51.4	103.2	2.7			
80.0										47.4	98.8	2.4			



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 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]
				32.0 r		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 3	8.5 m Pl	eza de p umín	lumín				
12.3	78.0	72.6	64.3												
13.0	76.9	72.4	64.3												
14.0	75.4	72.2	59.9												
16.0	72.3	71.6	50.9												
18.0	69.1	70.8	43.8												
18.4				73.0	71.4	53.7									
20.0	65.8	70.0	36.8	70.4	70.8	51.5									
22.0	62.5	69.0	31.7	67.2	70.0 69.1	46.4									
24.0 26.0	59.1 55.5	67.8 66.5	28.2 25.2	63.9 60.5	68.0	40.3 36.0									
26.0	55.5	00.5	25.2	60.5	68.0	36.0	65.0	68.4	37.1						
28.0	51.8	65.0	22.9	57.0	66.8	32.0	64.7	68.3	37.1						
30.0	47.8	63.2	21.2	53.4	65.3	28.8	61.3	67.3	35.1						
32.0	43.6	61.2	19.6	49.5	63.7	26.4	57.8	66.1	33.2	i					
34.0	39.0	58.9	18.3	45.4	61.8	24.1	54.2	64.7	31.0						
36.0	33.9	56.1	17.2	41.0	59.6	22.1	50.4	63.1	29.3						
38.0	28.0	52.6	16.3	36.1	57.0	20.5	46.4	61.2	27.6	l					
38.8										55.0	62.9	24.5			
40.0	20.5	48.0	15.3	30.6	53.9	19.2	42.0	59.1	26.1	52.9	62.0	25.2			
41.0	15.4	44.8	14.8												
42.0				23.9	49.9	17.8	37.3	56.6	24.8	49.0	60.4	23.7			
44.0				16.4	45.1	15.1	31.9	53.7	23.4	44.9	58.4	22.7			
46.0							25.6	49.9	21.8	40.4	56.2	21.6			
48.0							17.1	44.5	20.1	35.5	53.6	20.8			
50.0										29.9	50.4	20.0			
53.0										18.6	43.4	18.7			
57.1													35.0	46.5	14.0
60.0													27.0	41.9	14.3
63.0													15.7	34.8	12.6



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

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

		gulo de principal			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]
				32.0 ı	n Pluma	principa	I, Punto	de carga	1 - Cab	eza de p	lumín		_		-
					Cab		lumín (2: 1] Posici			umin					
12.9	78.0	75.5	58.2												
13.0	77.9	75.5	58.2												
14.0	76.4	75.3	57.3												
16.0	73.6	74.7	50.7												
18.0	70.7	74.0	42.6												
19.2				73.0	74.3	49.3									
20.0	67.7	73.2	36.7 31.3	71.9	74.0 73.3	49.2									
22.0 24.0	64.7 61.5	72.3 71.3	27.5	68.9 65.9	73.3 72.4	44.9 40.4									
26.0	58.3	70.1	24.8	62.9	72.4	36.0							ł		
28.0	55.0	68.7	22.6	59.7	70.3	32.5									
29.0	33.0	00.7	22.0	55.7	70.5	32.3	65.0	71.1	30.1						
30.0	51.5	67.2	20.8	56.4	69.0	29.1	63.6	70.7	34.7				i		
32.0	47.8	65.5	19.3	53.0	67.6	26.4	60.4	69.6	32.3				Ī		
34.0	44.0	63.5	18.0	49.4	65.9	24.2	57.2	68.3	30.5						
36.0	39.7	61.2	16.8	45.6	64.0	22.2	53.8	66.9	28.6						
38.0	35.1	58.5	15.8	41.6	61.9	20.5	50.2	65.3	27.2						
40.0	29.9	55.3	15.0	37.1	59.4	18.9	46.5	63.5	25.7				!		
40.5										55.0	65.3	23.0			
42.0	23.6	51.1	14.2	32.2	56.4	17.7	42.5	61.4	24.3	52.6	64.3	23.6			
44.0	16.6	46.4	12.6	26.4	52.7	16.6	38.2	59.0	23.2	49.0	62.6	22.2			
46.0				19.0	47.7	15.4	33.4	56.1	22.0	45.1	60.7	21.2			
47.0				15.7	45.5	14.1	07.0	50.0	00.5	44.0	50.5	00.0			
48.0 50.0							27.8 20.9	52.6 48.0	20.5 19.0	41.0 36.6	58.5 55.9	20.3 19.6			
50.0							16.4	48.0 45.0	19.0	30.0	55.9	19.6			
51.0 55.0							10.4	45.0	10.3	22.1	46.8	17.6			
56.0										17.9	43.9	17.0			
59.5										17.0	70.0	11.2	35.0	48.2	13.2
60.0													34.4	47.9	14.0
65.0													18.4	37.5	12.5
66.0													15.1	35.2	11.6



2821-1

2821-1

N° de ident.: 9842523/95738/

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

23/95738/ Pieza de articulación de pluma principal: 360 ° Cabeza de pluma principal:

		gulo de principa			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]
				32.0 ı	m Pluma Cab	eza de p	II, Punto Ilumín (2 1] Posici	316-1) 4	4.5 m Pli	eza de p umín	lumín				
13.5	78.0	78.5	53.1												
14.0	77.4	78.4	53.1												
16.0 18.0	74.7 72.0	77.8 77.2	48.8 42.3												
20.0	69.3	76.5	36.6												
20.1	00.0	70.5	30.0	73.0	77.2	45.8									
22.0	66.5	75.6	31.3	70.4	76.5	43.9									
24.0	63.6	74.7	27.1	67.7	75.7	40.6									
26.0	60.7	73.6	24.3	64.8	74.8	36.2									
28.0	57.7	72.4	22.2	61.9	73.8	32.9									
30.0	54.5	71.0	20.5	59.0	72.6	29.7									
30.3	-10		40.4		74.0	00.7	65.0	73.9	32.7						
32.0 34.0	51.3 47.9	69.4 67.7	19.1 17.9	55.9 52.7	71.3 69.8	26.7 24.4	62.6 59.6	73.0 71.9	32.0 29.9						
36.0	44.2	65.7	16.7	49.3	68.1	22.5	56.6	71.9	28.2						
38.0	40.4	63.5	15.6	45.8	66.3	20.7	53.4	69.2	26.6						
40.0	36.1	60.9	14.7	42.0	64.1	19.1	50.1	67.5	25.4						
42.0	31.4	57.8	14.0	38.0	61.7	17.7	46.6	65.7	24.1						
42.2										55.0	67.8	21.4			
44.0	25.9	54.0	13.2	33.5	58.8	16.6	42.9	63.7	22.8	52.3	66.5	22.1			
46.0	19.0	49.0	12.5	28.4	55.4	15.6	38.9	61.3	21.7	48.9	64.8	20.8			
47.0	16.0	46.8	11.4												
48.0				22.2	51.0	14.6	34.5	58.5	20.7	45.4	62.9	19.9			
50.0 54.0				15.2	45.9	12.8	29.6 15.8	55.3 45.4	19.4 16.8	41.6	60.8	19.1			
55.0							15.8	45.4	16.8	30.4	53.7	17.4			
55.0 59.0										30. 4 17.2	55.7 44.3	17.4			
62.0										11.2	77.5	10.0	35.0	50.0	12.3
65.0													28.0	45.3	12.4
68.0													17.8	38.0	11.6



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 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]
				32.0 ו		eza de p	ıl, Punto llumín (2 ı] Posici	316-1) 4	7.5 m Pli	eza de p umín	lumín				
14.2	78.0	81.4	48.5												
16.0	75.7	81.0	46.8												
18.0	73.2	80.4	42.1												
20.0	70.6	79.7	35.6												
21.0				73.0	80.0	42.3									
22.0	68.1	78.9	31.1	71.7	79.7	42.2									
24.0	65.4	78.0	27.1	69.1	78.9	38.9									
26.0 28.0	62.7 60.0	77.0 75.9	24.0 21.9	66.5 63.9	78.1 77.2	35.9 32.5									
30.0	57.1	75.9 74.6	20.1	61.1	77.2 76.1	30.1									
31.6	37.1	74.0	20.1	01.1	70.1	30.1	65.0	76.6	30.8						
32.0	54.2	73.2	18.6	58.3	74.9	27.0	64.5	76.4	30.8						
34.0	51.1	71.7	17.4	55.4	73.5	24.4	61.7	75.3	29.4						
36.0	47.9	69.9	16.3	52.4	72.1	22.4	59.0	74.2	27.7						
38.0	44.5	68.0	15.3	49.3	70.4	20.7	56.1	72.9	26.2						
40.0	40.9	65.7	14.3	45.9	68.5	19.1	53.1	71.4	24.8						
42.0	37.0	63.2	13.5	42.4	66.4	17.7	50.0	69.8	23.7						
43.9										55.0	70.3	20.2			
44.0	32.7	60.3	12.8	38.7	64.0	16.4	46.7	68.0	22.4	55.0	70.3	21.1			
46.0	27.8	56.8	12.1	34.6	61.3	15.4	43.3	65.9	21.3	52.0	68.8	20.6			
48.0	22.0	52.3	11.5	30.0	58.0	14.5	39.6	63.6	20.2	48.9	67.1	19.5			
50.0	15.4	47.2	10.0	24.6	54.0	13.6	35.5	60.9	19.3	45.5	65.2	18.7			
52.0				17.7	48.7	12.6									
55.0							22.9	51.7	16.4	36.2	59.3	16.9			
57.0							15.3	45.7	15.2	00.0	50.4	45.0			
60.0 62.0										23.9 16.7	50.4 44.8	15.2 14.4			
62.0 64.5										10.7	44.8	14.4	35.0	51.7	11.4
65.0													34.3	51.7 51.2	12.1
70.0													21.0	41.4	10.8
71.0													17.2	38.4	10.5



N° de ident.: 9842523/95738/

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

Valor de vuelco: Lastre trasero [t]:

Lastre central [t]:

2 - Vía ancha 124.0

52.6

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]
				32.0 ו	m Pluma Cab	eza de p	al, Punto dumín (2 n] Posici	316-1) 5	0.5 m Pl	eza de p umín	lumín		-		
14.8	78.0	84.3	44.9												
16.0	76.6	84.1	44.6												
18.0	74.2	83.5	41.0												
20.0	71.8	82.9	35.4												
21.9				73.0	82.9	39.6									
22.0	69.4	82.1	30.7	72.8	82.8	39.6									
24.0	67.0	81.3	27.0	70.4	82.2	38.2									
26.0	64.5	80.4	24.0	68.0	81.4	35.5									
28.0	61.9	79.4	21.7	65.5	80.5	32.5									
30.0	59.3	78.2	20.0	63.0	79.5	29.8									
32.0	56.6	76.9	18.4	60.4	78.4	27.6									
32.8							65.0	79.3	28.6						
34.0	53.8	75.5	17.1	57.7	77.2	24.9	63.6	78.7	29.1						
36.0	50.9	73.9	16.1	55.0	75.8	22.6	61.0	77.7	27.2						
38.0	47.9	72.2	15.1	52.1	74.3	20.8	58.3	76.5	25.9						
40.0	44.7	70.2	14.1	49.2	72.6	19.3	55.6	75.1	24.4						
42.0	41.4	68.0	13.2	46.1	70.8	17.8	52.8	73.7	23.2						
44.0	37.8	65.6	12.5	42.8	68.7	16.5	49.9	72.0	22.2	0	-0 -	40.0			
45.6		00.7	44.0	20.0	00.0	45.4	40.0	70.0	04.4	55.0	72.7	18.9			
46.0	33.8 29.4	62.7	11.8	39.3 35.5	66.3	15.4	46.8	70.2 68.2	21.1	54.7	72.5 71.0	19.8	-		-
48.0	29.4	59.4 55.3	11.3 10.7	35.5	63.6	14.4	43.6		20.0	51.8	71.0 69.3	19.2 18.3			
50.0 52.0	17.8	55.3 49.9	10.7 10.1	31.3	60.5	13.6	40.1	65.9	19.0	48.8	69.3	18.3			
52.0 55.0	17.8	49.9	10.1	17.1	49.1	11.5	30.1	58.6	16.7	40.7	64.2	16.5	l		
60.0				17.1	49.1	11.5	16.2	58.6 47.4	13.3	40.7 30.8	57.0	15.0			
65.0							10.2	47.4	13.3	16.1	45.2	13.2			-
66.9										10.1	45.2	13.2	35.0	53.4	10.6
70.0													35.0 28.7	53.4 48.7	10.6
74.0													15.4	37.7	9.4



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]
				32.0 ו		eza de p	al, Punto dumín (2 n] Posici	316-1) 5	3.5 m Pl	eza de p umín	lumín				
15.4	78.0	87.3	40.7												
16.0	77.3	87.1	40.7												
18.0	75.1	86.6	38.7												
20.0	72.9	86.0	35.1												
22.0	70.6	85.3	29.9	70.0	05.0	00.4									
22.7		04.0	00.4	73.0	85.8	36.1									
24.0 26.0	68.3 66.0	84.6 83.7	26.4 23.6	71.6 69.3	85.3 84.6	35.9 33.8				ł					
28.0	63.6	82.7	23.6	67.0	83.8	31.9				ł					
30.0	61.2	81.7	19.6	64.6	82.9	29.3									
32.0	58.7	80.5	18.1	62.2	81.8	27.3									
34.0	56.1	79.2	16.8	59.8	80.7	25.1									
34.1	00.1	70.2	10.0	00.0	00.1	20.1	65.0	82.0	27.5	i			i		
36.0	53.5	77.7	15.6	57.2	79.4	22.7	62.8	81.1	26.9	İ			İ		
38.0	50.8	76.2	14.7	54.6	78.1	20.7	60.3	80.0	25.3						
40.0	47.9	74.4	13.8	51.9	76.5	19.0	57.8	78.7	24.1						
42.0	44.9	72.5	12.9	49.1	74.9	17.6	55.2	77.4	22.7						
44.0	41.8	70.3	12.1	46.2	73.0	16.3	52.6	75.9	21.6						
46.0	38.4	67.9	11.4	43.1	70.9	15.2	49.8	74.3	20.7						
47.4										55.0	75.2	17.8			
48.0	34.8	65.1	10.8	39.9	68.6	14.1	46.9	72.4	19.6	54.3	74.8	18.5			
50.0	30.8	61.9	10.3	36.3	66.0	13.2	43.8	70.4	18.6	51.6	73.3	18.0			
55.0	17.2	50.4	9.0	25.8	57.5 49.5	11.3 10.2	35.3	64.2	16.5	44.3	68.6	16.1			
58.0 60.0				16.6	49.5	10.2	24.4	55.3	14.1	35.9	62.6	14.7			
63.0							15.8	47.8	12.1	33.9	02.0	14.7			
65.0							13.0	47.0	12.1	25.1	53.9	13.1			
68.0										15.7	45.6	12.1			
69.4							Ī						35.0	55.1	9.9
70.0													34.2	54.5	10.1
75.0													22.0	44.4	8.8
77.0													17.4	40.4	8.4



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

Valor de vuelco: 2 - Vía ancha Lastre trasero [t]: 124.0 Lastre central [t]: 52.6 Pieza de articulación de pluma principal: 2821-1 Cabeza de pluma principal: 2821-1

		gulo de orincipal			gulo de orincipa			gulo de principa		65° Án I	gulo de principa	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]
				32.0 ı	m Pluma Cab	eza de p	al, Punto dumín (2: n] Posici	316-1) 5	6.5 m Pl		lumín		-		
16.0 18.0 20.0 22.0 23.6	78.0 75.9 73.8 71.7	90.2 89.7 89.2 88.5	37.4 36.7 34.7 29.7	73.0	88.6	33.3									
24.0 26.0 28.0 30.0 32.0	69.5 67.4 65.1 62.9 60.5	87.8 87.0 86.1 85.1 84.0	25.9 23.3 21.1 19.4 18.0	72.6 70.5 68.3 66.1 63.8	88.5 87.8 87.0 86.2 85.2	33.2 32.4 31.1 29.1 27.0									
34.0 35.4 36.0 38.0 40.0	58.2 55.7 53.2 50.6	82.8 81.4 80.0 78.4	16.7 15.5 14.5 13.6	61.5 59.2 56.8 54.3	83.0 81.7 80.3	25.4 23.1 21.0 19.2	65.0 64.3 62.1 59.7	84.7 84.4 83.4 82.3	25.9 25.9 25.0 23.6						
42.0 44.0 46.0 48.0 49.1	47.9 45.1 42.1 39.0	76.6 74.7 72.6 70.2	12.8 12.0 11.3 10.7	51.7 49.1 46.3 43.4	78.8 77.1 75.2 73.2	17.7 16.4 15.2 14.2	59.7 57.3 54.9 52.3 49.7	82.3 81.0 79.7 78.1 76.5	22.5 21.3 20.3 19.5	55.0	77.6	16.7			
50.0 55.0 58.0 60.0 61.0	35.6 25.4 16.8	67.5 58.8 50.8	10.1 8.9 8.2	40.3 31.6 19.6 16.2	70.9 63.9 53.2 50.0	13.2 11.3 9.6 9.3	47.0 39.5 30.5	74.7 69.3 62.0	18.4 16.3 14.3	55.0 54.0 47.4 40.0	77.6 77.0 72.9 67.5	17.4 15.8 14.3			
65.0 66.0 70.0 71.0 71.8				10.2	30.0	9.5	17.8 15.3	50.5 48.2	12.0 11.1	31.1 18.8 15.2	60.4 49.3 46.0	13.0 11.5 11.2	35.0	56.9	9.2
75.0 80.0													28.7 16.9	51.6 40.8	8.8 7.6



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		45° Án I	gulo de principa	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]
				32.0 ו	m Pluma Cab	eza de p	al, Punto dumín (2: n] Posici	316-1) 5	9.5 m Pl		lumín				
16.6 18.0 20.0 22.0 24.0 24.5 26.0 28.0 30.0 32.0 34.0 36.0 36.6 38.0	78.0 76.7 74.7 72.7 70.6 68.6 66.5 64.3 62.2 60.0 57.7	93.1 92.8 92.3 91.7 91.0 90.2 89.4 88.5 87.4 86.3 85.1	34.4 34.2 32.6 29.7 25.7 23.0 20.9 19.1 17.7 16.4 15.2	73.0 71.5 69.4 67.3 65.2 63.1 60.9	91.5 91.0 90.3 89.5 88.6 87.6 86.5	30.8 30.6 29.6 28.6 26.6 24.9 23.6	65.0 63.6	87.5 86.8	24.1						
40.0 42.0 44.0 46.0 48.0 50.0 50.8 55.0 60.0 61.0 64.0	53.0 50.5 48.0 45.3 42.5 39.5 31.0 19.5 16.3	82.2 80.6 78.9 76.9 74.8 72.5 65.3 54.4 51.2	13.3 12.5 11.8 11.0 10.4 9.8 8.6 7.5 7.3	56.4 54.0 51.6 49.0 46.4 43.7 36.1 26.7	84.0 82.6 81.0 79.3 77.5 75.4 69.3 61.0	19.4 17.8 16.4 15.3 14.2 13.2 11.1 9.6	61.4 59.2 56.9 54.5 52.1 49.6 42.9 35.1	85.7 84.6 83.3 81.9 80.4 78.7 73.9 67.6	23.3 22.1 21.0 19.9 19.0 18.3 16.0 14.3	55.0 50.0 43.3	80.1 76.9 72.1	15.7 15.5 14.0			
65.0 68.0 70.0 74.0 74.3 75.0 80.0 83.0				13.7	30.4	0.4	25.4 17.3	58.8 50.9	12.2 10.9	35.7 26.1 16.0	65.9 57.4 47.6	12.8 11.4 9.6	35.0 33.7 24.9 16.5	58.6 57.5 49.4 41.2	8.6 8.4 7.3 6.7



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]
				32.0 ı	m Pluma Cab	eza de p	ıl, Punto ılumín (2 ı] Posici	316-1) 6:	2.5 m Pl	eza de p umín	lumín				
17.3 18.0 20.0 22.0 24.0	78.0 77.3 75.4 73.5 71.6	96.1 95.9 95.4 94.8 94.2	31.7 31.7 30.8 29.5 25.6			_									
25.4 26.0 28.0 30.0 32.0	69.6 67.7 65.7 63.6	93.5 92.7 91.8 90.8	22.7 20.6 18.9 17.4	73.0 72.4 70.5 68.5 66.5	94.4 94.2 93.5 92.7 91.9	28.7 28.6 28.3 27.4 26.2									
34.0 36.0 37.9 38.0	61.5 59.4 57.3	89.7 88.6 87.3	16.3 15.1 14.0	64.5 62.4 60.3	90.9 89.9 88.8	24.6 23.3 21.9	65.0 64.9	90.2 90.1	23.3 23.3						
40.0 42.0 44.0 46.0 48.0	55.0 52.8 50.4 48.0 45.4	86.0 84.5 82.9 81.1 79.2	13.1 12.2 11.5 10.9 10.2	58.2 56.0 53.7 51.4 49.0	87.6 86.3 84.8 83.3 81.6	19.9 18.1 16.6 15.4 14.4	62.9 60.8 58.7 56.5 54.2	89.1 88.1 86.9 85.6 84.2	23.0 21.7 20.7 19.7 18.7						
50.0 52.5 55.0 60.0 64.0	35.4 26.3 15.9	77.1 70.8 62.3 51.7	9.6 8.3 7.4 6.6	39.7 31.8	79.7 74.3 67.2	13.4 11.2 9.6	51.9 45.8 38.9	78.2 72.6	17.9 15.9 14.1	55.0 52.3 46.2	82.5 80.8 76.4	14.7 15.2 13.8			
65.0 67.0 70.0 71.0 75.0				21.3 15.3	57.0 50.7	7.6	30.8 19.9 16.9	65.3 54.5 51.4	12.4 10.4 10.0	39.4 31.3 20.7	70.9 63.7 53.2	12.5 11.4 10.1			
76.7 77.0 80.0 85.0 86.0										15.6	48.0	8.8	35.0 30.4 19.2 16.1	56.0 44.9 41.7	7.7 7.0 6.1 5.9



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

		gulo de 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]
				32.0 ı		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 6	5.5 m Pl	eza de p umín	lumín				
17.9	78.0	99.0	28.2												
18.0	77.9	99.0	28.2												
20.0	76.1	98.5	27.7												
22.0	74.3	98.0	26.5												
24.0	72.5 70.6	97.3 96.7	24.4 22.0												
26.0 26.3	70.6	90.7	22.0	73.0	97.2	25.4									
28.0	68.7	95.9	20.3	73.0	97.2 96.7	25.4							ł		
30.0	66.8	95.1	18.5	69.5	95.9	24.6									
32.0	64.9	94.2	17.0	67.6	95.1	24.0									
34.0	63.0	93.2	15.7	65.7	94.2	23.0									
36.0	61.0	92.1	14.7	63.8	93.3	22.1									
38.0	58.9	90.9	13.6	61.8	92.2	21.4							İ		
39.2							65.0	92.9	21.7						
40.0	56.9	89.6	12.7	59.8	91.1	19.9	64.2	92.5	21.7						
42.0	54.7	88.2	11.8	57.7	89.9	18.2	62.3	91.5	21.3						
44.0	52.6	86.7	11.1	55.6	88.5	16.6	60.3	90.4	20.1						
46.0	50.3	85.1	10.5	53.5	87.1	15.2	58.2	89.2	19.3						
48.0	48.0	83.3	9.9	51.3	85.5	14.1	56.1	87.8	18.3						
50.0 54.2	45.6	81.4	9.3	49.0	83.8	13.2	54.0	86.4	17.5	55.0	85.0	13.9			
54.2 55.0	39.0	75.8	8.0	42.8	78.9	11.0	48.3	82.3	15.7	55.0 54.3	85.0 84.5	13.9			
60.0	31.3	68.6	7.0	42.6 35.8	76.9	9.3	46.3 42.1	77.3	13.8	48.7	80.5	13.3	l		
65.0	21.2	58.3	6.1	27.4	64.4	8.0	35.0	70.9	12.3	42.5	75.5	12.1			
67.0	15.5	52.1	5.7			0.0	00.0					<u>-</u>	1		
70.0	15.5			16.1	52.4	6.1	26.3	62.3	10.5	35.5	69.2	11.1			
74.0							16.5	51.8	9.0						
75.0										26.9	60.8	9.9			
79.2													35.0	62.0	6.8
80.0										15.3	48.4	7.9	34.6	61.7	6.7
85.0													25.8	52.9	5.7
89.0													15.7	42.1	5.0



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

Valor de vuelco: 2 - Vía ancha Lastre trasero [t]: 124.0 Lastre central [t]: 52.6 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]
				32.0 ı	m Pluma Cab	eza de p	il, Punto lumín (2 n] Posici	316-1) 6	8.5 m Pl	eza de p umín	lumín				
18.5 20.0 22.0 24.0	78.0 76.7 75.0 73.3	101.9 101.6 101.1 100.5	25.5 25.4 24.2 23.1												
26.0 27.1 28.0 30.0 32.0	71.5 69.7 67.9 66.1	99.8 99.1 98.3 97.5	19.9 18.4 16.9	73.0 72.2 70.5 68.7	100.1 99.8 99.1 98.4	22.9 22.9 22.5 22.0									
34.0 36.0 38.0 40.0 40.4	64.2 62.4 60.5 58.5	96.5 95.5 94.4 93.2	15.5 14.5 13.5 12.5	66.9 65.0 63.2 61.3	97.5 96.6 95.6 94.6	21.5 20.9 20.5 20.1	65.0	95.6	19.9						
42.0 44.0 46.0 48.0	56.5 54.5 52.4 50.2	91.9 90.5 89.0 87.3	11.7 10.9 10.2 9.7	59.3 57.3 55.3 53.3	93.4 92.1 90.8 89.3	18.5 16.9 15.5 14.2	63.6 61.7 59.8 57.8	94.9 93.8 92.7 91.4	20.4 19.8 18.8 18.1						
50.0 55.0 56.0 60.0 65.0	48.0 42.0 35.2 27.0	85.6 80.5 74.1 65.7	9.1 7.8 6.8 5.9	51.1 45.5 39.2 31.9	87.7 83.2 77.6 70.5	13.2 11.1 9.3 8.0	55.8 50.5 44.8 38.5	90.1 86.3 81.7 76.0	17.2 15.5 13.7 12.1	55.0 50.9 45.2	87.5 84.4 79.9	13.1 13.0 11.9			
70.0 73.0 75.0 77.0 80.0	15.2	52.4	5.1	22.7 15.7	60.6 52.8	6.8 5.5	31.1 21.4 16.1	58.3 52.2	9.0 8.3	38.9 31.5 22.1	74.2 67.0 57.0	9.8 8.6			
81.7 82.0 85.0 90.0 92.0										17.0	51.2	8.2	35.0 30.6 20.8 15.3	59.3 48.8 42.5	5.6 4.7 4.4



2821-1

2821-1

N° de ident.: 9842523/95738/ Pieza d

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

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

		gulo de orincipa			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]
				32.0 ı		eza de p	II, Punto Ilumín (2: Il Posicio	316-1) 7	1.5 m Pl		lumín				
19.1	78.0	104.9	23.3						(/				I		
20.0	77.3	104.7	23.3												
22.0	75.6	104.2	22.5												
24.0	74.0	103.6	21.7												
26.0	72.3	103.0	20.3												
28.0	70.6	102.3	19.0	73.0	103.0	21.1									
30.0	68.9	101.6	18.0	71.3	102.3	21.0									
32.0	67.2	100.7	16.4	69.6	101.6	20.6									
34.0	65.4	99.8	15.1	67.9	100.8	20.2									
36.0	63.6	98.9	13.9	66.1	99.9	19.7									
38.0	61.8	97.8	13.0	64.4	99.0	19.2									
40.0	60.0	96.7	12.1	62.6	98.0	18.8									
41.7							65.0	98.3	19.0						
42.0	58.1	95.5	11.3	60.7	96.9	18.3	64.8	98.2	19.0						
44.0	56.2	94.1	10.5	58.9	95.7	16.7	63.0	97.2	18.9						
46.0	54.2	92.7	9.8	57.0	94.4	15.3	61.2	96.1	18.2						
48.0 50.0	52.2 50.1	91.2 89.6	9.2 8.7	55.0 53.0	93.0 91.6	14.1 13.0	59.3 57.4	95.0 93.7	17.4 16.7				ł		
55.0	44.6	84.9	7.5	47.8	91.6 87.4	10.9	57.4 52.5	90.1	14.8						
57.7	44.0	04.9	7.5	47.0	07.4	10.9	32.3	90.1	14.0	55.0	89.9	12.3	i		
60.0	38.6	79.2	6.4	42.1	82.3	9.1	47.2	85.9	13.3	52.8	88.3	12.5			
65.0	31.5	71.9	5.6	35.6	76.0	7.7	41.4	80.7	11.7	47.5	84.1	11.4			
70.0	22.5	61.9	4.8	27.9	67.8	6.6	34.9	74.2	10.5	41.8	78.9	10.3	i		
73.0	15.9	54.1	4.0	27.0	01.0	0.0	04.0	74.2	10.0	41.0	70.0	10.0	i		
75.0	.5.0		.,,0	17.3	55.5	5.5	27.0	65.7	8.9	35.3	72.5	9.5			
76.0				15.4	53.2	4.8									
80.0							15.7	52.6	7.3	27.5	64.2	8.4			
84.1													35.0	65.5	5.3
85.0										16.6	51.6	7.3	34.5	65.0	5.2
90.0													26.5	56.3	4.3
94.0													17.9	46.3	3.7



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 orincipa		1	gulo de orincipa		ı	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]
				32.0 ı	m Pluma Cab	eza de p	ıl, Punto ılumín (2: ı] Posici	316-1) 7	4.5 m Pl	eza de p umín	lumín				
19.8	78.0	107.8	21.8												
20.0	77.8	107.8	21.8												
22.0	76.2	107.3	21.5												
24.0	74.6 73.0	106.8 106.2	20.7 19.7												
26.0 28.0	71.4	105.5	18.4												
28.9	71.4	103.3	10.4	73.0	105.8	20.0									
30.0	69.8	104.8	17.5	72.1	105.5	20.0				i					
32.0	68.1	104.0	16.3	70.5	104.8	19.8				i					İ
34.0	66.5	103.1	14.9	68.8	104.0	19.4									
36.0	64.8	102.2	13.8	67.2	103.2	19.0									
38.0	63.0	101.2	12.8	65.5	102.3	18.5									
40.0	61.3	100.1	12.0	63.8	101.3	18.1									
42.0 43.0	59.5	99.0	11.1	62.0	100.3	17.7	65.0	101.1	18.1						
44.0	57.7	97.7	10.4	60.3	99.2	16.9	64.2	100.6	18.1						
46.0	55.9	96.4	9.7	58.5	98.0	15.5	62.4	99.5	17.8						
48.0	54.0	95.0	9.0	56.6	96.7	14.2	60.7	98.4	17.0	i					
50.0	52.0	93.5	8.5	54.8	95.3	13.1	58.9	97.3	16.3	İ					
55.0	46.9	89.1	7.3	49.9	91.4	10.9	54.3	93.9	14.6						
59.4										55.0	92.4	11.6			
60.0	41.4	83.9	6.2	44.6	86.7	9.1	49.3	89.9	13.2	54.5	92.0	12.0			
65.0	35.1	77.5	5.4	38.8	81.0	7.6	44.0	85.1	11.6	49.6	88.1	11.0			
70.0 75.0	27.6 17.4	69.1 56.8	4.7 4.0	32.1 23.7	73.8 64.2	6.5 5.5	38.1 31.3	79.3 72.0	10.3 9.0	44.3 38.5	83.3 77.6	10.1 9.2			
76.0	17.4	54.5	3.5	23.1	04.2	5.5	31.3	72.0	9.0	36.5	77.0	9.2			
79.0	15.5	04.0	0.0	15.0	53.6	4.3									
80.0					00.0		22.6	61.9	7.6	31.7	70.4	8.4			
83.0							15.4	53.0	6.7						
85.0										23.3	60.6	7.4			
86.6													35.0	67.2	4.6
88.0										16.3	52.0	6.7			
90.0													30.9	62.7	4.1
95.0 97.0													22.1 17.5	52.5 46.8	3.3 3.0
97.0													17.5	40.0	3.0



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 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]
				32.0 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		-		
20.4 22.0 24.0 26.0 28.0	78.0 76.8 75.3 73.7 72.2	110.8 110.4 109.9 109.3 108.7	20.0 19.9 19.1 18.6 17.5			_									
29.8 30.0 32.0 34.0 36.0	70.6 69.0 67.4 65.8	108.0 107.2 106.4 105.5	16.7 16.1 14.8 13.6	73.0 72.8 71.3 69.7 68.1	108.7 108.6 108.0 107.2 106.5	18.3 18.3 18.2 17.8 17.5									
38.0 40.0 42.0 44.0	64.2 62.5 60.8 59.1	103.5 104.6 103.6 102.5 101.3	12.5 11.7 10.9 10.1	66.5 64.9 63.2 61.5	105.6 104.7 103.7 102.6	17.5 17.1 16.6 16.3 16.0									
44.2 46.0 48.0 50.0 55.0 60.0	57.4 55.6 53.8 49.0 43.9	100.0 98.7 97.2 93.2 88.4	9.4 8.8 8.2 7.1 6.0	59.8 58.1 56.3 51.7 46.8	101.5 100.3 99.0 95.3 90.9	15.0 13.9 12.8 10.7 9.0	65.0 63.6 61.9 60.2 55.8 51.2	103.8 102.9 101.9 100.8 97.6 93.8	16.0 16.5 16.2 15.6 14.2 12.8						
61.1 65.0 70.0 75.0 79.0	38.2 31.7 23.6 15.2	82.5 75.3 65.5 54.9	5.1 4.4 3.8 3.0	41.5 35.5 28.4	85.7 79.3 71.2	7.5 6.3 5.4	46.3 40.9 34.8	89.4 84.1 77.5	11.5 10.1 9.0	55.0 51.5 46.6 41.2	94.8 92.0 87.6 82.3	10.9 10.8 9.8 8.9			
80.0 81.0 85.0 86.0 89.0				19.1 16.6	59.6 56.4	4.5 4.3	27.5 17.8 15.1	69.1 56.9 53.4	7.6 6.2 5.9	35.2 27.6	75.9 67.1	7.0	35.0	68.9	3.8
90.0 91.0 95.0 100.0										17.8 15.1	54.8 51.3	6.0 5.8	34.5 27.1 17.2	68.3 59.8 47.2	3.7 3.0 2.3



2821-1

2821-1

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

16.3

56.8

Radio de descarga: 360 °
Valor de vuelco: 2 - Vía ancha

Lastre trasero [t]: 124.0 Lastre central [t]: 52.6

		gulo de principa			gulo de orincipa		75° Án I	gulo de orincipa	pluma I	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]
				32.0	m Pluma Cab	eza de p	al, Punto Jumín (2 n l Posici	316-1) 8	0.5 m Pl	eza de p umín	lumín				
21.0	78.0	113.7	18.5	1					(===;	I					
22.0	77.3	113.5	18.5	i						i					
24.0	75.8	113.0	17.8	l						i					
26.0	74.3	112.4	17.2	i						i					
28.0	72.9	111.8	16.6	i						i					
30.0	71.4	111.2	16.0												
30.6	' ' ' '		10.0	73.0	111.6	16.8				i					
32.0	69.8	110.4	15.4	72.0	111.1	16.8				i					
34.0	68.3	109.7	14.7	70.5	110.4	16.6				İ					
36.0	66.8	108.8	13.4	69.0	109.7	16.2				i					
38.0	65.2	107.9	12.4	67.4	108.9	15.9									
40.0	63.6	106.9	11.4	65.9	108.0	15.5									
42.0	62.0	105.9	10.7	64.3	107.0	15.1				i					
44.0	60.4	104.8	10.0	62.7	106.0	14.8				İ					
45.5							65.0	106.5	14.5	i					
46.0	58.7	103.6	9.3	61.1	104.9	14.6	64.6	106.3	15.1						
48.0	57.0	102.3	8.6	59.4	103.8	13.5	63.1	105.3	15.1	l					
50.0	55.3	100.9	8.0	57.7	102.5	12.6	61.4	104.2	14.8	i		İ			
55.0	50.8	97.1	6.8	53.4	99.1	10.5	57.3	101.2	13.8						
60.0	46.1	92.6	5.8	48.8	95.0	9.0	52.9	97.7	12.5						
62.8										55.0	97.3	10.3			
65.0	40.8	87.3	4.9	43.9	90.1	7.5	48.3	93.5	11.4	53.2	95.8	10.6			
70.0	35.0	80.8	4.2	38.4	84.3	6.2	43.3	88.6	10.1	48.6	91.7	9.5			
75.0	28.1	72.5	3.6	32.2	77.2	5.3	37.8	82.6	8.9	43.6	86.8	8.7			
80.0	19.1	60.8	3.0	24.6	67.8	4.4	31.4	75.3	7.8	38.1	80.9	7.9			
81.0	16.7	57.7	2.9												
	I	I	I		1			1	1		l	I		1	1

23.6

65.5

55.0

6.5 5.0

31.5

15.6

73.3

63.5

52.8

6.9

5.9

52

35.0

31.1 23.2

84.0

85.0

89.0

90.0

91.5

94.0

95.0 100.0 101.0 3.3

2.8 2.2

70.6

66.0 56.1



Nº de ident.: 9842523/95738/

Radio de descarga: 360°

Valor de vuelco: Lastre trasero [t]:

Lastre central [t]:

87.0

90.0

92.0

93.9

95.0

97.0

98.0

2 - Vía ancha 124.0

52.6

16.0

57.2

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

		gulo de orincipal			gulo de orincipa		75° Án I	gulo de principa	pluma I	65° Án I	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]
				32.0		eza de p	al, Punto dumín (2 n] Posici	316-1) 8	3.5 m Pli		lumín				
21.6	78.0	116.6	16.9												
22.0	77.7	116.5	16.9												
24.0	76.3	116.1	16.6												
26.0	74.9	115.5	16.1												
28.0	73.5	115.0	15.7												
30.0	72.0	114.3	15.2												
31.5				73.0	114.4	15.6									
32.0	70.6	113.6	14.7	72.7	114.3	15.6									
34.0	69.1	112.9	14.4	71.2	113.6	15.4									
36.0	67.7	112.1	13.3	69.7	112.9	15.1									
38.0	66.2	111.2	12.2	68.3	112.1	14.9									
40.0	64.6	110.3	11.2	66.8	111.3	14.6									
42.0	63.1	109.3	10.4	65.3	110.4	14.2									
44.0	61.6	108.2	9.8	63.8	109.4	13.9									
46.0	60.0	107.1	9.1	62.2	108.4	13.7									
46.8	l						65.0	109.2	14.0						
48.0	58.4	105.9	8.4	60.6	107.3	13.3	64.1	108.6	14.0						
50.0	56.7 52.5	104.6	7.8	59.0	106.1	12.4	62.6	107.6	13.9						
55.0		101.0	6.6	54.9	102.8	10.4	58.6	104.8	13.2						
60.0	48.0	96.8	5.6	50.6	98.9	8.9	54.5	101.4	12.1	55.0	99.7	0.7			
64.6	40.0	04.0	4.7	40.0		7.4	50.4	07.5	11.1	55.0	99.7 99.5	9.7			
65.0 70.0	43.2 37.9	91.8 85.9	4.7	46.0 41.0	94.4 89.1	6.1	50.1 45.5	97.5 92.9	9.9	54.7 50.4	99.5 95.6	10.0 9.3			
70.0 75.0	37.9	78.6	3.4	41.0 35.4	89.1 82.6	5.1	45.5 40.4	92.9 87.4	9.9 8.7	50.4 45.7	95.6 91.1	9.3 8.5			
80.0	24.4	69.1	2.8	28.8	74.5	4.3	34.7	80.8	7.7	40.7	85.7	7.7			
84.0	16.4	58.1	2.3	20.0	74.5	4.3	34.1	00.0	1.1	40.7	00.1	1.1			
85.0	10.4	30.1	2.5	20.5	63.4	3.4	28.0	72.5	6.5	34.8	78.8	6.6			
65.0				20.5	03.4	3.4	20.0	12.5	0.5	34.0	10.0	0.0			

19.3

60.9

5.2

28.9

20.6

16.2

71.6

60.6

54.4

5.6

4.8

35.0

34.4

2.6

2.5

72.3

71.6

66.8



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 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]
				32.0 ı		eza de p	ıl, Punto ılumín (2: ı] Posici	316-1) 8	6.5 m Pli	eza de p umín	lumín				
22.3	78.0	119.6	15.7												
24.0	76.8	119.2	15.6												
26.0	75.5	118.6	15.2												
28.0	74.1	118.1	14.8												
30.0	72.7	117.5	14.4												
32.0	71.3	116.8	14.0												
32.4				73.0	117.3	14.5									
34.0	69.9	116.1	13.7	71.9	116.8	14.5									
36.0	68.5	115.3	13.2	70.5	116.1	14.2									
38.0	67.0	114.5	12.1	69.1	115.3	14.0									
40.0	65.6	113.6	11.1	67.6	114.5	13.8									
42.0	64.1	112.6	10.3	66.2	113.7	13.5									
44.0	62.6	111.6	9.6	64.7	112.7	13.2									
46.0	61.1	110.5	9.0	63.3	111.8	13.0									
48.0	59.6	109.4	8.3	61.8	110.7	12.8	65.0	111.9	12.5						
50.0	58.0	108.2	7.7	60.2	109.6	12.3	63.6	111.0	13.0						
55.0	54.0 49.8	104.7	6.4	56.3	106.4 102.8	10.3	59.8	108.3 105.1	12.6						
60.0 65.0	49.8 45.3	100.8 96.1	5.4 4.5	52.2 47.9	102.8 98.5	8.8 7.4	55.9 51.8	105.1 101.4	11.8 10.7						
66.3	45.3	90.1	4.5	47.9	90.5	7.4	0.10	101.4	10.7	55.0	102.2	9.1			
70.0	40.4	90.7	3.8	43.2	93.6	6.1	47.4	97.1	9.8	55.0	99.5	9.1			
70.0 75.0	34.9	84.1	3.0	43.2 38.1	93.6 87.7	4.9	47.4 42.7	97.1	9.6 8.6	52.0 47.7	99.5 95.2	8.2			
80.0	28.5	75.9	2.6	32.3	80.5	4.9	42.7 37.5	92.0 86.0	7.6	47.7	95.2	7.4			
85.0	20.5	75.9	2.0	25.3	71.3	3.4	31.6	78.6	6.6	37.6	84.0	6.3			
90.0				25.3 15.7	71.3 57.6	2.6	24.5	69.1	5.4	32.4	77.5	5.4			
95.0				13.7	51.0	2.0	15.1	55.8	3.8	25.5	68.4	4.5			
100.0							13.1	55.0	0.0	15.9	54.9	3.7			



N° de ident.: 9842523/95738/ Pi

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

Valor de vuelco: 2 - Vía ancha Lastre trasero [t]: 124.0 Lastre central [t]: 52.6 Pieza de articulación de pluma principal: 2821-1 Cabeza de pluma principal: 2821-1

		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]
				32.0 ı		eza de p	lumín (2	316-1) 8	9.5 m Pli	eza de p umín	lumín		_		
						43.0 [m] Posici	on midta	11 (2316)						
22.9	78.0	122.5	13.8												
24.0	77.3	122.2	13.8												
26.0	76.0	121.8	13.4												
28.0	74.6	121.2	13.1 12.8												
30.0 32.0	73.3 72.0	120.6 120.0	12.8												
33.3	72.0	120.0	12.5	73.0	120.2	12.7									
33.3 34.0	70.6	119.3	12.2	73.0	120.2	12.7									
36.0	69.2	118.5	11.9	71.2	119.3	12.7									
38.0	67.8	117.7	11.2	69.8	118.6	12.3									
40.0	66.4	116.9	10.3	68.4	117.8	12.0									
42.0	65.0	115.9	9.6	67.0	116.9	11.8									
44.0	63.6	115.0	8.9	65.6	116.0	11.5									
46.0	62.1	113.9	8.3	64.2	115.1	11.3									
48.0	60.7	112.8	7.8	62.7	114.1	11.0									
49.3							65.0	114.6	11.2						
50.0	59.2	111.6	7.2	61.3	113.0	10.9	64.5	114.3	11.2						
55.0	55.3	108.3	5.9	57.5	110.0	9.4	60.9	111.7	10.9						
60.0	51.3	104.6	5.0	53.6	106.5	8.1	57.1	108.6	10.4						
65.0	47.0	100.2	4.1	49.5	102.4	7.1	53.2	105.1	9.6						
68.0										55.0	104.7	8.5			
70.0	42.4	95.0	3.4	45.1	97.7	5.8	49.0	101.0	9.0	53.4	103.2	8.5			
75.0	37.4	88.9	2.7	40.3	92.2	4.7	44.6	96.2	8.0	49.3	99.1	7.7			
80.0	31.6	81.5	2.3	35.0	85.6	3.8 3.1	39.7	90.6	7.0 6.3	44.8	94.4 88.8	7.0 6.0			
85.0 90.0				28.8 21.1	77.4 66.4	2.4	34.3 28.1	83.8 75.4	5.2	40.0 35.3	83.0	5.1			
90.0				17.1	60.5	2.4	20.1	73.4	J.Z	33.3	03.0	J. I			
95.0 95.0				17.1	00.5	Z . 1	20.1	64.0	4.1	29.3	75.0	4.2			
97.0							15.8	57.6	3.6	20.0	7 5.0	7.2			
100.0										21.7	64.3	3.4			
103.0										15.6	55.3	3.0			



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

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

	88° Án I	gulo de principa	pluma l		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]
				32.0 ı		eza de p	lumín (2	316-1) 9:	2.5 m Pl	eza de p umín	lumín				
						46.0 [11] Posici	on midia	11 (2316)						
23.6	78.0	125.4	12.6												
24.0	77.7	125.3	12.6												
26.0	76.4	124.9	12.5												
28.0	75.2	124.3	12.1												
30.0	73.9 72.6	123.8	11.9 11.6												
32.0	71.2	123.1 122.5													
34.0 34.2	/1.2	122.5	11.3	73.0	123.1	11.7									
34.2 36.0	69.9	121.8	11.1	73.0	123.1	11.7									
38.0	68.6	121.0	10.7	70.5	121.8	11.4									
40.0	67.2	120.1	9.9	69.2	121.0	11.1									
42.0	65.9	119.3	9.2	67.8	120.2	10.9									
44.0	64.5	118.3	8.6	66.5	119.3	10.6							i		
46.0	63.1	117.3	8.0	65.1	118.4	10.3							i		
48.0	61.7	116.2	7.6	63.7	117.4	10.1							İ		
50.0	60.3	115.1	7.1	62.3	116.4	9.9									
50.6							65.0	117.4	10.1						
55.0	56.6	112.0	5.8	58.7	113.5	8.9	61.9	115.1	9.9						
60.0	52.8	108.4	4.8	55.0	110.2	7.8	58.3	112.2	9.4						
65.0	48.7	104.2	4.0	51.1	106.4	7.0	54.6	108.8	8.9						
69.7										55.0	107.1	7.9			
70.0	44.4	99.4	3.2	46.9	101.9	5.8	50.6	104.9	8.4	54.8	106.9	7.9			
75.0	39.8	93.8	2.6	42.5	96.8	4.6	46.4	100.4	7.7	50.9	103.1	7.5			
80.0				37.6	90.7	3.7	41.9	95.2	6.8	46.7	98.6	6.8			
85.0				32.1	83.4	3.0	37.0	89.0	6.1	42.2	93.4	5.8			
90.0				25.5	74.2	2.3	31.4	81.5	5.2	37.9	88.0	4.9			
95.0							24.7	72.0	4.2	32.5	80.9	4.0			
100.0							15.5	58.0	3.1	26.1	71.8	3.2			
105.0										17.6	59.1	2.5			
106.0										15.4	55.7	2.4			



N° de ident.: 9842523/95738/

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

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

Color Colo			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Cabeza de plumín (2316-1) 95.5 m Plumín 49.0 [m] Posición midfall (2316) 24.2 78.0 128.4 11.5 28.0 75.6 127.4 11.2 30.0 74.4 126.9 10.9 32.0 73.1 126.3 10.7 3.0 125.9 10.6 33.0 36.0 70.6 124.9 10.2 72.4 125.6 10.6 38.0 89.3 124.2 10.0 71.1 124.9 10.5 40.0 68.0 123.4 94 69.8 124.2 10.2 4.5 48.1 10.4 65.4 121.6 8.2 67.2 122.6 9.8 46.0 64.0 120.7 7.7 65.9 121.7 9.6 46.0 64.0 120.7 7.7 65.9 121.7 9.6 46.0 62.7 119.7 7.2 64.6 120.8 9.3 50.0 61.3 118.6 6.8 63.2 119.8 9.1 65.0 120.1 9.2 55.0 57.8 115.6 5.6 58.8 117.0 8.5 62.9 118.5 9.1 60.0 54.1 112.1 4.5 56.2 113.8 7.4 59.4 115.7 8.7 65.0 50.3 108.2 3.7 52.5 110.2 6.6 55.8 112.5 8.3 6.6 48.0 106.0 5.6 52.1 10.8 8.0 55.0 109.6 7.4 75.0 41.9 98.4 2.3 44.4 101.2 4.5 48.1 10.4 5.6 5.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0	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]
26.0					32.0		eza de p	lumín (2	316-1) 9	5.5 m Pl		lumín				
28.0	24.2															
30.0																
32.0																
34.0																
35.0 70.6 124.9 10.2 72.4 125.6 10.6 38.0 69.3 124.2 10.0 71.1 124.9 10.5 40.0 68.0 123.4 9.4 69.8 124.2 10.2 42.0 66.7 122.5 8.8 68.5 123.4 10.0 44.0 65.4 121.6 8.2 67.2 122.6 9.8 46.0 64.0 120.7 7.7 65.9 121.7 9.6 48.0 62.7 119.7 7.2 64.6 120.8 9.3 50.0 61.3 118.6 6.8 63.2 119.8 9.1 51.8 55.0 57.8 115.6 5.6 59.8 117.0 8.5 62.9 118.5 9.1 60.0 54.1 112.1 4.5 56.2 113.8 7.4 59.4 115.7 8.7 65.0 50.3 108.2 3.7 52.5 110.2 6.6 55.8 112.5 8.3 70.0 46.3 103.7 <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<>																
36.0 70.6 124.9 10.2 72.4 125.6 10.6 38.0 69.3 124.2 10.0 71.1 124.9 10.5 40.0 68.0 123.4 9.4 69.8 124.2 10.2 42.0 66.7 122.5 8.8 68.5 123.4 10.0 44.0 65.4 121.6 8.2 67.2 122.6 9.8 48.0 62.7 119.7 7.2 64.6 120.8 9.3 50.0 61.3 118.6 6.8 63.2 119.8 9.1 51.8 15.6 5.6 59.8 117.0 8.5 62.9 118.5 9.1 60.0 54.1 112.1 4.5 56.2 113.8 7.4 59.4 115.7 8.7 65.0 50.3 108.2 3.7 52.5 110.2 6.6 55.8 112.5 8.3 70.0 46.3 103.7 3.0 48.6 106.0 5.6 52.1 108.8 8.0 71.4 75.0 4		71.9	125.6	10.4												
38.0 69.3 124.2 10.0 71.1 124.9 10.5 40.0 68.0 123.4 9.4 69.8 124.2 10.2 42.0 66.7 122.5 8.8 68.5 123.4 10.0 44.0 65.4 121.6 8.2 67.2 122.6 9.8 46.0 64.0 120.7 7.7 65.9 121.7 9.6 48.0 62.7 119.7 7.2 64.6 120.8 9.3 50.0 61.3 118.6 6.8 63.2 119.8 9.1 51.8 55.0 57.8 115.6 5.6 59.8 117.0 8.5 62.9 118.5 9.1 65.0 53.3 108.2 3.7 52.5 110.2 6.6 55.8 112.5 8.3 70.0 46.3 103.7 3.0 48.6 106.0 5.6 52.1 108.8 8.0 71.4 75.0 41.9 98.4 2.3 44.4 101.2 4.5 48.1 104.5 7.5 52.3 109.6 7.4 75.0 49.0 41.9 98.4 2.3 44.4 101.2 4.5 48.1 104.5 <td></td> <td>70.0</td> <td>404.0</td> <td>40.0</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>		70.0	404.0	40.0												
40.0 68.0 123.4 9.4 69.8 124.2 10.2 42.0 66.7 122.5 8.8 68.5 123.4 10.0 44.0 65.4 121.6 8.2 67.2 122.6 9.8 46.0 64.0 120.7 7.7 65.9 121.7 9.6 48.0 62.7 119.7 7.2 64.6 120.8 9.3 50.0 61.3 118.6 6.8 63.2 119.8 9.1 51.8 55.0 57.8 115.6 5.6 59.8 117.0 8.5 62.9 118.5 9.1 60.0 54.1 112.1 4.5 56.2 113.8 7.4 59.4 115.7 8.7 65.0 50.3 108.2 3.7 52.5 110.2 6.6 55.8 112.5 8.3 70.0 46.3 103.7 3.0 48.6 106.0 5.6 52.1 108.8 8.0 71.4<																
42.0 66.7 122.5 8.8 68.5 123.4 10.0 44.0 65.4 121.6 8.2 67.2 122.6 9.8 46.0 64.0 120.7 7.7 65.9 121.7 9.6 48.0 62.7 119.7 7.2 64.6 120.8 9.3 50.0 61.3 118.6 6.8 63.2 119.8 9.1 51.8 55.0 57.8 115.6 5.6 59.8 117.0 8.5 62.9 118.5 9.1 60.0 54.1 112.1 4.5 56.2 113.8 7.4 59.4 115.7 8.7 65.0 50.3 108.2 3.7 52.5 110.2 6.6 55.8 112.5 8.3 70.0 46.3 103.7 3.0 48.6 106.0 5.6 52.1 108.8 8.0 71.4 75.0 41.9 98.4 2.3 44.4 101.2 4.5 48.1 104.5 7.5 52.3 106.9 7.2 80.0 34.9<						_										
44.0 65.4 121.6 8.2 67.2 122.6 9.8 46.0 64.0 120.7 7.7 65.9 121.7 9.6 48.0 62.7 119.7 7.2 64.6 120.8 9.3 50.0 61.3 118.6 6.8 63.2 119.8 9.1 55.0 57.8 115.6 5.6 59.8 117.0 8.5 62.9 118.5 9.1 60.0 54.1 112.1 4.5 56.2 113.8 7.4 59.4 115.7 8.7 65.0 50.3 108.2 3.7 52.5 110.2 6.6 55.8 112.5 8.3 70.0 46.3 103.7 3.0 48.6 106.0 5.6 52.1 108.8 8.0 71.4 75.0 41.9 98.4 2.3 44.4 101.2 4.5 48.1 104.5 7.5 52.3 106.9 7.2 80.0 39.9 95.6 3.5 43.9 99.6 6.6 48.4 102.7 6.5 <tr< 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></tr<>																
46.0 64.0 120.7 7.7 65.9 121.7 9.6 48.0 62.7 119.7 7.2 64.6 120.8 9.3 50.0 61.3 118.6 6.8 63.2 119.8 9.1 51.8 55.0 57.8 115.6 5.6 59.8 117.0 8.5 62.9 118.5 9.1 60.0 54.1 112.1 4.5 56.2 113.8 7.4 59.4 115.7 8.7 65.0 50.3 108.2 3.7 52.5 110.2 6.6 55.8 112.5 8.3 70.0 46.3 103.7 3.0 48.6 106.0 5.6 52.1 108.8 8.0 71.4 75.0 41.9 98.4 2.3 44.4 101.2 4.5 48.1 104.5 7.5 52.3 106.9 7.2 80.0 39.9 95.6 3.5 43.9 99.6 6.6 48.4 102.7 6.5 85.0 99.0 29.1 80.8 2.1 34.3 87.1 <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>																
48.0 62.7 119.7 7.2 64.6 120.8 9.3 50.0 61.3 118.6 6.8 63.2 119.8 9.1 51.8 55.0 57.8 115.6 5.6 59.8 117.0 8.5 62.9 118.5 9.1 60.0 54.1 112.1 4.5 56.2 113.8 7.4 59.4 115.7 8.7 65.0 50.3 108.2 3.7 52.5 110.2 6.6 55.8 112.5 8.3 70.0 46.3 103.7 3.0 48.6 106.0 5.6 52.1 108.8 8.0 71.4 75.0 41.9 98.4 2.3 44.4 101.2 4.5 48.1 104.5 7.5 52.3 106.9 7.2 80.0 39.9 95.6 3.5 43.9 99.6 6.6 48.4 102.7 6.5 85.0 34.9 88.9 2.7 39.4 93.9 5.8 44.6 98.4 5.5 90.0 29.1 80.8 2.1																
50.0 61.3 118.6 6.8 63.2 119.8 9.1 51.8 51.8 55.0 57.8 115.6 5.6 59.8 117.0 8.5 62.9 118.5 9.1 60.0 54.1 112.1 4.5 56.2 113.8 7.4 59.4 115.7 8.7 65.0 50.3 108.2 3.7 52.5 110.2 6.6 55.8 112.5 8.3 70.0 46.3 103.7 3.0 48.6 106.0 5.6 52.1 108.8 8.0 71.4 75.0 41.9 98.4 2.3 44.4 101.2 4.5 48.1 104.5 7.5 52.3 106.9 7.2 80.0 39.9 95.6 3.5 43.9 99.6 6.6 48.4 102.7 6.5 85.0 34.9 88.9 2.7 39.4 93.9 5.8 44.6 98.4 5.5 90.0 29.1 80.8 <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 57.8 115.6 5.6 59.8 117.0 8.5 62.9 118.5 9.1 60.0 54.1 112.1 4.5 56.2 113.8 7.4 59.4 115.7 8.7 65.0 50.3 108.2 3.7 52.5 110.2 6.6 55.8 112.5 8.3 70.0 46.3 103.7 3.0 48.6 106.0 5.6 52.1 108.8 8.0 71.4 75.0 41.9 98.4 2.3 44.4 101.2 4.5 48.1 104.5 7.5 52.3 106.9 7.2 80.0 39.9 95.6 3.5 43.9 99.6 6.6 48.4 102.7 6.5 85.0 34.9 88.9 2.7 39.4 93.9 5.8 44.6 98.4 5.5 90.0 29.1 80.8 2.1 34.3 87.1 5.1 40.2 92.8 4.6 95.0 100.0		61.3	118.6	6.8		119.8										
60.0 54.1 112.1 4.5 56.2 113.8 7.4 59.4 115.7 8.7 65.0 50.3 108.2 3.7 52.5 110.2 6.6 55.8 112.5 8.3 70.0 46.3 103.7 3.0 48.6 106.0 5.6 52.1 108.8 8.0 71.4 75.0 41.9 98.4 2.3 44.4 101.2 4.5 48.1 104.5 7.5 52.3 106.9 7.2 80.0 39.9 95.6 3.5 43.9 99.6 6.6 48.4 102.7 6.5 85.0 34.9 88.9 2.7 39.4 93.9 5.8 44.6 98.4 5.5 90.0 29.1 80.8 2.1 34.3 87.1 5.1 40.2 92.8 4.6 95.0 100.0 21.2 67.7 3.1 29.6 78.3 2.9 103.0 103.0 15.3 58.4	51.8							65.0	120.1	9.2						
65.0 50.3 108.2 3.7 52.5 110.2 6.6 55.8 112.5 8.3 70.0 46.3 103.7 3.0 48.6 106.0 5.6 52.1 108.8 8.0 71.4 75.0 41.9 98.4 2.3 44.4 101.2 4.5 48.1 104.5 7.5 52.3 106.9 7.2 80.0 39.9 95.6 3.5 43.9 99.6 6.6 48.4 102.7 6.5 85.0 34.9 88.9 2.7 39.4 93.9 5.8 44.6 98.4 5.5 90.0 29.1 80.8 2.1 34.3 87.1 5.1 40.2 92.8 4.6 95.0 29.1 80.8 2.1 34.3 87.1 5.1 40.2 92.8 4.6 95.0 20.0 27.2 67.7 3.1 29.6 78.3 2.9 100.0 103.0 15.3 58.4	55.0	57.8	115.6	5.6	59.8	117.0	8.5	62.9	118.5	9.1						
70.0 46.3 103.7 3.0 48.6 106.0 5.6 52.1 108.8 8.0 71.4 75.0 41.9 98.4 2.3 44.4 101.2 4.5 48.1 104.5 7.5 52.3 106.9 7.2 80.0 39.9 95.6 3.5 43.9 99.6 6.6 48.4 102.7 6.5 85.0 34.9 88.9 2.7 39.4 93.9 5.8 44.6 98.4 5.5 90.0 29.1 80.8 2.1 34.3 87.1 5.1 40.2 92.8 4.6 95.0 29.1 80.8 2.1 34.3 87.1 5.1 40.2 92.8 4.6 95.0 29.1 80.8 2.1 34.3 87.1 5.1 40.2 92.8 4.6 100.0 21.2 67.7 3.1 29.6 78.3 2.9 103.0 15.3 58.4 2.5 29.6	60.0	54.1	112.1	4.5	56.2	113.8	7.4	59.4	115.7	8.7						
71.4 75.0 41.9 98.4 2.3 44.4 101.2 4.5 48.1 104.5 7.5 55.0 109.6 7.4 80.0 85.0 85.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 9	65.0	50.3	108.2	3.7	52.5	110.2		55.8	-							
75.0 41.9 98.4 2.3 44.4 101.2 4.5 48.1 104.5 7.5 52.3 106.9 7.2 80.0 39.9 95.6 3.5 43.9 99.6 6.6 48.4 102.7 6.5 85.0 34.9 88.9 2.7 39.4 93.9 5.8 44.6 98.4 5.5 90.0 29.1 80.8 2.1 34.3 87.1 5.1 40.2 92.8 4.6 95.0 21.2 67.7 3.1 29.6 78.3 2.9 103.0 15.3 58.4 2.5		46.3	103.7	3.0	48.6	106.0	5.6	52.1	108.8	8.0						
80.0 39.9 95.6 3.5 43.9 99.6 6.6 48.4 102.7 6.5 85.0 34.9 88.9 2.7 39.4 93.9 5.8 44.6 98.4 5.5 90.0 29.1 80.8 2.1 34.3 87.1 5.1 40.2 92.8 4.6 95.0 28.5 78.8 4.1 35.2 86.3 3.7 100.0 21.2 67.7 3.1 29.6 78.3 2.9 103.0 15.3 58.4 2.5																
85.0 34.9 88.9 2.7 39.4 93.9 5.8 44.6 98.4 5.5 90.0 29.1 80.8 2.1 34.3 87.1 5.1 40.2 92.8 4.6 95.0 28.5 78.8 4.1 35.2 86.3 3.7 100.0 21.2 67.7 3.1 29.6 78.3 2.9 103.0 15.3 58.4 2.5		41.9	98.4	2.3		-		-								
90.0 29.1 80.8 2.1 34.3 87.1 5.1 40.2 92.8 4.6 95.0 28.5 78.8 4.1 35.2 86.3 3.7 100.0 21.2 67.7 3.1 29.6 78.3 2.9 103.0 15.3 58.4 2.5 25.5 25.5 25.5											-					
95.0 100.0 103.0 28.5 78.8 4.1 35.2 86.3 3.7 21.2 67.7 3.1 29.6 78.3 2.9																
100.0 103.0 21.2 67.7 3.1 29.6 78.3 2.9 15.3 58.4 2.5					29.1	80.8	2.1									
103.0													-			
									-		29.6	/8.3	2.9			
105.0								15.3	58.4	2.5	22.7	68.0	2.2			
105.0 22.7 66.0 2.2 21.0 65.4 2.1																



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

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

Valor de vuelco: 2 - Vía ancha Lastre trasero [t]: 124.0 Lastre central [t]: 52.6 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]
				32.0 ı		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 9	8.5 m Pli	eza de p umín	lumín				
24.8	78.0	131.3	10.6												
26.0	77.3	131.0	10.6												
28.0	76.1	130.5	10.4												
30.0	74.9	130.0	10.1												
32.0	73.7	129.4	9.9												
34.0	72.4	128.8	9.7	70.0	400.0	0.7									
35.9 36.0	71.2	100.1	9.4	73.0 73.0	128.8 128.8	9.7 9.7									
38.0	70.0	128.1 127.4	9.4	73.0	128.8	9.7									
40.0	68.7	127.4	9.0	71.7	127.4	9.7									
42.0	67.4	125.8	8.4	69.2	126.7	9.2									
44.0	66.2	124.9	7.8	68.0	125.9	9.1									
46.0	64.9	124.0	7.3	66.7	125.0	8.9									
48.0	63.6	123.0	6.9	65.4	124.1	8.7									
50.0	62.3	122.0	6.5	64.1	123.1	8.5									
53.1							65.0	122.8	8.4						
55.0	58.9	119.1	5.4	60.8	120.5	8.1	63.8	121.9	8.4						
60.0	55.4	115.8	4.3	57.4	117.4	7.2	60.5	119.2	8.1						
65.0	51.8	112.1	3.5	53.9	114.0	6.4	57.0	116.1	7.8						
70.0	47.9	107.8	2.8	50.1	110.0	5.6	53.5	112.6	7.5						
73.2										55.0	112.0	6.9			
75.0	43.8	102.9	2.1	46.2	105.4	4.5	49.7	108.5	7.3	53.7	110.7	6.9			
80.0				42.0	100.2	3.5	45.7	103.9	6.5	49.9	106.7	6.2			
85.0				37.3	94.1	2.6	41.5	98.6	5.7	46.4	102.6	5.2			
90.0							36.8	92.3	5.0	42.2	97.4	4.3			
95.0							31.6	84.9	4.2	37.6	91.4	3.4			
100.0							25.4	75.5	3.2	32.5	84.2	2.7			
104.0							10.4	64.2	2.2	27.9	77.2	2.1			
105.0 106.0							18.4 16.4	64.3 61.1	2.2 2.0						
100.0							10.4	01.1	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 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]
				32.0 ו	m Pluma Cabe	eza de pl	ıl, Punto umín (23 ı] Posici	316-1) 10)1.5 m P	eza de p lumín	lumín				
25.4	78.0	134.2	9.8												
26.0	77.7	134.1	9.8												
28.0	76.5	133.6	9.7												
30.0	75.3	133.1	9.4												
32.0	74.2	132.6	9.2												
34.0	73.0	132.0	9.0												
36.0	71.8	131.3	8.8												
36.8				73.0	131.7	8.9				•			<u> </u>		
38.0	70.6	130.6	8.6	72.3	131.3	8.9									
40.0	69.4	129.9	8.4	71.1	130.6	8.8									
42.0	68.2	129.1	8.0	69.9	129.9	8.6									
44.0	66.9	128.2	7.5	68.7	129.1	8.4									
46.0	65.7	127.3	7.0	67.4	128.3	8.3									
48.0	64.4	126.4	6.5	66.2	127.4	8.1									
50.0	63.2	125.4	6.1	65.0	126.5	7.9									
54.4							65.0	125.5	7.7						
55.0	59.9	122.6	5.2	61.8	123.9	7.5	64.6	125.2	7.7						
60.0	56.6	119.5	4.1	58.5	121.0	6.8	61.4	122.6	7.5						
65.0	53.1	115.9	3.2	55.1	117.7	6.0	58.1	119.7	7.2						
70.0	49.4	111.8	2.5	51.5	113.9	5.4	54.7	116.3	6.9						
74.9										55.0	114.5	6.3			
75.0				47.8	109.6	4.4	51.1	112.5	6.7	54.9	114.4	6.3			
80.0				43.8	104.6	3.3	47.4	108.1	6.2	51.4	110.6	5.9			
85.0				40.0	99.6	2.4	43.4	103.1	5.4	48.0	106.7	4.9			
87.0				37.7	96.4	2.1									
90.0							39.0	97.3	4.7	44.0	101.8	4.0			
95.0							34.3	90.4	4.1	39.8	96.2	3.1			
100.0							28.8	82.1	3.2	35.1	89.6	2.4			
102.0							00.4	74.4	0.0	33.1	86.6	2.1			
105.0							22.1	71.4	2.3						
106.0							20.5	68.8	2.1						



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]: 124.0 52.6 Lastre central [t]:

		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]
				32.0 ı	m Pluma Cabe	eza de pl	al, Punto lumín (23 n] Posici	316-1) 10)4.5 m P		lumín				
26.1 28.0 30.0 32.0 34.0 36.0 37.7 38.0 40.0	78.0 76.9 75.8 74.6 73.5 72.3 71.2 70.0	137.2 136.7 136.2 135.7 135.1 134.5	9.1 9.1 8.9 8.7 8.5 8.3	73.0 72.8 71.7	134.5 134.4 133.8	8.3 8.3 8.3									
42.0 44.0 46.0 48.0 50.0 55.0	68.8 67.6 66.4 65.2 64.0 60.9	132.3 131.5 130.6 129.7 128.7 126.1	7.9 7.7 7.2 6.7 6.3 5.9 5.0	71.7 70.5 69.3 68.1 66.9 65.7 62.7	133.1 132.3 131.5 130.7 129.8 127.3	7.9 7.7 7.6 7.4 7.0	65.0	128.2	7.1						
60.0 65.0 70.0 72.0 75.0 76.6 80.0 85.0	57.7 54.3 50.8 49.4	123.1 119.6 115.8 114.1	4.0 3.1 2.4 2.1	59.5 56.2 52.8 49.3 45.9 41.5	124.5 121.3 117.7 113.6 109.4 103.6	6.5 5.7 5.1 4.4 3.3 2.4	62.3 59.2 55.9 52.5 48.9 45.1	126.0 123.2 120.0 116.3 112.1 107.4	7.0 6.7 6.5 6.2 6.0 5.3	55.0 52.7 49.5	117.0 114.4 110.7	5.8 5.7 4.8			
90.0 95.0 100.0 101.0 105.0				39.8	101.2	2.4	41.0 36.6 31.7 25.9	107.4 102.0 95.7 88.2 78.9	4.6 4.0 3.3	45.7 41.7 37.4 36.5	106.1 100.8 94.7 93.4	3.8 3.0 2.2 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]: 124.0 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]
				32.0 ı	m Pluma Cabe	eza de pl	al, Punto lumín (23 n] Posici	316-1) 10	17.5 m P	eza de p lumín	lumín				
26.7	78.0	140.1	8.2												
28.0	77.3	139.8	8.2												
30.0	76.2	139.3	8.0										<u> </u>		
32.0	75.1	138.8	7.8												
34.0	74.0	138.2	7.6												
36.0	72.8	137.6	7.4												
38.0	71.7	137.0	7.2												
38.6				73.0	137.4	7.4									
40.0	70.6	136.3	7.1	72.2	136.9	7.4									
42.0	69.4	135.5	6.9	71.1	136.3	7.2									
44.0	68.3	134.7	6.6	69.9	135.5	7.0									
46.0	67.1	133.9	6.2	68.8	134.8	6.9									
48.0	66.0	133.0	5.8	67.6	133.9	6.8									
50.0	64.8	132.1	5.4	66.4	133.1	6.6									
55.0	61.8	129.5	4.7	63.5	130.7	6.2									
56.9							65.0	131.0	6.2						
60.0	58.7	126.6	3.7	60.4	128.0	5.9	63.2	129.4	6.2						
65.0	55.5	123.3	2.8	57.3	124.9	5.2	60.1	126.7	5.9						
70.0				54.1	121.5	4.7	57.0	123.6	5.7						
75.0				50.7	117.6	4.3	53.7	120.1	5.4						
78.3										55.0	119.4	5.1			
80.0				47.1	113.1	3.2	50.3	116.1	5.3	53.9	118.2	5.1			
85.0				43.3	108.1	2.3	46.7	111.6	4.8	50.8	114.7	4.4			
86.0				42.9	107.6	2.1	40.0	400 5		47.0	440.0	0.5			
90.0							42.9	106.5	4.1	47.3	110.3	3.5			
95.0							38.8	100.6	3.6	43.5	105.3	2.6			
99.0							24.0		0.4	40.3	100.8	2.0			
100.0							34.2	93.8	3.1						
105.0							29.1	85.5	2.3						



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]
				32.0 ו		eża de pl	ıl, Punto umín (23 ı] Posici	316-1) 11	0.5 m P	eza de p lumín	lumín		-		
27.3	78.0	143.0	7.4												
28.0	77.6	142.9	7.4												
30.0	76.6	142.4	7.3												
32.0	75.5	141.9	7.1												
34.0	74.4	141.3	6.9												
36.0	73.3	140.8	6.7												
38.0	72.2	140.1	6.6												
39.4				73.0	140.3	6.6									
40.0	71.1	139.4	6.4	72.7	140.1	6.6									
42.0	70.0	138.7	6.3	71.6	139.4	6.5									
44.0	68.9	138.0	6.1	70.5	138.7	6.4									
46.0	67.8	137.2	5.7	69.4	138.0	6.2									
48.0	66.7	136.3	5.3	68.3	137.2	6.1									
50.0	65.5	135.4	5.0	67.1	136.4	5.9									
55.0	62.6	132.9	4.3	64.3	134.1	5.6									
58.2							65.0	133.7	5.5						
60.0	59.6	130.1	3.5	61.3	131.4	5.3	64.0	132.8	5.5						
65.0	56.6	127.0	2.6	58.3	128.5	4.8	61.0	130.1	5.3						
70.0				55.2	125.2	4.4	58.0	127.2	5.0						
75.0				51.9	121.4	4.0	54.8	123.8	4.8						
80.0				48.5	117.2	3.2	51.6	120.0	4.6	55.0	121.9	4.5			
85.0				44.9	112.4	2.3	48.2	115.7	4.3	51.8	118.1	4.1			
86.0				44.6	111.9	2.1									
90.0							44.5	110.9	3.8	48.7	114.3	3.2			
95.0							40.7	105.4	3.3	45.1	109.6	2.4			
97.0										43.6	107.5	2.1			
100.0							36.5	99.0	2.9						
105.0							32.4	92.4	2.2						
106.0							31.4	90.8	2.1						



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

2 - Vía ancha Valor de vuelco: Lastre trasero [t]: 124.0 52.6 Lastre central [t]:

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]
				32.0 ı	m Pluma Cab	eza de p	ıl, Punto lumín (1: ı] Posici	916-1) 3:	2.5 m Pl	eza de p umín	lumín				
11.0 12.0 13.0 14.0 16.0	78.0 76.2 74.4 72.6 68.8	66.7 66.5 66.2 65.9 65.2	44.5 43.4 41.3 39.3 36.2												
16.6 18.0 20.0 22.0 24.0	64.9 61.0 56.8 52.4	64.3 63.2 62.0 60.5	33.2 31.0 28.6 26.7	73.0 70.4 66.6 62.6 58.6	65.7 65.2 64.4 63.4 62.2	38.1 36.6 33.9 31.5 29.5									
25.2 26.0 28.0 30.0 32.0	47.7 42.7 37.1 30.6	58.7 56.7 54.2 51.1	25.0 23.2 21.7 20.1	54.3 49.7 44.9 39.5	60.8 59.2 57.3 55.0	27.7 26.3 24.7 23.3	65.0 63.6 59.5 55.3 50.8	63.0 62.6 61.5 60.2 58.6	29.9 31.8 30.3 28.7 27.5						
34.0 35.0 35.3 36.0 38.0	22.4 16.9	46.9 44.0	18.4 17.5	33.4 26.1 15.8	52.2 48.6 43.1	22.0 20.1 18.1	46.0 40.8 34.9	56.8 54.6 51.9	25.9 24.4 23.1	55.0 53.7 49.2	58.0 57.5 55.9	26.6 28.1 26.6			
40.0 42.0 44.0 46.0 48.0				.5.0			27.9 18.7	48.5 43.6	21.5 19.8	44.2 38.8 32.6 25.1 16.4	53.9 51.6 48.7 45.0 40.3	25.3 24.0 22.9 21.6 15.1			
52.2 55.0 57.0													35.0 25.6 17.2	43.1 38.5 34.0	17.2 17.2 15.1



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]: 124.0 52.6 Lastre central [t]:

		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]
				32.0	m Pluma Cab	eza de p	al, Punto llumín (1 n] Posici	916-1) 3	5.5 m Plı	eza de p umín	lumín				
11.7 12.0	78.0 77.4	69.7 69.6	39.3 39.3												
13.0 14.0 16.0	75.8 74.1 70.7	69.3 69.0 68.4	37.7 36.3 33.2												
17.5 18.0	67.2	67.6	30.7	73.0 72.1	68.5 68.4	33.7 33.7									
20.0 22.0	63.6 59.9	66.6 65.5	28.4 26.6	68.7 65.1	67.6 66.7	31.2 28.9									
24.0 26.0 26.5	56.1 52.1	64.2 62.7	24.9	61.5 57.7	65.7 64.5	27.3 25.6	65.0	65.7	28.4						
28.0 30.0	47.8 43.2	61.0 59.0	22.1 20.7	53.8 49.6	63.1 61.4	24.3 23.1	62.3 58.6	65.0 63.8	27.8 26.6						
32.0 34.0	38.1 32.4	56.6 53.6	19.5 18.3	45.2 40.3	59.5 57.3	21.8 20.6	54.7 50.6	62.4 60.8	25.2 24.2						
36.0 37.0 38.0	25.6 16.1	49.9 44.4	17.0	34.9 28.6	54.6 51.3	19.6	46.2 41.5	59.0 56.9	22.8	55.0 53.3	60.4 59.8	23.4 24.9			
40.0 41.0	10.1	44.4	15.7	20.6 15.1	46.7 43.5	16.9 16.2	36.2	54.3	20.5	49.1	58.1	23.6			
42.0 44.0							30.2 22.7	51.1 46.9	19.3 18.1	44.6 39.7	56.2 53.9	22.5 21.3			
45.0 46.0							17.8	44.1	17.4	34.2	51.2 47.7	20.4			
48.0 50.0 51.0										27.8 19.4 15.6	47.7 42.9 40.7	19.4 18.3 15.1			
54.6 55.0												10	35.0 34.6	44.8 44.6	16.1 16.9
60.0													16.4	34.4	14.4



N° de ident.: 9842523/95738/

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

Valor de vuelco: Lastre trasero [t]:

Lastre central [t]:

2 - Vía ancha 124.0

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]
				32.0 ı		eza de p	ıl, Punto lumín (1: ı] Posici	916-1) 3	8.5 m Pl	eza de p umín	lumín				
12.3 13.0 14.0 16.0 18.0	78.0 76.9 75.4 72.3 69.1	72.6 72.4 72.2 71.6 70.8	35.1 34.8 33.3 30.7 28.6						,						
18.4 20.0 22.0 24.0 26.0	65.8 62.5 59.1 55.5	70.0 69.0 67.8 66.5	26.4 24.7 23.2 21.9	73.0 70.4 67.2 63.9 60.5	71.4 70.8 70.0 69.1 68.0	30.0 28.8 26.9 25.1 23.8									
27.8 28.0 30.0 32.0 34.0	51.8 47.8 43.6 39.0	65.0 63.2 61.2 58.9	20.8 19.7 18.6 17.6	57.0 53.4 49.5 45.4	66.8 65.3 63.7 61.8	22.6 21.6 20.6 19.4	65.0 64.7 61.3 57.8 54.2	68.4 68.3 67.3 66.1 64.7	25.4 25.4 24.5 23.5 22.3						
36.0 38.0 38.8 40.0 41.0	33.9 28.0 20.5 15.4	56.1 52.6 48.0 44.8	16.8 15.7 14.7 14.2	41.0 36.1 30.6	59.6 57.0 53.9	18.4 17.5 16.6	50.4 46.4 42.0	63.1 61.2 59.1	21.5 20.3 19.1	55.0 52.9	62.9 62.0	20.8 22.2			
42.0 44.0 46.0 48.0 50.0				23.9 16.4	49.9 45.1	15.6 12.9	37.3 31.9 25.6 17.1	56.6 53.7 49.9 44.5	18.2 17.4 16.5 15.6	49.0 44.9 40.4 35.5 29.9	60.4 58.4 56.2 53.6 50.4	21.2 20.2 19.2 18.3 17.5			
53.0 57.1 60.0 63.0										18.6	43.4	16.3	35.0 27.0 15.7	46.5 41.9 34.8	14.9 15.2 13.2



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

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

Valor de vuelco: 2 - Vía ancha Lastre trasero [t]: 124.0 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]
				32.0 ı	n Pluma Cab	eza de p	al, Punto dumín (19 n] Posici	916-1) 4	1.5 m Pl	eza de p umín	lumín				
12.9	78.0	75.5	31.0												
13.0	77.9	75.5	31.0												
14.0	76.4	75.3	30.4												
16.0	73.6	74.7	28.1												
18.0	70.7	74.0	25.9												
19.2				73.0	74.3	26.5									
20.0	67.7	73.2	24.1	71.9	74.0	26.3									
22.0	64.7	72.3	22.4	68.9	73.3	24.4									
24.0	61.5	71.3	21.1	65.9	72.4	22.9									
26.0	58.3	70.1	19.9	62.9	71.4	21.6									
28.0	55.0	68.7	18.8	59.7	70.3	20.5									
29.0		07.0	47.0	50.4	00.0	10.5	65.0	71.1	21.1 22.2						
30.0	51.5 47.8	67.2 65.5	17.9 17.0	56.4 53.0	69.0 67.6	19.5 18.6	63.6 60.4	70.7 69.6	22.2						
32.0 34.0	44.0	63.5	16.1	49.4	65.9	17.7	57.2	68.3	20.2						
36.0	39.7	61.2	15.3	45.6	64.0	16.8	53.8	66.9	19.2						
38.0	35.1	58.5	14.6	41.6	61.9	15.9	50.2	65.3	18.5						
40.0	29.9	55.3	13.8	37.1	59.4	15.9	46.5	63.5	17.5						
40.5	20.0	00.0	10.0	07.1	00.4	10.2	40.0	00.0	17.0	55.0	65.3	18.2			
42.0	23.6	51.1	13.0	32.2	56.4	14.4	42.5	61.4	16.6	52.6	64.3	19.2			
44.0	16.6	46.4	10.5	26.4	52.7	13.7	38.2	59.0	15.8	49.0	62.6	18.2			
46.0				19.0	47.7	12.9	33.4	56.1	15.1	45.1	60.7	17.5			
47.0				15.7	45.5	10.8									
48.0							27.8	52.6	14.3	41.0	58.5	16.6			
50.0							20.9	48.0	13.6	36.6	55.9	15.8			
51.0							16.4	45.0	13.2						
55.0										22.1	46.8	14.1			
56.0										17.9	43.9	13.7			
59.5													35.0	48.2	13.6
60.0													34.4	47.9	14.4
65.0													18.4	37.5	13.3
66.0													15.1	35.2	11.6



N° de ident.: 9842523/95738/ Pieza

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

Valor de vuelco: 2 - Vía ancha Lastre trasero [t]: 124.0 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]
				32.0 ı		eza de p	ıl, Punto lumín (1 ı] Posici	916-1) 4	4.5 m Pli	eza de p umín	lumín				
13.5 14.0 16.0 18.0	78.0 77.4 74.7 72.0	78.5 78.4 77.8 77.2	28.1 28.1 26.2 24.2												
20.0 20.1 22.0	69.3 66.5	76.5 75.6	22.7	73.0 70.4	77.2 76.5	24.0 22.8									
24.0 26.0 28.0 30.0	63.6 60.7 57.7 54.5	74.7 73.6 72.4 71.0	19.6 18.5 17.5	67.7 64.8 61.9 59.0	75.7 74.8 73.8 72.6	21.4 20.1 19.2 18.2									
30.3 32.0 34.0	51.3 47.9	69.4 67.7	15.9 15.1	55.9 52.7	71.3 69.8	17.2 16.5	65.0 62.6 59.6	73.9 73.0 71.9	20.2 19.7 18.8						
36.0 38.0 40.0 42.0	44.2 40.4 36.1 31.4	65.7 63.5 60.9 57.8	14.3 13.6 13.0 12.4	49.3 45.8 42.0 38.0	68.1 66.3 64.1 61.7	15.7 14.9 14.1 13.5	56.6 53.4 50.1 46.6	70.6 69.2 67.5 65.7	17.9 17.0 16.4 15.5						
42.2 44.0 46.0	25.9 19.0	54.0 49.0	11.7	33.5 28.4	58.8 55.4	12.9 12.2	42.9 38.9	63.7 61.3	14.7 14.0	55.0 52.3 48.9	67.8 66.5 64.8	16.0 17.0 16.2			
47.0 48.0 50.0 54.0	16.0	46.8	9.0	22.2 15.2	51.0 45.9	11.5 9.1	34.5 29.6 15.8	58.5 55.3 45.4	13.4 12.8 11.5	45.4 41.6	62.9 60.8	15.5 14.7			
55.0 59.0 62.0 65.0 68.0										30.4 17.2	53.7 44.3	13.2 11.9	35.0 28.0 17.8	50.0 45.3 38.0	12.5 12.7 12.1



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 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]
				32.0		eza de p	al, Punto llumín (1 n] Posici	916-1) 4	7.5 m Pl		lumín				
14.2 16.0 18.0 20.0 21.0	78.0 75.7 73.2 70.6	81.4 81.0 80.4 79.7	25.0 23.9 22.4 21.1	73.0	80.0	21.4									
22.0 24.0 26.0 28.0 30.0	68.1 65.4 62.7 60.0 57.1	78.9 78.0 77.0 75.9 74.6	20.0 18.9 18.1 17.4 16.7	71.7 69.1 66.5 63.9 61.1	79.7 78.9 78.1 77.2 76.1	21.1 20.0 19.2 18.4 17.8									
31.6 32.0 34.0 36.0 38.0	54.2 51.1 47.9 44.5	73.2 71.7 69.9 68.0	16.1 15.6 14.9 14.1	58.3 55.4 52.4 49.3	74.9 73.5 72.1 70.4	17.2 16.6 16.1 15.5	65.0 64.5 61.7 59.0 56.1	76.6 76.4 75.3 74.2 72.9	18.7 18.7 18.1 17.6 17.0						
40.0 42.0 43.9 44.0 46.0	40.9 37.0 32.7 27.8	65.7 63.2 60.3 56.8	13.4 12.8 12.1 11.4	45.9 42.4 38.7 34.6	68.5 66.4 64.0 61.3	14.8 14.2 13.6 13.1	53.1 50.0 46.7 43.3	71.4 69.8 68.0 65.9	16.4 16.0 15.3 14.6	55.0 55.0 52.0	70.3 70.3 68.8	15.8 16.5 16.2			
48.0 50.0 52.0 55.0 57.0	22.0 15.4	52.3 47.2	10.7 9.0	30.0 24.6 17.7	58.0 54.0 48.7	12.3 11.5 10.7	39.6 35.5 22.9 15.3	63.6 60.9 51.7 45.7	14.0 13.5 11.7 11.0	48.9 45.5 36.2	67.1 65.2 59.3	15.8 15.3 13.6			
60.0 62.0 64.5 65.0 70.0										23.9 16.7	50.4 44.8	12.1 11.5	35.0 34.3 21.0 17.2	51.7 51.2 41.4 38.4	12.1 12.5 11.5



N° de ident.: 9842523/95738/ Pieza de

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

Valor de vuelco: 2 - Vía ancha Lastre trasero [t]: 124.0 Lastre central [t]: 52.6

		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]
				32.0 ı		eza de p	II, Punto Iumín (19 1] Posicio	916-1) 5	0.5 m Pl	eza de p umín	lumín				
14.8	78.0	84.3	22.8												
16.0	76.6	84.1	22.4												
18.0	74.2	83.5	21.3												
20.0	71.8	82.9	20.1												
21.9				73.0	82.9	19.8									
22.0	69.4	82.1	19.3	72.8	82.8	19.8									
24.0	67.0	81.3	18.5	70.4	82.2	19.2									
26.0	64.5	80.4	17.9	68.0	81.4	18.6									
28.0	61.9	79.4	17.4	65.5	80.5	18.0									
30.0	59.3	78.2	16.9	63.0	79.5	17.6									
32.0	56.6	76.9	16.5	60.4	78.4	17.2	05.0	70.0	47.0						
32.8	50.0	75.5	16.1		77.0	16.8	65.0 63.6	79.3 78.7	17.3 17.8						
34.0 36.0	53.8 50.9	75.5 73.9	16.1	57.7 55.0	77.2 75.8	16.8	61.0	78.7 77.7	17.8 17.4						
38.0	47.9	73.9	15.6	55.0 52.1	75.6 74.3	16.5	58.3	77.7 76.5	17.4						
40.0	44.7	70.2	14.3	49.2	72.6	15.7	55.6	75.1	16.7						
42.0	41.4	68.0	13.5	46.1	70.8	15.7	52.8	73.7	16.4						
44.0	37.8	65.6	12.9	42.8	68.7	14.6	49.9	72.0	16.1						
45.6	07.0	00.0	12.0	72.0	00.1	14.0	40.0	72.0	10.1	55.0	72.7	15.6	i		
46.0	33.8	62.7	12.3	39.3	66.3	14.1	46.8	70.2	15.5	54.7	72.5	16.2			
48.0	29.4	59.4	11.5	35.5	63.6	13.6	43.6	68.2	14.8	51.8	71.0	16.0			
50.0	24.3	55.3	10.8	31.3	60.5	12.7	40.1	65.9	14.3	48.8	69.3	15.8			
52.0	17.8	49.9	10.0												
55.0				17.1	49.1	10.5	30.1	58.6	12.8	40.7	64.2	14.4			
60.0							16.2	47.4	10.8	31.5	57.6	13.1			
65.0										17.5	46.3	11.5			
66.9													35.0	53.4	11.7
70.0													28.7	48.7	11.5
74.0													16.6	38.8	10.8



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]
				32.0		eza de p	al, Punto dumín (19 n] Posici	916-1) 5	3.5 m Pl	eza de p umín	lumín				
15.4	78.0	87.3	20.6												
16.0	77.3	87.1	20.6												
18.0	75.1	86.6	19.5												
20.0	72.9	86.0	18.5												
22.0	70.6	85.3	17.7												
22.7				73.0	85.8	17.8									
24.0	68.3	84.6	17.1	71.6	85.3	17.7									
26.0	66.0	83.7	16.5	69.3	84.6	17.1									
28.0	63.6	82.7	16.1	67.0	83.8	16.6									
30.0	61.2	81.7	15.7	64.6	82.9	16.2									
32.0	58.7	80.5	15.3	62.2	81.8	15.9									
34.0	56.1	79.2	15.0	59.8	80.7	15.6	05.0	00.0	40.0						
34.1 36.0	53.5	77.7	14.7	57.2	79.4	15.2	65.0 62.8	82.0 81.1	16.2 16.0						
38.0	50.8	76.2	14.7	57.2 54.6	79.4 78.1	15.2	60.3	80.0	15.7						
40.0	47.9	74.4	13.8	51.9	76.1	14.8	57.8	78.7	15.7						
42.0	44.9	72.5	13.1	49.1	74.9	14.3	55.2	77.4	15.4						
44.0	41.8	70.3	12.5	46.2	73.0	13.8	52.6	75.9	14.9						
46.0	38.4	67.9	12.0	43.1	70.9	13.4	49.8	74.3	14.7				i		
47.4	00.1	00	12.0		7 0.0		10.0			55.0	75.2	14.1			
48.0	34.8	65.1	11.5	39.9	68.6	13.0	46.9	72.4	14.1	54.3	74.8	14.7			
50.0	30.8	61.9	10.8	36.3	66.0	12.6	43.8	70.4	13.6	51.6	73.3	14.5			
55.0	17.2	50.4	9.1	25.8	57.5	10.7	35.3	64.2	12.6	44.3	68.6	13.8			
58.0				16.6	49.5	9.5									
60.0							24.4	55.3	11.0	36.5	63.0	12.5			
63.0							15.8	47.8	9.7						
65.0										25.1	53.9	11.3			
68.0										15.7	45.6	10.5			
69.4													35.0	55.1	10.9
70.0													34.2	54.5	11.2
75.0													22.8	45.1	10.3
77.0													16.2	39.3	9.9



N° 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 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]
				32.0 ו		eza de p	al, Punto dumín (19 n] Posici	916-1) 5	6.5 m Pl	eza de p umín	lumín				
16.0	78.0	90.2	18.7												
18.0	75.9	89.7	18.1												
20.0	73.8	89.2	17.3												
22.0	71.7	88.5	16.4												
23.6	20.5	07.0	45.0	73.0	88.6	16.2									
24.0	69.5 67.4	87.8 87.0	15.8	72.6	88.5 87.8	16.2				ł					
26.0 28.0	67.4 65.1	87.0 86.1	15.3 14.9	70.5 68.3	87.8 87.0	15.8 15.4									
30.0	62.9	85.1	14.9	66.1	86.2	15.4				i					
32.0	60.5	84.0	14.3	63.8	85.2	14.7				i					
34.0	58.2	82.8	14.0	61.5	84.2	14.5									
35.4							65.0	84.7	14.8	İ					
36.0	55.7	81.4	13.8	59.2	83.0	14.2	64.3	84.4	14.8	İ			İ		
38.0	53.2	80.0	13.5	56.8	81.7	13.9	62.1	83.4	14.6						
40.0	50.6	78.4	13.4	54.3	80.3	13.7	59.7	82.3	14.3						
42.0	47.9	76.6	12.8	51.7	78.8	13.5	57.3	81.0	14.1						
44.0	45.1	74.7	12.2	49.1	77.1	13.2	54.9	79.7	13.8						
46.0	42.1	72.6	11.7	46.3	75.2	12.8	52.3	78.1	13.6						
48.0 49.1	39.0	70.2	11.2	43.4	73.2	12.4	49.7	76.5	13.5	55.0	77.6	12.9			
50.0	35.6	67.5	10.7	40.3	70.9	12.1	47.0	74.7	13.0	55.0	77.0	13.4			
55.0	25.4	58.8	9.3	31.6	63.9	10.9	39.5	69.3	12.0	47.4	72.9	13.4			
58.0	16.8	50.8	8.4	31.0	03.9	10.9	39.3	09.5	12.0	47.4	12.9	13.1			
60.0	10.0	00.0	0.4	19.6	53.2	9.1	30.5	62.0	10.9	40.0	67.5	12.1	i		
61.0				16.2	50.0	8.8		1							
65.0							17.8	50.5	9.5	31.1	60.4	11.1			
66.0							15.3	48.2	8.8						
70.0										18.8	49.3	9.9			
71.0										15.2	46.0	9.7			
71.8													35.0	56.9	10.2
75.0													29.3	52.1	10.0
80.0													15.7	39.7	9.2



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]
				32.0 ו	m Pluma Cab	eza de p	al, Punto Ilumín (1 n] Posici	916-1) 5	9.5 m Pl		lumín		-		
16.7 18.0 20.0 22.0 24.0 24.5	78.0 76.7 74.7 72.7 70.6	93.1 92.8 92.3 91.7 91.0	16.3 16.0 15.1 14.4 13.8	73.0	91.5	14.0									
26.0 28.0 30.0 32.0	68.5 66.4 64.3 62.1	90.2 89.4 88.4 87.4	13.4 13.0 12.7 12.5	71.5 69.4 67.3 65.2	91.0 90.3 89.4 88.5	13.9 13.5 13.2 12.9									
34.0 36.0 36.6 38.0 40.0	59.9 57.6 55.2 52.8	86.2 85.0 83.6 82.1	12.2 12.0 11.8 11.6	63.0 60.8 58.5 56.2	87.5 86.4 85.2 83.9	12.6 12.4 12.1 11.9	65.0 63.5 61.3	87.5 86.8 85.7	12.8 12.7 12.4						
42.0 44.0 46.0 48.0	50.3 47.7 45.0 42.2	80.5 78.7 76.8 74.6	11.4 11.0 10.6 10.3	53.8 51.4 48.8 46.2	82.5 80.9 79.2 77.3	11.7 11.6 11.3 11.1	59.1 56.8 54.4 52.0	84.5 83.2 81.8 80.3	12.2 12.0 11.8 11.6						
50.0 50.8 55.0 60.0 61.0	39.2 30.6 18.6 15.2	72.2 64.8 53.6 50.1	9.9 9.0 7.7 7.4	35.7 26.1	75.2 69.0 60.4	10.8	49.4 42.6 34.8	78.6 73.6 67.2	10.9 10.4	55.0 49.8 43.0	80.1 76.8 71.9	11.5 11.3 10.9			
64.0 65.0 68.0 70.0 74.0				16.9	51.5	7.4	24.8 16.3	58.2 49.9	9.2 8.4	35.3 25.5 16.0	65.6 56.8 47.6	9.5 8.5			
74.3 75.0 80.0 83.0													35.0 33.7 23.4 16.5	58.6 57.5 48.0 41.2	9.5 9.5 8.7 8.0



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]: 124.0 Lastre central [t]: 52.6

		gulo de principa			gulo de orincipa			gulo de principa			gulo de principa			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]
				32.0		eza de p	al, Punto dumín (19 n] Posici	916-1) 6	2.5 m Pl	eza de p umín	lumín				
17.3	78.0	96.1	14.7												
18.0	77.4	95.9	14.7												
20.0 22.0	75.5 73.5	95.4 94.8	13.9 13.3							ł					
24.0	73.5	94.8	13.3												
25.4	71.0	94.2	12.7	73.0	94.4	12.7									
26.0	69.6	93.5	12.3	72.4	94.2	12.7				i					
28.0	67.6	92.7	12.0	70.5	93.5	12.4				i					
30.0	65.6	91.8	11.7	68.5	92.7	12.1		İ	İ	İ	İ				
32.0	63.6	90.8	11.4	66.5	91.8	11.8									
34.0	61.5	89.7	11.3	64.4	90.9	11.6									
36.0	59.3	88.5	11.0	62.4	89.9	11.3									
37.9							65.0	90.2	11.6						
38.0	57.2	87.3	10.8	60.2	88.7	11.1	64.9	90.1	11.6						
40.0	54.9	85.9	10.6	58.1	87.5	10.9	62.8	89.1	11.4						
42.0	52.6	84.4	10.4	55.9	86.2	10.7	60.7	88.0	11.2						
44.0	50.2	82.7	10.3	53.6	84.7	10.5	58.6	86.8	11.0						
46.0	47.8	81.0	10.0	51.2	83.1	10.4	56.4	85.5	10.8						
48.0	45.2	79.0	9.7	48.8	81.4	10.2	54.1	84.1	10.6						
50.0	42.5	76.9	9.4	46.3	79.5	10.0	51.8	82.5	10.5						

45.6

38.6

30.3

19.0

15.9

78.0

72.3

64.9

53.6

50.3

55.0

52.1

46.0

39.1

30.9

19.9

15.6

10.2

9.9

8.0

7.8

82.5

80.7

76.2

70.6

63.3

52.4

48.0

10.4

10.3

10.0

9.3

8.4

7.7

29.3

17.3 16.1

52.5

55.0

60.0

64.0 65.0

67.0

70.0

71.0

75.0

76.7

77.0

80.0

85.0

86.0

35.0

25.8 17.0 70.5

61.7 52.8 7.8 6.4 39.4

31.3

20.6

16.5

74.0

66.8

56.2

51.9

8.9

6.7

8.9

8.5

7.9

60.3

55.0

43.0



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]
				32.0 ı		eza de p	ıl, Punto lumín (1: ı] Posici	916-1) 6	5.5 m Pli	eza de p umín	lumín				
18.0	78.0	99.0	13.4												
20.0	76.1	98.5	12.9												
22.0	74.3	98.0	12.4												
24.0	72.5	97.4	11.8												
26.0	70.6	96.7	11.4												
26.3	00.7	05.0		73.0	97.2	11.7									
28.0 30.0	68.7 66.8	95.9 95.1	11.1 10.8	71.4 69.5	96.7 95.9	11.6 11.3									
30.0	64.9	95.1	10.8	69.5 67.6	95.9 95.1	11.3									
34.0	62.9	93.1	10.6	65.7	94.2	10.7									
36.0	60.9	92.0	10.4	63.7	93.3	10.7									
38.0	58.9	90.8	9.9	61.7	92.2	10.3									
39.2	00.0	00.0	0.0	0	02.2	10.0	65.0	92.9	10.6						
40.0	56.8	89.5	9.7	59.7	91.0	10.0	64.2	92.5	10.6						
42.0	54.6	88.1	9.5	57.6	89.8	9.8	62.2	91.4	10.4						
44.0	52.4	86.6	9.3	55.5	88.4	9.6	60.2	90.3	10.2						
46.0	50.1	85.0	9.1	53.3	87.0	9.4	58.1	89.1	10.0						
48.0	47.8	83.2	8.9	51.1	85.4	9.3	56.0	87.8	9.8						
50.0	45.3	81.3	8.6	48.8	83.7	9.1	53.8	86.3	9.6						
54.2										55.0	85.0	9.4			
55.0	38.7	75.6	8.1	42.6	78.7	8.6	48.1	82.2	9.2	54.2	84.4	9.4			
60.0	30.9	68.2 57.5	7.5	35.5	72.3	8.3	41.8	77.0	8.8	48.5	80.3	9.1			
65.0 67.0	20.5 16.6	57.5	6.6 5.8	26.8	63.8	7.4	34.6	70.5	8.4	42.2	75.3	8.8			
70.0	10.0	JJ.2	3.0	16.1	52.4	6.1	25.7	61.7	7.7	35.1	68.9	8.5			
74.0				10.1	52.4	0.1	15.5	50.7	7.1	55.1	00.9	0.0			
75.0							10.0	00.7	7.1	26.4	60.3	7.9			
79.2											00.0		35.0	62.0	8.0
80.0										15.3	48.4	6.7	33.7	60.8	8.0
85.0													24.5	51.6	7.6
89.0													15.7	42.1	6.7



Nº de ident.: 9842523/95738/

Radio de descarga: 360°

Valor de vuelco:	2 - Vía ancha
Lastre trasero [t]:	124.0
Lastre central [t]:	52.6

		gulo de orincipal			gulo de orincipa			gulo de principa		65° Án	gulo de orincipa	pluma I	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]
				32.0 ı	m Pluma Cab	eza de p	lumín (1	de carga 916-1) 68 ón midfa	8.5 m Plı	eza de p umín	lumín				
18.6 20.0 22.0 24.0 26.0	78.0 76.8 75.0 73.3 71.5	101.9 101.6 101.1 100.5 99.8	12.3 12.1 11.5 11.1 10.7												
27.1 28.0 30.0 32.0 34.0	69.7 67.9 66.1 64.2	99.1 98.3 97.4 96.5	10.4 10.1 9.9 9.6	73.0 72.2 70.5 68.7 66.8	100.1 99.8 99.1 98.4 97.5	10.8 10.8 10.6 10.3 10.1									
36.0 38.0 40.0 40.4	62.3 60.4 58.4	95.5 94.3 93.1	9.5 9.2 9.0	65.0 63.1 61.2	96.6 95.6 94.5	9.8 9.6 9.4	65.0	95.6	9.7						
42.0 44.0 46.0 48.0 50.0	56.4 54.3 52.2 50.0 47.8	91.8 90.4 88.9 87.2 85.4	8.7 8.5 8.4 8.2 8.0	59.2 57.2 55.2 53.1 51.0	93.3 92.1 90.7 89.2 87.6	9.2 8.9 8.7 8.6 8.4	63.5 61.6 59.7 57.7 55.7	94.8 93.8 92.6 91.4 90.0	9.7 9.5 9.3 9.1 8.9						
55.0 56.0 60.0 65.0 70.0 73.0	34.9 26.5 16.2	73.8 65.2 53.7	7.5 7.1 6.4 5.3	38.9 31.5 22.0 15.7	77.4 70.1 59.9 52.8	7.9 7.5 7.0 6.4 5.6	50.4 44.6 38.2 30.6	86.2 81.5 75.7 68.2	8.5 8.0 7.6 7.2	55.0 50.7 45.0 38.6	87.5 84.3 79.7 74.0	8.6 8.4 8.1 7.7			
75.0 77.0 80.0 81.7 82.0				15.7	52.0	3.0	20.7 15.1	57.5 51.1	6.7 6.5	31.1 21.5 16.1	66.6 56.2 50.1	7.4 7.0 6.8	35.0	63.7	7.2
85.0 90.0 92.0										10.1	30.1	0.0	29.7 19.3 15.3	58.3 47.0 42.5	7.2 6.9 6.2



N° de ident.: 9842523/95738/

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

360 ° Cab 2 - Vía ancha

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 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]
				32.0 ı		eza de p	ıl, Punto lumín (1: ı l Posici	916-1) 7	1.5 m Pl	eza de p umín	lumín		-		
						40.0 [11	Posici	on midia	11 (1916)			1		1	
19.2	78.0	104.9	11.0												
20.0 22.0	77.3 75.7	104.7 104.2	11.0 10.5												
24.0	75.7 74.0	104.2	10.5												
26.0	72.3	103.0	9.8												
28.0	70.6	102.3	9.5	73.0	103.0	9.7									
30.0	68.9	101.6	9.3	71.3	102.3	9.6							i		
32.0	67.1	100.7	9.0	69.6	101.6	9.4									
34.0	65.4	99.8	8.8	67.9	100.8	9.2							İ		
36.0	63.6	98.8	8.6	66.1	99.9	8.9									
38.0	61.7	97.8	8.5	64.3	99.0	8.7									
40.0	59.9	96.6	8.3	62.5	97.9	8.6									
41.7							65.0	98.3	8.7				•		
42.0	58.0	95.4	8.1	60.7	96.8	8.4	64.7	98.2	8.7						
44.0	56.1	94.1	7.9	58.8	95.6	8.2	62.9	97.2	8.6						
46.0	54.1	92.6	7.7	56.9	94.3	8.0	61.1	96.1	8.5						
48.0	52.1	91.1	7.6	54.9	93.0	7.9	59.2	94.9	8.3						
50.0	50.0	89.5	7.5	52.9	91.5	7.7	57.3	93.6	8.1						
55.0 57.7	44.4	84.7	7.1	47.6	87.2	7.4	52.4	90.0	7.8	55.0	89.9	7.7	ł		
60.0	38.3	78.9	6.7	41.9	82.1	7.1	47.0	85.7	7.5	52.7	88.2	7.7			
65.0	31.1	71.5	6.3	35.3	75.7	6.8	41.2	80.4	7.2	47.4	83.9	7.4			
70.0	21.9	61.2	5.6	27.5	67.3	6.2	34.5	73.9	6.9	41.6	78.7	7.1			
73.0	15.9	54.1	4.8	27.0	01.0	0.2	01.0	70.0	0.0	41.0	70.7		i		
75.0				16.5	54.5	5.6	26.5	65.2	6.5	35.0	72.2	6.9	ĺ		
76.0				15.4	53.2	5.1									
80.0							16.7	53.8	5.5	27.0	63.7	6.6			
84.1													35.0	65.5	6.5
85.0										15.8	50.5	6.3	33.7	64.1	6.5
90.0													25.4	55.1	6.5
94.0													16.1	44.2	6.1



N° de ident.: 9842523/95738/ Piez

Radio de descarga: 360

/95738/ Pieza de articulación de pluma principal: 2821-1 360 ° 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]
				32.0		eza de p	il, Punto lumín (19 n] Posici	916-1) 7	4.5 m Pl		lumín				
19.8	78.0	107.8	10.0												
20.0	77.9	107.8	10.0												
22.0	76.3	107.3	9.7												
24.0	74.7	106.8	9.2												
26.0	73.1	106.2	9.0												
28.0	71.4	105.5	8.7												
28.9				73.0	105.8	8.8									
30.0	69.8	104.8	8.5	72.1	105.5	8.8									
32.0	68.1	104.0	8.3	70.5	104.8	8.6									
34.0	66.4	103.1	8.1	68.8	104.0	8.4									
36.0	64.7	102.2	7.9	67.1	103.2	8.2 8.0									
38.0	63.0 61.2	101.2 100.1	7.8 7.6	65.4 63.7	102.3 101.3	7.8							ł		
40.0 42.0	59.4	98.9	7.5	62.0	101.3	7.8									
43.0	35.4	30.3	1.5	02.0	100.5	1.1	65.0	101.1	7.9						
44.0	57.6	97.7	7.3	60.2	99.1	7.6	64.1	100.5	7.9						
46.0	55.8	96.3	7.2	58.4	97.9	7.4	62.4	99.5	7.8						
48.0	53.9	94.9	7.1	56.5	96.6	7.3	60.6	98.4	7.6	i			i		
50.0	51.9	93.4	7.0	54.7	95.2	7.2	58.8	97.2	7.5	i					
55.0	46.8	89.0	6.7	49.7	91.2	6.9	54.1	93.8	7.2						
59.4										55.0	92.4	7.0			
60.0	41.1	83.7	6.4	44.4	86.5	6.7	49.2	89.8	6.9	54.4	91.9	7.0			
65.0	34.8	77.1	6.2	38.5	80.7	6.5	43.8	84.9	6.7	49.5	87.9	6.8			
70.0	27.2	68.6	5.6	31.7	73.4	6.1	37.8	79.0	6.6	44.1	83.2	6.6			
75.0	16.6	55.8	4.9	23.2	63.6	5.5	30.9	71.5	6.3	38.2	77.3	6.5			
76.0	15.5	54.5	4.4												
79.0				15.0	53.6	4.7									
80.0							22.1	61.2	5.8	31.3	69.9	6.3			
83.0							16.4	54.2	5.2	00.7	50.0	0.0			
85.0										22.7	59.9	6.0	25.0	67.0	6.0
86.6										15.4	E0.0	5.8	35.0	67.2	6.0
88.0 90.0										15.4	50.9	5.8	30.0	61.7	6.0
90.0 95.0				I			I						20.8	50.9	5.8
97.0													15.8	44.6	5.6



N° de ident.: 9842523/95738/ F

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		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]
				32.0		eza de p	al, Punto dumín (19 n] Posici	916-1) 7	7.5 m Pl		lumín				
20.4 22.0 24.0 26.0 28.0	78.0 76.8 75.3 73.7 72.2	110.8 110.4 109.9 109.3 108.7	9.0 8.9 8.4 8.2 7.9												
29.8 30.0 32.0 34.0 36.0	70.6 69.0 67.4 65.8	108.0 107.2 106.4 105.5	7.7 7.5 7.3 7.1	73.0 72.8 71.3 69.7 68.1	108.7 108.6 108.0 107.2 106.4	7.9 7.9 7.8 7.6 7.4									
38.0 40.0 42.0 44.0 44.2	64.1 62.5 60.8 59.0	104.6 103.5 102.4 101.2	7.0 6.9 6.7 6.6	66.5 64.8 63.2 61.5	105.6 104.7 103.7 102.6	7.2 7.1 6.9 6.8	65.0	103.8	7.0						
46.0 48.0 50.0 55.0 60.0	57.3 55.5 53.6 48.8 43.7	100.0 98.6 97.1 93.0 88.2	6.4 6.3 6.2 6.0 5.7	59.8 58.0 56.2 51.6 46.7	101.4 100.2 98.9 95.2 90.7	6.6 6.5 6.4 6.1 5.9	63.5 61.9 60.2 55.7 51.1	102.9 101.8 100.7 97.5 93.7	7.0 6.8 6.7 6.4 6.1						
61.1 65.0 70.0 75.0 79.0	37.9 31.3 23.0 15.2	82.2 74.8 64.9 54.9	5.5 5.2 4.7 3.9	41.3 35.2 28.0	85.5 79.0 70.7	5.7 5.5 5.1	46.1 40.6 34.5	89.2 83.8 77.2	5.9 5.8 5.6	55.0 51.4 46.4 41.0	94.8 91.9 87.4 82.1	6.1 6.0 5.8 5.7			
80.0 81.0 85.0 86.0 89.0				18.4 15.8	58.7 55.3	4.7 4.6	27.1 17.0 16.0	68.6 55.9 54.6	5.4 5.1 4.7	34.9 27.6	75.5 67.1	5.5 5.4	35.0	68.9	5.2
90.0 91.0 95.0 100.0										17.8 15.1	54.8 51.3	5.3 5.3	33.7 26.1 15.5	67.4 58.6 45.0	5.2 5.2 5.0



2821-1

2821-1

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

Lasile	enuari].		32.0											
		gulo de principa			gulo de orincipa			gulo de principa			gulo de principa			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]
				32.0		eza de p	al, Punto olumín (1	916-1) 8	0.5 m Pl	umín [·]	lumín				

[]	[°]	nas [m]		[°]	nas [m]		[°]	nas [m]		[°]	nas [m]		[°]	nas [m]	
				32.0 ı	m Pluma	principa	I, Punto	de carga	1 - Cab	eza de p	lumín				
					Cab	eza de p 37.0 [m	lumín (19 1 Posicio	916-1) 80 ón midfa).5 m Pli II (1916)	umín					
21.1	78.0	113.7	8.2						, ,						
22.0	77.3	113.5	8.2												
24.0	75.8	113.0	7.8												
26.0	74.4	112.4	7.5												
28.0	72.9	111.8	7.2												
30.0	71.4	111.2	7.0												
30.7				73.0	111.6	7.2									
32.0	69.8	110.4	6.9	72.0	111.1	7.1									
34.0	68.3	109.6	6.7	70.5	110.4	7.0									
36.0	66.7	108.8	6.5	68.9	109.7	6.8									
38.0	65.2	107.9	6.3	67.4	108.9	6.6									
40.0	63.6	106.9	6.2	65.8	108.0	6.4									
42.0	62.0	105.9	6.1	64.2	107.0	6.3									
44.0	60.3	104.7	5.9	62.6	106.0	6.1									
45.5							65.0	106.5	6.3						
46.0	58.7	103.5	5.8	61.0	104.9	6.0	64.6	106.3	6.3						
48.0	57.0	102.2	5.7	59.4	103.7	5.9	63.0	105.2	6.2						
50.0	55.2	100.9	5.6	57.7	102.5	5.8	61.4	104.2	6.1						
55.0	50.7 45.9	97.0 92.5	5.4 5.1	53.3 48.7	99.0 94.8	5.5 5.3	57.2 52.8	101.1 97.6	5.8 5.5						
60.0 62.8	45.9	92.5	5.1	48.7	94.8	5.3	52.8	97.6	5.5	55.0	97.3	5.4			
65.0	40.6	87.0	5.0	43.7	89.9	5.1	48.1	93.4	5.3	53.1	97.3 95.7	5.4 5.4			
70.0	34.7	80.4	4.8	38.2	84.1	4.9	43.1	93.4 88.4	5.3 5.1	48.4	95.7 91.5	5.4			
75.0	27.7	72.0	4.5	31.9	76.8	4.9	37.5	82.3	5.0	43.4	86.6	5.0			i
80.0	18.4	60.0	4.1	24.1	67.1	4.5	31.1	74.9	4.8	37.9	80.6	4.9			
81.0	15.9	56.6	4.0	24.1	07.1	7.5	01.1	14.5	4.0	51.5	00.0	7.5			
84.0	10.0	00.0	4.0	15.5	55.7	4.2									
85.0				10.0	00.7	7.2	23.1	64.9	4.7	31.5	73.3	4.8			i
89.0							15.7	55.0	4.3	01.0	7 0.0	1.0			
90.0										23.7	63.5	4.8			
91.5													35.0	70.6	4.5
94.0										16.5	54.0	4.3			
95.0													30.3	65.0	4.5
100.0													22.0	54.6	4.5
103.0													15.2	45.4	4.4



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]
				32.0 ı		eza de p	il, Punto Ilumín (19 n] Posici	916-1) 8	3.5 m Pl	eza de p umín	lumín				
21.7	78.0	116.6	7.3												
22.0	77.8	116.6	7.3												
24.0	76.4	116.1	7.1												
26.0	74.9	115.5	6.8												
28.0	73.5	115.0	6.6												
30.0	72.1	114.3	6.4												
31.5				73.0	114.4	6.5									
32.0	70.6	113.6	6.3	72.7	114.3	6.5									
34.0	69.1	112.9	6.1	71.2	113.6	6.4 6.2									
36.0	67.6 66.1	112.1	5.9 5.8	69.7	112.9										
38.0 40.0	64.6	111.2 110.3	5.8 5.7	68.3 66.8	112.1 111.3	6.0 5.9									
40.0 42.0	63.1	10.3	5.7 5.5	65.2	110.4	5.9									
44.0 44.0	61.5	109.2	5.4	63.7	109.4	5.6									
46.0	59.9	107.0	5.3	62.2	108.3	5.5									
46.8	00.0	107.0	0.0	02.2	100.0	0.0	65.0	109.2	5.6						
48.0	58.3	105.8	5.2	60.6	107.2	5.4	64.1	108.6	5.6						
50.0	56.6	104.5	5.1	59.0	106.0	5.2	62.5	107.6	5.5						
55.0	52.4	100.9	4.8	54.8	102.7	5.0	58.5	104.7	5.2						
60.0	47.9	96.6	4.6	50.5	98.8	4.8	54.4	101.3	5.0						
64.6										55.0	99.7	4.8			
65.0	43.0	91.6	4.4	45.8	94.2	4.5	50.0	97.4	4.8	54.6	99.4	4.8			
70.0	37.6	85.6	4.2	40.7	88.8	4.4	45.3	92.7	4.6	50.3	95.5	4.7			
75.0	31.5	78.2	4.0	35.1	82.3	4.2	40.2	87.2	4.4	45.6	90.9	4.5			
80.0	23.9	68.4	3.7	28.4	74.0	4.0	34.4	80.5	4.3	40.5	85.5	4.4			
84.0	15.6	57.0	3.5												
85.0				19.9	62.6	3.8	27.6	72.0	4.1	34.8	78.8	4.2			
87.0				15.2	56.1	3.7									
90.0							18.7	60.0	4.0	28.1	70.5	4.2			
92.0							15.4	55.4	3.5				25.0	70.0	4.0
93.9 95.0										19.4	58.8	4.1	35.0 33.7	72.3 70.8	4.0 4.0
95.0 97.0										19.4 16.2	58.8 54.4	4.1 3.6	33.1	70.8	4.0
100.0										10.2	54.4	3.0	26.8	62.0	3.9
105.0													17.4	49.4	3.9
106.0													16.5	48.1	3.5



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

Radio de descarga: 360 °
Valor de vuelco: 2 - Vía ancha
Lastre trasero [t]: 124.0
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]
				32.0 r		eza de p	ıl, Punto lumín (19 n] Posici	916-1) 8	6.5 m Pli	eza de p umín	lumín				
22.3	78.0	119.6	6.7												
24.0	76.9	119.2	6.5												
26.0	75.5	118.7	6.3												
28.0	74.1	118.1	6.1												
30.0	72.7	117.5	5.9												
32.0	71.3	116.8	5.8												
32.4				73.0	117.3	5.9									
34.0	69.9	116.1	5.6	71.9	116.8	5.8									
36.0	68.5	115.3	5.5	70.5	116.1	5.7									
38.0	67.0	114.5	5.3	69.1	115.3	5.5									
40.0	65.6	113.6	5.2	67.6	114.5	5.4									
42.0	64.1	112.6	5.1	66.2	113.7	5.3									
44.0	62.6	111.6	5.0	64.7	112.7	5.1									
46.0	61.1 59.5	110.5 109.3	4.9 4.8	63.2 61.7	111.7 110.7	5.0 4.9	05.0	111.9	5.1						
48.0 50.0	59.5	109.3	4.8	60.2	109.5	4.9	65.0 63.5	111.9	5.1						
55.0	53.9	106.1	4.7	56.2	109.5	4.6	59.8	108.2	4.8						
60.0	49.7	104.6	4.4	50.2	100.4	4.6	55.8	105.2	4.6						
65.0	45.1	96.0	4.0	47.7	98.4	4.1	51.6	101.3	4.4						
66.3	40.1	00.0	7.0	77.7	00.4	7.1	01.0	101.0	7.7	55.0	102.2	4.3			
70.0	40.2	90.4	3.8	43.0	93.4	3.9	47.2	96.9	4.2	51.9	99.4	4.3			
75.0	34.6	83.8	3.6	37.8	87.4	3.7	42.5	91.8	4.0	47.5	95.1	4.1			
80.0	28.2	75.4	3.4	32.0	80.1	3.6	37.2	85.7	3.8	42.8	90.0	3.9			
85.0	19.8	63.9	3.2	24.9	70.7	3.4	31.3	78.2	3.7	37.6	84.0	3.8			
87.0	15.4	57.4	3.1												
90.0				16.5	58.8	2.8	24.0	68.4	3.5	31.7	76.6	3.7			
95.0							15.1	55.8	2.9	24.5	67.0	3.6			
96.4													35.0	74.1	3.5
100.0										15.9	54.9	3.0	30.5	68.4	3.4
105.0													23.0	58.2	3.4
109.0													16.2	48.5	3.0



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

Valor de vuelco: 2 - Vía ancha Lastre trasero [t]: 124.0 Lastre central [t]: 52.6

		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]
				32.0	m Pluma Cab	eza de p	il, Punto llumín (19 n] Posici	916-1) 8	9.5 m Pl	eza de p umín	lumín				
22.9	78.0	122.5	5.9												
24.0	77.3	122.2	5.8												
26.0	76.0	121.8	5.6							<u> </u>					
28.0	74.6	121.2	5.4												
30.0	73.3	120.6	5.3												
32.0	72.0	120.0	5.1												
33.3				73.0	120.2	5.2									
34.0	70.6	119.3	4.9	72.5	120.0	5.2									
36.0	69.2	118.5	4.8	71.2	119.3	5.0									
38.0 40.0	67.8 66.4	117.7 116.9	4.7 4.5	69.8 68.4	118.6 117.8	4.9 4.8									
40.0 42.0	65.0	115.9	4.5	68.4 67.0	117.8	4.8 4.6									
42.0 44.0	63.6	115.9	4.4	67.0 65.6	116.9	4.6									
46.0	62.1	113.0	4.3	64.2	115.1	4.5							ł		
48.0	60.7	112.8	4.1	62.7	114.1	4.3									
49.3	00.7	112.0	7.1	02.7	117.1	7.0	65.0	114.6	4.4						
50.0	59.2	111.6	4.0	61.3	113.0	4.2	64.5	114.3	4.4						
55.0	55.3	108.3	3.8	57.5	110.0	3.9	60.9	111.7	4.1	i					
60.0	51.3	104.6	3.6	53.6	106.5	3.7	57.1	108.6	3.9	İ		İ			
65.0	47.0	100.2	3.4	49.5	102.4	3.5	53.2	105.1	3.7						
68.0										55.0	104.7	3.7			
70.0	42.4	95.0	3.2	45.1	97.7	3.3	49.0	101.0	3.5	53.4	103.2	3.6			
75.0	37.4	88.9	3.0	40.3	92.2	3.2	44.6	96.2	3.4	49.3	99.1	3.5			
80.0	31.6	81.5	2.9	35.0	85.6	3.0	39.7	90.6	3.2	44.8	94.4	3.3			
85.0	24.7	72.0	2.7	28.8	77.4	2.9	34.3	83.8	3.1	40.0	88.8	3.2			
90.0	15.1	57.8	2.5	21.1	66.4	2.7	28.1	75.4	2.9	34.7	82.2	3.1			
93.0				16.2	59.2	2.2	00.4		0.0	00.5	70.0				
95.0							20.1	64.0	2.8	28.5	73.9	3.0			
97.0 98.9							15.8	57.6	2.7				35.0	75.8	2.9
100.0										20.6	62.7	2.9	35.0	75.8	2.9
100.0										20.6 15.6	55.3	2.9	33.1	/4.1	2.9
105.0				l						10.0	33.3	2.4	27.3	65.4	2.8
110.0				Ī									18.9	53.4	2.8
112.0				I									15.9	48.9	2.4



N° de ident.: 9842523/95738/

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

Valor de vuelco:

Lastre trasero [t]:

Lastre central [t]:

2 - Vía ancha 124.0

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]
				32.0	m Pluma Cab	eza de p	al, Punto dumín (19 n] Posici	916-1) 9	2.5 m Pl		lumín		-		
23.6	78.0	125.4	5.2												
24.0	77.7	125.3	5.2												
26.0	76.4	124.9	5.0	•											
28.0	75.2	124.3	4.9												
30.0	73.9	123.8	4.7												
32.0	72.6	123.1	4.5												
34.0	71.2	122.5	4.4												
34.2				73.0	123.1	4.5									
36.0	69.9	121.8	4.3	71.8	122.5	4.5									
38.0	68.6	121.0	4.2	70.5	121.8	4.3									
40.0	67.2	120.1	4.0	69.2	121.0	4.2									
42.0	65.9	119.3	3.9	67.8	120.2	4.1									
44.0	64.5	118.3	3.8	66.5	119.3	4.0									
46.0	63.1	117.3	3.7	65.1	118.4	3.8									
48.0	61.7	116.2	3.6	63.7	117.4	3.7									
50.0	60.3	115.1	3.5	62.3	116.4	3.7									
50.6							65.0	117.4	3.8						
55.0	56.6	112.0	3.3	58.7	113.5	3.4	61.9	115.1	3.6						
60.0	52.8	108.4	3.1	55.0	110.2	3.2	58.3	112.2	3.4						
65.0	48.7	104.2	2.9	51.1	106.4	3.0	54.6	108.8	3.2						
69.7										55.0	107.1	3.1			
70.0	44.4	99.4	2.7	46.9	101.9	2.9	50.6	104.9	3.0	54.8	106.9	3.1			
75.0	39.8	93.8	2.6	42.5	96.8	2.7	46.4	100.4	2.9	50.9	103.1	3.0			
80.0	34.6	87.1	2.5	37.6	90.7	2.6	41.9	95.2	2.7	46.7	98.6	2.8			
85.0				32.1	83.4	2.4	37.0	89.0	2.6	42.2	93.4	2.7			
90.0							31.4	81.5	2.5	37.3	87.3	2.6			
95.0							24.7	72.0	2.3	31.8	79.9	2.5			
100.0										25.2	70.5	2.4			
101.3			1	I									35.0	77.5	24

105.0



Nº de ident.: 9842523/95738/

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

360 ° Cabeza de plu - Vía ancha

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]
				32.0 ı		eza de p	il, Punto llumín (19 n] Posici	916-1) 9	5.5 m Pl		lumín				
24.2	78.0	128.4	4.8												
26.0	76.9	127.9	4.7												
28.0	75.6	127.4	4.5												
30.0	74.4	126.9	4.4												
32.0	73.1	126.3	4.3												
34.0	71.9	125.6	4.1												
35.0				73.0	125.9	4.2									
36.0	70.6	124.9	4.0	72.4	125.6	4.2									
38.0 40.0	69.3 68.0	124.2 123.4	3.9 3.8	71.1 69.8	124.9 124.2	4.0 3.9									
40.0	66.7	123.4	3.8	68.5	123.4	3.9									
44.0	65.4	122.5	3.5	67.2	123.4	3.7									
44.0 46.0	64.0	121.6	3.5	67.2 65.9	122.6	3.6									
48.0	62.7	119.7	3.4	64.6	120.8	3.5									
50.0	61.3	118.6	3.3	63.2	119.8	3.4									
51.8	00	110.0	0.0	00.2	110.0	0	65.0	120.1	3.5						
55.0	57.8	115.6	3.0	59.8	117.0	3.2	62.9	118.5	3.4						
60.0	54.1	112.1	2.8	56.2	113.8	2.9	59.4	115.7	3.2						
65.0	50.3	108.2	2.6	52.5	110.2	2.7	55.8	112.5	2.9						
70.0	46.3	103.7	2.3	48.6	106.0	2.5	52.1	108.8	2.7						
71.4										55.0	109.6	2.8			
75.0							48.1	104.5	2.5	52.3	106.9	2.7			
80.0										48.4	102.7	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 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]
				35.0 r		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 3	8.5 m Pl	eza de p umín	lumín				
12.4	78.0	75.6	64.0												
13.0	77.1	75.5	64.0												
14.0	75.5	75.2	60.0							•					
16.0	72.4	74.6	50.3												
18.0	69.2	73.9	42.9												
18.7				73.0	74.4	53.5									
20.0	66.0	73.0	36.2	71.0	74.0	52.3									
22.0	62.7	72.0	31.3	67.8	73.2	47.8									
24.0	59.3	70.9	27.9	64.5	72.3	41.1									
26.0	55.7	69.5	25.0	61.2	71.2	36.2									
28.0	52.0	68.0	22.7	57.7	70.0	32.2				ł					
28.5	40.0	00.0	24.0	540	00.0	00.0	65.0	71.3	30.1						
30.0	48.0	66.3	21.0	54.0	68.6	29.0	62.6	70.6	34.5						
32.0	43.8 39.3	64.3 62.0	19.5 18.2	50.2 46.2	67.0 65.1	26.5	59.2 55.6	69.4 68.1	32.4 30.4						
34.0 36.0	39.3	59.2	17.1	41.8	63.0	24.3 22.3	55.6	66.6	28.7	-					
38.0	28.3	55.8	16.2	37.1	60.5	20.6	48.0	64.9	27.2						
40.0	20.9	51.3	15.2	31.7	57.5	19.3	43.8	62.9	25.6	55.0	65.6	23.2			
41.0	16.0	48.2	14.8	31.7	37.3	19.5	43.0	02.9	25.0	55.0	05.0	23.2			
42.0	10.0	40.2	14.0	25.3	53.7	18.0	39.2	60.6	24.3	51.5	64.2	23.3			
44.0				16.6	48.2	16.7	34.1	57.8	23.2	47.5	62.4	22.2			
46.0				10.0	70.2	10.7	28.2	54.4	22.0	43.3	60.4	21.1			
48.0							20.8	49.8	20.8	38.7	58.0	20.2			
49.0							15.8	46.6	20.2	55.7	00.0		1		
50.0							. 3.0	.3.0		33.5	55.2	19.4			
55.0										16.5	44.8	15.1			
59.2													35.0	48.6	13.1
60.0													33.5	47.8	13.7
65.0													16.4	37.4	11.5



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 orincipa			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]
				35.0 ו		eza de p	ıl, Punto ılumín (2: ı] Posici	316-1) 4	1.5 m Pli	eza de p umín	lumín				
13.0	78.0	78.5	57.3												
14.0	76.6	78.3	56.9							İ					
16.0	73.7	77.7	49.8												
18.0	70.8	77.1	41.7												
19.6				73.0	77.3	48.8									
20.0	67.9	76.3	36.0	72.4	77.1	48.7									
22.0	64.8	75.4	30.8	69.5	76.4	45.8									
24.0	61.7	74.3	27.1	66.5	75.6	41.5									
26.0	58.5	73.2	24.5	63.4	74.6	36.2									
28.0	55.2	71.8	22.3	60.3	73.5	32.5									
29.8							65.0	74.0	33.2						
30.0	51.7	70.3	20.6	57.0	72.2	29.1	64.8	74.0	33.2						
32.0	48.0	68.6	19.2	53.6	70.8	26.4	61.6	72.9	31.7						
34.0	44.2	66.6	17.8	50.1	69.2	24.3	58.4	71.7	29.9						
36.0	40.0	64.3	16.7	46.3	67.4	22.3	55.1	70.4	28.0						
38.0	35.4	61.6	15.7	42.3	65.3	20.6	51.6	68.9	26.5						
40.0	30.2	58.4	14.9	38.0	62.8	19.1	48.0	67.1	25.2						
41.7				00.4	00.0	47.0		05.4	00.0	55.0	68.1	21.6 22.7			
42.0	23.9 15.4	54.4 48.6	14.1 13.2	33.1 27.5	60.0 56.4	17.9 16.7	44.1 39.9	65.1 62.9	23.8 22.7	54.8	68.0 66.4	21.7			
44.0 46.0	15.4	48.6	13.2	20.5	51.8	15.6	35.3	60.2	21.7	51.3 47.6	64.7	20.6			
47.0				20.5 15.9	48.6	15.0	35.3	60.2	21.7	47.0	04.7	20.6			
47.0				15.9	40.0	15.0	30.1	57.0	20.6	43.7	62.6	19.7			
50.0							23.8	52.9	19.5	39.4	60.3	19.7			
52.0							15.2	47.0	18.3	55.4	00.0	10.0			
55.0							10.2	71.0	10.0	26.5	52.4	17.4			
58.0										15.9	45.2	15.0			
61.7										10.0	70.2	10.0	35.0	50.4	12.1
65.0													26.4	45.0	11.9
68.0													15.8	37.8	10.5



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

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

Valor de vuelco: 2 - Vía ancha Lastre trasero [t]: 124.0 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]
				35.0 ı		eza de p	lumín (2	316-1) 4	4.5 m Pl		lumín		_		
						22.0 [m	n] Posici	ón midta	II (2316)	_			_		
13.6	78.0	81.5	52.0												
14.0	77.5	81.4	52.0												
16.0	74.9	80.9	48.0												
18.0	72.2	80.2	41.6												
20.0	69.4	79.5	35.9	70.0	00.4	45.0				l					
20.5 22.0	66.6	78.7	30.9	73.0 70.9	80.1 79.6	45.2 44.3									
24.0	63.8	78.7	26.8	68.2	79.6 78.8	44.3				ł					
26.0	60.9	76.7	24.0	65.4	78.0	36.9				i			i		
28.0	57.8	75.4	22.0	62.5	76.9	32.9				l					
30.0	54.7	74.1	20.3	59.5	75.8	29.7									
31.1			20.0	00.0	. 0.0	20.7	65.0	76.8	31.3	i					
32.0	51.5	72.5	18.9	56.4	74.5	26.8	63.7	76.3	31.3	i			İ		
34.0	48.1	70.8	17.7	53.3	73.1	24.4	60.8	75.2	29.4						
36.0	44.4	68.8	16.5	49.9	71.4	22.6	57.8	74.0	27.8						
38.0	40.6	66.6	15.5	46.5	69.6	20.8	54.7	72.6	26.2						
40.0	36.4	64.0	14.6	42.7	67.5	19.2	51.4	71.1	24.9						
42.0	31.7	61.0	13.9	38.7	65.2	17.9	48.0	69.4	23.7						
43.5										55.0	70.5	20.3			
44.0	26.2	57.2	13.1	34.3	62.4	16.7	44.4	67.4	22.5	54.3	70.2	21.5			
46.0	19.4	52.3	12.4	29.4	59.1	15.7	40.5	65.1	21.4	51.1	68.7	20.5			
47.0	16.5	50.2	11.3	00.4	540	44-	00.0	20.0	00.5	47.0	20.0	40.4	ł		
48.0 50.0				23.4 15.4	54.9 49.0	14.7 13.7	36.3 31.6	62.6 59.5	20.5 19.5	47.6 44.0	66.9 64.9	19.4 18.7	ł		
50.0 55.0				15.4	49.0	13.7	16.3	59.5 48.6	19.5	33.5	58.5	17.2			
60.0							10.3	46.0	15.1	18.4	47.9	15.6			
61.0										15.3	47.9 45.6	14.1			
64.1										13.3	43.0	14.1	35.0	52.1	11.3
65.0							Ī						33.5	51.1	11.8
70.0													18.3	40.5	10.4
71.0													15.2	38.1	9.8



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

	rasero [t entral [t	•		124.0 52.6											
I	88° Án	aulo do	nluma	83° Án	anlo de	nluma	75° Án	gulo de	nluma	65° Án	gulo de	nluma	45° Án	gulo de	nluma
l		orincipa	•		principal			orincipal			orincipa			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]
				35.0 ı	m Pluma Cab	eza de p	II, Punto Iumín (2 I] Posici	316-1) 4	7.5 m Pl	eza de p umín	lumín				
14.3 16.0 18.0	78.0 75.8 73.3	84.4 84.0	47.4 46.0 41.3												
20.0 21.4	73.3	83.4 82.7	34.8	73.0	83.0	41.8									
22.0 24.0 26.0	68.2 65.6 62.9	82.0 81.1 80.1	30.5 26.6 23.6	72.2 69.6 67.0	82.8 82.1 81.2	41.7 39.6 36.9									
28.0 30.0 32.0	60.1 57.3 54.3	79.0 77.7 76.3	21.6 19.9 18.4	64.4 61.6 58.8	80.3 79.3 78.1	32.8 29.9 27.0									
32.3 34.0 36.0 38.0	51.3 48.1 44.7	74.8 73.0 71.1	17.2 16.1 15.1	55.9 53.0 49.8	76.8 75.3 73.7	24.5 22.4 20.7	65.0 62.8 60.0 57.2	79.5 78.7 77.5 76.3	28.9 28.8 27.0 25.6						
40.0 42.0 44.0	41.1 37.2 33.0	68.9 66.4 63.4	14.1 13.3 12.6	46.6 43.1 39.4	71.8 69.8 67.5	19.2 17.8 16.5	54.3 51.2 48.0	74.9 73.3 71.6	24.2 23.1 22.0	55.0	70.0	40.0			
45.2 46.0 48.0	28.1 22.3	60.0 55.6	12.0 11.4	35.4 30.9	64.8 61.6	15.5 14.6	44.6 41.0	69.6 67.4	21.0	55.0 54.0 50.9	73.0 72.5 70.9	19.0 20.0 19.0			
50.0 53.0	15.9	50.6	10.0	25.7 16.4	57.8 50.6	13.7 11.7	37.2	64.9	19.2	47.7	69.1	18.1			
55.0 58.0 60.0							25.3 15.8	56.4 49.0	16.8 14.7	38.7 27.5	55.8	16.4			
63.0 66.6										17.8	48.4	14.2	35.0	53.8	10.5
70.0 73.0													27.4 17.7	48.4 40.9	10.1 9.3



N° de ident.: 9842523/95738/ Pi

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

Valor de vuelco: 2 - Vía ancha Lastre trasero [t]: 124.0 Lastre central [t]: 52.6 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		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]
				35.0 ı	n Pluma Cab	eza de p	il, Punto lumín (2 n] Posici	316-1) 5	0.5 m Plı	eza de p umín	lumín				
14.9 16.0 18.0 20.0 22.0	78.0 76.7 74.3 72.0 69.6	87.3 87.1 86.5 85.9 85.2	44.0 43.9 40.0 34.7 30.0												
22.2 24.0 26.0 28.0 30.0	67.1 64.6 62.1 59.4	84.4 83.4 82.4 81.3	26.5 23.6 21.4 19.7	73.0 70.9 68.5 66.0 63.5	85.9 85.3 84.5 83.6 82.7	39.3 38.7 36.2 33.2 30.0									
32.0 33.6 34.0 36.0	56.7 54.0 51.1	78.6 77.0	18.2 16.9 15.9	60.9 58.2 55.5	81.6 80.4 79.0	27.6 24.9 22.7	65.0 64.6 62.0	82.2 82.0 81.0	27.9 27.9 26.8						
38.0 40.0 42.0 44.0 46.0	48.1 44.9 41.6 38.0 34.0	75.3 73.3 71.1 68.7 65.9	14.9 13.9 13.1 12.3 11.7	52.7 49.7 46.7 43.4 40.0	77.6 75.9 74.1 72.0 69.8	20.8 19.3 17.9 16.6 15.5	59.4 56.7 53.9 51.0 48.0	79.8 78.6 77.1 75.6 73.8	25.3 24.0 22.7 21.7 20.8						
46.9 48.0 50.0 53.0 55.0	29.7 24.6 15.4	62.6 58.6 51.0	11.1 10.5 8.9	36.2 32.1 18.5	67.1 64.1 53.3	14.5 13.7	44.8 41.5 31.8	71.9 69.7 62.8	19.8 18.9	55.0 53.6 50.7 42.9	75.4 74.7 73.1 68.3	17.9 18.8 17.8			
56.0 60.0 61.0 65.0 66.0				15.9	51.0	10.6	18.0 15.3	51.8 49.4	14.6 13.5	33.5 20.8 17.2	61.8 51.8 48.8	14.7 13.4 13.2			
69.0 70.0 75.0 76.0													35.0 33.5 21.8 18.4	55.5 54.4 45.3 42.4	9.8 9.8 8.5 8.3

Source:a9841388



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 principal		ŗ	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]
				35.0 r		eza de p	ll, Punto lumín (2: n] Posici	316-1) 5	3.5 m Pl	eza de p umín	lumín		-		
15.5 16.0 18.0 20.0	78.0 77.5 75.2 73.0	90.3 90.2 89.7 89.1	39.7 39.7 37.8 34.3												
22.0 23.1 24.0 26.0	70.8 68.5 66.1	88.4 87.6 86.8	29.2 25.9 23.2	73.0 72.0 69.7	88.7 88.4 87.7	35.5 35.4 34.1									
28.0 30.0 32.0 34.0	63.8 61.3 58.8 56.3	85.8 84.7 83.6 82.3	21.0 19.3 17.8 16.5	67.4 65.1 62.7 60.2	86.9 86.0 85.0 83.9	32.8 29.7 27.2 25.1									
34.9 36.0 38.0 40.0	53.6 50.9 48.1	80.8 79.2 77.5	15.4 14.5 13.6	57.7 55.1 52.4	82.7 81.3 79.8	22.7 20.7 19.0	65.0 63.7 61.3 58.8	84.9 84.4 83.3 82.1	26.2 26.2 24.7 23.5						
42.0 44.0 46.0 48.0	45.1 42.0 38.6 35.0	75.6 73.4 71.0 68.3	12.8 12.0 11.3 10.7	49.7 46.8 43.7 40.5	78.2 76.3 74.3 72.0	17.7 16.4 15.2 14.2	56.2 53.6 50.9 48.0	80.8 79.4 77.8 76.1	22.2 21.1 20.2 19.3						
48.6 50.0 55.0 59.0	31.0 17.6	65.1 53.7	10.7	37.0 26.7 15.4	69.5 61.3 51.4	13.3 11.5 9.3	45.0 36.8	74.1 68.2	18.4 16.6	55.0 53.3 46.2	77.9 77.0 72.6	16.7 17.4 15.7			
60.0 63.0 65.0 69.0							26.3 17.5	59.9 52.2	14.5 13.2	28.2 16.7	59.2 49.2	13.0 12.1			
71.5 75.0 79.0													35.0 28.2 17.9	57.3 51.8 42.9	9.0 8.2 7.3



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

360°

Pieza de articulación de pluma principal:

2821-1 2821-1

2 - Vía ancha Valor de vuelco: Lastre trasero [t]: 124.0 Lastre central [t]: 52.6

		gulo de			gulo de			gulo de			gulo de		45° Án	gulo de	pluma
		orincipa			orincipa	_		orincipa			orincipa			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]
				35.0						eza de p	lumín				
					Cab	eza de p 22.0 [m	olumín (2 n] Posici	316-1) 5 ón midfa	6.5 m Pl II (2316)	umín					
16.1	78.0	93.2	36.6												
18.0	76.0	92.8	36.1												
20.0	73.9	92.2	33.8										<u> </u>		
22.0	71.8	91.6	29.2												
24.0	69.7	90.8	25.4	73.0	91.6	32.7									
26.0	67.5	90.0	22.9	70.8	90.9	32.2									
28.0	65.2	89.1	20.8	68.7	90.2	31.3									
30.0	63.0	88.1	19.1	66.5	89.3	29.7							<u> </u>		
32.0	60.7	87.0	17.7	64.2	88.4	27.2									
34.0	58.3	85.8	16.4	61.9	87.3	25.2									
36.0	55.9	84.5	15.3	59.6	86.2	23.1									
36.1							65.0	87.6	24.5						
38.0	53.4	83.1	14.3	57.2	84.9	21.0	62.9	86.7	24.5						
40.0	50.8	81.5	13.4	54.8	83.6	19.2	60.6	85.6	23.1						
42.0	48.1	79.7	12.6	52.2	82.0	17.7	58.3	84.4	22.1						
44.0	45.3	77.8	11.9	49.6	80.4	16.4	55.8	83.1	20.9						
46.0	42.3	75.7	11.2	46.8	78.6	15.3	53.3	81.6	19.8						
48.0	39.2	73.3	10.5	44.0	76.6	14.2	50.7	80.1	19.0						
50.0	35.8	70.6	9.9	40.9	74.3	13.3	48.0	78.3	18.2						
50.3										55.0	80.4	15.7			
55.0	25.7	62.1	8.8	32.3	67.5	11.4	40.7	73.1	16.3	49.1	76.7	15.4			
58.0	17.1	54.2	8.1												
60.0				20.7	57.2	9.7	32.0	66.2	14.6	41.9	71.7	13.9			
61.0				17.5	54.2	9.4									
65.0							20.3	55.7	12.5	33.5	65.1	12.8			
66.0							17.0	52.7	12.1						
70.0										22.5	55.5	11.8			
72.0										16.2	49.7	11.3	25.0	50.0	0.0
73.9													35.0	59.0	8.3
75.0												-	33.0	57.4	8.1
80.0	l	l	I	I		1		1	1	I		1	23.3	48.9	7.1



N° 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]
				35.0 ı		eza de p	ıl, Punto llumín (2 ı] Posici	316-1) 5	9.5 m Pli	eza de p umín	lumín				
16.8	78.0	96.1	33.6												
18.0	76.8	95.9	33.5												
20.0	74.8	95.3	31.9												
22.0	72.8	94.7	29.2												
24.0	70.7	94.0	25.2												
24.9				73.0	94.5	30.2									
26.0	68.7	93.3	22.5	71.9	94.1	30.1									
28.0	66.6	92.4	20.5	69.8	93.4	29.5									
30.0	64.5	91.5	18.7	67.7	92.6	28.9									
32.0	62.3	90.5	17.4	65.6	91.7	26.9									
34.0	60.1	89.4	16.1	63.5	90.7	24.9									
36.0	57.8	88.1	15.0	61.3	89.7	23.5									
37.4							65.0	90.4	23.1						
38.0	55.5	86.8	13.9	59.1	88.5	21.4	64.4	90.1	23.5						
40.0	53.1	85.3	13.0	56.8	87.2	19.5	62.2	89.1	22.8						
42.0	50.6	83.7	12.3	54.4	85.8	17.8	60.0	87.9	21.5						
44.0 46.0	48.1 45.4	82.0 80.1	11.6 10.9	52.0 49.5	84.3 82.6	16.4 15.3	57.8 55.5	86.7 85.4	20.6 19.5						
46.0 48.0	45.4 42.6	77.9	10.9	49.5 46.9	82.6 80.8	15.3	55.5 53.1	85.4 83.9	19.5						
50.0	39.7	77.9 75.6	9.6	44.2	78.8	13.3	50.6	82.3	17.8						
52.1	39.1	75.0	9.0	44.2	70.0	13.3	30.0	02.3	17.0	55.0	82.8	14.7			
55.0	31.2	68.5	8.5	36.7	72.8	11.2	44.0	77.6	15.9	51.6	80.7	15.1			
60.0	19.8	57.7	7.4	27.4	64.7	9.7	36.4	71.6	14.5	45.1	76.1	13.6			
61.0	16.7	54.6	7.2	21.4	04.7	5.1	30.4	71.0	14.5	43.1	70.1	15.0			
64.0	10.7	04.0	7.2	17.0	54.6	8.5									
65.0					0	0.0	27.2	63.3	12.6	37.7	70.4	12.4			
69.0							16.6	53.1	11.0	J					
70.0										28.8	62.6	11.4			
75.0										15.8	50.1	10.5			
76.4													35.0	60.7	7.4
80.0													29.4	55.8	6.7
85.0													16.9	43.8	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

	88° Án	gulo de principa	pluma I	83° Án	gulo de orincipa	pluma I	75° Án I	gulo de orincipa	pluma I		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]
				35.0 ı	m Pluma Cab	eza de p	ıl, Punto ılumín (2 ı] Posici	316-1) 6:	2.5 m Plı	eza de p umín	lumín				
17.4 18.0 20.0 22.0 24.0	78.0 77.4 75.5 73.6 71.7	99.1 98.9 98.4 97.9 97.2	31.1 31.1 30.3 29.1 25.2			-									
25.7 26.0 28.0 30.0 32.0	69.7 67.8 65.8 63.7	96.5 95.7 94.8 93.9	22.3 20.3 18.5 17.1	73.0 72.8 70.8 68.9 66.9	97.3 97.3 96.6 95.8 95.0	28.2 28.2 27.9 27.4 26.6									
34.0 36.0 38.0 38.7 40.0	61.7 59.5 57.4 55.2	92.8 91.7 90.4 89.0	16.0 14.9 13.8	64.9 62.8 60.7 58.6	94.1 93.1 92.0 90.8	24.7 23.2 22.0 20.0	65.0 63.7	93.1 92.4	22.5 22.4						
42.0 44.0 46.0 48.0 50.0	52.9 50.5 48.1 45.6 42.9	87.6 86.0 84.2 82.3 80.2	12.9 12.1 11.4 10.7 10.1 9.5	56.4 54.1 51.8 49.4 47.0	89.5 88.1 86.5 84.9 83.0	18.2 16.7 15.5 14.4 13.4	61.6 59.5 57.3 55.1 52.8	91.4 90.2 89.0 87.6 86.1	21.3 20.2 19.3 18.3 17.5						
53.8 55.0 60.0 64.0 65.0	35.6 26.6 16.3	74.0 65.5 55.0	8.2 7.3 6.5	40.3 32.4 22.2	77.7 70.8 60.9	11.2 9.6	46.8 40.1 32.2	81.8 76.5	15.8 14.2	55.0 53.8 47.8	85.3 84.5 80.3	13.9 14.7 13.4			
67.0 70.0 72.0 75.0 78.0				16.6	55.0	7.7	21.9 16.1	59.5 53.5	10.9	33.5 23.8 15.4	68.5 59.1 50.5	11.2 10.4 9.6			
78.9 80.0 85.0 88.0										10.4	50.5	3.0	35.0 34.1 24.5 16.5	62.4 61.6 52.5 44.2	6.6 6.4 5.5 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 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]
				35.0 ı	m Pluma Cab	principa eza de p	ıl, Punto lumín (2:	de carga 316-1) 6	1 - Cab 5.5 m Pl	eza de p umín	lumín		_		
							ı] Posici								
18.0	78.0	102.0	27.6												
20.0	76.2	101.5	27.3												
22.0	74.4	101.0	26.1												
24.0 26.0	72.6 70.7	100.4 99.7	24.1 21.6												
26.6	70.7	99.1	21.0	73.0	100.2	25.0									
28.0	68.8	98.9	19.9	71.7	99.8	24.9				i			i		
30.0	66.9	98.1	18.1	69.9	99.0	24.4				Ī					
32.0	65.0	97.2	16.7	68.0	98.3	23.9				İ			İ		
34.0	63.1	96.2	15.4	66.1	97.4	23.0									
36.0	61.1	95.1	14.5	64.1	96.4	22.1									
38.0	59.1	93.9	13.4	62.2	95.4	21.3									
39.9							65.0	95.8	20.6						
40.0	57.0	92.7	12.5	60.2 58.1	94.3	20.1	65.0	95.8	20.9						
42.0 44.0	54.9 52.7	91.3 89.8	11.7 10.9	56.0	93.1 91.7	18.3 16.7	63.0 61.0	94.8 93.7	20.7 19.7						
46.0	50.4	88.2	10.9	53.9	90.3	15.3	59.0	92.5	18.7						
48.0	48.1	86.4	9.7	51.7	88.8	14.1	56.9	91.3	17.9	i			i		
50.0	45.7	84.5	9.2	49.4	87.1	13.2	54.8	89.9	17.0	i			Ī		
55.0	39.1	79.0	7.9	43.3	82.2	11.1	49.2	85.9	15.4						
55.5										55.0	87.7	13.1			
60.0	31.5	71.8	6.9	36.4	76.1	9.3	43.1	81.0	13.8	50.1	84.3	12.9			
65.0	21.5	61.5	6.0	28.1	68.1	8.1	36.2	74.9	12.5	44.1	79.6	11.7	ļ		
67.0	15.9	55.4	5.7												
70.0				16.2	55.5	6.8	27.8	66.7	10.9	37.4	73.7	10.7			
75.0 80.0							15.7	53.9	9.1	29.3 18.2	65.9 54.3	9.9 8.8			
80.0 81.0										18.2 15.0	54.3 50.9	8.6			
81.3										13.0	30.8	0.0	35.0	64.1	5.7
85.0													29.8	59.1	5.1
90.0													19.1	47.9	4.3
91.0										<u> </u>			16.1	44.6	4.1



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 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]
				35.0 ו	m Pluma Cab	eza de p	al, Punto Ilumín (2 n] Posici	316-1) 6	8.5 m Pl		lumín		-		
18.6 20.0 22.0 24.0 26.0	78.0 76.8 75.1 73.3 71.6	104.9 104.6 104.1 103.5 102.9	25.1 25.0 23.9 22.9 20.9												
27.5 28.0 30.0 32.0 34.0	69.8 68.0 66.2 64.3	102.2 101.4 100.5 99.6	19.5 18.1 16.6 15.3	73.0 72.6 70.8 69.0 67.2	103.1 102.9 102.2 101.5 100.7	22.6 22.6 22.3 21.8 21.4									
36.0 38.0 40.0 41.2 42.0	62.5 60.6 58.6	98.5 97.4 96.2 94.9	14.2 13.3 12.4	65.4 63.5 61.6 59.7	99.8 98.8 97.7	20.9 20.4 20.1	65.0 64.3	98.5 98.2	19.5 19.9						
44.0 46.0 48.0 50.0	54.6 52.5 50.3 48.1	93.6 92.1 90.4 88.7	10.8 10.1 9.6 9.0	57.7 55.7 53.6 51.5	95.3 94.0 92.6 91.0	17.1 15.6 14.3 13.2	62.4 60.5 58.6 56.6	97.1 96.0 94.8 93.5	19.4 18.5 17.7 16.8						
55.0 57.2 60.0 65.0 70.0 73.0	35.4 27.2 15.5	77.3 68.9 55.8	7.7 6.7 5.9 5.1	39.7 32.5 23.5 15.8	86.6 81.1 74.1 64.5 55.9	9.3 8.0 6.9 6.1	51.4 45.8 39.5 32.3	89.8 85.3 79.8 72.8	13.6 12.3 11.1	55.0 52.2 46.7 40.6	90.2 88.2 83.8 78.5	12.4 12.7 11.6 10.4			
75.0 78.0 80.0 83.8				10.0	33.8	0.1	23.2 15.4	63.1 54.3	9.4 8.4	33.5 24.8	71.8	9.6 8.6	35.0	65.9	5.1
84.0 85.0 90.0 94.0										15.8	52.5	7.4	34.0 25.4 15.7	64.9 56.0 45.0	4.9 4.1 3.5



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]: 124.0 52.6 Lastre central [t]:

		gulo de orincipa		ı	gulo de orincipa		ı	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]
				35.0 ו	m Pluma Cab	eza de p	al, Punto dumín (2 n] Posici	316-1) 7	1.5 m Pl	eza de p umín	lumín				
19.2	78.0	107.9	22.9												
20.0	77.4	107.7	22.9												
22.0	75.7	107.2	22.2												
24.0	74.1 72.4	106.7	21.4 20.0	l			ł								
26.0 28.0	70.7	106.0 105.4	18.6												
28.4	70.7	103.4	10.0	73.0	105.9	20.8	i								
30.0	69.0	104.6	17.5	71.6	105.4	20.7	i			i					
32.0	67.3	103.8	16.0	69.9	104.7	20.3	i			i					
34.0	65.5	102.9	14.7	68.2	103.9	19.9									
36.0	63.7	101.9	13.6	66.5	103.1	19.5									
38.0	61.9	100.9	12.7	64.7	102.1	19.1									
40.0	60.1	99.7	11.9	62.9	101.1	18.7									
42.0 42.5	58.2	98.5	11.1	61.1	100.1	18.4	65.0	101.2	18.5						
44.0	56.3	97.2	10.3	59.2	98.9	16.9	63.7	101.2	18.5						
46.0	54.3	95.8	9.7	57.3	97.6	15.5	61.9	99.5	17.9						
48.0	52.3	94.3	9.1	55.4	96.3	14.2	60.0	98.3	17.0	i					
50.0	50.2	92.7	8.6	53.4	94.8	13.0	58.2	97.1	16.3	İ					
55.0	44.8	88.0	7.4	48.2	90.7	10.9	53.3	93.6	14.4						
58.9										55.0	92.6	11.6			
60.0	38.7	82.3	6.3	42.5	85.7	9.1	48.1	89.5	13.1	54.1	92.0	12.0			
65.0	31.6	75.1	5.5	36.2	79.5	7.7	42.4	84.4	11.8	48.9	87.9	10.9			
70.0 73.0	22.7 15.2	65.2 56.2	4.8 4.3	28.6	71.4	6.6	36.0	78.2	10.8	43.3	83.0	10.0			
75.0	15.2	30.2	4.3	18.3	59.7	5.5	28.3	70.1	9.3	37.0	77.0	9.1			
76.0				15.5	56.3	5.3	20.5	/ 0.1	0.0	37.0	77.0	0.1			
80.0				1	00.0	0.0	17.9	58.2	7.8	29.7	69.3	8.3			
81.0							15.0	54.7	7.4						
85.0										19.2	57.4	7.2			
86.2													35.0	67.6	4.3
87.0										15.4	52.9	6.7			
90.0													30.2	62.5 51.7	3.7 3.0
95.0 97.0													20.7 15.4	51.7 45.4	3.0 2.7
91.0													10.4	40.4	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 orincipa		83° Án I	gulo de orincipa	pluma I	75° Án I	gulo de orincipa	pluma I		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]
				35.0	m Pluma Cab	eza de p	ıl, Punto ılumín (2 ı] Posici	316-1) 7	4.5 m Pl	eza de p umín	lumín				
19.9 20.0 22.0 24.0 26.0 28.0 29.3	78.0 77.9 76.3 74.7 73.1 71.5	110.8 110.8 110.3 109.8 109.2 108.5	21.5 21.5 21.2 20.4 19.5 18.1	73.0	108.8	19.7									
30.0 32.0 34.0 36.0 38.0 40.0 42.0	69.9 68.2 66.5 64.9 63.1 61.4 59.6	107.8 107.0 106.2 105.3 104.3 103.2 102.0	17.0 15.9 14.6 13.5 12.5 11.7 10.9	72.4 70.8 69.1 67.5 65.8 64.1 62.4	108.6 107.9 107.1 106.3 105.5 104.5 103.5	19.7 19.5 19.1 18.8 18.4 18.0 17.7									
43.7 44.0 46.0 48.0 50.0 55.0	57.8 56.0 54.1 52.1 47.1	100.8 99.5 98.1 96.5 92.2	10.2 9.5 8.9 8.3 7.2	60.6 58.8 57.0 55.1 50.3	102.4 101.2 99.9 98.5 94.7	17.2 15.7 14.4 13.2 10.9	65.0 64.8 63.1 61.4 59.6 55.0	103.9 103.8 102.9 101.8 100.6 97.4	17.4 17.6 17.6 16.7 16.0 14.3						
60.0 60.7 65.0 70.0 75.0 76.0	41.5 35.3 27.8 17.7	87.0 80.6 72.3 60.1 57.8	5.3 4.6 3.9	45.0 39.2 32.6 24.4	90.0 84.4 77.4 68.0	9.1 7.6 6.5 5.5	50.1 44.9 39.1 32.4	93.5 88.8 83.2 76.1	12.9 11.6 10.5 9.4	55.0 50.9 45.7 40.0	95.1 91.9 87.3 81.9	11.0 10.7 9.8 8.9			
79.0 80.0 84.0 85.0	15.6	57.6	3.4	15.1	56.7	4.7	24.2 15.7	66.7 56.3	8.0 6.3	33.5 25.6	75.1 66.1	8.1 7.0	35.0	60.2	3.6
88.7 90.0 95.0 100.0										15.1	53.3	6.0	35.0 34.0 26.2 15.0	69.3 68.2 59.4 45.8	3.6 3.5 2.7 2.1



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

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				gulo de orincipa		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]
35.0 m Pluma principal, Punto de carga 1 - Cabeza de plumín Cabeza de plumín (2316-1) 77.5 m Plumín 43.0 [m] Posición midfall (2316)															
20.5 22.0 24.0 26.0	78.0 76.9 75.3 73.8	113.7 113.4 112.9 112.3	19.7 19.6 18.8 18.3												
28.0 30.0 30.1	72.2	111.7 111.0	17.2 16.3	73.0	111.7	18.0									
32.0 34.0 36.0 38.0	69.1 67.5 65.9 64.3	110.3 109.5 108.6 107.6	15.6 14.4 13.2 12.2	71.5 70.0 68.4 66.8	111.1 110.4 109.6 108.7	17.9 17.6 17.3 16.9									
40.0 42.0 44.0	62.6 60.9 59.2	106.6 105.5 104.3	11.4 10.7 9.9	65.2 63.5 61.8	107.8 106.9 105.8	16.5 16.2 15.9									
45.0 46.0 48.0 50.0	57.5 55.7 53.9	103.1 101.8 100.3	9.2 8.6 8.0	60.1 58.4 56.7	104.7 103.5 102.2	15.2 14.0 12.9	65.0 64.2 62.6 60.9	106.7 106.2 105.2 104.1	15.7 16.1 15.9 15.4						
55.0 60.0 62.4	49.1 44.0	96.3 91.5	6.9 5.9	52.1 47.2	98.5 94.2	10.7 9.0	56.5 52.0	101.0 97.4	14.0 12.5	55.0	97.6	10.3			
65.0 70.0 75.0 79.0	38.3 31.8 23.8 15.5	85.7 78.4 68.8 58.2	5.0 4.3 3.7 2.9	41.9 36.0 29.0	89.1 82.8 74.8	7.5 6.3 5.4	47.1 41.7 35.8	93.0 87.9 81.5	11.3 10.2 9.4	52.7 47.9 42.6	95.7 91.5 86.5	10.4 9.4 8.6			
80.0 82.0 85.0 87.0				19.9 15.8	63.6 58.3	4.5 3.7	28.8 19.6 15.4	73.5 62.1 56.7	8.1 6.6 5.6	36.8 29.6	80.4 72.2	7.7 6.6			
90.0 91.1 92.0							13.4	30.7	3.0	22.0 17.5	62.9 57.2	5.7 5.3	35.0	71.0	2.9
95.0 97.0													30.4 27.3	65.8 62.1	2.4 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:

	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]	
35.0 m Pluma principal, Punto de carga 1 - Cabeza de plumín Cabeza de plumín (2316-1) 80.5 m Plumín 34.0 [m] Posición midfall (2316)																
21.1	78.0	116.7	18.2													
22.0	77.4	116.5	18.2													
24.0	75.9	116.0	17.6													
26.0	74.4	115.5	17.0													
28.0	72.9	114.8	16.4													
30.0	71.4	114.2	15.6													
31.0				73.0	114.6	16.6										
32.0	69.9	113.5	15.0	72.3	114.2	16.6										
34.0	68.4	112.7	14.3	70.8	113.6	16.4										
36.0	66.8	111.9	13.1	69.2	112.8	16.1										
38.0	65.3	111.0	12.1	67.7	112.0	15.8										
40.0	63.7	110.0	11.2	66.1	111.1	15.4										
42.0	62.1	108.9	10.5	64.6	110.2	15.0										
44.0	60.5	107.8	9.8	63.0	109.2	14.7										
46.0	58.8	106.6	9.1	61.4	108.1	14.4										
46.3							65.0	109.4	15.0							
48.0	57.1	105.4	8.5	59.7	107.0	13.6	63.7	108.6	15.0							
50.0	55.4	104.0	7.9	58.1	105.8	12.6	62.1	107.5	14.8							
55.0	50.9	100.2	6.7	53.7	102.3	10.6	57.9	104.6	13.7							
60.0	46.2	95.7	5.7	49.2	98.3	9.0	53.6	101.1	12.2							
64.1										55.0	100.0	9.7				
65.0	41.0	90.4	4.8	44.2	93.5	7.5	49.0	97.1	11.1	54.3	99.5	10.0				
70.0	35.1	83.9	4.1	38.8	87.8	6.3	44.1	92.3	10.1	49.8	95.5	9.2				
75.0	28.3	75.7	3.5	32.7	80.7	5.3	38.7	86.5	9.2	44.9	90.8	8.4				
80.0	19.3	64.2	3.0	25.2	71.5	4.4	32.5	79.4	8.2	39.6	85.2	7.6				
82.0	15.2	58.6	2.5													
85.0				15.5	58.7	3.3	25.0	70.2	6.9	33.2	78.0	6.5				
90.0							15.1	57.1	5.1	26.9	70.3	5.6				
93.6													35.0	72.7	2.4	
95.0										17.2	57.6	4.7	33.9	71.5	2.3	
96.0	I												32.6	70.0	2.1	



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

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]
	35.0 m Pluma principal, Punto de carga 1 - Cabeza de plumín Cabeza de plumín (2316-1) 83.5 m Plumín														
						37.0 [m	ı] Posici	ón midfa	II (2316)						
21.7	78.0	119.6	16.7												
22.0	77.8	119.6	16.7												
24.0	76.4	119.1	16.4												
26.0	75.0	118.6	15.9												
28.0	73.6	118.0	15.5												
30.0	72.1	117.4	14.9	70.0	117.4	15.3				ł					
31.9 32.0	70.7	116.7	14.3	73.0 72.9	117.4	15.3									
34.0	69.2	115.7	13.9	71.5	116.7	15.3				i					
36.0	67.7	115.1	12.9	70.0	116.0	15.0				i					
38.0	66.2	114.3	11.9	68.5	115.2	14.7									
40.0	64.7	113.3	11.0	67.1	114.4	14.4				i					
42.0	63.2	112.3	10.2	65.6	113.5	14.1		İ	İ	İ			İ		
44.0	61.6	111.3	9.5	64.0	112.6	13.8									
46.0	60.1	110.1	8.9	62.5	111.5	13.5									
47.6							65.0	112.1	13.8						
48.0	58.5	108.9	8.2	60.9	110.4	13.3	64.7	111.9	13.8						
50.0	56.8	107.6	7.7	59.3	109.3	12.4	63.2	110.9	13.8						
55.0	52.6	104.1	6.4	55.2	106.0	10.4	59.2	108.1	13.1						
60.0	48.1	99.9	5.5	50.9	102.2	8.9	55.1	104.9	11.9						
65.0 65.8	43.3	94.9	4.6	46.3	97.8	7.4	50.8	101.0	10.8	55.0	102.5	9.1			
70.0	38.0	89.0	3.8	41.3	92.5	6.1	46.2	96.5	9.8	55.0 51.5	99.4	9.1			
75.0	31.9	81.8	3.3	35.8	86.1	5.0	41.2	91.2	8.8	47.0	95.0	8.2			
80.0	24.6	72.3	2.7	29.3	78.2	4.2	35.6	84.9	8.1	42.0	89.9	7.3			
84.0	16.7	61.5	2.3				00.0	- · · · ·	Ü.,						
85.0				21.2	67.4	3.5	29.2	76.9	6.9	36.3	83.4	6.2			
88.0				15.2	59.1	2.7									
90.0							20.9	66.0	5.6	30.7	76.6	5.3			
92.0							16.6	59.9	5.1						
95.0										23.0	66.5	4.4			
98.0										16.9	58.1	3.9			



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

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

Valor de vuelco: 2 - Vía ancha Lastre trasero [t]: 124.0 Lastre central [t]: 52.6

		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]
				35.0 ı		eza de p	al, Punto dumín (2 n] Posici	316-1) 8	6.5 m Pl	eza de p umín	lumín				
22.4	78.0	122.6	15.4												
24.0	76.9	122.2	15.4												
26.0	75.5	121.7	14.9												
28.0	74.1	121.1	14.6												
30.0	72.8	120.5	14.2												
32.0	71.4	119.8	13.7												
32.8				73.0	120.3	14.3									
34.0	70.0	119.1	13.3	72.1	119.9	14.3									
36.0	68.5	118.4	12.8	70.7	119.2	14.1									
38.0	67.1	117.5	11.8	69.3	118.5	13.8									
40.0	65.7	116.6	10.8	67.9	117.7	13.6									
42.0	64.2	115.7	10.0	66.5	116.8	13.3									
44.0	62.7	114.7	9.3	65.0	115.9	13.1									
46.0	61.2	113.6	8.8	63.5	114.9	12.8									
48.0	59.7	112.4	8.1	62.0	113.9	12.6									
48.8							65.0	114.8	12.3						
50.0	58.1	111.2	7.5	60.5	112.8	12.3	64.2	114.3	12.8						
55.0	54.1	107.8	6.3	56.6	109.7	10.3	60.4	111.6	12.5						
60.0	49.9	103.9	5.3	52.5	106.1	8.8	56.5	108.5	11.7						
65.0	45.4	99.2	4.4	48.2	101.9	7.5	52.4	104.9	10.5						
67.6										55.0	104.9	8.6			
70.0	40.5	93.8	3.7	43.6	96.9	6.1	48.1	100.7	9.6	53.1	103.2	8.8			
75.0	35.0	87.2	3.0	38.5	91.1	4.9	43.4	95.7	8.7	48.8	99.1	8.0			
80.0	28.7	79.1	2.5	32.7	84.1	4.1	38.3	89.9	7.9	44.0	94.1	7.0			
85.0				25.5	74.4	3.3	32.6	82.8	7.0	39.5	89.0	5.9			
90.0				16.6	61.9	2.6	25.7	73.7	5.8	33.9	82.2	5.0			
95.0							16.3	60.4	4.5	27.4	73.7	4.2			
100.0										18.8	61.7	3.4			
101.0										16.6	58.5	3.2			



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			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]
				35.0 ı		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 8	9.5 m Plı	eza de p umín	lumín				
23.0	78.0	125.5	13.5												
24.0	77.4	125.3	13.5												
26.0	76.0	124.8	13.2												
28.0	74.7	124.2	12.9												
30.0	73.4	123.7	12.7												
32.0	72.0	123.0	12.3												
33.7	70.7	400.0	40.0	73.0	123.2	12.5									
34.0 36.0	70.7 69.3	122.3 121.6	12.0 11.7	72.8 71.4	123.1 122.4	12.5 12.4									
38.0	67.9	121.6	11.7	71.4	122.4	12.4									
40.0	66.5	119.9	10.1	68.7	120.9	11.9									
42.0	65.1	119.0	9.3	67.3	120.9	11.7									
44.0	63.7	118.0	8.7	65.9	119.2	11.4									
46.0	62.2	117.0	8.1	64.4	118.2	11.2									
48.0	60.7	115.9	7.6	63.0	117.2	10.9									
50.0	59.2	114.7	7.0	61.5	116.2	10.8									
50.1							65.0	117.5	11.1						
55.0	55.4	111.4	5.8	57.8	113.2	9.4	61.4	115.0	10.8						
60.0	51.4	107.6	4.8	53.9	109.7	8.1	57.7	112.0	10.4						
65.0	47.1	103.2	4.0	49.8	105.7	7.1	53.8	108.5	9.5						
69.3										55.0	107.4	7.9			
70.0	42.5	98.1	3.3	45.4	101.1	5.8	49.7	104.5	8.9	54.4	106.9	7.9			
75.0	37.5	92.1	2.7	40.7	95.6	4.7	45.3	99.9	8.1	50.3	102.9	7.4			
80.0	31.7	84.7	2.2	35.4	89.1	3.8	40.5	94.4	7.4	46.0	98.4	6.6			
85.0				29.3	81.1	3.1	35.2	87.8	6.7	41.8	93.7	5.6			
90.0				21.7	70.4	2.4	29.1	79.7	5.6	36.7	87.5	4.7			
92.0				17.9	64.7	2.1	24.5	60.0	4.4	20.0	70.0	2.0			
95.0 98.0							21.5 15.3	68.9 59.7	4.4 3.7	30.9	79.9	3.8			
100.0							15.3	59.7	3.1	23.9	70.1	3.1			
100.0										16.3	58.9	2.5			
104.0	1					ı				10.5	30.8	2.5			



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

		gulo de 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]
				35.0	m Pluma Cab	eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 9	2.5 m Plı	eza de p umín	lumín				
23.7	78.0	128.4	12.4												
24.0	77.8	128.3	12.4												
26.0	76.5	127.9	12.3												
28.0	75.2	127.4	12.0												
30.0	73.9	126.8	11.8												
32.0	72.6	126.2	11.5												
34.0	71.3	125.5	11.2												
34.5				73.0	126.0	11.5									
36.0	70.0	124.8	11.0	72.0	125.6	11.5									
38.0	68.7	124.0	10.7	70.7	124.9	11.3									
40.0	67.3	123.2	9.9	69.4	124.1	11.0									
42.0	66.0	122.3	9.1	68.1	123.3	10.8									
44.0	64.6	121.4	8.4	66.7	122.5	10.6									
46.0	63.2	120.4	7.9	65.3	121.6	10.3									
48.0	61.8	119.3	7.4	64.0	120.6	10.0									
50.0	60.4	118.2	6.9	62.6	119.6	9.8									
51.4							65.0	120.3	10.0						
55.0	56.7	115.1	5.6	59.0	116.7	8.9	62.5	118.4	9.9						
60.0	52.9	111.5	4.7	55.3	113.4	7.8	58.9	115.6	9.4						
65.0	48.8	107.3	3.9	51.4	109.6	7.0	55.2	112.3	8.9						
70.0	44.5	102.5	3.1	47.2	105.3	5.8	51.2	108.5	8.5						
71.0										55.0	109.8	7.5			
75.0	39.9	96.9	2.5	42.8	100.2	4.6	47.1	104.1	7.9	51.9	106.8	7.2			
80.0				38.0	94.2	3.7	42.7	99.0	7.1	47.8	102.5	6.4			
85.0				32.5	87.0	3.0	37.8	92.9	6.5	43.9	98.1	5.4			
90.0				26.1	77.9	2.3	32.4	85.7	5.7	39.2	92.4	4.5			
95.0							25.9	76.5	4.6	33.9	85.5	3.7			
100.0							17.3	63.6	3.4	27.8	77.1	2.9			
101.0							16.5	62.4	3.1	00.4	05.0	0.0			
105.0										20.1	65.6	2.2			
106.0										18.2	62.7	2.0			



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

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

2 - Vía ancha Valor de vuelco: Lastre trasero [t]: 124.0 52.6 Lastre central [t]:

		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]
				35.0 ı		eza de p	ıl, Punto lumín (2 ı l Posici	316-1) 9	5.5 m Pl		lumín				
24.3	78.0	131.4	11.3							I			I		
26.0	76.9	131.0	11.3						İ	İ		İ	İ		
28.0	75.7	130.5	11.0							i					
30.0	74.5	129.9	10.8												
32.0	73.2	129.3	10.6												
34.0	71.9	128.7	10.3												
35.4				73.0	128.9	10.4									
36.0	70.7	128.0	10.1	72.6	128.7	10.4									
38.0	69.4	127.2	9.9	71.4	128.0	10.4									
40.0	68.1	126.4	9.4	70.1	127.3	10.1									
42.0	66.8	125.6	8.7	68.8	126.6	9.9									
44.0	65.4	124.7	8.1	67.5	125.7	9.7									
46.0	64.1	123.7	7.5	66.2	124.9	9.5									
48.0	62.7	122.7	7.0	64.8	123.9	9.2									
50.0	61.4	121.6	6.6	63.5	123.0	9.1									
52.6							65.0	123.0	9.1						
55.0	57.9	118.6	5.4	60.1	120.2	8.5	63.4	121.8	9.1						
60.0	54.2	115.2	4.4	56.5	117.1	7.4	60.0	119.1	8.7	•			<u> </u>		
65.0	50.4	111.3	3.6	52.8	113.5	6.6	56.4	115.9	8.3						
70.0	46.3	106.8	2.9	48.9	109.3	5.7	52.7	112.3	7.9						
72.7										55.0	112.3	6.9			
75.0	42.0	101.5	2.2	44.7	104.5	4.6	48.8	108.1	7.6	53.3	110.6	6.9			
80.0				40.2	99.0	3.5	44.6	103.3	6.9	49.4	106.6	6.1			
85.0				35.3	92.4	2.7	40.1	97.8	6.2	45.7	102.4	5.1			
90.0				29.6	84.4	2.1	35.1	91.2	5.7	41.3	97.0	4.2			
95.0							29.4	83.1	4.6	36.5	90.8	3.3			
100.0							22.4	72.6	3.5	31.1	83.2	2.6			
104.0							16.2	62.8	2.6	26.0	75.8	2.0			



Nº de ident.: 9842523/95738/

Radio de descarga:

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

360° 2 - Vía ancha Valor de vuelco: Lastre trasero [t]: 124.0 Lastre central [t]: 52.6

		gulo de principa			gulo de orincipa			gulo de principa		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]
				35.0 ı		eza de p	al, Punto dumín (2 n] Posici	316-1) 9	8.5 m Pli	eza de p umín	lumín				
24.9 26.0 28.0 30.0 32.0	78.0 77.4 76.2 74.9 73.7	134.3 134.0 133.6 133.0 132.5	10.4 10.4 10.3 10.0 9.9												
34.0 36.0 36.3 38.0 40.0	72.5 71.3 70.0 68.8	131.8 131.2 130.4 129.7	9.6 9.4 9.2 9.0	73.0 71.9 70.7	131.8 131.2 130.5	9.6 9.5 9.4									
42.0 44.0 46.0 48.0 50.0	67.5 66.2 65.0 63.7 62.3	128.9 128.0 127.1 126.1 125.0	8.3 7.7 7.2 6.8 6.4	69.5 68.2 66.9 65.7 64.4	129.8 129.0 128.1 127.3 126.3	9.2 9.0 8.8 8.6 8.4									
53.9 55.0 60.0 65.0 70.0	59.0 55.5 51.8 48.0	122.2 118.9 115.2 110.9	5.3 4.2 3.4 2.7	61.1 57.7 54.1 50.4	123.7 120.7 117.2 113.3	8.1 7.2 6.4 5.7	65.0 64.3 61.0 57.6 54.0	125.7 125.2 122.5 119.5 116.0	8.3 8.3 8.1 7.8 7.5						
74.4 75.0 80.0 85.0 90.0				46.5 42.3 37.7	108.8 103.6 97.5	4.6 3.5 2.6	50.3 46.4 42.2 37.6	112.1 107.6 102.4 96.3	7.3 6.7 6.1 5.5	55.0 54.6 50.9 47.4 43.3	114.8 114.3 110.5 106.5 101.5	6.5 6.5 5.8 4.8 3.9			
95.0 100.0 102.0 105.0 107.0							33.1 26.4 18.7 15.9	89.9 80.0 67.7 63.2	4.5 3.7 2.6 2.1	38.8 33.9 31.7	95.7 88.9 85.7	3.1 2.3 2.0			



2821-1

2821-1

N° de ident.: 9842523/95738/ Pieza

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

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

		gulo de orincipal			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]
				35.0 ı		eża de pl	l, Punto umín (23 i] Posici	316-1) 10	1.5 m P	eza de p lumín	lumín				
25.5	78.0	137.2	9.6												
26.0	77.7	137.1	9.6												
28.0	76.6	136.7	9.5												
30.0	75.4	136.1	9.3												
32.0	74.2	135.6	9.1												
34.0	73.0	135.0	8.9												
36.0	71.8	134.3	8.7												
37.2				73.0	134.6	8.8									
38.0	70.6	133.6	8.5	72.5	134.4	8.8									
40.0	69.4	132.9	8.3	71.3	133.7	8.7									
42.0	68.2	132.1	8.0	70.1	133.0	8.5									
44.0	67.0	131.3	7.4	68.9	132.2	8.3									
46.0	65.7	130.4	6.9	67.7	131.4	8.2									
48.0	64.5	129.4	6.4	66.4	130.5	8.0									
50.0	63.2	128.4	6.0	65.2	129.6	7.8									
55.0	60.0	125.7	5.0	62.0	127.1	7.5	05.0	400.4	7.0						
55.2	50.0	400.5	4.0	50.7	404.0	0.0	65.0	128.4	7.6						
60.0	56.6 53.2	122.5 119.0	4.0 3.2	58.7 55.3	124.2 120.9	6.8	61.9	126.0	7.5 7.2						
65.0	49.5	119.0	3.2 2.5	55.3 51.8	120.9	6.0 5.4	58.6 55.3	123.1 119.7	6.9						
70.0 75.0	49.5	114.9	2.5	48.1	112.9	4.5	51.7	116.0	6.7						
76.2				40.1	112.9	4.5	51.7	116.0	0.7	55.0	117.2	6.0			
80.0				44.1	108.0	3.4	48.0	111.7	6.3	52.3	117.2	5.4			
85.0				39.9	108.0	2.5	44.0	106.8	5.7	49.0	110.6	4.5			
87.0				38.0	99.9	2.2	44.0	100.0	5.1	45.0	110.0	4.5			
90.0				30.0	88.8	2.2	39.7	101.1	5.1	45.1	105.9	3.6			
95.0							35.6	95.3	4.3	40.9	100.4	2.7			
99.0							55.0	33.3	7.0	37.3	95.5	2.1			
100.0							30.4	87.5	3.5	00	00.0		ĺ		
105.0							24.1	77.6	2.6						
108.0							19.5	70.0	2.0						



N° de ident.: 9842523/95738/ Piez

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

Valor de vuelco: Lastre trasero [t]:

Lastre central [t]:

2 - Vía ancha 124.0

52.6

		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]
				35.0 ו	m Pluma Cabe	eża de pl	al, Punto lumín (23 n] Posici	316-1) 10)4.5 m P		lumín		_		
26.2	78.0	140.2	9.0												
28.0	77.0	139.7	9.0												
30.0	75.8	139.2	8.7												
32.0	74.7	138.7	8.5												
34.0	73.5	138.1	8.4												
36.0	72.4	137.5	8.2												
38.0	71.2	136.8	8.0	73.0	137.5	8.2									
40.0	70.1	136.1	7.8	71.9	136.9	8.2									
42.0	68.9	135.3	7.7	70.7	136.2	8.0									
44.0	67.7	134.5	7.1	69.5	135.4	7.8									
46.0	66.5	133.7	6.6	68.3	134.7	7.7									
48.0	65.3	132.8	6.2	67.2	133.8	7.5									
50.0	64.1	131.8	5.8	65.9	132.9	7.3									
55.0	60.9	129.1	4.9	62.9	130.5	7.0									
56.4							65.0	131.1	7.0						
60.0	57.7	126.1	3.9	59.7	127.7	6.5	62.8	129.4	7.0						
65.0	54.4	122.7	3.0	56.5	124.6	5.7	59.7	126.6	6.7						
70.0	50.9	118.8	2.3	53.1	121.0	5.1	56.4	123.4	6.4						
75.0				49.6	116.9	4.4	53.0	119.8	6.2						
77.9										55.0	119.7	5.5			
80.0				45.8	112.3	3.4	49.5	115.7	6.0	53.6	118.1	5.3			
85.0				41.8	107.0	2.5	45.7	111.1	5.5	50.4	114.5	4.3			
87.0				40.6	105.3	2.1									
90.0							41.7	105.8	5.0	46.7	110.1	3.4			
95.0							37.8	100.3	4.1	42.8	105.0	2.6			
98.0										40.3	101.5	2.1			
100.0							33.1	93.2	3.3						
105.0							27.6	84.6	2.6						
108.0							23.8	78.3	2.1	I				1	1



N° de ident.: 9842523/95738/ Pieza de

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

Valor de vuelco: 2 - Vía ancha Lastre trasero [t]: 124.0 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]
				35.0 ו		eża de pl	ıl, Punto umín (23 ı] Posici	316-1) ĬC	7.5 m P	eza de p lumín	lumín		-		
26.8	78.0	143.1	8.1												
28.0	77.3	142.8	8.1												
30.0	76.2	142.3	7.9												
32.0	75.1	141.8	7.7												
34.0	74.0	141.2	7.5												
36.0	72.9	140.6	7.3												
38.0	71.8	140.0	7.1												
38.9				73.0	140.4	7.3									
40.0	70.6	139.3	7.0	72.4	140.0	7.3									
42.0	69.5	138.6	6.9	71.3	139.4	7.2									
44.0	68.3	137.8	6.6	70.1	138.6	7.0									
46.0	67.2	136.9	6.1	69.0	137.9	6.8									
48.0	66.0	136.1	5.7	67.8	137.1	6.7									
50.0	64.8	135.1	5.3	66.7	136.2	6.5									
55.0	61.8	132.6	4.5	63.7	133.9	6.2									
57.7							65.0	133.9	6.1						
60.0	58.7	129.7	3.6	60.7	131.2	5.9	63.6	132.7	6.1						
65.0	55.5	126.4	2.7	57.5	128.1	5.3	60.6	130.0	5.9						
70.0				54.3	124.7	4.8	57.5	127.0	5.7						
75.0				50.9	120.8	4.4	54.2	123.5	5.4						
79.6										55.0	122.1	4.9			
80.0				47.4	116.4	3.3	50.8	119.6	5.3	54.7	121.8	4.9			
85.0				43.6	111.5	2.4	47.3	115.2	4.9	51.7	118.4	4.0			
90.0							43.5	110.2	4.4	48.2	114.2	3.1			
95.0							39.4	104.5	3.8	44.5	109.3	2.3			
96.0										43.7	108.3	2.1			
100.0							35.5	98.6	3.0						
105.0							30.5	90.8	2.3						
106.0							29.5	89.1	2.1						



N° de ident.: 9842523/95738/ Pieza d

Radio de descarga: 360° Valor de vuelco: 2 - Via ancha

Lastre trasero [t]:

Lastre central [t]:

2 - Vía ancha 124.0 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]
				35.0 ı			ıl, Punto umín (23			eza de p	lumín				
					Oubt] Posici			iaiiiii					
27.4	78.0	146.0	7.3												
28.0	77.7	145.9	7.3												
30.0	76.6	145.4	7.2												
32.0	75.5	144.9	7.0												
34.0	74.5	144.4	6.8												
36.0	73.4	143.8	6.7												
38.0	72.3	143.2	6.5												
39.8				73.0	143.2	6.5									
40.0	71.2	142.5	6.3	72.9	143.2	6.5									
42.0	70.1	141.8	6.2	71.8	142.5	6.5									
44.0	69.0	141.0	6.1	70.7	141.8	6.3									
46.0	67.8	140.2	5.7	69.6	141.1	6.2									
48.0	66.7	139.3	5.3	68.5	140.3	6.0									
50.0	65.6	138.4	4.9	67.3	139.5	5.9									
55.0	62.7	136.0	4.2	64.5	137.2	5.5									
59.0							65.0	136.6	5.4						
60.0	59.7	133.2	3.4	61.5	134.6	5.3	64.4	136.1	5.4						
65.0	56.6	130.0	2.5	58.5	131.7	4.8	61.5	133.5	5.2						
70.0				55.4	128.4	4.4	58.5	130.5	5.0						
75.0				52.2	124.7	4.1	55.3	127.2	4.8						
80.0				48.8	120.5	3.4	52.1	123.5	4.6						
81.3										55.0	124.6	4.4			
85.0				45.2	115.8	2.4	48.7	119.3	4.4	52.9	122.2	3.7			
90.0							45.1	114.6	4.0	49.6	118.2	2.8			
94.0										46.8	114.5	2.1			
95.0							41.3	109.2	3.5						
100.0							37.6	103.7	2.8						
105.0							33.1	96.6	2.0						



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]
				35.0 ı	m Pluma Cab	eza de p	al, Punto dumín (19 n] Posici	916-1) 3:	2.5 m Plı	eza de p umín	lumín				
11.1 12.0 13.0 14.0 16.0	78.0 76.4 74.6 72.8 69.0	69.7 69.5 69.2 68.9 68.2	43.9 43.4 41.1 39.2 36.2												
17.0 18.0 20.0 22.0 24.0	65.2 61.2 57.0 52.6	67.3 66.3 65.0 63.6	33.2 31.0 28.6 26.7	73.0 71.1 67.3 63.4 59.3	68.7 68.3 67.5 66.5 65.4	37.7 37.0 34.2 31.7 29.7									
26.0 28.0 30.0 32.0 34.0	48.0 43.0 37.4 31.0 22.9	61.8 59.8 57.4 54.3 50.2	25.0 23.1 21.5 20.1 18.5	55.1 50.6 45.8 40.5 34.6	64.1 62.5 60.6 58.4 55.7	28.0 26.6 25.0 23.6 22.3	65.0 61.1 56.9 52.6 47.9	65.9 64.8 63.6 62.1 60.4	31.8 30.7 29.3 27.9 26.6						
35.0 36.0 36.6 38.0 40.0	17.5	47.3	17.7	27.6 18.1	52.3 47.3	20.5	42.9 37.3 30.8	58.4 55.9 52.8	25.0 23.7 22.2	55.0 52.1 47.4	60.7 59.7 57.9	26.5 27.2 25.7			
42.0 43.0 44.0 46.0 48.0							22.7 17.3	48.7 45.8	20.5 19.7	42.3 36.7 30.1 21.7	55.9 53.4 50.2 45.9	24.4 23.3 22.2 21.1			
49.0 54.3 55.0 59.0										16.0	42.8	20.5	35.0 33.5 15.8	45.2 44.5 35.3	16.0 16.6 15.4



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

Valor de vuelco: 2 - Vía ancha Lastre trasero [t]: 124.0 Lastre central [t]: 52.6

		gulo de orincipa			gulo de orincipa			gulo de principa			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]
				35.0 ı		eza de p	al, Punto llumín (1 n] Posici	916-1) 3:	5.5 m Plı		lumín				
11.8 12.0 13.0 14.0 16.0	78.0 77.6 75.9 74.3 70.9	72.7 72.6 72.4 72.1 71.4	38.8 38.8 37.6 36.0 33.1	73.0	71.5	33.3									
18.0 20.0 22.0 24.0	67.4 63.8 60.1 56.3	70.6 69.7 68.6 67.3	30.6 28.4 26.6 24.9	72.7 69.3 65.8 62.2	71.5 70.8 69.9 68.9	33.3 31.3 29.1 27.4									
26.0 27.3 28.0 30.0 32.0	52.3 48.0 43.4 38.4	65.8 64.1 62.1 59.7	23.5 22.1 20.7 19.5	58.4 54.5 50.4 46.0	67.7 66.3 64.7 62.9	25.8 24.5 23.4 22.0	65.0 63.8 60.1 56.2	68.6 68.3 67.2 65.9	28.2 28.2 26.9 25.7						
34.0 36.0 38.0 38.3 40.0	32.7 26.0 16.7	56.8 53.1 47.8	18.4 17.1 15.9	41.2 36.0 29.9	60.7 58.1 54.9 50.7	20.9 19.9 18.6	52.2 47.9 43.4 38.3	64.4 62.6 60.6	24.5 23.4 22.0 20.9	55.0 51.8	63.1 61.9	23.4 24.2			
41.0 42.0 44.0 46.0 48.0				17.3	47.8	16.6	32.6 25.8 16.5	55.3 51.6 46.2	19.9 18.7 17.4	47.5 42.9 37.8 32.0	60.2 58.1 55.7 52.7	23.0 21.9 20.9 20.0			
50.0 52.0 56.7 60.0 62.0										25.0 15.2	48.9 43.2	19.0 18.0	35.0 24.9 15.1	46.9 41.5 35.7	14.8 14.9 14.4



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 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]
				35.0 r		eza de p	ıl, Punto lumín (1 ı] Posici	916-1) 3	8.5 m Pl	eza de p umín	lumín				
12.4	78.0	75.6	34.7												
13.0	77.1	75.5	34.6												
14.0	75.5	75.2	33.1												
16.0	72.4	74.6	30.6												
18.0	69.2	73.9	28.6												
18.7				73.0	74.4	29.7									
20.0	66.0	73.0	26.4	71.0	74.0	29.0									
22.0	62.7	72.0	24.7	67.8	73.2	27.1									
24.0	59.3	70.9	23.2	64.5	72.3	25.3									
26.0	55.7	69.5	21.9	61.2	71.2	24.0									
28.0	52.0	68.0	20.8	57.7	70.0	22.8									
28.5							65.0	71.3	23.6						
30.0	48.0	66.3	19.8	54.0	68.6	21.7	62.6	70.6	24.9						
32.0	43.8	64.3	18.7	50.2	67.0	20.8	59.2	69.4	23.8						
34.0	39.3	62.0	17.7	46.2	65.1	19.6	55.6	68.1	22.7						
36.0	34.2	59.2	16.9	41.8	63.0	18.6	51.9	66.6	21.8						
38.0	28.3	55.8	15.9	37.1	60.5	17.7	48.0	64.9	20.8						
40.0	20.9	51.3	14.9	31.7	57.5	16.8	43.8	62.9	19.6	55.0	65.6	20.8			
41.0	16.0	48.2	14.4												
42.0				25.3	53.7	15.9	39.2	60.6	18.6	51.5	64.2	21.9			
44.0				16.6	48.2	15.0	34.1	57.8	17.8	47.5	62.4	20.9			
46.0							28.2	54.4	16.9	43.3	60.4	19.9			
48.0							20.8	49.8	16.0	38.7	58.0	18.9			
49.0							15.8	46.6	15.6			40.4			
50.0										33.5	55.2	18.1			
55.0										16.5	44.8	14.5	05.0	40.0	40.0
59.2													35.0	48.6	13.8
60.0													33.5	47.8	14.8
65.0													16.4	37.4	12.6



2821-1

2821-1

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

Pieza de articulación de pluma principal:
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]
				35.0		eza de p	ıl, Punto lumín (19 n] Posici	916-1) 4	1.5 m Pl	eza de p umín	lumín				
13.0	78.0	78.5	30.6												
14.0	76.6	78.3	30.2												
16.0	73.7	77.7	28.0												
18.0	70.8	77.1	25.8												
19.6				73.0	77.3	26.2									
20.0	67.9	76.3	24.1	72.4	77.1	26.2									
22.0	64.8 61.7	75.4	22.4	69.5	76.4	24.5									
24.0 26.0	58.5	74.3 73.2	21.1 19.9	66.5 63.4	75.6 74.6	23.0 21.7									
28.0	55.2	71.8	18.8	60.3	73.5	20.7									
29.8	33.2	71.0	10.0	00.5	13.3	20.1	65.0	74.0	22.2						
30.0	51.7	70.3	18.0	57.0	72.2	19.6	64.8	74.0	22.2						
32.0	48.0	68.6	17.1	53.6	70.8	18.8	61.6	72.9	21.5						
34.0	44.2	66.6	16.2	50.1	69.2	18.0	58.4	71.7	20.7						
36.0	40.0	64.3	15.3	46.3	67.4	17.0	55.1	70.4	19.6						
38.0	35.4	61.6	14.7	42.3	65.3	16.1	51.6	68.9	18.8						
40.0	30.2	58.4	13.9	38.0	62.8	15.3	48.0	67.1	17.9						
41.7										55.0	68.1	18.1			
42.0	23.9	54.4	13.1	33.1	60.0	14.6	44.1	65.1	16.9	54.8	68.0	19.4			
44.0	15.4	48.6	12.4	27.5	56.4	13.9	39.9	62.9	16.1	51.3	66.4	18.8			
46.0				20.5	51.8	13.1	35.3	60.2	15.4	47.6	64.7	18.0			
47.0				15.9	48.6	12.7	00.4		447	40.7	00.0	47.4			
48.0 50.0							30.1 23.8	57.0 52.9	14.7 13.9	43.7 39.4	62.6 60.3	17.1 16.3			
50.0 52.0							23.8 15.2	52.9 47.0	13.9	39.4	00.3	10.3			
55.0							10.2	47.0	13.2	26.5	52.4	14.6			
58.0										15.9	45.2	12.0			
61.7										10.0	70.2	12.0	35.0	50.4	13.0
65.0				Ī									26.4	45.0	13.1
68.0													15.8	37.8	11.3



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 orincipal			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]
				35.0 ו		eza de p	ıl, Punto lumín (19 n] Posici	916-1) 4	4.5 m Pli	eza de p umín	lumín				
13.6 14.0 16.0 18.0 20.0	78.0 77.5 74.9 72.2 69.4	81.5 81.4 80.9 80.2 79.5	27.8 27.8 26.1 24.2 22.7												
20.5 22.0 24.0 26.0 28.0	66.6 63.8 60.9 57.8	78.7 77.7 76.7 75.4	21.0 19.6 18.6 17.5	73.0 70.9 68.2 65.4 62.5	80.1 79.6 78.8 78.0 76.9	23.7 23.0 21.5 20.3 19.3									
30.0 31.1 32.0 34.0 36.0	54.7 51.5 48.1 44.4	74.1 72.5 70.8 68.8	16.6 15.9 15.2 14.4	59.5 56.4 53.3 49.9	75.8 75.8 74.5 73.1 71.4	18.4 17.4 16.7 15.9	65.0 63.7 60.8 57.8	76.8 76.3 75.2 74.0	20.1 20.0 19.1 18.3						
38.0 40.0 42.0 43.5 44.0	40.6 36.4 31.7 26.2	66.6 64.0 61.0	13.7 13.0 12.4	46.5 42.7 38.7	69.6 67.5 65.2	15.1 14.3 13.6	54.7 51.4 48.0	72.6 71.1 69.4 67.4	17.4 16.7 15.9	55.0 54.3	70.5 70.2	16.0 17.3			
46.0 47.0 48.0 50.0 55.0	19.4 16.5	52.3 50.2	11.1 9.1	29.4 23.4 15.4	59.1 54.9 49.0	12.4 11.7 11.1	40.5 36.3 31.6 16.3	65.1 62.6 59.5 48.6	13.7 13.1 10.3	51.1 47.6 44.0 33.5	68.7 66.9 64.9 58.5	16.7 16.0 15.2 13.6			
60.0 61.0 64.1 65.0 70.0										18.4 15.3	47.9 45.6	12.1 9.9	35.0 33.5 18.3 15.2	52.1 51.1 40.5 38.1	12.3 12.9 11.9 10.3



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

Valor de vuelco: 2 - Vía ancha Lastre trasero [t]: 124.0 Lastre central [t]: 52.6

		gulo de principa			gulo de principa		75° Án I	gulo de principa	pluma I		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]
				35.0 ו	m Pluma Cab	eza de p	il, Punto lumín (1 n] Posici	916-1) 4	7.5 m Pl		lumín				
14.3 16.0 18.0 20.0 21.4	78.0 75.8 73.3 70.8	84.4 84.0 83.4 82.7	24.6 23.7 22.3 20.9	73.0	83.0	21.1									
22.0 24.0 26.0 28.0 30.0	68.2 65.6 62.9 60.1 57.3	82.0 81.1 80.1 79.0 77.7	19.9 18.8 18.0 17.3 16.7	72.2 69.6 67.0 64.4 61.6	82.8 82.1 81.2 80.3 79.3	21.1 20.0 19.2 18.4 17.9									
32.0 32.3 34.0 36.0 38.0	54.3 51.3 48.1 44.7	76.3 74.8 73.0 71.1	16.1 15.6 14.9 14.1	58.8 55.9 53.0 49.8	78.1 76.8 75.3 73.7	17.2 16.6 16.2 15.6	65.0 62.8 60.0 57.2	79.5 78.7 77.5 76.3	18.0 18.3 17.7 17.2						
40.0 42.0 44.0 45.2 46.0	41.1 37.2 33.0 28.1	68.9 66.4 63.4	13.4 12.7 12.1	46.6 43.1 39.4	71.8 69.8 67.5	14.9 14.3 13.8	54.3 51.2 48.0	74.9 73.3 71.6	16.6 16.2 15.6	55.0 54.0	73.0 72.5	15.7 16.4			
48.0 50.0 53.0 55.0 58.0	22.3 15.9	55.6 50.6	10.8	30.9 25.7 16.4	61.6 57.8 50.6	12.5 11.7 9.7	41.0 37.2 25.3 15.8	67.4 64.9 56.4 49.0	14.3 13.7 12.1 10.5	50.9 47.7 38.7	70.9 69.1 63.7	16.0 15.7 14.0			
60.0 63.0 66.6 70.0 73.0										27.5 17.8	55.8 48.4	12.6 11.7	35.0 27.4 17.7	53.8 48.4 40.9	11.6 11.5 11.0



N° de ident.: 9842523/95738/

Radio de descarga: 360° Valor de vuelco: 2 - Via ancha

Lastre trasero [t]:

Lastre central [t]:

2 - Vía ancha 124.0 52.6

	88° Án	gulo de orincipal	pluma I		gulo de orincipa			gulo de orincipa		65° Án	gulo de orincipa	pluma 	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]
				35.0 ı	m Pluma Cab	eza de p	il, Punto lumín (1 n] Posici	916-1) 5	0.5 m Plı	eza de p umín	lumín				
14.9 16.0 18.0 20.0 22.0	78.0 76.7 74.3 72.0 69.6	87.3 87.1 86.5 85.9 85.2	22.5 22.2 21.1 20.0 19.2												
22.2 24.0 26.0 28.0 30.0	67.1 64.6 62.1 59.4	84.4 83.4 82.4 81.3	18.4 17.8 17.3 16.9	73.0 70.9 68.5 66.0 63.5	85.9 85.3 84.5 83.6 82.7	19.6 19.1 18.5 18.0 17.6									
32.0 33.6 34.0 36.0 38.0	56.7 54.0 51.1 48.1	78.6 77.0 75.3	16.4 16.1 15.8 15.1	58.2 55.5 52.7	81.6 80.4 79.0 77.6	17.2 16.8 16.5 16.2	65.0 64.6 62.0 59.4	82.2 82.0 81.0 79.8	17.7 17.7 17.4 17.1						
40.0 42.0 44.0 46.0	44.9 41.6 38.0 34.0	73.3 71.1 68.7 65.9	14.2 13.5 12.8 12.2	49.7 46.7 43.4 40.0	75.9 74.1 72.0 69.8	15.8 15.2 14.6 14.1	59.4 56.7 53.9 51.0 48.0	79.8 78.6 77.1 75.6 73.8	16.7 16.4 16.2 15.7						
46.9 48.0 50.0 53.0 55.0	29.7 24.6 15.4	62.6 58.6 51.0	11.5 10.8 9.3	36.2 32.1 18.5	67.1 64.1 53.3	13.7 12.9 10.7	44.8 41.5 31.8	71.9 69.7 62.8	15.1 14.5 13.2	55.0 53.6 50.7 42.9	75.4 74.7 73.1 68.3	15.5 16.1 15.9 14.9			
56.0 60.0 61.0 65.0 66.0				15.9	51.0	10.0	18.0 15.3	51.8 49.4	11.3 10.7	34.2 21.9 18.5	62.3 52.7 49.9	13.6 12.0 11.7			
69.0 70.0 75.0 76.0													35.0 33.5 20.7 17.1	55.5 54.4 44.4 41.4	10.9 11.3 10.5 10.4



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 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]
				35.0 ı		eza de p	ıl, Punto lumín (1 ı] Posici	916-1) 5	3.5 m Pli	eza de p umín	lumín				
15.5 16.0 18.0 20.0 22.0	78.0 77.5 75.2 73.0 70.8	90.3 90.2 89.7 89.1 88.4	20.3 20.3 19.3 18.4 17.6												
23.1 24.0 26.0 28.0	68.5 66.1 63.8	87.6 86.8 85.8	16.9 16.4 16.0	73.0 72.0 69.7 67.4	88.7 88.4 87.7 86.9	17.6 17.6 17.0 16.6									
30.0 32.0 34.0 34.9	61.3 58.8 56.3	84.7 83.6 82.3	15.6 15.2 14.9	65.1 62.7 60.2	86.0 85.0 83.9	16.2 15.9 15.6	65.0	84.9	16.1						
36.0 38.0 40.0 42.0	53.6 50.9 48.1 45.1	80.8 79.2 77.5 75.6	14.6 14.4 13.8 13.1	57.7 55.1 52.4 49.7	82.7 81.3 79.8 78.2	15.2 15.0 14.7 14.4	63.7 61.3 58.8 56.2	84.4 83.3 82.1 80.8	16.0 15.7 15.4 15.1						
44.0 46.0 48.0 48.6	42.0 38.6 35.0	73.4 71.0 68.3	12.4 11.9 11.4	46.8 43.7 40.5	76.3 74.3 72.0	13.9 13.4 13.0	53.6 50.9 48.0	79.4 77.8 76.1	14.9 14.7 14.3	55.0	77.9	14.0			
50.0 55.0 59.0 60.0	31.0 17.6	65.1 53.7	10.8 9.2	37.0 26.7 15.4	69.5 61.3 51.4	12.7 10.9 9.0	45.0 36.8 26.3	74.1 68.2 59.9	13.8 12.8 11.3	53.3 46.2 38.2	77.0 72.6 67.0	14.5 14.2 12.9			
63.0 65.0 69.0 71.5							17.5	52.2	10.3	29.0 16.7	59.8 49.2	11.7 10.6	35.0	57.3	10.3
75.0 79.0													28.2 16.6	51.8 41.8	10.3 10.2 9.5



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 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]
				35.0 ı		eza de p	al, Punto dumín (19 n] Posici	916-1) 5	6.5 m Pl	eza de p umín	lumín				
16.1	78.0	93.2	18.5												
18.0	76.0	92.8	18.0												
20.0	73.9	92.2	17.2										<u> </u>		
22.0	71.8	91.6	16.3												
24.0	69.7	90.8	15.7	73.0	91.6	16.0									
26.0	67.5	90.0	15.2	70.8	90.9	15.8									
28.0	65.2	89.1	14.8	68.7	90.2	15.4									
30.0	63.0	88.1	14.5	66.5	89.3	15.0									
32.0	60.7	87.0	14.2	64.2	88.4	14.7									
34.0	58.3	85.8	13.9	61.9	87.3	14.5									
36.0	55.9	84.5	13.7	59.6	86.2	14.2									
36.1	50.4	00.4	40.5	57.0	04.0	40.0	65.0 62.9	87.6 86.7	14.1						
38.0 40.0	53.4 50.8	83.1 81.5	13.5 13.3	57.2 54.8	84.9 83.6	13.9 13.7	60.6	85.6	14.6 14.3						
42.0	48.1	79.7	12.8	52.2	82.0	13.7	58.3	84.4	14.3						
44.0	45.3	77.8	12.2	49.6	80.4	13.2	55.8	83.1	13.9						
46.0	42.3	75.7	11.6	46.8	78.6	12.8	53.3	81.6	13.6						
48.0	39.2	73.3	11.1	44.0	76.6	12.5	50.7	80.1	13.5						
50.0	35.8	70.6	10.7	40.9	74.3	12.1	48.0	78.3	13.2				i		
50.3										55.0	80.4	12.9			
55.0	25.7	62.1	9.3	32.3	67.5	11.1	40.7	73.1	12.2	49.1	76.7	13.1			
58.0	17.1	54.2	8.5												
60.0				20.7	57.2	9.3	32.0	66.2	11.3	41.9	71.7	12.3			
61.0				17.5	54.2	9.0									
65.0							20.3	55.7	9.8	33.5	65.1	11.5			
66.0							17.0	52.7	9.5						
70.0										22.5	55.5	10.3			
72.0										16.2	49.7	9.8			
73.9													35.0	59.0	9.7
75.0													33.5	57.7	10.0
80.0													22.5	48.1	9.1
82.0													16.2	42.2	8.7



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

ipal: 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]
				35.0 ı		eza de p	ıl, Punto lumín (1 ı] Posici	916-1) 5	9.5 m Pl	eza de p umín	lumín				
16.8 18.0 20.0 22.0 24.0	78.0 76.8 74.8 72.8 70.7	96.1 95.9 95.3 94.7 94.0	16.1 15.9 15.0 14.3 13.7												
24.9 26.0 28.0 30.0 32.0	68.7 66.5 64.4 62.2	93.3 92.4 91.5 90.4	13.3 12.9 12.7 12.4	73.0 71.9 69.8 67.7 65.6	94.5 94.1 93.4 92.6 91.7	13.9 13.8 13.4 13.2 12.8									
34.0 36.0 37.4 38.0 40.0	60.0 57.7 55.4 53.0	89.3 88.1 86.7 85.2	12.2 11.9 11.7 11.5	63.4 61.2 59.0 56.7	90.7 89.6 88.4 87.1	12.6 12.4 12.1 11.9	65.0 64.4 62.2	90.4 90.1 89.0	12.7 12.7 12.5						
42.0 44.0 46.0 48.0 50.0	50.5 47.9 45.2 42.3 39.3	83.6 81.8 79.9 77.7 75.3	11.3 10.9 10.6 10.2 9.9	54.3 51.8 49.3 46.7 43.9	85.7 84.2 82.5 80.6 78.6	11.7 11.5 11.3 11.1 10.8	59.9 57.7 55.3 52.9 50.4	87.9 86.6 85.3 83.8 82.2	12.2 12.0 11.8 11.7 11.5						
52.1 55.0 60.0 61.0 64.0	30.8 19.0 15.6	68.0 56.9 53.5	9.0 7.7 7.5	36.3 26.9 16.0	72.5 64.1 53.6	10.4 9.1 7.9	43.7 36.1	77.4 71.2	11.0 10.6	55.0 51.4 44.8	82.8 80.6 76.0	11.4 11.3 11.0			
65.0 69.0 70.0 75.0 76.4							26.6 15.5	62.8 52.0	9.4 8.4	37.4 28.3 17.0	70.1 62.1 51.2	9.8 8.6	35.0	60.7	9.1
80.0 85.0													28.2 16.9	54.7 43.8	8.8 7.7



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 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]
				35.0	m Pluma Cab	eza de p	ıl, Punto lumín (19 n] Posici	916-1) 6:	2.5 m Pli	eza de p umín	lumín				
17.4 18.0 20.0 22.0 24.0	78.0 77.5 75.6 73.6 71.7	99.1 98.9 98.4 97.9 97.2	14.5 14.5 13.8 13.2 12.7			•									
25.8 26.0 28.0 30.0 32.0	69.7 67.7 65.7 63.7	96.5 95.7 94.8 93.8	12.2 11.9 11.6 11.4	73.0 72.8 70.8 68.8 66.8	97.3 97.3 96.6 95.8 95.0	12.6 12.6 12.4 12.1 11.8									
34.0 36.0 38.0 38.7 40.0	61.6 59.5 57.3	92.8 91.6 90.3	11.2 11.0 10.8	64.8 62.7 60.6	94.1 93.0 91.9	11.5 11.3 11.1	65.0 63.6	93.1 92.4	11.5 11.4						
42.0 44.0 46.0 48.0	52.7 50.4 47.9 45.3 42.6	85.8 85.8 84.1 82.1 80.0	10.4 10.2 9.9 9.6	56.3 54.0 51.7 49.3 46.7	89.4 88.0 86.4 84.7 82.9	10.7 10.5 10.4 10.2	65.6 61.5 59.4 57.2 55.0 52.7	91.3 90.2 88.9 87.5	11.4 11.2 11.0 10.8 10.6 10.5						
50.0 53.8 55.0 60.0 64.0 65.0	35.2 26.0 15.2	73.6 64.9 53.9	9.4 8.8 7.8 6.9	40.0 32.0 21.5	77.4 70.4 60.2	9.7 9.0 7.8	46.6 39.8 31.7	86.0 81.7 76.2 69.1	10.5 10.2 9.9	55.0 53.6 47.6	85.3 84.4 80.2 74.9	10.3 10.3 10.0			
67.0 70.0 72.0 75.0 78.0				15.6	54.0	7.3	21.2 15.1	58.7 52.4	8.2 7.8	33.1 23.2 16.5	68.1 58.5 51.7	9.6 9.6 8.6 7.8			
78.9 80.0 85.0 88.0										10.5	01.7	7.0	35.0 33.1 23.1 16.5	62.4 60.7 51.0 44.2	8.6 8.6 7.8 7.2



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 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]
				35.0 ı	m Pluma Cab	eza de p	al, Punto dumín (19 n] Posici	916-1) 6	5.5 m Plı	eza de p umín	lumín				
18.1 20.0	78.0 76.2	102.0 101.5	13.2 12.8												
22.0 24.0	74.4 72.6	101.0 100.4	12.3 11.8												
26.0 26.6	70.7	99.7	11.4	73.0	100.2	11.6									
28.0 30.0	68.8 66.9	98.9 98.1	11.1 10.8	71.7 69.9	99.8 99.0 98.2	11.5 11.2									
32.0 34.0 36.0	65.0 63.0 61.0	97.2 96.2 95.1	10.5 10.3 10.1	68.0 66.0 64.1	98.2 97.4 96.4	11.0 10.7 10.5									
38.0 39.9	59.0	93.9	9.9	62.1	95.4	10.5	65.0	95.8	10.5						
40.0 42.0	56.9 54.7	92.6 91.2	9.6 9.4	60.1 58.0	94.2 93.0	10.0 9.8	64.9 63.0	95.8 94.8	10.5						
44.0 46.0	52.5 50.3	89.7 88.1	9.2 9.1	55.9 53.7	91.7 90.2	9.6 9.4	61.0 58.9	93.7 92.5	10.2 10.0						
48.0 50.0	47.9 45.5	86.3 84.4	8.8 8.6	51.5 49.2	88.7 87.0	9.3 9.1	56.8 54.7	91.2 89.8	9.8 9.6						
55.0 55.5	38.8	78.7	8.1	43.0	82.0	8.7	49.0	85.8	9.2	55.0	87.7	9.3			
60.0 65.0 67.0	31.0 20.8 16.9	71.4 60.8 56.6	7.5 6.6 5.9	36.0 27.6	75.8 67.6	8.3 7.5	42.9 35.8	80.8 74.6	8.9 8.6	50.0 43.9	84.2 79.4	9.1 8.8			
70.0 75.0				15.2	54.4	6.6	27.3 16.8	66.2 55.1	7.9 6.6	37.0 28.8	73.4 65.5	8.6 8.1			
80.0 81.0										17.3 16.2	53.4 52.1	7.5 6.8			
81.3 85.0													35.0 28.8	64.1 58.1	7.8 7.5
90.0 91.0													19.1 16.1	47.9 44.6	6.6 6.5



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		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]
				35.0 ı	m Pluma Cab	eza de p	al, Punto Jumín (1 n] Posici	916-1) 6	8.5 m Pl	eza de p umín	lumín				
18.7 20.0 22.0 24.0 26.0 27.5 28.0	78.0 76.9 75.1 73.4 71.6	104.9 104.6 104.1 103.5 102.9	12.2 12.0 11.4 11.0 10.7	73.0 72.6	103.1 102.9	10.7 10.7									
30.0 32.0 34.0 36.0	68.0 66.2 64.3 62.4	101.4 100.5 99.5 98.5	10.1 9.8 9.6 9.4	70.8 69.0 67.2 65.3	102.2 101.5 100.7 99.7	10.5 10.3 10.1 9.8									
38.0 40.0 41.2 42.0	60.5 58.5 56.5	97.4 96.2 94.9	9.2 8.9	63.4 61.5 59.6	98.8 97.7 96.5	9.6 9.4 9.2	65.0 64.3	98.5 98.1	9.7 9.7						
44.0 46.0 48.0 50.0 55.0	54.4 52.3 50.2 47.9 41.9	93.5 91.9 90.3 88.5 83.4	8.5 8.3 8.2 8.0 7.5	57.6 55.6 53.5 51.4 45.7	95.3 93.9 92.5 90.9 86.4	8.9 8.7 8.6 8.4 7.9	62.4 60.4 58.5 56.5 51.2	97.1 96.0 94.8 93.5 89.7	9.6 9.3 9.2 9.0 8.5						
57.2 60.0 65.0 70.0 73.0	35.1 26.7 16.5	77.0 68.4 57.0	7.1 6.4 5.3	39.4 32.1 22.9 16.8	80.8 73.7 63.8 57.0	7.5 7.0 6.4 5.6	45.5 39.2 31.9	85.2 79.6 72.4	8.1 7.7 7.3	55.0 52.1 46.5 40.3	90.2 88.1 83.7 78.3	8.6 8.5 8.1 7.8			
75.0 78.0 80.0 83.8 84.0							22.6 16.4	62.4 55.5	6.9 5.9	33.2 24.3 15.8	71.4 62.0 52.5	7.5 7.1 6.1	35.0	65.9	7.1
85.0 90.0 94.0													33.1 24.2 15.7	64.0 54.6 45.0	7.1 6.5 5.9



2821-1

2821-1

Nº de ident.: 9842523/95738/

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

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

		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]
				35.0		eza de p	al, Punto dumín (19 n] Posici	916-1) 7	1.5 m Pl	eza de p umín	lumín				
19.3	78.0	107.9	10.9												
20.0	77.4	107.7	10.9												
22.0	75.8	107.2	10.4												
24.0	74.1	106.7	10.0												
26.0	72.4	106.0	9.7												
28.0	70.7	105.4	9.4												
28.4	69.0	104.6	0.0	73.0 71.6	105.9 105.4	9.6 9.6									
30.0 32.0	67.2	104.6	9.2 9.0	69.9	105.4	9.6									
34.0	65.5	103.6	8.8	68.2	104.7	9.3									
36.0	63.7	101.9	8.6	66.4	103.9	8.9									
38.0	61.8	100.8	8.4	64.7	102.1	8.7									
40.0	60.0	99.7	8.2	62.8	101.1	8.5									
42.0	58.1	98.5	8.0	61.0	100.0	8.4									
42.5							65.0	101.2	8.7						
44.0	56.2	97.1	7.9	59.1	98.8	8.2	63.6	100.5	8.6						
46.0	54.2	95.7	7.7	57.2	97.6	8.0	61.8	99.4	8.5						
48.0	52.2	94.2	7.6	55.3	96.2	7.9	60.0	98.3	8.3						
50.0	50.1	92.5	7.4	53.3	94.7	7.7	58.1	97.0	8.2						
55.0	44.6	87.8	7.1	48.0	90.5	7.4	53.2	93.5	7.8						
58.9			0.7	40.0	05.5	- 4	47.0		7.5	55.0	92.6	7.7			
60.0 65.0	38.4 31.3	82.0 74.7	6.7 6.3	42.3 35.8	85.5 79.2	7.1 6.8	47.9 42.1	89.3 84.2	7.5 7.2	54.0 48.8	91.9 87.8	7.7 7.4			
70.0	22.1	64.5	5.7	28.1	71.0	6.3	35.7	77.9	7.2	43.1	82.8	7.4			
73.0	16.2	57.4	4.8	20.1	71.0	0.5	55.7	11.5	7.0	43.1	02.0	1.2			
75.0	10.2	07.4	7.0	17.5	58.7	5.7	27.9	69.6	6.5	36.7	76.7	7.0			
76.0				16.5	57.5	5.1									
80.0							17.1	57.2	6.1	29.2	68.8	6.7			
81.0							16.1	55.9	5.5						
85.0										19.2	57.4	6.4			
86.2													35.0	67.6	6.5
87.0										15.4	52.9	5.8			
90.0													29.2	61.4	6.2
95.0													20.7	51.7	5.5 5.2
97.0													15.4	45.4	5.2



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			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]
				35.0		eza de p	al, Punto dumín (19 n] Posici	916-1) 7 _'	4.5 m Pl		lumín				
19.9 20.0	78.0 77.9	110.8 110.8	9.9 9.9												
			9.9 9.7												
22.0	76.4	110.3	9.7 9.2	ł									ł		1
24.0 26.0	74.8 73.1	109.8 109.2	9.2 8.9												
28.0	71.5	109.2	8.7												
29.3	/ 1.5	106.5	0.7	73.0	108.8	8.8									
30.0	69.9	107.8	8.5	73.0 72.4	108.6	8.8							ł		
32.0	68.2	107.8	8.3	70.8	107.9	8.6							ł		i i
34.0	66.5	107.0	8.1	69.1	107.3	8.4									
36.0	64.8	105.2	7.9	67.4	106.3	8.2									
38.0	63.1	104.2	7.7	65.8	105.4	8.0							i		
40.0	61.3	103.2	7.6	64.0	104.5	7.8							Ī		
42.0	59.5	102.0	7.5	62.3	103.4	7.7							İ		l i
43.7							65.0	103.9	7.8						
44.0	57.7	100.7	7.3	60.5	102.3	7.6	64.8	103.8	7.8						
46.0	55.9	99.4	7.2	58.7	101.1	7.4	63.1	102.8	7.8						
48.0	54.0	98.0	7.1	56.9	99.8	7.3	61.3	101.7	7.6						
50.0	52.0	96.4	7.0	55.0	98.5	7.1	59.5	100.6	7.5						
55.0	46.9	92.1	6.7	50.1	94.5	6.9	54.9	97.3	7.2						
60.0	41.3	86.8	6.4	44.8	89.9	6.7	50.0	93.4	6.9						
60.7										55.0	95.1	6.9			
65.0	34.9	80.3	6.2	39.0	84.2	6.5	44.7	88.6	6.7	50.8	91.7	6.8			
70.0	27.4	71.8	5.6	32.2	77.0	6.2	38.8	82.9	6.6	45.5	87.2	6.6			
75.0	16.9	59.2	5.0	23.9	67.4	5.6	32.0	75.7	6.3	39.8	81.6	6.5			
76.0	15.8	57.8	4.4	40.4											
79.0				16.1	57.9	4.7	22.6	66.0	F.0	33.2	74.7	6.3			
80.0 84.0				l			23.6 15.7	56.3	5.9 5.2	33.2	14.1	6.3	l		
85.0							10.7	30.3	J.Z	25.2	65.6	6.1			
88.7										20.2	03.0	0.1	35.0	69.3	5.9
90.0										15.1	53.3	5.5	33.2	67.3	5.9
95.0										15.1	55.5	0.0	25.1	58.1	5.4
100.0				i			Ī						15.0	45.8	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

	88° Ángulo de pluma principal			83° Án I	gulo de orincipa	pluma I		gulo de principa			gulo de orincipa		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]		
	35.0 m Pluma principal, Punto de carga 1 - Cabeza de plumín Cabeza de plumín (1916-1) 77.5 m Plumín 34.0 [m] Posición midfall (1916)																
20.6	78.0	113.7	8.9														
22.0	76.9	113.4	8.8														
24.0	75.4	112.9	8.4														
26.0	73.8	112.3	8.1														
28.0	72.3	111.7	7.9	-													
30.0	70.7	111.0	7.7	70.0		7.0											
30.1 32.0	69.1	110.3	7.5	73.0 71.5	111.7 111.1	7.9 7.8											
34.0	67.5	109.4	7.3	70.0	110.4	7.6							ł				
36.0	65.9	108.6	7.5	68.4	109.6	7.4											
38.0	64.2	107.6	6.9	66.8	108.7	7.2											
40.0	62.5	106.6	6.8	65.1	107.8	7.0											
42.0	60.8	105.5	6.7	63.5	106.8	6.9		İ	İ	İ		İ					
44.0	59.1	104.3	6.5	61.8	105.8	6.8											
45.0							65.0	106.7	7.0								
46.0	57.4	103.0	6.4	60.1	104.6	6.6	64.2	106.2	7.0								
48.0	55.6	101.7	6.3	58.3	103.4	6.5	62.5	105.2	6.8								
50.0	53.7	100.2	6.2	56.6	102.1	6.4	60.8	104.1	6.7								
55.0 60.0	48.9 43.8	96.1 91.3	5.9 5.7	52.0 47.0	98.4 94.1	6.1 5.9	56.4 51.8	100.9 97.2	6.4 6.1								
62.4	43.8	91.3	5.7	47.0	94.1	5.9	51.8	97.2	6.1	55.0	97.6	6.1					
65.0	38.0	85.4	5.5	41.7	88.9	5.7	46.9	92.9	5.9	53.0 52.6	95.6	6.0					
70.0	31.4	78.0	5.2	35.7	82.5	5.6	41.5	87.6	5.8	47.7	91.3	5.8					
75.0	23.2	68.1	4.8	28.6	74.3	5.2	35.5	81.2	5.6	42.4	86.2	5.7					
79.0	15.5	58.2	4.0			-				1							
80.0				19.3	62.8	4.8	28.4	73.0	5.4	36.5	80.0	5.6					
82.0				15.8	58.3	4.3											
85.0							18.9	61.3	5.1	29.6	72.2	5.5					
87.0							15.4	56.7	4.7								
90.0										20.7	61.3	5.4	05.0	74.0	5. 4		
91.1										45.0	55.0	50	35.0	71.0	5.1		
92.0 95.0										15.9	55.0	5.3	29.6	64.8	5.1		
100.0													29.6	55.5	4.5		
100.0													17.5	49.8	4.2		
102.0													17.5	43.0	4.4		



Nº de ident.: 9842523/95738/

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

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

	88° Ángulo de pluma principal				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]
	35.0 m Pluma principal, Punto de carga 1 - Cabeza de plumín														
Cabeza de plumín (1916-1) 80.5 m Plumín 37.0 [m] Posición midfall (1916)															
21.2	78.0	116.7	8.1												
22.0	77.4	116.5	8.1						İ	İ			İ		
24.0	75.9	116.0	7.7												
26.0	74.4	115.5	7.4												
28.0	72.9	114.9	7.2												
30.0	71.4	114.2	7.0												
31.0				73.0	114.6	7.1									
32.0	69.9	113.5	6.8	72.3	114.2	7.1				•			<u> </u>		
34.0	68.4	112.7	6.7	70.8	113.6	7.0									
36.0	66.8	111.8	6.5	69.2	112.8	6.8									
38.0	65.3	110.9	6.3	67.7	112.0	6.6									
40.0	63.7	110.0	6.2	66.1	111.1	6.4									
42.0	62.0	108.9	6.1	64.5	110.2	6.3									
44.0	60.4	107.8	5.9	62.9	109.2	6.1									
46.0	58.7	106.6	5.8	61.3	108.1	6.0	25.0	100.1	0.0						
46.3		405.0		-0-	400.0	5.0	65.0	109.4	6.3						
48.0	57.0 55.3	105.3	5.7 5.6	59.7 58.0	106.9	5.9	63.6	108.5	6.2 6.1				ł		
50.0 55.0	55.3	103.9 100.1	5.5	58.0 53.6	105.7 102.2	5.8 5.5	62.0 57.9	107.5 104.5	5.8						
60.0	46.0	95.6	5.5 5.1	49.0	98.1	5.3	53.5	104.5	5.5						
64.1	40.0	93.0	J. I	43.0	90.1	0.0	33.3	101.0	3.3	55.0	100.0	5.4			
65.0	40.7	90.2	4.9	44.0	93.3	5.1	48.9	96.9	5.3	54.2	99.4	5.4			
70.0	34.8	83.6	4.8	38.6	87.5	4.9	43.9	92.1	5.1	49.6	95.4	5.2	i		
75.0	27.9	75.2	4.5	32.3	80.3	4.7	38.4	86.3	5.0	44.7	90.6	5.1	ĺ		
80.0	18.7	63.3	4.1	24.8	70.9	4.5	32.2	79.1	4.9	39.3	85.0	4.9			
82.0	15.2	58.6	3.6						,,						
85.0				15.5	58.7	3.9	24.5	69.6	4.8	33.2	78.0	4.8			
90.0							15.1	57.1	4.3	25.9	69.0	4.8			
93.6													35.0	72.7	4.5
95.0										15.6	55.5	4.8	33.2	70.6	4.5
100.0													25.8	61.6	4.3
105.0													17.1	50.2	3.7



N° de ident.: 9842523/95738/ Pieza

360 °

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

Radio de descarga: 360° Valor de vuelco: 2 - Via ancha

Lastre trasero [t]: 124.0
Lastre central [t]: 52.6

	88° Ángulo de pluma principal				gulo de orincipa			gulo de principa			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]		
	35.0 m Pluma principal, Punto de carga 1 - Cabeza de plumín Cabeza de plumín (1916-1) 83.5 m Plumín 40.0 [m] Posición midfall (1916)																
21.8	78.0	119.6	7.3														
22.0	77.9	119.6	7.3														
24.0	76.4	119.1	7.1														
26.0	75.0	118.6	6.8														
28.0	73.6	118.0	6.6														
30.0	72.1	117.4	6.4														
31.9				73.0	117.4	6.4											
32.0	70.7	116.7	6.2	72.9	117.4	6.4											
34.0	69.2	115.9	6.1	71.5	116.7	6.3 6.2											
36.0	67.7	115.1	5.9 5.8	70.0	116.0												
38.0 40.0	66.2 64.7	114.2 113.3	5.8 5.6	68.5 67.0	115.2 114.4	6.0 5.9											
40.0 42.0	63.1	112.3	5.5	65.5	113.5	5.9											
44.0	61.6	111.2	5.4	64.0	112.5	5.6							ł				
46.0	60.0	110.1	5.3	62.4	111.5	5.5											
47.6	00.0	110.1	0.0	02.4	111.0	0.0	65.0	112.1	5.6								
48.0	58.4	108.9	5.2	60.9	110.4	5.4	64.7	111.9	5.6								
50.0	56.7	107.6	5.1	59.3	109.2	5.2	63.1	110.9	5.5	i							
55.0	52.5	104.0	4.8	55.1	105.9	5.0	59.2	108.1	5.2	İ		İ					
60.0	48.0	99.7	4.6	50.8	102.1	4.8	55.0	104.8	5.0								
65.0	43.1	94.7	4.4	46.2	97.6	4.6	50.7	100.9	4.8								
65.8										55.0	102.5	4.8					
70.0	37.7	88.7	4.2	41.1	92.2	4.4	46.0	96.4	4.6	51.4	99.3	4.7					
75.0	31.6	81.3	4.0	35.5	85.8	4.2	41.0	91.0	4.4	46.8	94.9	4.5					
80.0	24.1	71.7	3.7	29.0	77.7	4.0	35.4	84.5	4.3	41.8	89.7	4.4					
84.0	15.9	60.4	3.5														
85.0				20.6	66.6	3.8	28.8	76.4	4.2	36.3	83.4	4.3					
88.0				15.2	59.1	3.3	00.4	05.0	1.0	00.0	75.5	4.0					
90.0							20.4	65.2	4.0	29.9	75.5	4.2					
92.0							15.8	58.9	4.0	24.0	65.0	4.0					
95.0 96.1										21.9	65.0	4.2	35.0	74.5	3.9		
98.0										15.3	55.8	4.1	35.0	74.5	3.9		
100.0										10.5	00.0	4.1	29.9	68.1	3.9		
105.0													23.0	59.1	3.4		
108.0													16.8	50.6	3.1		



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]: 124.0 52.6 Lastre central [t]:

	88° Ángulo de pluma principal				gulo de orincipa		principal principal						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]
35.0 m Pluma principal, Punto de carga 1 - Cabeza de plumín Cabeza de plumín (1916-1) 86.5 m Plumín 43.0 [m] Posición midfall (1916)															
22.4	78.0	122.6	6.6												
24.0	76.9	122.2	6.5												
26.0	75.6	121.7	6.3												
28.0	74.2	121.1	6.1												
30.0	72.8	120.5	5.9												
32.0	71.4	119.8	5.7												
32.8				73.0	120.3	5.9									
34.0	70.0	119.1	5.6	72.1	119.9	5.9				<u> </u>			<u> </u>		
36.0	68.5	118.4	5.5	70.7	119.2	5.7									
38.0	67.1	117.5	5.3	69.3	118.5	5.5									
40.0	65.6	116.6	5.2	67.9	117.7	5.4									
42.0	64.2	115.7	5.1	66.4	116.8	5.3									
44.0	62.7	114.6	5.0	65.0	115.9	5.1									
46.0	61.1	113.6	4.9	63.5	114.9	5.0									
48.0	59.6	112.4	4.8	62.0	113.8	4.9									
48.8	50.0	444.0	4.0	00.5	440.7	4.0	65.0	114.8	5.1						
50.0	58.0 54.0	111.2 107.7	4.6 4.4	60.5 56.5	112.7 109.6	4.8 4.6	64.1 60.3	114.2 111.6	5.1 4.8				ł		
55.0 60.0	49.8	107.7	4.4	50.5	109.6	4.6	56.4	108.4	4.8				ł		
65.0	45.2	99.1	4.2	48.1	103.9	4.4	52.3	104.8	4.6						
67.6	45.2	99.1	4.0	40.1	101.7	4.2	32.3	104.0	4.4	55.0	104.9	4.3			
70.0	40.3	93.5	3.8	43.4	96.7	3.9	47.9	100.5	4.2	53.0	104.9	4.3			
75.0	34.7	86.9	3.6	38.2	90.9	3.8	43.2	95.5	4.0	48.7	99.0	4.1	i		
80.0	28.3	78.6	3.4	32.4	83.7	3.6	38.1	89.6	3.8	44.0	94.1	4.0	i		
85.0	20.1	67.2	3.2	25.5	74.4	3.4	32.3	82.4	3.7	39.0	88.3	3.8			
87.0	15.6	60.8	3.1												
90.0				15.9	60.9	3.3	25.3	73.1	3.6	33.3	81.4	3.7			
95.0							15.5	59.3	3.4	26.5	72.5	3.6			
98.5													35.0	76.2	3.5
100.0										17.4	59.8	3.5	33.2	74.0	3.4
101.0										16.6	58.5	3.0			
105.0													26.5	65.1	3.3
110.0													18.7	54.3	2.8
111.0													16.5	51.1	2.7