

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

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

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

	88° Án	gulo de principa	pluma I		gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				62.0 ı	m Pluma Cab	eza de p	ıl, Punto ılumín (19 ı] Posicio	916-1) 3	8.5 m Pli	eza de p umín	lumín				
13.3 14.0 16.0 18.0 20.0	78.0 77.0 73.9 70.7 67.5	102.6 102.4 101.9 101.2 100.4	28.7 28.7 27.2 25.5 24.0												
22.0 24.0 26.0 28.0 30.0	64.3 60.9 57.4 53.7 49.9	99.5 98.4 97.2 95.8 94.1	22.6 21.4 20.0 18.9 18.0	73.0 69.9 66.6 63.3 59.9	101.2 100.5 99.7 98.7 97.6	24.8 24.1 23.0 22.1 21.4									
32.0 34.0 35.5 36.0	45.8 41.5 36.7	92.3 90.1 87.6	16.9 15.8 15.0	56.4 52.7 48.8	96.3 94.8 93.1	20.4 19.7 18.9	65.0 64.3	97.4 97.2	21.2 21.9						
38.0 40.0 42.0 44.0 46.0	31.2 24.7 15.7	84.5 80.6 74.9	14.3 13.6 12.9	44.7 40.2 35.2 29.5 22.6	91.2 89.0 86.3 83.0 78.8	18.0 17.2 16.5 15.8 15.0	60.9 57.4 53.8 49.9 45.9	96.1 94.9 93.5 91.9 90.0	21.3 20.5 19.5 18.8 17.9						
47.0 48.0 50.0 51.4 55.0				18.1	76.0	14.5	41.5 36.7 20.7	87.8 85.3 75.9	17.2 16.6	55.0 48.4	90.1 87.3	13.6 13.5			
56.0 60.0 65.0 66.0 78.3 80.0							15.8	72.7	14.8	37.2 21.7 17.0	81.7 72.5 69.6	12.4 11.1 10.9	35.0 31.8	67.7 65.9	3.5 3.3
84.0													16.9	56.8	2.8



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]: 114.0 Lastre central [t]: 52.6

		gulo de orincipal			gulo de orincipa			gulo de principa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				62.0 ı	m Pluma Cab	principa eza de p	ıl, Punto lumín (1	de carga 916-1) 4	1 - Cab	eza de p umín	lumín				
						22.0 [m] Posici	ón midfa	II (1916)						
14.0	78.0	105.5	25.6												
16.0	75.1	105.0	24.5												
18.0	72.2	104.4	23.1												
20.0	69.3	103.7	21.8												
22.0 22.9	66.3	102.8	20.5	73.0	104.1	21.9									
24.0	63.2	101.8	19.4	71.4	104.1	21.9									
26.0	60.0	101.8	18.4	68.4	103.7	20.8									
28.0	56.8	99.4	17.4	65.4	102.0	19.9									
30.0	53.4	98.0	16.6	62.3	101.0	19.2									
32.0	49.8	96.4	16.0	59.1	99.9	18.5									
34.0	46.0	94.5	15.1	55.8	98.6	17.7									
36.0	42.0	92.4	14.3	52.4	97.1	17.0									
36.8							65.0	100.1	19.5						
38.0	37.6	89.9	13.6	48.8	95.4	16.4	63.2	99.5	19.5						
40.0	32.7	87.0	13.0	44.9	93.5	15.6	60.0	98.4	18.7						
42.0	27.0	83.4	12.4	40.8	91.2	14.9	56.8	97.2	18.1						
44.0 45.0	19.9 15.1	78.6 75.3	11.8 11.5	36.3	88.7	14.3	53.4	95.7	17.3						
46.0	15.1	75.5	11.5	31.2	85.6	13.7	49.8	94.1	16.8						
48.0				25.3	81.7	13.1	46.0	92.2	16.0						
50.0				17.4	76.4	12.4	42.0	90.1	15.3						
53.2							.2.0	00	10.0	55.0	92.5	12.9			
55.0							30.0	83.0	13.9	52.0	91.2	13.1			
59.0							15.1	73.1	12.7						
60.0										42.5	86.5	12.0			
65.0										30.6	79.5	10.9			
69.0										16.3	70.0	10.0			
80.7													35.0	69.5	2.9
85.0													24.5	62.8	2.4
87.0													16.2	57.2	2.2



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

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]
				62.0 ı		eza de p	ıl, Punto llumín (19 n] Posici	916-1) 4	4.5 m Pli	eza de p umín	lumín				
14.6 16.0 18.0 20.0 22.0	78.0 76.1 73.4 70.7 68.0	108.5 108.1 107.5 106.9 106.1	23.2 22.8 21.5 20.2 19.2												
23.8 24.0 26.0 28.0 30.0	65.1 62.2 59.3 56.2	105.2 104.2 103.0 101.7	18.1 17.2 16.4 15.7	73.0 72.7 70.0 67.2 64.3	106.9 106.9 106.2 105.3 104.4	19.9 19.9 19.3 18.7 17.9									
32.0 34.0 36.0 38.0 38.1	53.0 49.7 46.2 42.4	100.3 98.6 96.8 94.7	15.0 14.5 13.8 13.1	61.4 58.4 55.3 52.1	103.4 102.2 100.8 99.3	17.3 16.5 15.8 15.2	65.0	102.8	17.8						
40.0 42.0 44.0 46.0 48.0	38.4 34.0 28.9 22.9 16.2	92.3 89.4 86.1 81.8 76.9	12.5 12.0 11.5 11.0 7.7	48.7 45.2 41.4 37.2 32.6 27.4	97.6 95.7 93.5 91.0 88.1 84.5	14.6 14.0 13.4 12.8 12.3	62.3 59.3 56.2 53.0 49.7 46.2	101.9 100.7 99.4 98.0 96.3 94.5	17.5 16.9 16.3 15.7 15.2						
50.0 53.0 54.9 55.0 60.0				16.8	76.8	10.9	36.3 22.9	88.6 79.6	13.2 11.8	55.0 55.0 46.6	95.0 95.0 90.8	12.2 12.5 11.7			
62.0 65.0 70.0 72.0 83.2							16.3	74.7	9.7	36.7 23.6 15.7	85.0 76.2 70.4	10.7 9.7 9.2	35.0	71.2	2.4
85.0 87.0													32.1 26.7	69.3 65.6	2.2 2.0



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

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

2 - Vía ancha Valor de vuelco: Lastre trasero [t]: 114.0 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]
				62.0 ı		eza de p	ıl, Punto lumín (1 ı] Posici	916-1) 4	7.5 m Pl	eza de p umín	lumín				
15.2	78.0	111.4	21.1												
16.0	77.0	111.2	21.1												
18.0	74.5	110.7	20.1												
20.0	72.0	110.0	19.1												
22.0	69.4	109.3	18.3												
24.0	66.8	108.5	17.5												
24.6				73.0	109.8	18.3									
26.0	64.1 61.4	107.5	16.8	71.3	109.3	18.2									
28.0 30.0	58.6	106.5 105.3	16.3 15.5	68.7 66.1	108.6 107.7	17.7 17.3									
32.0	55.7	105.3	14.8	63.4	107.7	16.8									
34.0	52.7	104.0	14.0	60.6	105.7	16.4									
36.0	49.6	102.5	13.7	57.8	103.7	15.8									
38.0	46.3	99.0	13.0	54.9	103.1	15.3							i		
39.3	40.0	00.0	10.0	04.0	100.1	10.0	65.0	105.6	16.1						
40.0	42.8	96.9	12.3	51.9	101.6	15.0	64.2	105.2	16.7						
42.0	39.1	94.6	11.8	48.7	99.9	14.4	61.4	104.2	16.5						
44.0	35.0	91.9	11.2	45.4	97.9	13.8	58.6	103.0	16.2				i		
46.0	30.5	88.7	10.8	41.8	95.8	13.3	55.7	101.7	15.7						
48.0	25.2	84.8	10.3	38.0	93.3	12.8	52.7	100.2	15.3						
50.0	18.5	79.6	9.8	33.8	90.5	12.3	49.6	98.6	14.9						
51.0	15.7	77.3	7.1												
55.0				20.2	80.4	10.9	41.0	93.5	13.5						
56.0				16.2	77.3	10.5									
56.6										55.0	97.4	11.6			
60.0							30.5	86.4	12.3	49.9	94.9	11.5			
65.0							15.7	75.1	9.8	41.4	89.9	10.5			
70.0										30.4	82.4	9.4			
75.0										16.7	72.0	8.3			



N° de ident.: 9842523/95738/

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

Valor de vuelco:

Lastre trasero [t]:

Lastre central [t]:

2 - Vía ancha 114.0

52.6

		gulo de orincipa			gulo de orincipa			gulo de principa			gulo de orincipa			gulo de 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]
				62.0		eza de p	al, Punto dumín (1 n] Posici	916-1) 5	0.5 m Pl		lumín				
15.8	78.0	114.3	19.4												
16.0	77.8	114.3	19.4												
18.0	75.5	113.8	18.8												
20.0	73.1	113.2	18.1												
22.0	70.7	112.5	17.3												
24.0	68.3	111.7	16.7												
25.5				73.0	112.7	17.0									
26.0	65.8	110.9	16.3	72.4	112.5	17.0									
28.0	63.3	109.9	15.9	70.0	111.8	16.8									
30.0	60.7	108.8	15.5	67.6	111.0	16.5									
32.0	58.0	107.6	14.7	65.1	110.1	16.2									
34.0	55.3	106.2	14.1	62.6	109.1	15.9									
36.0	52.5	104.7	13.5	59.9	108.0	15.7									
38.0	49.5	103.1	13.0	57.3	106.7	15.3									
40.0	46.4	101.2	12.3	54.5	105.3	15.0									
40.6							65.0	108.3	15.9						
42.0	43.2	99.2	11.7	51.6	103.8	14.7	63.3	107.6	15.9						
44.0	39.7	96.9	11.1	48.7	102.1	14.3	60.7	106.5	15.7						
46.0	35.9	94.2	10.6	45.5	100.2	13.7	58.0	105.3	15.5						
48.0	31.8	91.2	10.1	42.2	98.1	13.2	55.3	103.9	15.2						
50.0	27.1	87.5	9.7	38.7	95.7	12.7	52.5	102.5	14.8						
54.0	15.2	77.7	5.8												
55.0				28.2	87.9	11.4	44.8	98.0	13.8				!		
58.3										55.0	99.9	11.0			
59.0				15.7	77.7	10.2									
60.0							36.0	91.9	12.6	52.8	98.7	11.3			
65.0							24.4	83.1	11.6	45.2	94.3	10.4	Į.		
68.0							15.2	75.5	9.8						
70.0	I			I				1		36.4	88.4	9.4	I	1	1



2821-1

2821-1

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

		gulo de orincipal			gulo de orincipa			gulo de 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]
				62.0 i	m Pluma Cab	eza de p	ıl, Punto lumín (1 ı] Posici	916-1) 5	3.5 m Pl	eza de p umín	lumín		-		
16.5	78.0	117.3	17.1												
18.0	76.3	116.9	16.9												
20.0	74.1	116.3	16.1												
22.0	71.8	115.7	15.4												
24.0	69.5	115.0	14.8												
26.0	67.2	114.1	14.4												
26.4				73.0	115.5	15.0									
28.0	64.8	113.2	14.1	71.2	115.0	14.9									
30.0	62.4	112.2	13.8	68.9	114.2	14.6									
32.0	59.9	111.1	13.4	66.5	113.4	14.3									
34.0	57.4	109.8	12.9	64.2	112.4	14.1									
36.0	54.7	108.4	12.4	61.7	111.4	13.9									
38.0	52.0	106.9	12.0	59.2	110.2	13.6									
40.0	49.2	105.2	11.6	56.7	108.9	13.3									
41.9							65.0	111.0	13.9						
42.0	46.3	103.3	11.0	54.0	107.5	13.1	64.8	110.9	13.9						
44.0	43.2	101.2	10.5	51.3	105.9	12.9	62.4	109.9	13.8						
46.0	39.9	98.9	9.9	48.4	104.2	12.5	59.9	108.8	13.7						
48.0	36.3	96.3	9.5	45.4	102.3	12.1	57.4	107.5	13.5						
50.0	32.4	93.3	9.1	42.3	100.1	11.8	54.8	106.1	13.3						
55.0	19.9	82.7	8.2	33.3	93.5	10.9	47.8	102.0	12.8						
56.0	16.3	79.5	8.0												
60.0				21.3	83.4	9.6	39.9	96.6	11.9	55.0	102.4	10.4			
62.0				16.6	79.3	6.9									
65.0							30.3	89.3	11.1	48.1	98.3	9.8			
70.0							16.3	77.2	10.0	40.2	93.0	9.0			
75.0										30.8	85.8	8.0			
80.0										19.4	76.1	7.1			
81.0										15.7	72.8	6.9			



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

Cabeza de pluma principal:

2821-1 2821-1

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

Altura Carga Angu- Carga Cit C			gulo de orincipal			gulo de orincipa			gulo de principa			gulo de orincipa			gulo de orincipa	
Cabeza de plumín (1916-1) 56.5 m Plumín 25.0 [m] Posición midfall (1916) 17.1 78.0 120.2 15.5 18.0 77.1 120.0 15.5 20.0 75.0 119.5 14.9 22.0 72.8 118.9 14.3 24.0 70.7 118.2 13.7 26.0 86.5 117.4 13.3 28.0 66.3 116.5 13.0 72.2 118.2 13.8 30.0 64.0 115.6 12.8 70.1 117.5 13.6 32.0 61.7 114.5 12.6 67.9 116.7 13.3 36.0 59.3 113.4 12.2 65.6 115.8 13.1 36.0 59.3 113.4 12.2 65.6 115.8 13.1 36.0 59.3 113.4 12.2 65.6 115.8 13.1 36.0 59.3 113.4 12.5 65.0 115.8 13.1 40.0 51.8 109.1 11.5 61.0 113.7 12.7 40.0 51.8 109.1 11.2 58.7 112.5 12.4 42.0 49.2 107.4 10.8 56.2 111.2 12.2 42.0 49.2 107.4 10.8 56.2 111.2 12.2 43.1 44.0 46.4 105.6 10.3 53.7 109.7 12.0 64.0 113.3 12.7 44.0 45.4 103.5 9.8 51.1 108.2 11.8 61.7 112.2 12.6 48.0 40.3 101.2 9.3 48.4 106.4 11.6 59.3 111.1 12.5 50.0 37.0 98.6 8.9 45.6 104.5 11.2 56.9 109.8 12.3 55.0 27.3 90.4 8.0 37.8 98.7 10.6 50.5 106.0 12.0 55.0 27.3 90.4 8.0 37.8 98.7 10.6 50.5 106.0 12.0 55.0 27.3 90.4 8.0 37.8 98.7 10.6 50.5 106.0 12.0 55.0 27.3 90.4 8.0 37.8 98.7 10.6 50.5 106.0 12.0 55.0 27.3 90.4 8.0 37.8 98.7 10.6 50.5 106.0 12.0 55.0 27.3 90.4 8.0 37.8 98.7 10.6 50.5 106.0 12.0 55.0 27.3 90.4 8.0 37.8 98.7 10.6 50.5 106.0 9.9 43.8 97.6 8.8 97.6 8.8 97.6 8.8 97.6 8.8 97.6 8.8 97.6 8.8 97.6 9.9 15.9 77.6 9.3 35.7 91.4 7.8 98.0 15.9 97.6 8.8 97.6 9.9 97.	ce	o de plumín	de rolda- nas	Carga [t]	o de plumín	de rolda- nas	Carga [t]	o de plumín	de rolda- nas	Carga [t]	o de plumín	de rolda- nas	Carga [t]	o de plumín	de rolda- nas	Carga [t]
18.0 77.1 120.0 15.5 20.0 75.0 119.5 14.9 22.0 72.8 118.9 14.3 24.0 70.7 118.2 13.7 26.0 68.5 117.4 13.3 27.3 73.0 118.4 13.8 30.0 64.0 115.6 12.8 70.1 118.2 30.0 64.0 115.6 12.8 70.1 116.7 13.3 34.0 59.3 113.4 12.2 65.6 115.8 13.1 36.0 56.9 112.1 11.8 63.4 114.8 12.8 38.0 54.4 110.7 11.5 61.0 113.7 12.7 40.0 51.8 109.1 11.2 58.7 112.5 12.4 42.0 49.2 107.4 10.8 56.2 111.2 12.2 43.1 46.4 105.6 10.3 53.7 109.7 12.0 64.0 113.3 12.7 46.0 43.4 103.5 9.8 51.1 108.2 11.8 61.7 112.2 12.6 48.0 40.3 101.2 9.3 48.4 106.4 11.6					62.0 ı		eza de p	lumín (1	916-1) 5	6.5 m Pli		lumín				
18.0 77.1 120.0 15.5 20.0 75.0 119.5 14.9 22.0 72.8 118.9 14.3 24.0 70.7 118.2 13.7 26.0 68.5 117.4 13.3 27.3 73.0 118.4 13.8 30.0 64.0 115.6 12.8 70.1 118.2 30.0 64.0 115.6 12.8 70.1 116.7 13.3 34.0 59.3 113.4 12.2 65.6 115.8 13.1 36.0 56.9 112.1 11.8 63.4 114.8 12.8 38.0 54.4 110.7 11.5 61.0 113.7 12.7 40.0 51.8 109.1 11.2 58.7 112.5 12.4 42.0 49.2 107.4 10.8 56.2 111.2 12.2 43.1 46.4 105.6 10.3 53.7 109.7 12.0 64.0 113.3 12.7 46.0 43.4 103.5 9.8 51.1 108.2 11.8 61.7 112.2 12.6 48.0 40.3 101.2 9.3 48.4 106.4 11.6	17 1	78.0	120.2	15.5				1								
20.0																
22.0 72.8 118.9 14.3 13.7 24.0 70.7 118.2 13.7 13.3 26.0 68.5 117.4 13.3 73.0 118.4 13.8 27.3 73.0 118.4 13.8 13.1 13.3 13.3 13.3 13.3 13.3 13.3 13.3 13.3 14.8 13.3																
24.0 70.7 118.2 13.7 73.0 118.4 13.8 13.8 117.4 13.3 27.3 73.0 118.4 13.8 13.8 30.0 66.3 116.5 13.0 72.2 118.2 13.8 30.0 64.0 115.6 12.8 70.1 117.5 13.6 32.0 61.7 114.5 12.6 67.9 116.7 13.3 3 <td></td>																
27.3 28.0 66.3 66.3 116.5 11.0 13.0 72.2 118.2 118.4 117.5 13.8 13.1 117.5 13.6 32.0 116.5 64.0 64.0 115.6 112.1 114.5 114.5 114.5 116.7 114.5 116.7 114.5 116.7		70.7	118.2	13.7												
28.0 66.3 116.5 13.0 72.2 118.2 13.8 30.0 64.0 115.6 12.8 70.1 117.5 13.6 32.0 61.7 114.5 12.6 67.9 116.7 13.3 34.0 59.3 113.4 12.2 65.6 115.8 13.1 36.0 56.9 112.1 11.8 63.4 114.8 12.8 38.0 54.4 110.7 11.5 61.0 113.7 12.7 40.0 51.8 109.1 11.2 58.7 112.5 12.4 42.0 49.2 107.4 10.8 56.2 111.2 12.2 43.1 44.0 46.4 105.6 10.3 53.7 109.7 12.0 64.0 113.3 12.7 44.0 43.4 103.5 9.8 51.1 108.2 11.8 61.7 112.2 12.6 48.0 40.3 101.2 9.3 48.4 106.4 11.6 59.3 111.1 12.5 55.0 27.3 90.	26.0	68.5	117.4	13.3												
30.0	27.3				73.0	118.4	13.8									
32.0 61.7 114.5 12.6 67.9 116.7 13.3 34.0 59.3 113.4 12.2 65.6 115.8 13.1 38.0 56.9 112.1 11.8 63.4 114.8 12.7 40.0 51.8 109.1 11.2 58.7 112.5 12.4 42.0 49.2 107.4 10.8 56.2 111.2 12.2 43.1 44.0 46.4 105.6 10.3 53.7 109.7 12.0 64.0 113.3 12.7 46.0 43.4 103.5 9.8 51.1 108.2 11.8 61.7 112.2 12.6 48.0 40.3 101.2 9.3 48.4 106.4 11.6 59.3 111.1 12.5 50.0 37.0 98.6 8.9 45.6 104.5 11.2 56.9 109.8 12.3 55.0 27.3 90.4 8.0 37.8 98.7 10.6 50.5 106.0 12.0 59.0 15.8 79.9 7.4 7.4 7.4 7.4 7.4 7.4 7.4 65.0 16.1 79.7 6.3 35.3 94.9 10.9	28.0	66.3	116.5	13.0	72.2	118.2	13.8									
34.0 59.3 113.4 12.2 65.6 115.8 13.1 36.0 56.9 112.1 11.8 63.4 114.8 12.8 38.0 54.4 110.7 11.5 61.0 113.7 12.7 40.0 51.8 109.1 11.2 58.7 112.5 12.4 42.0 49.2 107.4 10.8 56.2 111.2 12.2 43.1 44.0 46.4 105.6 10.3 53.7 109.7 12.0 64.0 113.7 12.7 46.0 43.4 103.5 9.8 51.1 108.2 11.8 61.7 112.2 12.6 48.0 40.3 101.2 9.3 48.4 106.4 11.6 59.3 111.1 12.5 50.0 37.0 98.6 8.9 45.6 104.5 11.2 56.9 109.8 12.3 55.0 27.3 90.4 8.0 37.8 98.7 10.6 50.5 106.0 12.0 59.0 15.8 79.9 7.4 79.7 <td>30.0</td> <td>64.0</td> <td>115.6</td> <td>12.8</td> <td>70.1</td> <td>117.5</td> <td>13.6</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	30.0	64.0	115.6	12.8	70.1	117.5	13.6									
36.0 56.9 112.1 11.8 63.4 114.8 12.8 38.0 54.4 110.7 11.5 61.0 113.7 12.7 40.0 51.8 109.1 11.2 58.7 112.5 12.4 42.0 49.2 107.4 10.8 56.2 111.2 12.2 43.1 44.0 46.4 105.6 10.3 53.7 109.7 12.0 64.0 113.3 12.7 46.0 43.4 103.5 9.8 51.1 108.2 11.8 61.7 112.2 12.6 48.0 40.3 101.2 9.3 48.4 106.4 11.6 59.3 111.1 12.5 50.0 37.0 98.6 8.9 45.6 104.5 11.2 56.9 109.8 12.3 55.0 27.3 90.4 8.0 37.8 98.7 10.6 50.5 106.0 12.0 59.0 15.8 79.9 7.4 28.3 90.8 9.6 43.5 101.2 11.4 66.0 10.0	32.0	61.7	114.5	12.6	67.9	116.7	13.3									
38.0 54.4 110.7 11.5 61.0 113.7 12.7 40.0 51.8 109.1 11.2 58.7 112.5 12.4 42.0 49.2 107.4 10.8 56.2 111.2 12.2 43.1 44.0 46.4 105.6 10.3 53.7 109.7 12.0 64.0 113.3 12.7 46.0 43.4 103.5 9.8 51.1 108.2 11.8 61.7 112.2 12.6 48.0 40.3 101.2 9.3 48.4 106.4 11.6 59.3 111.1 12.5 50.0 37.0 98.6 8.9 45.6 104.5 11.2 56.9 109.8 12.3 55.0 27.3 90.4 8.0 37.8 98.7 10.6 50.5 106.0 12.0 59.0 15.8 79.9 7.4 28.3 90.8 9.6 43.5 101.2 11.4 65.0 16.1 79.7 6.3 35.3 94.9 10.9 50.8 102.3 9.5	34.0	59.3	113.4	12.2	65.6	115.8	13.1									
40.0 51.8 109.1 11.2 58.7 112.5 12.4 42.0 49.2 107.4 10.8 56.2 111.2 12.2 43.1 44.0 46.4 105.6 10.3 53.7 109.7 12.0 64.0 113.3 12.7 46.0 43.4 103.5 9.8 51.1 108.2 11.8 61.7 112.2 12.6 48.0 40.3 101.2 9.3 48.4 106.4 11.6 59.3 111.1 12.5 50.0 37.0 98.6 8.9 45.6 104.5 11.2 56.9 109.8 12.3 55.0 27.3 90.4 8.0 37.8 98.7 10.6 50.5 106.0 12.0 59.0 15.8 79.9 7.4 28.3 90.8 9.6 43.5 101.2 11.4 65.0 16.1 79.7 6.3 35.3 94.9 10.9 50.8 102.3 9.5 70.0 73.0 75.0 36.9 43.8 9.9 43.8	36.0	56.9	112.1	11.8	63.4	114.8	12.8									
42.0 49.2 107.4 10.8 56.2 111.2 12.2 43.1 44.0 46.4 105.6 10.3 53.7 109.7 12.0 64.0 113.3 12.7 46.0 43.4 103.5 9.8 51.1 108.2 11.8 61.7 112.2 12.6 48.0 40.3 101.2 9.3 48.4 106.4 11.6 59.3 111.1 12.5 50.0 37.0 98.6 8.9 45.6 104.5 11.2 56.9 109.8 12.3 55.0 27.3 90.4 8.0 37.8 98.7 10.6 50.5 106.0 12.0 59.0 15.8 79.9 7.4 <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td></td>						-										
43.1 44.0 46.4 105.6 10.3 53.7 109.7 12.0 64.0 113.7 12.7 46.0 43.4 103.5 9.8 51.1 108.2 11.8 61.7 112.2 12.6 48.0 43.4 103.5 9.8 51.1 108.2 11.8 61.7 112.2 12.6 50.0 37.0 98.6 8.9 45.6 104.5 11.2 56.9 109.8 12.3 55.0 27.3 90.4 8.0 37.8 98.7 10.6 50.5 106.0 12.0 59.0 15.8 79.9 7.4 60.0 61.8 9.6 43.5 101.2 11.4 65.0 16.1 79.7 6.3 35.3 94.9 10.9 50.8 102.3 70.0 73.0 77.6 9.3 75.0 35.7 91.4 7.8 80.0 80.0 36.9 35.7 91.4 7.8 80.0 26.9 83.9 6.9																
44.0 46.4 105.6 10.3 53.7 109.7 12.0 64.0 113.3 12.7 46.0 43.4 103.5 9.8 51.1 108.2 11.8 61.7 112.2 12.6 48.0 40.3 101.2 9.3 48.4 106.4 11.6 59.3 111.1 12.5 50.0 37.0 98.6 8.9 45.6 104.5 11.2 56.9 109.8 12.3 55.0 27.3 90.4 8.0 37.8 98.7 10.6 50.5 106.0 12.0 59.0 15.8 79.9 7.4 28.3 90.8 9.6 43.5 101.2 11.4 61.8 65.0 16.1 79.7 6.3 35.3 94.9 10.9 50.8 102.3 9.5 70.0 73.0 77.6 9.3 43.8 97.6 8.8 75.0 80.0 9.9 43.8 9.9 43.8 9.9 43.8 9.6 80.0 9.0 9.8 9.9 43.8 9.9 <td></td> <td>49.2</td> <td>107.4</td> <td>10.8</td> <td>56.2</td> <td>111.2</td> <td>12.2</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>		49.2	107.4	10.8	56.2	111.2	12.2									
46.0 43.4 103.5 9.8 51.1 108.2 11.8 61.7 112.2 12.6																
48.0 40.3 101.2 9.3 48.4 106.4 11.6 59.3 111.1 12.5 50.0 37.0 98.6 8.9 45.6 104.5 11.2 56.9 109.8 12.3 55.0 27.3 90.4 8.0 37.8 98.7 10.6 50.5 106.0 12.0 59.0 15.8 79.9 7.4 28.3 90.8 9.6 43.5 101.2 11.4 61.8 65.0 16.1 79.7 6.3 35.3 94.9 10.9 50.8 102.3 9.5 70.0 73.0 77.6 9.3 35.7 91.4 7.8 75.0 35.7 91.4 7.8 80.0 80.0 83.9 6.9																
50.0 37.0 98.6 8.9 45.6 104.5 11.2 56.9 109.8 12.3 55.0 27.3 90.4 8.0 37.8 98.7 10.6 50.5 106.0 12.0 59.0 15.8 79.9 7.4																
55.0 27.3 90.4 8.0 37.8 98.7 10.6 50.5 106.0 12.0 59.0 15.8 79.9 7.4 28.3 90.8 9.6 43.5 101.2 11.4 55.0 104.8 9.8 61.8 65.0 16.1 79.7 6.3 35.3 94.9 10.9 50.8 102.3 9.5 70.0 73.0 24.9 86.0 9.9 43.8 97.6 8.8 75.0 15.9 77.6 9.3 35.7 91.4 7.8 80.0 9.9 43.8 97.6 83.9 6.9	•															
59.0 15.8 79.9 7.4 60.0 61.8 65.0 16.1 79.7 6.3 35.3 94.9 10.9 50.8 102.3 9.5 70.0 73.0 24.9 86.0 9.9 43.8 97.6 8.8 75.0 35.7 91.4 7.8 80.0 26.9 83.9 6.9																
60.0 28.3 90.8 9.6 43.5 101.2 11.4 61.8 16.1 79.7 6.3 35.3 94.9 10.9 50.8 102.3 9.5 70.0 24.9 86.0 9.9 43.8 97.6 8.8 73.0 77.6 9.3 75.0 35.7 91.4 7.8 80.0 26.9 83.9 6.9					37.8	98.7	10.6	50.5	106.0	12.0						
61.8 65.0 16.1 79.7 6.3 35.3 94.9 10.9 50.8 102.3 9.5 70.0 24.9 86.0 9.9 43.8 97.6 8.8 73.0 77.6 9.3 75.0 35.7 91.4 7.8 80.0 26.9 83.9 6.9		15.8	79.9	7.4												
65.0 16.1 79.7 6.3 35.3 94.9 10.9 50.8 102.3 9.5 70.0 24.9 86.0 9.9 43.8 97.6 8.8 73.0 15.9 77.6 9.3 77.8 91.4 7.8 80.0 80.0 26.9 83.9 6.9 6.9					28.3	90.8	9.6	43.5	101.2	11.4						
70.0 24.9 86.0 9.9 43.8 97.6 8.8 73.0 15.9 77.6 9.3 77.8 75.0 35.7 91.4 7.8 80.0 26.9 83.9 6.9																
73.0 75.0 80.0 15.9 77.6 9.3 35.7 91.4 7.8 26.9 83.9 6.9					16.1	79.7	6.3									
75.0 80.0 35.7 91.4 7.8 26.9 83.9 6.9											43.8	97.6	8.8			
80.0 26.9 83.9 6.9								15.9	/ / / .6	9.3	05.7	04.4	7.0			
													-			
	80.0 84.0										26.9 15.2	73.2	6.2			



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 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]
				62.0 ı		eza de p	al, Punto lumín (1 n] Posici	916-1) 5	9.5 m Pl		lumín				
17.8	78.0	123.1	14.0												
18.0	77.8	123.1	14.0												
20.0	75.8	122.6	13.7												
22.0	73.7	122.0	13.2												
24.0	71.7	121.4	12.6												
26.0	69.6	120.6	12.2												
28.0	67.5	119.8	11.9												
28.2				73.0	121.3	12.5									
30.0	65.4	118.9	11.7	71.1	120.7	12.4									
32.0	63.3	117.9	11.5	69.1	119.9	12.2									
34.0	61.0	116.8 115.6	11.3	67.0	119.1 118.1	12.0				ł			ł		
36.0 38.0	58.8 56.5	115.6	11.0 10.7	64.8 62.6	118.1	11.7 11.5									
40.0	54.1	112.9	10.7	60.4	116.0	11.3				ł			ł		
42.0	51.6	111.4	10.3	58.2	114.8	11.1									
44.0	49.1	109.7	10.0	55.8	113.5	10.9									
44.4	40.1	100.1	10.0	00.0	110.0	10.0	65.0	116.4	11.5	i					
46.0	46.5	107.8	9.5	53.4	112.0	10.8	63.3	115.6	11.5	i					
48.0	43.7	105.7	9.0	51.0	110.4	10.6	61.1	114.5	11.3	İ			İ		
50.0	40.8	103.5	8.6	48.4	108.7	10.4	58.8	113.3	11.2						
55.0	32.5	96.6	7.8	41.4	103.5	9.9	52.9	109.9	10.8						
60.0	21.7	86.5	7.0	33.3	96.8	9.4	46.5	105.5	10.5						
62.0	15.4	80.3	6.7												
63.5										55.0	107.3	9.3			
65.0				22.8	87.1	8.4	39.3	100.0	10.2	53.2	106.1	9.3			
68.0				15.7	80.1	5.5									
70.0							30.7	92.6	9.6	46.8	101.8	8.5			
75.0							18.8	81.4	8.7	39.6	96.4	7.5			
76.0							15.4	78.0	8.5			0.0			
80.0										32.2	90.1	6.6			
85.0										21.2	79.9	5.8			
86.0										18.3	77.0	5.6			



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 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]
				62.0 ו	n Pluma Cab	eza de p	ıl, Punto lumín (1 ı] Posici	916-1) 6:	2.5 m Pl	eza de p umín	lumín				
18.4	78.0	126.1	12.9												
20.0	76.5	125.7	12.7												
22.0	74.5	125.1	12.1												
24.0	72.6	124.5	11.7												
26.0	70.7	123.8	11.3												
28.0	68.7	123.1	11.0												
29.1				73.0	124.1	11.4									
30.0	66.7	122.2	10.8	72.1	123.8	11.4									
32.0	64.6	121.3	10.6	70.1	123.1	11.2									
34.0	62.6	120.3	10.4	68.1	122.3	11.0									
36.0	60.5	119.1	10.2	66.1	121.5	10.8									
38.0	58.3	117.9	10.0	64.1	120.5	10.6									
40.0	56.1	116.6	9.8	62.0	119.5	10.4									
42.0	53.8	115.2	9.6	59.9	118.3	10.2									
44.0	51.5	113.6	9.5	57.7	117.1	10.0									
45.7							65.0	119.2	10.4						
46.0	49.1	111.9	9.2	55.5	115.7	9.9	64.7	119.0	10.4						
48.0	46.5	110.0	8.8	53.2	114.2	9.7	62.6	118.0	10.4						
50.0	43.9 36.7	108.0 102.0	8.4	50.8 44.5	112.6 108.0	9.6 9.3	60.5 55.0	116.9 113.6	10.2 9.9						
55.0	27.9	93.8	7.5 6.8	37.4	108.0	9.3 8.9	49.1	109.6	9.9						
60.0 65.0	27.9 17.1	93.6 82.9	4.3	28.8	94.2	8.2	49.1 42.6	109.6	9.7						
65.0 65.2	17.1	02.9	4.3	20.0	94.2	0.2	42.0	104.6	9.5	55.0	109.7	8.8			
70.0				16.6	81.8	7.3	35.1	98.3	9.3	49.3	109.7	8.3			
71.0				15.3	80.5	4.9	33.1	90.5	9.5	45.5	103.8	0.5			
75.0				13.3	00.0	4.9	25.9	89.5	8.5	42.9	101.0	7.4			
79.0							15.0	78.4	7.9	44.5	101.0	7.4			
80.0							13.0	70.4	1.9	36.4	95.5	6.5			
85.0										27.6	87.3	5.7			
89.0										17.9	77.5	5.1			



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 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]
				62.0	m Pluma Cab	eza de p	ıl, Punto lumín (1 ı] Posici	916-1) 6:	5.5 m Pl	eza de p umín	lumín				
19.0	78.0	129.0	11.7												
20.0	77.1	128.8	11.7												
22.0	75.3	128.3	11.2												
24.0	73.4	127.7	10.8	I											
26.0	71.6	127.0	10.5												
28.0	69.7	126.3	10.2	l											
29.9				73.0	127.0	10.5									
30.0	67.8	125.5	10.0	72.9	127.0	10.5									
32.0	65.9	124.6	9.7	71.1	126.3	10.4									
34.0	63.9	123.6	9.6	69.2	125.6	10.2									
36.0	62.0	122.6	9.4	67.3	124.7	10.0									
38.0	59.9	121.4	9.2	65.4	123.8	9.8									
40.0	57.9	120.2	9.0	63.4	122.9	9.6									
42.0	55.7	118.9	8.8	61.4	121.8	9.4									
44.0	53.6	117.4	8.7	59.4	120.6	9.3									
46.0	51.3	115.8	8.5	57.3	119.3	9.1									
46.9	40.0		0.0	55.4	440.0	0.0	65.0	121.9	9.5						
48.0	49.0	114.1	8.3	55.1	118.0	8.9	64.0	121.3	9.5						
50.0	46.6	112.3	8.0	53.0	116.5	8.8	62.0	120.3	9.4						
55.0	40.2	106.9	7.2	47.2	112.2	8.4	56.8	117.3	9.1						
60.0	32.6	99.9	6.6	40.8	106.9	8.0	51.3	113.5	8.8						
65.0 66.9	23.0	90.2	5.9	33.4	100.1	7.6	45.4	109.0	8.5	55.0	112.2	8.1			
68.0	16.7	83.4	4.1							55.0	112.2	0.1			
70.0	10.7	03.4	4.1	24.0	90.7	7.0	38.8	103.3	8.3	51.6	109.8	8.0			
73.0				16.2	82.2	6.6	30.0	103.3	0.3	0.10	109.6	6.0			
75.0 75.0				10.2	02.2	0.0	31.0	96.0	7.9	45.7	105.3	7.1			
75.0 80.0							20.6	96.0 85.3	7.9	39.8	105.3	6.2			
82.0				l			16.8	81.1	6.1	39.0	100.4	0.2			
85.0							10.0	01.1	0.1	32.3	93.4	5.4			
90.0										22.7	83.6	4.7			
92.0										17.4	78.0	4.7			
92.0										17.4	10.0	4.4			



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

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

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

	ļ r	gulo de orincipa		ı	gulo de principa		ı	gulo de orincipa		1	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]
				62.0 ו	m Pluma Cab	eza de p	il, Punto lumín (1 n] Posici	916-1) 6	8.5 m Pl	eza de p umín	lumín				
19.6 20.0 22.0 24.0 26.0	78.0 77.7 75.9 74.2 72.4	131.9 131.8 131.4 130.8 130.2	10.7 10.7 10.5 10.1 9.8												
28.0 30.0 30.8 32.0 34.0	70.7 68.9 67.0 65.2	129.5 128.7 127.9 127.0	9.5 9.3 9.1 8.9	73.0 71.9 70.2	129.9 129.5 128.8	9.6 9.6 9.5									
36.0 38.0 40.0 42.0 44.0	63.3 61.4 59.4 57.5 55.4	126.0 124.9 123.7 122.5 121.1	8.7 8.6 8.4 8.2 8.0	68.3 66.5 64.7 62.8 60.9	128.0 127.1 126.2 125.2 124.1	9.3 9.1 8.9 8.8 8.6									
46.0 48.0 48.2 50.0 55.0	53.3 51.2 49.0 43.1	119.7 118.1 116.4 111.4	7.8 7.7 7.5 6.9	58.9 56.9 54.9 49.5	122.9 121.6 120.2 116.3	8.4 8.3 8.1 7.8	65.0 63.3 58.5	124.6 123.7 120.8	8.7 8.7 8.4						
60.0 65.0 68.6 70.0 71.0	36.4 28.5 17.5 16.4	105.3 97.2 85.1 83.8	6.3 5.8 5.2 3.8	43.6 37.1 29.3	111.4 105.4 97.5	7.3 7.0 6.6	53.3 47.9 41.8	117.4 113.2 108.0	8.1 7.8 7.5	55.0 53.6	114.7 113.6	7.5 7.5			
75.0 76.0 80.0 85.0 90.0				18.7 15.8	86.0 82.6	6.2 6.1	35.0 26.6 16.4	93.0 81.5	7.2 6.9 5.8	48.1 42.8 36.1 28.1 17.0	109.5 105.0 98.8 90.7 78.4	6.9 6.1 5.2 4.5 3.8			



2821-1

2821-1

N° de ident.: 9842523/95738/

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

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

	88° Án	gulo de orincipa	pluma I		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]
				62.0 ו	m Pluma Cab	eza de p	il, Punto lumín (1 il Posici	916-1) 7	1.5 m Pl		lumín				
20.0	700	1010	0.7			1 0.0 [11		I	11 (1310)	1	l	ı		l	1
20.2 22.0	78.0 76.5	134.9 134.5	9.7 9.6												
24.0	74.9	133.9	9.0							ł					
26.0	73.2	133.3	8.9												
28.0	71.5	132.7	8.7							i					
30.0	69.8	131.9	8.5												
31.7	00.0	101.0	0.0	73.0	132.7	8.7				Ī					
32.0	68.1	131.2	8.3	72.7	132.6	8.7				İ					
34.0	66.3	130.3	8.1	71.0	132.0	8.6									
36.0	64.5	129.3	8.0	69.3	131.2	8.5									
38.0	62.7	128.3	7.8	67.6	130.4	8.3									
40.0	60.9	127.2	7.7	65.8	129.5	8.1									
42.0	59.0	126.0	7.5	64.0	128.6	8.0									
44.0	57.1	124.8	7.4	62.2	127.5	7.9									
46.0	55.1	123.4	7.2	60.4	126.4	7.7									
48.0	53.1	121.9	7.1	58.5	125.2	7.6				l					
49.5							65.0	127.3	7.8						
50.0 55.0	51.1 45.6	120.3 115.8	7.0 6.5	56.5 51.5	123.9 120.2	7.5 7.2	64.5 59.9	127.1 124.4	7.8 7.6						
60.0	39.6	115.8	6.0	51.5 46.1	120.2	6.9	59.9 55.1	124.4	7.6						
65.0	32.7	103.2	5.5	40.1	110.3	6.6	50.0	117.2	7.4						
70.0	24.1	93.7	5.0	33.4	103.4	6.3	44.5	112.5	6.9						
70.4	24.1	33.7	3.0	55.4	100.4	0.5	44.5	112.5	0.5	55.0	117.1	6.9			
74.0	16.0	84.2	3.6							00.0		0.0			
75.0				25.0	94.2	5.9	38.3	106.7	6.7	50.3	113.5	6.6			
79.0				15.4	83.0	5.5									
80.0							31.2	99.3	6.5	45.3	109.3	5.8			
85.0							22.0	89.0	6.3	39.3	103.7	5.0			
88.0							16.0	81.9	5.2						
90.0										32.4	96.7	4.2			
95.0										23.8	87.2	3.6			
98.0										16.7	78.8	3.2			



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

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

		gulo de principa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				62.0 ı		eza de p	il, Punto llumín (19 n] Posici	916-1) 7	4.5 m Pli	eza de p umín	lumín				
20.9 22.0 24.0 26.0 28.0	78.0 77.1 75.5 73.9 72.3	137.8 137.5 137.0 136.5 135.8	8.9 8.9 8.5 8.2 8.0												
30.0 32.0 32.6 34.0	70.6 69.0 67.3	135.6 135.1 134.4 133.6	7.8 7.7	73.0 71.8	135.6 135.1	8.0 8.0									
36.0 38.0 40.0 42.0	65.6 63.9 62.2 60.4	132.7 131.7 130.7 129.5	7.4 7.2 7.1 7.0	70.2 68.5 66.8 65.1	134.4 133.7 132.8 131.9	7.8 7.6 7.5 7.4									
44.0 46.0 48.0 50.0	58.6 56.7 54.9 52.9	128.3 127.0 125.6 124.2	6.8 6.7 6.6 6.5	63.4 61.7 59.9 58.1	130.9 129.9 128.7 127.5	7.2 7.1 7.0 6.9									
50.7 55.0 60.0 65.0	47.9 42.4 36.2	119.9 114.8 108.6	6.2 5.7 5.3	53.4 48.3 42.9	124.0 119.8 114.8	6.6 6.4 6.2	65.0 61.3 56.8 52.0	130.0 127.8 124.7 121.1	7.1 7.0 6.8 6.6						
70.0 72.1 75.0 77.0	28.9 19.3 15.7	100.6 89.1 84.6	4.8 4.3 3.5	36.8	108.7	6.0	46.8	116.7	6.4	55.0 52.2	119.6 117.4	6.3 6.2			
80.0 82.0 85.0 90.0	13.7	04.0	3.5	20.3 15.1	89.9 83.4	5.3 5.1	34.9 27.3 16.7	104.9 96.4 83.7	6.2 5.9 5.7	47.1 42.1 35.9	113.0 108.4 102.1	5.7 4.9 4.2			
91.0 95.0 100.0 101.0							15.7	82.4	4.7	28.6 18.9 16.3	94.1 82.5 79.2	3.5 2.9 2.8			



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

Color Colo			gulo de principa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Cabeza de plumín (1916-1) 77.5 m Plumín 34.0 [m] Posición midfall (1916) 21.5	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]
34.0 [m] Posición midfall (1916) 21.5					62.0	m Pluma	principa	al, Punto	de carga	1 - Cab	eza de p	lumín				
22.0						Cab					umm					
24.0 76.1 140.1 7.8 26.0 74.5 139.6 7.5 28.0 73.0 139.0 7.3 30.0 71.4 138.3 7.1 32.0 69.8 137.6 7.0 33.4 33.4 34.0 68.2 136.8 6.8 72.6 138.3 7.2 36.0 66.6 136.0 6.7 71.0 137.6 7.1 38.0 65.0 135.0 6.5 69.4 136.9 6.9 40.0 63.3 134.1 6.4 67.8 136.1 6.8 42.0 61.7 133.0 6.3 66.2 135.2 6.7 44.0 59.9 131.8 6.2 64.5 134.3 6.5 46.0 58.2 130.6 6.0 62.9 133.3 6.4 48.0 56.4 129.3 5.9 61.2 132.2 6.3 50.0 54.6 127.9 5.8 59.5 131.0 6.2 55.0 49.9 123.9 5.6 55.0 127.7 5.9 62.5 131.2 6.3 60.0 44.8 119.2 5.2 50.3 123.	21.5		140.7	8.0												
26.0 74.5 139.6 7.5 28.0 73.0 139.0 7.3 30.0 71.4 138.3 7.1 32.0 69.8 137.6 7.0 33.4 34.0 68.2 136.8 6.8 72.6 138.3 7.2 33.3 7.2 33.4 36.0 66.6 136.0 6.7 71.0 137.6 7.1 38.0 65.0 135.0 6.5 69.4 136.9 6.9 40.0 63.3 134.1 6.4 67.8 136.1 6.8 42.0 61.7 133.0 63.3 66.2 135.2 6.7 44.0 59.9 131.8 6.2 64.5 134.3 6.5 44.0 59.9 131.8 6.2 64.5 134.3 6.5 44.0 59.9 131.8 6.2 64.5 134.3 6.5 44.0 59.9 131.8 6.2 64.5 134.3 6.5 44.0 59.9 131.8 6.2 64.5 134.3 6.5 46.0 58.2 130.6 6.0 62.9 133.3 6.4 46.0 56.4 199.9	22.0	77.6	140.6	8.0												
28.0 73.0 139.0 7.3 30.0 71.4 138.3 7.1 32.0 69.8 137.6 7.0 33.4 73.0 138.5 7.2 36.0 66.6 136.0 6.7 71.0 137.6 7.1 38.0 65.0 135.0 6.5 69.4 136.9 6.9 40.0 63.3 134.1 6.4 67.8 136.1 6.8 42.0 61.7 133.0 63. 66.2 135.2 6.7 44.0 59.9 131.8 6.2 64.5 134.3 6.5 46.0 58.2 130.6 6.0 62.9 133.3 6.4 48.0 56.4 129.3 5.9 61.2 132.2 6.3 50.0 54.6 127.9 5.8 59.5 131.0 6.2 55.0 49.9 123.9 5.6 55.0 127.7 5.9 62.5 131.2 6.3	24.0	76.1	140.1													
30.0	26.0															
32.0 69.8 137.6 7.0 33.4 34.0 68.2 136.8 6.8 72.6 138.3 7.2 36.0 66.6 136.0 6.7 71.0 137.6 7.1 38.0 65.0 135.0 6.5 69.4 136.9 6.9 40.0 63.3 134.1 6.4 67.8 136.1 6.8 42.0 61.7 133.0 6.3 66.2 135.2 6.7 44.0 59.9 131.8 6.2 64.5 134.3 6.5 46.0 58.2 130.6 6.0 62.9 133.3 6.4 48.0 56.4 129.3 5.9 61.2 132.2 6.3 50.0 54.6 127.9 5.8 59.5 131.0 6.2 52.0 55.0 49.9 123.9 5.6 55.0 127.7 5.9 62.5 131.2 6.3 60.0 44.8 119.2 5.2 50.3 123.8 5.7 58.2 128.3 6.1 65.0 39.2 113.6 4.9 45.3 119.2 5.5 53.7 124.9 5.8 75.0 25.0 97.3 <t< td=""><td>28.0</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></t<>	28.0															
33.4 34.0 68.2 136.8 6.8 72.6 138.3 7.2 36.0 66.6 136.0 6.7 71.0 137.6 7.1 38.0 65.0 135.0 6.5 69.4 136.9 6.9 40.0 63.3 134.1 6.4 67.8 136.1 6.8 42.0 61.7 133.0 6.3 66.2 135.2 6.7 44.0 59.9 131.8 6.2 64.5 134.3 6.5 46.0 58.2 130.6 6.0 62.9 133.3 6.4 48.0 56.4 129.3 5.9 61.2 132.2 6.3 50.0 54.6 127.9 5.8 59.5 131.0 6.2 55.0 49.9 123.9 5.6 55.0 127.7 5.9 62.5 131.2 6.3 60.0 44.8 119.2 5.2 50.3 123.8 5.7 58.2 128.3 6.1 65.0 39.2 113.6 4.9 45.3 119.2 5.5 </td <td>30.0</td> <td>71.4</td> <td></td>	30.0	71.4														
34.0 68.2 136.8 6.8 72.6 138.3 7.2 36.0 66.6 136.0 6.7 71.0 137.6 7.1 38.0 65.0 135.0 6.5 69.4 136.9 6.9 40.0 63.3 134.1 6.4 67.8 136.1 6.8 42.0 61.7 133.0 6.2 64.5 134.3 6.5 44.0 59.9 131.8 6.2 64.5 134.3 6.5 46.0 58.2 130.6 6.0 62.9 133.3 6.4 48.0 56.4 129.3 5.9 61.2 132.2 6.3 50.0 54.6 127.9 5.8 59.5 131.0 6.2 55.0 49.9 123.9 5.6 55.0 127.7 5.9 62.5 131.2 6.3 60.0 44.8 119.2 5.2 50.3 123.8 5.7 58.2 128.3 6.1 65.0 39.2 113.6 4.9 45.3 119.2 5.5 53.7 </td <td>32.0</td> <td>69.8</td> <td>137.6</td> <td>7.0</td> <td></td> <td></td> <td></td> <td>l</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	32.0	69.8	137.6	7.0				l								
36.0 66.6 136.0 6.7 71.0 137.6 7.1 38.0 65.0 135.0 6.5 69.4 136.9 6.9 40.0 63.3 134.1 6.4 67.8 136.1 6.8 42.0 61.7 133.0 6.3 66.2 135.2 6.7 44.0 59.9 131.8 6.2 64.5 134.3 6.5 46.0 58.2 130.6 6.0 62.9 133.3 6.4 48.0 56.4 129.3 5.9 61.2 132.2 6.3 50.0 54.6 127.9 5.8 59.5 131.0 6.2 55.0 49.9 123.9 5.6 55.0 127.7 5.9 62.5 131.2 6.3 60.0 44.8 119.2 5.2 50.3 123.8 5.7 58.2 128.3 6.1 65.0 39.2 113.6 4.9 45.3 119.2 5.5 53.7 124.9 5.8 70.0 32.8 106.5 4.6 39.7 </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><u> </u></td> <td></td> <td></td>								•						<u> </u>		
38.0 65.0 135.0 6.5 69.4 136.9 6.9 40.0 63.3 134.1 6.4 67.8 136.1 6.8 42.0 61.7 133.0 6.3 66.2 135.2 6.7 44.0 59.9 131.8 6.2 64.5 134.3 6.5 46.0 58.2 130.6 6.0 62.9 133.3 6.4 48.0 56.4 129.3 5.9 61.2 132.2 6.3 50.0 54.6 127.9 5.8 59.5 131.0 6.2 52.0 49.9 123.9 5.6 55.0 127.7 5.9 62.5 131.2 6.3 60.0 44.8 119.2 5.2 50.3 123.8 5.7 58.2 128.3 6.1 65.0 39.2 113.6 4.9 45.3 119.2 5.5 53.7 124.9 5.8 70.0 32.8 106.5 4.6 39.7 113.6 5.3 48.9 120.8 5.7 73.8 75.0 </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>																
40.0 63.3 134.1 6.4 67.8 136.1 6.8 42.0 61.7 133.0 6.3 66.2 135.2 6.7 44.0 59.9 131.8 6.2 64.5 134.3 6.5 46.0 58.2 130.6 6.0 62.9 133.3 6.4 48.0 56.4 129.3 5.9 61.2 132.2 6.3 50.0 54.6 127.9 5.8 59.5 131.0 6.2 52.0 55.0 49.9 123.9 5.6 55.0 127.7 5.9 62.5 131.2 6.3 60.0 44.8 119.2 5.2 50.3 123.8 5.7 58.2 128.3 6.1 65.0 39.2 113.6 4.9 45.3 119.2 5.5 53.7 124.9 5.8 70.0 32.8 106.5 4.6 39.7 113.6 5.3 48.9 120.8 5.7 73.8 75.0 25.0 97.3 4.1 33.4 106.7 5.2 43.7 </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>																
42.0 61.7 133.0 6.3 66.2 135.2 6.7 44.0 59.9 131.8 6.2 64.5 134.3 6.5 48.0 58.2 130.6 6.0 62.9 133.3 6.4 48.0 56.4 129.3 5.9 61.2 132.2 6.3 50.0 54.6 127.9 5.8 59.5 131.0 6.2 52.0 65.0 132.7 6.4 6.3 60.0 44.8 119.2 5.2 50.3 123.8 5.7 58.2 128.3 6.1 65.0 39.2 113.6 4.9 45.3 119.2 5.5 53.7 124.9 5.8 70.0 32.8 106.5 4.6 39.7 113.6 5.3 48.9 120.8 5.7 73.8 75.0 25.0 97.3 4.1 33.4 106.7 5.2 43.7 115.9 5.5 53.9 121.1 5.5 80.0 15.3 85.0 3.2 25.8 97.7 4.9 38.0																
44.0 59.9 131.8 6.2 64.5 134.3 6.5 46.0 58.2 130.6 6.0 62.9 133.3 6.4 48.0 56.4 129.3 5.9 61.2 132.2 6.3 50.0 54.6 127.9 5.8 59.5 131.0 6.2 55.0 49.9 123.9 5.6 55.0 127.7 5.9 62.5 131.2 6.3 60.0 44.8 119.2 5.2 50.3 123.8 5.7 58.2 128.3 6.1 65.0 39.2 113.6 4.9 45.3 119.2 5.5 53.7 124.9 5.8 70.0 32.8 106.5 4.6 39.7 113.6 5.3 48.9 120.8 5.7 73.8 75.0 25.0 97.3 4.1 33.4 106.7 5.2 43.7 115.9 5.5 53.9 121.1 5.5 80.0 15.3 85.0 3.2 25.8 97.7 4.9 38.0 110.0 5.4 49.1 <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>																
46.0 58.2 130.6 6.0 62.9 133.3 6.4 48.0 56.4 129.3 5.9 61.2 132.2 6.3 50.0 54.6 127.9 5.8 59.5 131.0 6.2 52.0 55.0 49.9 123.9 5.6 55.0 127.7 5.9 62.5 131.2 6.3 60.0 44.8 119.2 5.2 50.3 123.8 5.7 58.2 128.3 6.1 65.0 39.2 113.6 4.9 45.3 119.2 5.5 53.7 124.9 5.8 70.0 32.8 106.5 4.6 39.7 113.6 5.3 48.9 120.8 5.7 73.8 75.0 25.0 97.3 4.1 33.4 106.7 5.2 43.7 115.9 5.5 53.9 121.1 5.5 80.0 15.3 85.0 3.2 25.8 97.7 4.9 38.0 110.0 5.4							-									
48.0 56.4 129.3 5.9 61.2 132.2 6.3 50.0 54.6 127.9 5.8 59.5 131.0 6.2 52.0 65.0 127.7 5.9 62.5 131.2 6.3 65.0 49.9 123.9 5.6 55.0 127.7 5.9 62.5 131.2 6.3 60.0 44.8 119.2 5.2 50.3 123.8 5.7 58.2 128.3 6.1 65.0 39.2 113.6 4.9 45.3 119.2 5.5 53.7 124.9 5.8 70.0 32.8 106.5 4.6 39.7 113.6 5.3 48.9 120.8 5.7 73.8 75.0 25.0 97.3 4.1 33.4 106.7 5.2 43.7 115.9 5.5 53.9 121.1 5.5 80.0 15.3 85.0 3.2 25.8 97.7 4.9 38.0 110.0 5.4 49.1 117.1 5.5 80.0 15.3 85.0 3.2 25.8 <td></td> <td></td> <td></td> <td>-</td> <td></td>				-												
50.0 54.6 127.9 5.8 59.5 131.0 6.2 52.0 49.9 123.9 5.6 55.0 127.7 5.9 62.5 131.2 6.3 60.0 44.8 119.2 5.2 50.3 123.8 5.7 58.2 128.3 6.1 65.0 39.2 113.6 4.9 45.3 119.2 5.5 53.7 124.9 5.8 70.0 32.8 106.5 4.6 39.7 113.6 5.3 48.9 120.8 5.7 73.8 75.0 25.0 97.3 4.1 33.4 106.7 5.2 43.7 115.9 5.5 53.9 121.1 5.5 80.0 15.3 85.0 3.2 25.8 97.7 4.9 38.0 110.0 5.4 49.1 117.1 5.4 85.0 90.0 16.6 86.1 3.7 31.4 102.6 5.3 44.5 112.8 4.6 94.0 15.4 82.8 4.4 4.4 107.1 3.9																
52.0 49.9 123.9 5.6 55.0 127.7 5.9 62.5 131.2 6.3 60.0 44.8 119.2 5.2 50.3 123.8 5.7 58.2 128.3 6.1 65.0 39.2 113.6 4.9 45.3 119.2 5.5 53.7 124.9 5.8 70.0 32.8 106.5 4.6 39.7 113.6 5.3 48.9 120.8 5.7 73.8 75.0 25.0 97.3 4.1 33.4 106.7 5.2 43.7 115.9 5.5 53.9 121.1 5.5 80.0 15.3 85.0 3.2 25.8 97.7 4.9 38.0 110.0 5.4 49.1 117.1 5.4 85.0 90.0 16.6 86.1 3.7 31.4 102.6 5.3 44.5 112.8 4.6 90.0 94.0 15.4 82.8 4.4 4.4 107.1 3.9																
55.0 49.9 123.9 5.6 55.0 127.7 5.9 62.5 131.2 6.3 6.3 6.1 66.0 44.8 119.2 5.2 50.3 123.8 5.7 58.2 128.3 6.1 6.1 66.1 66.1 66.0 39.2 113.6 4.9 45.3 119.2 5.5 53.7 124.9 5.8 5.7 55.0 122.0 5.5 5.7 73.8 5.7 55.0 122.0 5.5 55.0 122.0 5.5 55.0 122.0 5.5 55.0 122.0 5.5 53.9 121.1 5.5 55.0 80.0 15.3 85.0 3.2 25.8 97.7 4.9 38.0 110.0 5.4 49.1 117.1 5.4 49.1 117.1 5.4 4.6 39.0 15.3 86.1 3.7 31.4 102.6 5.3 44.5 112.8 4.6 39.9 107.1 3.9 94.0 15.4 82.8 4.4 4.4		54.6	127.9	5.8	59.5	131.0	6.2									
60.0 44.8 119.2 5.2 50.3 123.8 5.7 58.2 128.3 6.1 65.0 39.2 113.6 4.9 45.3 119.2 5.5 53.7 124.9 5.8 70.0 32.8 106.5 4.6 39.7 113.6 5.3 48.9 120.8 5.7 73.8 75.0 25.0 97.3 4.1 33.4 106.7 5.2 43.7 115.9 5.5 53.9 121.1 5.5 80.0 15.3 85.0 3.2 25.8 97.7 4.9 38.0 110.0 5.4 49.1 117.1 5.4 85.0 90.0 16.6 86.1 3.7 31.4 102.6 5.3 44.5 112.8 4.6 99.0 94.0 15.4 82.8 4.4																
65.0 39.2 113.6 4.9 45.3 119.2 5.5 53.7 124.9 5.8 70.0 32.8 106.5 4.6 39.7 113.6 5.3 48.9 120.8 5.7 73.8 75.0 25.0 97.3 4.1 33.4 106.7 5.2 43.7 115.9 5.5 53.9 121.1 5.5 80.0 15.3 85.0 3.2 25.8 97.7 4.9 38.0 110.0 5.4 49.1 117.1 5.4 85.0 90.0 16.6 86.1 3.7 31.4 102.6 5.3 44.5 112.8 4.6 90.0 94.0 15.4 82.8 4.4 4.4			ı													
70.0 32.8 106.5 4.6 39.7 113.6 5.3 48.9 120.8 5.7 73.8 75.0 25.0 97.3 4.1 33.4 106.7 5.2 43.7 115.9 5.5 53.9 121.1 5.5 80.0 15.3 85.0 3.2 25.8 97.7 4.9 38.0 110.0 5.4 49.1 117.1 5.4 85.0 90.0 16.6 86.1 3.7 31.4 102.6 5.3 44.5 112.8 4.6 90.0 94.0 15.4 82.8 4.4							_									
73.8 75.0 25.0 97.3 4.1 33.4 106.7 5.2 43.7 115.9 5.5 53.9 121.1 5.5 80.0 15.3 85.0 3.2 25.8 97.7 4.9 38.0 110.0 5.4 49.1 117.1 5.4 85.0 90.0 16.6 86.1 3.7 31.4 102.6 5.3 44.5 112.8 4.6 99.0 94.0 15.4 82.8 4.4																
75.0 25.0 97.3 4.1 33.4 106.7 5.2 43.7 115.9 5.5 53.9 121.1 5.5 80.0 15.3 85.0 3.2 25.8 97.7 4.9 38.0 110.0 5.4 49.1 117.1 5.4 85.0 90.0 16.6 86.1 3.7 31.4 102.6 5.3 44.5 112.8 4.6 90.0 94.0 15.4 82.8 4.4 38.9 107.1 3.9		32.8	106.5	4.6	39.7	113.6	5.3	48.9	120.8	5.7						
80.0 15.3 85.0 3.2 25.8 97.7 4.9 38.0 110.0 5.4 49.1 117.1 5.4 85.0 16.6 86.1 3.7 31.4 102.6 5.3 44.5 112.8 4.6 90.0 23.1 92.7 5.2 38.9 107.1 3.9 94.0 15.4 82.8 4.4		05.0				400.7		40.7	445.0							
85.0 90.0 94.0 16.6 86.1 3.7 31.4 102.6 5.3 44.5 112.8 4.6 23.1 92.7 5.2 38.9 107.1 3.9			ı													
90.0 94.0 23.1 92.7 5.2 38.9 107.1 3.9		15.3	85.0	3.2												
94.0					16.6	86.1	3.7									
											38.9	107.1	3.9			
								15.4	82.8	4.4	20.5	400.0	0.0			
95.0 100.0 32.5 100.0 33.3 24.7 90.7 2.7																
100.0 24.7 90.7 2.7 104.0 16.0 79.7 2.2					-			-								



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

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

		gulo de orincipa		83° Án	gulo de orincipa	pluma I		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]
				62.0 ı		eza de p	al, Punto dumín (19 n] Posici	916-1) 8	0.5 m Pl	eza de p umín	lumín		-		
22.1 24.0 26.0 28.0 30.0 32.0	78.0 76.6 75.1 73.6 72.1 70.6	143.7 143.2 142.7 142.1 141.5 140.8	7.3 7.2 6.9 6.7 6.5												
34.0 34.3 36.0 38.0 40.0 42.0	69.1 67.6 66.0 64.4 62.8	140.0 139.2 138.4 137.4 136.4	6.3 6.1 5.9 5.8 5.7	73.0 71.7 70.2 68.7 67.1	141.4 140.8 140.1 139.3 138.5	6.5 6.5 6.4 6.2 6.1									
44.0 46.0 48.0 50.0 53.3	61.2 59.5 57.8 56.1	135.3 134.1 132.9 131.6	5.6 5.5 5.4 5.3	65.6 64.0 62.4 60.7	137.6 136.6 135.6 134.5	5.9 5.8 5.7 5.6	65.0	135.5	5.7						
55.0 60.0 65.0 70.0 75.0	51.7 46.9 41.8 36.0 29.3	127.9 123.5 118.2 111.9 104.0	5.0 4.8 4.5 4.3 4.0	56.5 52.1 47.4 42.2 36.6	131.4 127.7 123.4 118.2 112.0	5.3 5.1 4.9 4.7 4.6	63.6 59.5 55.3 50.8 45.9	134.6 131.8 128.6 124.7 120.2	5.7 5.5 5.3 5.1 4.9						
75.5 80.0 83.0 85.0	20.7	93.0 85.4	3.5 2.9	30.0	104.3	4.5	40.7	114.8	4.8	55.0 51.0 46.2	124.5 121.0 116.5	4.9 4.9			
88.0 90.0 95.0 97.0				16.3	86.5	3.3	27.8 18.5 15.1	99.8 87.8 83.1	4.7 4.7 4.1	41.5 35.7 29.0	111.8 105.4 97.4	3.7 3.1 2.5			
100.0										29.0	89.0	2.5			



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

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

Valor de vuelco: Lastre trasero [t]:

Lastre central [t]:

2 - Vía ancha 114.0 52.6

Alcan- ce [m] plum [°]	de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m] m Pluma Cab	Carga [t] principa eza de p	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas	Carga [t]
	146.3		62.0 ı	m Pluma Cab	principa eza de n	I. Punto				r 1			[m]	
	146.3		ı	Cab		dumín (1	de carga	1 - Cab	eza de p	lumín				
	146.3] Posici								
24 0 77 1														
24.0 11.1	1/5 0	6.5												
26.0 75.7		6.3												
28.0 74.3		6.1												
30.0 72.8		6.0												
32.0 71.4		5.8												
34.0 69.9	143.3	5.7												
35.2			73.0	144.2	5.9									
36.0 68.4		5.6	72.4	144.0	5.9									
38.0 66.9	141.6	5.4	71.0	143.3	5.8									
40.0 65.4		5.3	69.5	142.5	5.6									
42.0 63.9		5.2	68.0	141.7	5.5									
44.0 62.3	138.7	5.1	66.5	140.9	5.4									
46.0 60.7		5.0	65.0	140.0	5.3									
48.0 59.1		4.9	63.4	139.0	5.2									
50.0 57.5	135.2	4.8	61.9	137.9	5.1									
54.5						65.0	138.2	5.1						
55.0 53.3	131.7	4.6	57.9	135.0	4.8	64.6	138.0	5.1						
60.0 48.8	127.5	4.4	53.7	131.5	4.6	60.8	135.3	4.9						
65.0 44.0	122.7	4.1	49.3	127.4	4.4	56.7	132.2	4.7						
70.0 38.8	116.9	3.9	44.5	122.7	4.3	52.4	128.6	4.6						
75.0 32.8	109.9	3.7	39.3	117.0	4.1	47.9	124.3	4.4	55.0	400.0	4.0			
77.2	400 7	3.3	20.4	440.0	4.0	40.0	440.0	4.0	55.0	126.9	4.3			
80.0 25.7			33.4	110.0	-	43.0	119.3	4.3	52.6	124.9	4.3			
85.0 15.8	87.2	2.9	26.4 16.9	101.2 88.3	3.8	37.7 31.5	113.3 106.0	4.2 4.1	48.1	120.7 116.2	4.1 3.5			
90.0 91.0			16.9 16.0	88.3 86.9	3.6	31.5	106.0	4.1	43.8	116.2	3.5			
91.0			10.0	00.9	3.0	24.0	96.3	4.0	38.5	110.4	2.8			
99.0						15.8	84.9	4.0	30.0	110.4	2.0			
100.0						13.0	04.5	4.0	32.6	103.4	2.3			
102.0									29.9	100.0	2.0			



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 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]
				62.0 ı		eza de p	al, Punto dumín (19 n] Posici	916-1) 8	6.5 m Pl	eza de p umín	lumín				
23.4	78.0	149.5	5.9												
24.0	77.6	149.4	5.9												
26.0	76.2	148.9	5.8												
28.0	74.8	148.4	5.6												
30.0	73.4	147.8	5.5												
32.0	72.0	147.2	5.3												
34.0	70.6	146.5	5.2												
36.0	69.2	145.7	5.1												
36.1				73.0	147.1	5.3									
38.0	67.8	144.9	5.0	71.6	146.5	5.3									
40.0	66.3	144.0	4.9	70.2	145.8	5.2									
42.0	64.9	143.1	4.7	68.8	145.0	5.1									
44.0	63.4 61.9	142.1	4.6	67.4	144.2	5.0 4.8									
46.0	60.3	141.1	4.6 4.5	65.9 64.4	143.3 142.3	4.8									
48.0 50.0	58.8	139.9 138.7	4.5	63.0	142.3	4.7									
55.0	54.8	135.4	4.4	59.1	138.5	4.6									
55.8	34.0	133.4	4.2	39.1	136.3	4.4	65.0	140.9	4.6						
60.0	50.6	131.5	4.0	55.1	135.2	4.2	61.9	138.8	4.5				i		
65.0	46.1	127.0	3.8	51.0	131.4	4.1	58.0	135.8	4.3						
70.0	41.2	121.6	3.6	46.5	126.9	3.9	54.0	132.4	4.1						
75.0	35.8	115.2	3.4	41.7	121.6	3.7	49.7	128.4	4.0						
79.0						• • • • • • • • • • • • • • • • • • • •				55.0	129.4	3.9	i		
80.0	29.6	107.3	3.1	36.4	115.4	3.5	45.2	123.7	3.8	54.1	128.6	3.9	İ		
85.0	21.8	96.7	2.8	30.2	107.6	3.4	40.2	118.2	3.7	49.9	124.7	3.8			
88.0	15.5	87.6	2.6												
90.0				22.6	97.3	3.2	34.7	111.5	3.6	45.8	120.5	3.3			
94.0				15.7	87.4	2.7									
95.0							28.2	103.2	3.5	41.0	115.2	2.7			
100.0							20.0	91.8	3.4	35.6	108.8	2.1			
101.0										34.4	107.3	2.0			
102.0							15.5	85.3	3.4						



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 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]
				62.0			al, Punto Ilumín (1			eza de p umín	lumín				
							n] Posici			·····					
24.0	78.0	152.5	5.2												
26.0	76.7	152.0	5.2												
28.0	75.3	151.5	5.0												
30.0	74.0	150.9	4.9												
32.0	72.7	150.3	4.7												
34.0	71.3	149.6	4.6												
36.0	69.9	148.9	4.5												
36.9				73.0	150.0	4.6									
38.0	68.6	148.1	4.4	72.3	149.6	4.6									
40.0	67.2	147.3	4.3	70.9	148.9	4.6									
42.0	65.8	146.4	4.1	69.6	148.2	4.4									
44.0	64.3	145.5	4.0	68.2	147.4	4.3									
46.0	62.9	144.5	4.0	66.8	146.6	4.2									
48.0	61.4	143.4	3.9	65.4	145.7	4.1									
50.0	59.9	142.2	3.8	63.9	144.7	4.0									
55.0	56.1	139.1	3.6	60.3	142.0	3.8	05.0	440.0							
57.1 60.0	52.2	135.4	3.4	56.5	138.9	3.6	65.0 62.9	143.6 142.2	3.9 3.9						
65.0	47.9	135.4	3.4	56.5 52.5	138.9	3.6	59.2	139.3	3.9						
70.0	43.4	126.1	3.2	48.3	131.0	3.4	55.4	136.1	3.7						
75.0	38.5	120.1	2.9	43.8	126.1	3.1	51.3	132.3	3.4						
80.0	32.9	113.2	2.5	38.9	120.1	3.0	47.1	127.9	3.3						
80.7	32.9	113.2	2.1	50.9	120.0	3.0	77.1	127.9	0.0	55.0	131.9	3.3			
85.0	26.3	104.2	2.5	33.4	113.4	2.9	42.5	122.8	3.1	51.5	128.6	3.2			
90.0	17.5	91.5	2.2	26.9	104.6	2.7	37.4	116.7	3.0	47.3	124.2	3.0			
95.0	1			18.5	92.4	2.6	31.7	109.3	2.9	43.2	119.7	2.4			
97.0				15.4	87.8	2.2									
98.0										40.3	116.3	2.1			
100.0							24.8	99.8	2.8						
105.0							15.2	85.7	2.7						



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

ce	Ángu- o de plumín	Altura			orincipal	pluma I		gulo de orincipal			gulo de orincipa			principa	pluma I
	[°]	de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				62.0 r	m Pluma Cab	eza de p	l, Punto lumín (19 i] Posicio	916-1) 92	2.5 m Plı	eza de p umín	lumín				
24.6	78.0	155.4	4.7												
26.0	77.1	155.1	4.7												
28.0	75.8	154.6	4.5												
30.0	74.5	154.0	4.4												
32.0	73.2	153.5	4.2												
34.0	71.9	152.8	4.1												
36.0	70.6	152.1	4.0												
37.8				73.0	152.8	4.1									
38.0	69.3	151.4	3.9	72.9	152.8	4.1									
40.0	68.0	150.6	3.8	71.6	152.1	4.1									
42.0	66.6	149.7	3.6	70.3	151.4	4.0									
44.0	65.2	148.8	3.5	68.9	150.6	3.8									
46.0	63.8	147.8	3.5	67.6	149.8	3.8									
48.0	62.4	146.8	3.4	66.2	149.0	3.6									
50.0	61.0	145.7	3.3	64.8	148.0	3.5									
55.0	57.4	142.7	3.1	61.3	145.4	3.3									
58.3							65.0	146.3	3.4						
60.0	53.6	139.2	2.9	57.7	142.4	3.1	63.9	145.5	3.4						
65.0	49.6	135.1	2.8	53.9	139.0	2.9	60.3	142.8	3.2						
70.0	45.4	130.5	2.6	50.0	135.0	2.8	56.7	139.7	3.1						
75.0	40.8	125.0	2.5	45.7	130.4	2.7	52.8	136.1	2.9						
80.0	35.7	118.6	2.3	41.2	125.0	2.5	48.8	132.0	2.8						
82.4				00.0	440.7	0.4	44.5	407.0	0.7	55.0	134.3	2.7			
85.0				36.2	118.7	2.4	44.5	127.2	2.7	53.0	132.4	2.7			
90.0				30.5	110.9	2.3	39.8	121.5	2.6	49.0	128.3	2.6			
95.0							34.6	114.8	2.5	45.1	124.0	2.3			
97.0 100.0							28.6	106.6	2.4	43.3	121.9	2.0			



N° de ident.: 9842523/95738/

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

Valor de vuelco:

Lastre trasero [t]:

Lastre central [t]:

2 - Vía ancha 114.0

52.6

		gulo de orincipal			gulo de 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]
				62.0 ı		eza de p	il, Punto Ilumín (19 n] Posici	916-1) 9	5.5 m Pli	eza de p umín	lumín				
25.2	78.0	158.3	4.3												
26.0	77.5	158.2	4.3												
28.0	76.3	157.7	4.2												
30.0	75.0	157.2	4.1												
32.0	73.8	156.6	4.0												
34.0	72.5	156.0	3.8												
36.0	71.3	155.3	3.7												
38.0	70.0	154.6	3.6												
38.7				73.0	155.7	3.8									
40.0	68.7	153.8	3.5	72.2	155.3	3.8									
42.0	67.4	153.0	3.4	70.9	154.6	3.7									
44.0	66.1	152.1	3.3	69.6	153.9	3.6									
46.0	64.7	151.2	3.2	68.3	153.1	3.5									
48.0	63.4	150.2	3.1	67.0	152.2	3.4									
50.0	62.0	149.1	3.1	65.7	151.3	3.3									
55.0	58.5	146.2	2.8	62.3	148.9	3.1									
59.6							65.0	149.1	3.1						
60.0	54.9	142.9	2.6	58.9	146.0	2.9	64.7	148.9	3.1						
65.0	51.1	139.1	2.4	55.3	142.7	2.7	61.3	146.3	3.0						
70.0				51.5 47.5	138.9	2.5	57.8	143.3	2.8						
75.0				47.5	134.6	2.3	54.2	139.9	2.6						
80.0 84.1							50.4	135.9	2.5	55.0	136.8	2.4			
84.1 85.0										55.0 54.3	136.8	2.4			
90.0										54.3 50.5	136.1	2.4			
90.0										50.5	132.2	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:

		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]
				65.0 ı	m Pluma Cab	eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 3	8.5 m Pl	eza de p umín	lumín		_		
13.4	78.0	105.6	38.6												
14.0	77.1	105.4	38.6												
16.0	74.1	104.9	35.2												
18.0	70.9	104.2	31.0												
20.0	67.7	103.5	27.7												
22.0	64.4	102.5	24.4												
22.4				73.0	104.2	31.4									
24.0	61.1	101.5	22.0	70.5	103.6	30.5									
26.0	57.6	100.2	20.1	67.2	102.8	28.5									
28.0	53.9	98.8	18.6	64.0	101.9	26.7									
30.0	50.1	97.2	17.4	60.6	100.8	25.3									
32.0	46.1	95.4	16.3	57.1	99.5	23.2									
34.0	41.7 36.9	93.2 90.7	15.2	53.4 49.5	98.1 96.4	21.5 20.1									
36.0 36.3	36.9	90.7	14.4	49.5	96.4	20.1	65.0	100.3	20.9						
38.0	31.5	87.7	13.7	45.5	94.6	18.7	62.2	99.4	20.9						
40.0	25.1	83.9	13.7	41.0	94.0	17.5	58.8	98.3	19.5						
42.0	16.3	78.3	12.3	36.2	89.8	16.5	55.2	96.9	18.5						
44.0	10.5	70.5	12.5	30.7	86.7	15.6	51.4	95.4	17.6						
46.0				24.0	82.7	14.7	47.5	93.6	16.9						
48.0				16.5	77.9	9.2	43.2	91.6	16.1						
50.0							38.6	89.2	15.4						
52.7										55.0	92.8	11.8	i		
55.0							23.9	80.7	14.0	50.6	91.0	11.4			
57.0							16.4	76.0	12.5						
60.0										40.3	86.1	10.2			
65.0										27.5	78.9	9.1			
67.0										19.9	74.2	8.6			



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 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]
				65.0 ı			ıl, Punto Iumín (2			eza de p	lumín				
					Oub] Posici			arriiri					
14.1	78.0	108.5	35.5												
16.0	75.2	108.0	33.7												
18.0	72.3	107.4	30.1												
20.0	69.4	106.7	26.9												
22.0	66.4	105.9	23.8												
23.3				73.0	107.0	29.0									
24.0	63.3	104.9	21.3	71.9	106.8	28.9									
26.0	60.2	103.8	19.5	69.0	106.1	27.4									
28.0	56.9	102.5	18.0	66.0	105.2	25.8									
30.0	53.5	101.1	16.8	62.9	104.2	24.3									
32.0	50.0	99.5	15.8	59.7	103.1	22.8									
34.0	46.2	97.6	14.8	56.4	101.8	21.0									
36.0	42.2	95.5	13.9	53.0	100.3	19.6									
37.6							65.0	103.0	19.6						
38.0	37.8	93.1	13.1	49.4	98.7	18.4	64.4	102.8	19.6						
40.0	33.0	90.2	12.5	45.7	96.8	17.2	61.3	101.8	18.9						
42.0	27.4	86.6	11.9	41.6	94.7	16.1	58.1	100.6	18.0						
44.0	20.3 15.7	81.9 78.7	11.3	37.2	92.1	15.2	54.7	99.2	17.1						
45.0	15.7	/8./	11.0	20.0	00.0	44.4	51.2	07.0	16.3						
46.0				32.2 26.5	89.2 85.5	14.4	47.5	97.6 95.9	15.6						
48.0 50.0				26.5 19.1	85.5 80.6	13.6	47.5 43.6	95.9	15.6						
50.0				15.9	78.3	12.8 8.3	43.6	93.9	14.9						
51.0 54.4				15.9	10.3	0.3				55.0	95.3	11.0			
55.0							32.2	87.3	13.6	54.0	95.5	10.9			
60.0							15.7	76.4	11.4	45.7	90.9	9.7			
65.0							15.7	'0.4	11.7	34.8	84.8	8.6			
70.0										19.1	74.7	7.5			



N° de ident.: 9842523/95738/

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

Valor de vuelco: Lastre trasero [t]:

Lastre central [t]:

2 - Vía ancha 114.0 52.6

		gulo de 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]
				65.0 ı		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 4	4.5 m Pli	eza de p umín	lumín				
14.7	78.0	111.5	33.3												
16.0	76.3	111.1	32.9												
18.0	73.6	110.6	29.8												
20.0	70.9	109.9	26.2												
22.0	68.1	109.1	23.6												
24.0	65.3	108.2	21.1												
24.1				73.0	109.9	27.2									
26.0	62.4 59.4	107.2 106.1	19.2 17.7	70.5 67.7	109.3	26.6 25.2									
28.0	59.4	106.1	16.5	67.7 64.9	108.5 107.6	25.2									
30.0 32.0	53.2	104.8	15.4	62.0	107.6	23.7									
34.0	49.9	103.3	14.6	59.0	105.5	21.0									
36.0	49.9	99.9	13.7	59.0 55.9	105.4	19.4									
38.0	42.6	97.8	12.9	53.9 52.7	104.1	18.2									
38.8	72.0	37.0	12.5	52.7	102.0	10.2	65.0	105.7	18.2						
40.0	38.6	95.4	12.2	49.4	100.9	17.1	63.4	105.2	18.6						
42.0	34.2	92.6	11.6	45.8	99.0	16.0	60.4	104.1	17.6						
44.0	29.2	89.3	11.1	42.1	96.9	15.0	57.4	102.8	16.9						
46.0	23.2	85.1	10.5	38.0	94.5	14.2	54.3	101.4	16.0						
48.0	15.1	79.1	10.0	33.5	91.6	13.4	51.0	99.9	15.4						
50.0				28.4	88.2	12.8	47.6	98.1	14.7						
54.0				15.3	78.7	7.5									
55.0							38.0	92.6	13.3						
56.1										55.0	97.7	10.3			
60.0							25.4	84.2	12.2	49.4	95.0	9.5			
63.0							15.1	76.7	10.4						
65.0										40.1	89.8	8.4			
70.0										28.4	82.3	7.3			
73.0	1									18.4	75.1	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 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]
				65.0		eza de p	ıl, Punto lumín (2: ı l Posici	316-1) 4	7.5 m Pl	eza de p umín	lumín		_		
15.3	78.0	114.4	31.0	<u> </u>		20.0 [11	1 1 00101		(2010)				I		
16.0	77.1	114.4	31.0												
18.0	74.6	113.7	28.6												
20.0	72.1	113.1	25.5										i		
22.0	69.6	112.4	22.9												
24.0	66.9	111.5	20.6												
25.0				73.0	112.8	25.6							İ		
26.0	64.3	110.6	18.7	71.7	112.4	25.4							İ		
28.0	61.6	109.5	17.3	69.2	111.7	24.2									
30.0	58.8	108.4	16.1	66.6	110.9	23.1									
32.0	55.9	107.0	15.0	63.9	109.9	21.7									
34.0	52.9	105.6	14.1	61.2	108.9	20.7									
36.0	49.8	103.9	13.3	58.3	107.7	19.2									
38.0	46.5	102.1	12.5	55.4	106.3	17.8									
40.0	43.0	100.0	11.8	52.4	104.8	16.7									
40.1							65.0	108.5	17.6						
42.0	39.3	97.7	11.2	49.3	103.2	15.8	62.5	107.5	17.2						
44.0	35.3	95.0	10.6	46.0	101.3	14.8	59.7	106.4	16.4						
46.0	30.7	91.8	10.1	42.5	99.2	13.9	56.9	105.1	15.7						
48.0	25.5	88.0	9.7	38.7	96.8	13.1	53.9	103.7	14.9						
50.0	18.9	82.9	9.2	34.6	94.0	12.4	50.8	102.1	14.3						
51.0	16.1	80.7	6.2												
55.0				21.5	84.4	10.9	42.4	97.3	12.9						
56.0				17.8	81.5	10.6				55.0	400.0				
57.9							22.2	90.6	11.8	55.0 52.4	100.2	9.4 9.0			
60.0 65.0							32.3 17.7	90.6 79.5	11.8	52.4 44.3	98.9 94.3	9.0 8.0			
70.0							17.7	79.5	10.6	34.6	94.3 88.1	6.9			
75.0				1						21.5	78.5	5.9			
76.0										17.8	75.6	5.7			



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]: 114.0 Lastre central [t]: 52.6

		gulo de orincipal		ŗ	gulo de orincipal	pluma I	75° Án I	gulo de orincipa	pluma I		gulo de principa		45° Án	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]
				65.0 r	n Pluma Cab	eza de p	ıl, Punto lumín (2: n] Posici	316-1) 5	0.5 m Pl	eza de p umín	lumín		-		
15.9	78.0	117.3	29.1				<u> </u>								
16.0	77.9	117.3	29.1												
18.0	75.6	116.8	28.0												
20.0	73.2	116.2	25.2												
22.0	70.8	115.6	22.2												
24.0	68.4	114.8	20.2												
25.9				73.0	115.6	24.3									
26.0	65.9	113.9	18.4	72.9	115.6	24.3									
28.0	63.4	112.9	17.0	70.5	114.9	23.6									
30.0	60.8	111.9	15.8	68.0	114.1	22.4									-
32.0	58.2	110.6	14.7	65.6	113.3	21.2									
34.0	55.4	109.3	13.8	63.0	112.3	20.1									
36.0	52.6	107.8	13.0	60.4	111.2	19.2									
38.0	49.7	106.2 104.3	12.3 11.6	57.8	109.9	17.8 16.5									
40.0 41.4	46.6	104.3	11.6	55.0	108.6	16.5	65.0	111.2	16.7						
41.4	43.3	102.3	10.9	52.2	107.1	15.5	64.3	110.9	16.7						
44.0	39.9	102.3	10.9	49.2	107.1	14.7	61.7	109.8	16.7						
46.0	36.1	97.4	9.8	46.1	103.4	13.8	59.1	109.8	15.4						
48.0	32.0	94.3	9.4	42.8	101.4	13.0	56.4	107.4	14.7						
50.0	27.3	90.8	9.0	39.3	99.1	12.2	53.6	105.9	14.0						
54.0	15.6	81.1	5.3												
55.0				29.1	91.6	10.8	46.1	101.6	12.6						
59.0				17.2	81.9	9.7									
59.6										55.0	102.6	8.7			
60.0							37.4	95.9	11.4	55.0	102.6	8.6			
65.0							26.5	87.7	10.5	47.7	98.6	7.6			
68.0							17.1	80.0	10.0						
70.0										39.4	93.2	6.7			
75.0										29.1	85.7	5.6			<u> </u>
79.0										17.3	76.0	4.9			



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

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

Valor de vuelco: Lastre trasero [t]:

Lastre central [t]:

2 - Vía ancha 114.0 52.6

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				65.0		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 5	3.5 m Pli	eza de p umín	lumín				
16.6	78.0	120.3	26.8												
18.0	76.4	119.9	26.6												
20.0	74.2	119.4	24.1												
22.0	71.9	118.7	21.5												
24.0	69.7	118.0	19.3	-											
26.0	67.4	117.2	17.7	70.0	440.5	00.0									
26.8 28.0	65.0	116.3	16.3	73.0 71.6	118.5 118.1	22.6 22.3									
30.0	62.6	115.3	15.2	69.3	117.4	21.4									
32.0	60.1	114.2	14.2	67.0	116.5	20.5									
34.0	57.6	112.9	13.3	64.7	115.6	19.3									
36.0	55.0	111.6	12.4	62.2	114.6	18.4									
38.0	52.4	110.1	11.7	59.8	113.5	17.4									
40.0	49.6	108.4	11.1	57.3	112.2	16.2									
42.0	46.7	106.6	10.5	54.7	110.8	15.1									
42.6							65.0	113.9	15.1						
44.0	43.6	104.6	9.9	52.0	109.3	14.2	63.4	113.2	15.6						
46.0	40.4	102.3	9.4	49.2	107.6	13.4	61.0	112.2	14.9						
48.0	36.9	99.7	8.9	46.2	105.8	12.6	58.5	111.0	14.2						
50.0	33.1	96.8	8.5	43.2	103.7	11.9	55.9	109.6	13.6						
55.0	21.1	86.8	7.6	34.5	97.4	10.4	49.1	105.7	12.2						
57.0	15.2	81.5	5.0	00.0	88.1	9.1	44.5	100.7	11.0						
60.0 61.3				23.2	88.1	9.1	41.5	100.7	11.0	55.0	105.1	7.8			
62.0				16.7	82.4	8.6				55.0	100.1	1.0			
65.0				10.7	02.4	0.0	32.5	93.9	10.1	50.6	102.6	7.2			
70.0							20.1	83.5	9.2	43.2	97.8	6.2			
71.0				i			16.6	80.4	9.1		00	- U.Z			
75.0				ĺ						34.5	91.4	5.2			
80.0										23.2	82.1	4.3			
82.0										16.7	76.5	4.0			



2821-1

2821-1

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

		gulo de orincipal			gulo de orincipa			gulo de 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]
				65.0 ı		eza de p	lumín (2	316-1) 5	6.5 m Pli	eza de p umín	lumín				
						22.0 [m	1 J Posici	ón midfa	II (2316)						
17.2	78.0	123.2	25.2												
18.0	77.1	123.0	25.2												
20.0	75.0	122.5	23.5												
22.0	72.9	121.9	21.3												
24.0	70.8 68.6	121.2 120.5	18.9												
26.0	68.6	120.5	17.3	70.0	404.4	04.4									
27.6 28.0	66.4	119.6	16.0	73.0 72.6	121.4 121.3	21.4 21.3									
30.0	64.2	119.6	16.0	72.6	121.3	20.7									
32.0	61.9	117.6	14.9	68.3	119.8	19.8									
34.0	59.5	116.5	13.1	66.1	118.9	18.9									
36.0	57.2	115.2	12.2	63.8	118.0	17.9									
38.0	54.7	113.8	11.5	61.5	116.9	17.2							i		
40.0	52.1	112.3	10.8	59.2	115.8	16.1							i		
42.0	49.5	110.6	10.3	56.8	114.5	15.0							İ		
43.9							65.0	116.6	14.3						
44.0	46.8	108.8	9.7	54.3	113.1	14.0	65.0	116.6	14.8						
46.0	43.9	106.8	9.2	51.8	111.5	13.2	62.7	115.6	14.6						
48.0	40.8	104.6	8.7	49.1	109.9	12.5	60.4	114.5	13.9						
50.0	37.6	102.1	8.3	46.3	108.0	11.8	58.0	113.2	13.4						
55.0	28.1	94.1	7.4	38.8	102.5	10.2	51.7	109.7	11.9						
59.0	17.3	84.3	6.7												
60.0				29.6	94.9	9.0	44.9	105.1	10.8						
63.0										55.0	107.5	7.3			
65.0				16.2	82.8	7.9	37.0	99.2	9.8	53.1	106.4	7.0			
70.0							27.4	91.1	9.1	46.4	102.1	6.1			
74.0							16.1	80.8	8.4	20.0	00.5	5.0			
75.0 80.0										38.8 29.6	96.5 89.0	5.2 4.3			
80.0 85.0										29.6 16.3	76.9	3.5			
85.0										16.3	76.9	3.5			



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Nº de ident.: 9842523/95738/

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

Pieza de articulación de pluma principal:

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]
				65.0 ı	n Pluma	principa	II, Punto Iumín (2	de carga	1 - Cab	eza de p	lumín	-			
					Oab] Posici			allilli					
17.8	78.0	126.1	23.5												
18.0	77.8	126.1	23.5												
20.0	75.8	125.6	22.8												
22.0	73.8	125.0	20.6												
24.0	71.8	124.4	18.5												
26.0	69.8	123.7	16.8												
28.0	67.7	122.9	15.6	70.0	404.0	00.4									
28.5	05.0	400.0	44.4	73.0	124.2 123.8	20.1 19.8									
30.0	65.6 63.4	122.0 121.0	14.4	71.5 69.5	123.8										
32.0 34.0	61.2	119.9	13.5 12.8	67.4	123.0	19.0 18.3									
36.0	59.0	118.8	11.9	65.3	122.2	17.4									
38.0	56.7	117.5	11.9	63.1	121.3	16.5									
40.0	54.4	116.1	10.5	60.9	119.2	15.9							i		
42.0	51.9	114.6	9.9	58.7	118.1	14.8									
44.0	49.4	112.9	9.4	56.4	116.8	13.8									
45.2							65.0	119.3	14.0						
46.0	46.8	111.1	8.9	54.0	115.3	12.9	64.2	119.0	13.9				İ		
48.0	44.1	109.1	8.4	51.6	113.8	12.2	62.0	117.9	13.6						
50.0	41.2	106.8	7.9	49.1	112.1	11.5	59.8	116.8	12.9						
55.0	33.2	100.1	7.0	42.3	107.1	9.9	54.0	113.4	11.6						
60.0	22.7	90.5	6.2	34.4	100.7	8.7	47.7	109.3	10.5						
62.0	16.8	84.7	5.9										<u> </u>		
64.7										55.0	110.0	6.5			
65.0				24.4	91.6	7.7	40.8	104.1	9.5	54.7	109.8	6.5			
68.0				15.8	83.2	7.0									
70.0							32.6	97.2	8.7	49.1	106.2	5.7			
75.0							21.9	87.3	8.0	42.3	101.2	4.7			
77.0							15.7	81.2	7.7		0.4.0				
80.0										34.4	94.8	3.9			
85.0										24.5	85.7	3.1 2.7			
88.0	l .							l	l .	15.8	77.3	2.1	ı		



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:

114.0

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

		gulo de principa			gulo de orincipa			gulo de principa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				65.0 ו	m Pluma Cab	eza de p	al, Punto dumín (1 n] Posici	916-1) 3	2.5 m Plı	eza de p umín	lumín				
12.2	78.0	99.7	34.1												
13.0	76.5	99.5	33.9												
14.0	74.7	99.2	32.9												
16.0 18.0	71.0 67.2	98.6 97.8	31.2 29.3												
20.0	63.3	96.8	27.1												
20.6	00.0	30.0	27.1	73.0	98.4	29.6									
22.0	59.2	95.7	25.0	70.4	98.0	29.2									
24.0	55.0	94.3	22.7	66.6	97.1	28.2									İ
26.0	50.5	92.8	20.9	62.7	96.1	27.0									
28.0	45.7	90.9	19.5	58.6	95.0	25.7									
30.0	40.4	88.7	18.2	54.3	93.6	24.5									
32.0	34.5	86.0	17.1	49.8	92.0	23.4									
33.8							65.0	94.9	23.7						
34.0	27.4 17.8	82.5 77.5	16.2	44.9 39.6	90.1 87.8	21.8	64.6	94.8 93.7	23.7						
36.0 38.0	17.8	17.5	15.3	39.6	87.8 85.0	20.3 19.2	60.6 56.4	93.7	22.9 21.8						
40.0				26.2	81.4	18.1	52.0	90.9	20.7						
42.0				16.0	75.9	16.9	47.3	89.2	19.8						
44.0					7 0.0	10.0	42.3	87.1	18.9						
46.0							36.6	84.6	18.2						
48.0							30.0	81.4	17.6						
49.3										55.0	87.9	14.3			
50.0							21.6	77.1	16.9	53.6	87.4	15.0			
51.0							15.8	73.9	16.6						
55.0										41.5	82.7	13.6			
60.0										24.9	74.7	12.3			
62.0										16.0	70.0	11.2	25.0	66.4	2.6
75.5 80.0													35.0 19.2	66.4 58.4	3.6 3.0
60.0													19.2	30.4	3.0



2821-1

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

Lastre central [t]: 52.6

Radio de descarga:	360 °	Cabeza de pluma principal:	2821-1
Valor de vuelco:	2 - Vía ancha		
Lastre trasero [t]:	114.0		

		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]
				65.0 ı		eza de p	il, Punto Iumín (19 n] Posici	916-1) 3	5.5 m Pli	eza de p umín	lumín				
12.8 13.0 14.0 16.0 18.0	78.0 77.7 76.0 72.7 69.2	102.6 102.6 102.4 101.8 101.0	30.7 30.7 30.3 28.6 27.2												
20.0 21.5 22.0 24.0 26.0	65.7 62.1 58.3 54.4	99.1 98.0 96.6	25.3 23.8 22.0 20.4	73.0 72.2 68.7 65.2	101.3 101.1 100.4 99.5	26.7 26.7 25.7 24.7									
28.0 30.0 32.0 34.0 35.0	50.3 45.9 41.1 35.8	95.0 93.1 91.0 88.4	19.1 17.8 16.7 15.8	61.5 57.8 53.8 49.7	98.5 97.2 95.8 94.2	23.8 22.7 21.8 20.9	65.0	97.6	22.0						
36.0 38.0 39.0 40.0	29.7 22.1 17.0	85.2 80.9 77.9	15.0 14.3 13.9	45.2 40.4 35.0	92.3 90.1 87.4	19.7 18.6	63.3 59.6 55.8	97.1 96.0 94.7	22.3 21.2 20.3						
42.0 44.0 45.0 46.0 48.0				28.7 20.7 15.2	84.1 79.6 76.3	16.8 15.9 15.4	51.7 47.4 42.8 37.7	93.2 91.4 89.3 86.9	19.3 18.6 17.7 17.0						
50.0 51.0 54.0 55.0 60.0							31.9 15.0	74.3	15.3	55.0 46.8 34.1	90.3 87.1 81.0	13.5 13.2 12.1			
65.0 78.0 80.0 83.0										15.3	70.4	10.4	35.0 30.5 18.3	68.1 65.8 58.9	2.9 2.7 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:

		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]
				65.0 ı	m Pluma Cab	eza de p	lumín (1	916-1) 3	8.5 m Pli	eza de p umín	lumín				
						19.0 [m	ı] Posici	ón midfa	II (1916)						
13.4	78.0	105.6	28.0												
14.0	77.1	105.4	28.0												
16.0	74.1	104.9	26.7												
18.0	70.9	104.2	25.1												
20.0	67.7	103.5	23.7												
22.0	64.4	102.5	22.3												
22.4				73.0	104.2	24.3									
24.0	61.1	101.5	21.2	70.5	103.6	23.9									
26.0	57.6	100.2	19.8	67.2	102.8	22.9									
28.0	53.9	98.8	18.5	64.0	101.9	22.0									
30.0	50.1 46.1	97.2	17.6	60.6	100.8 99.5	21.3									
32.0 34.0	41.7	95.4 93.2	16.5 15.5	57.1 53.4	99.5 98.1	20.3 19.6									
36.0	36.9	90.7	14.7	49.5	96.1	18.9									
36.3	30.9	30.7	14.7	45.5	30.4	10.9	65.0	100.3	21.2						
38.0	31.5	87.7	14.0	45.5	94.6	18.0	62.2	99.4	20.9						
40.0	25.1	83.9	13.3	41.0	92.4	17.2	58.8	98.3	19.9						
42.0	16.3	78.3	12.7	36.2	89.8	16.5	55.2	96.9	19.0				i		
44.0				30.7	86.7	15.7	51.4	95.4	18.2				i		
46.0				24.0	82.7	14.9	47.5	93.6	17.5						
48.0				16.5	77.9	10.5	43.2	91.6	16.8						
50.0							38.6	89.2	16.1						
52.7										55.0	92.8	12.8			
55.0							23.9	80.7	14.8	50.9	91.1	13.1			
57.0							16.4	76.0	13.0						
60.0										40.3	86.1	11.9			
65.0										26.4	78.2	10.7			
67.0										16.8	72.2	10.2			
80.4													35.0	69.9	2.5
85.0													22.1	62.2	2.0



 N° de ident.: 9842523/95738/ Pieza de articulación d

Radio de descarga: $360\,^\circ$ Valor de vuelco: 2 - Vía ancha

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

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

		gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				65.0 ו		eza de p	ıl, Punto lumín (19 n] Posici	916-1) 4	1.5 m Pli	eza de p umín	lumín				
14.1	78.0	108.5	24.9												
16.0	75.2	108.0	24.1												
18.0	72.3	107.4	22.7												
20.0	69.4	106.7	21.5												
22.0	66.4	105.9	20.2												
23.3				73.0	107.0	21.4									
24.0	63.3	104.9	19.1	71.9	106.8	21.3									
26.0	60.2	103.8	18.2	69.0	106.1	20.6									
28.0	56.9	102.5	17.2	66.0	105.2	19.8									
30.0	53.5	101.1	16.4	62.9	104.2	19.1									
32.0	50.0	99.5	15.7	59.7	103.1	18.4									
34.0	46.2	97.6	14.8	56.4	101.8	17.6									
36.0	42.2	95.5	14.0	53.0	100.3	16.9									
37.6							65.0	103.0	19.1						
38.0	37.8	93.1	13.3	49.4	98.7	16.3	64.4	102.8	19.1						
40.0	33.0	90.2	12.7	45.7	96.8	15.6	61.3	101.8	18.6						
42.0	27.4	86.6	12.2	41.6	94.7	14.9	58.1	100.6	17.9						
44.0	20.3	81.9	11.6	37.2	92.1	14.3	54.7	99.2	17.1						
45.0	15.7	78.7	11.3												
46.0				32.2	89.2	13.7	51.2	97.6	16.5						
48.0				26.5	85.5	13.1	47.5	95.9	15.9						
50.0				19.1	80.6	12.5	43.6	93.9	15.2						
51.0				15.9	78.3	9.3					05.0	10.1			
54.4									40.0	55.0	95.3	12.1			
55.0							32.2	87.3	13.9	54.2	94.9	12.5			
60.0							15.7	76.4	11.1	45.0	90.5	11.5			
65.0										34.0	84.3	10.4			
70.0										16.1	72.6	9.3			



Nº de ident.: 9842523/95738/

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

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

	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]
	65.0 m Pluma principal, Punto de carga 1 - Cabeza de plumín Cabeza de plumín (1916-1) 44.5 m Plumín 25.0 [m] Posición midfall (1916)														
14.7	78.0	111.5	22.7												
16.0	76.3	111.1	22.4												
18.0	73.6	110.6	21.3												
20.0	70.9	109.9	20.0												
22.0	68.1	109.1	19.0												
24.0	65.3	108.2	17.9												
24.1				73.0	109.9	19.5									
26.0	62.4	107.2	17.1	70.5	109.3	19.2									
28.0	59.4	106.1	16.3	67.7	108.5	18.6									
30.0	56.4	104.8	15.6	64.9	107.6	17.8									
32.0	53.2	103.3	15.0	62.0	106.5	17.2									
34.0	49.9	101.7	14.4	59.0	105.4	16.5									
36.0	46.4	99.9	13.7	55.9	104.1	15.8									
38.0	42.6	97.8	13.0	52.7	102.6	15.2									
38.8							65.0	105.7	16.8						
40.0	38.6	95.4	12.4	49.4	100.9	14.6	63.4	105.2	17.5						
42.0	34.2	92.6	11.9	45.8	99.0	14.0	60.4	104.1	16.9						
44.0	29.2	89.3	11.4	42.1	96.9	13.4	57.4	102.8	16.4						
46.0	23.2	85.1	10.9	38.0	94.5	12.9	54.3	101.4	15.8						
48.0	15.1	79.1	10.4	33.5 28.4	91.6 88.2	12.4 11.8	51.0 47.6	99.9 98.1	15.3 14.7						
50.0					88.2 78.7	8.3	47.6	98.1	14.7						
54.0 55.0				15.3	78.7	8.3	38.0	00.6	10.0						
55.0 56.1							36.0	92.6	13.3	55.0	97.7	11.5			
60.0							25.4	84.2	12.0	48.8	94.7	11.3			
63.0							15.1	76.7	9.6	40.0	34.1	11.0			
65.0							13.1	10.1	9.0	39.4	89.4	10.2			
70.0										26.7	81.1	9.2			
73.0										15.6	73.0	8.5			



N° de ident.: 9842523/95738/

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

Valor de vuelco: Lastre trasero [t]:

Lastre central [t]:

2 - Vía ancha 114.0 52.6

	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]	
	65.0 m Pluma principal, Punto de carga 1 - Cabeza de plumín Cabeza de plumín (1916-1) 47.5 m Plumín															
	28.0 [m] Posición midfall (1916)															
15.3	78.0	114.4	20.6													
16.0	77.1	114.2	20.6													
18.0	74.6	113.7	19.8													
20.0	72.1	113.1	18.8													
22.0	69.6	112.4	18.0													
24.0	66.9	111.5	17.3													
25.0				73.0	112.8	17.9										
26.0	64.3	110.6	16.6	71.7	112.4	17.9										
28.0	61.6	109.5	16.1	69.2	111.7	17.5										
30.0 32.0	58.8 55.9	108.4 107.0	15.3 14.6	66.6 63.9	110.9 109.9	17.1 16.6										
34.0	52.9	107.0	14.0	61.2	109.9	16.3										
36.0	49.8	103.0	13.5	58.3	108.9	15.7										
38.0	46.5	103.9	12.8	55.4	107.7	15.7							i			
40.0	43.0	100.0	12.1	52.4	104.8	14.8										
40.1	10.0	100.0	12.1	02.1	101.0	1 1.0	65.0	108.5	16.5							
42.0	39.3	97.7	11.5	49.3	103.2	14.4	62.5	107.5	16.4							
44.0	35.3	95.0	11.0	46.0	101.3	13.7	59.7	106.4	16.0				i			
46.0	30.7	91.8	10.6	42.5	99.2	13.2	56.9	105.1	15.7							
48.0	25.5	88.0	10.2	38.7	96.8	12.7	53.9	103.7	15.1							
50.0	18.9	82.9	9.7	34.6	94.0	12.2	50.8	102.1	14.7							
51.0	16.1	80.7	6.8													
55.0				21.5	84.4	10.8	42.4	97.3	13.3							
56.0				17.8	81.5	10.6										
57.9										55.0	100.2	10.9				
60.0							32.3	90.6	12.2	51.9	98.6	10.9				
65.0							17.7	79.5	11.2	43.7	94.0	9.9				
70.0										33.4	87.3	8.9				
75.0										21.5	78.5	7.8				
76.0										17.8	75.6	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:

	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]
	65.0 m Pluma principal, Punto de carga 1 - Cabeza de plumín Cabeza de plumín (1916-1) 50.5 m Plumín 19.0 [m] Posición midfall (1916)														
15.0	15.9 78.0 117.3 19.0 1 1 15.9 78.0 117.3 19.0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1														
16.0	77.9	117.3	19.0												
18.0	75.6	116.8	18.5												
20.0	73.2	116.2	17.8												
22.0	70.8	115.6	17.0												
24.0	68.4	114.8	16.5												
25.9				73.0	115.6	16.7									
26.0	65.9	113.9	16.1	72.9	115.6	16.7									
28.0	63.4	112.9	15.7	70.5	114.9	16.6									
30.0	60.8	111.9	15.3	68.0	114.1	16.3									
32.0	58.2	110.6	14.5	65.6	113.3	16.0									
34.0	55.4	109.3	13.8	63.0	112.3	15.8									
36.0	52.6	107.8	13.2	60.4	111.2	15.5									
38.0	49.7	106.2	12.7	57.8	109.9	15.1									
40.0	46.6	104.3	12.0	55.0	108.6	14.8									
41.4							65.0	111.2	15.7						
42.0	43.3	102.3	11.4	52.2	107.1	14.6	64.3	110.9	15.6						
44.0 46.0	39.9 36.1	100.0 97.4	10.8 10.4	49.2 46.1	105.4 103.5	14.2 13.6	61.7 59.1	109.8 108.7	15.5 15.4						
48.0	32.0	94.3	9.9	40.1	103.5	13.0	59.1 56.4	106.7	15.4						
50.0	27.3	90.8	9.5	39.3	99.1	12.5	53.6	107.4	14.6						
54.0	15.6	81.1	5.4	33.3	33.1	12.5	33.0	100.0	14.0						
55.0	10.0	01.1	0.4	29.1	91.6	11.3	46.1	101.6	13.4						
59.0				17.2	81.9	10.2									
59.6										55.0	102.6	10.4			
60.0							37.4	95.9	12.2	54.6	102.4	10.6			
65.0							26.5	87.7	11.4	47.2	98.3	9.8			
68.0							17.1	80.0	10.9						
70.0										38.4	92.5	8.9			
75.0										29.1	85.7	7.8			
79.0										17.3	76.0	7.1			



N° de ident.: 9842523/95738/ Pieza de

Radio de descarga: 360 °

2 - Vía ancha

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

	88° Ángulo de pluma	83° Áng
Lastre o	central [t]:	52.6
Lastre t	114.0	

Valor de vuelco:

	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]
65.0 m Pluma principal, Punto de carga 1 - Cabeza de plumín Cabeza de plumín (1916-1) 53.5 m Plumín 22.0 [m] Posición midfall (1916)															
16.6 78.0 120.3 16.7															
18.0	76.5	119.9	16.5												
20.0	74.2	119.4	15.8												
22.0	72.0	118.7	15.1												
24.0	69.7	118.0	14.6												
26.0	67.3	117.2	14.2												
26.8				73.0	118.5	14.7									
28.0	64.9	116.3	13.9	71.6	118.1	14.7									
30.0	62.5	115.3	13.6	69.3	117.4	14.4									
32.0	60.0	114.1	13.2	67.0	116.5	14.2									
34.0	57.5	112.9	12.7	64.6	115.6	13.9									
36.0	54.9	111.5	12.2	62.2	114.6	13.7									
38.0	52.2	110.0	11.8	59.7	113.4	13.5									
40.0	49.4	108.3	11.4	57.1	112.1	13.2									
42.0	46.4	106.4	10.8	54.5	110.7	12.9									
42.6							65.0	113.9	13.6						
44.0	43.3	104.3	10.2	51.8	109.2	12.7	63.4	113.2	13.6						
46.0	40.0	102.0	9.7	48.9	107.5	12.4	60.9	112.1	13.5						
48.0	36.5	99.4	9.3	46.0	105.6	12.0	58.4	110.9	13.4						
50.0	32.6	96.4	8.9	42.9	103.5	11.6	55.8	109.6	13.2						
55.0	20.2	86.0	8.1	34.0	97.0	10.7	48.9	105.6	12.6						
57.0	15.2	81.5	5.1	00.4	07.4	0.0	44.0	400.5	44.0						
60.0				22.4	87.4	9.6	41.2	100.5	11.6	55.0	405.4	9.8			
61.3 62.0				15.5	81.3	9.1				55.0	105.1	9.8			
65.0				15.5	81.3	9.1	32.0	93.5	10.8	49.9	102.2	9.4			
70.0							32.0 19.2	93.5 82.7	10.6	49.9	97.2	8.5			
70.0							15.4	79.3	9.8	42.3	91.2	0.5			
71.0 75.0							15.4	18.5	9.0	34.5	91.4	7.5			
80.0										23.2	82.1	6.6			
82.0										16.7	76.5	6.3			



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

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

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

		gulo de principa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				65.0 ı		eza de p	ıl, Punto llumín (19 n] Posici	916-1) 5	6.5 m Pli	eza de p umín	lumín				
17.2	78.0	123.2	15.2												
18.0	77.2	123.0	15.2 14.6												
20.0 22.0	75.1 73.0	122.5 121.9	14.6												
24.0	70.8	121.9	13.6												
26.0	68.6	120.4	13.2												
27.7	00.0	.20		73.0	121.4	13.6									
28.0	66.4	119.6	12.9	72.6	121.3	13.6						İ	İ		
30.0	64.1	118.6	12.6	70.5	120.6	13.4									
32.0	61.8	117.6	12.4	68.3	119.8	13.2									
34.0	59.4	116.4	12.0	66.1	118.9	13.0									
36.0	57.0	115.1	11.6	63.8	118.0	12.7									
38.0	54.5	113.7	11.2	61.5	116.9	12.6									
40.0	52.0	112.2	10.9	59.1	115.7	12.3									
42.0	49.3	110.5	10.6	56.7	114.4	12.1	05.0	116.6	12.5						
43.9 44.0	46.5	108.7	10.1	54.2	113.0	11.9	65.0 64.9	116.6	12.5						
46.0	43.6	106.7	9.6	54.2 51.6	111.4	11.9	62.6	115.5	12.5						
48.0	40.5	104.3	9.1	48.9	109.7	11.5	60.3	114.4	12.4						
50.0	37.2	101.8	8.7	46.1	107.8	11.1	57.9	113.2	12.2						
55.0	27.5	93.6	7.9	38.4	102.2	10.4	51.5	109.5	11.9						
59.0	16.2	83.3	7.3												
60.0				29.1	94.5	9.5	44.6	104.9	11.3				<u> </u>		
63.0										55.0	107.5	9.3			
65.0				15.1	81.7	8.4	36.7	98.9	10.6	52.5	106.0	9.2			
70.0							26.8	90.6	9.8	45.6	101.6	8.3			
74.0							17.3	81.9	6.7						
75.0										38.8	96.5	7.3			
80.0 85.0										29.6 16.3	89.0 76.9	6.5 5.6			
65.0										10.3	70.9	0.0			



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

		gulo de 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]
				65.0 ı	n Pluma Cab	eza de p	il, Punto lumín (1 i] Posici	916-1) 5	9.5 m Pl	eza de p umín	lumín				
17.9	78.0	126.1	13.8												
18.0	77.9	126.1	13.8												
20.0	75.9	125.6	13.5												
22.0	73.8	125.0	13.0												
24.0	71.8	124.4	12.5												
26.0	69.7	123.7	12.1												
28.0	67.7	122.9	11.8	70.0	1010	40.0									
28.5	05.5	400.0	11.5	73.0 71.5	124.2 123.8	12.3 12.3									
30.0 32.0	65.5 63.4	122.0 121.0	11.5	69.4	123.8	12.3									
34.0	61.2	119.9	11.2	67.3	123.0	11.8									
36.0	58.9	118.7	10.8	65.2	121.3	11.6									
38.0	56.6	117.4	10.5	63.0	121.3	11.4									
40.0	54.2	116.0	10.3	60.8	119.2	11.2									
42.0	51.8	114.4	10.1	58.6	118.0	11.0									
44.0	49.2	112.7	9.8	56.3	116.7	10.8									
45.2							65.0	119.3	11.3						
46.0	46.6	110.9	9.3	53.9	115.2	10.7	64.1	118.9	11.3						
48.0	43.8	108.9	8.9	51.4	113.7	10.5	61.9	117.9	11.2						
50.0	40.9	106.6	8.4	48.9	112.0	10.3	59.7	116.7	11.1						
55.0	32.7	99.7	7.6	42.0	106.9	9.8	53.8	113.4	10.8						
60.0	22.0	89.8	6.9	34.0	100.3	9.3	47.5	109.1	10.5						
62.0	15.8	83.7	6.6												
64.7										55.0	110.0	8.7			
65.0				23.8	91.0	8.3	40.5	103.8	10.0	54.7	109.8	8.7			
68.0				17.0	84.3	5.0	00.4		0.5	40.4	405.7				
70.0							32.1	96.8 86.5	9.5 8.8	48.4	105.7	7.9 7.1			
75.0 77.0							21.1 16.9	82.4	6.5	42.3	101.2	7.1			
80.0							10.8	02.4	0.5	34.4	94.8	6.2			
85.0										24.5	85.7	5.4			
88.0										15.8	77.3	4.9			



N° de ident.: 9842523/95738/

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

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

2821-1 2821-1

		gulo de principa			gulo de orincipa			gulo de orincipa			gulo de orincipa		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]
				65.0 i		eza de p	il, Punto lumín (1 n] Posici	916-1) 6:	2.5 m Pl	eza de p umín	lumín				
18.5	78.0	129.1	12.6												
20.0	76.6	128.7	12.6												
22.0	74.6	128.2	12.0												
24.0	72.7	127.6	11.6												
26.0	70.8	126.9	11.2												
28.0	68.8	126.1	10.9												
29.4				73.0	127.1	11.3									
30.0	66.8	125.3	10.7	72.4	126.9	11.3									
32.0	64.8 62.7	124.3 123.3	10.5	70.5 68.5	126.2	11.2 10.9									
34.0 36.0	60.6	123.3	10.3 10.1	66.5	125.5 124.6	10.9									
38.0	58.4	121.0	9.9	64.5	123.7	10.7									
40.0	56.2	119.7	9.9	62.4	123.7	10.3									
42.0	53.9	118.2	9.5	60.3	121.5	10.3									
44.0	51.6	116.7	9.3	58.1	120.3	10.0									
46.0	49.2	115.0	9.1	55.9	118.9	9.8									
46.4							65.0	122.1	10.3						
48.0	46.7	113.1	8.7	53.6	117.5	9.7	63.4	121.3	10.3						
50.0	44.1	111.1	8.3	51.3	115.9	9.5	61.3	120.2	10.2						
55.0	36.9	105.1	7.4	45.0	111.3	9.2	55.9	117.1	9.9						
60.0	28.1	97.0	6.7	38.0	105.5	8.8	50.0	113.2	9.6						
65.0	15.4	84.1	6.1	29.5	97.8	8.2	43.6	108.4	9.4						
66.5										55.0	112.5	8.2			
70.0				17.7	86.0	7.3	36.4	102.3	9.2	50.9	109.7	7.8			
71.0				16.5	84.8	4.7									
75.0							27.5	94.0	8.6	45.3	105.6	6.9			
80.0							16.5	82.8	6.4	38.3	99.9	6.1			
85.0 90.0										30.0	92.4 81.1	5.3			
90.0										18.7 15.4	77.7	4.5 4.4			
91.0										15.4	11.1	4.4			



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

842523/95738/	Pieza de articulación de piuma principai:	2821-1
360 °	Cabeza de pluma principal:	2821-1

		gulo de orincipa	i	ı	gulo de orincipa		ı	gulo de orincipa	ľ	ı	gulo de orincipa		1	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]
				65.0		eza de p	il, Punto lumín (1: i] Posici	916-1) 6	5.5 m Pli	eza de p umín	lumín				
19.1	78.0	132.0	11.5												
20.0	77.2	131.8	11.5												
22.0	75.4	131.3	11.1												
24.0	73.5	130.7	10.7												
26.0	71.7	130.0	10.3												
28.0	69.8	129.3	10.1												
30.0	67.9	128.5	9.9												
30.3				73.0	130.0	10.3									
32.0	66.0	127.7	9.6	71.4	129.4	10.3									
34.0	64.0	126.7	9.4	69.5	128.7	10.1									
36.0	62.1	125.6	9.3	67.6	127.9	9.9									
38.0	60.0 58.0	124.5	9.1	65.7 63.8	127.0 126.0	9.7									
40.0 42.0	55.9	123.3 121.9	8.9 8.7	63.8	125.0	9.5 9.3									
44.0	53.7	121.9	8.5	59.7	123.8	9.3									
46.0	51.5	118.9	8.4	57.7	123.6	9.0									
47.7	31.5	110.9	0.4	37.7	122.0	9.0	65.0	124.8	9.3						
48.0	49.1	117.2	8.2	55.5	121.2	8.8	64.7	124.6	9.3						
50.0	46.8	115.4	7.9	53.4	119.7	8.7	62.7	123.6	9.3				i		
55.0	40.3	110.0	7.1	47.6	115.5	8.3	57.6	120.7	9.0						
60.0	32.8	103.1	6.4	41.3	110.3	7.9	52.2	117.1	8.7						
65.0	23.3	93.4	5.8	34.0	103.6	7.6	46.4	112.7	8.5						
68.0	15.0	84.5	5.5	1											
68.2						İ				55.0	114.9	7.7	İ		
70.0				24.8	94.5	7.0	39.9	107.2	8.2	53.0	113.6	7.4			
74.0				16.1	85.2	4.4									
75.0							32.3	100.2	7.9	47.8	109.7	6.6			
80.0							22.5	90.2	7.5	41.5	104.6	5.8			
83.0							16.1	83.2	6.0						
85.0										34.3	98.1	5.0			
90.0										25.4	89.2	4.3			
94.0										15.1	78.1	3.7			



N° de ident.: 9842523/95738/ Pie

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

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

		gulo de principa		83° Án	gulo de orincipa	pluma I		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]
				65.0 ı		eza de p	al, Punto dumín (1 n] Posici	916-1) 6	8.5 m Pli	eza de p umín	lumín				
19.7 20.0 22.0 24.0 26.0 28.0	78.0 77.8 76.0 74.3 72.5 70.7	134.9 134.9 134.4 133.8 133.2	10.5 10.5 10.4 9.9 9.6 9.4												
30.0 31.2 32.0 34.0 36.0	68.9 67.1 65.3 63.4	131.8 130.9 130.0 129.0	9.2 9.0 8.8 8.6	73.0 72.3 70.5 68.7	132.9 132.6 131.9 131.1	9.5 9.5 9.4 9.2									
38.0 40.0 42.0 44.0 46.0	61.5 59.5 57.6 55.5 53.5	128.0 126.8 125.6 124.2 122.7	8.5 8.3 8.1 7.9 7.8	66.9 65.0 63.1 61.2 59.3	130.3 129.4 128.4 127.3 126.1	9.0 8.8 8.7 8.6 8.4									
48.0 49.0 50.0 55.0 60.0	51.3 49.1 43.2 36.6	121.2 119.5 114.5 108.4	7.6 7.5 6.8 6.2	57.3 55.2 49.9 44.1	124.8 123.5 119.5 114.8	8.2 8.0 7.7 7.3	65.0 64.0 59.2 54.2	127.5 127.0 124.2 120.9	8.6 8.6 8.3						
65.0 69.9 70.0 71.0	28.7 17.8 16.7	100.4 88.4 87.2	5.6 5.1 3.7	37.6 29.9	108.9 101.2	6.9	48.7 42.8	116.8 111.8	7.8 7.5	55.0 54.9	117.4 117.3	7.2 7.2			
75.0 77.0 80.0 85.0 86.0				19.7 15.8	90.0 85.6	6.1 4.1	36.1 28.1 16.8 15.7	97.4 85.0 83.6	7.2 7.0 6.7 5.7	50.1 44.3 37.9	113.7 109.0 103.2	5.6 4.8			
90.0 95.0 96.0										30.4 20.4 17.8	95.7 85.0 82.0	4.1 3.4 3.3			



N° de ident.: 9842523/95738/ P

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

Valor de vuelco:

Lastre trasero [t]:

Lastre central [t]:

2 - Vía ancha 114.0 52.6

	l	gulo de orincipa			gulo de orincipa			gulo de orincipa		1	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]
				65.0 ı	m Pluma Cab	eza de p	al, Punto dumín (19 n] Posici	916-1) 7	1.5 m Pl		lumín		_		
20.4	78.0	137.9	9.6												
22.0	76.6	137.5	9.5												
24.0	75.0	136.9	9.1												
26.0	73.3	136.4	8.8												
28.0	71.6	135.7	8.6												
30.0	69.9	135.0	8.4												
32.0	68.1	134.2	8.2	73.0	135.7	8.6									
34.0	66.4	133.3	8.0	71.3	135.1	8.6							<u> </u>		
36.0	64.6	132.4	7.9	69.6	134.3	8.4									
38.0	62.8	131.4	7.7	67.9	133.5	8.2									
40.0	61.0	130.3	7.6	66.1	132.7	8.1									
42.0	59.1	129.1	7.5	64.3	131.7	7.9									
44.0	57.2	127.8	7.3	62.5	130.7	7.8							<u> </u>		
46.0	55.2	126.5	7.2	60.7	129.6	7.7									
48.0	53.2	125.0	7.1	58.8	128.4	7.5									
50.0	51.2	123.4	6.9	56.9	127.1	7.4									
50.2							65.0	130.2	7.7						
55.0	45.8	118.9	6.4	51.9	123.4	7.1	60.7	127.7	7.6						
60.0	39.8	113.3	5.8	46.6	119.0	6.8	55.9	124.5	7.3						
65.0	32.9	106.4	5.4	40.7	113.7	6.5	50.8	120.7	7.1						
70.0	24.3	97.0	4.9	33.9	107.0	6.3	45.4	116.2	6.9						
71.6										55.0	119.8	6.6			
74.0	16.3	87.6	3.6												
75.0				25.7	98.0	5.8	39.4	110.5	6.7	51.6	117.3	6.1			
80.0				15.4	86.0	4.2	32.4	103.5	6.5	46.8	113.3	5.3			
85.0							23.7	93.8	6.3	40.9	108.0	4.5			
89.0							15.3	84.0	5.0						
90.0										34.3	101.4	3.8			
95.0										26.2	92.7	3.2			



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

2821-1 Cabeza de pluma principal: 2821-1

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

		gulo de principa			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]
				65.0 ı	m Pluma Cab	eza de p	al, Punto dumín (19 n] Posici	916-1) 7	4.5 m Plı	eza de p umín	lumín				
21.0 22.0 24.0 26.0 28.0 30.0 32.0	78.0 77.2 75.6 74.0 72.4 70.7 69.1	140.8 140.6 140.1 139.5 138.9 138.2 137.4	8.8 8.8 8.4 8.1 7.9 7.8 7.6												
32.9 34.0 36.0 38.0 40.0	67.4 65.7 64.0 62.3	136.6 135.7 134.8 133.7	7.5 7.3 7.2 7.0	73.0 72.1 70.5 68.8 67.2	138.6 138.2 137.5 136.8 136.0	7.9 7.9 7.7 7.6 7.5									
42.0 44.0 46.0 48.0 50.0	60.5 58.7 56.8 55.0 53.0	132.6 131.4 130.1 128.7 127.2	6.9 6.8 6.7 6.6 6.5	65.5 63.7 62.0 60.2 58.4	135.1 134.1 133.0 131.9 130.7	7.3 7.2 7.1 7.0 6.8									
51.5 55.0 60.0 65.0	48.0 42.5 36.3	123.0 118.0 111.7	6.1 5.6 5.1	53.7 48.7 43.3	127.2 123.1 118.2	6.6 6.4 6.2	65.0 62.0 57.5 52.7	132.9 131.1 128.2 124.6	7.0 7.0 6.7 6.5						
70.0 73.3 75.0 77.0 80.0	29.1 19.5 16.0	92.4 88.0	4.7 4.2 3.6	37.3 30.2 21.1	112.2 104.5 93.9	5.7 5.3	47.7 42.1 35.9	120.3 115.2 108.9	6.4	55.0 53.4 48.9	122.3 121.1 117.4	6.2 6.0			
83.0 85.0 90.0 92.0				15.1	86.4	3.7	28.6 18.8 15.0	100.8 89.1 84.4	6.0 5.7 4.3	43.5 37.6	112.5 106.6	4.5 3.8			
95.0 100.0 102.0										30.6 21.8 17.0	99.1 88.7 82.9	3.1 2.6 2.3			



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

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

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

		gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				65.0	m Pluma Cab	eza de p	al, Punto llumín (1 n] Posici	916-1) 7	7.5 m Pl	eza de p umín	lumín				
21.6	78.0	143.7	7.9												
22.0	77.7	143.6	7.9												
24.0	76.2	143.2	7.7												
26.0	74.6	142.6	7.4												
28.0	73.1	142.0	7.2												
30.0	71.5	141.4	7.0												
32.0	69.9	140.6	6.9												
33.8				73.0	141.5	7.1									
34.0	68.3	139.9	6.8	72.8	141.4	7.1									
36.0	66.7	139.0	6.6	71.3	140.7	7.0									
38.0	65.1	138.1	6.5	69.7	140.0	6.9									
40.0	63.4	137.1	6.3	68.1	139.2	6.8									
42.0	61.7	136.0	6.2	66.5	138.4	6.6									
44.0	60.0	134.9	6.1	64.8	137.4	6.5									
46.0	58.3	133.7	6.0	63.2	136.4	6.3									
48.0	56.5	132.4	5.9	61.5	135.4	6.2									
50.0 52.8	54.7	131.0	5.8	59.8	134.2	6.1	65.0	135.6	6.3				ł		
52.6 55.0	50.0	127.0	5.6	55.4	131.0	5.9	65.0 63.2	134.5	6.3						
60.0	44.9	127.0	5.0	50.7	127.1	5.9	58.9	134.5	6.0						
65.0	39.3	116.7	4.8	45.6	122.5	5.5	54.4	128.3	5.8						
70.0	32.9	109.7	4.5	40.1	117.0	5.3	49.7	124.4	5.7						
75.0	25.2	100.5	4.0	33.9	110.3	5.1	44.6	119.6	5.5				i		
75.1	20.2	100.0	4.0	00.0	110.0	0.1	11.0	110.0	0.0	55.0	124.7	5.4	i		
80.0	15.6	88.4	3.2	26.4	101.5	4.8	38.9	113.9	5.4	50.4	120.9	4.9			
85.0			U	15.9	88.2	4.6	32.5	106.8	5.3	45.8	116.8	4.2			
90.0							24.6	97.4	5.2	40.4	111.4	3.5			
94.0				Ī			15.8	86.2	5.1	I					
95.0										34.2	104.7	2.9			
100.0										26.9	96.1	2.3			
102.0										23.3	91.7	2.1			



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

2821-1 Cabeza de pluma principal: 2821-1

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

	88° Án	gulo de principa	pluma I	83° Án	gulo de orincipa	pluma I		gulo de principa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				65.0 i	m Pluma Cab	eza de p	il, Punto lumín (1 n] Posici	916-1) 8	0.5 m Pl		lumín				
22.2	78.0	146.7	7.2												
24.0	76.7	146.3	7.1												
26.0	75.2	145.7	6.9												
28.0	73.7	145.2	6.7												
30.0	72.2	144.5	6.5												
32.0	70.7	143.8	6.3												
34.0	69.2	143.1	6.2												
34.7				73.0	144.3	6.4									
36.0	67.6	142.3	6.1	72.0	143.9	6.4									
38.0	66.1	141.4	5.9	70.5	143.2	6.3									
40.0	64.5	140.5	5.8	69.0	142.4	6.2									
42.0	62.9	139.4	5.7	67.4	141.6	6.1									
44.0	61.3	138.4	5.6	65.8	140.7	5.9 5.8				ł					
46.0 48.0	59.6 57.9	137.2 136.0	5.5 5.3	64.3 62.7	139.8 138.8	5.8									
50.0	56.2	134.6	5.3	61.0	137.7	5.6									
54.0	30.2	134.0	3.2	01.0	137.7	5.0	65.0	138.4	5.6	i					
55.0	51.8	130.9	5.0	56.8	134.6	5.3	64.2	137.9	5.6						
60.0	47.0	126.6	4.8	52.4	131.0	5.1	60.2	135.2	5.4	i					
65.0	41.9	121.4	4.5	47.7	126.7	4.9	55.9	132.0	5.2						
70.0	36.1	115.1	4.2	42.6	121.6	4.7	51.5	128.3	5.1						
75.0	29.5	107.1	3.9	37.0	115.5	4.6	46.7	123.9	4.9						
76.8										55.0	127.2	4.8			
80.0	20.9	96.3	3.4	30.5	107.9	4.4	41.5	118.6	4.8	52.1	124.8	4.7			
83.0	15.3	88.8	2.8												
85.0				22.3	97.6	4.3	35.7	112.2	4.7	47.9	120.9	4.0			
88.0				15.6	88.6	4.1									
90.0							29.0	104.2	4.7	42.9	115.9	3.3			
95.0							20.3	93.0	4.6	37.3	109.9	2.7			
97.0							15.5	86.6	4.6	L					
100.0										30.9	102.4	2.1			
101.0	I									29.4	100.6	2.0			



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

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

	9842523/95738/	Pieza de articulación de pluma principal:	2821-1
scarga:	360 °	Cabeza de pluma principal:	2821-1
elco:	2 - Vía ancha		

	F	gulo de orincipa		ı	gulo de orincipa		ı	gulo de orincipa		l	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]
				65.0 ו	m Pluma Cab	eza de p	al, Punto lumín (1 n] Posici	916-1) 8	3.5 m Pl	eza de p umín	lumín				
22.8 24.0 26.0 28.0 30.0	78.0 77.2 75.8 74.3 72.9	149.6 149.3 148.8 148.3 147.7	6.4 6.4 6.2 6.1 5.9												
32.0 34.0 35.6 36.0	71.4 70.0 68.5	147.0 146.3 145.5	5.8 5.6 5.5	73.0 72.7	147.2 147.1	5.8 5.8									
38.0 40.0 42.0 44.0 46.0 48.0	67.0 65.5 64.0 62.4 60.8 59.2	144.7 143.8 142.8 141.8 140.7 139.5	5.4 5.3 5.1 5.0 5.0 4.8	71.2 69.8 68.3 66.8 65.3 63.7	146.4 145.7 144.9 144.0 143.1 142.1	5.7 5.6 5.5 5.4 5.2 5.1									
50.0 55.0 55.3 60.0 65.0	57.6 53.4 48.9 44.2	138.2 134.7 130.6 125.8	4.7 4.5 4.3 4.1	62.2 58.2 54.0 49.6	141.1 138.2 134.7 130.7	5.0 4.8 4.6 4.4	65.0 61.4 57.3	141.1 138.7 135.6	5.0 4.9 4.7						
70.0 75.0 78.5 80.0 85.0	38.9 33.0 25.9 16.0	120.1 113.0 104.0 90.6	3.8 3.6 3.2 2.8	44.9 39.7 33.9 27.0	126.0 120.4 113.6 104.9	4.2 4.1 3.9 3.8	53.1 48.6 43.8 38.6	132.1 128.0 123.1 117.2	4.6 4.4 4.3 4.1	55.0 53.7 49.7	129.7 128.6 124.9	4.3 4.3 3.7			
86.0 90.0 91.0 95.0 98.0	15.1	89.2	2.5	17.7 15.3	92.4 89.0	3.6 3.5	32.6 25.3	110.1 100.9 87.0	4.0	45.0 39.9 36.6	120.3 114.7 110.9	3.0 2.4 2.1			



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

		gulo de 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]
				65.0		eza de p	II, Punto Ilumín (1 1] Posici	916-1) 8	6.5 m Pl	eza de p umín	lumín				
23.5	78.0	152.5	5.8												
24.0	77.6	152.4	5.8												
26.0	76.3	151.9	5.7												
28.0	74.9	151.4	5.6												
30.0	73.5	150.8	5.4												
32.0	72.1	150.2	5.3												
34.0	70.7	149.5	5.2												
36.0	69.3	148.7	5.1	70.0	450.4	5.0									
36.4	67.8	147.9	5.0	73.0	150.1	5.2 5.2									
38.0 40.0	66.4	147.9	5.0 4.8	71.9 70.5	149.6 148.9	5.2									
40.0	64.9	147.1	4.6	69.1	148.1	5.0									
44.0	63.4	145.2	4.7	67.6	147.3	4.9									
46.0	61.9	144.1	4.5	66.2	146.4	4.8									
48.0	60.4	143.0	4.5	64.7	145.5	4.7									
50.0	58.9	141.8	4.4	63.2	144.5	4.6									
55.0	54.9	138.5	4.1	59.4	141.7	4.4									
56.6							65.0	143.8	4.5						
60.0	50.7	134.6	4.0	55.4	138.4	4.2	62.5	142.1	4.5						
65.0	46.2	130.1	3.8	51.3	134.7	4.0	58.6	139.2	4.3						
70.0	41.3	124.8	3.5	46.8	130.2	3.9	54.6	135.8	4.1						
75.0	36.0	118.4	3.4	42.1	125.0	3.7	50.4	131.9	4.0						
80.0	29.8	110.5	3.1	36.8	118.8	3.5	45.9	127.4	3.8						
80.2										55.0	132.1	3.8			
85.0	22.0	100.0	2.7	30.7	111.2	3.4	41.0	122.0	3.7	51.0	128.5	3.5			
88.0	15.7	91.0	2.5												
90.0				23.3	101.2	3.2	35.6	115.5	3.6	47.0	124.5	2.9			
94.0				16.6	91.6	2.6		407.5	0.5	40.0	440.0	0.0			
95.0							29.3	107.5	3.5	42.3	119.3	2.3			
97.0							24.4	06.0	2.4	40.2	117.0	2.1			
100.0							21.4	96.8	3.4 2.9						
103.0	l						16.5	89.7	2.9						



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

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

		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]
				65.0 ו	m Pluma Cab	eza de p	ıl, Punto lumín (1 ı] Posici	916-1) 8	9.5 m Pl	eza de p umín	lumín				
24.1	78.0	155.5	5.2												
26.0	76.7	155.0	5.1												
28.0	75.4	154.5	4.9							•					
30.0	74.1	154.0	4.8												
32.0	72.7	153.3	4.7												
34.0	71.4	152.7	4.6												
36.0	70.0	152.0	4.5												
37.3				73.0	152.9	4.6									
38.0	68.6	151.2	4.4	72.5	152.7	4.6									
40.0	67.2	150.4	4.2	71.2	152.0	4.5									
42.0	65.8	149.5	4.1	69.8	151.3	4.4									
44.0	64.4	148.5	4.0	68.4	150.5	4.3									
46.0	63.0	147.5	3.9	67.0	149.7	4.2									
48.0	61.5	146.4	3.8	65.6	148.8	4.1									
50.0	60.0	145.3	3.8	64.2	147.8	4.0									
55.0	56.2	142.1	3.6	60.6	145.2	3.8	05.0	440.5	0.0	ł					
57.9 60.0	52.2	138.5	3.4	56.8	142.1	3.6	65.0 63.5	146.5 145.5	3.9 3.9						
65.0	48.0	134.2	3.4	52.8	138.5	3.4	59.8	143.5	3.9	ł					
70.0	43.5	129.3	3.0	48.6	134.3	3.3	56.0	139.5	3.5						
75.0	38.6	123.4	2.9	44.2	129.5	3.1	52.0	135.8	3.4						
80.0	33.0	116.3	2.7	39.3	123.8	3.0	47.7	131.5	3.3						
82.0	33.0	110.5	2.1	55.5	123.0	3.0	47.7	151.5	3.5	55.0	134.6	3.2			
85.0	26.5	107.4	2.4	33.8	116.9	2.8	43.2	126.5	3.1	52.6	132.3	3.2			
90.0				27.5	108.3	2.7	38.2	120.6	3.0	48.8	128.5	2.6			
95.0				19.2	96.5	2.5	32.6	113.4	2.9	44.3	123.7	2.0			
97.0				16.3	92.1	2.2									
100.0							26.0	104.4	2.8						
105.0							17.1	91.4	2.7						
106.0							16.2	90.1	2.3						



2821-1

2821-1

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

		gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa			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]
				65.0 ı	m Pluma Cab	eza de p	il, Punto llumín (19 n] Posici	916-1) 9	2.5 m Plı	eza de p umín	lumín				
24.7	78.0	158.4	4.6												
26.0	77.2	158.1	4.6												
28.0	75.9	157.6	4.5												
30.0	74.6	157.1	4.3												
32.0	73.3	156.5	4.2												
34.0	72.0	155.8	4.1												
36.0	70.7	155.2	3.9												
38.0	69.4	154.4	3.9												
38.2				73.0	155.8	4.1									
40.0	68.0	153.6	3.7	71.8	155.2	4.0									
42.0	66.7	152.8	3.6	70.5	154.5	3.9									
44.0	65.3	151.8	3.5	69.2	153.8	3.8									
46.0	63.9	150.9	3.4	67.8	153.0	3.7							<u> </u>		
48.0	62.5	149.8	3.4	66.5	152.1	3.6									
50.0	61.1	148.8	3.3	65.1	151.2	3.5									
55.0	57.5	145.7	3.1	61.6	148.6	3.3									
59.1							65.0	149.2	3.3						
60.0	53.7	142.2	2.9	58.0	145.7	3.1	64.4	148.8	3.3						
65.0	49.7	138.2	2.8	54.2	142.2	2.9	60.9	146.2	3.2						
70.0	45.4	133.6	2.6	50.3	138.3	2.8	57.2	143.1	3.1						
75.0	40.9	128.1	2.4	46.1	133.7	2.7	53.4	139.6	2.9						
80.0	35.8	121.7	2.3	41.5	128.4	2.5	49.4	135.5	2.8						
83.7										55.0	137.0	2.7			
85.0				36.6	122.2	2.4	45.2	130.8	2.7	54.0	136.1	2.7			
90.0				30.9	114.5	2.3	40.6	125.4	2.5	50.4	132.5	2.4			
93.0										47.9	129.9	2.1			
95.0							35.5	118.9	2.5						
100.0							29.6	110.9	2.4						



2821-1

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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]
				65.0 ı	m Pluma Cab	eza de p	il, Punto Ilumín (19 n] Posici	916-1) 9	5.5 m Pl	eza de p umín	lumín				
25.3	78.0	161.3	4.2												
26.0	77.6	161.2	4.2												
28.0	76.4	160.7	4.2												
30.0	75.1	160.2	4.0												
32.0	73.9	159.6	3.9												
34.0	72.6	159.0	3.8												
36.0	71.3	158.3	3.7												
38.0	70.0	157.6	3.6												
39.1				73.0	158.7	3.7									
40.0	68.8	156.8	3.5	72.4	158.4	3.7									
42.0	67.4	156.0	3.4	71.1	157.7	3.7									
44.0	66.1	155.1	3.3	69.9	157.0	3.6									
46.0	64.8	154.2	3.2	68.6	156.2	3.5									
48.0	63.5	153.2	3.1	67.3	155.4	3.4									
50.0	62.1	152.2	3.1	65.9	154.5	3.3									
55.0	58.6	149.3	2.8	62.6	152.0	3.1									
60.0	55.0	146.0	2.6	59.1	149.2	2.9									
60.4							65.0	152.0	3.1				<u> </u>		
65.0	51.2	142.1	2.4	55.5	145.9	2.7	61.9	149.6	3.0						
70.0				51.8	142.2	2.5	58.4	146.7	2.8						
75.0				47.8	137.9	2.3	54.8	143.3	2.6						
80.0							51.0	139.5	2.5						
85.0							46.9	135.0	2.3						
85.4										55.0	139.5	2.4			
90.0										51.5	136.0	2.1			
91.0										51.1	135.6	2.0			



2821-1

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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]
				68.0		eza de p	al, Punto dumín (2 n] Posici	316-1) 3	8.5 m Pl		lumín		_		
13.5	78.0	108.6	36.3												
14.0	77.3	108.5	36.3												
16.0	74.2	107.9	33.6												
18.0	71.1	107.3	29.9												
20.0	67.9	106.5	26.8												
22.0	64.6	105.6	23.6												
22.7				73.0	107.1	29.3									
24.0	61.2	104.5	21.4	71.0	106.7	28.8									
26.0	57.8	103.3	19.6	67.8	105.9	27.0									
28.0	54.1	101.9	18.1	64.6	105.0	25.4									
30.0	50.3	100.3	16.9	61.2	104.0	24.2									
32.0	46.3	98.5	15.8	57.7	102.7	22.4									
34.0	41.9	96.4	14.9	54.1	101.3	20.8				•			<u> </u>		
36.0	37.2	93.9	14.0	50.3	99.7	19.6									
37.1							65.0	103.2	19.7						
38.0	31.8	90.9	13.3	46.2	97.9	18.3	63.5	102.8	19.7						
40.0	25.4	87.1	12.7	41.9	95.8	17.1	60.1	101.6	18.8						
42.0	16.9	81.7	12.0	37.1	93.3	16.1	56.6	100.4	17.9						
44.0				31.7	90.3	15.3	52.9	98.9	17.0						
46.0				25.3	86.5	14.5	49.0	97.3	16.3						
48.0				16.7	81.0	13.6	44.9	95.3	15.5						
50.0							40.5	93.1	14.9						
54.0										55.0	95.5	10.8			
55.0							26.7	85.3	13.6	53.9	95.1	10.5			
58.0							15.1	78.0	11.6						
60.0										43.9	90.6	9.4			
65.0										31.5	83.9	8.4			
69.0	1	l	I		I	1		ı	1	16.2	74.5	7.4	I	l	I



2821-1

2821-1

Nº de ident.: 9842523/95738/

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

5738/ Pieza de articulación de pluma principal:
360 ° Cabeza de pluma principal:

	ŗ	principal	pluma I		gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				68.0 r		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 4	1.5 m Pli	eza de p umín	lumín				
14.2 16.0	78.0 75.4	111.5 111.1	33.5 32.1												
18.0	72.5	110.5	28.9												
20.0	69.6	10.3	25.8												
22.0	66.6	108.9	23.0												
23.6				73.0	110.0	27.0									
24.0	63.5	107.9	20.7	72.5	109.9	26.9									
26.0	60.4	106.8	19.0	69.5	109.2	25.9									
28.0	57.1	105.6	17.5	66.5	108.3	24.5									
30.0	53.7	104.2	16.3	63.5	107.4	23.1									
32.0	50.2	102.6	15.4	60.3	106.3	22.0									
34.0	46.4	100.7	14.4	57.0	105.0	20.4									
36.0	42.4 38.1	98.6 96.2	13.6 12.8	53.7 50.1	103.6 102.0	19.0									
38.0 38.3	38.1	96.2	12.8	50.1	102.0	17.9	65.0	105.9	18.0						
40.0	33.3	93.3	12.2	46.4	100.1	16.8	62.5	105.9	18.2						
42.0	27.7	89.8	11.6	42.4	98.0	15.7	59.3	103.1	17.3						
44.0	20.8	85.2	11.1	38.0	95.6	14.8	56.0	102.6	16.5						
45.0	16.2	82.1	10.8												
46.0				33.2	92.7	14.1	52.6	101.2	15.7						
48.0				27.6	89.2	13.3	49.0	99.5	15.1						
50.0				20.6	84.6	12.6	45.2	97.6	14.4						
51.0				16.1	81.4	12.2									
55.0							34.2	91.4	13.1						
55.7										55.0	98.0	9.8			
60.0							17.9	80.8	11.9	48.1	94.8	8.9			
65.0										37.8	89.3	7.9			
70.0 72.0										24.1 15.6	80.7 74.9	6.8 6.4			



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 principa			gulo de orincipa										
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				68.0			ıl, Punto lumín (1			eza de p	lumín				
					Cab	13.0 [m	n] Posici	ón midfa	II (1916)	ullilli					
12.3	78.0	102.7	32.8												
13.0	76.7	102.5	32.7												
14.0	74.9	102.3	31.8												
16.0	71.2	101.6	30.2												
18.0	67.4	100.8	28.5												
20.0	63.5	99.9	26.3												
21.0			040	73.0	101.4	28.6									
22.0 24.0	59.4 55.2	98.7 97.4	24.3 22.1	71.1 67.3	101.1 100.3	28.4 27.4									
26.0	50.7	95.8	20.3	63.4	99.3	26.3									
28.0	45.9	94.0	19.0	59.4	98.2	25.2									
30.0	40.7	91.8	17.7	55.1	96.8	23.9									
32.0	34.8	89.1	16.7	50.6	95.3	22.9									
34.0	27.8	85.7	15.9	45.8	93.4	21.3									
34.5				1			65.0	97.8	22.2						
36.0	18.5	80.8	15.0	40.6	91.2	19.9	62.2	97.0	22.1						
38.0				34.7	88.5	18.8	58.1	95.8	21.0						
40.0				27.7	85.1	17.8	53.8	94.4	20.0						
42.0				18.3	80.2	16.7	49.2	92.8	19.2						
44.0							44.3	90.8	18.3						
46.0							38.9	88.5	17.5						
48.0							32.7	85.6	16.9						
50.0							25.2	81.9	16.3						
50.5										55.0	90.6	13.3			
52.0							16.5	77.2	14.3			10.0			
55.0										44.8	86.8	12.9			
60.0										29.9	80.0	11.7			
63.0										15.6	72.5	11.0	25.0	60 E	2.4
77.6													35.0	68.5 65.5	2.4
80.0 81.0				-									28.8 24.7	63.4	2.2
61.0													24./	ნპ.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 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]
				68.0		eza de p	ıl, Punto lumín (19 n] Posici	916-1) 3	5.5 m Pli	eza de p umín	lumín				
12.9	78.0	105.6	29.7												
13.0	77.9	105.6	29.7												
14.0	76.2	105.4	29.5												
16.0	72.8	104.8	28.0												
18.0	69.4	104.1	26.6												
20.0	65.9	103.2	24.8												
21.9				73.0	104.3	25.9									
22.0	62.3	102.2	23.3	72.8	104.2	25.9									
24.0	58.5	101.0	21.6	69.3	103.5	25.2									
26.0	54.6	99.7	19.9	65.8	102.7	24.3									
28.0	50.5	98.1	18.6	62.2	101.6	23.4									
30.0	46.1 41.4	96.2	17.4	58.5	100.5	22.4 21.4									
32.0 34.0	36.1	94.1 91.5	16.4 15.5	54.6 50.4	99.1 97.5	20.6									
35.8	30.1	91.5	15.5	50.4	97.5	20.0	65.0	100.5	20.9						
36.0	30.1	88.3	14.7	46.0	95.7	19.4	64.7	100.5	21.2						
38.0	22.5	84.1	14.7	41.3	93.5	18.3	61.1	99.3	20.6						
39.0	17.6	81.3	13.6	41.5	95.5	10.5	01.1	33.3	20.0						
40.0	17.0	01.0	10.0	36.0	90.9	17.4	57.3	98.1	19.7						
42.0				29.9	87.7	16.5	53.3	96.7	18.7						
44.0				22.4	83.5	15.7	49.1	95.0	18.0						
45.0				17.4	80.6	15.2									
46.0		İ		İ			44.6	93.1	17.2						
48.0							39.7	90.8	16.5						
50.0							34.3	88.1	15.9						
52.2										55.0	93.1	12.6			
55.0							15.7	77.6	12.8	49.5	91.0	12.6			
60.0										37.6	85.5	11.3			
65.0										20.5	76.2	10.3			
66.0										16.9	74.1	9.7			



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]
				68.0 ı		eza de p	ıl, Punto lumín (1 ı] Posici	916-1) 3	8.5 m Pl	eza de p umín	lumín				
L						19.0[11	i j Fusici	I	11 (1910)						
13.5 14.0	78.0 77.3	108.6 108.5	27.2 27.2												
16.0	74.2	108.5	26.0												
18.0	71.1	107.9	26.0												
20.0	67.9	106.5	23.3												
22.0	64.6	105.6	21.9												
22.7	04.0	100.0	21.0	73.0	107.1	23.5									
24.0	61.2	104.5	20.9	71.0	106.7	23.3									
26.0	57.8	103.3	19.4	67.8	105.9	22.5									
28.0	54.1	101.9	18.1	64.6	105.0	21.6									
30.0	50.3	100.3	17.2	61.2	104.0	21.0									
32.0	46.3	98.5	16.1	57.7	102.7	20.1									
34.0	41.9	96.4	15.2	54.1	101.3	19.3									
36.0	37.2	93.9	14.3	50.3	99.7	18.7									
37.1							65.0	103.2	20.0						
38.0	31.8	90.9	13.7	46.2	97.9	17.7	63.5	102.8	20.0						
40.0	25.4	87.1	13.1	41.9	95.8	16.9	60.1	101.6	19.2						
42.0	16.9	81.7	12.4	37.1	93.3	16.2	56.6	100.4	18.4						
44.0				31.7	90.3	15.5	52.9	98.9	17.5						
46.0				25.3	86.5	14.7	49.0	97.3	16.9						
48.0				16.7	81.0	13.9	44.9	95.3	16.2						
50.0							40.5	93.1	15.5	55.0	05.5	44.0			
54.0 55.0							26.7	85.3	14.3	55.0 53.3	95.5 94.8	11.9 12.4			
55.0 58.0							26.7 15.1	78.0	14.3	55.5	94.0	12.4			
60.0							10.1	70.0	11.2	43.2	90.2	11.2			
65.0										30.5	83.4	10.1			
69.0										16.2	74.5	9.0			



Nº de ident.: 9842523/95738/ Pieza de articulación

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

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

	88° Án	gulo de principa	pluma I		gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				68.0		eza de p	ıl, Punto lumín (19 1] Posici	916-1) 4	1.5 m Pli	eza de p umín	lumín		-		
14.2 16.0 18.0	78.0 75.4 72.5 69.6	111.5 111.1 110.5 109.7	24.2 23.5 22.3 21.1												
20.0 22.0 23.6	66.6	108.9	19.9	73.0	110.0	20.9									
24.0 26.0 28.0	63.5 60.4 57.1 53.7	107.9 106.8 105.6	18.9 18.0 17.0	72.5 69.5 66.5	109.9 109.2 108.3 107.4	20.8 20.3 19.6									
30.0 32.0 34.0 36.0	50.2 46.4 42.4	104.2 102.6 100.7 98.6	16.1 15.4 14.6 13.8	63.5 60.3 57.0 53.7	106.3 105.0 103.6	18.9 18.3 17.5 16.8									
38.0 38.3 40.0	38.1	96.2	13.1	50.1	102.0	16.2	65.0 62.5	105.9 105.1	18.0 18.2						
42.0 44.0 45.0	27.7 20.8 16.2	89.8 85.2 82.1	11.9 11.4 11.1	42.4 38.0	98.0 95.6	14.8 14.2	59.3 56.0	103.9 102.6	17.4 16.7						
46.0 48.0 50.0				33.2 27.6 20.6	92.7 89.2 84.6	13.6 13.0 12.4	52.6 49.0 45.2	99.5 97.6	16.1 15.5 14.9						
51.0 55.0 55.7				16.1	81.4	12.1	34.2	91.4	13.6	55.0	98.0	11.3			
60.0 65.0 70.0 72.0							17.9	80.8	12.4	47.5 37.1 21.8 15.6	94.5 88.9 79.2 74.9	10.8 9.8 8.7 8.3			



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

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

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

		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]
				68.0 i		eza de p	ıl, Punto lumín (19 n] Posici	916-1) 4	4.5 m Pli		lumín				
14.8	78.0	114.4	22.1												
16.0	76.4	114.2	21.9												
18.0	73.7	113.6	20.8												
20.0	71.0	112.9	19.6												
22.0	68.2	112.2	18.7												
24.0	65.4	111.3	17.7												
24.5				73.0	112.9	19.0									
26.0	62.5	110.3	16.8	71.0	112.4	18.9									
28.0	59.6	109.1	16.1	68.2	111.6	18.3									
30.0	56.5	107.9	15.4	65.4	110.7	17.6									
32.0	53.4	106.4	14.7	62.5	109.7	17.0									
34.0 36.0	50.0 46.5	104.8 103.0	14.2 13.5	59.5 56.5	108.6 107.3	16.3 15.6									
38.0	42.8	100.9	12.8	53.3	107.3	15.0									
39.6	42.0	100.9	12.0	33.3	103.0	13.1	65.0	108.6	16.5						
40.0	38.8	98.5	12.1	50.0	104.2	14.6	64.5	108.5	17.1						
42.0	34.5	95.8	11.6	46.5	102.4	13.9	61.6	107.4	16.8						
44.0	29.5	92.5	11.1	42.8	100.3	13.3	58.6	106.2	16.2						
46.0	23.6	88.3	10.7	38.8	97.9	12.8	55.5	104.9	15.5				i		
48.0	15.6	82.5	10.2	34.4	95.2	12.3	52.3	103.4	14.9						
50.0				29.4	91.9	11.8	48.9	101.7	14.5						
54.0				15.5	81.8	10.7		-							
55.0		İ					39.6	96.5	13.1			İ	İ		
57.4										55.0	100.4	10.7			
60.0							27.7	88.7	12.0	51.0	98.5	10.6			
63.0							17.3	81.2	11.3						
65.0										41.6	93.4	9.5			
70.0										30.3	86.3	8.6			
75.0										15.0	75.3	7.5			



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 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]
				68.0 ı	m Pluma Cab	eza de p	al, Punto Ilumín (1: n l Posici	916-1) 4	7.5 m Pl	eza de p umín	lumín		_		
15.4	78.0	117.4	20.1			20.0 [11	1 1 1 00101		11 (1010)						
16.0	77.3	117.4	20.1												
18.0	74.8	116.7	19.3												
20.0	72.3	116.1	18.5												
22.0	69.7	115.4	17.7												
24.0	67.1	114.6	17.0												
25.4	07.1	114.0	17.0	73.0	115.8	17.6									
26.0	64.4	113.6	16.4	72.2	115.5	17.5							i		
28.0	61.7	112.6	15.9	69.6	114.8	17.2							i		
30.0	58.9	111.4	15.1	67.0	114.0	16.9									
32.0	56.0	110.1	14.4	64.4	113.1	16.4									
34.0	53.0	108.7	13.7	61.7	112.0	16.0									
36.0	49.9	107.0	13.2	58.9	110.9	15.5							i		
38.0	46.7	105.2	12.5	56.0	109.5	15.1									
40.0	43.2	103.2	11.9	53.0	108.1	14.6									
40.9							65.0	111.4	16.1						
42.0	39.5	100.8	11.3	49.9	106.5	14.3	63.5	110.8	16.1						
44.0	35.5	98.2	10.8	46.6	104.6	13.6	60.8	109.7	15.8						
46.0	31.0	95.0	10.4	43.1	102.6	13.0	58.0	108.5	15.4						
48.0	25.8	91.2	9.9	39.4	100.2	12.5	55.1	107.2	14.8						
50.0	19.3	86.2	9.5	35.4	97.6	12.0	52.0	105.7	14.3						
51.0	15.1	82.9	9.3												
55.0				22.7	88.3	10.8	43.8	101.0	13.0						
57.0				16.5	83.4	7.2									
59.1										55.0	102.9	10.2			
60.0							34.1	94.7	12.0	53.7	102.2	10.2			
65.0							20.6	84.8	11.0	45.6	97.8	9.2			
66.0							16.7	81.7	10.8	20.0	04.0				
70.0										36.2	91.9	8.3			
75.0										25.5	84.2	7.3			
77.0	1	1	1			ı		1	1	18.9	79.1	6.9	I	1	l



N° de ident.: 9842523/95738/

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

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

		gulo de principa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de principa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				68.0 i	m Pluma Cab	eza de p	ıl, Punto lumín (19 n] Posici	916-1) 5	0.5 m Pli	eza de p umín	lumín				
16.0	78.0	120.3	18.4												
18.0	75.7	119.8	18.1												
20.0	73.3	119.3	17.4												
22.0	70.9	118.6	16.7												
24.0	68.5	117.8	16.2												
26.0	66.0	117.0	15.7												
26.3				73.0	118.6	16.3									
28.0	63.5	116.0	15.4	70.9	118.0	16.2									
30.0	60.9	114.9	15.1	68.5	117.3	16.0									
32.0	58.3	113.7	14.3	66.0	116.4	15.8									
34.0	55.6	112.4	13.5	63.5	115.4	15.5									
36.0	52.8	110.9	12.9	60.9	114.3	15.3									
38.0	49.8 46.7	109.3 107.4	12.4 11.7	58.3	113.1 111.8	14.9 14.6									
40.0		1		55.5											
42.0 42.1	43.5	105.4	11.1	52.7	110.3	14.3	65.0	114.1	14.7						
44.0	40.1	103.1	10.6	49.8	108.7	14.0	62.7	114.1	15.2						
44.0 46.0	36.3	100.5	10.6	49.6	106.7	13.3	60.1	112.0	15.2						
48.0	32.2	97.5	9.7	43.5	100.9	12.7	57.4	110.8	14.7						
50.0	27.6	94.0	9.3	40.0	102.5	12.2	54.7	109.4	14.1						
54.0	16.1	84.5	5.5	40.0	102.0	12.2	01.1	100.4	14.1						
55.0		0	0.0	29.9	95.2	11.0	47.3	105.3	12.9						
60.0				16.0	83.8	6.3	38.9	99.8	11.8						
60.8										55.0	105.3	9.6	Ī		
65.0							28.5	92.1	11.0	48.9	102.0	9.1			
69.0							16.2	82.1	10.3						
70.0										40.7	96.8	8.2			
75.0										32.0	90.6	7.3			
80.0										18.3	79.6	6.3			



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 principal			gulo de orincipa										
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
	-			68.0 ı			ıl, Punto lumín (1			eza de p umín	lumín		_		
] Posici								
16.7	78.0	123.3	16.3												
18.0	76.6	122.9	16.2												
20.0	74.3	122.4	15.5												
22.0	72.1	121.8	14.9												
24.0	69.8	121.0	14.4												
26.0	67.4	120.2	14.0	70.0	121.5	14.4									
27.2 28.0	65.1	119.3	13.6	73.0 72.0	121.5	14.4									
30.0	62.7	118.3	13.4	69.7	121.2	14.4									
32.0	60.2	117.2	13.0	67.4	119.7	14.0									
34.0	57.6	115.9	12.4	65.0	118.8	13.7									
36.0	55.0	114.6	11.9	62.6	117.7	13.5									
38.0	52.3	113.0	11.5	60.1	116.6	13.3									
40.0	49.5	111.4	11.1	57.6	115.4	13.0									
42.0	46.6	109.5	10.5	55.0	114.0	12.7									
43.4							65.0	116.8	13.4						
44.0	43.5	107.5	10.0	52.3	112.5	12.5	64.3	116.5	13.4						
46.0	40.2	105.2	9.5	49.5	110.8	12.2	61.9	115.5	13.3						
48.0	36.7	102.6	9.1	46.5	108.9	11.8	59.4	114.3	13.1						
50.0	32.8	99.6	8.7	43.4	106.9	11.3	56.8	113.0	12.9						
55.0	20.5	89.3	7.9 5.2	34.8	100.5	10.5	50.0	109.2	12.2						
57.0 60.0	15.6	84.9	5.2	23.4	91.2	9.4	42.5	104.2	11.2						
62.6				23.4	91.2	9.4	42.5	104.2	11.2	55.0	107.8	9.1			
63.0				15.5	84.2	5.7				55.0	107.0	3.1			
65.0				10.0	U-7.Z	0.7	33.6	97.6	10.4	51.7	105.9	8.7			
70.0							21.6	87.7	9.7	44.4	101.3	7.9			
72.0							17.0	83.7	7.7						
75.0										36.9	96.0	7.0			
80.0										26.5	87.7	6.1			
83.0										17.7	80.1	5.6			



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

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]
				68.0 ı	m Pluma Cab	eza de p	ıl, Punto lumín (19 n] Posici	916-1) 5	6.5 m Plı	eza de p umín	lumín				
17.3	78.0	126.2	14.8												
18.0	77.3	126.0	14.8												
20.0	75.2	125.5	14.3												
22.0	73.1	124.9	13.8												
24.0	70.9	124.2	13.4												
26.0	68.7	123.5	13.0												
28.0	66.5	122.6	12.7	73.0	124.4	13.3									
30.0	64.2	121.7	12.4	70.9	123.7	13.2									
32.0	61.9	120.6	12.2	68.7	122.9	13.0									
34.0	59.6	119.5	11.8	66.5	122.1	12.8									
36.0	57.2	118.2	11.4 11.0	64.2	121.1 120.1	12.5									
38.0 40.0	54.7 52.1	116.8 115.3	11.0	61.9 59.5	120.1 118.9	12.3 12.1									
40.0 42.0	49.4	115.3	10.6	59.5 57.1	118.9	12.1									
44.0	49.4	111.8	9.8	57.1 54.6	117.6	11.9									
44.7	40.7	111.0	9.0	34.0	110.2	11.7	65.0	119.5	12.3						
46.0	43.8	109.7	9.3	52.1	114.7	11.5	63.5	118.9	12.3						
48.0	40.7	109.7	8.9	49.4	113.0	11.3	61.2	117.8	12.3						
50.0	37.4	104.9	8.5	46.6	111.2	10.9	58.8	116.6	12.0						
55.0	27.7	96.8	7.7	39.0	105.6	10.1	52.6	113.1	11.6						
60.0	15.2	85.3	5.0	29.8	98.1	9.2	45.7	108.6	10.9						
64.3		00.0	0.0							55.0	110.3	8.6			
65.0				16.5	86.0	8.2	38.0	102.9	10.1	54.1	109.7	8.5			
66.0				15.0	84.6	5.1									
70.0							28.5	95.0	9.5	47.4	105.5	7.6			
75.0							16.5	84.1	6.8	40.8	100.8	6.8			
80.0										32.2	93.9	5.9			
85.0										20.5	83.5	5.1			
86.0										17.3	80.5	5.0			



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

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

360 ° Cabeza de pluma principal:

2821-1 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]
				68.0		eza de p	il, Punto llumín (19 n] Posici	916-1) 5	9.5 m Pli		lumín				
18.0	78.0	129.1	13.5												
20.0	76.0	128.6	13.2												
22.0	74.0 71.9	128.1 127.4	12.7 12.3	ł											
24.0 26.0	69.9	127.4	12.3												
28.0	67.8	125.9	11.6												
28.9	07.0	120.0	11.0	73.0	127.2	12.1									
30.0	65.6	125.0	11.4	71.9	126.9	12.1									
32.0	63.5	124.0	11.2	69.8	126.1	11.9							i		
34.0	61.3	123.0	11.0	67.7	125.3	11.7									
36.0	59.0	121.8	10.7	65.6	124.4	11.5									
38.0	56.7	120.5	10.3	63.4	123.5	11.3									
40.0	54.4	119.1	10.0	61.2	122.4	11.1									
42.0	51.9	117.5	9.8	59.0	121.2	10.9									
44.0	49.4	115.8	9.5	56.7	119.9	10.7									
45.9							65.0	122.2	11.1						
46.0	46.7	114.0	9.1	54.3	118.5	10.5	64.9	122.2	11.1						
48.0	44.0	112.0	8.6	51.9	117.0	10.4	62.8	121.2	11.1						
50.0	41.1 32.9	109.7 102.9	8.2	49.3 42.5	115.3 110.3	10.2 9.5	60.6 54.8	120.1 116.8	10.9 10.6						
55.0 60.0	22.2	93.0	7.4 6.7	34.6	103.9	9.0	48.5	112.8	10.6						
62.0	16.2	93.0 87.1	6.4	34.0	103.9	9.0	40.0	112.0	10.3						
65.0	10.2	07.1	0.4	24.6	94.8	8.1	41.6	107.6	9.7						
66.0				24.0	04.0	0.1	41.0	107.0	0.7	55.0	112.7	8.0	i		
68.0				16.0	86.4	7.6									
70.0							33.6	101.0	9.2	50.7	110.0	7.3			
75.0				l			23.1	91.4	8.5	44.1	105.3	6.5			
78.0							16.1	84.5	6.5						
80.0										36.6	99.3	5.6			
85.0										27.3	91.1	4.8			
89.0										16.8	81.0	4.3			



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]
				68.0	m Pluma Cab	eza de p	II, Punto Iumín (1 I Posici	916-1) 6	2.5 m Plı	eza de p umín	lumín				
18.6	78.0	132.1	12.3												
20.0	76.7	131.7	12.3												
22.0	74.7	131.2	11.8												
24.0	72.8	130.6	11.4												
26.0	70.9	129.9	11.0												
28.0	68.9	129.1	10.8												
29.8				73.0	130.1	11.1									
30.0	66.9	128.3	10.5	72.8	130.0	11.1									
32.0	64.9	127.4	10.3	70.8	129.3	11.0									
34.0	62.8	126.4	10.1	68.9	128.6	10.8									
36.0	60.7	125.3	9.9	66.9	127.7	10.6									
38.0	58.5	124.1	9.7	64.8	126.8	10.4									
40.0	56.3	122.7	9.4	62.8	125.8	10.2									
42.0	54.1	121.3	9.2	60.7	124.7	10.0									
44.0	51.7	119.8	9.1	58.5	123.5	9.8									
46.0	49.3	118.1	8.8	56.3	122.2	9.7									
47.2							65.0	124.9	10.1						
48.0	46.8	116.2	8.4	54.0	120.7	9.5	64.2	124.6	10.1						
50.0	44.2	114.2	8.0	51.7	119.2	9.4	62.1	123.5	10.0						
55.0	37.0	108.2	7.2	45.5	114.7	9.0	56.7	120.5	9.7						
60.0	28.4	100.2	6.5	38.5	109.0	8.6	51.0	116.7	9.5						
65.0	15.8	87.5	5.9	30.2	101.5	8.0	44.7	112.1	9.1	55.0	445.0	7.5			
67.7 70.0				18.8	90.2	7.1	37.6	106.2	8.8	55.0 52.4	115.2 113.5	7.5 7.1			
70.0				15.6	90.2 86.8	7.1	37.0	100.2	0.0	52.4	113.5	7.1			
71.0				15.0	0.00	7.0	29.0	98.4	8.3	46.9	109.5	6.4			
80.0							29.0 16.9	96.4 86.2	7.7	40.9	109.5	5.5			
81.0				I			15.7	84.9	6.2	40.2	104.2	0.0			
85.0				1			13.7	04.5	0.2	32.3	97.2	4.7			
90.0										22.1	87.3	4.0			
92.0										16.4	81.4	3.8			



N° de ident.: 9842523/95738/ Pieza

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

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

		gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				68.0 ı	m Pluma Cab	eza de p	ıl, Punto lumín (19 n] Posici	916-1) 6	5.5 m Pli	eza de p umín	lumín				
19.2 20.0 22.0 24.0 26.0	78.0 77.3 75.5 73.6 71.8	135.0 134.8 134.3 133.7 133.1	11.3 11.3 10.9 10.5 10.2												
28.0 30.0 30.7 32.0	69.9 68.0 66.1	132.4 131.6 130.7	10.0 9.7 9.5	73.0 71.8	133.0 132.5	10.1 10.1									
34.0 36.0 38.0 40.0 42.0	64.1 62.2 60.1 58.1 56.0	129.7 128.7 127.6 126.3 125.0	9.3 9.2 9.0 8.8 8.6	69.9 68.0 66.1 64.1 62.1	131.8 131.0 130.1 129.2 128.1	9.9 9.8 9.6 9.4 9.2									
44.0 46.0 48.0 48.5 50.0	53.8 51.6 49.3 46.9	123.6 122.0 120.3	8.4 8.2 8.0	60.1 58.0 55.9	127.0 125.8 124.4 123.0	9.1 8.9 8.7	65.0 63.5	127.7 126.9	9.2 9.2						
55.0 60.0 65.0 68.0	40.9 40.4 33.0 23.5 15.4	118.5 113.1 106.2 96.7 87.9	6.9 6.2 5.7 5.3	48.0 41.8 34.5	118.8 113.7 107.2	7.8 7.5	58.4 53.1 47.3	126.9 124.1 120.6 116.3	8.9 8.6 8.4						
69.5 70.0 74.0 75.0 80.0				25.6 15.3	98.3 87.2	6.8	40.9 33.6 24.3	111.0 104.3 95.0	7.8 7.3	55.0 54.4 49.3 43.2	117.6 117.2 113.6 108.7	6.9 6.8 6.1 5.2			
84.0 85.0 90.0 95.0							15.3	85.3	5.8	36.3 27.9 16.0	102.6 94.5 81.8	4.5 3.8 3.1			



Nº de ident.: 9842523/95738/

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

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

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				68.0 ı	m Pluma Cab	eza de p	il, Punto Ilumín (19 n] Posici	916-1) 6	8.5 m Pl	eza de p umín	lumín				
19.8 20.0 22.0 24.0 26.0	78.0 77.9 76.1 74.4 72.6	137.9 137.9 137.4 136.9 136.2	10.3 10.3 10.1 9.8 9.5												
28.0 30.0 31.5 32.0 34.0	70.8 69.0 67.2 65.4	135.6 134.8 134.0 133.1	9.2 9.1 8.9 8.7	73.0 72.6 70.8	135.8 135.7 135.0	9.3 9.3 9.2									
36.0 38.0 40.0 42.0	63.5 61.6 59.6 57.7	132.1 131.0 129.9 128.6	8.5 8.3 8.2 8.0	69.0 67.2 65.3 63.5	134.2 133.4 132.5 131.5	9.0 8.9 8.7 8.5									
44.0 46.0 48.0 49.8 50.0	55.6 53.6 51.4 49.2	127.3 125.8 124.2 122.5	7.8 7.7 7.5 7.4	61.6 59.6 57.6 55.6	130.5 129.3 128.1 126.7	8.4 8.3 8.1 7.9	65.0 64.8	130.4 130.3	8.4 8.4						
55.0 60.0 65.0 70.0 71.0	43.3 36.7 28.9 18.1 15.0	117.7 111.6 103.6 91.7 88.3	6.6 6.0 5.5 4.9 4.8	50.3 44.5 38.1 30.5	122.8 118.1 112.3 104.8	7.6 7.2 6.8 6.4	60.0 55.0 49.6 43.8	127.6 124.3 120.4 115.5	8.2 7.9 7.7 7.4						
71.2 75.0 77.0 80.0	15.0	00.3	4.0	20.6 16.9	94.1 89.9	6.0 4.1	37.2 29.5	109.5 101.8	7.1 6.9	55.0 51.4 45.8	120.1 117.5 113.0	6.4 5.9 5.0			
85.0 86.0 90.0 95.0 98.0							19.0 16.2	90.3 87.1	6.6 6.5	39.6 32.4 23.3 15.6	107.5 100.5 90.9 82.2	3.6 3.0 2.6			



2821-1

2821-1

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

		gulo de orincipa			gulo de orincipa			gulo de orincipa		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]
	-			68.0 ı	n Pluma	principa	I, Punto	de carga	1 - Cab	eza de p	lumín				-
					Cab		lumín (1 1] Posici			umin					
20.5	78.0	140.9	9.4												
22.0	76.7	140.5	9.3												
24.0	75.1	140.0	9.0												
26.0	73.4	139.4	8.7												
28.0	71.7	138.7	8.5												
30.0	70.0	138.0	8.3												
32.0	68.2	137.2	8.1												
32.4				73.0	138.7	8.5									
34.0	66.5	136.4	8.0	71.7	138.2	8.5									
36.0	64.7	135.4	7.8	69.9	137.5	8.3									
38.0	62.9	134.4	7.7	68.2	136.7	8.1									
40.0	61.1	133.3	7.5	66.5	135.8	8.0									
42.0	59.2	132.2	7.4	64.7	134.9	7.8									
44.0	57.3	130.9	7.2	62.9	133.9	7.7									
46.0	55.3	129.5	7.1	61.0	132.8	7.6									
48.0	53.3	128.1	7.0	59.2	131.6	7.4									
50.0	51.3	126.5	6.9	57.3	130.3	7.3	05.0	400.4	7.6						
51.0 55.0	45.9	122.0	6.3	52.3	126.7	7.0	65.0 61.4	133.1 131.0	7.5						
60.0	39.9	116.5	5.7	47.0	120.7	6.7	56.7	128.0	7.3						
65.0	33.0	109.5	5.2	41.1	117.1	6.4	51.7	124.3	7.0						
70.0	24.5	100.2	4.7	34.5	110.5	6.2	46.3	119.8	6.8						
72.9	24.5	100.2	7.7	54.5	110.5	0.2	40.5	113.0	0.0	55.0	122.5	5.8			
74.0	16.6	90.9	3.6							00.0	.22.0	0.0			
75.0				26.4	101.8	5.7	40.3	114.4	6.6	53.3	121.3	5.6			
80.0				16.5	90.3	4.1	33.6	107.6	6.5	48.1	117.2	4.7			
85.0							25.2	98.5	6.2	42.5	112.2	4.0			
89.0							15.8	87.5	6.0						
90.0										36.1	105.9	3.3			
95.0										28.5	97.9	2.7			
100.0										18.1	86.0	2.2			
101.0										15.3	82.6	2.0			



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

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

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

		gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				68.0		eza de p	il, Punto Ilumín (19 n] Posici	916-1) 7	4.5 m Pli	eza de p umín	lumín				
21.1 22.0 24.0 26.0 28.0	78.0 77.3 75.7 74.1 72.4	143.8 143.6 143.1 142.5 141.9	8.6 8.6 8.3 8.0 7.8												
30.0 32.0 33.3 34.0	70.8 69.2 67.5	141.2 140.5 139.7	7.7 7.5 7.4	73.0 72.4	141.6 141.3	7.7 7.7									
36.0 38.0 40.0 42.0 44.0	65.8 64.1 62.3 60.6 58.8 56.9	138.8 137.8 136.8 135.7 134.5 133.2	7.2 7.1 7.0 6.8 6.7	70.8 69.1 67.5 65.8 64.1 62.3	140.7 139.9 139.1 138.2 137.2 136.2	7.6 7.5 7.4 7.2 7.1									
46.0 48.0 50.0 52.3 55.0 60.0	55.1 53.1 48.1 42.6	133.2 131.8 130.3 126.1 121.1	6.6 6.5 6.4 6.0	62.3 60.5 58.7 54.1 49.1	135.1 133.9 130.5 126.4	7.0 6.9 6.8 6.5	65.0 62.7 58.2	135.8 134.5	6.9 6.9 6.7						
65.0 70.0 74.6 75.0 77.0	36.5 29.3 19.8 16.3	121.1 114.9 107.0 95.7 91.4	5.5 5.0 4.5 4.1 3.5	49.1 43.7 37.7 30.8	121.6 115.6 108.1	6.3 6.1 5.9 5.6	53.5 48.5 43.0	131.6 128.1 123.9 119.0	6.7 6.5 6.3 6.2	55.0 54.6	125.0 124.7	5.5 5.4			
80.0 83.0 85.0 90.0 92.0	10.3	31.4	3.0	21.9 16.2	97.8 90.7	5.1 3.5	36.9 29.8 20.6 15.5	112.9 105.1 94.2 87.9	6.1 5.9 5.7 5.6	50.2 44.9 39.2	121.2 116.5 110.9	4.7 3.9 3.3			
95.0 100.0 101.0										32.5 24.3 22.3	103.9 94.5 92.1	2.7 2.1 2.0			



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 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]
				71.0 ו	m Pluma Cab	eza de p	ıl, Punto lumín (19 n] Posici	916-1) 3:	2.5 m Plı	eza de p umín	lumín				
12.4	78.0	105.7	31.7												
13.0	76.9	105.6	31.7												
14.0	75.1	105.3	31.0												
16.0	71.4	104.7	29.5												
18.0	67.6	103.9	27.9												
20.0	63.7	102.9	25.7												
21.4				73.0	104.4	27.7									
22.0	59.6	101.8	23.8	71.8	104.2	27.7									
24.0	55.4	100.5	21.6	68.0	103.4	26.8									
26.0	51.0	98.9	19.9	64.1	102.5	25.8									
28.0	46.2	97.1	18.6	60.1	101.4	24.8									
30.0	41.0	94.9	17.4	55.9	100.1	23.4									
32.0	35.1	92.3	16.4	51.5	98.6	22.4									
34.0	28.2	88.9	15.6	46.8	96.8	21.0									
35.3							65.0	100.7	21.1						
36.0	19.1	84.1	14.8	41.6	94.6	19.6	63.7	100.3	21.2						
38.0				35.8	92.0	18.5	59.7	99.2	20.4						
40.0				29.1	88.8	17.5	55.5	97.9	19.4						
42.0				20.3	84.2	16.6	51.0	96.4	18.6						
43.0 44.0				16.4	82.1	9.8	46.0	94.5	17.0						
							46.2		17.8						
46.0							41.0	92.4	17.0						
48.0 50.0							35.2 28.3	89.7 86.4	16.4 15.8						
50.0 51.8							26.3	00.4	15.8	55.0	93.3	12.5			
51.8							19.2	81.6	15.2	55.0	93.3	12.5			
52.0 55.0							19.2	81.6	15.2	47.9	90.8	12.2			
60.0										47.9 34.2	90.8 84.8	11.0			
64.0										15.4	75.1	10.1			



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

		gulo de 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]
				71.0 ו	m Pluma Cab	eza de p	ıl, Punto lumín (1 n] Posici	916-1) 3	5.5 m Pl	eza de p umín	lumín		_		
13.0	78.0	108.6	28.8												
14.0	76.4	108.4	28.6												
16.0	73.0	107.8	27.3												
18.0	69.6	107.1	25.9												
20.0	66.1	106.3	24.2												
22.0	62.5	105.3	22.8												
22.2				73.0	107.3	25.1									
24.0	58.7	104.1	21.1	70.0	106.6	24.6									
26.0	54.8	102.7	19.5	66.5	105.8	23.8									
28.0	50.7	101.2	18.2	62.9	104.8	23.0									
30.0	46.4	99.3	17.0	59.2	103.7	22.1									
32.0	41.6	97.2	16.0	55.3	102.3	21.0									
34.0	36.4	94.7	15.1	51.2 46.9	100.8	20.2									
36.0 36.6	30.4	91.5	14.4	46.9	99.0	19.1	65.0	103.4	20.0						
38.0	23.0	87.4	13.7	42.2	96.9	18.0	62.5	103.4	19.9						
39.0	18.2	87.4 84.6	13.7	42.2	96.9	18.0	62.5	102.7	19.9						
40.0	10.2	04.0	13.4	37.0	94.4	17.1	58.8	101.5	19.0						
42.0				31.1	94.4	16.3	54.9	101.5	18.1						
44.0				23.9	87.4	15.4	50.8	98.6	17.4						
46.0				15.6	82.5	8.9	46.4	96.8	16.7						
48.0				13.0	02.0	0.0	41.7	94.6	16.0						
50.0							36.5	92.1	15.4						
53.5							00.0	J		55.0	95.8	11.8	i		
55.0							18.3	82.1	14.1	52.2	94.7	11.8			
60.0										40.4	89.6	10.6			
65.0										24.8	81.4	9.6			
67.0										16.6	76.6	9.2			



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

360°

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

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

	88° Ángulo de pluma principal			83° Ángulo de pluma principal				gulo de principa			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]
	71.0 m Pluma principal, Punto de carga 1 - Cabeza de plumín Cabeza de plumín (1916-1) 38.5 m Plumín														
19.0 [m] Posición midfall (191															
13.6	78.0	111.6	26.5												
14.0	77.5	111.5	26.5												
16.0	74.4	111.0	25.4												
18.0	71.2	110.3	24.1												
20.0	68.1	109.5	22.9												
22.0	64.8	108.6	21.6												
23.1		407.0	00.0	73.0	110.1	22.9									
24.0 26.0	61.4 57.9	107.6 106.4	20.6 19.1	71.6 68.4	109.8 109.1	22.8 22.2				ł					
28.0	54.3	105.4	17.8	65.2	109.1	21.4									
30.0	50.5	103.4	16.8	61.8	107.1	20.8									
32.0	46.5	103.4	15.8	58.4	107.1	19.9									
34.0	42.2	99.5	14.9	54.8	104.6	19.1				i					
36.0	37.5	97.0	14.1	51.0	103.0	18.5				İ					
37.9							65.0	106.1	19.1	İ					
38.0	32.1	94.0	13.4	47.0	101.2	17.6	64.8	106.0	19.1						
40.0	25.8	90.3	12.8	42.7	99.2	16.7	61.5	105.0	18.6						
42.0	17.4	85.0	12.2	38.0	96.7	15.9	58.0	103.8	17.9						
44.0				32.8	93.8	15.3	54.4	102.4	17.0						
46.0				26.6	90.2	14.5	50.6	100.8	16.4						
48.0				18.6	85.2	13.8	46.6	99.0	15.8						
50.0							42.2	96.9	15.1						
55.0							29.2	89.7	13.9						
55.2										55.0	98.2	11.2			
58.0							17.6	82.5	13.2						
60.0										45.5	94.1	10.4			
65.0										33.5	87.8	9.4			
70.0						1		ı	1	17.7	78.2	8.4			



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

	88° Ángulo de pluma principal			83° Ángulo de pluma principal			75° Ángulo de pluma principal			65° Ángulo de pluma principal			45° Ángulo de pluma principal		
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
	71.0 m Pluma principal, Punto de carga 1 - Cabeza de plumín Cabeza de plumín (1916-1) 41.5 m Plumín 22.0 [m] Posición midfall (1916)														
<u> </u>						22.0 [m	ı] Posici	ón midfa	II (1916)						
14.3	78.0	114.5	23.5												
16.0	75.5	114.1	23.0												
18.0	72.7	113.5	21.8												
20.0	69.7	112.8	20.7												
22.0	66.7	111.9	19.6												
24.0	63.7	111.0	18.6	73.0	113.0	20.4									
26.0	60.5	109.9	17.8	70.1	112.3	20.0									
28.0	57.3	108.7	16.7	67.1	111.5	19.4									
30.0	53.9	107.2	15.8	64.0	110.5	18.7									
32.0	50.4	105.6	15.1	60.9	109.5	18.1									
34.0	46.6	103.8	14.3	57.7	108.2	17.3									
36.0	42.6	101.7	13.5	54.3	106.8	16.6									
38.0	38.3	99.3	12.8	50.8	105.3	16.1	05.0	400.0	47.0						
39.1	20.5	00.5	40.0	47.1	400.5	45.4	65.0	108.8	17.3						
40.0	33.5	96.5	12.2 11.7	47.1	103.5 101.4	15.4 14.7	63.7 60.6	108.4 107.3	17.7 17.1						
42.0	28.0 21.2	93.0 88.5	11.7	43.1 38.8			57.3	107.3	16.4						
44.0 45.0	16.7	88.5 85.5	10.9	38.8	99.1	14.1	57.3	106.1	16.4						
45.0 46.0	10.7	65.5	10.9	34.1	96.3	13.5	53.9	104.7	15.6						
48.0				28.7	92.9	12.9	50.4	104.7	15.0						
50.0				22.1	88.5	12.3	46.7	101.2	14.5						
51.0				17.9	85.7	12.0	40.7	101.2	14.5						
55.0				17.5	00.1	12.0	36.1	95.4	13.2						
57.0							00.1	JJ	10.2	55.0	100.7	10.6			
60.0							21.3	86.0	12.2	49.8	98.4	10.1			
61.0							16.9	83.0	12.0						
65.0										39.5	93.0	9.1			
70.0										28.1	86.1	8.2			
73.0										17.0	78.6	7.5			



 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]: 114.0 Lastre central [t]: 52.6

	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]
71.0 m Pluma principal, Punto de carga 1 - Cabeza de plumín Cabeza de plumín (1916-1) 44.5 m Plumín 25.0 [m] Posición midfall (1916)															
14.9	78.0	117.4	21.5												
16.0	76.5	117.2	21.4												
18.0	73.9	116.6	20.4												
20.0	71.1 68.4	116.0	19.4 18.5										ł		
22.0 24.0	65.6	115.2 114.3	17.5												
24.0	05.0	114.3	17.5	73.0	115.9	18.7									
26.0	62.7	113.3	16.7	71.5	115.5	18.6									
28.0	59.7	112.2	15.9	68.7	114.7	18.1									
30.0	56.7	110.9	15.2	65.9	113.9	17.5									
32.0	53.5	109.5	14.5	63.0	112.9	16.8									
34.0	50.2	107.9	14.0	60.1	111.8	16.3									
36.0	46.7	106.1	13.3	57.0	110.5	15.6									
38.0	43.0	104.0	12.6	53.9	109.1	15.0									
40.0	39.1	101.7	11.9	50.6	107.5	14.5									
40.4	04.7	00.0	44.4	47.4	405.7	40.0	65.0	111.5	16.9						
42.0 44.0	34.7 29.8	98.9 95.7	11.4 10.9	47.1 43.5	105.7 103.7	13.9 13.3	62.7 59.8	110.7 109.6	16.8 16.1				ł		
44.0 46.0	23.9	95.7	10.9	43.5 39.5	103.7	12.8	59.8 56.7	109.6	15.4				ł		
48.0	16.1	85.9	10.0	35.2	98.7	12.3	53.6	106.9	14.7						
50.0	10.1	00.0	10.0	30.4	95.5	11.8	50.3	105.3	14.2						
54.0				17.2	86.1	10.7									
55.0				İ			41.1	100.3	12.9				j		
58.7										55.0	103.1	10.0			
60.0							29.8	93.1	12.0	52.8	102.1	9.8			
64.0							16.3	83.4	11.2						
65.0										44.0	97.6	8.8	l		
70.0										34.8	92.0	8.0			
75.0										20.6	82.1	7.0			
76.0										16.4	79.0	6.8			



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

		gulo de principal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
	-			71.0 ו			ıl, Punto lumín (1			eza de p	lumín		_		
					Cub] Posici			u					
15.5	78.0	120.4	19.6												
16.0	77.4	120.3	19.6												
18.0	74.9	119.8	18.9												
20.0	72.4	119.1	18.1												
22.0	69.8	118.4	17.4												
24.0	67.2	117.6	16.7	70.0	118.7	17.2									
25.7 26.0	64.6	116.7	16.1	73.0 72.7	118.7	17.2									
28.0	61.8	115.7	15.6	70.1	117.9	16.9									
30.0	59.1	114.5	14.9	67.5	117.1	16.7									
32.0	56.2	113.2	14.1	64.9	116.2	16.2									
34.0	53.2	111.7	13.5	62.2	115.2	15.8									
36.0	50.1	110.1	13.0	59.4	114.1	15.4									
38.0	46.8	108.3	12.3	56.5	112.8	14.9									
40.0	43.4	106.3	11.6	53.5	111.3	14.5									
41.7							65.0	114.3	15.8						
42.0	39.7	104.0	11.1	50.5	109.7	14.1	64.6	114.1	15.8						
44.0	35.7	101.3	10.5	47.2	108.0	13.5	61.9	113.1	15.7						
46.0	31.2	98.2	10.1	43.8	105.9	12.9	59.1	111.9	15.1						
48.0	26.1	94.4	9.7	40.1	103.7	12.3	56.2	110.6	14.5						
50.0	19.7	89.5	9.3 9.1	36.2	101.1	11.9	53.2	109.2	13.9						
51.0 55.0	15.6	86.3	9.1	23.8	92.2	10.6	45.2	104.7	12.7						
55.0 57.0				23.6 16.6	92.2 86.5	10.6	45.2	104.7	12.7						
60.0				10.0	00.0	10.1	35.7	98.7	11.7						
60.4							55.7	55.7	11.1	55.0	105.6	9.4			
65.0							23.2	89.6	10.8	48.6	102.3	8.5			
67.0							15.7	83.8	10.5						
70.0										39.8	97.0	7.7			
75.0										28.9	89.5	6.7			
79.0										15.8	79.4	6.0			



Nº de ident.: 9842523/95738/

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

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

Ce O de Ce Fi Diumin Civil Diumin Civil Diumin Civil Diumin Civil Diumin Civil Diumin Civil Diumin Civil Diumin Civil Diumin Civil Diumin Civil Civi			gulo de principa			gulo de orincipa			gulo de principa			gulo de orincipa			gulo de orincipa	
Cabeza de plumín (1916-1) 50.5 m Plumín 19.0 [m] Posición midfall (1916) 18.1	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]
16.1 78.0 123.3 18.0 75.8 122.9 17.7 20.0 73.5 122.3 17.1 22.0 71.1 121.6 16.4 24.0 68.6 120.9 15.5 15.5 15.9 15.9 15.9 26.0 66.2 120.0 15.5 121.6 15.9 15.0 15.9 15.7 15.9 15.0 15.7 15.7 15.1 15.9 15.0 15.1 15.0 16.1 117.5 15.1 15.1 15.1 15.1					71.0		eza de p	lumín (1	916-1) 5	0.5 m Pl		lumín				
18.0 75.8 122.9 17.7 20.0 73.5 122.3 17.1 22.0 71.1 121.6 16.4 24.0 68.6 120.9 15.9 26.0 66.2 120.0 15.5 73.0 121.6 15.9 28.0 63.7 119.0 15.2 71.4 121.1 15.9 30.0 61.1 118.0 14.9 68.9 120.4 15.7 32.0 58.4 116.8 14.0 66.5 119.5 15.5 34.0 55.7 115.5 13.3 64.0 118.6 15.3 36.0 52.9 114.0 12.6 61.4 117.5 15.1 38.0 50.0 112.4 12.1 58.7 116.4 14.7 40.0 46.9 110.5 15.6 115.0 14.4 42.9 44.0 40.3 106.2 10.3 50.3 112.0 13.8 63.7 116.5	16.1	78.0	123.3	18.0	ı		10.0[11	1 1 1 00101		(1010)						I
20.0																
22.0 71.1 121.6 16.4 24.0 68.6 120.9 15.9 26.0 66.2 120.0 15.5 28.0 63.7 119.0 15.2 71.4 121.1 15.9 30.0 61.1 118.0 14.9 68.9 120.4 15.7 32.0 58.4 116.8 14.0 66.5 119.5 15.5 34.0 55.7 115.5 13.3 64.0 118.6 15.3 36.0 52.9 114.0 12.6 61.4 117.5 15.1 38.0 50.0 112.4 12.1 58.7 116.5 14.4 42.0 43.7 108.5 10.9 53.2 113.6 14.1 42.9 44.0 40.3 106.2 10.3 50.3 112.0 13.8 63.7 116.5 15.0 44.0 40.3 106.2 10.3 50.3 112.0 13.8 63.7 116.5 15.0 44.0 40.3 106.2 10.3 50.3 112.0 13.8 63.7 116.5 15.0 48.0 32.5 100.7 9.5 44.1 108.2 12.6 58.5 114.2 </td <td></td> <td>1</td> <td>ı</td> <td></td> <td>l</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>		1	ı		l											
24.0 68.6 120.9 15.9 26.0 66.2 120.0 15.5 73.0 121.6 15.9 28.0 63.7 119.0 15.2 71.4 121.1 15.9 30.0 61.1 118.0 14.9 68.9 120.4 15.7 32.0 58.4 116.8 14.0 66.5 119.5 15.5 34.0 55.7 115.5 13.3 64.0 118.6 15.3 38.0 52.9 114.0 12.6 61.4 117.5 15.1 38.0 50.0 112.4 12.1 58.7 116.4 14.7 40.0 46.9 110.5 11.5 56.0 115.0 14.4 42.0 43.7 108.5 10.9 53.2 113.6 14.1 42.9 44.0 40.3 106.2 10.3 50.3 112.0 13.8 63.7 116.5 15.0 46.0 36.5 103.7 9.9 47.3 110.2 13.2 61.1 115.4 14.8 48.					i											
26.0 66.2 120.0 15.5 73.0 121.6 15.9 28.0 63.7 119.0 15.2 71.4 121.1 15.9 30.0 61.1 118.0 14.9 68.9 120.4 15.7 32.0 58.4 116.8 14.0 66.5 119.5 15.5 34.0 55.7 115.5 13.3 64.0 118.6 15.3 38.0 52.9 114.0 12.6 61.4 117.5 15.1 38.0 52.9 110.5 11.5 58.7 116.4 14.7 40.0 46.9 110.5 11.5 56.0 115.0 14.4 42.0 43.7 108.5 10.9 53.2 113.6 14.1 42.9 44.0 40.3 106.2 10.3 50.3 112.0 13.8 63.7 116.5 15.0 46.0 36.5 103.7 9.9 47.3 110.2 13.2 61.1 115.4 14.8 48.0 32.5 100.7 9.5 44.1 108.2 12.6 58.5 114.2 14.3 50.0 27.9 97.2 9.1 40.7 106.0 12.0 55.8 </td <td></td> <td>1</td> <td></td> <td></td> <td>i</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>		1			i											
28.0 63.7 119.0 15.2 71.4 121.1 15.9 30.0 61.1 118.0 14.9 68.9 120.4 15.7 32.0 58.4 116.8 14.0 66.5 119.5 15.5 34.0 55.7 115.5 13.3 64.0 118.6 15.3 36.0 52.9 114.0 12.6 61.4 117.5 15.1 38.0 50.0 112.4 12.1 58.7 116.4 14.7 40.0 46.9 110.5 11.5 56.0 115.0 14.4 42.0 43.7 108.5 10.9 53.2 113.6 14.1 42.9 44.0 40.3 106.2 10.3 50.3 112.0 13.8 63.7 116.5 15.0 46.0 36.5 103.7 9.9 47.3 110.2 13.2 61.1 115.4 14.8 48.0 32.5 100.7 9.5 44.1 108.2 12.6 58.5 114.2 14.8 48.0 15.1 86.7 8.4 89.8 10.8 48.5 108.9 12.5 55.0 60.0 55.0 10.1 10.5 10.5 <td></td> <td>66.2</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>		66.2														
30.0	26.6				73.0	121.6	15.9									
32.0 58.4 116.8 14.0 66.5 119.5 15.5 15.5 134.0 55.7 115.5 13.3 64.0 118.6 15.3 15.1 15.1 15.1 15.1 15.1 15.1 15.1 15.1 15.1 15.1 15.1 15.1 15.1 15.1 15.0 15.0 15.0 14.4 15.0 14.4	28.0	63.7	119.0	15.2	71.4	121.1	15.9									
34.0 55.7 115.5 13.3 64.0 118.6 15.3 36.0 52.9 114.0 12.6 61.4 117.5 15.1 38.0 50.0 112.4 12.1 58.7 116.4 14.7 40.0 46.9 110.5 11.5 56.0 115.0 14.4 42.9 44.0 40.3 106.2 10.3 50.3 112.0 13.8 63.7 116.5 15.0 46.0 36.5 103.7 9.9 47.3 110.2 13.2 61.1 115.4 14.8 48.0 32.5 100.7 9.5 44.1 108.2 12.6 58.5 114.2 14.3 50.0 27.9 97.2 9.1 40.7 106.0 12.0 55.8 112.9 13.8 54.0 15.1 86.7 8.4 55.0 86.7 8.4 66.0 10.8 48.5 10.8 48.5 108.9 12.5 66.0 10.1 87.0 9.6 40.3 103.7 11.5 65.0 10.1 89.0 40.3 103.7 11.5 65.0 10.1 89.0 40.3 103.7 <td< td=""><td>30.0</td><td>61.1</td><td>118.0</td><td>14.9</td><td>68.9</td><td>120.4</td><td>15.7</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	30.0	61.1	118.0	14.9	68.9	120.4	15.7									
36.0 52.9 114.0 12.6 61.4 117.5 15.1 38.0 50.0 112.4 12.1 58.7 116.4 14.7 40.0 46.9 110.5 11.5 55.0 115.0 14.4 42.0 43.7 108.5 10.9 53.2 113.6 14.1 42.9 44.0 40.3 106.2 10.3 50.3 112.0 13.8 63.7 116.5 15.0 46.0 36.5 103.7 9.9 47.3 110.2 13.2 61.1 115.4 14.8 48.0 32.5 100.7 9.5 44.1 108.2 12.6 58.5 114.2 14.3 50.0 27.9 97.2 9.1 40.7 106.0 12.0 55.8 112.9 13.8 54.0 15.1 86.7 8.4 55.0 30.8 98.8 10.8 48.5 108.9 12.5 60.0 62.1 30.8 98.8 10.8 48.5 108.9 11.5 65.0 15.0 40.7 50.8 105.8 8.4 70.0 10.0 15.2 84.2 9.9 43.8 101.5 7.6 <td>32.0</td> <td>58.4</td> <td>116.8</td> <td>14.0</td> <td>66.5</td> <td>119.5</td> <td>15.5</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	32.0	58.4	116.8	14.0	66.5	119.5	15.5									
38.0 50.0 112.4 12.1 58.7 116.4 14.7 40.0 46.9 110.5 11.5 56.0 115.0 14.4 42.0 43.7 108.5 10.9 53.2 113.6 14.1 42.9 44.0 40.3 106.2 10.3 50.3 112.0 13.8 63.7 116.5 15.0 46.0 36.5 103.7 9.9 47.3 110.2 13.2 61.1 115.4 14.8 48.0 32.5 100.7 9.5 44.1 108.2 12.6 58.5 114.2 14.3 50.0 27.9 97.2 9.1 40.7 106.0 12.0 55.8 112.9 13.8 54.0 15.1 86.7 8.4 55.0 60.0 16.1 87.0 9.6 40.3 103.7 11.5 62.1 55.0 108.1 8.9 65.0 30.3 96.4 10.7 50.8 105.8 8.4 70.0 15.2 84.2 9.9 43.8 101.5 7.6	34.0	55.7	115.5	13.3	64.0	118.6	15.3									
40.0 46.9 110.5 11.5 56.0 115.0 14.4 42.0 43.7 108.5 10.9 53.2 113.6 14.1 42.9 44.0 40.3 106.2 10.3 50.3 112.0 13.8 63.7 116.5 15.0 46.0 36.5 103.7 9.9 47.3 110.2 13.2 61.1 115.4 14.8 48.0 32.5 100.7 9.5 44.1 108.2 12.6 58.5 114.2 14.3 50.0 27.9 97.2 9.1 40.7 106.0 12.0 55.8 112.9 13.8 54.0 15.1 86.7 8.4 55.0 30.8 98.8 10.8 48.5 108.9 12.5 60.0 16.1 87.0 9.6 40.3 103.7 11.5 65.0 30.3 96.4 10.7 50.8 105.8 8.4 70.0 15.2 84.2 9.9 43.8 101.5 7.6	36.0	52.9	114.0	12.6	61.4	117.5	15.1									
42.0 43.7 108.5 10.9 53.2 113.6 14.1 65.0 117.0 14.4 14.8 14.1 14.8 14.1 14.8 14.1 14.8 14.3	38.0	50.0	112.4		58.7	116.4										
42.9 44.0 40.3 106.2 10.3 50.3 112.0 13.8 63.7 116.5 15.0 46.0 36.5 103.7 9.9 47.3 110.2 13.2 61.1 115.4 14.8 48.0 32.5 100.7 9.5 44.1 108.2 12.6 58.5 114.2 14.3 50.0 27.9 97.2 9.1 40.7 106.0 12.0 55.8 112.9 13.8 54.0 15.1 86.7 8.4 55.0 30.8 98.8 10.8 48.5 108.9 12.5 60.0 62.1 55.0 115.1 55.0 108.1 8.9 65.0 30.3 96.4 10.7 50.8 105.8 8.4 70.0 15.2 84.2 9.9 43.8 101.5 7.6				-												
44.0 40.3 106.2 10.3 50.3 112.0 13.8 63.7 116.5 15.0 46.0 36.5 103.7 9.9 47.3 110.2 13.2 61.1 115.4 14.8 48.0 32.5 100.7 9.5 44.1 108.2 12.6 58.5 114.2 14.3 50.0 27.9 97.2 9.1 40.7 106.0 12.0 55.8 112.9 13.8 54.0 15.1 86.7 8.4 55.0 30.8 98.8 10.8 48.5 108.9 12.5 60.0 62.1 55.0 115.2 55.0 108.1 8.9 65.0 30.3 96.4 10.7 50.8 105.8 8.4 70.0 15.2 84.2 9.9 43.8 101.5 7.6		43.7	108.5	10.9	53.2	113.6	14.1									
46.0 36.5 103.7 9.9 47.3 110.2 13.2 61.1 115.4 14.8 48.0 32.5 100.7 9.5 44.1 108.2 12.6 58.5 114.2 14.3 50.0 27.9 97.2 9.1 40.7 106.0 12.0 55.8 112.9 13.8 54.0 15.1 86.7 8.4 55.0 30.8 98.8 10.8 48.5 108.9 12.5 60.0 16.1 87.0 9.6 40.3 103.7 11.5 62.1 55.0 108.1 8.9 65.0 30.3 96.4 10.7 50.8 105.8 8.4 70.0 15.2 84.2 9.9 43.8 101.5 7.6																
48.0 32.5 100.7 9.5 44.1 108.2 12.6 58.5 114.2 14.3 50.0 27.9 97.2 9.1 40.7 106.0 12.0 55.8 112.9 13.8 54.0 15.1 86.7 8.4 55.0 30.8 98.8 10.8 48.5 108.9 12.5 60.0 16.1 87.0 9.6 40.3 103.7 11.5 62.1 55.0 108.1 8.9 65.0 30.3 96.4 10.7 50.8 105.8 8.4 70.0 15.2 84.2 9.9 43.8 101.5 7.6																
50.0 27.9 97.2 9.1 40.7 106.0 12.0 55.8 112.9 13.8 54.0 15.1 86.7 8.4 55.0 30.8 98.8 10.8 48.5 108.9 12.5 60.0 16.1 87.0 9.6 40.3 103.7 11.5 65.0 30.3 96.4 10.7 50.8 105.8 8.4 70.0 15.2 84.2 9.9 43.8 101.5 7.6																
54.0 15.1 86.7 8.4 55.0 30.8 98.8 10.8 48.5 108.9 12.5 60.0 10.1 10.1 10.8 1									I							
55.0 30.8 98.8 10.8 48.5 108.9 12.5 60.0 16.1 87.0 9.6 40.3 103.7 11.5 62.1 55.0 108.1 8.9 65.0 30.3 96.4 10.7 50.8 105.8 8.4 70.0 15.2 84.2 9.9 43.8 101.5 7.6					40.7	106.0	12.0	55.8	112.9	13.8						
60.0 16.1 87.0 9.6 40.3 103.7 11.5 55.0 108.1 8.9 65.0 30.3 96.4 10.7 50.8 105.8 8.4 70.0 15.2 84.2 9.9 43.8 101.5 7.6	•	15.1	86.7	8.4												
62.1 30.3 96.4 10.7 50.8 105.8 8.4 70.0 15.2 84.2 9.9 43.8 101.5 7.6																
65.0 30.3 96.4 10.7 50.8 105.8 8.4 70.0 15.2 84.2 9.9 43.8 101.5 7.6					16.1	87.0	9.6	40.3	103.7	11.5		400.4				
70.0 15.2 84.2 9.9 43.8 101.5 7.6								00.0		40.7						
		-			-											
								15.2	84.2	9.9						
75.0																
80.0 82.0 22.5 85.9 15.3 79.8 5.5																



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]: 104.0 52.6 Lastre central [t]:

	88° Án	gulo de orincipal	pluma		gulo de orincipa			gulo de principa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				20.0 ו	m Pluma Cab	eza de p	lumín (2	de carga 316-1) 3 ón midfa	8.5 m Pl	eza de p umín	lumín		-		
11.9 12.0 13.0 14.0 16.0	78.0 77.8 76.3 74.7 71.6	60.6 60.6 60.3 60.1 59.4	61.6 61.6 58.5 50.5 39.9			_									
16.9 18.0 20.0 22.0 24.0	68.4 65.2 61.7 58.2	58.7 57.8 56.7 55.5	33.7 27.9 24.5 21.5	73.0 71.3 68.1 64.8 61.3	59.5 59.1 58.4 57.5 56.4	46.5 44.7 36.1 29.5 25.9									
24.7 26.0 28.0 30.0 32.0	54.7 51.0 47.0 42.7	54.2 52.6 50.8 48.8	19.1 17.5 16.0 14.6	57.8 54.1 50.6 46.5	55.1 53.7 52.2 50.4	22.4 19.6 17.9 16.4	65.0 62.8 59.2 55.6 51.9	56.8 56.2 55.0 53.6 52.1	33.0 30.9 26.9 23.3 20.4						
33.7 34.0 36.0 38.0 40.0	38.0 33.7 27.7 18.5	46.3 43.9 40.5 34.8	13.5 12.8 11.8 10.9	42.2 38.3 33.1 27.0	48.3 46.3 43.4 39.8	15.1 14.1 13.4 12.3	48.2 44.0 39.5 35.3	50.5 48.5 46.2 44.0	18.5 16.9 15.5 14.9	55.0 54.4 50.6 46.8 42.5	52.0 51.8 50.2 48.5 46.4	20.9 20.9 18.0 16.1 14.4			
42.0 44.0 45.0 46.0 48.0				19.1	34.9	11.2	29.6 22.6 18.2	40.7 36.5 33.7	13.7 12.4 11.8	38.7 33.5 27.5 19.8	44.4 41.6 38.1 33.3	13.2 12.4 11.3 10.2			
48.6 50.0 54.0													35.0 32.7 18.4	38.0 36.7 28.1	13.7 14.4 10.9



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		45° Án	gulo de orincipa	pluma I
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				20.0 ı		eza de p	lumín (2	316-1) 4	1.5 m Pl	eza de p umín	lumín				
						19.0 [m] Posici	on miata	11 (2316)						
12.5	78.0	63.5	56.4												
13.0	77.3	63.4	56.4												
14.0	75.9 73.0	63.2 62.6	50.3												
16.0 17.8	/3.0	62.6	40.7	73.0	62.4	43.1									
18.0	70.0	61.9	33.0	72.7	62.3	43.1									
20.0	67.1	61.1	27.6	69.7	61.6	35.8									
22.0	63.9	60.1	23.4	66.8	60.8	29.7									
24.0	60.8	59.0	20.9	63.6	59.8	25.1									
25.9	00.0	00.0	20.0	00.0	00.0	20	65.0	59.6	30.1						
26.0	57.6	57.8	18.7	60.4	58.7	22.4	64.9	59.5	30.1						
28.0	54.3	56.4	17.0	57.1	57.4	19.6	61.7	58.5	27.3						
30.0	50.8	54.9	15.7	53.9	56.1	17.5	58.5	57.3	23.6						
32.0	47.1	53.1	14.4	50.4	54.5	16.1	55.1	55.9	20.5						
34.0	43.1	51.0	13.3	46.7	52.6	14.8	51.6	54.4	18.2						
35.4										55.0	54.5	18.6			
36.0	39.6	49.1	12.2	42.7	50.6	13.7	48.2	52.7	16.7	54.0	54.0	18.5			
38.0	34.9	46.4	11.4	39.1	48.6	12.8	44.3	50.8	15.4	50.7	52.5	16.1			
40.0	28.7	42.5	10.7	34.4	45.8	12.1	40.2	48.5	14.2	47.6	51.0	15.1			
42.0	22.0	38.1	10.0	29.0	42.5	11.1	36.4	46.3	13.6	43.7	49.0	13.6			
43.0	17.8	35.2	9.6												
44.0				21.2	37.4	10.3	31.3	43.3	12.5	39.4	46.7	12.2			
45.0				16.8	34.3	9.9									
46.0							25.3	39.4	11.4	34.8	44.0	11.1			
48.0							17.5	34.1	10.3	29.5	40.7	10.1			
50.0										21.8	35.7	9.3			
51.0										17.5	32.8	8.9	25.0	20.0	12.2
51.1 55.0													35.0 25.5	39.8 33.8	12.2 10.8
55.0 57.0													25.5 17.7	33.6 28.5	9.4
37.0													17.7	20.0	9.4



2821-1

2821-1

 N° 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]: 104.0 Lastre central [t]: 52.6

		gulo de principa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				20.0 ו	m Pluma Cab	eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 4	4.5 m Pl		lumín				
13.1	78.0	66.5	51.5												
14.0	76.8	66.3	50.1												
16.0	74.2	65.7	40.4												
18.0	71.5	65.1	32.7												
18.7	00.7	04.0	00.5	73.0	65.2	39.2									
20.0 22.0	68.7 65.8	64.3 63.4	28.5 23.9	71.2 68.4	64.8 64.0	36.5 30.1				ł					
24.0	62.9	62.4	23.9	65.5	63.1	25.8									
26.0	59.9	61.3	18.2	62.6	62.1	22.2				i					
27.2	00.0	01.0	10.2	02.0	02.1	22.2	65.0	62.3	28.6	i					
28.0	57.0	60.1	16.7	59.6	61.0	19.6	63.8	61.9	28.2						
30.0	53.9	58.7	15.3	56.7	59.7	17.5	60.9	60.8	23.8						
32.0	51.1	57.4	14.9	53.5	58.3	15.9	57.8	59.5	20.9						
34.0	47.7	55.6	13.6	50.8	57.0	14.8	54.7	58.2	18.3						
36.0	44.1	53.6	12.4	47.3	55.2	13.7	51.6	56.7	16.6						
37.1										55.0	56.9	16.8			
38.0	40.2	51.4	11.3	43.7	53.2	12.6	48.2	55.0	15.3	53.8	56.4	16.5			
40.0	35.2	48.3	10.5	39.8	50.9	11.7	44.6	53.0	14.1	51.0	55.0	14.7			
42.0	30.4	45.1	9.9	34.7	47.7	11.0	41.4	51.2	13.0	47.6	53.3 51.3	14.1			
44.0 46.0	24.6 17.2	41.1 35.7	9.3 8.6	29.8 24.0	44.5 40.4	10.3 9.6	37.3 32.7	48.7 45.7	12.3 11.4	44.0 40.1	49.0	12.6 11.2			
48.0	17.2	35.7	0.0	16.2	34.7	8.9	26.5	45.7	10.6	35.8	49.0 46.4	10.0			
50.0				10.2	34.1	0.9	26.5 19.7	36.7	9.7	30.2	40.4	9.3			
51.0							15.3	33.4	9.3	00.2	72.7	0.0			
53.5										1			35.0	41.5	11.0
54.0										16.9	33.2	8.0			
55.0													32.8	40.1	11.2
60.0													15.5	27.8	8.4



2821-1

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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										
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				20.0 ו			ıl, Punto lumín (2:			eza de p	lumín				
					Cab		i Posici			umm					
13.7	78.0	69.4	46.9												
14.0	77.7	69.4	46.9												
16.0	75.2	68.8	39.9												
18.0	72.7	68.2	32.5												
19.5				73.0	68.1	35.6									
20.0	70.1	67.5	27.2	72.4	68.0	35.6									
22.0 24.0	67.5 64.8	66.7 65.8	23.8 20.3	69.8 67.2	67.2 66.4	29.6 25.9									
24.0 26.0	62.1	64.8	17.8	64.5	65.5	25.9									
28.0	59.4	63.7	16.3	61.8	64.4	19.4									
28.5	33.4	00.7	10.5	01.0	04.4	13.4	65.0	65.0	26.0						
30.0	56.5	62.4	14.9	58.9	63.3	17.3	62.9	64.2	24.4						
32.0	53.5	60.9	13.8	56.2	62.0	15.6	60.1	63.1	20.8						
34.0	51.0	59.6	13.3	53.7	60.8	14.4	57.2	61.8	18.4			İ			
36.0	47.7	57.9	12.2	50.6	59.2	13.8	54.4	60.5	16.5						
38.0	44.4	55.9	11.1	47.4	57.4	12.7	51.9	59.2	15.1						
38.8										55.0	59.4	15.2			
40.0	40.1	53.3	10.2	44.0	55.4	11.6	48.7	57.5	14.4	53.9	58.9	15.1			
42.0	36.2	50.6	9.5	39.7	52.8	10.7	45.4	55.6	13.2	50.9	57.3	14.1			
44.0	31.8	47.6	9.0	35.7	50.1	10.0	41.9	53.5	12.1	47.6	55.5	12.6			
46.0	26.7	43.9	8.4	31.3	47.0	9.4	38.0	51.0	11.2	44.3	53.5	11.3			
48.0	20.5	39.2	7.9	26.1	43.3	8.8	33.1	47.7	10.4	40.6	51.3	10.0			
49.0	16.6	36.1	7.6	10.0	38.4	8.2	28.3	44.2	9.7	36.0	48.3	9.1			
50.0 51.0				19.8 15.7	38.4 35.1	7.8	20.3	44.2	9.7	30.0	40.3	9.1			
54.0				10.1	JJ. I	1.0	16.3	35.0	7.8						
55.0							10.0	55.0	7.0	23.6	39.3	7.6			
56.0										20.0	55.5	7.0	35.0	43.2	9.9
57.0										16.3	33.6	7.0	23.0		2.0
60.0		<u></u>											25.7	36.5	8.6
63.0													16.5	29.4	7.0



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

Valor de vuelco: 2 - Vía ancha Lastre trasero [t]: 104.0 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]
				20.0 ı	m Pluma Cab	eza de p	II, Punto Ilumín (2 1] Posici	316-1) 5	0.5 m Plı	eza de p umín	lumín				
14.4	78.0	72.3	44.2												
16.0	76.1	72.0	40.1												
18.0 20.0	73.7 71.3	71.4 70.7	32.6 26.7												
20.0	/1.3	70.7	20.7	73.0	71.0	32.7									
22.0	68.9	70.0	23.6	71.1	70.4	30.3									
24.0	66.4	69.1	20.3	68.6	69.7	25.6									
26.0	63.9	68.2	17.7	66.2	68.8	22.2									
28.0	61.4	67.1	16.0	63.6	67.8	19.3									
29.7							65.0	67.7	23.9						
30.0	58.7	65.9	14.7	61.0	66.8	17.3	64.6	67.6	23.9						
32.0	56.0	64.6	13.6	58.5	65.6	15.6	62.1	66.5	21.3						
34.0 36.0	53.7 50.8	63.4 61.8	12.6 12.0	55.7 53.4	64.3 63.1	14.2 13.1	59.4 56.9	65.4 64.2	18.6 16.7						
38.0	47.8	60.1	11.0	50.5	61.5	12.4	54.1	62.7	15.0						
40.0	44.1	57.8	10.1	47.4	59.7	11.4	51.7	61.5	14.1						
40.6		01.0			00		0	01.0		55.0	61.8	13.9			
42.0	40.6	55.5	9.4	44.3	57.7	10.5	48.7	59.7	13.2	53.6	61.1	14.7	İ		
44.0	37.0	53.0	8.8	40.3	55.1	9.9	45.6	57.8	12.1	50.7	59.5	12.8			
46.0	32.9	50.1	8.3	36.6	52.5	9.3	42.3	55.7	11.1	47.7	57.8	11.4			
48.0	28.4	46.6	7.8	32.5	49.5	8.7	38.1	52.9	10.3	44.5	55.8	10.2			
50.0	23.1	42.3	7.3	27.9	46.0	8.2	34.2	50.1	9.6	41.1	53.6	9.1			
52.0	16.1	36.5	6.8	45.0	05.5	7.0									
54.0 55.0				15.2	35.5	7.0	21.9	40.5	8.0	30.6	46.0	7.5			
57.0							15.8	35.4	6.9	30.0	40.0	1.5			
58.4							13.0	55.4	0.9				35.0	44.9	8.9
60.0										15.8	34.0	6.2	32.9	43.4	8.8
65.0													18.6	32.0	6.9
66.0													16.0	29.8	6.2



2821-1

2821-1

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

Alcan-	4				principal	pluma I		gulo de orincipal			gulo de orincipa			guio de principa	pluma I
ce	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				20.0 r	n Pluma Cab	eza de p	ıl, Punto lumín (2: ı] Posici	316-1) 5	3.5 m Plı	eza de p umín	lumín				
15.0	78.0	75.3	40.6												
16.0	76.9	75.0	39.9												
18.0	74.7	74.5	31.9												
20.0	72.4	73.9	26.8												
21.3				73.0	73.8	30.1									
22.0	70.2	73.2	23.0	72.2	73.6	30.1									
24.0	67.8	72.4	20.0	69.9	72.9	26.0									
26.0	65.5	71.5	17.5	67.6	72.1	22.2									
28.0	63.1	70.5	15.7	65.2	71.2	19.3									
30.0	61.1	69.6	14.7	62.8	70.2	17.0									
31.0							65.0	70.4	22.0						
32.0	58.6	68.4	13.5	60.4	69.1	15.5	63.8	69.9	21.7						
34.0	56.0	67.1	12.4	57.9	67.9	14.0	61.3	68.9	18.7						
36.0	53.4	65.7	11.5	55.3	66.5	12.8	58.9	67.7	16.7						
38.0	50.6	64.1	10.7	53.1	65.3	11.9	56.4	66.4	15.0						
40.0	47.3	62.0	9.9	50.4	63.7	11.1	53.8	65.0	13.6						
42.0	44.3	60.0	9.2	47.5	61.9	10.2	51.5	63.7	12.8						
42.3										55.0	64.3	12.6			
44.0	41.1	57.8	8.5	44.0	59.6	9.5	48.7	62.0	11.9	53.3	63.4	13.1			
46.0	37.7	55.3	7.9	40.8	57.4	8.9	45.7	60.1	10.9	50.6	61.8	11.4			
48.0	34.0	52.5	7.4	37.3	54.8	8.4	42.6	58.0	10.0	47.7	60.0	10.2			
50.0	29.8	49.2	7.0	33.6	52.0	7.9	38.7	55.2	9.4	44.7	58.0	9.1			
55.0	15.6	36.9	5.9	21.8	42.2	6.6	29.0	47.6	7.9	35.8	51.6	7.3			
57.0				16.1	37.2	5.6	45.0	05.0	0.0	05.0	40.0	0.4			
60.0							15.3	35.8	6.0	25.0	42.9	6.1	05.0	40.0	0.0
60.9												- 1	35.0	46.6	8.0
63.0										15.4	34.4	5.4	00.7	40.0	7.0
65.0 69.0													26.7 15.5	40.0 30.2	7.0 5.4



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		45° Án	gulo de orincipa	pluma I
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				20.0 ı	m Pluma Cab	eza de p	al, Punto lumín (2 n] Posici	316-1) 5	6.5 m Pl	eza de p umín	lumín				
15.6	78.0	78.2	37.5												
16.0 18.0	77.6 75.5	78.1 77.6	37.5 31.9												
20.0	73.4	77.0	27.6												
22.0	71.3	76.4	22.9												
22.2				73.0	76.7	29.1									
24.0	69.1	75.6	19.8	71.0	76.1	26.6									
26.0	66.9	74.8	17.4	68.8	75.3	22.3									
28.0	64.7	73.9	15.5	66.6	74.5	19.4									
30.0	62.8	73.0	14.6	64.4	73.5	17.0									
32.0	60.4	71.9	13.7	62.1	72.5	15.4	05.0	70.4	00.4						
32.3 34.0	58.1	70.7	12.4	60.2	71.6	14.2	65.0 63.0	73.1 72.3	20.4 19.2						
36.0	55.6	69.4	11.3	57.8	70.4	12.9	60.8	71.2	16.8						
38.0	53.1	67.9	10.4	55.4	69.0	11.8	58.4	70.0	15.2						
40.0	50.1	66.0	9.8	52.9	67.6	10.9	56.4	68.9	13.8						
42.0	47.4	64.3	9.1	50.2	65.9	10.1	53.9	67.5	12.6						
44.0	44.5	62.3	8.4	47.1	63.8	9.4	51.3	65.9	11.7	55.0	66.8	11.6			
46.0	41.5	60.1	7.8	44.2	61.8	8.8	48.6	64.2	10.8	53.0	65.6	11.7			
48.0	38.3	57.7	7.3	41.2	59.6	8.2	45.9	62.3	9.9	50.4	64.0	10.3			
50.0	34.9	54.9	6.8	38.0	57.2	7.7	42.4	59.9	9.3	47.7	62.2	9.2			
55.0	24.4	45.9	5.8	28.6	49.4	6.6	34.1	53.4	7.9	39.8	56.6	7.3			
58.0 60.0	15.2	37.3	5.2	15.6	37.6	5.0	23.4	44.1	6.6	31.0	49.4	6.1			
62.0				0.01	37.0	5.0	23.4 17.4	38.6	6.0	31.0	49.4	0.1			
63.3							17.4	30.0	0.0				35.0	48.4	7.3
65.0										18.6	38.3	5.0	32.3	46.2	7.2
66.0										16.2	36.0	4.5	52.0		
70.0													20.8	35.9	5.7
72.0													15.1	30.6	4.8



N° de ident.: 9842523/95738/

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

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

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				20.0 ו		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 5	9.5 m Pli	eza de p umín	lumín				
16.2	78.0	81.2	34.7												
18.0	76.2	80.7	32.0												
20.0	74.3	80.2	27.0												
22.0	72.2	79.6	22.8												
23.0				73.0	79.6	25.7									
24.0	70.2	78.9	19.4	72.0	79.3	26.8									
26.0 28.0	68.1 66.0	78.1 77.2	17.1 15.3	70.0 67.9	78.6 77.8	22.4 19.4							ł		
30.0	63.9	77.2 76.3	13.8	65.8	77.8 76.9	17.0									
32.0	62.1	75.4	13.6	63.7	76.9 75.9	15.2									
33.5	02.1	75.4	10.2	03.7	75.5	15.2	65.0	75.9	18.9						
34.0	59.9	74.2	12.0	61.9	75.0	14.8	64.5	75.6	18.9				i		
36.0	57.6	73.0	10.8	59.6	73.9	13.3	62.3	74.6	17.0						
38.0	54.9	71.4	9.9	57.4	72.7	11.9	60.5	73.7	15.1						
40.0	52.5	69.9	9.2	55.0	71.3	10.7	58.3	72.5	14.8						
42.0	50.0	68.3	8.6	52.6	69.8	9.8	56.0	71.2	13.1						
44.0	47.4	66.5	8.0	49.7	67.9	9.1	53.6	69.7	11.7						
45.7										55.0	69.2	10.6			
46.0	44.7	64.5	7.5	47.1	66.1	8.5	51.2	68.2	10.6	54.8	69.1	10.8			
48.0	41.9	62.4	7.0	44.4	64.1	7.9	48.6	66.5	9.7	52.8	67.9	10.4			
50.0	38.9	60.0	6.5	41.6	61.9	7.4	45.5	64.2	9.1	50.3	66.2	9.1			
55.0	30.2 18.3	52.6 41.2	5.6 4.7	33.6	55.3	6.3	38.2	58.6	7.6	43.2	61.1 54.9	7.2 5.9			
60.0 61.0	16.0	38.9	4.7 4.1	23.3	45.8	5.3	29.5	51.0	6.5	35.5	54.9	5.9	ł		
63.0	16.0	36.9	4.1	15.2	37.9	4.3									
65.0				13.2	31.8	4.3	17.0	39.0	5.2	26.0	46.3	4.9			
65.8							17.0	55.0	0.2	20.0	70.0	7.0	35.0	50.1	6.5
69.0										15.8	36.4	3.8	33.0	30.1	0.5
70.0												0.0	27.5	43.4	5.7
74.0													17.1	33.4	4.7



Nº de ident.: 9842523/95738/

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

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

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				20.0 ו		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 6	2.5 m Pli	eza de p umín	lumín				
16.9	78.0	84.1	32.3												
18.0	76.9	83.8	32.1												
20.0	75.1	83.3	26.7												
22.0	73.1	82.7	22.9												
23.9			10.0	73.0	82.5	25.0									
24.0	71.2	82.0	19.3	72.9	82.4	25.0									
26.0	69.2 67.2	81.3	16.8	71.0	81.8	22.9									
28.0 30.0	65.2	80.5 79.6	15.1 13.6	69.0 67.0	81.0 80.2	19.4 17.1									
32.0	63.5	78.8	12.5	65.0	79.3	15.2									
34.0	61.5	77.7	11.8	63.3	78.4	13.9									
34.8	01.5	,,,,	11.0	00.0	70.4	15.5	65.0	78.6	17.6						
36.0	59.3	76.5	10.6	61.2	77.4	13.3	63.8	78.0	17.5						
38.0	57.2	75.3	9.6	59.1	76.2	11.9	61.7	77.0	15.3						
40.0	54.6	73.7	8.9	56.9	74.9	10.7	60.0	76.0	14.2						
42.0	52.3	72.2	8.2	54.7	73.5	9.6	57.8	74.8	13.3						
44.0	49.9	70.5	7.7	52.0	71.8	9.0	55.6	73.4	11.8						
46.0	47.4	68.7	7.2	49.7	70.1	8.4	53.4	72.0	10.6						
47.4										55.0	71.7	9.8			
48.0	44.9	66.8	6.7	47.2	68.3	7.8	51.0	70.4	9.6	54.9	71.6	10.1			
50.0	42.2	64.6	6.3	44.6	66.3	7.3	48.2	68.4	9.0	52.6	70.1	9.4			
55.0	34.7	58.2	5.3	37.6	60.5	6.2	41.6	63.3	7.5	46.1	65.4	7.3			
60.0	25.4	49.4	4.6 3.6	29.1	52.8	5.2	34.1	56.7	6.4	39.3	59.9	5.8			
64.0	15.6	39.3	3.6	17.1	40.7	4.3	24.6	47.7	5.3	31.2	52.7	4.8			
65.0 68.0				17.1	40.7	4.3	16.5	39.4	4.6	31.2	52.1	4.0			
68.3							10.5	39.4	4.0				35.0	51.8	5.8
70.0										20.5	42.2	3.9	32.5	49.5	5.8
72.0										15.4	36.8	3.3	02.0		0.0
75.0													22.3	39.6	4.6
77.0													16.7	33.8	4.2



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

Radio de descarga: 360°

2 - Vía ancha

Cabeza de pluma principal: 2821-1

2821-1

Valor de vuelco: Lastre trasero [t]: 104.0 52.6 Lastre central [t]:

		gulo de principa			gulo de orincipa			gulo de orincipa		65° Án	gulo de orincipa	pluma I		gulo de principa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				20.0 ו	m Pluma Cab	eza de p	ıl, Punto ılumín (2: ı] Posici	316-1) 6	5.5 m Pl	eza de p umín	lumín				
17.5 18.0 20.0 22.0 24.0	78.0 77.6 75.8 73.9 72.1	87.0 86.9 86.4 85.9 85.2	29.8 29.8 26.9 22.6 19.2												
24.8 26.0 28.0 30.0 32.0	70.2 68.3 66.4 64.8	84.5 83.7 82.9 82.1	16.6 14.9 13.4 12.2	73.0 71.9 70.0 68.1 66.2	85.3 84.9 84.2 83.4 82.6	23.3 23.3 19.6 17.0 15.1									
34.0 36.0 36.1 38.0 40.0	62.9 60.9 58.5 56.4	81.1 80.0 78.6 77.3	11.2 10.3 9.4 8.6	64.3 62.7 60.7 58.6	81.6 80.8 79.7 78.5	13.6 12.7 11.7 10.5	65.0 63.2 61.5	81.3 80.4 79.5	16.2 15.5 14.2						
42.0 44.0 46.0 48.0 49.2	54.3 52.1 49.8 47.5	75.9 74.4 72.8 71.0	7.9 7.3 6.8 6.4	56.6 54.1 51.9 49.6	77.2 75.6 74.0 72.4	9.5 8.7 8.1 7.5	59.5 57.4 55.3 53.1	78.3 77.1 75.7 74.2	13.1 11.9 10.6 9.5	55.0	74.1	9.0			
50.0 55.0 60.0 65.0 67.0	45.0 38.4 30.6 20.2 15.2	69.0 63.3 55.9 45.1 39.7	6.0 5.0 4.3 3.6 3.0	47.2 40.9 33.6 24.4	70.6 65.3 58.6 49.4	7.0 5.9 5.0 4.1	50.5 44.5 37.8 29.9	72.4 67.7 61.9 54.3	8.8 7.3 6.1 5.2	54.2 48.6 42.4 35.4	73.6 69.6 64.6 58.2	9.1 7.1 5.7 4.6			
68.0 70.0 70.7 71.0 75.0 80.0				16.7	41.2	3.6	19.1 16.1	43.1 39.8	4.2 3.9	26.8 15.0	49.8 37.2	3.8	35.0 28.1 16.3	53.5 46.8 34.2	5.2 4.6 3.5



Lastre trasero [t]: 104.0 Lastre central [t]: 52.6

Nº de ident.:	9842523/95738/	Pieza de articulación de pluma principal:	2821-1
Radio de descarga:	360 °	Cabeza de pluma principal:	2821-1
Valor de vuelco:	2 - Vía ancha		

		gulo de principa	Ī	ı	gulo de orincipa	ľ	ı	gulo de principa	ľ	1	gulo de orincipa	ĺ	l	gulo de orincipa	pluma I
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				20.0 ו		eza de p	il, Punto lumín (2: n] Posici	316-1) 6	8.5 m Pli	eza de p umín	lumín				
18.1	78.0	90.0	27.6												
20.0	76.4	89.5	26.4												
22.0	74.7	89.0	22.2												
24.0	72.9	88.4	19.1												
25.7	74.4	07.7	10.5	73.0	88.2	22.0									
26.0	71.1	87.7	16.5	72.7	88.1	22.0									
28.0	69.6 67.8	87.1	15.1	70.9	87.4 86.7	20.0									
30.0 32.0	66.0	86.3 85.4	13.8 12.3	69.1 67.4	85.7 85.9	17.1 15.2									
34.0	64.2	84.5	11.1	65.8	85.9 85.1	13.6									
36.0	62.3	83.4	10.1	64.0	84.2	12.4									
37.3	02.5	00.4	10.1	04.0	04.2	12.7	65.0	84.0	15.1						
38.0	60.0	82.1	9.3	62.1	83.1	11.6	64.4	83.7	15.2						
40.0	58.1	80.9	8.5	60.2	82.0	10.5	62.9	82.9	15.1						
42.0	56.1	79.6	7.8	58.2	80.8	9.4	60.9	81.8	13.4						
44.0	54.0	78.2	7.2	55.9	79.2	8.6	59.0	80.6	12.0						
46.0	51.9	76.6	6.7	53.8	77.8	7.9	57.0	79.3	10.8						
48.0	49.8	75.0	6.2	51.7	76.3	7.4	55.0	78.0	9.6						
50.0	47.5	73.2	5.8	49.5	74.6	6.9	52.6	76.2	8.7						
50.9										55.0	76.6	8.3			
55.0	41.5	68.0	4.9	43.7	69.8	5.7	47.1	71.9	7.2	50.8	73.5	7.2			
60.0	34.6	61.5	4.2	37.2	63.8	4.8	41.0	66.7	6.0	45.1	68.9	5.7			
65.0	26.3	52.9	3.5	29.5	56.1	4.1	34.0	60.1	5.1	38.8	63.3	4.5			
69.0	17.0	42.5	3.0												
70.0				19.2	44.8	3.3	25.5	51.1	4.2	31.4	56.0	3.7			
71.0				16.4	41.6	3.1							05.0		4.7
73.2 74.0							15.0	40.3	3.4				35.0	55.3	4.7
74.0 75.0							15.8	40.3	3.4	22.0	45.9	2.9	32.6	52.8	4.6
75.0 77.0										16.8	45.9 40.1	2.9	32.0	32.0	4.0
80.0										10.0	40.1	2.0	23.5	43.2	3.6
83.0													15.9	34.7	3.1



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

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



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

842523/95738/	Pieza de articulación de pluma principal:	2821-1
360 °	Cabeza de pluma principal:	2821-1
2 Vía ancha		

		gulo de orincipa			gulo de principa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				20.0 ו		eza de p	al, Punto dumín (2 n] Posici	316-1) 7	7.5 m Pl	eza de p umín	lumín				
20.0	78.0	98.8	21.4												
22.0	76.5	98.3	20.8												
24.0	75.0	97.8	18.0												
26.0	73.4	97.2	16.0												
28.0	71.8	96.5	14.0												
28.3				73.0	96.8	18.1									
30.0	70.5	96.0	12.8	71.7	96.2	17.9									
32.0	69.0	95.2	11.9	70.1	95.5	15.6									
34.0	67.4	94.4	10.5	68.8	94.9	14.1									
36.0	65.7	93.5	9.3	67.2	94.1	13.1									
38.0	63.8	92.4	8.4	65.6	93.2	11.4									
40.0	62.2	91.3	7.7	63.9	92.2	10.0									
41.1							65.0	92.2	12.0						
42.0	60.5	90.2	7.1	62.3	91.2	8.9	64.6	91.9	12.4						
44.0	58.7	89.0	6.5	60.6	90.1	8.1	62.9	90.9	11.9						
46.0	57.0	87.8	5.9	58.6	88.7	7.4	61.3	89.9	10.7						
48.0	55.2	86.4	5.4	56.8	87.4	6.7	59.6	88.7	9.5						
50.0	53.4	84.9	5.0	55.0	86.0	6.1	57.8	87.5	8.6						
55.0	48.6	80.8	4.1	50.3	82.2	5.0	53.0	83.7	6.7						
56.0										55.0	84.0	6.2			
60.0	43.4	75.9	3.4	45.3	77.6	4.1	48.2	79.6	5.5	51.4	81.1	5.5			
65.0	37.7	70.0	2.8	39.8	72.0	3.3	43.0	74.6	4.5	46.5	76.6	4.3			
70.0	31.1	62.6	2.3	33.6	65.2	2.7	37.2	68.6	3.6	40.9	71.1	3.2			
75.0							30.5	61.0	2.9	35.1	64.9	2.5			
80.0							22.0	50.7	2.2						
80.5													35.0	60.4	3.1
85.0													29.0	53.5	2.6
88.0	l												24.6	48.2	2.1



2821-1

2821-1

Nº de ident.: 9842523/95738/

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

738/ Pieza de articulación de pluma principal: 660 ° 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]
				20.0 ו	m Pluma Cab	eza de p	ıl, Punto lumín (2: ı] Posici	316-1) 8	0.5 m Pl	eza de p umín	lumín		-		
	70.0	1017	40.5			J - 1.0 [11	l ji osici	I	11 (2310)	1		ı			
20.6 22.0	78.0 77.0	101.7 101.4	19.5 19.5												
24.0	75.5	101.4	17.7							ł					
26.0	74.0	100.3	15.8							i					
28.0	72.5	99.7	14.0							Ī					
29.2	72.0	00.7	1 1.0	73.0	99.7	17.0									
30.0	71.3	99.1	12.6	72.4	99.4	17.0				i					
32.0	69.8	98.4	11.5	70.9	98.7	16.1				İ					
34.0	68.2	97.6	10.4	69.6	98.1	14.0									
36.0	66.7	96.8	9.2	68.1	97.3	13.0									
38.0	64.9	95.7	8.3	66.5	96.5	11.5									
40.0	63.3	94.7	7.5	65.0	95.6	10.1									
42.0	61.7	93.7	6.9	63.4	94.6	8.9									
42.4							65.0	94.9	11.3						
44.0	60.0	92.5	6.3	61.5	93.3	8.0	64.0	94.3	11.5						
46.0	58.4	91.3	5.8	59.9	92.2	7.3	62.4	93.3	10.7						
48.0	56.7	90.0	5.3	58.2	91.0	6.6	60.8	92.2	9.5						
50.0	55.0	88.7	4.8	56.5	89.7	6.0	59.2	91.0	8.6						
55.0	50.5	84.8	3.9	52.1	86.0	4.8	54.6	87.5	6.7						
57.8	45.0	00.0	0.0	47.4	04.7	0.0	50.4	20.0	- 1	55.0	86.4	5.7			
60.0	45.6	80.2	3.2	47.4	81.7	3.9	50.1	83.6	5.4	53.1	84.9	5.5			
65.0 70.0	40.4	74.8	2.6	42.3 36.4	76.6 70.2	3.2 2.5	45.2 39.9	78.9 73.4	4.4 3.5	48.5 43.5	80.7 75.8	4.2 3.3			
70.0 75.0				30.4	70.2	2.5	39.9	66.7	2.8	43.5 38.0	75.8	2.4			
80.0							26.8	58.0	2.0	36.0	70.0	2.4			
83.0							20.0	30.0	2.2				35.0	62.1	2.6
85.0													32.4	59.1	2.6
89.0										ĺ			27.4	53.0	2.0



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

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

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

		gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				20.0 ו		eza de p	ıl, Punto ılumín (2: ı] Posici	316-1) 8	6.5 m Pli	eza de p umín	lumín				
21.8	78.0	107.6	16.8												
22.0	77.9	107.5	16.8												
24.0	76.5	107.1	16.6												
26.0	75.2	106.5	15.1												
28.0	74.0	106.1	14.3												
30.0	72.6	105.5	12.6												
30.9				73.0	105.4	14.9									
32.0	71.2	104.8	11.1	72.3	105.1	14.9									
34.0 36.0	69.8 68.4	104.1 103.3	9.9	70.9 69.7	104.4 103.8	14.2 12.5									
38.0	66.7	103.3	8.9 8.0	68.3	103.8	11.4									
40.0	65.3	102.3	7.2	66.8	103.0	10.2									
42.0	63.8	101.4	6.5	65.4	102.1	8.9									
44.0	62.3	99.4	6.0	63.9	101.2	7.8									
44.9	02.5	33.4	0.0	00.0	100.5	7.0	65.0	100.3	9.6						
46.0	60.8	98.3	5.5	62.2	99.1	7.1	64.3	99.8	9.8						
48.0	59.3	97.1	5.0	60.6	98.0	6.4	63.0	99.0	9.3						
50.0	57.7	95.9	4.5	59.1	96.8	5.8	61.3	97.8	8.5						
55.0	53.7	92.4	3.5	55.1	93.5	4.5	57.4	94.7	6.7						
60.0	49.4	88.4	2.8	51.0	89.7	3.6	53.4	91.2	5.1						
61.2										55.0	91.3	4.6			
65.0	44.9	83.7	2.3	46.6	85.3	2.8	49.1	87.2	4.1	52.0	88.6	4.2			
70.0				41.8	80.1	2.1	44.5	82.4	3.2	47.6	84.3	3.1			
75.0							39.3	76.5	2.4	42.9	79.3	2.3			
76.0										41.7	77.9	2.1			
87.9													35.0	65.6	2.0
89.0													34.0	64.3	2.1



N° de ident.: 9842523/95738/ Pie

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

Valor de vuelco: 2 - Vía ancha Lastre trasero [t]: 104.0 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]
				20.0 ו		eza de p	lumín (2	316-1) 8	9.5 m Pl	eza de p umín	lumín				
						43.0 [m] Posici	on midta	II (2316)						
22.5	78.0	110.5	14.6												
24.0	77.0	110.2	14.6												
26.0	75.7	109.7	13.8												
28.0	74.4	109.1	13.0												
30.0	73.2	108.6	12.0												
31.8				73.0	108.3	13.3									
32.0	71.9	108.0	10.6	72.9	108.2	13.3									
34.0	70.5	107.3	9.4	71.5	107.6	13.1									
36.0	69.2	106.5	8.5	70.2	106.8	12.0									
38.0	67.8	105.7	7.6	69.0	106.2	10.9									
40.0	66.4	104.9	6.8	67.6	105.4	10.2									
42.0	64.7	103.8	6.2	66.2	104.5	8.9									
44.0	63.3	102.8	5.6	64.8	103.6	7.7									
46.0	61.8	101.7	5.1	63.4	102.6	6.8	05.0	400.4	0.0						
46.2	00.0	400.0	4.6	61.7	101.4	0.4	65.0	103.1	8.8						
48.0	60.3	100.6	-			6.1	64.0	102.4	8.8						
50.0	58.8 55.0	99.4 96.1	4.2 3.2	60.2 56.4	100.2 97.1	5.5 4.2	62.6 58.6	101.3 98.2	8.2 6.6						
55.0 60.0	50.9	96.1	2.5	56.4 52.4	97.1	3.2	58.6	98.2	4.9						
62.9	50.9	92.2	2.5	52.4	93.4	3.2	54.7	94.9	4.9	55.0	93.8	4.0			
65.0				48.2	89.2	2.5	50.6	91.0	3.7	53.4	92.3	3.9			
68.0				46.2 45.6	86.4	2.5	50.6	91.0	3.7	55.4	92.3	3.9			
70.0				45.0	00.4	Z. I	46.3	86.5	2.9	49.2	88.2	2.9			
75.0							41.6	81.2	2.5	45.2	84.0	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 principa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				20.0 ו		eza de p	ıl, Punto lumín (2: ı l Posici	316-1) 9:	2.5 m Pli	eza de p umín	lumín		_		
23.1	78.0	113.4	13.3				<u> </u>								
24.0	77.5	113.2	13.3												
26.0	76.2	112.8	12.9												
28.0	74.9	112.2	12.3										İ		
30.0	73.6	111.6	11.8												
32.0	72.3	111.0	10.4												
32.7				73.0	111.1	12.1									
34.0	71.0	110.3	9.2	72.2	110.7	12.1									
36.0	69.6	109.6	8.3	70.8	110.0	11.8									
38.0	68.3	108.8	7.5	69.5	109.3	10.6									
40.0	67.2	108.1	6.7	68.4	108.7	9.8									
42.0	65.6	107.1	6.0	67.1	107.8	9.0									
44.0	64.2	106.1	5.4	65.7	106.9	7.8									
46.0 47.5	62.8	105.1	4.9	64.3	106.0	6.8	65.0	105.8	8.2						
47.5	61.4	104.0	4.5	63.0	105.0	6.0	64.6	105.8	8.2						
50.0	60.0	104.0	4.5	61.3	103.0	5.4	63.2	105.5	8.0						
55.0	56.3	99.7	3.1	57.6	103.7	4.1	59.7	104.5	6.5						
60.0	52.4	96.1	2.4	53.9	97.2	3.1	56.0	98.5	5.0						
64.7	02.3	55.1	2.7	00.0	07. <u>L</u>	0.1	00.0	00.0	0.0	55.0	96.2	3.6			
65.0				49.9	93.2	2.4	52.1	94.9	3.7	54.7	96.0	3.6			
67.0				48.2	91.5	2.1									
70.0							48.5	91.1	2.7	50.8	92.1	2.9			
74.0							44.6	86.7	2.1						



N° de ident.: 9842523/95738/

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

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

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				20.0 i	m Pluma Cab	eza de p	ıl, Punto llumín (2 ı] Posici	316-1) 9	5.5 m Pli	eza de p umín	lumín				
23.8	78.0	116.4	12.2												
24.0	77.9	116.3	12.2												
26.0 28.0	76.6 75.4	115.8 115.3	12.0 11.6										ł		
30.0	75.4	114.8	11.0										i		
32.0	72.9	114.2	10.2												
33.6	. 2.0			73.0	114.0	11.1									
34.0	71.6	113.5	9.0	72.7	113.9	11.1							İ		
36.0	70.3	112.8	8.0	71.5	113.2	11.0									
38.0	69.0	112.0	7.2	70.2	112.5	10.3									
40.0	67.7	111.2	6.5	68.9	111.7	9.3									
42.0	66.4	110.4	5.8	67.8	111.1	8.6									
44.0	65.1	109.5	5.2	66.5	110.2	7.6									
46.0	63.7	108.5	4.6	65.2	109.3	6.6									
48.0	62.4	107.4	4.2	63.6	108.1	5.9	25.0	108.5	7.0						
48.7 50.0	61.0	106.3	3.8	62.3	107.1	5.2	65.0 64.2	108.5	7.6 7.6						
55.0	57.5	106.3	2.8	58.8	107.1	3.9	60.7	107.9	6.3				ł		
60.0	37.3	103.3	2.0	55.2	104.2	2.9	57.5	103.2	4.9						
65.0				51.4	97.1	2.1	53.9	99.0	3.5						
66.4				1						55.0	98.7	3.1			
70.0							49.7	94.6	2.6	52.3	96.0	2.9			
73.0							47.6	92.4	2.1	49.9	93.5	2.2			



Nº de ident.: 9842523/95738/

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

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		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]
	20.0 m Pluma principal, Punto de carga 1 - Cabeza de plumín Cabeza de plumín (2316-1) 98.5 m Plumín 52.0 [m] Posición midfall (2316)														
24.4	78.0	119.3	11.3												
26.0	77.0	118.9	11.2												
28.0	75.8	118.4	10.9												
30.0	74.6	117.9	10.7												
32.0	73.4	117.3	10.1												
34.0	72.2	116.7	8.9												
34.5				73.0	116.9	10.2									
36.0	70.9	116.0	7.8	72.1	116.4	10.2									
38.0	69.7 68.4	115.3 114.5	7.0	70.8 69.6	115.7 115.0	10.0 9.1									
40.0 42.0	67.2	114.5	6.3 5.6	68.3	115.0	8.4									
44.0	65.9	112.8	5.0	67.1	113.3	7.6									
46.0	64.6	111.8	4.5	65.8	112.4	6.7									
48.0	63.3	110.8	4.0	64.5	111.5	5.8									
50.0	62.0	109.8	3.6	63.2	110.5	5.1	65.0	111.2	7.0						
55.0	58.6	106.9	2.7	60.1	108.0	3.8	61.7	108.7	6.2						
60.0				56.4	104.6	2.8	58.3	105.7	5.0						
64.0				53.5	101.7	2.1									
65.0							55.1	102.7	3.5						
68.1										55.0	101.2	2.7			
70.0							51.2	98.5	2.5	53.6	99.8	2.7			
73.0										51.8	97.8	2.2			



Nº de ident.: 9842523/95738/

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° Ángulo de pluma principal				gulo de orincipa			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]
	20.0 m Pluma principal, Punto de carga 1 - Cabeza de plumín Cabeza de plumín (2316-1) 101.5 m Plumín 55.0 [m] Posición midfall (2316)														
25.0	78.0	122.2	10.4												
26.0	77.4	122.0	10.4												
28.0	76.3	121.5	10.2												
30.0	75.1	121.0	9.9												
32.0	73.9	120.4	9.7												
34.0	72.7	119.8	8.7												
35.3				73.0	119.8	9.4									
36.0	71.5	119.2	7.6	72.6	119.5	9.4									
38.0	70.3	118.5	6.8	71.4	118.9	9.3									
40.0	69.1	117.7	6.1	70.2	118.2	8.8									
42.0	67.9	116.9	5.4	69.0	117.4	8.1									
44.0	66.7	116.0	4.8	67.8	116.6	7.6									
46.0	65.4	115.1	4.3	66.5	115.7	6.7									
48.0	64.2	114.2	3.8	65.3	114.8	5.8									
50.0	62.9	113.2	3.4	64.0	113.9	5.0									
51.3							65.0	113.9	6.4						
55.0	59.9	110.6	2.4	60.8	111.2	3.7	62.6	112.1	6.0	l					
57.0	58.6	109.4	2.1		400.4	0.0	50.4	400.0	4.0						
60.0				57.8	108.4	2.6	59.4	109.2	4.8						
63.0				55.5	106.1	2.1	50.0	400.0	0.5						
65.0							56.3	106.3	3.5		400.0	0.0			
69.8							50.0	400.7	0.0	55.0	103.6	2.3			
70.0							52.8	102.7 101.6	2.3	54.9	103.5	2.3			
71.0							51.8	101.6	2.2	50.0	404.0	0.4			
73.0										52.8	101.3	2.1			



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		83° Ángulo de pluma principal				gulo de orincipa			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]
	20.0 m Pluma principal, Punto de carga 1 - Cabeza de plumín Cabeza de plumín (2316-1) 104.5 m Plumín 46.0 [m] Posición midfall (2316)														
25.6	78.0	125.2	9.7												
26.0	77.8	125.1	9.7												
28.0	76.7	124.6	9.6										<u> </u>		
30.0	75.5	124.1	9.4												
32.0	74.4	123.6	9.1												
34.0	73.2	123.0	8.5												
36.0	72.1	122.3	7.5												
36.2				73.0	122.6	8.7									
38.0	70.9	121.6	6.6	72.0	122.0	8.7									
40.0	69.7	120.9	5.9	70.8	121.4	8.6									
42.0	68.6	120.1	5.3	69.6	120.6	7.9									
44.0	67.4	119.3	4.7	68.4	119.8	7.4									
46.0	66.2	118.4	4.2	67.3	119.0	6.8									
48.0	65.2	117.7	3.6	66.1	118.1	5.9									
50.0	63.7	116.5	3.2	64.8	117.2	5.1									
52.5							65.0	116.6	5.9						
55.0	60.6	113.9	2.3	61.7	114.6	3.6	63.5	115.4	5.8						
56.0	60.2	113.5	2.1												
60.0				58.8	112.0	2.5	60.4	112.7	4.6						
62.0				57.5	110.7	2.1									
65.0							57.4	109.9	3.5						
70.0							54.1	106.5	2.3						
71.0							53.4	105.7	2.1						



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

360°

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

2821-1 2821-1

2 - Vía ancha Valor de vuelco: Lastre trasero [t]: 104.0 52.6 Lastre central [t]:

	88° Ángulo de pluma principal			83° Ángulo de pluma principal				gulo de orincipa			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]
	20.0 m Pluma principal, Punto de carga 1 - Cabeza de plumín Cabeza de plumín (2316-1) 107.5 m Plumín 49.0 [m] Posición midfall (2316)														
26.3	78.0	128.1	8.7												
28.0	77.0	127.7	8.7												
30.0	75.9	127.2	8.5												
32.0	74.8	126.7	8.2												
34.0	73.7	126.1	8.0												
36.0	72.6	125.5	7.1												
37.1				73.0	125.5	7.7									
38.0	71.5	124.8	6.3	72.5	125.2	7.7							<u> </u>		
40.0	70.3	124.1	5.6	71.4	124.5	7.7									
42.0	69.2	123.4	5.1	70.2	123.8	7.3									
44.0	68.0	122.6	4.5	69.1	123.1	6.9									
46.0	66.9	121.7	3.9	67.9	122.3	6.6									
48.0	65.7	120.8	3.4	66.8	121.4	5.8									
50.0	64.5	119.9	3.0	65.6	120.5	5.0									
53.8							65.0	119.4	5.3						
55.0	61.5	117.3	2.1	62.6	118.0	3.4	64.3	118.8	5.3						
60.0				59.8	115.5	2.3	61.3	116.2	4.4						
61.0				58.9	114.6	2.2									
65.0							58.4	113.5	3.5						
70.0							55.2	110.2	2.2						
71.0							54.6	109.5	2.0						



Nº de ident.: 9842523/95738/

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

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

		gulo de pluma principal		83° Ángulo de pluma principal				gulo de orincipa			gulo de principa		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]
	20.0 m Pluma principal, Punto de carga 1 - Cabeza de plumín Cabeza de plumín (2316-1) 110.5 m Plumín 52.0 [m] Posición midfall (2316)														
26.9	78.0	131.0	7.9												
28.0	77.4	130.8	7.9												
30.0	76.3	130.3	7.7												
32.0	75.3	129.8	7.5												
34.0	74.2	129.2	7.3												
36.0	73.1	128.6	6.7	70.0	400.4	7.0									
38.0	72.0 70.9	128.0 127.3	5.9	73.0	128.4 127.7	7.0									
40.0 42.0	69.8	127.3	5.3 4.8	71.9 70.8	127.7	7.0 6.8									
44.0	68.7	125.8	4.3	69.7	126.3	6.5									
46.0	67.6	125.0	3.8	68.6	125.5	6.2									
48.0	66.6	124.3	3.2	67.4	124.7	5.8									
50.0	65.3	123.2	2.8	66.3	123.8	5.0							i		
55.0		į -		63.4	121.4	3.3					İ	İ	İ		
55.1							65.0	122.1	4.8						
60.0				60.7	118.9	2.2	62.1	119.6	4.3						
61.0				60.1	118.4	2.0									
65.0							59.4	117.0	3.3						
70.0							56.3	113.8	2.2						



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		83° Ángulo de pluma principal				gulo de orincipa			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]
	23.0 m Pluma principal, Punto de carga 1 - Cabeza de plumín Cabeza de plumín (2316-1) 38.5 m Plumín 16.0 [m] Posición midfall (2316)														
12.0	78.0	63.6	64.7												
13.0	76.4	63.4	62.9												
14.0	74.9	63.1	58.4												
16.0	71.8	62.5	49.1												
17.3				73.0	62.5	53.4									
18.0	68.6	61.7	42.6	71.8	62.2	53.2									
20.0	65.3	60.8	35.2	68.7	61.5	46.4									
22.0	61.9	59.8	30.1	65.4	60.6	38.8									
24.0	58.4	58.6	26.6	62.1	59.6	33.0	05.0	59.7	00.4						
25.4 26.0	54.7	57.2	23.6	58.6	58.4	28.7	65.0 64.1	59.7	30.1 42.0						
28.0	51.2	55.7	23.6	55.0	56. 4 57.1	25.3	60.7	59.5 58.4	37.0						
30.0	47.2	53.7	19.7	51.0	55.4	23.0	57.2	57.1	32.7						
32.0	42.9	51.9	18.1	47.3	53.7	21.0	53.6	55.7	28.2				i		
34.0	38.3	49.5	16.7	43.0	51.7	19.3	49.4	54.0	25.6						
34.9	00.0	10.0	10.7	10.0	01	10.0		01.0	20.0	55.0	54.7	29.6			
36.0	33.0	46.6	15.5	38.4	49.3	17.9	45.3	52.0	23.0	53.0	53.9	28.9			
38.0	26.9	43.0	14.6	33.2	46.4	16.7	41.3	50.1	20.9	49.1	52.2	24.8	i		
40.0	19.0	38.1	13.6	27.1	42.9	15.5	36.4	47.5	19.2	44.9	50.3	21.7			
41.0	15.5	35.8	13.0												
42.0				19.3	38.0	14.3	31.0	44.4	17.8	40.9	48.3	19.2			
43.0				15.8	35.8	13.7				<u> </u>			<u> </u>		
44.0							24.4	40.5	16.4	36.0	45.7	17.3			
46.0							15.2	34.6	14.9	30.5	42.5	15.9			
48.0										23.7	38.5	14.6			
50.0										16.1	33.7	13.4			
50.7													35.0	40.2	17.2
55.0													22.0	32.4	15.4
56.0													19.0	30.6	15.0