

2821-1

2821-1

 $N^{\circ}$  de ident.: 9842523/95738/ Pieza de articulación de pluma principal: Radio de descarga: 360  $^{\circ}$  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]
				50.0 i		eza de p	ıl, Punto lumín (2 ı ] Posici	316-1) 6	5.5 m Pli	eza de p umín	lumín				
18.5	78.0	117.0	24.2												
20.0	76.7	116.7	24.2												
22.0	74.9	116.1	22.6												
24.0	73.0	115.5	20.9												
26.0	71.2	114.9	18.8												
28.0	69.3	114.1	17.2												
28.4				73.0	115.1	22.1									
30.0	67.4	113.3	15.9	71.6	114.6	21.9									
32.0	65.5	112.4 111.5	14.6	69.7 67.8	113.9 113.1	21.4 20.9									
34.0 36.0	63.6 61.6	110.4	13.6 12.8	65.9	113.1	19.8									
38.0	59.6	109.3	12.0	64.0	111.2	18.6									
40.0	57.5	109.5	11.2	62.0	110.2	17.6									
42.0	55.4	106.7	10.5	60.0	109.1	16.6									
43.8							65.0	110.3	15.9						
44.0	53.2	105.2	9.8	57.9	107.8	15.3	64.9	110.2	16.2						
46.0	51.0	103.6	9.3	55.8	106.5	14.2	62.9	109.2	16.0						
48.0	48.7	101.9	8.8	53.7	105.1	13.1	60.9	108.1	15.2						
50.0	46.3	100.0	8.3	51.5	103.5	12.3	58.9	106.9	14.5						
55.0	39.9	94.6	7.1	45.6	99.0	10.5	53.6	103.5	13.0						
60.0	32.3	87.6	6.3	39.0	93.4	8.9	47.9	99.4	11.8						
61.8										55.0	101.3	9.5			
65.0	22.7	77.8	5.5	31.3	86.2	7.8	41.6	94.3	10.6	51.7	99.0	9.5			
68.0	15.4	69.9	4.6												
70.0				21.3	75.9	6.7	34.5	87.8	9.7	45.8	94.6	8.7			
72.0				15.6	69.7	6.3	05.0	70.0	0.0	20.0	00.7	7.0			
75.0 79.0							25.6 15.4	79.0 68.0	8.9 8.3	39.0	88.7	7.6			
79.0 80.0							15.4	00.0	0.3	32.2	82.4	6.5			
85.0										22.5	72.5	5.6			
87.0										17.2	66.8	5.2			



N° de ident.: 9842523/95738/ Pie

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

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

		gulo de orincipal			gulo de orincipa			gulo de principa			gulo de orincipa			gulo de principa	
Alcan- ce [ m ]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]
				50.0 ו		eza de p	ıl, Punto lumín (2 ı ] Posici	316-1) 6	8.5 m Pl		lumín				
19.1	78.0	119.9	22.0												
20.0	77.3	119.7	22.0												
22.0	75.5	119.2	21.3							•					
24.0	73.8	118.7	20.3												
26.0	72.1	118.0	18.5												
28.0	70.3	117.3	16.8												
29.3				73.0	118.0	20.2									
30.0	68.5	116.6	15.6	72.4	117.8	20.1									
32.0	66.7	115.7	14.4	70.6	117.1	19.8									
34.0	64.8	114.8	13.4	68.9	116.3	19.3									
36.0	63.0	113.8	12.5	67.0	115.5	18.9									
38.0	61.1	112.7	11.8	65.2	114.6	17.9									
40.0	59.1	111.6	11.0	63.3	113.6	17.1									
42.0	57.1	110.3	10.3	61.4	112.5	16.4									
44.0	55.1	108.9	9.6	59.5	111.4	15.4	25.0	440.0	45.0						
45.1	50.0	407.4	0.0	57.5	440.4	440	65.0	113.0	15.3						
46.0	53.0 50.9	107.4	9.0	57.5	110.1	14.2	64.2 62.3	112.6 111.6	15.3						
48.0 50.0	48.7	105.9 104.1	8.5 8.1	55.5 53.5	108.8 107.3	13.1 12.2	60.4	110.4	15.0 14.2						
55.0	42.8	99.2	7.0	48.0	107.3	10.4	55.4	107.3	12.7						
60.0	36.2	93.0	6.0	42.1	98.1	8.9	50.2	107.3	11.5						
63.6	30.2	33.0	0.0	44.1	90. i	0.9	30.2	100.4	11.5	55.0	103.8	8.9			
65.0	28.2	84.9	5.3	35.3	91.8	7.6	44.4	98.7	10.4	53.6	103.8	9.2			
70.0	17.1	72.7	4.6	27.1	83.3	6.7	38.0	92.9	9.4	48.2	98.7	8.4			
71.0	15.0	70.3	4.1	27	00.0	0.1	00.0	02.0	0.4	-10.2	00.7	0.7			
75.0	.5.0	. 5.0		15.3	70.1	5.7	30.5	85.4	8.7	42.0	93.4	7.4			
80.0						<b>.</b>	20.6	74.7	7.9	35.2	87.0	6.3			
82.0							16.1	69.6	7.0	00.2	00	0.0			
85.0										28.0	79.7	5.4			
90.0										16.8	67.3	4.5			



N° de ident.: 9842523/95738/ P

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

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

		gulo de 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]
				50.0		eza de p	lumín (2	de carga 316-1) 7 ón midfa	1.5 m Pli	eza de p umín	lumín				
19.8	78.0	122.9	20.5												
20.0	77.8	122.8	20.5												
22.0	76.2	122.3	20.2												
24.0	74.5	121.8	19.2												
26.0	72.8	121.2	18.1												
28.0	71.1	120.5	16.5												
30.0	69.4	119.8	15.3												
30.2				73.0	120.8	18.9									
32.0	67.7	119.0	14.1	71.5	120.2	18.8									
34.0	66.0	118.1	13.1	69.8	119.5	18.4									
36.0	64.2	117.2	12.1	68.1	118.7	18.0									
38.0	62.4	116.1	11.4	66.3	117.9	17.4									
40.0	60.6	115.0	10.7	64.5	116.9	16.6									
42.0	58.7	113.8	10.0	62.7	115.9	15.9									
44.0	56.8	112.6	9.3	60.9	114.8	15.4									
46.0	54.8	111.2	8.7	59.1	113.7	14.3	05.0		44.5						
46.4	50.0	400.7	0.0	o	440.4	40.0	65.0	115.7	14.5						
48.0 50.0	52.8 50.8	109.7 108.1	8.2 7.8	57.2 55.2	112.4 111.0	13.2 12.2	63.6 61.8	114.9 113.9	14.5 14.0						
55.0	45.4	103.5	6.7	50.2 50.2	107.2	10.3	57.1	110.9	12.5						
60.0	39.4	98.0	5.8	44.7	107.2	8.7	52.1	107.3	11.2						
65.0	32.4	90.9	5.0	38.6	96.8	7.4	46.8	107.3	10.1						
65.3	32.4	30.3	3.0	30.0	30.0	7.4	40.0	102.3	10.1	55.0	106.2	8.4	i		
70.0	23.8	81.4	4.4	31.5	89.6	6.5	41.0	97.7	9.1	50.3	102.7	8.1	i		
73.0	16.7	73.1	4.0												
75.0	1.2			22.6	79.6	5.6	34.4	91.1	8.4	44.7	97.8	7.0			
78.0				15.9	71.7	4.6									
80.0							26.4	82.4	7.7	39.2	92.8	6.0			
85.0							15.7	70.0	6.4	32.3	85.7	5.1			
90.0										23.6	76.1	4.2			
93.0										16.5	67.7	3.7			

Source:a9841388



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		65° Án I	gulo de orincipa	pluma I		gulo de orincipa	
Alcan- ce [ m ]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]
	-	2		50.0 ו	n Pluma	principa	I, Punto	de carga	1 - Cab	eza de p	lumín		-		-
					Cab		lumín (2: 1] Posici			umin					
20.4	78.0	125.8	19.2												
22.0	76.7	125.4	19.2												
24.0	75.1	124.9	18.3												
26.0	73.5	124.3	17.6												
28.0	71.9	123.7	16.1												
30.0	70.3	123.0	14.8												
31.1				73.0	123.7	17.8									
32.0	68.7	122.2	13.9	72.3	123.4	17.8									
34.0	67.0	121.4	12.8	70.6	122.7	17.5									
36.0	65.3	120.5	11.9	69.0	122.0	17.2									
38.0	63.6	119.5	11.1	67.3	121.2	16.9									
40.0	61.9	118.5	10.4	65.6	120.3	16.2									
42.0	60.1	117.3	9.8	63.9	119.3	15.5									
44.0	58.3	116.1	9.1	62.2	118.3	14.9									
46.0	56.5	114.8	8.5	60.4	117.2	14.3	25.0	110.1	40.4						
47.6			0.0	<b>50 7</b>	440.0	40.0	65.0	118.4	13.4						
48.0	54.6 52.7	113.4	8.0 7.5	58.7 56.8	116.0	13.2 12.2	64.7	118.3	13.7						
50.0 55.0	47.6	111.9 107.7	6.5	50.8	114.7 111.0	10.2	63.0 58.6	117.3 114.4	13.7 12.2						
60.0	42.1	107.7	5.6	47.0	106.7	8.7	53.9	111.0	10.9						
65.0	36.0	96.3	4.8	41.4	100.7	7.4	49.0	107.0	9.9						
67.0	30.0	30.5	7.0	71.7	101.5	7.4	43.0	107.0	3.3	55.0	108.7	7.8			
70.0	28.7	88.3	4.2	35.2	95.1	6.3	43.6	102.2	8.9	52.2	106.7	7.8			
75.0	19.0	76.7	3.6	27.7	86.7	5.5	37.7	96.2	8.1	47.0	102.1	6.7			
76.0	16.4	73.5	3.5				l								
80.0	1	1 2.2		17.5	74.5	4.6	30.7	88.8	7.4	42.0	97.4	5.7			
81.0				15.6	72.1	4.1									
85.0							21.9	78.5	6.8	35.8	91.1	4.8			
88.0							15.4	70.4	5.8						
90.0										28.5	83.1	3.9			
95.0										18.7	71.4	3.2			
96.0										16.1	68.1	3.0			



Nº de ident.: 9842523/95738/

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

Valor de vuelco: Lastre trasero [ t ]:

Lastre central [ t ]:

2 - Vía ancha 124.0

52.6

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

		gulo de 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]
				50.0 i		eza de p	II, Punto Iumín (2: I Posici	316-1) 7	7.5 m Pli	eza de p umín	lumín				
21.1	78.0	128.7	17.1												
22.0	77.3	128.5	17.1												
24.0	75.8	128.0	16.6												
26.0	74.2	127.5	16.0												
28.0	72.7	126.9	15.0												
30.0	71.1	126.2	13.9												
32.0	69.5	125.5	13.0	73.0	126.6	15.7									
34.0	67.9	124.7	12.1	71.4	125.9	15.6									
36.0	66.3	123.8	11.2	69.8	125.2	15.3									
38.0	64.6	122.8	10.4	68.2	124.4	14.9									
40.0	63.0	121.8	9.8	66.6	123.5	14.6									
42.0	61.3	120.8	9.2	65.0	122.6	14.1									
44.0	59.6	119.6	8.6	63.3	121.6	13.7									
46.0	57.8	118.4	8.0	61.6	120.6	13.4									
48.0	56.0	117.0	7.5	59.9	119.4	12.7									
48.9							65.0	121.2	12.7						
50.0	54.2	115.6	7.0	58.2	118.2	11.8	64.1	120.6	12.7						
55.0	49.5	111.6	6.0	53.7	114.7	9.7	59.9	117.9	11.5						
60.0	44.3	106.8	5.2	48.9	110.6	8.2	55.4	114.7	10.3						
65.0	38.7	101.1	4.4	43.7	105.8	7.0	50.8	110.8	9.3						
68.7			0.0	20.0		5.0	45-	400.0		55.0	111.1	7.3			
70.0	32.2	93.9	3.8	38.0	99.9	5.9	45.7	106.3	8.4	53.8	110.2	7.3			
75.0 79.0	24.2 15.2	84.3 72.8	3.3	31.3	92.5	5.1	40.2	100.8	7.6	49.0	106.1	6.3			
79.0 80.0	15.2	12.8	2.8	23.1	82.5	4.3	34.0	94.0	6.9	44.4	101.8	5.3			
84.0				15.3	72.5	3.5	34.0	94.0	0.9	44.4	101.8	5.3			
84.0 85.0				15.3	12.5	ა.၁	26.5	85.3	6.3	38.8	96.1	4.4			
90.0							26.5 16.1	72.1	5.7	38.8	96.1 89.0	3.6			
91.0							15.1	70.8	5.7	32.4	09.0	3.0			
95.0							13.1	'0.0	0.0	24.5	79.7	2.8			
99.0										15.8	68.5	2.3			



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

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

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

		gulo de principa		83° Án I	gulo de orincipa	pluma I		gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [ m ]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]
				50.0 ı	m Pluma Cab	eza de p	il, Punto Ilumín (2 n] Posici	316-1) 8	0.5 m Plı	eza de p umín	lumín				
21.7 22.0 24.0 26.0 28.0 30.0 32.0	78.0 77.8 76.3 74.8 73.3 71.8 70.3	131.7 131.6 131.1 130.6 130.0 129.4 128.7	15.6 15.6 15.3 14.8 14.4 13.4 12.6												
32.9 34.0 36.0 38.0 40.0 42.0 44.0	68.8 67.2 65.7 64.1 62.5 60.8	127.9 127.1 126.2 125.2 124.2 123.1	11.9 11.0 10.2 9.5 8.9 8.4	73.0 72.1 70.6 69.1 67.5 66.0 64.4	129.4 129.1 128.4 127.6 126.8 125.9 125.0	14.3 14.3 14.1 13.8 13.6 13.2 12.9									
46.0 48.0 50.0 50.2 55.0 60.0 65.0	59.2 57.5 55.8 51.3 46.5 41.3	121.9 120.6 119.3 115.5 111.1 105.8	7.8 7.3 6.8 5.8 5.0 4.2	62.8 61.2 59.5 55.2 50.7 45.9	124.0 122.9 121.7 118.4 114.6 110.1	12.7 12.5 11.7 9.6 8.1 6.9	65.0 61.1 56.9 52.5	123.9 121.4 118.3 114.7	12.0 11.2 10.0 9.0						
70.0 70.4 75.0 80.0 82.0 85.0 87.0	35.5 28.7 19.8 16.6	99.3 91.2 79.8 75.5	3.6 3.1 2.6 2.2	40.7 34.7 27.8 18.5 15.0	98.0 89.6 77.6 72.9	5.8 4.9 4.2 3.5 3.0	47.8 42.7 37.1 30.6	110.4 105.4 99.3 91.7	7.4 6.7 6.1	55.0 50.9 46.6 41.4	113.6 110.1 106.1 100.8	6.8 6.2 5.2 4.3			
90.0 93.0 95.0 100.0							22.5 15.8	81.4 72.5	5.6 5.2	35.7 28.9 20.2	94.5 86.4 75.3	3.5 2.7 2.0			



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

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

		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]
				50.0 ו		eza de p	II, Punto Ilumín (2 I Posici	316-1) 8	3.5 m Pli	eza de p umín	lumín				
	700	1010	440			37.0[11	i j Fusici		11 (2310)						
22.3	78.0	134.6	14.3												
24.0	76.8 75.4	134.2 133.7	14.3 13.9												
26.0 28.0	75.4	133.7	13.9												
30.0	72.5	132.5	12.9												
32.0	71.1	131.8	12.9												
33.7	/ 1.1	131.0	12.1	73.0	132.3	13.4									
34.0	69.6	131.1	11.4	73.0	132.3	13.4									
36.0	68.1	130.3	10.7	71.3	131.6	13.4							i		
38.0	66.6	129.5	9.9	69.9	130.8	13.0									
40.0	65.1	128.5	9.2	68.4	130.1	12.8									
42.0	63.5	127.6	8.6	66.9	129.2	12.6									
44.0	62.0	126.5	8.1	65.4	128.3	12.2		İ				İ	İ		
46.0	60.4	125.4	7.6	63.9	127.3	12.0									
48.0	58.8	124.2	7.0	62.3	126.3	11.8									
50.0	57.2	122.9	6.6	60.7	125.2	11.6									
51.4							65.0	126.6	11.3						
55.0	52.9	119.3	5.5	56.7	122.1	9.5	62.2	124.8	11.0						
60.0	48.5	115.2	4.7	52.4	118.5	7.9	58.3	121.9	9.8						
65.0	43.6	110.3	4.0	47.9	114.2	6.7	54.1	118.4	8.8						
70.0	38.3	104.4	3.3	43.0	109.2	5.6	49.7	114.4	7.9						
72.2										55.0	116.1	6.3			
75.0	32.3	97.2	2.8	37.6	103.2	4.7	44.9	109.7	7.1	52.6	113.9	5.8			
80.0	25.0	87.8	2.3	31.5	95.8	4.0	39.8	104.2	6.4	48.5	110.2	4.8			
85.0				24.0	86.1	3.3	34.0	97.4	5.9	43.7	105.3	3.9			
89.0				15.7	74.7	2.8									
90.0							27.1	88.7	5.3	38.5	99.5	3.1			
95.0 96.0							19.3 17.1	78.3	4.5	32.5	92.4	2.4			
96.0							17.1	75.1	4.4	20.0	89.0	2.1			
97.0										29.8	89.0	2.1			



2821-1

2821-1

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

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

	88° Án I	gulo de principa	pluma I		gulo de orincipa			gulo de principa			gulo de orincipa		45° Án	gulo de orincipa	pluma I
Alcan- ce [ m ]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]
				50.0		eza de p	al, Punto olumín (2: n] Posici	316-1) 8	6.5 m Pl	eza de p umín	lumín		_		
22.9	78.0	137.5	13.3				Ī								
24.0	77.3	137.3	13.3	i			İ			İ					
26.0	75.9	136.8	13.1												
28.0	74.5	136.3	12.8	1											
30.0	73.1	135.7	12.5												
32.0	71.7	135.0	11.7												
34.0	70.3	134.3	11.0												
34.6				73.0	135.2	12.5									
36.0	68.9	133.6	10.5	72.0	134.7	12.5									
38.0	67.5	132.7	9.7	70.6	134.0	12.3									
40.0	66.0	131.9	9.0	69.2	133.3	12.1									
42.0	64.5	130.9	8.3	67.8	132.5	11.9									
44.0	63.1	129.9	7.8	66.3	131.6	11.7									
46.0	61.5	128.8	7.3	64.8	130.7	11.4									
48.0	60.0	127.7	6.9	63.4	129.7	11.2									
50.0	58.5	126.5	6.4	61.8	128.6	11.0									
52.7				•			65.0	129.3	10.6						
55.0	54.4	123.1	5.3	58.0	125.7	9.5	63.3	128.2	10.6	•					
60.0	50.2	119.2	4.5	53.9	122.2	7.9	59.5	125.4	9.5						
65.0	45.7	114.6	3.8	49.7	118.2	6.6	55.5	122.1	8.5						
70.0	40.8	109.2	3.1	45.1	113.5	5.5	51.4	118.4	7.7						
73.9										55.0	118.5	5.8			
75.0	35.4	102.7	2.6	40.2	108.0	4.6	46.9	114.0	6.9	54.1	117.7	5.5			
80.0	29.0	94.6	2.1	34.7	101.4	3.8	42.1	108.8	6.2	50.3	114.1	4.5			
85.0				28.2	93.0	3.2	36.9	102.6	5.6	45.8	109.6	3.6			
90.0				19.9	81.6	2.6	30.8	95.0	5.1	40.9	104.2	2.8			
92.0				15.4	75.1	2.3									
95.0							24.4	86.4	4.3	35.5	97.8	2.1			
00.0	1	ı	1		1	1	16 0	75.6	27		1			1	1

Source:a9841388



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]
				50.0 i		eza de p	II, Punto Ilumín (2: Il Posici	316-1) 8	9.5 m Pli	eza de p umín	lumín				
23.6	78.0	140.5	12.2												
24.0	77.7	140.4	12.2												
26.0	76.4	139.9	12.0												
28.0	75.1	139.4	11.8												
30.0	73.7	138.8	11.6												
32.0	72.4	138.2	11.0												
34.0	71.0	137.5	10.4												
35.5				73.0	138.1	11.4									
36.0	69.6	136.8	10.0	72.7	137.9	11.4									
38.0	68.3	136.0	9.4	71.3	137.2	11.3									
40.0	66.9	135.1	8.7	69.9	136.5	11.1									
42.0	65.5	134.2	8.1	68.5	135.7	10.9									
44.0	64.0	133.3	7.5	67.2	134.9	10.7									
46.0	62.6	132.2	7.0	65.7	134.0	10.4									
48.0	61.1	131.2	6.6	64.3	133.0	10.2									
50.0	59.6	130.0	6.1	62.9	132.0	10.0									
54.0							65.0	132.0	9.8						
55.0	55.8	126.8	5.1	59.2	129.2	9.0	64.3	131.5	9.8						
60.0	51.8	123.1	4.2	55.3	125.9	7.5	60.6	128.9	9.2						
65.0	47.6	118.7	3.5	51.3	122.1	6.4	56.8	125.8	8.3						
70.0	43.0	113.7	2.9	47.0	117.7	5.4	52.9	122.2	7.4						
75.0	38.0	107.7	2.3	42.4	112.6	4.4	48.7	118.0	6.7						
75.6										55.0	121.0	5.0			
80.0				37.4	106.5	3.6	44.2	113.2	6.0	51.8	118.0	4.2			
85.0				31.7	99.1	3.0	39.4	107.5	5.4	47.6	113.7	3.3			
90.0				24.8	89.6	2.4	34.0	100.7	4.8	43.1	108.7	2.5			
93.0										40.2	105.3	2.0			
95.0							28.4	93.3	4.0						
100.0							20.6	82.1	3.3						
102.0							16.5	76.0	3.0						



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 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]
				50.0 ו		eza de p	ıl, Punto lumín (2 ı ] Posici	316-1) 9	2.5 m Pli	eza de p umín	lumín				
24.2	78.0	143.4	11.2												
26.0	76.8	143.0	11.2												
28.0	75.6	142.5	10.9												
30.0	74.3	141.9	10.7												
32.0	73.0	141.3	10.4												
34.0	71.7	140.7	9.9												
36.0	70.3	140.0	9.5												
36.4				73.0	140.9	10.4									
38.0	69.0	139.2	9.1	71.9	140.4	10.4									
40.0	67.7	138.4	8.5	70.6	139.7	10.2									
42.0	66.3	137.5	7.8	69.3	138.9	10.0									
44.0	64.9	136.6	7.2	67.9	138.1	9.8									
46.0	63.6	135.6	6.7	66.6	137.3	9.6							<u> </u>		
48.0	62.2	134.6	6.3	65.2	136.4	9.3									
50.0	60.7	133.5	5.9	63.8	135.4	9.1									
55.0	57.1	130.4	4.9	60.3	132.7	8.6									
55.2							65.0	134.8	9.1						
60.0	53.3	126.9	4.0	56.6	129.6	7.2	61.7	132.3	8.8						
65.0	49.3	122.8	3.4	52.8	126.0	6.2	58.1	129.4	8.0						
70.0	45.0	118.1	2.7	48.8	121.8	5.3	54.3	125.9	7.1						
75.0	40.4	112.5	2.1	44.5	117.0	4.3	50.3	122.0	6.4						
77.3										55.0	123.4	4.4			
80.0				39.8	111.4	3.5	46.1	117.5	5.8	53.3	121.8	4.0			
85.0				34.6	104.7	2.8	41.6	112.2	5.2	49.3	117.8	3.1			
90.0				28.6	96.4	2.3	36.7	105.9	4.6	45.1	113.1	2.3			
91.0										44.2	112.0	2.1			
95.0							31.7	99.3	3.8						
100.0							25.1	89.9	3.1						
105.0							16.2	76.4	2.3						



N° de ident.: 9842523/95738/ Pieza

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

Valor de vuelco: 2 - Vía ancha Lastre trasero [ t ]: 124.0 Lastre central [ t ]: 52.6 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]
				50.0 ו		eza de p	ıl, Punto lumín (2 ı ] Posici	316-1) 9	5.5 m Pl		lumín		-		
24.8	78.0	146.3	10.3												
26.0	77.3	146.1	10.3												
28.0	76.0	145.6	10.1												
30.0	74.8	145.1	9.9												
32.0	73.5	144.5	9.7												
34.0	72.3	143.8	9.3												
36.0	71.0	143.2	8.9												
37.2				73.0	143.8	9.5									
38.0	69.7	142.4	8.6	72.5	143.5	9.5									
40.0	68.4	141.6	8.3	71.2	142.9	9.5									
42.0	67.1	140.8	7.6	70.0	142.2	9.3									
44.0	65.8	139.9	7.0	68.7	141.4	9.1									
46.0	64.5	139.0	6.5	67.4	140.6	8.9									
48.0	63.1	138.0	6.0	66.1	139.7	8.7									
50.0	61.7	136.9	5.6	64.7	138.7	8.5									
55.0	58.2	134.0	4.6	61.3	136.1	8.1									
56.5							65.0	137.5	8.3						
60.0	54.6	130.6	3.8	57.8	133.2	7.0	62.6	135.7	8.3						
65.0	50.8	126.7	3.1	54.2	129.7	5.9	59.2	132.9	7.6						
70.0	46.8	122.3	2.5	50.3	125.8	5.1	55.6	129.6	6.9						
75.0				46.3	121.3	4.2	51.8	125.9	6.2						
79.1										55.0	125.9	3.7			
80.0				41.9	116.0	3.3	47.9	121.6	5.6	54.6	125.5	3.6			
85.0				37.2	109.9	2.6	43.6	116.7	4.9	50.8	121.7	2.7			
89.0										47.7	118.2	2.1			
90.0							39.0	110.9	4.3						
95.0							34.5	104.8	3.5						
100.0							28.8	96.6	2.8						
105.0							21.6	85.8	2.1						



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

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

		gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de principa	
Alcan- ce [ m ]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]
				50.0		eza de p	al, Punto Jumín (2 n ] Posici	316-1) 9	8.5 m Pl	eza de p umín	lumín				
25.4	78.0	149.3	9.5	1		02.0[11	1 1 1 00101		(2010)						
26.0	77.7	149.3	9.5	l											
28.0	76.5	148.7	9.5												
30.0	75.3	148.2	9.2	i											
32.0	74.0	147.6	9.1	i											
34.0	72.8	147.0	8.8												
36.0	71.6	146.3	8.4	l											
38.0	70.4	145.6	8.1	i											
38.1				73.0	146.7	8.8			İ						
40.0	69.1	144.9	7.9	71.8	146.0	8.7									
42.0	67.8	144.1	7.4	70.6	145.3	8.6									
44.0	66.6	143.2	6.8	69.4	144.6	8.4									
46.0	65.3	142.3	6.2	68.1	143.8	8.3									
48.0	64.0	141.3	5.8	66.8	143.0	8.1									
50.0	62.7	140.3	5.4	65.6	142.1	7.9									
55.0	59.3	137.5	4.4	62.3	139.6	7.5									
57.8							65.0	140.2	7.7						
60.0	55.9	134.3	3.5	58.9	136.7	6.7	63.6	139.1	7.7						
65.0	52.2	130.6	2.8	55.4	133.4	5.7	60.2	136.4	7.2						
70.0	48.4	126.4	2.2	51.8	129.7	4.9	56.8	133.3	6.7						
75.0				47.9	125.4	4.0	53.2	129.7	5.9						
80.0				43.9	120.5	3.2	49.4	125.6	5.4	55.0	400.4	0.4			
80.8 85.0				39.4	114.7	2.4	45.5	121.0	4.8	55.0 52.3	128.4 125.5	3.1 2.4			
85.0 87.0				39.4	114.7	2.4	45.5	121.0	4.0	52.3 50.8	125.5	2.4			
90.0							41.2	115.6	4.1	50.6	123.8	Z. I			
90.0 95.0							37.0	110.0	3.3						
100.0				i			31.8	102.6	2.5						
103.0				i			28.3	97.4	2.1						



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 ]: 124.0 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]
				50.0 ı	m Pluma Cabe	eza de pl	ıl, Punto umín (23 ı ] Posici	316-1) 10	1.5 m P	eza de p lumín	lumín				
26.1	78.0	152.2	8.8												
28.0	76.9	151.8	8.8												
30.0	75.7	151.3	8.6							•					
32.0	74.5	150.7	8.4												
34.0	73.3	150.1	8.2												
36.0	72.2	149.5	7.9												
38.0	71.0	148.8	7.6												
39.0				73.0	149.5	8.1									
40.0	69.8	148.1	7.4	72.4	149.2	8.1									
42.0	68.5	147.3	7.1	71.2	148.5	8.0									
44.0	67.3	146.5	6.5	70.0	147.8	7.9									
46.0	66.1	145.6	6.0	68.8	147.0	7.7									
48.0	64.8	144.7	5.5	67.6	146.2	7.5									
50.0	63.6	143.7	5.1	66.3	145.4	7.4									
55.0	60.3	141.0	4.2	63.2	143.0	7.0									
59.0							65.0	142.9	7.0						
60.0	57.0	137.9	3.3	59.9	140.2	6.5	64.4	142.4	7.0						
65.0	53.5	134.4	2.6	56.6	137.1	5.4	61.2	139.8	6.8						
70.0				53.1	133.5	4.6	57.9	136.8	6.4						
75.0				49.5	129.4	3.9	54.5	133.4	5.7						
80.0				45.6	124.8	3.0	50.9	129.6	5.1						
82.5										55.0	130.8	2.4			
85.0				41.5	119.4	2.3	47.1	125.1	4.5	53.6	129.3	2.0			
90.0							43.5	120.6	3.8						
95.0							39.2	114.9	3.0						
100.0							34.5	108.2	2.2						
101.0							33.5	106.7	2.1						



N° de ident.: 9842523/95738/ Pie

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

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

		gulo de orincipal			gulo de orincipa			gulo de 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]
				50.0 ו		ża de pl	ıl, Punto umín (23 ı ] Posici	316-1) ĬC	4.5 m P	eza de p lumín	lumín				
26.7	78.0	155.1	8.2												
28.0	77.3	154.9	8.2												
30.0	76.1	154.4	8.1												
32.0	75.0	153.8	7.9												
34.0	73.8	153.3	7.7												
36.0	72.7	152.7	7.5												
38.0	71.5	152.0	7.2												
39.9				73.0	152.4	7.5									
40.0	70.4	151.3	6.9	72.9	152.4	7.5									
42.0	69.2	150.5	6.7	71.8	151.7	7.5									
44.0	68.0	149.7	6.3	70.6	151.0	7.3									
46.0	66.8	148.9	5.8	69.4	150.3	7.2									
48.0	65.6	148.0	5.3	68.2	149.5	7.0									
50.0	64.4	147.0	4.8	67.0	148.6	6.9									
55.0	61.3	144.4	4.0	64.0	146.3	6.5									
60.0	58.1	141.5	3.1	60.9	143.7	6.2									
60.3							65.0	145.6	6.5						
65.0	54.8	138.1	2.4	57.7	140.6	5.2	62.1	143.3	6.4						
70.0				54.4	137.2	4.4	58.9	140.4	6.0						
75.0				50.9	133.3	3.7	55.6	137.1	5.4						
80.0				47.2	128.9	2.9	52.2	133.4	4.8						
85.0				43.3	123.9	2.2	48.6	129.2	4.3						
90.0							45.2	125.0	3.6						
95.0							41.2	119.6	2.8						
100.0							36.8	113.3	2.1						



2821-1

2821-1

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

		gulo de 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]
				50.0 ו	m Pluma Cabe	eza de pl	ıl, Punto umín (23 ı ] Posici	316-1) 10	17.5 m P	eza de p lumín	lumín		_		
27.3	78.0	158.1	7.3												
28.0	77.6	157.9	7.3												
30.0	76.5	157.5	7.3												
32.0	75.4	156.9	7.1												
34.0	74.3	156.4	6.9												
36.0	73.2	155.8	6.8												
38.0	72.1	155.2	6.5												
40.0	70.9	154.5	6.3												
40.7				73.0	155.3	6.6									
42.0	69.8	153.7	6.1	72.3	154.9	6.6									
44.0	68.7	153.0	6.0	71.2	154.2	6.6									
46.0	67.5	152.1	5.4	70.0	153.5	6.4									
48.0	66.3	151.3	5.0	68.9	152.7	6.3									
50.0	65.2	150.4	4.5	67.7	151.9	6.2									
55.0	62.2	147.8	3.6	64.8	149.7	5.8									
60.0	59.1	145.0	2.8	61.8	147.1	5.5									
61.6							65.0	148.3	5.6						
65.0				58.7	144.2	4.8	63.0	146.6	5.6						
70.0				55.5	140.9	4.0	59.9	143.9	5.4						
75.0				52.2	137.2	3.4	56.7	140.7	5.0						
80.0				48.7	133.0	2.7	53.5	137.2	4.5						
85.0							50.0	133.2	4.0						
90.0							46.8	129.1	3.3						
95.0							43.0	124.1	2.5						
98.0							40.6	120.7	2.0						



N° de ident.: 9842523/95738/

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

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

		gulo de 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]
				50.0 ו	m Pluma Cabe	eża de pl	ıl, Punto umín (23 ı ] Posici	316-1) 11	0.5 m P	eza de p lumín	lumín				
27.9	78.0	161.0	6.6												
28.0	78.0	161.0	6.6												
30.0	76.9	160.5	6.6							•					
32.0	75.8	160.0	6.5												
34.0	74.7	159.5	6.3												
36.0	73.7	158.9	6.2												
38.0	72.6	158.3	6.0												
40.0	71.5	157.6	5.8												
41.6				73.0	158.1	5.9									
42.0	70.4	156.9	5.6	72.8	158.0	5.9									
44.0	69.3	156.2	5.5	71.7	157.4	5.9									
46.0	68.1	155.4	5.2	70.6	156.7	5.8									
48.0	67.0	154.6	4.7	69.5	155.9	5.7									
50.0	65.9	153.7	4.3	68.4	155.1	5.5									
55.0	63.0	151.2	3.4	65.5	153.0	5.2									
60.0	60.0	148.5	2.6	62.6	150.5	4.9									
62.8							65.0	151.1	5.0						
65.0				59.6	147.7	4.4	63.8	150.0	4.9						
70.0				56.6	144.5	3.7	60.8	147.3	4.8						
75.0				53.4	141.0	3.1	57.8	144.3	4.6	-					
80.0				50.0	137.0	2.6	54.6	140.9	4.1						
85.0							51.3	137.1	3.7						
90.0							48.3	133.2	3.1						
95.0							44.7	128.4	2.2						
96.0							43.9	127.4	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]
				50.0 r		eza de p	ıl, Punto lumín (1 ı ] Posici	916-1) 3:	2.5 m Pl	eza de p umín	lumín				
11.7 12.0	78.0 77.4	84.7 84.6	39.3 39.3												
13.0	75.6	84.4	38.3												
14.0	73.7	84.1	37.3												
16.0	70.0	83.4	34.6												
18.0	66.2	82.6	32.1												
18.8				73.0	83.5	34.4									
20.0	62.2	81.5	30.1	70.8	83.1	33.9									
22.0	58.1	80.4	27.5	67.0	82.3	31.8									
24.0	53.8	79.0	25.1	63.0	81.3	29.8									
26.0	49.3	77.3	23.3	59.0	80.2	28.3									
28.0	44.3	75.4	21.6	54.7	78.8	26.8	05.0		00.0						
29.9 30.0	38.9	73.0	20.1	50.2	77.2	25.7	65.0 64.9	80.4 80.3	29.9 29.9						
32.0	32.8	70.2	18.9	45.4	77.2 75.4	24.2	60.9	79.3	28.9						
34.0	25.2	66.4	17.8	40.1	73.4	22.9	56.7	78.0	27.6						
36.0	16.6	61.8	14.7	34.1	70.4	21.7	52.3	76.5	26.2						
38.0	10.0	01.0	1-1.7	26.9	66.8	20.2	47.6	74.8	25.0						
40.0				17.1	61.6	18.5	42.6	72.7	23.7						
42.0							36.9	70.2	22.7						
42.9										55.0	74.3	19.9			
44.0							30.4	67.1	21.5	52.9	73.6	20.3			
46.0							22.2	62.9	20.3	48.2	71.9	19.4			
47.0							16.6	59.9	19.7						
48.0										43.2	69.8	18.7			
50.0										37.7	67.4	18.0			
55.0										18.1	57.6	16.3	05.0		40.4
64.9													35.0	55.8	10.4
65.0 70.0													34.7 15.4	55.7 45.7	10.4 9.3
70.0													15.4	45.7	9.3



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 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]
				50.0			II, Punto Iumín (1			eza de p	lumín				
					Cab		] Posici			ullilli					
12.3	78.0	87.7	34.9												
13.0	76.8	87.5	34.7												
14.0	75.1	87.2	33.5												
16.0	71.8	86.6	31.1												
18.0	68.3	85.8	29.2												
19.7				73.0	86.4	30.1									
20.0	64.8	84.9	27.1	72.5	86.3	30.1									
22.0 24.0	61.1 57.3	83.9 82.6	25.6 23.8	69.0 65.5	85.6 84.7	28.6 26.9									
26.0	53.4	81.2	23.6	61.9	83.7	25.7									
28.0	49.2	79.5	21.0	58.1	82.5	24.4									
30.0	44.7	77.6	19.6	54.2	81.1	23.3									
31.1	44.7	''.0	13.0	54.2	01.1	25.5	65.0	83.1	25.2						
32.0	39.8	75.3	18.3	50.0	79.5	22.4	63.5	82.7	26.3						
34.0	34.3	72.6	17.3	45.6	77.6	21.1	59.8	81.6	25.2						
36.0	27.9	69.2	16.4	40.8	75.4	20.1	56.0	80.3	24.1						
38.0	19.6	64.4	15.4	35.5	72.8	19.2	52.0	78.8	23.2						
39.0	15.8	62.2	13.3												
40.0				29.3	69.5	18.1	47.7	77.0	22.2						
42.0				21.5	65.1	17.0	43.1	75.0	21.1						
43.0				16.3	62.1	16.4									
44.0							38.0	72.6	20.1						
44.6								00.0	10.0	55.0	76.7	18.7			
46.0							32.3	69.6	19.3	52.5	75.8	19.0			
48.0 50.0							25.4	65.9 60.3	18.3	48.2 43.7	74.1 72.1	18.2 17.5			
50.0 55.0							15.8	60.3	17.3	43.7 29.9	72.1 65.2	17.5 16.0			
55.0 58.0										29.9 17.3	58.0	15.1			
67.3										17.3	30.0	13.1	35.0	57.5	9.7
70.0													28.4	54.0	9.1
72.0													20.3	49.4	8.6



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 orincipal			gulo de orincipa			gulo de orincipa			gulo de principa			gulo de orincipa	
Alcan- ce [ m ]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]
				50.0 i		eza de p	ıl, Punto lumín (1 ı ] Posici	916-1) 3	8.5 m Pli	eza de p umín	lumín				
12.9 13.0 14.0	78.0 77.9 76.3	90.6 90.6 90.3	31.4 31.4 30.9												
16.0 18.0	73.2 70.1	89.8 89.1	28.8 26.9												
20.0 20.6 22.0	66.9 63.6	88.2 87.3	25.1	73.0 70.7	89.3 88.8	26.9 26.3									
24.0 26.0	60.2 56.6	86.2 84.9	22.3 21.2	67.5 64.2	88.0 87.1	24.9 23.6									
28.0 30.0 32.0	53.0 49.1 45.0	83.4 81.8 79.9	20.2 19.3 18.1	60.9 57.4 53.7	86.0 84.7 83.3	22.7 21.6 20.8									
32.4 34.0	40.5	77.6	17.0	49.9	81.7	20.0	65.0 62.4	85.8 85.0	22.5 23.4						
36.0 38.0 40.0	35.6 30.0 23.1	75.0 71.8 67.6	16.1 15.3 14.5	45.8 41.4 36.6	79.8 77.7 75.1	18.9 18.0 17.2	59.0 55.4 51.7	83.9 82.5 81.0	22.6 21.7 20.9						
42.0 44.0	15.2	62.6	11.3	31.2 24.6	72.1 68.2	16.4 15.6	47.7 43.5	79.3 77.2	20.1 19.1						
46.0 46.4 48.0				15.6	62.5	14.8	38.9 33.8	74.9 72.1	18.2	55.0 52.2	79.2 78.0	17.5 17.9			
50.0 53.0							27.8 15.1	68.6 60.7	16.7 15.4	48.2	76.3	17.1			
55.0 60.0 61.0										37.1 21.4 16.6	70.7 61.5 58.4	15.5 14.4 14.1			
69.8 70.0										10.0	00.4	14.1	35.0 34.5	59.3 59.0	9.0 9.0
75.0													19.5	49.9	7.9



 $N^{\circ}$  de ident.: 9842523/95738/ Pieza de articulación

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

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

		gulo de orincipal			gulo de orincipa		75° Án I	gulo de orincipa	pluma I		gulo de orincipa			gulo de orincipa	
Alcan- ce [ m ]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]
				50.0 r		eza de p	ıl, Punto lumín (19 n] Posici	916-1) 4	1.5 m Pl		lumín				
13.5	78.0	93.5	28.3												
14.0	77.3	93.4	28.3												
16.0 18.0	74.5 71.6	92.9 92.2	26.6 24.8							ł			ł		
20.0	68.6	91.5	23.4												
21.4	00.0	01.0	20.4	73.0	92.1	24.2									
22.0	65.6	90.6	21.8	72.2	92.0	24.2				İ			İ		
24.0	62.5	89.6	20.6	69.2	91.2	23.0									
26.0	59.3	88.5	19.6	66.2	90.4	21.9									
28.0	56.1	87.2	18.6	63.2	89.4	20.9									
30.0	52.6	85.7	17.8	60.0	88.3	20.0									
32.0	49.0	84.0	17.0	56.7	87.0	19.1				l					
33.7	45.0	00.4	16.1	50.0	05.0	18.3	65.0 64.6	88.5 88.4	21.2 21.2						
34.0 36.0	45.2 41.1	82.1 79.9	15.2	53.3 49.8	85.6 83.9	17.6	61.5	87.3	20.7						
38.0	36.6	77.4	14.5	46.0	82.1	16.7	58.2	86.1	20.7						
40.0	31.6	74.3	13.8	42.0	80.0	15.9	54.9	84.8	19.1						
42.0	25.7	70.6	13.1	37.6	77.5	15.2	51.4	83.2	18.4						
44.0	18.0	65.4	12.4	32.7	74.6	14.5	47.8	81.5	17.7	İ			İ		
46.0				27.0	71.0	13.8	43.9	79.5	16.8						
48.0				19.8	66.2	13.1	39.6	77.2	16.0						
48.1										55.0	81.7	16.3			
49.0				15.0	62.8	12.7									
50.0							35.0	74.5	15.4	51.9	80.3	16.8			
55.0							19.5	64.5	13.7	42.3	75.5	15.2			
56.0							16.3	62.3	11.5	20.4	60.5	12.0			
60.0 64.0										30.4 15.9	68.5 58.8	13.9 12.9	I		
72.3										15.9	0.00	12.9	35.0	61.0	8.2
75.0													29.2	57.4	7.6
78.0													18.7	50.4	7.1



2821-1

2821-1

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

		gulo de 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]
				50.0 ו		eza de p	al, Punto dumín (19 n ] Posici	916-1) 4	4.5 m Pli	eza de p umín	lumín				
14.2 16.0 18.0 20.0 22.0	78.0 75.6 72.9 70.1 67.4	96.5 96.0 95.4 94.7 93.9	25.7 24.7 23.2 21.8 20.5	70.0	95.0	21.9									
24.0 26.0 28.0 30.0	64.5 61.6 58.6 55.5	93.0 91.9 90.8 89.4	19.2 18.3 17.3 16.5	73.0 70.7 67.9 65.1 62.2	94.4 93.7 92.8 91.7	21.4 20.5 19.4 18.6									
32.0 34.0 35.0 36.0 38.0	52.3 49.0 45.4 41.6	87.9 86.3 84.4 82.2	15.8 15.1 14.4 13.7	59.2 56.2 53.0 49.7	90.6 89.3 87.8 86.2	17.8 16.9 16.2 15.6	65.0 63.6 60.6	91.2 90.7 89.7	19.2 19.2 18.4						
40.0 42.0 44.0 46.0 47.0	37.5 33.0 27.8 21.4 17.4	79.7 76.8 73.3 68.8 65.8	13.1 12.5 12.0 11.3 11.0	46.1 42.4 38.4 33.9	84.3 82.2 79.8 77.0	14.8 14.1 13.5 13.0	57.6 54.5 51.2 47.8	88.4 87.0 85.5 83.7	17.8 17.0 16.3 15.6						
48.0 49.8 50.0 52.0 55.0	11.3	03.0	11.0	28.9 22.8 16.1	73.6 69.4 64.5	12.4 11.7 9.3	44.2 40.3 28.7	81.8 79.5 72.0	14.9 14.2 12.8	55.0 54.9 46.5	84.1 84.1 79.9	15.1 16.0 14.9			
59.0 60.0 65.0 67.0 74.7							15.7	62.7	10.2	36.6 23.4 15.4	74.1 65.2 59.2	13.5 12.4 11.9	35.0	62.7	7.5
75.0 80.0 81.0													35.0 35.0 21.9 18.0	62.7 53.7 50.9	7.5 6.6 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 orincipal			gulo de orincipa										
Alcan- ce [ m ]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]
				50.0 ı			II, Punto Iumín (1			eza de p umín	lumín		_		
							] Posici			<b></b>					
14.8	78.0	99.4	22.8												
16.0	76.5	99.1	22.5												
18.0	74.0	98.6	21.3										<u> </u>		
20.0	71.5	97.9	20.1												
22.0	68.9	97.2	19.2												
23.2				73.0	97.9	19.6									
24.0	66.3	96.3	18.3	72.0	97.6	19.6									
26.0	63.6	95.3	17.5	69.4	96.9	18.9									
28.0	60.8	94.3	16.9	66.8	96.1	18.3									
30.0	58.0	93.0	16.2	64.1	95.1	17.7									
32.0	55.1	91.7	15.5	61.4	94.1	17.3									
34.0	52.1	90.2	15.0	58.6	92.9	16.6									
36.0 36.2	48.9	88.5	14.4	55.7	91.5	16.1	65.0	94.0	17.1						
38.0	45.6	86.6	13.7	52.7	90.1	15.7	62.7	94.0	17.1						
40.0	42.1	84.5	13.7	49.6	88.4	15.7	59.9	93.1	17.0						
40.0	38.3	82.0	12.3	46.3	86.6	14.6	59.9 57.0	92.0	16.6						
44.0	34.1	79.2	11.8	40.3	84.5	14.0	54.1	89.3	16.1						
46.0	29.5	75.9	11.3	39.1	82.1	13.5	51.0	87.7	15.8						
48.0	24.0	71.8	10.7	35.0	79.4	13.1	47.8	86.0	15.3						
50.0	16.8	66.3	10.2	30.4	76.2	12.4	44.4	84.0	14.7						
51.5	10.0	00.0		00.1				01.0		55.0	86.6	14.5			
55.0				15.6	64.9	9.3	34.8	77.8	13.4	49.8	83.9	14.4			
60.0							21.8	68.3	11.8	41.3	78.9	13.2			
62.0	<u></u>						15.2	63.1	10.4						
65.0										30.9	71.9	12.1			
70.0										16.4	60.8	10.1			
77.2													35.0	64.4	6.7
80.0													29.8	60.8	6.3
84.0													17.4	51.3	5.6



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

		gulo de orincipal		83° Án	gulo de orincipa	pluma I	75° Án I	gulo de orincipa	pluma I		gulo de orincipa			gulo de orincipa	
Alcan- ce [ m ]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]
				50.0 ו	m Pluma Cab	eza de p	il, Punto Ilumín (19 n] Posici	916-1) 5	0.5 m Pli	eza de p umín	lumín				
15.4 16.0 18.0 20.0 22.0 24.0	78.0 77.3 75.0 72.6 70.2 67.7	102.3 102.2 101.7 101.1 100.4 99.6	20.9 20.9 19.9 19.0 18.2												
24.1 26.0 28.0 30.0 32.0	65.3 62.7 60.1 57.5	98.7 97.7 96.6 95.3	17.1 16.7 16.2 15.6	73.0 70.7 68.2 65.8 63.2	100.8 100.1 99.3 98.4 97.5	18.2 18.0 17.6 17.2 16.8									
34.0 36.0 37.5 38.0	54.7 51.8 48.9	93.9 92.4 90.7	15.0 15.1 14.7	63.2 60.7 58.0	97.5 96.4 95.2 93.8	16.5 16.1	65.0 64.4	96.7 96.5	16.9 16.9						
40.0 42.0 44.0 46.0	45.8 42.5 38.9 35.1 30.9	88.8 86.7 84.4 81.6 78.5	13.3 12.6 12.0 11.4 10.9	52.4 49.5 46.4 43.1 39.7	92.3 90.7 88.8 86.7 84.4	15.5 15.2 14.7 14.2 13.8	61.9 59.2 56.5 53.7 50.9	95.4 94.3 93.0 91.5 90.0	16.7 16.4 16.1 15.9 15.6						
48.0 50.0 53.0 53.2 55.0 58.0	26.0 16.3	74.7 66.7	10.4 9.7	35.7 35.9 24.4 15.1	81.8 73.0 65.2	13.4 13.4 11.5 9.2	47.8 39.5	88.2	15.3	55.0 52.7	89.0 87.8	14.0 14.3			
60.0 64.0 65.0 70.0 73.0				10.1	00.2	9.2	29.3 17.6	75.4 65.9	12.8 11.4	45.1 36.2 24.8 15.9	83.3 77.4 68.7 61.2	13.1 12.0 11.2 10.0			
79.6 80.0 85.0 87.0										10.0	01.2	10.0	35.0 34.3 23.6 16.9	66.1 65.6 57.4 51.8	6.3 6.2 5.5 5.2



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

52.6

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

Lastre central [ t ]:

2821-1 Cabeza de pluma principal: 2821-1

		gulo de principa			gulo de orincipa			gulo de principa			gulo de orincipa			gulo de orincipa	
Alcan- ce [ m ]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]
				50.0 ו		eza de p	al, Punto dumín (1 n] Posici	916-1) 5	3.5 m Pli	eza de p umín	lumín				
16.0	78.0	105.3	19.0												
18.0	75.8	104.8	18.4												
20.0	73.6	104.2	17.6												
22.0	71.3	103.6	16.8												
24.0	69.1	102.8	16.2												
24.9				73.0	103.6	16.6									
26.0	66.7	102.0	15.7	71.8	103.3	16.5									
28.0	64.4	101.0	15.3	69.5	102.6	16.1									
30.0	62.0	100.0	15.0	67.2	101.7	15.8									
32.0	59.5	98.9	14.6	64.9	100.8	15.5									
34.0	57.0	97.6	14.2	62.5	99.8	15.2									
36.0	54.3	96.2	13.9	60.0	98.7	14.9									
38.0	51.6	94.7	13.6	57.5	97.4	14.6									
38.8							65.0	99.4	15.3						
40.0	48.8	93.0	13.1	54.9	96.1	14.3	63.6	98.8	15.3						
42.0	45.9	91.1	12.4	52.2	94.6	14.1	61.1	97.7	15.0						
44.0	42.8	89.0	11.7	49.4	92.9	13.8	58.6	96.5	14.8						
46.0	39.5	86.7	11.1	46.5	91.0	13.4	56.1	95.2	14.6						
48.0	36.0	84.0	10.6	43.4	89.0	13.0	53.4	93.8	14.4						
50.0	32.1 19.4	81.0 70.3	10.2	40.2 30.8	86.7 79.6	12.7	50.7	92.2 87.4	14.2 13.3	55.0	91.5	13.0			
55.0 56.0	15.8	67.1	9.1 8.8	30.8	79.6	11.5	43.3	87.4	13.3	55.0	91.5	13.0			
60.0	15.6	07.1	0.0	17.4	68.1	9.8	34.7	81.1	12.6	48.2	87.5	12.8			
65.0				17.4	00.1	9.0	23.4	71.9	11.0	40.5	82.3	11.8			
67.0							17.1	66.3	10.4	40.5	02.3	11.0			
70.0							17.1	00.5	10.4	31.2	75.2	11.0			
75.0										18.0	64.0	10.1			
76.0										15.4	61.6	9.3			
82.1							Ī			10.4	01.0	0.0	35.0	67.9	5.6
85.0													30.3	64.1	5.2
90.0													16.4	52.2	4.4



2821-1

2821-1

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

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

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

		gulo de orincipa		83° Án I	gulo de orincipa	pluma l	ı	gulo de principa			gulo de orincipa		1	gulo de orincipa	
Alcan- ce [ m ]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]
				50.0		eza de p	al, Punto dumín (19 n ] Posici	916-1) 5	6.5 m Pl		lumín		_		
16.7	78.0	108.2	17.4												
18.0	76.6	107.9	17.1												
20.0	74.5	107.3	16.4												
22.0	72.4	106.7	15.6												
24.0	70.2	106.0	15.0												
25.8				73.0	106.5	15.2									
26.0	68.0	105.2	14.5	72.8	106.4	15.2									
28.0	65.8	104.4	14.2	70.7	105.8	15.0									
30.0	63.6	103.4	13.9	68.5	105.0	14.7									
32.0	61.3	102.3	13.7	66.3	104.1	14.4									
34.0	58.9	101.2	13.4	64.0	103.2	14.1									
36.0	56.5	99.9	13.1	61.7	102.1	13.8									
38.0	54.0	98.5	12.8	59.4	101.0	13.6									
40.0	51.5	96.9	12.6	57.0	99.7	13.3	65.0	102.1	13.4						
42.0	48.8	95.2	12.2	54.5	98.3	13.1	62.8	101.2	13.9						
44.0	46.0	93.3	11.6	52.0	96.8	13.0	60.5	100.0	13.7						
46.0	43.1	91.2	11.0	49.3	95.1	12.7	58.1	98.8	13.5						
48.0	40.0	88.9	10.4	46.6	93.3	12.4	55.7	97.5	13.3						
50.0	36.7	86.4	9.9	43.7	91.3	12.1	53.2	96.0	13.1						
55.0	26.9	78.1	8.9	35.7	85.1	11.4	46.5	91.7	12.6						
56.7										55.0	93.9	12.1			
59.0	15.3	67.5	8.1												
60.0				25.5	76.5	10.0	38.9	86.2	12.0	50.9	91.5	12.3			
63.0				16.9	68.5	9.0	00.0		44.0	44.0		44.0			
65.0				<b>-</b>			29.8	78.7	11.0	44.0	86.8	11.6			
70.0							16.6	66.7	9.6	36.0	80.7	10.7			
75.0										25.9 17.5	72.2 64.4	9.9 9.5			
78.0 84.6										17.5	64.4	9.5	35.0	69.6	5.0
84.6 85.0													35.0 34.2	68.9	5.0
90.0													24.9	60.9	4.3
90.0														52.6	3.9
93.0													15.9	J 5∠.0	3.9



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 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]
				50.0		eza de p	al, Punto dumín (19 n] Posici	916-1) 5	9.5 m Pl		lumín				
17.3	78.0	111.1	15.0												
18.0	77.3	111.0	15.0												
20.0	75.3	110.5	14.3												
22.0	73.3	109.9	13.8												
24.0	71.3	109.2	13.2												
26.0	69.2	108.5	12.8												
26.7	07.4	407.0	40.4	73.0	109.4	13.2									
28.0 30.0	67.1 65.0	107.6 106.7	12.4 12.2	71.7 69.6	108.9 108.2	13.1 12.8									
32.0	62.8	105.7	11.9	67.5	106.2	12.6									
34.0	60.6	103.7	11.7	65.4	106.5	12.3									
36.0	58.3	103.4	11.5	63.2	105.5	12.1									
38.0	56.0	102.1	11.3	61.0	104.4	11.9				i					
40.0	53.6	100.6	11.1	58.8	103.2	11.6				i					i i
41.3							65.0	104.8	12.1						
42.0	51.1	99.0	10.9	56.5	101.9	11.4	64.2	104.5	12.1						
44.0	48.6	97.3	10.6	54.1	100.5	11.3	62.0	103.5	11.9						
46.0	45.9	95.4	10.1	51.6	98.9	11.1	59.8	102.3	11.7						
48.0	43.1	93.3	9.7	49.1	97.2	10.9	57.5	101.1	11.6						
50.0	40.1	91.0	9.3	46.4	95.4	10.7	55.2	99.7	11.4						
55.0	31.8	83.9	8.4	39.2	89.8	10.3	49.0	95.7	11.1						
58.4	00.5	70.4	7.5	20.0	00.5	0.5	40.4	00.0	40.7	55.0	96.4	10.9			
60.0 62.0	20.5 16.2	73.4 69.1	7.5 5.9	30.6	82.5	9.5	42.1	90.6	10.7	53.1	95.2	10.9			
65.0	10.2	09.1	5.9	18.7	71.2	8.2	34.2	84.1	10.3	46.7	90.9	10.5			
66.0				15.3	67.8	7.9	J7.2	07.1	10.0	70.7	30.3	10.0			
70.0				10.0	07.0	1.0	24.0	74.8	9.2	39.5	85.4	9.9			
73.0							15.0	66.0	8.5	00.0		0.0			
75.0										31.0	78.1	9.3			
80.0										19.3	67.1	8.6			
81.0										16.0	63.8	8.5			
87.0													35.0	71.3	4.4
90.0													30.6	67.5	4.0
95.0													18.9	56.3	3.4
96.0													15.5	53.0	3.2



2821-1

2821-1

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

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

		gulo de principa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de principa	
Alcan- ce [ m ]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]
				50.0 ו		eza de p	al, Punto Jumín (19 n ] Posici	916-1) 6	2.5 m Pli	eza de p umín	lumín				
18.0 20.0 22.0 24.0 26.0	78.0 76.1 74.1 72.2 70.3	114.1 113.6 113.0 112.4 111.7	13.7 13.3 12.7 12.2 11.8												
27.6 28.0 30.0 32.0 34.0	68.3 66.3 64.2 62.1	110.9 110.0 109.1 108.0	11.5 11.2 11.0 10.8	73.0 72.6 70.6 68.7 66.7	112.2 112.1 111.4 110.6 109.8	12.0 12.0 11.8 11.6 11.3									
36.0 38.0 40.0 42.0 42.6	60.0 57.8 55.6 53.3	106.9 105.7 104.3 102.9	10.6 10.3 10.2 10.0	64.6 62.6 60.4 58.3	108.9 107.8 106.7 105.5	11.1 10.9 10.7 10.5	65.0	107.6	10.9						
44.0 46.0 48.0 50.0 55.0	51.0 48.5 46.0 43.4 36.0	101.3 99.5 97.6 95.6 89.4	9.9 9.6 9.2 8.9 8.1	56.1 53.8 51.5 49.0 42.5	104.2 102.7 101.2 99.5 94.5	10.3 10.1 10.0 9.9 9.5	63.5 61.4 59.3 57.1 51.4	106.8 105.8 104.6 103.3 99.6	10.9 10.8 10.6 10.4 10.1						
60.0 60.1 65.0 69.0 70.0	27.1 15.8	81.0 69.5	7.4	35.1 25.8 17.1	88.1 79.4 70.5	9.3 8.2 6.0	45.1 38.1 29.7	95.1 89.3 81.6	9.8 9.6 9.0	55.0 49.3 42.8	98.9 95.0 90.0	9.8 9.7			
75.0 76.0 80.0 84.0 89.5							18.0 16.8	70.0 68.7	8.1 7.1	35.4 26.2 15.6	83.7 75.1 64.2	9.0 8.4 7.9	35.0	73.0	3.9
90.0 95.0 99.0													35.0 35.0 25.9 15.1	73.0 64.4 53.4	3.9 3.3 2.8



N° de ident.: 9842523/95738/

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

Valor de vuelco: Lastre trasero [ t ]:

Lastre central [ t ]:

2 - Vía ancha 124.0

52.6

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

		gulo de 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]
				50.0	m Pluma Cab	eza de p	al, Punto Jumín (19 n ] Posicio	916-1) 6	5.5 m Pl	eza de p umín	lumín				
18.6 20.0 22.0 24.0 26.0 28.0 28.5 30.0 32.0 34.0 36.0 38.0 40.0 42.0 43.8 44.0 46.0 48.0 50.0 60.0 61.8	78.0 76.7 74.9 73.1 71.2 69.3 67.4 65.5 63.5 61.5 59.5 57.4 55.3 53.1 50.9 48.5 46.1 39.6 31.9	117.0 116.7 116.1 115.5 114.9 114.1 113.3 112.4 111.4 110.4 109.2 107.9 106.6 105.1 103.5 101.8 99.9 94.3 87.2	12.5 12.3 11.7 11.3 10.9 10.7 10.4 10.1 9.9 9.8 9.5 9.3 9.1 9.0 8.8 8.6 8.3 7.7	73.0 71.6 69.7 67.8 65.9 61.9 59.9 57.8 55.7 53.6 51.3 45.4 38.7	115.1 114.6 113.9 113.1 112.2 111.2 110.2 109.0 107.8 106.4 105.0 103.4 98.9 93.2	11.0 11.0 10.7 10.5 10.3 10.1 9.9 9.7 9.5 9.3 9.1 9.0 8.6 8.3	65.0 64.8 62.9 60.9 58.8 53.5 47.7	110.3 110.2 109.2 108.1 106.9 103.5 99.2	10.0 10.0 9.9 9.8 9.6 9.2 8.9	55.0	101.3	8.9			
65.0 68.0 70.0	22.1 15.4	77.1 69.9	6.4 5.0	30.9 20.6	85.8 75.1	7.7	41.4 34.1	94.0 87.4	8.6 8.3	51.5 45.6	98.9	8.8			
72.0 75.0 79.0 80.0 85.0 87.0 91.9 95.0 100.0				16.7	70.9	5.5	25.0 16.4	78.4 69.2	7.7 6.5	39.0 31.2 21.0 15.2	88.7 81.4 70.9 64.6	8.3 8.0 7.5 7.3	35.0 30.9 20.7 17.9	74.7 70.8 60.2 57.3	3.3 3.0 2.4 2.3



N° de ident.: 9842523/95738/

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

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

		gulo de orincipa		83° Án	gulo de orincipa	pluma I	75° Án I	gulo de orincipa	pluma I		gulo de orincipa		45° Án I	gulo de orincipa	pluma I
Alcan- ce [ m ]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]
				50.0 ו		eza de p	il, Punto lumín (19 n] Posici	916-1) 6	8.5 m Pli	eza de p umín	lumín				
19.2 20.0 22.0 24.0 26.0 28.0 29.3 30.0 32.0 34.0 36.0 38.0 40.0 42.0 45.1 46.0 48.0 50.0 63.6 65.0 70.0 71.0	78.0 77.3 75.6 73.8 72.1 70.3 68.5 66.6 62.9 61.0 59.0 57.0 55.0 52.9 50.7 48.5 42.6 35.8 27.7 16.2 15.0	119.9 119.8 119.3 118.7 118.0 117.3 116.6 115.7 114.8 113.8 112.7 111.5 110.2 108.8 107.3 105.7 104.0 99.0 92.7 84.4 71.6 70.3	11.4 11.4 11.0 10.5 10.2 10.0 9.7 9.5 9.3 9.1 8.9 8.7 8.5 8.3 8.1 8.0 7.8 7.3 6.9 6.3 5.6 4.8	73.0 72.4 70.6 68.8 67.0 65.2 63.3 61.4 59.4 57.4 53.3 47.8 41.8 35.0 26.6	118.0 117.8 117.1 116.3 115.5 114.6 113.6 112.5 111.3 110.1 108.7 107.2 103.0 97.9 91.4 82.8	10.2 10.2 10.0 9.8 9.6 9.4 9.2 9.1 8.8 8.6 8.5 7.9 7.5 7.1 6.6	65.0 64.2 62.3 60.3 55.3 50.0 44.2 37.7	113.0 112.6 111.5 110.4 107.2 103.3 98.5 92.6 85.0 73.9	9.2 9.2 9.1 8.9 8.6 8.2 7.9 7.5	55.0 53.5 48.0 42.0 35.2	103.8 102.7 98.5 93.4 87.0	8.1 8.1 7.9 7.7 7.5			
82.0 85.0 90.0							16.1	69.6	5.9	26.9 16.8	78.5 67.3	7.1 6.2			
94.4 95.0 100.0 102.0													35.0 34.9 26.6 22.5	76.5 76.4 67.8 63.4	2.8 2.8 2.3 2.1



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

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

		gulo de orincipa		1	gulo de principa		ı	gulo de orincipa		ı	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]
				50.0 ı		eza de p	il, Punto Iumín (19 n] Posici	916-1) T	1.5 m Pli	eza de p umín	lumín				
19.8	78.0	122.9	10.3												
20.0	77.9	122.8	10.3												
22.0	76.2	122.4	10.0												
24.0	74.5	121.8	9.6												
26.0	72.8	121.2	9.3												
28.0	71.1	120.5	9.1												
30.0	69.4	119.8	8.9												
30.2				73.0	120.8	9.2									
32.0	67.7	119.0	8.7	71.5	120.2	9.1									
34.0	65.9	118.1	8.5	69.8	119.5	8.9									
36.0	64.1	117.1	8.3	68.0	118.7	8.7									
38.0	62.3	116.1	8.1	66.3	117.9	8.5									
40.0	60.5	115.0	8.0	64.5	116.9	8.4									
42.0	58.6	113.8	7.8	62.7	115.9	8.2									
44.0	56.7	112.5	7.6	60.9	114.8	8.1									
46.0	54.7	111.1	7.5	59.0	113.6	7.9									
46.4							65.0	115.7	8.3						
48.0	52.7	109.6	7.4	57.1	112.3	7.8	63.5	114.9	8.3						
50.0	50.6	108.0	7.3	55.1	111.0	7.6	61.7	113.8	8.1						
55.0	45.2	103.4	6.8	50.0	107.0	7.3	57.0	110.8	7.8						
60.0	39.1	97.7	6.4	44.5	102.3	7.0	52.0	107.2	7.5						
65.0	32.1	90.6	6.0	38.3	96.5	6.7	46.7	102.8	7.2		400.0	7.0			
65.3		00.0	- 4	24.4	00.4	0.4	40.0	07.4	7.0	55.0	106.2	7.3			
70.0	23.3	80.8	5.4	31.1	89.1	6.4	40.8	97.4	7.0	50.2	102.5	7.1			
73.0 75.0	15.9	72.1	5.1	00.0	70.0	5.0	04.4	90.7	0.0	44.7	97.8	7.0			
				22.0	78.9 71.7	5.9	34.1	90.7	6.8	44.7	97.8	7.0			
78.0 80.0				15.9	71.7	4.8	25.9	81.8	6.5	38.5	92.1	6.9			
80.0 85.0							25.9 15.7	70.0	5.5	38.5	92.1 84.8	6.7			
90.0							15.7	70.0	0.0	22.3	74.7	6.4			
93.0										16.5	67.7	5.7			
96.8										10.5	01.1	3.1	35.0	78.2	2.3
99.0													32.7	75.8	2.3



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

	88° Án	gulo de orincipal	pluma I	83° Án	gulo de orincipa	pluma I		gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [ m ]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]
				50.0 ı	m Pluma Cab	eza de p	lumín (1	916-1) 7	4.5 m Pl		lumín				
						31.0 [ m	] Posici	on midta	II (1916)						
20.5	78.0	125.8	9.4												
22.0	76.8	125.4	9.2												
24.0	75.2	124.9	8.8												
26.0	73.6	124.3	8.6												
28.0	71.9	123.7	8.3												
30.0	70.3	123.0	8.2	70.0	400 7										
31.1	68.6	122.2	8.0	73.0 72.3	123.7 123.4	8.4 8.4									
32.0 34.0	67.0	122.2	7.8	72.3	123.4	8.2									
36.0	65.3	121.4	7.6	69.0	122.7	8.0									
38.0	63.5	119.5	7.5	67.3	121.1	7.9									
40.0	61.8	118.4	7.4	65.6	120.2	7.7									
42.0	60.0	117.3	7.2	63.9	119.3	7.5									
44.0	58.2	116.1	7.1	62.1	118.2	7.4									
46.0	56.4	114.8	7.0	60.4	117.1	7.3									
47.6							65.0	118.4	7.5						
48.0	54.5	113.3	6.8	58.6	115.9	7.2	64.7	118.3	7.5						
50.0	52.5	111.8	6.7	56.7	114.6	7.0	63.0	117.3	7.4						
55.0	47.4	107.5	6.4	51.9	110.9	6.8	58.5	114.4	7.1						
60.0	41.9	102.4	6.1	46.8	106.6	6.6	53.8	111.0	6.9						
65.0	35.6	96.0	5.8	41.2	101.3	6.4	48.8	106.9	6.7						
67.0										55.0	108.7	6.6			
70.0	28.2	87.8	5.3	34.8	94.7	6.2	43.4	101.9	6.5	52.1	106.4	6.5			
75.0	18.2	75.9	4.7	27.2	86.2	5.8	37.4	95.9	6.4	47.0	102.1	6.4			
76.0	15.5	72.5	4.6	40.7	70.5	5.0	00.4		0.0			0.0			
80.0				16.7	73.5	5.3	30.4	88.3	6.2	41.4	96.8	6.3			
81.0 85.0				15.6	72.1	4.5	21.3	77.7	5.8	35.1	90.3	6.2			
85.0 88.0							21.3 15.4	70.4	5.8	JO. I	90.3	0.2			
90.0							10.4	70.4	5.2	27.5	81.9	6.1			
95.0										17.1	69.4	5.7			
96.0										16.1	68.1	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 orincipa			gulo de orincipa		75° Án I	gulo de orincipa	pluma I		gulo de orincipa			gulo de orincipa	
Alcan- ce [ m ]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]
				50.0 ו	m Pluma Cab	eza de p	ıl, Punto lumín (19 n] Posici	916-1) 7	7.5 m Pl	eza de p umín	lumín				
21.1	78.0	128.7	8.4												
22.0	77.3	128.5	8.4												
24.0	75.8	128.0	8.1												
26.0	74.2	127.5	7.8												
28.0	72.7	126.9	7.6												
30.0	71.1	126.2	7.4												
32.0	69.5	125.5	7.2	73.0	126.6	7.5									
34.0	67.9	124.7	7.1	71.4	125.9	7.5									
36.0	66.3	123.8	6.9	69.8	125.2	7.3									
38.0	64.6	122.8	6.7	68.2	124.4	7.1									
40.0	63.0	121.8	6.6	66.6	123.5	7.0									
42.0	61.3 59.6	120.8 119.6	6.5 6.4	65.0 63.3	122.6 121.6	6.8 6.7									
44.0 46.0	57.8	119.6	6.2	61.6	121.6	6.6									
48.0	56.0	117.0	6.1	59.9	119.4	6.4									
48.9	30.0	117.0	0.1	39.9	119.4	0.4	65.0	121.2	6.7						
50.0	54.2	115.6	6.0	58.2	118.2	6.3	64.1	120.6	6.7						
55.0	49.5	111.6	5.8	53.7	114.7	6.0	59.9	117.9	6.4						
60.0	44.3	106.8	5.5	48.9	110.6	5.8	55.4	114.7	6.1						
65.0	38.7	101.1	5.3	43.7	105.8	5.6	50.8	110.8	5.9						
68.7										55.0	111.1	5.8			
70.0	32.2	93.9	5.0	38.0	99.9	5.5	45.7	106.3	5.8	53.8	110.2	5.8			
75.0	24.2	84.3	4.5	31.3	92.5	5.2	40.2	100.8	5.6	49.0	106.1	5.7			
79.0	15.2	72.8	4.1												
80.0				23.1	82.5	4.9	34.0	94.0	5.5	43.9	101.3	5.5			
84.0				15.3	72.5	4.0									
85.0							26.5	85.3	5.3	38.2	95.4	5.4			
90.0							16.1	72.1	5.2	31.6	88.1	5.4			
91.0							15.1	70.8	4.7						
95.0										23.4	78.3	5.3			
99.0										15.8	68.5	4.8			



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

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

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

		gulo de 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]
				50.0	m Pluma Cab	eza de p	il, Punto lumín (19 n] Posici	916-1) 8	0.5 m Pl	eza de p umín	lumín				
21.7	78.0	131.7	7.7												
22.0	77.8	131.6	7.7												
24.0	76.3	131.1	7.5												
26.0	74.8	130.6	7.2												
28.0	73.3	130.0	7.0												
30.0	71.8	129.4	6.8												
32.0	70.3	128.7	6.6												
32.9				73.0	129.4	6.8									
34.0	68.8	127.9	6.5	72.1	129.1	6.8									
36.0	67.2	127.1	6.3	70.6	128.4	6.7									
38.0	65.7	126.2	6.1	69.1	127.6	6.5									
40.0	64.1	125.2 124.2	6.0 5.9	67.5	126.8 125.9	6.4 6.2				ł					
42.0 44.0	62.5 60.8	124.2	5.8	66.0 64.4	125.9	6.1									
46.0	59.2	123.1	5.7	62.8	123.0	5.9				i					
48.0	57.5	120.6	5.5	61.2	122.9	5.8									
50.0	55.8	119.3	5.4	59.5	121.7	5.7									
50.2	00.0	110.0	0.4	00.0	121	0.1	65.0	123.9	6.0	i			i		
55.0	51.3	115.5	5.2	55.2	118.4	5.4	61.1	121.4	5.8				İ		
60.0	46.5	111.1	5.0	50.7	114.6	5.2	56.9	118.3	5.5						
65.0	41.3	105.8	4.8	45.9	110.1	5.0	52.5	114.7	5.3						
70.0	35.5	99.3	4.7	40.7	104.6	4.9	47.8	110.4	5.1						
70.4										55.0	113.6	5.1			
75.0	28.7	91.2	4.3	34.7	98.0	4.7	42.7	105.4	5.0	50.9	110.1	5.0			
80.0	19.8	79.8	3.9	27.8	89.6	4.6	37.1	99.3	4.8	46.1	105.6	4.9			
82.0	16.6	75.5	3.4							I					
85.0				18.5	77.6	4.4	30.6	91.7	4.8	40.8	100.2	4.8			
87.0				15.0	72.9	3.7				l					
90.0							22.5	81.4	4.8	35.0	93.7	4.7			
93.0							15.8	72.5	4.7						
95.0										28.0	85.3	4.7			
100.0										18.9	73.5	4.6			
102.0										15.5	68.9	4.2			



2821-1

2821-1

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

		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]
				50.0 ı	m Pluma Cab	principa	II, Punto Iumín (1	de carga	1 - Cab	eza de p	lumín				
					Cub		] Posici			a					
22.3	78.0	134.6	6.9												
24.0	76.8	134.2	6.8												
26.0	75.4	133.7	6.6												
28.0	74.0	133.1	6.4												
30.0	72.5	132.5	6.2												
32.0	71.1	131.8	6.0												
33.7				73.0	132.3	6.1									
34.0	69.6	131.1	5.9	72.8	132.2	6.1									
36.0	68.1	130.3	5.7	71.3	131.6	6.1									
38.0	66.6	129.5	5.6	69.9	130.8	5.9									
40.0	65.1	128.5	5.5	68.4	130.1	5.8									
42.0	63.5	127.6	5.3	66.9	129.2	5.6									
44.0	62.0	126.5	5.2	65.4	128.3	5.5									
46.0	60.4	125.4	5.1	63.9	127.3	5.4									
48.0	58.8	124.2	5.0	62.3	126.3	5.3									
50.0	57.2	122.9	4.9	60.7	125.2	5.2									
51.4	50.0	4400		-0-	400.4	4.0	65.0	126.6	5.3						
55.0	52.9	119.3 115.2	4.7	56.7	122.1 118.5	4.9	62.2	124.8 121.9	5.3						
60.0	48.5 43.6	115.2	4.5	52.4 47.9	118.5	4.7 4.5	58.3 54.1	121.9	5.0 4.8						
65.0 70.0	38.3	104.4	4.3 4.1	43.0	109.2	4.5	49.7	118.4	4.8						
70.0 72.2	38.3	104.4	4.1	43.0	109.2	4.3	49.7	114.4	4.6	EE 0	116.1	4.6			
72.2 75.0	32.3	97.2	3.9	37.6	103.2	4.2	44.9	109.7	4.4	55.0 52.6	116.1	4.5			
75.0 80.0	25.0	97.2 87.8	3.9	37.6	95.8	4.2	39.8	109.7	4.4	52.6 48.1	113.9	4.5			
85.0	16.3	75.9	3.0	24.0	95.6 86.1	3.9	34.0	97.4	4.3	43.2	109.7	4.4			
89.0	10.3	10.8	3.0	15.7	74.7	3.9	34.0	91.4	4.2	43.2	104.7	4.3			
90.0				15.7	14.1	3.1	27.1	88.7	4.1	37.8	98.8	4.2			
95.0							18.0	76.4	4.0	31.7	91.4	4.2			
96.0							15.5	70.4	4.0	31.7	31.7	7.1			
100.0							10.0	72.0	7.0	24.3	81.8	4.1			
105.0										15.2	69.3	3.6			



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 principa			gulo de orincipa			gulo de principa			gulo de orincipa		45° Án I	gulo de orincipa	pluma I
Alcan- ce [ m ]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]
				50.0 ו	m Pluma Cab	eza de p	al, Punto dumín (19 n] Posici	916-1) 8	6.5 m Plı	eza de p umín	lumín		-		
22.9 24.0 26.0 28.0 30.0 32.0	78.0 77.3 75.9 74.5 73.1 71.7	137.5 137.3 136.8 136.3 135.7	6.2 6.2 6.0 5.8 5.7												
34.0 34.6 36.0 38.0 40.0	70.3 68.9 67.5 66.0	134.3 133.6 132.7 131.9	5.4 5.3 5.1 5.0	73.0 72.0 70.6 69.2	135.2 134.7 134.0 133.3	5.6 5.6 5.4 5.3									
42.0 44.0 46.0 48.0 50.0	64.5 63.1 61.5 60.0 58.5	130.9 129.9 128.8 127.7 126.5	4.9 4.8 4.7 4.6 4.5	67.8 66.3 64.8 63.4 61.8	132.5 131.6 130.7 129.7 128.6	5.2 5.1 4.9 4.8 4.7									
52.7 55.0 60.0 65.0	54.4 50.2 45.7 40.8	123.1 119.2 114.6 109.2	4.3 4.1 3.9 3.7	58.0 53.9 49.7 45.1	125.7 122.2 118.2	4.5 4.3 4.1 3.9	65.0 63.3 59.5 55.5	129.3 128.2 125.4 122.1 118.4	4.8 4.8 4.6 4.4 4.2						
73.9 75.0 80.0 85.0	35.4 29.0 21.1	102.7 94.6 83.6	3.5 3.3 3.0	45.1 40.2 34.7 28.2	113.5 108.0 101.4 93.0	3.7 3.6 3.4	46.9 42.1 36.9	114.0 108.8 102.6	4.0 3.9 3.7	55.0 54.1 49.8 45.3	118.5 117.7 113.7 109.1	4.1 4.1 4.0 3.9			
88.0 90.0 92.0 95.0 99.0	16.0	76.4	2.6	19.9 15.4	81.6 75.1	3.3 3.2	30.8 23.4 15.2	95.0 85.0 73.3	3.6 3.5 3.4	40.4 34.9	103.6 97.0	3.7			
100.0 105.0 107.0										28.4 20.2 15.9	88.7 77.4 71.1	3.6 3.5 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:

	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]
50.0 m Pluma principal, Punto de carga 1 - Cabeza de plumín Cabeza de plumín (1916-1) 89.5 m Plumín 46.0 [ m ] Posición midfall (1916)															
23.6	78.0	140.5	5.5												
24.0	77.7	140.4	5.5												
26.0	76.4	139.9	5.4												
28.0	75.1	139.4	5.2												
30.0	73.7	138.8	5.1												
32.0	72.4	138.2	4.9												
34.0	71.0	137.5	4.8												
35.5		400.0		73.0	138.1	4.9									
36.0	69.6	136.8	4.7	72.7	137.9	4.9									
38.0	68.3	136.0	4.5	71.3	137.2	4.8									
40.0	66.9	135.1	4.4	69.9	136.5	4.7									
42.0	65.5	134.2	4.3	68.5	135.7	4.5									
44.0 46.0	64.0 62.6	133.3 132.2	4.2 4.1	67.2 65.7	134.9 134.0	4.4 4.3									
48.0	61.1	131.2	4.1	64.3	134.0	4.3									
50.0	59.6	130.0	3.9	62.9	132.0	4.2									
54.0	39.0	130.0	3.9	02.9	132.0	4.1	65.0	132.0	4.1						
55.0	55.8	126.8	3.7	59.2	129.2	3.9	64.3	131.5	4.1						
60.0	51.8	123.1	3.5	55.3	125.2	3.7	60.6	128.9	3.9						
65.0	47.6	118.7	3.3	51.3	122.1	3.5	56.8	125.8	3.7						
70.0	43.0	113.7	3.1	47.0	117.7	3.3	52.9	122.2	3.6						
75.0	38.0	107.7	3.0	42.4	112.6	3.2	48.7	118.0	3.4						
75.6	55.5		0.0						<b>U</b>	55.0	121.0	3.4			
80.0	32.4	100.5	2.8	37.4	106.5	3.0	44.2	113.2	3.3	51.5	117.6	3.4			
85.0	25.7	91.3	2.6	31.7	99.1	2.9	39.4	107.5	3.1	47.2	113.3	3.3			
90.0	16.6	78.1	2.4	24.8	89.6	2.8	34.0	100.7	3.0	42.6	108.2	3.2			
91.0	15.7	76.8	2.1												
95.0				15.2	75.5	2.6	27.6	92.1	2.9	37.6	102.1	3.1			
100.0							19.4	80.4	2.8	31.9	94.8	3.0			
102.0							16.5	76.0	2.4						
105.0										25.0	85.3	2.9			
110.0										15.6	71.5	2.8			



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

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

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

		gulo de 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]
				50.0 ו		eza de p	ıl, Punto lumín (19 n] Posici	916-1) 9:	2.5 m Pli	eza de p umín	lumín				
24.2	78.0	143.4	4.9												
26.0	76.8	143.0	4.8												
28.0	75.6	142.5	4.7												
30.0	74.3	141.9	4.5												
32.0	73.0	141.3	4.4												
34.0	71.7	140.7	4.2												
36.0	70.3	140.0	4.1												
36.4				73.0	140.9	4.3									
38.0	69.0	139.2	4.0	71.9	140.4	4.3									
40.0	67.7	138.4	3.9	70.6	139.7	4.1									
42.0	66.3	137.5	3.8	69.3	138.9	4.0									
44.0	64.9	136.6	3.7	67.9	138.1	3.9									
46.0	63.6	135.6	3.6	66.6	137.3	3.8									
48.0	62.2	134.6	3.5	65.2	136.4	3.7									
50.0	60.7	133.5	3.4	63.8	135.4	3.6									
55.0	57.1	130.4	3.2	60.3	132.7	3.4									
55.2		400.0	0.0	50.0	400.0	0.0	65.0	134.8	3.6						
60.0 65.0	53.3 49.3	126.9 122.8	3.0 2.8	56.6 52.8	129.6 126.0	3.2 3.0	61.7 58.1	132.3 129.4	3.4 3.2						
70.0	49.3 45.0	118.1	2.6	48.8	120.0	2.9	54.3	129.4	3.2						
75.0	40.4	112.5	2.7	44.5	117.0	2.9	50.3	123.9	2.9						
77.3	40.4	112.5	2.5	44.5	117.0	2.1	30.3	122.0	2.9	55.0	123.4	2.9			
80.0	35.2	106.0	2.4	39.8	111.4	2.6	46.1	117.5	2.8	52.9	123.4	2.9			
85.0	33.2	100.0	2.4	34.6	104.7	2.5	41.6	112.2	2.7	48.9	117.3	2.5			
90.0				28.6	96.4	2.3	36.7	105.9	2.6	44.6	117.5	2.6			
95.0				20.0	30.7	2.0	31.0	98.3	2.5	39.9	107.0	2.6			
100.0							24.2	88.6	2.3	34.8	100.3	2.5			
105.0							27.2	00.0	2.0	28.8	92.1	2.4			
110.0										21.4	81.2	2.3			
113.0										15.3	71.9	2.3			



Nº de ident.: 9842523/95738/ 360°

Radio de descarga:

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

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

		gulo de orincipa			gulo de orincipa			gulo de principa			gulo de orincipa			gulo de orincipa	
Alcan- ce [ m ]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]
				50.0 ו		eza de p	ıl, Punto lumín (19 1 ] Posici	916-1) 9	5.5 m Plı	eza de p umín	lumín		_		
24.8	78.0	146.3	4.5												
26.0	77.3	146.1	4.5												
28.0	76.0	145.6	4.4												
30.0	74.8	145.1	4.2												
32.0	73.5	144.5	4.1												
34.0	72.3	143.8	4.0												
36.0	71.0	143.2	3.8												
37.2	00.7			73.0	143.8	4.0									
38.0 40.0	69.7 68.4	142.4 141.6	3.8 3.6	72.5 71.2	143.5 142.9	4.0 3.9									
42.0	67.1	141.8	3.5	70.0	142.9	3.9									
44.0	65.8	139.9	3.4	68.7	141.4	3.6									
46.0	64.5	139.0	3.3	67.4	140.6	3.5									
48.0	63.1	138.0	3.2	66.1	139.7	3.4							i		
50.0	61.7	136.9	3.2	64.7	138.7	3.3									
55.0	58.2	134.0	2.9	61.3	136.1	3.2									
56.5							65.0	137.5	3.3						
60.0	54.6	130.6	2.7	57.8	133.2	2.9	62.6	135.7	3.2						
65.0	50.8	126.7	2.5	54.2	129.7	2.7	59.2	132.9	3.0						
70.0				50.3	125.8	2.5	55.6	129.6	2.8						
75.0				46.3	121.3	2.3	51.8	125.9	2.6						
79.1										55.0	125.9	2.6			
80.0							47.9	121.6	2.4	54.3	125.2	2.6			
85.0										50.5	121.3	2.4			



N° de ident.: 9842523/95738/

360°

Radio de descarga:

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

		gulo de 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]
				53.0 ו		eza de p	al, Punto dumín (2: n] Posici	316-1) 3	8.5 m Pl	eza de p umín	lumín				
13.0	78.0	93.6	48.3												
14.0	76.5	93.4	47.8												
16.0	73.4	92.8	41.5												
18.0	70.3	92.1	35.8												
20.0	67.0	91.3	31.3												
20.9				73.0	92.3	41.5									
22.0	63.7	90.3	27.4	71.3	91.9	41.0									
24.0	60.3	89.2	24.6	68.1	91.1	37.7									
26.0	56.8 53.2	88.0 86.5	22.3	64.8 61.5	90.2 89.2	33.6 30.4									
28.0 30.0	49.3	84.9	20.5 19.0	58.0	88.0	27.5									
32.0	49.3 45.2	83.0	17.7	56.0 54.4	86.6	25.2									
33.2	45.2	03.0	17.7	34.4	00.0	23.2	65.0	88.7	26.0						
34.0	40.7	80.8	16.6	50.6	85.0	23.3	63.7	88.3	26.0						
36.0	35.9	78.2	15.6	46.6	83.2	21.6	60.3	87.2	24.6						
38.0	30.3	75.0	14.8	42.3	81.1	20.0	56.8	86.0	23.2						
40.0	23.5	70.9	14.1	37.5	78.6	18.7	53.1	84.5	22.0						
42.0	15.8	66.0	12.1	32.2	75.7	17.6	49.3	82.9	21.0						
44.0				25.9	71.9	16.5	45.2	81.0	20.0						
46.0				17.6	66.7	15.4	40.7	78.8	19.0						
47.6										55.0	81.9	15.6			
48.0							35.8	76.1	18.3	54.5	81.7	16.5			
50.0							30.3	73.0	17.6	50.7	80.2	16.0			
54.0							15.8	64.0	14.9						
55.0										40.1	75.1	14.5			
60.0										26.2	67.2	13.2			
62.0										18.0	62.1	12.7			
71.9													35.0	61.4	5.8
75.0													27.6	57.1	5.3
77.0													20.0	52.4	5.0



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 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]
				53.0 ı	m Pluma Cab	eza de p	al, Punto dumín (2 n ] Posici	316-1) 4	1.5 m Pl		lumín				
13.6	78.0	96.5	44.8												
14.0	77.5	96.4	44.8												
16.0	74.6	95.9	40.2												
18.0	71.7	95.3	35.0												
20.0	68.8	94.5	31.0												
21.8				73.0	95.1	38.5									
22.0	65.8	93.7	27.0	72.7	95.1	38.4									
24.0	62.7	92.7	24.0	69.8	94.4	36.6									
26.0 28.0	59.5 56.2	91.5 90.2	21.9	66.8 63.7	93.5 92.6	33.9 30.2				ł					
30.0	50.2	90.2 88.8	20.1 18.6	60.6	92.6	27.6									
32.0	49.2	87.1	17.4	57.3	90.2	25.1									
34.0	45.4	85.2	16.3	54.0	88.8	23.1				i					
34.5	45.4	05.2	10.5	34.0	00.0	25.1	65.0	91.4	24.6	i			i		
36.0	41.3	83.0	15.2	50.4	87.2	21.5	62.7	90.7	24.2						
38.0	36.9	80.5	14.4	46.7	85.4	19.9	59.5	89.5	22.8						
40.0	31.9	77.5	13.7	42.7	83.4	18.5	56.2	88.2	21.6	l					
42.0	26.0	73.8	13.0	38.4	80.9	17.3	52.8	86.8	20.5	İ			İ		
44.0	18.5	68.7	12.3	33.6	78.1	16.3	49.2	85.1	19.6						
45.0	15.2	66.4	10.2												
46.0				28.1	74.7	15.4	45.4	83.2	18.7						
48.0				21.3	70.2	14.4	41.3	81.0	17.8	ļ			<u> </u>		
49.0				16.9	67.2	13.9									
49.3										55.0	84.4	14.6			
50.0							36.9	78.5	17.1	54.1	84.0	15.6			
55.0							22.6	69.5	15.5	44.9	79.6	14.1			
57.0							15.1	64.4	14.1	20.0	70.0	40.0			
60.0										33.8 17.3	73.3 62.5	12.8 11.7			
65.0 74.4										17.3	02.5	11.7	35.0	63.1	4.9
75.0													34.9	63.0	4.9
80.0													19.2	52.9	4.9



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

		gulo de orincipal			gulo de orincipa			gulo de principa			gulo de orincipa			gulo de orincipa	
Alcan- ce [ m ]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]
				53.0 ı	m Pluma Cab	eza de p	al, Punto lumín (2 n ] Posici	316-1) 4	4.5 m Plı	eza de p umín	lumín				
14.3	78.0	99.5	41.9												
16.0	75.7	99.0	39.7												
18.0	73.0	98.4	34.7												
20.0	70.3	97.8	30.2												
22.0	67.5	97.0	26.8												
22.7				73.0	98.0	36.0									
24.0	64.7	96.0	23.7	71.2	97.5	35.5									
26.0	61.8	95.0	21.4	68.4	96.8	33.3									
28.0	58.8	93.8	19.7	65.6	95.9	30.5									
30.0	55.7	92.5	18.3	62.8	94.9	27.5									
32.0	52.5	91.0	17.1	59.8	93.8	25.3									
34.0	49.1	89.3	16.1	56.7	92.5	23.1	05.0		00.7						
35.7 36.0	45.6	87.5	15.1	53.6	91.1	21.4	65.0 64.7	94.1 94.0	22.7 23.4						
38.0	41.8	85.3	14.2	50.3	89.5	19.9	61.8	93.0	23.4						
40.0	37.7	82.8	13.3	46.8	87.7	18.6	58.8	91.8	21.3						
42.0	33.2	80.0	12.7	43.1	85.6	17.3	55.7	90.5	20.2						
44.0	28.1	76.5	12.7	39.1	83.3	16.2	52.5	89.0	19.2						
46.0	21.8	72.0	11.5	34.8	80.5	15.2	49.1	87.3	18.5						
47.0	17.9	69.2	11.2	01.0	00.0			07.0	10.0						
48.0				29.9	77.3	14.4	45.6	85.5	17.6						
50.0				24.0	73.2	13.6	41.8	83.3	16.8						
51.1	İ			i .						55.0	86.8	13.8			
52.0				16.3	67.6	12.7			L						
55.0							30.7	76.3	15.3	48.7	83.8	13.9			
59.0							17.8	67.1	14.1						
60.0										39.3	78.5	12.5			
65.0										27.3	70.6	11.5			
68.0										16.7	62.9	10.9			
76.8													35.0	64.8	4.4
80.0													28.5	60.5	3.9
83.0													18.6	53.4	3.4



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

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [ m ]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]
				53.0 ı		eza de p	ıl, Punto lumín (2 ı ] Posici	316-1) 4	7.5 m Pl	eza de p umín	lumín				
14.9 16.0 18.0	78.0 76.6 74.1	102.4 102.1 101.6	38.8 38.6 33.7												
20.0 22.0	71.6 69.0	100.9 100.2	29.4 26.2												
23.6 24.0 26.0	66.4 63.7	99.4 98.4	23.3 21.0	73.0 72.4 69.9	100.9 100.7 100.0	33.4 33.2 32.0									
28.0 30.0 32.0	61.0 58.2 55.3	97.3 96.1 94.8	19.3 17.8 16.6	67.3 64.6 61.9	99.2 98.3 97.2	30.5 27.4 25.0									
34.0 36.0 37.0	52.2 49.1	93.3 91.6	15.5 14.6	59.1 56.2	96.1 94.8	23.0 21.1	65.0	96.9	21.9						
38.0 40.0	45.8 42.3	89.7 87.6	13.8 12.9	53.2 50.1	93.3 91.7	19.5 18.3	63.7 61.0	96.4 95.3	21.8						
42.0 44.0 46.0	38.5 34.4 29.7	85.2 82.4 79.1	12.2 11.6 11.1	46.9 43.4 39.8	89.9 87.9 85.6	17.1 15.9 14.9	58.2 55.2 52.2	94.1 92.8 91.3	19.7 18.7 17.8						
48.0 50.0	24.3 17.3	75.1 69.6	10.5 10.0	35.8 31.3	82.9 79.8	14.0	49.1 45.8	89.6 87.7	17.8 17.2 16.4						
52.8 55.0 60.0 62.0				15.8	68.0	11.4	36.5 24.3 17.2	81.8 73.1 67.6	14.7 13.5 12.9	55.0 51.8 43.6	89.3 87.7 83.0	12.9 13.4 12.1			
65.0 70.0 71.0							11.2	07.0	12.9	33.8 20.1 16.1	76.6 66.5 63.3	11.0 10.0 9.8			
79.3 80.0 85.0													35.0 34.7 21.6	66.5 66.3 56.7	3.5 3.5 2.8
86.0													17.9	53.8	2.6



2821-1

2821-1

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

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [ m ]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]
				53.0 ו		eza de p	ıl, Punto lumín (2 ı ] Posici	316-1) 5	0.5 m Pli	eza de p umín	lumín				
15.5	78.0	105.3	36.4												
16.0	77.4	105.2	36.4												
18.0	75.1	104.7	33.0												
20.0	72.7	104.1	29.1												
22.0	70.3	103.4	25.5												
24.0	67.9	102.6	23.0												
24.4				73.0	103.7	31.4									
26.0	65.4	101.7	20.8	71.1	103.2	30.9									
28.0	62.9	100.7	19.0	68.7	102.4	29.5									
30.0	60.3 57.6	99.6	17.6	66.2	101.6	27.7 25.0									
32.0	57.6 54.8	98.4	16.4 15.3	63.7 61.1	100.6 99.6	25.0									
34.0 36.0	54.8 52.0	97.0 95.5	15.3	58.5	99.6 98.4	21.2									
38.0	49.0	93.8	13.5	55.8	97.0	19.6							ł		
38.3	43.0	33.0	10.0	33.0	37.0	13.0	65.0	99.6	20.8						
40.0	45.9	91.9	12.7	53.0	95.6	18.2	62.9	98.7	20.5						
42.0	42.6	89.8	12.0	50.0	93.9	17.0	60.3	97.6	19.4						
44.0	39.1	87.5	11.3	47.0	92.1	15.9	57.6	96.4	18.5						
46.0	35.3	84.8	10.7	43.7	90.1	14.9	54.8	95.0	17.6						
48.0	31.1	81.7	10.3	40.3	87.9	14.0	52.0	93.5	16.8						
50.0	26.3	77.9	9.8	36.6	85.3	13.2	49.0	91.8	16.1						
53.0	16.7	70.0	9.1												
54.5										55.0	91.8	12.1			
55.0				25.4	76.7	11.5	40.9	86.7	14.5	54.5	91.5	12.9			
58.0				15.3	68.4	10.4									
60.0							31.1	79.7	13.2	47.1	87.3	11.8			
65.0							16.7	68.0	12.0	38.6	81.8	10.7			
70.0										28.1	74.0	9.8			
74.0										15.6	63.7	8.8	05.0		0.0
81.8													35.0	68.3	2.9
85.0													29.2	63.9	2.5
88.0	l												20.9	57.3	2.1



2821-1

2821-1

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

		gulo de 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]
				53.0 ו	m Pluma Cab	eza de p	al, Punto dumín (2 n ] Posici	316-1) 5	3.5 m Pl		lumín				
16.1	78.0	108.3	33.4												
18.0	75.9	107.8	32.3												
20.0	73.7	107.2	28.5												
22.0	71.5	106.6	24.8												
24.0	69.2	105.9	22.2												
25.3				73.0	106.6	29.2									
26.0	66.9	105.0	20.1	72.2	106.4	29.0									
28.0	64.5	104.1	18.4	69.9	105.7	28.1									
30.0	62.1	103.1	17.1	67.6	104.9	27.0									
32.0	59.6	101.9	15.9	65.3	104.0	24.8									
34.0	57.1	100.7	14.8	62.9	103.0	22.7									
36.0	54.5	99.3	13.9	60.5	101.9	21.1									
38.0	51.8	97.7	13.1	57.9	100.7	19.4	65.0	102.3	19.0	ł					
39.5 40.0	49.0	96.1	12.4	55.4	99.3	17.9	64.5	102.3	19.0						
42.0	46.1	94.2	11.6	52.7	97.8	16.7	62.1	101.1	19.4						
44.0	43.0	94.2	11.0	49.9	96.2	15.7	59.6	99.9	18.0						
46.0	39.7	89.8	10.4	47.0	94.4	14.6	57.1	98.7	17.2	i					
48.0	36.1	87.2	9.8	44.0	92.4	13.7	54.5	97.3	16.3	i					
50.0	32.3	84.2	9.4	40.8	90.1	12.9	51.8	95.7	15.6						
55.0	19.8	73.6	8.3	31.6	83.2	11.2	44.5	91.2	14.0						
56.0	16.2	70.5	8.1							1					
56.2								İ	İ	55.0	94.2	11.4			
60.0				18.7	72.2	9.7	36.1	85.2	12.7	50.0	91.3	11.5			
61.0				16.2	70.0	7.9									
65.0							25.5	76.6	11.7	42.5	86.5	10.4			
68.0							16.2	68.4	11.0						
70.0										33.7	80.0	9.4			
75.0										21.2	69.5	8.2			
77.0										15.1	64.1	7.7			
84.2													35.0	70.0	2.1
85.0													34.6	69.7	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]
				53.0 ו		eza de p	ıl, Punto lumín (2 ı ] Posici	316-1) 5	6.5 m Pl	eza de p umín	lumín				
16.8	78.0	111.2	31.0												
18.0	76.7	110.9	31.0												
20.0	74.6	110.4	27.8												
22.0	72.5 70.3	109.8 109.1	24.6												
24.0 26.0	68.2	109.1	21.7 19.7												
26.0	00.2	106.3	19.7	73.0	109.5	27.6									
28.0	66.0	107.4	18.1	71.1	108.9	27.0									
30.0	63.7	106.5	16.8	68.9	108.1	26.1									
32.0	61.4	105.4	15.8	66.7	107.3	24.9									
34.0	59.1	104.2	14.7	64.5	106.3	22.7									
36.0	56.6	102.9	13.7	62.2	105.3	21.0									
38.0	54.2	101.5	12.9	59.8	104.2	19.5									
40.0	51.6	100.0	12.1	57.5	102.9	18.0									
40.8							65.0	105.0	18.5						
42.0	48.9	98.3	11.5	55.0	101.6	16.7	63.7	104.5	18.4						
44.0	46.2	96.4	10.8	52.5	100.1	15.6	61.4	103.4	17.7						
46.0 48.0	43.3 40.2	94.4 92.1	10.2 9.6	49.8 47.1	98.4 96.6	14.6 13.7	59.0 56.6	102.2 100.9	16.9 16.1						
50.0	36.9	89.5	9.0	44.2	94.6	12.8	54.2	99.5	15.3						
55.0	27.1	81.3	8.1	36.3	88.6	11.0	47.6	95.4	13.8						
58.0		01.0	0.1	00.0	00.0	11.0	47.0	00.4	10.0	55.0	96.7	10.8			
59.0	15.8	70.9	7.3												
60.0				26.4	80.2	9.7	40.2	90.1	12.4	52.6	95.2	11.3			
64.0				15.7	70.4	7.4									
65.0							31.4	83.0	11.4	45.8	90.8	10.3			
70.0							19.2	72.1	10.5	38.1	85.1	9.3			
71.0							15.7	68.8	10.3						
75.0										28.2	76.9	8.1			
80.0										16.0	65.8	6.9			



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

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]
				53.0 ו		eza de p	ıl, Punto lumín (2 ı ] Posici	316-1) 5	9.5 m Pli	eza de p umín	lumín				
17.4	78.0	114.1	28.4												
18.0	77.4	114.0	28.4												
20.0	75.4	113.5	26.9												
22.0	73.4	112.9	24.0												
24.0	71.4	112.3	21.2												
26.0	69.3	111.5	19.1												
27.1				73.0	112.3	25.6									
28.0	67.2	110.7	17.5	72.0	112.0	25.4									
30.0	65.1	109.8	16.2	70.0	111.3	24.7									
32.0	63.0	108.8	15.1	67.9	110.5	23.8									
34.0	60.8	107.7	14.2	65.8	109.7	22.3									
36.0	58.5	106.5	13.2	63.7	108.7	20.5									
38.0	56.2	105.2	12.3	61.5	107.6	19.2									
40.0	53.9	103.8	11.6	59.3	106.5	17.8									
42.0	51.4	102.2	10.9	57.0	105.2	16.4									
42.1							65.0	107.7	17.4						
44.0	48.9	100.5	10.4	54.7	103.8	15.2	63.0	106.8	17.2						
46.0	46.3	98.7	9.8	52.2	102.3	14.3	60.8	105.7	16.3						
48.0	43.5	96.6	9.2	49.8	100.7	13.4	58.5	104.5	15.6						
50.0	40.6	94.4	8.7	47.2	98.9	12.6	56.2	103.2	14.9						
55.0	32.4	87.5	7.7	40.1	93.5	10.7	50.2	99.4	13.4						
59.7										55.0	99.1	10.1			
60.0	21.6	77.4	6.8	31.8	86.5	9.4	43.5	94.6	12.0	54.7	99.0	10.6			
62.0	15.3	71.3	6.4												
65.0				20.7	76.1	8.1	35.9	88.5	11.0	48.6	94.9	9.7			
67.0				15.3	70.8	6.7									
70.0							26.4	80.0	10.1	41.7	89.9	8.9			
74.0							15.3	69.2	9.3						
75.0										33.7	83.3	7.8			
80.0										22.8	73.2	6.7			
83.0										15.6	66.2	6.1			



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

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

		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]
				53.0 ı		eza de p	ıl, Punto lumín (2 ı ] Posici	316-1) 6	2.5 m Pl		lumín				
18.0	78.0	117.1	26.5												
20.0	76.1	116.6	26.2												
22.0	74.2	116.0	23.4												
24.0	72.3	115.4	21.0												
26.0	70.4	114.7	18.9	70.0	115.0	04.0									
27.9	00.4	4440	47.4	73.0	115.2	24.2				ł					
28.0 30.0	68.4 66.4	114.0 113.1	17.4 16.0	72.9 71.0	115.2 114.5	24.2 23.8				ł					
32.0	64.4	112.2	14.8	69.0	113.8	23.0				ł					
34.0	62.3	111.1	13.9	67.1	112.9	22.3				i					
36.0	60.2	110.0	13.0	65.1	112.0	20.5									
38.0	58.1	108.8	12.2	63.0	111.0	19.0				i					
40.0	55.9	107.5	11.4	60.9	110.0	17.8		İ	İ	İ					
42.0	53.6	106.0	10.7	58.8	108.8	16.5									
43.3							65.0	110.5	16.0						
44.0	51.3	104.5	10.1	56.6	107.5	15.3	64.4	110.2	16.5						
46.0	48.9	102.8	9.6	54.4	106.1	14.2	62.3	109.1	16.1						
48.0	46.4	100.9	9.0	52.1	104.6	13.3	60.2	108.0	15.3						
50.0	43.8	98.9	8.5	49.7	102.9	12.5	58.1	106.8	14.7						
55.0	36.6	92.8	7.4	43.3	98.1	10.7	52.4	103.3	13.1						
60.0 61.4	27.8	84.7	6.6	36.0	91.9	9.2	46.4	98.9	11.8	55.0	101.6	9.5			
65.0	16.1	72.9	5.2	27.2	83.6	8.1	39.6	93.4	10.7	55.0 51.0	98.9	9.5			
69.0	10.1	12.9	3.2	17.2	73.6	7.1	39.0	93.4	10.7	51.0	90.9	9.5			
70.0				17.2	75.0	7.1	31.6	86.3	9.8	44.7	94.3	8.6			
75.0							21.0	76.0	9.0	37.4	88.2	7.5			
77.0							16.1	70.8	8.0	l ****	00.2				
80.0										29.9	81.4	6.4			
85.0										18.5	70.0	5.5			
86.0										15.2	66.5	5.3			



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

Valor de vuelco: Lastre trasero [ t ]: 124.0 Lastre central [ t ]: 52.6

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

		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]
				53.0 ı	m Pluma Cab	eza de p	II, Punto Iumín (2 1] Posici	316-1) 6	5.5 m Plı	eza de p umín	lumín				
18.6 20.0 22.0 24.0 26.0	78.0 76.8 75.0 73.1 71.3	120.0 119.7 119.2 118.6 117.9	23.5 23.5 21.9 20.2 18.2												
28.0 28.8 30.0 32.0 34.0	69.4 67.5 65.6 63.7	117.2 116.4 115.5 114.5	16.7 15.4 14.2 13.3	73.0 71.9 70.1 68.2	118.1 117.7 117.0 116.2	21.6 21.4 20.9 20.3									
36.0 38.0 40.0 42.0 44.0	61.7 59.7 57.6 55.5 53.4	113.5 112.3 111.1 109.7 108.3	12.5 11.7 10.9 10.2 9.6	66.3 64.3 62.4 60.4 58.3	115.3 114.4 113.4 112.3 111.1	19.5 18.2 17.1 16.2 14.9									
44.6 46.0 48.0 50.0 55.0	51.1 48.8 46.5 40.0	106.7 105.0 103.1 97.7	9.1 8.6 8.1 7.0	56.2 54.1 51.9 46.0	109.7 108.3 106.8 102.4	13.8 12.9 12.1 10.3	65.0 63.7 61.7 59.7 54.4	113.2 112.5 111.5 110.3 107.0	15.3 15.3 14.8 14.0 12.5						
60.0 63.1 65.0 68.0 70.0	32.5 23.0 15.7	90.8 81.1 73.3	5.4 4.6	39.5 32.0 22.2	96.9 89.8 79.8	7.7 6.7	48.8 42.7 35.7	98.0 91.8	11.4 10.3 9.3	55.0 53.1 47.3	104.0 102.7 98.5	8.8 9.1 8.3			
72.0 75.0 80.0 85.0 88.0				16.8	74.0	6.3	27.2 15.7	83.5 71.2	8.6 7.2	40.7 34.2 25.3 18.0	93.0 87.1 78.2 70.4	7.1 6.1 5.2 4.6			



N° de ident.: 9842523/95738/

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

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

		gulo de orincipal		1	gulo de orincipal	pluma		gulo de orincipa			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]
				53.0 ו		eza de p	II, Punto Ilumín (2: I Posici	316-1) 6	8.5 m Pl	eza de p umín	lumín				
						34.0 [ 11	i j Posici	Jii iiilula	11 (2310)		ı	ı	1	1	
19.3	78.0 77.4	122.9	21.4 21.4												
20.0 22.0	77.4 75.6	122.8 122.3	20.8												
24.0	73.9	122.3	19.6												
26.0	72.1	121.1	17.9												
28.0	70.4	120.4	16.4												
29.7			10.1	73.0	120.9	19.8									
30.0	68.6	119.6	15.2	72.7	120.8	19.7									
32.0	66.8	118.8	14.0	71.0	120.2	19.4									
34.0	64.9	117.9	13.0	69.2	119.4	19.0									
36.0	63.1	116.9	12.2	67.4	118.6	18.7									
38.0	61.2	115.8	11.5	65.5	117.7	17.7									
40.0	59.2	114.6	10.7	63.7	116.8	16.7									
42.0	57.2	113.4	10.0	61.8	115.7	15.9									
44.0	55.2	112.0	9.4	59.9	114.6	15.0									
45.9							65.0	115.9	14.6						
46.0	53.1	110.5	8.8	57.9	113.3	13.9	64.9	115.9	14.6						
48.0 50.0	51.0 48.8	108.9 107.2	8.4 7.9	55.9 53.8	112.0 110.6	12.9 12.0	63.1 61.2	114.9 113.8	14.5 13.8						
55.0	42.9	107.2	6.8	48.4	106.5	10.3	56.2	110.7	12.3						
60.0	36.3	96.2	5.9	42.5	100.5	8.8	51.0	106.9	11.2						
64.8	30.3	30.2	5.5	42.5	101.5	0.0	31.0	100.5	11.2	55.0	106.5	8.4			
65.0	28.4	88.1	5.3	35.8	95.2	7.6	45.3	102.4	10.1	55.0	106.5	8.6			
70.0	17.4	76.0	4.6	27.8	87.0	6.6	39.1	96.8	9.1	49.6	102.5	8.1			
71.0	15.4	73.7	4.1												
75.0			·	16.4	74.4	5.7	31.8	89.6	8.4	43.6	97.5	6.9			
80.0							22.4	79.7	7.7	37.8	92.3	5.9			
83.0							15.3	71.6	6.6						
85.0										30.2	84.7	5.0			
90.0										20.2	73.9	4.1			
91.0										17.6	70.9	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 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]
				53.0 ı		eza de p	al, Punto lumín (2 n ] Posici	316-1) 7	1.5 m Pl	eza de p umín	lumín				
19.9	78.0	125.9	20.0												
20.0	77.9	125.8	20.0												
22.0	76.3	125.4	19.8												
24.0	74.6	124.8	18.6												
26.0	72.9	124.2	17.5												
28.0	71.2	123.6	15.9												
30.0	69.5	122.8	14.8												
30.6				73.0	123.8	18.5									
32.0	67.8	122.0	13.7	71.8	123.3	18.4									
34.0	66.1	121.2	12.7	70.1	122.6	18.0									
36.0	64.3	120.2	11.8	68.4	121.9	17.6									
38.0	62.5	119.2	11.1	66.6	121.0	17.2									
40.0	60.6 58.8	118.1	10.4 9.7	64.9	120.1 119.1	16.2 15.4									
42.0 44.0	56.9	116.9 115.6	9.7	63.1 61.3	118.0	14.8									
46.0	54.9	114.3	8.5	59.4	116.0	13.9									
47.1	34.9	114.3	0.0	39.4	110.9	13.9	65.0	118.6	13.4						
48.0	52.9	112.8	8.0	57.5	115.6	12.8	64.3	118.2	13.7						
50.0	50.9	111.2	7.6	55.6	114.3	11.9	62.5	117.2	13.5				i		
55.0	45.5	106.6	6.6	50.5	110.5	10.1	57.8	114.3	12.0						
60.0	39.5	101.1	5.7	45.1	105.9	8.6	52.9	110.8	10.8						
65.0	32.6	94.1	5.0	39.1	100.2	7.3	47.7	106.6	9.8						
66.6		-								55.0	109.0	7.7	İ		
70.0	24.0	84.7	4.3	32.1	93.1	6.4	42.0	101.4	8.8	51.7	106.4	7.7			
74.0	15.0	74.1	3.5												
75.0				23.3	83.4	5.5	35.5	95.1	8.0	46.1	101.8	6.5			
78.0				16.1	74.8	5.0									
80.0							27.8	86.9	7.4	40.8	97.0	5.5			
85.0							17.0	74.4	6.7	34.2	90.4	4.6			
86.0							15.0	72.0	6.0						
90.0										26.1	81.6	3.8			
94.0										17.2	71.3	3.2			



Nº de ident.: 9842523/95738/

Radio de descarga: 360°

2 - Vía ancha

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

Valor de vuelco: Lastre trasero [ t ]: 124.0 52.6 Lastre central [ t ]:

		gulo de orincipa			gulo de orincipa			gulo de 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]
				53.0 ı	m Pluma Cab	eza de p	il, Punto Iumín (2 i ] Posici	316-1) 7	4.5 m Plı	eza de p umín	lumín				
20.5 22.0 24.0 26.0	78.0 76.8 75.2 73.6	128.8 128.5 127.9 127.4	18.8 18.8 17.9 17.0												
28.0 30.0 31.4 32.0	72.0 70.4 68.7	126.7 126.0 125.3	15.6 14.4 13.6	73.0 72.6	126.7 126.5	17.5 17.4									
34.0 36.0 38.0 40.0	67.1 65.4 63.7 61.9	124.4 123.5 122.6 121.5	12.5 11.6 10.8 10.2	70.9 69.3 67.6 66.0	125.8 125.1 124.3 123.4	17.2 16.8 16.5 15.9									
42.0 44.0 46.0 48.0	60.2 58.4 56.5 54.7	120.4 119.2 117.9	9.5 8.9 8.3 7.8	64.2 62.5 60.8 59.0	122.5 121.4 120.3	15.1 14.4 13.9									
48.4 50.0 55.0 60.0	52.8 47.7 42.2	115.0 110.8 105.7	7.4 6.4 5.5	57.2 52.4 47.4	117.9 114.3 110.0	11.9 10.0 8.5	65.0 63.7 59.3 54.7	121.3 120.6 117.8 114.5	12.7 13.1 11.8 10.5						
65.0 68.3 70.0 75.0	36.1 28.8 19.2	99.5 91.5 80.1	4.7 4.2 3.6	41.8 35.6 28.3	104.9 98.6 90.4	7.3 6.2 5.4	49.8 44.5 38.6	110.6 105.9 100.1	9.6 8.6 7.8	55.0 53.5 48.3	111.4 110.2 106.0	7.2 7.4 6.2			
76.0 80.0 81.0 85.0	16.7	76.9	3.4	18.4 15.7	78.6 75.3	4.6 4.4	31.9 23.5	93.0 83.3	7.2 6.6	43.5 37.5	101.5 95.6	5.2			
88.0 90.0 95.0 97.0							16.7	74.9	6.2	30.5 21.6 16.9	88.1 77.6 71.8	3.5 2.8 2.5			



2821-1

2821-1

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

		gulo de orincipal			gulo de orincipa		75° Án I	gulo de orincipa	pluma I	65° Án I	gulo de orincipa	pluma I		gulo de orincipa	
Alcan- ce [ m ]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]
				53.0 ו	m Pluma Cab	eza de p	ıl, Punto lumín (2 ı ] Posici	316-1) 7	7.5 m Plı	eza de p umín	lumín				
21.2	78.0	131.7	16.6												
22.0	77.4	131.6	16.6												
24.0	75.8	131.1	16.2												
26.0	74.3	130.5	15.5												
28.0	72.7	129.9	14.6												
30.0	71.2	129.2	13.5												
32.0	69.6	128.5	12.6												
32.3				73.0	129.6	15.3									
34.0	68.0	127.7	11.8	71.7	129.0	15.2									
36.0	66.4	126.8	10.9	70.1	128.3	14.9									
38.0	64.7 63.1	125.9 124.9	10.1 9.5	68.5 66.9	127.5 126.7	14.6 14.3									
40.0 42.0	61.4	124.9	9.5	65.3	125.7	13.8									
44.0	59.7	123.6	8.4	63.6	123.8	13.3									
46.0	57.9	121.4	7.8	61.9	123.7	13.0									
48.0	56.1	120.1	7.3	60.2	122.6	12.5									
49.7	00.1	120.1	7.0	00.2	122.0	12.0	65.0	124.1	12.0						
50.0	54.3	118.7	6.8	58.5	121.4	11.5	64.7	123.9	12.0						
55.0	49.6	114.7	5.9	54.0	118.0	9.5	60.5	121.2	11.1						
60.0	44.4	109.9	5.1	49.2	113.9	8.1	56.1	118.1	9.9						
65.0	38.8	104.2	4.3	44.1	109.1	6.9	51.5	114.4	8.9						
70.0	32.3	97.0	3.7	38.4	103.3	5.8	46.5	109.9	8.1	55.0	113.9	6.7			
75.0	24.4	87.6	3.2	31.9	96.0	5.0	41.1	104.6	7.3	50.7	110.4	5.8			
79.0	15.5	76.2	2.8												
80.0				23.8	86.4	4.3	35.0	98.1	6.6	45.8	105.8	4.9			
84.0				16.3	76.8	3.5									
85.0							27.8	89.7	6.1	40.3	100.4	4.0			
90.0							18.1	77.6	5.6	34.1	93.7	3.2			
91.0							15.5	74.2	5.4						
95.0										26.7	85.1	2.5			
98.0										21.2	78.2	2.0			



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

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

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]
				53.0 ı		eza de p	al, Punto dumín (2 n ] Posici	316-1) 8	0.5 m Pli	eza de p umín	lumín				
21.8 22.0 24.0 26.0 28.0	78.0 77.9 76.4 74.9 73.4	134.7 134.6 134.2 133.6 133.0	15.1 15.1 15.0 14.6 14.2												
30.0 32.0 33.2 34.0	71.9 70.4 68.9	132.4 131.7 130.9	13.1 12.2	73.0 72.4	132.4 132.2	14.1 14.0									
36.0 38.0 40.0 42.0	67.3 65.7 64.2 62.6	130.1 129.2 128.3 127.2	9.9 9.3 8.7	70.9 69.4 67.8 66.3	131.5 130.7 129.9 129.1	13.9 13.6 13.3 13.0									
44.0 46.0 48.0 50.0	60.9 59.3 57.6 55.9	126.1 125.0 123.7 122.4	8.2 7.6 7.1 6.7	64.7 63.1 61.5 59.8	128.1 127.1 126.1 124.9	12.7 12.4 12.2 11.6									
50.9 55.0 60.0 65.0	51.4 46.6 41.4	118.6 114.2 108.9	5.7 4.9 4.1	55.6 51.1 46.3	121.7 117.9 113.4	9.5 8.0 6.8	65.0 61.7 57.6 53.2	126.8 124.7 121.7 118.2	11.4 10.9 9.7 8.7						
70.0 71.7 75.0 80.0	35.6 28.8 20.0	94.4 83.1	3.5 3.0 2.5	41.1 35.2 28.3	108.1 101.6 93.3	5.7 4.9 4.2	48.6 43.6 38.0	114.0 109.1 103.2	7.9 7.1 6.4	55.0 52.5 47.8	116.3 114.2 110.0	6.3 5.7 4.7			
82.0 85.0 87.0 90.0	15.2	76.6	2.3	19.3 16.0	81.7 77.3	3.5 3.1	31.7 23.9	95.9 86.2 74.6	5.9 5.4 4.8	42.8 37.2	105.0 98.9	3.8			
94.0 95.0 97.0							15.2	/4.6	4.8	30.8 27.8	91.4 87.8	2.3 2.1			



 $\mbox{N}^{\rm o}$  de ident.: 9842523/95738/ Pieza de articulaci Radio de descarga: 360  $^{\circ}$  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 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]
				53.0 ו		eza de p	II, Punto Ilumín (2: I Posici	316-1) 8	3.5 m Pli	eza de p umín	lumín				
22.4	78.0	137.6	14.0												
24.0	76.9	137.2	14.0												
26.0	75.5	136.7	13.6												
28.0	74.0	136.2	13.4												
30.0	72.6	135.6	12.6												
32.0	71.1	134.9	11.8												
34.0	69.7	134.1	11.1												
34.1				73.0	135.3	13.1									
36.0	68.2	133.4	10.4	71.6	134.7	13.0									
38.0	66.7	132.5	9.6	70.2	134.0	12.8									
40.0	65.2	131.6	8.9	68.7	133.2	12.5									
42.0	63.6	130.6	8.3	67.2	132.4	12.3									
44.0	62.1	129.6	7.8	65.7	131.5	12.0									
46.0	60.5	128.4	7.4	64.1	130.5	11.7									
48.0	58.9	127.3	6.9	62.6	129.5	11.5									
50.0	57.3	126.0	6.4	61.0	128.4	11.3									
52.2							65.0	129.5	10.7						
55.0	53.0	122.4	5.4	57.0	125.3	9.4	62.8	128.1	10.6						
60.0	48.6	118.3	4.6	52.7	121.7	7.8	58.9	125.2	9.4						
65.0	43.7	113.4	3.9	48.2	117.5	6.6	54.7	121.9	8.4						
70.0	38.4	107.5	3.2	43.4	112.6	5.5	50.4	118.0	7.6						
73.4										55.0	118.8	5.6			
75.0	32.4	100.4	2.7	38.1	106.6	4.6	45.7	113.4	6.9	54.1	118.0	5.3			
80.0	25.2	91.1	2.3	32.0	99.4	3.9	40.6	108.0	6.2	49.7	114.0	4.4			
85.0				24.6	89.9	3.3	34.9	101.4	5.6	45.0	109.3	3.5			
90.0				15.7	77.7	2.5	28.3	93.1	5.1	39.8	103.8	2.7			
94.0										35.3	98.5	2.1			
95.0							20.9	83.3	4.4						
97.0							16.5	77.3	4.0						



2821-1

2821-1

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

		gulo de 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]
				53.0 ו		eza de p	II, Punto Ilumín (2: I Posici	316-1) 8	6.5 m Pli	eza de p umín	lumín				
23.1	78.0	140.5	13.1												
24.0	77.4	140.3	13.1												
26.0	76.0	139.8	12.8												
28.0	74.6	139.3	12.6												
30.0	73.2	138.7	12.3												
32.0	71.8	138.1	11.4												
34.0	70.4	137.4	10.7												
35.0				73.0	138.2	12.3									
36.0	69.0	136.6	10.1	72.3	137.8	12.2									
38.0	67.5	135.8	9.4	70.9	137.1	12.1									
40.0	66.1	134.9	8.7	69.5	136.4	11.9									
42.0	64.6	134.0	8.1	68.0	135.6	11.7									
44.0	63.1	133.0	7.6	66.6	134.8	11.4									
46.0	61.6	131.9	7.1	65.1	133.8	11.2									
48.0	60.1	130.8	6.7	63.6	132.9	11.0									
50.0	58.5	129.5	6.2	62.1	131.8	10.8									
53.5							65.0	132.2	10.1						
55.0	54.5 50.3	126.2 122.2	5.2	58.3	128.9 125.5	9.4 7.7	63.9 60.1	131.5 128.7	10.1 9.2						
60.0		122.2	4.4	54.2	125.5	6.5	56.1	128.7	9.2 8.3						
65.0 70.0	45.8 40.9	117.7	3.7 3.1	50.0 45.5	121.5	5.4	52.0	125.6	7.4						
70.0 75.0	35.5	105.8	2.5	40.6	111.4	4.5	52.0 47.6	121.9	6.7						
75.0 75.2	35.5	105.6	2.5	40.6	111.4	4.5	47.0	117.0	0.7	55.0	121.2	5.0			
80.0				35.1	104.9	3.8	42.9	112.5	6.0	51.3	117.9	4.1			
85.0				28.7	96.7	3.2	37.7	106.5	5.4	46.9	117.5	3.2			
90.0				20.6	85.6	2.6	31.8	99.2	4.9	42.2	108.4	2.4			
92.0				20.0	55.0	2.0	01.0	55.2	4.0	40.2	106.1	2.1			
93.0				15.4	78.1	2.1				70.2	100.1	2.1			
95.0				.3			25.7	91.0	4.1						
100.0							16.2	77.7	3.3						



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

Altura   Ce   Final   Ce   Ce   Ce   Ce   Ce   Ce   Ce   C			gulo de orincipa			gulo de orincipa			gulo de principa			gulo de orincipa			gulo de orincipa	
Cabeza de plumín (2316-1) 38.9.5 m Plumín 43.0 [ m ] Posición midfall (2316)  23.7 78.0 143.5 11.9 24.0 77.8 143.4 11.9 25.0 76.5 142.9 11.8 28.0 75.1 142.4 11.6 30.0 73.8 141.8 11.4 32.0 72.4 141.2 10.8 34.0 71.1 140.5 10.1 35.8 36.0 69.7 139.8 9.6 72.9 141.0 11.1 38.0 66.9 139.2 8.4 70.2 139.6 10.9 42.0 65.5 137.3 7.8 68.8 138.8 10.7 44.0 66.9 138.2 8.4 70.2 139.6 10.9 42.0 65.5 137.3 7.8 68.8 138.8 10.7 44.0 64.1 136.3 7.2 67.4 138.0 10.5 44.0 62.7 135.3 6.8 66.0 137.1 10.2 48.0 61.2 134.2 6.4 64.6 136.2 10.0 50.0 59.7 133.1 5.9 63.1 135.2 9.8 65.0 134.9 9.4 55.0 55.9 129.8 4.9 59.5 132.4 8.9 64.8 134.8 9.4 60.0 51.9 126.1 4.1 55.6 129.2 7.4 61.2 132.2 8.9 65.0 47.7 121.8 3.4 51.6 125.4 6.3 57.4 129.2 8.0 70.0 43.1 116.8 2.8 47.4 121.1 5.3 63.5 125.7 7.1 75.0 38.1 110.9 2.3 42.8 116.0 4.3 49.4 121.6 6.4 76.9 80.0 37.8 110.0 3.5 45.0 116.9 5.7 52.9 121.7 3.7 85.0 90.0 37.8 110.0 3.5 45.0 116.9 5.7 52.9 121.7 3.7 85.0 90.0 37.8 110.0 3.5 45.0 116.9 5.7 52.9 121.7 3.7 85.0 90.0 90.0 25.3 93.4 2.4 34.8 104.7 4.6 44.3 112.8 2.0	ce	o de plumín	de rolda- nas		o de plumín	de rolda- nas	Carga [t]	o de plumín	de rolda- nas	Carga [t]	o de plumín	de rolda- nas	Carga [t]	o de plumín	de rolda- nas	Carga [t]
24.0 77.8 143.4 11.9 26.0 76.5 142.9 11.8 28.0 75.1 142.4 11.6 30.0 73.8 141.8 11.4 11.4 10.8 32.0 72.4 141.2 10.8 34.0 71.1 140.5 10.1 35.8 36.0 69.7 139.8 9.6 72.9 141.0 11.1 38.8 36.0 68.3 139.0 9.1 71.5 140.3 11.1 40.0 66.9 138.2 8.4 70.2 139.6 10.9 42.0 65.5 137.3 7.8 68.8 138.8 10.7 44.0 64.1 136.3 7.2 67.4 138.0 10.5 46.0 62.7 135.3 6.8 66.0 137.1 10.2 48.0 61.2 134.2 6.4 64.6 136.2 10.0 46.0 61.2 134.2 6.4 64.6 136.2 10.0 59.7 133.1 5.9 63.1 135.2 9.8 65.0 134.9 9.4 60.0 51.9 126.1 4.1 55.6 129.2 7.4 61.2 132.2 8.9 65.0 47.7 121.8 3.4 51.6 125.4 6.3 57.4 129.2 8.0 70.0 43.1 116.8 2.8 47.4 121.1 5.3 53.5 125.7 7.1 7.5 50.0 38.1 110.9 2.3 42.8 116.0 4.3 49.4 121.6 6.4 76.9 80.0 37.8 110.0 3.5 45.0 116.9 5.7 52.9 121.7 3.7 85.0 95.0 100.0 95.0 97.0 3.8 100.0 95.0 100.0 95.0 97.0 3.8 100.0 95.0 100.0 95.0 97.0 3.0 95.0 100.0 95.0 97.0 3.0 95.0 100.0 95.0 97.0 3.0 95.0 100.0 95.0 97.0 3.0 95.0 100.0 95.0 97.0 3.0 95.0 100.0 95.0 97.0 3.0 95.0 97.6 3.8 100.0 95.0 97.0 3.0 95.0 97.6 3.8 100.0 95.0 97.0 3.0 95.0 97.0 3.0 95.0 97.0 3.0 97.0 3.0 97.0 97.0 3.0 97.0 97.0 3.0 97.0 97.0 3.0 97.0 97.0 3.0 97.0 97.0 3.0 97.0 97.0 97.0 97.0 97.0 97.0 97.0 97					53.0	m Pluma Cab	eza de p	lumín (2	316-1) 8	9.5 m Pl	umín <sup>·</sup>	lumín				
26.0       76.5       142.9       11.8       28.0       75.1       142.4       11.6       41.8       11.4       11.4       32.0       72.4       141.2       10.8       34.0       71.1       140.5       10.1       35.8       35.8       36.0       69.7       139.8       9.6       72.9       141.0       11.1       38.0       68.3       139.0       9.1       71.5       140.3       11.1       40.0       66.9       138.2       8.4       70.2       139.6       10.9       42.0       65.5       137.3       7.8       68.8       138.8       10.7       44.0       64.1       136.3       7.2       67.4       138.0       10.5       44.0       64.1       136.3       7.2       67.4       138.0       10.5       44.0       64.1       136.3       7.2       67.4       138.0       10.5       44.0       62.7       135.3       6.8       66.0       137.1       10.2       44.0       61.2       134.2       6.4       64.6       136.2       10.0       9.8       59.7       133.1       5.9       63.1       135.2       9.8       59.5       132.4       8.9       64.8       134.8       9.4       9.4       65.0       47.7       121.	23.7		143.5													
28.0 75.1 142.4 11.6 30.0 73.8 141.8 11.4 11.4 11.4 11.4 11.4 12.3 11.4 11.4 11.4 11.4 11.4 11.4 11.4 11	24.0	77.8	143.4	11.9												
30.0	26.0	76.5														
32.0     72.4     141.2     10.8       34.0     71.1     140.5     10.1       35.8     33.8     9.6     72.9     141.0     11.1       38.0     68.3     139.0     9.1     71.5     140.3     11.1       40.0     66.9     138.2     8.4     70.2     139.6     10.9       42.0     65.5     137.3     7.8     68.8     138.8     10.7       44.0     64.1     136.3     7.2     67.4     138.0     10.5       46.0     62.7     135.3     6.8     66.0     137.1     10.2       48.0     61.2     134.2     6.4     64.6     136.2     10.0       50.0     59.7     133.1     5.9     63.1     135.2     9.8       65.0     55.9     129.8     4.9     59.5     132.4     8.9     64.8     134.9     9.4       60.0     51.9     126.1     4.1     55.6     129.2     7.4     61.2     132.2     8.9       65.0     47.7     121.8     3.4     51.6     125.4     6.3     57.4     129.2     8.0       70.0     43.1     116.8     2.8     47.4     121.1     5.3     53.5     125.7 <td>28.0</td> <td></td> <td>142.4</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>	28.0		142.4													
34.0     71.1     140.5     10.1       35.8     36.0     69.7     139.8     9.6     72.9     141.0     11.1       38.0     68.3     139.0     9.1     71.5     140.3     11.1       40.0     66.9     138.2     8.4     70.2     139.6     10.9       42.0     65.5     137.3     7.8     68.8     138.8     10.7       46.0     66.1     136.3     7.2     67.4     138.0     10.5       46.0     62.7     135.3     6.8     66.0     137.1     10.2       48.0     61.2     134.2     6.4     64.6     136.2     10.0       50.0     59.7     133.1     5.9     63.1     135.2     9.8       65.0     55.9     129.8     4.9     59.5     132.4     8.9     64.8     134.8     9.4       60.0     51.9     126.1     4.1     55.6     129.2     7.4     61.2     132.2     8.9       65.0     47.7     121.8     3.4     51.6     125.4     6.3     57.4     129.2     8.0       70.0     43.1     116.8     2.8     47.4     121.1     5.3     53.5     125.7     7.1       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>																
35.8     36.0     69.7     139.8     9.6     72.9     141.0     11.1       38.0     68.3     139.0     9.1     71.5     140.3     11.1       40.0     66.9     138.2     8.4     70.2     139.6     10.9       42.0     65.5     137.3     7.8     68.8     138.8     10.7       44.0     64.1     136.3     7.2     67.4     138.0     10.5       46.0     62.7     135.3     6.8     66.0     137.1     10.2       48.0     61.2     134.2     6.4     64.6     136.2     10.0       50.0     59.7     133.1     5.9     63.1     135.2     9.8       65.0     55.9     129.8     4.9     59.5     132.4     8.9     64.8     134.9     9.4       60.0     51.9     129.8     4.9     59.5     132.4     8.9     64.8     134.9     9.4       65.0     47.7     121.8     3.4     51.6     125.4     6.3     57.4     129.2     8.9       65.0     47.7     121.8     3.4     51.6     125.4     6.3     57.4     129.2     8.0       70.0     43.1     116.8     2.8     47.4     121.1<	32.0	72.4	141.2	10.8												
36.0       69.7       139.8       9.6       72.9       141.0       11.1         38.0       68.3       139.0       9.1       71.5       140.3       11.1         40.0       66.9       138.2       8.4       70.2       139.6       10.9         42.0       65.5       137.3       7.8       68.8       138.8       10.7         44.0       64.1       136.3       7.2       67.4       138.0       10.5         46.0       62.7       135.3       6.8       66.0       137.1       10.2         48.0       61.2       134.2       6.4       64.6       136.2       10.0         50.0       59.7       133.1       5.9       63.1       135.2       9.8         65.0       55.9       129.8       4.9       59.5       132.4       8.9       64.8       134.8       9.4         65.0       47.7       121.8       3.4       51.6       125.4       6.3       57.4       129.2       8.0         70.0       43.1       116.8       2.8       47.4       121.1       5.3       53.5       125.7       7.1         75.0       38.0       37.8       110.0 <t< td=""><td></td><td>71.1</td><td>140.5</td><td>10.1</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></t<>		71.1	140.5	10.1												
38.0       68.3       139.0       9.1       71.5       140.3       11.1         40.0       66.9       138.2       8.4       70.2       139.6       10.9         42.0       65.5       137.3       7.8       68.8       138.8       10.7         44.0       64.1       136.3       7.2       67.4       138.0       10.5         46.0       62.7       135.3       6.8       66.0       137.1       10.2         48.0       61.2       134.2       6.4       64.6       136.2       10.0         50.0       59.7       133.1       5.9       63.1       135.2       9.8         65.0       55.9       129.8       4.9       59.5       132.4       8.9       64.8       134.8       9.4         60.0       51.9       126.1       4.1       55.6       129.2       7.4       61.2       132.2       8.9         65.0       47.7       121.8       3.4       51.6       125.4       6.3       57.4       129.2       8.0         70.0       43.1       116.8       2.8       47.4       121.1       5.3       53.5       125.7       7.1         75.0																
40.0       66.9       138.2       8.4       70.2       139.6       10.9         42.0       65.5       137.3       7.8       68.8       138.8       10.7         44.0       64.1       136.3       7.2       67.4       138.0       10.5         46.0       62.7       135.3       6.8       66.0       137.1       10.2         48.0       61.2       134.2       6.4       64.6       136.2       10.0         50.0       59.7       133.1       5.9       63.1       135.2       9.8         54.7       55.0       55.9       129.8       4.9       59.5       132.4       8.9       64.8       134.8       9.4         60.0       51.9       126.1       4.1       55.6       129.2       7.4       61.2       132.2       8.9         65.0       47.7       121.8       3.4       51.6       125.4       6.3       57.4       129.2       8.0         70.0       43.1       116.8       2.8       47.4       121.1       5.3       53.5       125.7       7.1         75.0       38.1       110.9       2.3       42.8       116.0       4.3       49.4																
42.0       65.5       137.3       7.8       68.8       138.8       10.7         44.0       64.1       136.3       7.2       67.4       138.0       10.5         48.0       62.7       135.3       6.8       66.0       137.1       10.2         48.0       61.2       134.2       6.4       64.6       136.2       10.0         50.0       59.7       133.1       5.9       63.1       135.2       9.8         54.7																
44.0       64.1       136.3       7.2       67.4       138.0       10.5         46.0       62.7       135.3       6.8       66.0       137.1       10.2         48.0       61.2       134.2       6.4       64.6       136.2       10.0         50.0       59.7       133.1       5.9       63.1       135.2       9.8         65.0       55.9       129.8       4.9       59.5       132.4       8.9       64.8       134.8       9.4         60.0       51.9       126.1       4.1       55.6       129.2       7.4       61.2       132.2       8.9         65.0       47.7       121.8       3.4       51.6       125.4       6.3       57.4       129.2       8.0         70.0       43.1       116.8       2.8       47.4       121.1       5.3       53.5       125.7       7.1         76.9       30.0       37.8       110.0       3.5       45.0       116.9       5.7       52.9       121.7       3.7         85.0       32.1       102.7       2.9       40.2       111.4       5.1       48.7       117.6       2.8         90.0       95.0       25		66.9		-		139.6										
46.0       62.7       135.3       6.8       66.0       137.1       10.2         48.0       61.2       134.2       6.4       64.6       136.2       10.0         50.0       59.7       133.1       5.9       63.1       135.2       9.8         54.7       55.0       55.9       129.8       4.9       59.5       132.4       8.9       64.8       134.8       9.4         60.0       51.9       126.1       4.1       55.6       129.2       7.4       61.2       132.2       8.9         65.0       47.7       121.8       3.4       51.6       125.4       6.3       57.4       129.2       8.0         70.0       43.1       116.8       2.8       47.4       121.1       5.3       53.5       125.7       7.1         75.0       38.1       110.9       2.3       42.8       116.0       4.3       49.4       121.6       6.4         76.9       80.0       37.8       110.0       3.5       45.0       116.9       5.7       52.9       121.7       3.7         85.0       32.1       102.7       2.9       40.2       111.4       5.1       48.7       117.6       2				-												
48.0         61.2         134.2         6.4         64.6         136.2         10.0         134.9         9.8         134.9         9.4         132.2         <																
50.0         59.7         133.1         5.9         63.1         135.2         9.8         65.0         134.9         9.4         9.5         9.5         9.5         132.4         8.9         64.8         132.2         8.9         65.0         45.0         129.2         8.0         9.5         7.1         9.5         7.1         9.5         9.5         9.5         9.5         9.5         9.5						-	-									
54.7     55.0     55.9     129.8     4.9     59.5     132.4     8.9     64.8     134.8     9.4       60.0     51.9     126.1     4.1     55.6     129.2     7.4     61.2     132.2     8.9       65.0     47.7     121.8     3.4     51.6     125.4     6.3     57.4     129.2     8.0       70.0     43.1     116.8     2.8     47.4     121.1     5.3     53.5     125.7     7.1       75.0     38.1     110.9     2.3     42.8     116.0     4.3     49.4     121.6     6.4       76.9     80.0     37.8     110.0     3.5     45.0     116.9     5.7     52.9     121.7     3.7       85.0     32.1     102.7     2.9     40.2     111.4     5.1     48.7     117.6     2.8       90.0     95.0     25.3     93.4     2.4     34.8     104.7     4.6     44.3     112.8     2.0       100.0     87.0     87.0     3.0																
55.0     55.9     129.8     4.9     59.5     132.4     8.9     64.8     134.8     9.4       60.0     51.9     126.1     4.1     55.6     129.2     7.4     61.2     132.2     8.9       65.0     47.7     121.8     3.4     51.6     125.4     6.3     57.4     129.2     8.0       70.0     43.1     116.8     2.8     47.4     121.1     5.3     53.5     125.7     7.1       75.0     38.1     110.9     2.3     42.8     116.0     4.3     49.4     121.6     6.4       76.9     80.0     37.8     110.0     3.5     45.0     116.9     5.7     52.9     121.7     3.7       85.0     32.1     102.7     2.9     40.2     111.4     5.1     48.7     117.6     2.8       90.0     95.0     25.3     93.4     2.4     34.8     104.7     4.6     44.3     112.8     2.0       95.0     29.5     97.6     3.8       100.0     87.0     3.0     87.0     3.0		59.7	133.1	5.9	63.1	135.2	9.8									
60.0     51.9     126.1     4.1     55.6     129.2     7.4     61.2     132.2     8.9       65.0     47.7     121.8     3.4     51.6     125.4     6.3     57.4     129.2     8.0       70.0     43.1     116.8     2.8     47.4     121.1     5.3     53.5     125.7     7.1       75.0     38.1     110.9     2.3     42.8     116.0     4.3     49.4     121.6     6.4       76.9     55.0     123.7     4.2       80.0     37.8     110.0     3.5     45.0     116.9     5.7     52.9     121.7     3.7       85.0     32.1     102.7     2.9     40.2     111.4     5.1     48.7     117.6     2.8       90.0     95.0     25.3     93.4     2.4     34.8     104.7     4.6     44.3     112.8     2.0       95.0     87.0     87.0     3.0																
65.0         47.7         121.8         3.4         51.6         125.4         6.3         57.4         129.2         8.0           70.0         43.1         116.8         2.8         47.4         121.1         5.3         53.5         125.7         7.1           75.0         38.1         110.9         2.3         42.8         116.0         4.3         49.4         121.6         6.4           76.9         80.0         37.8         110.0         3.5         45.0         116.9         5.7         55.0         123.7         4.2           80.0         32.1         102.7         2.9         40.2         111.4         5.1         48.7         117.6         2.8           90.0         95.0         25.3         93.4         2.4         34.8         104.7         4.6         44.3         112.8         2.0           95.0         87.0         3.0         87.0         3.0         3.8         22.0         87.0         3.0																
70.0         43.1         116.8         2.8         47.4         121.1         5.3         53.5         125.7         7.1         7.1         75.0         38.1         110.9         2.3         42.8         116.0         4.3         49.4         121.6         6.4         55.0         123.7         4.2           80.0         37.8         110.0         3.5         45.0         116.9         5.7         52.9         121.7         3.7           85.0         32.1         102.7         2.9         40.2         111.4         5.1         48.7         117.6         2.8           90.0         95.0         25.3         93.4         2.4         34.8         104.7         4.6         44.3         112.8         2.0           95.0         20.0         87.0         3.0         3.8         22.0         87.0         3.0         3.8						_										
75.0     38.1     110.9     2.3     42.8     116.0     4.3     49.4     121.6     6.4     55.0     123.7     4.2       80.0     37.8     110.0     3.5     45.0     116.9     5.7     52.9     121.7     3.7       85.0     32.1     102.7     2.9     40.2     111.4     5.1     48.7     117.6     2.8       90.0     95.0     25.3     93.4     2.4     34.8     104.7     4.6     44.3     112.8     2.0       100.0     87.0     3.0																
76.9     80.0     37.8     110.0     3.5     45.0     116.9     5.7     52.9     121.7     3.7       85.0     32.1     102.7     2.9     40.2     111.4     5.1     48.7     117.6     2.8       90.0     95.0     25.3     93.4     2.4     34.8     104.7     4.6     44.3     112.8     2.0       95.0     22.0     87.0     3.0     3.0     3.0     3.0																
80.0     37.8     110.0     3.5     45.0     116.9     5.7     52.9     121.7     3.7       85.0     32.1     102.7     2.9     40.2     111.4     5.1     48.7     117.6     2.8       90.0     25.3     93.4     2.4     34.8     104.7     4.6     44.3     112.8     2.0       95.0     29.5     97.6     3.8       100.0     87.0     3.0		38.1	110.9	2.3	42.8	116.0	4.3	49.4	121.6	6.4						
85.0         32.1         102.7         2.9         40.2         111.4         5.1         48.7         117.6         2.8           90.0         25.3         93.4         2.4         34.8         104.7         4.6         44.3         112.8         2.0           95.0         29.5         97.6         3.8           100.0         22.0         87.0         3.0					07.0	440.0	0.5	45.0	1400							
90.0 95.0 100.0 25.3 93.4 2.4 34.8 104.7 29.5 97.6 29.5 97.6 3.8 22.0 87.0 3.0										-						
95.0 100.0 29.5 22.0 87.0 3.8																
100.0					25.3	93.4	2.4				44.3	112.8	2.0			
	100.0				l			16.0	78.1	2.6						



Nº de ident.: 9842523/95738/

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

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

		gulo de 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]
				53.0 ı		eza de p	ıl, Punto lumín (2 ı ] Posici	316-1) 9:	2.5 m Pl	eza de p umín	lumín				
24.3	78.0	146.4	11.0												
26.0	76.9	146.0	11.0												
28.0	75.6	145.5	10.7												
30.0	74.3	145.0	10.5												
32.0	73.0	144.4	10.2												
34.0	71.7	143.7	9.6												
36.0	70.4	143.0	9.2												
36.7				73.0	143.9	10.2									
38.0	69.1	142.3	8.8	72.2	143.5	10.2									
40.0	67.7	141.4	8.2	70.9	142.8	10.0									
42.0	66.4	140.6	7.6	69.5	142.1	9.8									
44.0	65.0	139.7	7.0	68.2	141.3	9.7									
46.0	63.6	138.7	6.5	66.8	140.4	9.5							<u> </u>		
48.0	62.2	137.6	6.1	65.5	139.5	9.2									
50.0	60.8	136.5	5.7	64.1	138.6	9.0									
55.0	57.2	133.5	4.7	60.6	135.9	8.5									
56.0							65.0	137.6	8.9						
60.0	53.4	129.9	3.9	56.9	132.8	7.1	62.2	135.6	8.7						
65.0	49.3	125.9	3.3	53.1	129.2	6.1	58.6	132.7	7.7						
70.0	45.1	121.2	2.6	49.1	125.1	5.2	54.9	129.4	6.9						
75.0				44.8	120.4	4.2	51.0	125.6	6.2						
78.6										55.0	126.2	3.7			
80.0				40.1	114.8	3.4	46.8	121.1	5.6	54.3	125.5	3.5			
85.0				35.0	108.2	2.8	42.4	116.0	5.0	50.3	121.6	2.6			
88.0										47.9	118.9	2.1			
90.0				29.1	100.1	2.2	37.5	109.9	4.4						
95.0							32.6	103.5	3.6						
100.0							26.3	94.5	2.8						
105.0							17.9	81.9	2.1						



2821-1

2821-1

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

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

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa		45° Án 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]
				53.0 ı	m Pluma Cab	eza de p	ıl, Punto lumín (2 ı ] Posici	316-1) 9	5.5 m Pl	eza de p umín	lumín				
24.9	78.0	149.3	10.1												
26.0	77.3	149.1	10.1												
28.0	76.1	148.6	10.0										•		
30.0	74.8	148.1	9.7												
32.0	73.6	147.5	9.5												
34.0	72.3	146.9	9.1												
36.0	71.1	146.2	8.6												
37.6				73.0	146.8	9.3									
38.0	69.8	145.5	8.3	72.7	146.6	9.3									
40.0	68.5	144.7	7.9	71.5	146.0	9.3									
42.0	67.2	143.9	7.3	70.2	145.3	9.1									
44.0	65.9	143.0	6.7	68.9	144.5	8.9									
46.0	64.5	142.0	6.2	67.6	143.7	8.7									
48.0	63.2	141.0	5.8	66.3	142.8	8.5									
50.0	61.8	140.0	5.4	65.0	141.9	8.3									
55.0	58.3	137.0	4.4	61.6	139.3	7.9									
57.3		400 =	0.0	50.4	400.4	0.0	65.0	140.4	8.1						
60.0 65.0	54.7 50.9	133.7 129.8	3.6 2.9	58.1 54.4	136.4 133.0	6.9 5.8	63.2 59.7	139.0 136.2	8.1 7.4				ł		
70.0	46.9	129.8	2.9	54.4 50.6	133.0	5.8	59.7 56.2	136.2	6.6						
75.0	46.9	125.4	2.3	46.6	129.1	4.0	50.2	129.4	5.9						
75.0 80.0				46.6	124.6	3.2	52.4 48.5	129.4	5.9						
80.0 80.3				42.3	119.4	3.2	46.5	120.2	5.3	55.0	128.6	3.0			
85.0				37.5	113.3	2.5	44.3	120.4	4.7	51.8	125.4	2.2			
86.0				31.3	113.3	2.5	44.5	120.4	4.7	51.0	123.4	2.2			
90.0							39.8	114.7	4.1	31.1	124.0	2.1			
95.0							35.4	108.9	3.3						
100.0							29.7	100.9	2.5				i		
103.0							25.8	95.2	2.1						



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

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]
				53.0 ו		eza de p	ıl, Punto lumín (2: ı ] Posici	316-1) 9	8.5 m Pl	eza de p umín	lumín		-		
25.5	78.0	152.3	9.3						( /						
26.0	77.7	152.2	9.3												
28.0	76.5	151.7	9.3												
30.0	75.3	151.2	9.1												
32.0	74.1	150.6	8.9												
34.0	72.9	150.0	8.6												
36.0	71.7	149.4	8.2												
38.0	70.4	148.7	7.9												
38.5				73.0	149.6	8.6									
40.0	69.2	147.9	7.6	72.1	149.1	8.6									
42.0	67.9	147.1	7.1	70.8	148.5	8.5									
44.0	66.6	146.3	6.5	69.6	147.7	8.3									
46.0	65.4	145.3	6.0	68.3	146.9	8.2									
48.0	64.1	144.4	5.6	67.1	146.1	8.0									
50.0	62.8	143.4	5.2	65.8	145.2	7.8									
55.0	59.4	140.5	4.3	62.5	142.7	7.4									
58.5							65.0	143.1	7.5						
60.0	55.9	137.3	3.4	59.2	139.9	6.7	64.1	142.4	7.5						
65.0	52.3	133.7	2.7	55.7	136.7	5.6	60.8	139.7	7.2						
70.0	48.5	129.4	2.2	52.1	132.9	4.7	57.3	136.7	6.4						
75.0				48.2	128.7	3.9	53.8	133.2	5.7						
80.0				44.2	123.8	3.1	50.0	129.2	5.1	55.0	404.4	2.4			
82.0 84.0										55.0 53.9	131.1 130.0	2.4			
84.0 85.0				39.8	118.2	2.4	46.1	124.6	4.5	55.9	130.0	2.1			
90.0				39.0	110.2	2.4	42.3	124.6	3.8						
95.0							42.3 37.8	113.9	3.0						
100.0							32.7	106.8	2.3						
101.0							31.6	105.2	2.3						



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

		gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de principa	
Alcan- ce [ m ]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]
				53.0 ı	m Pluma Cabe	eza de pl	ıl, Punto umín (23 ı ] Posici	316-1) 10	1.5 m P	eza de p lumín	lumín				
26.2	78.0	155.2	8.6												
28.0	76.9	154.8	8.6												
30.0	75.8	154.3	8.5										<u> </u>		
32.0	74.6	153.8	8.3												
34.0	73.4	153.2	8.1												
36.0	72.2	152.5	7.7												
38.0	71.0	151.9	7.4												
39.4				73.0	152.5	7.9									
40.0	69.8	151.1	7.1	72.6	152.3	7.9									
42.0	68.6	150.3	6.8	71.4	151.6	7.9									
44.0	67.4	149.5	6.3	70.2	150.9	7.7									
46.0	66.1	148.6	5.7	69.0	150.2	7.6									
48.0	64.9	147.7	5.3	67.8	149.4	7.4									
50.0	63.6	146.7	4.9	66.6	148.5	7.2									
55.0	60.4	144.0	4.0	63.4	146.1	6.8									
59.8							65.0	145.8	6.9						
60.0	57.1	140.9	3.2	60.2	143.4	6.4	64.9	145.7	6.9						
65.0	53.6	137.4	2.5	56.8	140.3	5.3	61.7	143.2	6.8						
70.0				53.4	136.7	4.4	58.4	140.2	6.1						
75.0				49.7	132.7	3.7	55.0	136.9	5.4						
80.0				45.9	128.1	2.9	51.5	133.1	4.8						
85.0				41.8	122.8	2.2	47.7	128.8	4.3						
90.0							44.2	124.4	3.5						
95.0							39.9	118.8	2.7						
99.0							36.2	113.6	2.1						



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

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

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

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

		gulo de 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]
				53.0 ı	m Pluma Cabe	eża de pl	ıl, Punto umín (23 ı ] Posici	316-1) ĬC	4.5 m P	eza de p lumín	lumín				
26.8	78.0	158.1	8.0												
28.0	77.3	157.9	8.0												
30.0	76.2	157.4	8.0												
32.0	75.0	156.9	7.8												
34.0	73.9	156.3	7.6												
36.0	72.8	155.7	7.3												
38.0	71.6	155.0	7.0												
40.0	70.4	154.3	6.7												
40.2				73.0	155.4	7.4									
42.0	69.2	153.6	6.5	72.0	154.8	7.3									
44.0	68.1	152.8	6.1	70.8	154.1	7.2									
46.0	66.9	151.9	5.5	69.6	153.4	7.1									
48.0	65.7	151.0	5.1	68.5	152.6	6.9				•			•		
50.0	64.4	150.1	4.6	67.3	151.8	6.8									
55.0	61.3	147.5	3.8	64.2	149.5	6.4									
60.0	58.1	144.5	3.0	61.1	146.8	6.1									
61.1							65.0	148.5	6.3						
65.0	54.8	141.2	2.3	57.9	143.9	5.2	62.6	146.6	6.3	•			•		
70.0				54.6	140.5	4.3	59.4	143.7	5.8						
75.0				51.1	136.6	3.6	56.2	140.5	5.3						
80.0				47.5	132.3	2.8	52.8	136.9	4.6						
85.0				43.6	127.3	2.1	49.2	132.8	4.1						
90.0							45.8	128.6	3.4						
95.0							41.9	123.4	2.6						
98.0							39.3	119.8	2.1						

Source:a9841388



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

360°

2821-1 2821-1

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

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [ m ]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]
				53.0 ı		ża de pl	ıl, Punto umín (23 ı ] Posici	316-1) ĬC	7.5 m P	eza de p lumín	lumín				
27.4	78.0	161.1	7.2												
28.0	77.7	161.0	7.2												
30.0	76.6	160.5	7.1												
32.0	75.5	160.0	7.0												
34.0	74.4	159.4	6.8												
36.0	73.3	158.8	6.6												
38.0	72.1	158.2	6.4												
40.0	71.0	157.5	6.1												
41.1				73.0	158.2	6.5									
42.0	69.9	156.8	5.9	72.5	158.0	6.5									
44.0	68.7	156.0	5.7	71.4	157.3	6.5									
46.0	67.6	155.2	5.2	70.2	156.6	6.3									
48.0	66.4	154.3	4.8	69.1	155.8	6.2									
50.0	65.2	153.4	4.3	67.9	155.0	6.0									
55.0	62.2	150.9	3.5	65.0	152.8	5.7									
60.0	59.1	148.0	2.7	62.0	150.3	5.3									
62.4							65.0	151.2	5.5						
65.0				58.9	147.4	4.7	63.4	149.9	5.5						
70.0				55.7	144.1	3.9	60.4	147.2	5.3						
75.0				52.4	140.5	3.2	57.2	144.2	4.9						
80.0				48.9	136.3	2.6	54.0	140.7	4.3						
85.0							50.6	136.8	3.8						
90.0							47.4	132.8	3.0						
95.0							43.6	127.8	2.2						
96.0							42.8	126.7	2.1						



Nº de ident.: 9842523/95738/

360°

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

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

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

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de 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]
				53.0 ו	m Pluma Cabe	eza de pl	ıl, Punto umín (23 ı ] Posici	316-1) 11	0.5 m P	eza de p lumín	lumín				
28.0	78.0	164.0	6.5												
30.0	77.0	163.6	6.5												
32.0	75.9	163.1	6.3							•					
34.0	74.8	162.5	6.2												
36.0	73.7	162.0	6.1												
38.0	72.6	161.3	5.8												
40.0	71.5	160.7	5.6												
42.0	70.4	160.0	5.5	73.0	161.1	5.8									
44.0	69.3	159.2	5.3	71.9	160.5	5.8									
46.0	68.2	158.4	5.0	70.8	159.8	5.7									
48.0	67.1	157.6	4.5	69.7	159.0	5.6									
50.0	65.9	156.7	4.1	68.6	158.3	5.5									
55.0 60.0	63.0	154.3 151.5	3.2 2.5	65.7 62.8	156.1 153.7	5.1 4.8				ł					
63.6	60.1	151.5	2.5	62.8	153.7	4.8	65.0	154.0	4.9	ł					
65.0				59.9	150.9	4.4	64.2	153.3	4.9						
70.0				59.9 56.8	150.9	3.6	61.3	150.7	4.9						
70.0 75.0				55.8	147.8	3.6	58.2	150.7	4.7						
80.0				50.3	144.2	2.5	56.∠ 55.1	147.7	4.5						
85.0				30.3	140.5	2.5	51.9	140.6	3.6						
90.0							48.8	136.8	2.8						
94.0							46.0	133.1	2.1						



N° de ident.: 9842523/95738/ Pi

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

Valor de vuelco: Lastre trasero [ t ]:

Lastre central [ t ]:

2 - Vía ancha 124.0 52.6 Pieza de articulación de pluma principal: 2821-1 Cabeza de pluma principal: 2821-1

		gulo de 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]
				53.0 i		eza de p	al, Punto olumín (1 n ] Posici	916-1) 3:	2.5 m Pl	eza de p umín	lumín				
11.8	78.0	87.7	38.4												
12.0	77.6	87.7	38.4												
13.0	75.8	87.4	37.6												
14.0	73.9	87.1	36.6												
16.0	70.2	86.4	34.2												
18.0	66.4	85.6	31.8												
19.2				73.0	86.5	33.6									
20.0	62.4	84.6	29.8	71.4	86.2	33.5									
22.0	58.3	83.4	27.3	67.7	85.5	31.8									
24.0	54.0	82.0	24.8	63.8	84.5	29.8									
26.0	49.5	80.4	22.9	59.7	83.4	28.3									
28.0	44.6	78.5	21.3	55.5	82.1	26.8									
30.0	39.2	76.2	19.8	51.0	80.5	25.7				<u> </u>					
30.7							65.0	83.3	29.4						
32.0	33.1	73.3	18.6	46.3	78.7	24.2	62.4	82.6	28.9						
34.0	25.7	69.6	17.6	41.1	76.5	22.9	58.3	81.4	27.4						
36.0	15.1	64.0	16.5	35.2	73.9	21.8	54.0	80.0	25.8						
38.0				28.4	70.6	20.3	49.5	78.4	24.6	•					
40.0				19.3	65.8	18.8	44.6	76.5	23.3						
41.0				15.0	63.5	15.0									
42.0							39.2	74.2	22.2						
44.0				•			33.1	71.3	21.3	ļ					
44.2										55.0	77.0	18.9			
46.0							25.7	67.6	20.4	51.2	75.7	19.1			
48.0							15.0	61.9	19.5	46.5	73.9	18.2			
50.0										41.3	71.7	17.5			
55.0										24.6	63.7	16.0			
57.0										15.5	58.9	14.4			
67.0													35.0	57.9	9.3
70.0													26.4	53.7	8.7
72.0	1		1	I		1	I	l	1	I			16.2	48.3	8.2



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		65° Án	gulo de orincipa	pluma I	45° Án	gulo de orincipa	pluma I
Alcan- ce [ m ]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]
				53.0 ı		eza de p	ıl, Punto llumín (19 n] Posici	916-1) 3	5.5 m Pli	eza de p umín	lumín				
12.4 13.0 14.0 16.0	78.0 77.0 75.3 71.9	90.7 90.5 90.2 89.6	34.1 34.1 33.0 30.8												
20.0 22.0 24.0	68.5 65.0 61.3 57.5	88.9 88.0 86.9 85.7	28.9 26.9 25.4 23.5	73.0 69.6 66.1	89.4 88.7 87.8	29.5 28.4 26.9									
26.0 28.0 30.0 31.9	53.6 49.4 44.9	84.3 82.6 80.7	22.0 20.8 19.3	62.5 58.8 54.9	86.8 85.7 84.3	25.6 24.4 23.3	65.0	86.0	24.9						
32.0 34.0 36.0 38.0	40.1 34.6 28.3 20.1	78.5 75.8 72.4 67.7	18.1 17.0 16.1 15.2	50.8 46.4 41.7 36.5	82.8 80.9 78.8 76.3	22.4 21.2 20.1 19.2	65.0 61.3 57.5 53.6	86.0 84.9 83.7 82.3	26.0 25.3 24.2 23.0						
39.0 40.0 42.0 43.0	16.5	65.6	12.5	30.5 23.1 18.4	73.2 69.0 66.3	18.2 17.1 16.6	49.4 44.9	80.6 78.7	22.2 21.1						
44.0 45.9 46.0 48.0							40.0 34.6 28.2	76.5 73.8 70.4	20.1 19.3 18.5	55.0 55.0 51.0	79.5 79.5 77.9	17.6 18.1 17.6			
50.0 51.0 55.0 59.0							20.1 16.4	65.7 63.6	17.6 14.9	33.8 18.8	76.1 70.0 61.6	17.0 15.5 14.4	05.0		
69.5 70.0 75.0													35.0 35.0 15.5	59.7 59.7 48.7	8.4 8.4 7.3



N° de ident.: 9842523/95738/ Piez

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]
				53.0 ו		eza de p	ıl, Punto lumín (1: ı l Posici	916-1) 3	8.5 m Pl	eza de p umín	lumín				
13.0	78.0	93.6	30.9						( /						
14.0	76.5	93.4	30.5												
16.0	73.4	92.8	28.5												
18.0	70.3	92.1	26.6												
20.0	67.0	91.3	24.9												
20.9				73.0	92.3	26.5									
22.0	63.7	90.3	23.4	71.3	91.9	26.2									
24.0	60.3	89.2	22.2	68.1	91.1	24.7									
26.0	56.8	88.0	21.0	64.8	90.2	23.6									
28.0	53.2	86.5	20.1	61.5	89.2	22.7									
30.0	49.3	84.9	19.2	58.0	88.0	21.7									
32.0	45.2	83.0	18.0	54.4	86.6	20.8									
33.2							65.0	88.7	23.4						
34.0	40.7	80.8	16.8	50.6	85.0	20.1	63.7	88.3	23.4						
36.0	35.9	78.2	15.9	46.6	83.2	19.0	60.3	87.2	22.7						
38.0	30.3	75.0	15.1	42.3	81.1	18.1	56.8	86.0	21.9						
40.0	23.5	70.9	14.3	37.5	78.6	17.3	53.1	84.5	21.1						
42.0	15.8	66.0	11.4	32.2 25.9	75.7 71.9	16.5 15.7	49.3	82.9 81.0	20.4 19.4						
44.0 46.0				25.9 17.6	66.7	14.9	45.2 40.7	78.8	18.5						
47.6				17.0	00.7	14.9	40.7	70.0	10.5	55.0	81.9	16.5			
48.0							35.8	76.1	17.7	55.0 54.5	81.7	17.1			
50.0							30.3	73.0	17.7	50.7	80.2	16.7			
54.0							15.8	64.0	13.1	30.1	00.2	10.7			
55.0							10.0	04.0	10.1	40.1	75.1	15.2			
60.0										26.2	67.2	14.0			
62.0										18.0	62.1	13.6			
71.9										. 5.0		. 5.0	35.0	61.4	7.8
75.0													27.6	57.1	7.3
77.0													20.0	52.4	6.9



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 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]
				53.0		eza de p	al, Punto dumín (19 n] Posici	916-1) 4	1.5 m Pl		lumín				
13.6	78.0	96.5	27.8												
14.0	77.5	96.4	27.8												
16.0	74.6	95.9	26.3												
18.0	71.7	95.3	24.6												
20.0	68.8	94.5	23.2	70.0	05.4	00.0									
21.8 22.0	65.8	93.7	21.7	73.0 72.7	95.1 95.1	23.8 23.8									
24.0	62.7	93.7	20.5	69.8	95.1	23.6				ł					
26.0	59.5	91.5	19.5	66.8	93.5	21.9									
28.0	56.2	90.2	18.5	63.7	92.6	20.8									
30.0	52.8	88.8	17.7	60.6	91.5	20.0									
32.0	49.2	87.1	16.9	57.3	90.2	19.1									
34.0	45.4	85.2	16.0	54.0	88.8	18.3									
34.5							65.0	91.4	21.0						
36.0	41.3	83.0	15.1	50.4	87.2	17.6	62.7	90.7	20.8						
38.0	36.9	80.5	14.4	46.7	85.4	16.8	59.5	89.5	20.0						
40.0	31.9	77.5	13.7	42.7	83.4	16.0	56.2	88.2	19.3						
42.0	26.0	73.8	13.0	38.4	80.9	15.3	52.8	86.8	18.5						
44.0 45.0	18.5 15.2	68.7 66.4	12.3 9.6	33.6	78.1	14.6	49.2	85.1	17.9						
46.0	13.2	00.4	9.0	28.1	74.7	13.9	45.4	83.2	17.0						
48.0				21.3	70.2	13.2	41.3	81.0	16.2						
49.0				16.9	67.2	12.9	41.0	01.0	10.2	i			i		
49.3										55.0	84.4	15.5	i		
50.0							36.9	78.5	15.6	54.1	84.0	16.2			
55.0							22.6	69.5	13.9	44.9	79.6	14.8			
57.0				[			15.1	64.4	11.7	l					
60.0				I						33.8	73.3	13.6			
65.0										17.3	62.5	12.6			
74.4													35.0	63.1	7.0
75.0													34.9	63.0	7.0
80.0										I			19.2	52.9	6.1



2821-1

2821-1

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

		gulo de principa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [ m ]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]
				53.0 ı		eza de p	al, Punto dumín (19 n] Posici	916-1) 4	4.5 m Pl		lumín				
14.3	78.0	99.5	25.3												
16.0	75.7	99.0	24.5												
18.0	73.0	98.4	23.0												
20.0	70.3	97.8	21.6												
22.0	67.5	97.0	20.4												
22.7				73.0	98.0	21.6									
24.0	64.7	96.0	19.1	71.2	97.5	21.3									
26.0	61.8	95.0	18.2	68.4	96.8	20.4									
28.0	58.8	93.8	17.3	65.6	95.9	19.5									
30.0	55.7	92.5	16.4	62.8	94.9	18.6									
32.0	52.5	91.0	15.7	59.8	93.8	17.8									
34.0	49.1	89.3	15.1	56.7	92.5	17.0									
35.7	45.6		14.4	53.6	04.4	40.0	65.0	94.1 94.0	17.9 19.0						
36.0	45.6	87.5 85.3		50.3	91.1 89.5	16.3 15.7	64.7 61.8	94.0	19.0						
38.0	37.7		13.7		87.7			93.0	17.9						
40.0 42.0	33.2	82.8 80.0	13.1 12.5	46.8 43.1	85.6	14.9 14.2	58.8 55.7	90.5	17.9						
42.0 44.0	28.1	76.5	12.5	39.1	83.3	13.6	52.5	89.0	16.5						
46.0	21.8	70.5	11.4	34.8	80.5	13.1	49.1	87.3	15.9						
47.0	17.9	69.2	11.4	34.0	00.5	13.1	43.1	07.5	13.3						
48.0	17.5	03.2	11.1	29.9	77.3	12.5	45.6	85.5	15.1						
50.0				24.0	73.2	11.9	41.8	83.3	14.4						
51.1				24.0	70.2	11.0	41.0	00.0	14.4	55.0	86.8	14.7			
52.0				16.3	67.6	11.2				00.0	00.0				
55.0							30.7	76.3	13.0	48.7	83.8	14.6			
59.0							17.8	67.1	11.8						
60.0										39.3	78.5	13.3			
65.0										27.3	70.6	12.4			
68.0										16.7	62.9	11.9			
76.8													35.0	64.8	6.4
80.0													28.5	60.5	5.9
83.0													18.6	53.4	5.4



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

		gulo de principa			gulo de orincipa			gulo de 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]
				53.0 ı		eza de p	al, Punto llumín (1 n ] Posici	916-1) 4	7.5 m Pl		lumín				
14.9 16.0 18.0 20.0 22.0 23.6 24.0 26.0 30.0 32.0 34.0 36.0 37.0 38.0 40.0 44.0 46.0 48.0 50.0 60.0 62.0 65.0	78.0 76.6 74.1 71.6 69.0 66.4 63.7 61.0 58.2 55.3 52.2 49.1 45.8 42.3 38.5 34.4 29.7 24.3 17.3	102.4 102.1 101.6 100.9 100.2 99.4 98.4 97.3 96.1 94.8 93.3 91.6 89.7 87.6 85.2 82.4 79.1 75.1 69.6	22.4 22.2 21.0 19.9 19.0 18.1 17.4 16.8 16.1 15.4 14.8 14.3 13.5 12.8 12.2 11.7 11.2 10.6	73.0 72.4 69.9 67.3 64.6 61.9 59.1 56.2 53.2 50.1 46.9 43.4 39.8 35.8 31.3	100.9 100.7 100.0 99.2 98.3 97.2 96.1 94.8 93.3 91.7 89.9 85.6 82.9 79.8 68.0	19.3 19.3 18.8 18.2 17.6 17.2 16.6 16.1 15.6 15.2 14.0 13.6 13.1 12.5	65.0 63.7 61.0 58.2 55.2 52.2 49.1 45.8 36.5 24.3 17.2	96.9 96.4 95.3 94.1 92.8 91.3 89.6 87.7 81.8 73.1 67.6	17.5 17.5 17.1 16.2 15.8 15.4 14.8	55.0 51.8 43.6 33.8 20.1	89.3 87.7 83.0 76.6 66.5	13.9 14.1 12.9 11.9			
71.0 79.3 80.0 85.0 86.0										16.1	63.3	10.9	35.0 34.7 21.6 17.9	66.5 66.3 56.7 53.8	5.7 5.6 4.9 4.7



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

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

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

		gulo de orincipal		83° Án	gulo de orincipa	pluma I		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]
				53.0 ו		eza de p	ıl, Punto lumín (1: ı ] Posici	916-1) 5	0.5 m Pl	eza de p umín	lumín		-		
15.5 16.0 18.0 20.0 22.0 24.0 24.4 26.0 30.0 32.0 34.0 36.0 38.3 40.0 42.0 44.0 48.0 50.0 53.0 54.5 55.0 60.0	78.0 77.4 75.1 72.7 70.3 67.9 65.4 62.9 60.3 57.6 54.8 52.0 49.0 45.9 42.6 39.1 35.3 31.1 26.3 16.7	105.3 105.2 104.7 104.1 103.4 102.6 101.7 100.7 99.6 98.4 97.0 95.5 93.8 91.9 89.8 87.5 84.8 81.7 77.9 70.0	20.6 20.6 19.7 18.9 18.0 17.5 16.9 16.5 16.1 15.5 14.9 14.4 13.9 13.2 12.4 11.3 10.8 10.3 9.6	73.0 71.1 68.7 66.2 63.7 61.1 58.5 55.8 53.0 50.0 47.0 43.7 40.3 36.6	103.7 103.2 102.4 101.6 100.6 99.6 98.4 97.0 95.6 93.9 92.1 87.9 85.3	17.9 17.9 17.4 17.1 16.7 16.4 16.1 15.7 15.4 15.1 14.7 14.2 13.8 13.4	65.0 62.9 60.3 57.6 54.8 52.0 49.0	99.6 98.7 97.6 96.4 95.0 93.5 91.8 86.7	16.7 16.6 16.3 16.1 15.8 15.6 15.4	55.0 54.5 47.1	91.8 91.5	13.3 13.7 12.8			
65.0 70.0 74.0 81.8 85.0 89.0							16.7	68.0	11.3	38.6 28.1 15.6	81.8 74.0 63.7	11.7 10.9 10.3	35.0 29.2 17.4	68.3 63.9 54.3	5.3 4.9 4.3



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 orincipal		83° Án	gulo de orincipa	pluma I		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]
				53.0 ı	m Pluma Cab	eza de p	ıl, Punto lumín (1 ı ] Posici	916-1) 5	3.5 m Pl	eza de p umín	lumín				
16.1 18.0 20.0 22.0 24.0	78.0 75.9 73.7 71.5 69.2	108.3 107.8 107.2 106.6 105.9	18.7 18.2 17.5 16.6 16.0												
25.3 26.0 28.0 30.0 32.0	66.9 64.5 62.1 59.6	105.0 104.1 103.1 101.9	15.6 15.2 14.9 14.5	73.0 72.2 69.9 67.6 65.3	106.6 106.4 105.7 104.9 104.0	16.3 16.3 16.0 15.7 15.4									
34.0 36.0 38.0 39.5 40.0	57.1 54.5 51.8 49.0	100.7 99.3 97.7	14.1 13.7 13.3	62.9 60.5 57.9 55.4	103.0 101.9 100.7	15.1 14.8 14.5	65.0 64.5	102.3 102.1	14.5 15.1						
42.0 44.0 46.0 48.0 50.0	46.1 43.0 39.7 36.1 32.3	96.1 94.2 92.1 89.8 87.2 84.2	12.9 12.2 11.5 11.0 10.4 10.0	52.7 49.9 47.0 44.0 40.8	97.8 96.2 94.4 92.4 90.1	14.0 13.8 13.4 13.0 12.7	62.1 59.6 57.1 54.5 51.8	102.1 101.1 99.9 98.7 97.3 95.7	15.1 15.0 14.7 14.6 14.3 14.2						
55.0 56.0 56.2 60.0 61.0	19.8 16.2	73.6 70.5	8.9 8.7	31.6 18.7 16.2	83.2 72.2 70.0	11.6 9.9 8.3	44.5 36.1	91.2 85.2	13.4	55.0 50.0	94.2 91.3	12.5 12.4			
65.0 68.0 70.0 75.0 77.0				10.2	70.0	0.0	25.5 16.2	76.6 68.4	11.3 10.3	42.5 33.7 22.1 15.1	86.5 80.0 70.3 64.1	11.4 10.6 9.9 9.6			
84.2 85.0 90.0 92.0													35.0 34.6 23.3 16.8	70.0 69.7 60.4 54.7	4.6 4.5 3.9 3.6



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]
53.0 m Pluma principal, Punto de carga 1 - Cabeza de plumín Cabeza de plumín (1916-1) 56.5 m Plumín 25.0 [ m ] Posición midfall (1916)															
16.8 18.0 20.0 22.0 24.0 26.0	78.0 76.7 74.6 72.5 70.3 68.2	111.2 110.9 110.4 109.8 109.1 108.3	17.1 17.0 16.2 15.5 14.8												
26.2 28.0 30.0 32.0 34.0	66.0 63.7 61.4 59.1	107.4 106.5 105.4 104.2	14.1 13.8 13.6	73.0 71.1 68.9 66.7 64.5	109.5 108.9 108.1 107.3 106.3	15.0 14.9 14.6 14.3									
36.0 38.0 40.0 40.8	56.6 54.2 51.6	102.9 101.5 100.0	12.9 12.6 12.4	62.2 59.8 57.5	105.3 104.2 102.9	13.7 13.5 13.3	65.0	105.0	13.8						
42.0 44.0 46.0 48.0 50.0	48.9 46.2 43.3 40.2 36.9	98.3 96.4 94.4 92.1 89.5	12.0 11.4 10.8 10.3 9.8	55.0 52.5 49.8 47.1 44.2	101.6 100.1 98.4 96.6 94.6	13.1 12.9 12.7 12.3 12.0	63.7 61.4 59.0 56.6 54.2	104.5 103.4 102.2 100.9 99.5	13.8 13.6 13.5 13.3 13.1						
55.0 58.0 59.0 60.0 64.0	27.1 15.8	81.3 70.9	8.8	36.3 26.4 15.7	88.6 80.2 70.4	11.4 10.0 7.9	47.6 40.2	95.4	12.7	55.0 52.6	96.7 95.2	11.9			
65.0 70.0 71.0 75.0 80.0					-		31.4 19.2 15.7	83.0 72.1 68.8	11.2 9.8 9.5	45.8 38.1 28.8 16.0	90.8 85.1 77.4 65.8	11.2 10.4 9.7 8.2			
86.7 90.0 95.0													35.0 29.7 16.4	71.7 67.2 55.1	4.1 3.7 3.1



2821-1

2821-1

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

		gulo de orincipal		83° Án	gulo de orincipa	pluma I	75° Án I	gulo de orincipa	pluma I		gulo de orincipa			gulo de orincipa	
Alcan- ce [ m ]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]
				53.0 ı	m Pluma Cab	eza de p	il, Punto Ilumín (19 n] Posici	916-1) 5	9.5 m Pl	eza de p umín	lumín				
17.4	78.0	114.1	14.8						<u> </u>						
18.0	77.4	114.0	14.8							İ		İ	İ		
20.0	75.4	113.5	14.2												
22.0	73.4	112.9	13.6												
24.0	71.4	112.3	13.1												
26.0	69.3	111.5	12.6												
27.1				73.0	112.3	13.0									
28.0	67.2	110.7	12.3	72.1	112.0	13.0									
30.0	65.1	109.8	12.0	70.0	111.3	12.8									
32.0	62.9	108.8	11.8	67.9	110.5	12.5									
34.0	60.7	107.7	11.6	65.8	109.6	12.2									
36.0	58.4	106.5	11.4	63.6	108.7	12.0									
38.0	56.1	105.1	11.1	61.4	107.6	11.8									
40.0	53.7	103.7	11.0	59.2	106.4	11.6									
42.0	51.3	102.1	10.8	56.9	105.1	11.4									
42.1							65.0	107.7	11.9						
44.0	48.7	100.4	10.5	54.5	103.7	11.2	62.9	106.8	11.9						
46.0	46.0	98.5	10.0	52.1	102.2	11.0	60.7	105.7	11.7						
48.0	43.2	96.4	9.5	49.6	100.5	10.9	58.4	104.4	11.5						
50.0	40.3	94.1	9.1	46.9	98.7	10.7	56.1	103.1	11.4						
55.0	32.0	87.1	8.3	39.8	93.3	10.3	50.0	99.3	11.1		00.4	40.7			
59.7	000	70.7	7.4	04.0	00.4	9.6	40.0	04.4	10.7	55.0	99.1 98.9	10.7			
60.0 62.0	20.8 16.5	76.7 72.4	7.4 5.3	31.3	86.1	9.6	43.2	94.4	10.7	54.6	98.9	10.7	ł		
65.0	10.5	12.4	5.5	19.8	75.3	8.3	35.5	88.1	10.4	48.4	94.8	10.3	i		
67.0				15.3	70.8	6.5	33.3	00.1	10.4	40.4	94.0	10.3			
70.0				13.3	70.0	0.5	25.8	79.5	9.4	41.4	89.6	9.7			
74.0							16.5	79.5	7.8	41.4	03.0	9.1	Ī		
75.0							10.0	, 5.4	7.0	33.3	82.9	9.1	i		
80.0										22.8	73.2	8.4			
83.0										15.6	66.2	7.6			
89.1													35.0	73.4	3.5
90.0													34.5	73.0	3.4
95.0													24.5	63.9	2.8
98.0													15.9	55.6	2.5



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

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

		gulo de principa			gulo de orincipa			gulo de principa			gulo de orincipa		45° Án I	gulo de orincipa	pluma I
Alcan- ce [ m ]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]
				53.0 ו	m Pluma Cab	eza de p	al, Punto dumín (19 n ] Posicio	916-1) 6	2.5 m Pl	eza de p umín	lumín				
18.1 20.0 22.0 24.0 26.0 28.0 30.0 32.0 34.0 36.0 38.0 40.0 42.0 43.3 44.0 46.0 48.0 55.0	78.0 76.2 74.2 72.3 70.4 68.4 66.4 64.3 62.2 60.1 58.0 55.7 53.5 51.1 48.7 46.1 43.5 36.2	117.1 116.6 116.0 115.4 114.7 113.9 113.1 112.1 111.1 110.0 108.7 107.4 105.9 104.3 102.6 100.7 98.7 92.5	13.6 13.2 12.6 12.1 11.7 11.4 11.1 10.9 10.7 10.5 10.3 10.1 9.9 9.8 9.5 9.2 8.8	73.0 71.0 69.0 67.0 65.0 62.9 60.8 58.7 56.5 54.2 51.9 49.5	115.2 114.5 113.8 112.0 111.0 109.9 108.7 107.4 106.0 104.4 102.8 97.9	11.9 11.8 11.5 11.3 11.1 10.9 10.7 10.5 10.3 10.1 10.0 9.8	65.0 64.3 62.2 60.1 58.0 52.3	110.5 110.1 109.1 108.0 106.7 103.2	10.8 10.8 10.6 10.1						
60.0 61.4 65.0 69.0 70.0 75.0	27.3	72.9	7.3	35.7 26.6 16.2	91.6 83.1 72.5	9.3 9.3 8.3 7.4	39.3 31.1 20.3	98.7 93.2 85.9 75.2	9.8 9.6 9.1 8.2	55.0 50.8 44.5 37.4	101.6 98.8 94.1 88.2	9.7 9.7 9.4 8.8			
77.0 80.0 85.0 86.0 91.6 95.0 100.0 101.0							16.1	70.8	6.9	28.8 16.5 15.2	80.3 67.9 66.5	8.3 7.7 7.1	35.0 30.1 18.7 15.5	75.1 70.6 59.3 56.0	3.1 2.7 2.2 2.1



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]: 124.0 Lastre central [t]: 52.6 Pieza de articulación de pluma principal: 2821-1 Cabeza de pluma principal: 2821-1

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de 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]
				53.0	m Pluma Cab	eza de p	il, Punto lumín (19 n] Posici	916-1) 6	5.5 m Pl	eza de p umín	lumín				
18.7 20.0	78.0 76.8	120.0 119.7	12.3 12.2												
22.0 24.0	75.0 73.2	119.2 118.6	11.6 11.2 10.8												
26.0 28.0 28.8	71.3 69.4	117.9 117.2	10.8	73.0	118.1	10.9									
30.0 32.0	67.5 65.6	116.4 115.5	10.3 10.0	71.9 70.0	117.7 117.0	10.9 10.7									
34.0 36.0	63.6 61.6	114.5 113.4	9.8 9.7 9.5	68.2 66.2	116.2 115.3	10.5 10.2 10.0									
38.0 40.0 42.0	59.6 57.5 55.4	112.3 111.0 109.7	9.5 9.3 9.1	64.3 62.3 60.3	114.4 113.3 112.2	9.8 9.7									
44.0 44.6	53.2	108.2	8.9	58.2	111.0	9.5	65.0	113.2	9.9						
46.0 48.0 50.0	51.0 48.7 46.2	106.6 104.9 103.0	8.8 8.5 8.3	56.1 54.0 51.7	109.7 108.2 106.7	9.3 9.1 9.0	63.6 61.6 59.6	112.5 111.4 110.3	9.9 9.7 9.6						
55.0 60.0	39.7 32.1	97.5 90.4	7.6 7.0	45.8 39.2	100.7 102.2 96.6	8.6 8.2	54.3 48.6	106.9 102.8	9.0 9.2 8.9						
63.1 65.0 68.0	22.3 15.7	80.4 73.3	6.3 4.7	31.5	89.4	7.8	42.4	97.8	8.6	55.0 52.9	104.0 102.6	8.8 8.8			
70.0 72.0				21.5 15.8	79.1 73.0	7.0 6.7	35.3	91.5	8.4	47.1	98.3	8.6			
75.0 80.0 85.0							26.6 15.7	82.9 71.2	7.8 6.3	40.7 33.3 24.0	93.0 86.2 76.8	8.2 7.9 7.5			
94.0 95.0 99.0										16.1	68.3	6.9	35.0 34.4 27.5	76.9 76.3 69.5	2.5 2.4 2.0



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

360°

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

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

		gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [ m ]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]
				53.0 ı		eza de p	il, Punto lumín (1 n ] Posici	916-1) 6	8.5 m Pl	eza de p umín	lumín				
19.3 20.0 22.0 24.0 26.0 28.0 29.7 30.0 32.0 34.0 36.0 40.0 42.0	78.0 77.4 75.7 73.9 72.2 70.4 68.6 66.7 64.9 63.0 61.1 59.1 57.1	122.9 122.8 122.3 121.7 121.1 120.4 119.6 118.8 117.8 116.8 115.7 114.6 113.3	11.3 11.3 10.9 10.4 10.1 9.9 9.6 9.4 9.2 9.0 8.9 8.6 8.4	73.0 72.7 71.0 69.2 67.3 65.5 63.6 61.7	120.9 120.9 120.2 119.4 118.6 117.7 116.7 115.7	10.1 10.1 10.0 9.7 9.6 9.3 9.2 9.0									
44.0 45.9 46.0 48.0 50.0 55.0 60.0 64.8 65.0 70.0 71.0 75.0 80.0	55.1 53.0 50.9 48.6 42.7 36.0 27.9 16.5 15.4	111.9 110.4 108.8 107.1 102.1 95.8 87.6 75.0 73.7	8.2 8.1 7.9 7.7 7.2 6.8 6.2 5.6 4.5	59.8 57.8 55.8 53.7 48.3 42.3 35.5 27.3	114.5 113.3 111.9 110.5 106.3 101.3 94.9 86.5	8.8 8.6 8.4 8.3 7.9 7.5 7.1 6.7	65.0 64.9 63.0 61.1 56.1 50.8 45.1 38.8	115.9 115.8 114.8 113.7 110.6 106.8 102.2 96.5	9.1 9.1 9.0 8.9 8.5 8.2 7.9 7.5	55.0 54.8 49.5 43.6 37.0	106.5 106.4 102.4 97.5 91.5	8.0 8.0 7.9 7.7 7.5			
83.0 85.0 90.0 91.0 96.5 97.1							15.3	71.6	5.9	29.2 18.6 15.7	83.7 72.1 68.7	7.2 6.5 6.3	35.0 35.0	78.6 78.6	2.0 2.0



N° de ident.: 9842523/95738/ Piez

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

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

		gulo de principa			gulo de orincipa			gulo de principa		65° Án I	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]
	-			53.0 ו	m Pluma	principa	I, Punto	de carga	1 - Cab	ezą de p	lumín	-		-	-
					Cab		olumín (19 n ] Posici								
19.9	78.0	125.9	10.2												
20.0	77.9	125.9	10.2						İ	İ		İ			
22.0	76.3	125.4	10.0												
24.0	74.6	124.8	9.5												
26.0	72.9	124.2	9.2												
28.0	71.2	123.6	9.0												
30.0	69.5	122.8	8.8												
30.6				73.0	123.8	9.1				•					
32.0	67.8	122.0	8.6	71.8	123.4	9.1									
34.0	66.0	121.1	8.4	70.1	122.6	8.9									
36.0	64.2	120.2	8.2	68.4	121.9	8.7									
38.0	62.4	119.2	8.1	66.6	121.0	8.5									
40.0	60.6	118.1	7.9	64.8	120.1	8.3									
42.0	58.7	116.9	7.8	63.0	119.1	8.2									
44.0	56.8	115.6	7.6	61.2	118.0	8.1									
46.0	54.8	114.2	7.4	59.3	116.8	7.9	05.0	440.0		l					
47.1	50.0	440.7	7.3	57.4	445.0	7.7	65.0	118.6	8.2 8.2						
48.0 50.0	52.8 50.7	112.7 111.1	7.3	57.4 55.5	115.6 114.2	7.7	64.2 62.4	118.2 117.2	8.1						
55.0	45.3	106.5	6.8	50.4	110.3	7.6	57.7	114.2	7.8						
60.0	39.2	100.8	6.3	44.9	105.7	7.0	52.8	110.7	7.5						
65.0	32.2	93.7	5.9	38.8	100.0	6.7	47.5	106.4	7.2						
66.6	32.2	33.7	0.0	30.0	100.0	0.7	47.5	100.4	1.2	55.0	109.0	7.2			
70.0	23.5	84.0	5.4	31.7	92.7	6.4	41.7	101.2	7.0	51.5	106.3	7.1			
74.0	15.0	74.1	4.3							1					
75.0				22.8	82.8	5.9	35.2	94.8	6.8	46.1	101.8	7.0			
78.0				15.1	73.7	5.6									
80.0							27.3	86.3	6.5	40.2	96.4	6.8			
85.0							16.2	73.4	6.1	33.3	89.5	6.7			
86.0							15.0	72.0	5.4						
90.0										24.9	80.4	6.2			
94.0										17.2	71.3	5.6			



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]
				53.0 ı	m Pluma Cab	eza de p	al, Punto dumín (19 n ] Posici	916-1) 7 <sub>'</sub>	4.5 m Plı	eza de p umín	lumín				
20.6	78.0	128.8	9.3												
22.0	76.9	128.5	9.2												
24.0	75.3	128.0	8.8												
26.0	73.6	127.4	8.5												
28.0	72.0	126.7	8.3												
30.0	70.4	126.0	8.1												
31.5				73.0	126.7	8.3									
32.0	68.7	125.3	7.9	72.6	126.5	8.3									
34.0	67.1	124.4	7.8	70.9	125.8	8.2									
36.0	65.4	123.5	7.6	69.3	125.1	8.0									
38.0	63.6	122.6	7.4	67.6	124.3	7.8									
40.0	61.9	121.5	7.3	65.9	123.4	7.7									
42.0 44.0	60.1 58.3	120.4 119.1	7.2 7.0	64.2 62.5	122.4 121.4	7.5 7.4									
46.0	56.4	117.8	6.9	60.7	120.3	7.4									
48.0	54.6	116.4	6.8	58.9	119.1	7.1									
48.4	34.0	110.4	0.0	30.9	115.1	7.1	65.0	121.3	7.4						
50.0	52.6	114.9	6.7	57.1	117.8	7.0	63.6	120.5	7.4						
55.0	47.5	110.6	6.4	52.3	114.2	6.8	59.2	117.8	7.1						
60.0	42.0	105.5	6.0	47.2	109.9	6.5	54.6	114.4	6.9						
65.0	35.8	99.2	5.7	41.6	104.7	6.3	49.6	110.4	6.7						
68.3										55.0	111.4	6.5			
70.0	28.4	91.0	5.2	35.3	98.2	6.2	44.3	105.7	6.5	53.3	110.1	6.5			
75.0	18.5	79.2	4.6	27.9	89.9	5.8	38.4	99.9	6.4	48.3	106.0	6.4			
76.0	15.8	75.8	4.5												
80.0				17.7	77.7	5.3	31.5	92.6	6.2	42.9	101.0	6.3			
81.0				16.7	76.4	4.4									
85.0							23.0	82.6	5.9	36.8	94.8	6.2			
88.0							15.8	73.8	5.7						
90.0										29.6	87.0	6.1			
95.0										21.6	77.6	5.4			
97.0										16.9	71.8	5.2			



2821-1

2821-1

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

		gulo de 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]
				53.0 ı		eza de p	ıl, Punto lumín (1 ı ] Posici	916-1) 7	7.5 m Pl	eza de p umín	lumín				
21.2	78.0	131.7	8.3												
22.0	77.4	131.6	8.3												
24.0	75.8	131.1	8.0												
26.0	74.3	130.5	7.7												
28.0	72.7	129.9	7.5												
30.0	71.2	129.2	7.3												
32.0	69.6	128.5	7.2												
32.3				73.0	129.6	7.4									
34.0	68.0	127.7	7.0	71.7	129.0	7.4									
36.0	66.4	126.8	6.8	70.1	128.3	7.2									
38.0	64.7	125.9	6.7	68.5	127.5	7.1									
40.0	63.1	124.9	6.6	66.9	126.7	6.9									
42.0	61.4	123.8	6.5	65.3	125.8	6.8									
44.0	59.7	122.7	6.3	63.6	124.8	6.6									
46.0	57.9	121.4	6.2	61.9	123.7	6.5									
48.0	56.1	120.1	6.1	60.2	122.6	6.4									
49.7							65.0	124.1	6.6						
50.0	54.3	118.7	6.0	58.5	121.4	6.3	64.7	123.9	6.6						
55.0	49.6	114.7	5.7	54.0	118.0	6.0	60.5	121.2	6.4						
60.0	44.4	109.9	5.5	49.2	113.9	5.8	56.1	118.1	6.1						
65.0	38.8	104.2	5.2	44.1	109.1	5.6	51.5	114.4	5.9						
70.0	32.3	97.0	4.9	38.4	103.3	5.4	46.5	109.9	5.7	55.0	113.9	5.8			
75.0	24.4	87.6	4.4	31.9	96.0	5.2	41.1	104.6	5.6	50.3	110.0	5.6			
79.0	15.5	76.2	4.0	00.0	00.4	5.0	25.0	004		45.0	405.0				
80.0				23.8	86.4	5.0	35.0	98.1	5.5	45.2	105.3	5.5			
84.0				16.3	76.8	4.0	07.0	00.7	<b>50</b>	20.7	00.0	<b>5</b> 4			
85.0 90.0							27.8 18.1	89.7 77.6	5.3 5.2	39.7 33.4	99.8 92.9	5.4 5.4			
90.0							15.5	74.2	5.2	JJ.4	92.9	5.4	l		
91.0 95.0							15.5	14.2	5.2	25.7	83.8	5.2			
100.0										16.5	72.2	4.5			
100.0								l	l	10.5	12.2	4.5			



N° de ident.: 9842523/95738/

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

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

		gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa			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]
				53.0 r	m Pluma Cab	eza de p	al, Punto dumín (19 n] Posici	916-1) 8	0.5 m Pl	eza de p umín	lumín				
21.8 22.0 24.0 26.0 28.0	78.0 77.9 76.4 74.9 73.4	134.7 134.6 134.2 133.6 133.0	7.6 7.6 7.4 7.1 6.9												
30.0 32.0 33.2 34.0	71.9 70.4 68.9	132.4 131.7 130.9	6.7 6.6 6.4	73.0 72.4	132.4 132.2	6.8 6.8									
36.0 38.0 40.0 42.0 44.0	67.3 65.7 64.2 62.6 60.9	130.1 129.2 128.3 127.2 126.1	6.3 6.1 6.0 5.9 5.8	70.9 69.4 67.8 66.3 64.7	131.5 130.7 129.9 129.1 128.1	6.7 6.5 6.3 6.2 6.0									
46.0 48.0 50.0 50.9 55.0	59.3 57.6 55.9 51.4	125.0 123.7 122.4 118.6	5.6 5.5 5.4 5.2	63.1 61.5 59.8 55.6	127.1 126.1 124.9 121.7	5.9 5.8 5.7 5.4	65.0 61.7	126.8 124.7	5.9 5.8						
60.0 65.0 70.0 71.7 75.0	46.6 41.4 35.6 28.8	114.2 108.9 102.5	5.0 4.8 4.7	51.1 46.3 41.1 35.2	117.9 113.4 108.1 101.6	5.2 5.0 4.9	57.6 53.2 48.6	121.7 118.2 114.0	5.5 5.3 5.1 5.0	55.0 52.1	116.3 113.8	5.1 5.1			
80.0 82.0 85.0 87.0	28.8 20.0 15.2	94.4 83.1 76.6	3.8 3.6	28.3 19.3 16.0	93.3 81.7 77.3	4.7 4.6 4.4 3.6	38.0	95.9	4.8	47.3 42.2	109.5 104.4	4.9			
90.0 94.0 95.0 100.0 103.0							23.9 15.2	86.2 74.6	4.8 4.7	29.9 21.6 16.2	98.2 90.4 79.8 72.6	4.7 4.3 4.0			



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

		gulo de orincipa			gulo de orincipa		75° Án I	gulo de orincipa	pluma I		gulo de orincipa			gulo de orincipa	
Alcan- ce [ m ]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]
				53.0 ı		eza de p	ıl, Punto lumín (1: ı ] Posici	916-1) 8	3.5 m Pli	eza de p umín	lumín				
22.4	78.0	137.6	6.8												
24.0	76.9	137.2	6.7												
26.0	75.5	136.7	6.5												
28.0	74.0	136.2	6.3												
30.0	72.6	135.6	6.1												
32.0	71.1	134.9	6.0												
34.0	69.7	134.1	5.8												
34.1				73.0	135.3	6.1									
36.0	68.2	133.4	5.7	71.6	134.7	6.0									
38.0	66.7	132.5	5.6	70.2	134.0	5.9									
40.0	65.2	131.6	5.4	68.7	133.2	5.7									
42.0	63.6	130.6	5.3	67.2	132.4	5.6									
44.0	62.1	129.6 128.4	5.2 5.1	65.7 64.1	131.5 130.5	5.5 5.4									
46.0 48.0	60.5 58.9	128.4	5.1	62.6	130.5	5.4									
50.0	57.3	126.0	4.9	61.0	129.5	5.3									
52.2	57.3	120.0	4.9	61.0	120.4	5.2	65.0	129.5	5.3						
52.2 55.0	53.0	122.4	4.7	57.0	125.3	4.9	62.8	129.5	5.3						
60.0	48.6	118.3	4.7	52.7	123.3	4.9	58.9	125.1	5.0						
65.0	43.7	113.4	4.3	48.2	117.5	4.5	54.7	121.9	4.8						
70.0	38.4	107.5	4.1	43.4	112.6	4.3	50.4	118.0	4.6						
73.4	00.4	107.0	7.1	40.4	112.0	4.0	00.4	110.0	4.0	55.0	118.8	4.5			
75.0	32.4	100.4	3.9	38.1	106.6	4.2	45.7	113.4	4.4	53.7	117.6	4.5			
80.0	25.2	91.1	3.5	32.0	99.4	4.0	40.6	108.0	4.3	49.2	113.6	4.4			
85.0	16.5	79.3	2.9	24.6	89.9	3.9	34.9	101.4	4.2	44.5	108.8	4.3			
90.0				15.7	77.7	3.2	28.3	93.1	4.1	39.3	103.1	4.2			
95.0							19.7	81.6	4.0	33.4	96.2	4.1			
97.0							16.5	77.3	3.6						
100.0										26.4	87.3	4.1			
105.0										18.3	76.4	3.5			
106.0										15.9	73.0	3.4			



Lastre trasero [ t ]: 124.0 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 orincipa	i	ı	gulo de orincipa		ı	gulo de principa		F	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]
				53.0		eza de p	al, Punto dumín (19 n ] Posici	916-1) 8	6.5 m Pli	eza de p umín	lumín				
23.1	78.0	140.5	6.2												
24.0	77.4	140.3	6.2												
26.0	76.0	139.8	6.0										<u> </u>		
28.0	74.6	139.3	5.8												
30.0	73.2	138.7	5.7												
32.0	71.8	138.1	5.5												
34.0	70.4	137.4	5.4												
35.0				73.0	138.2	5.5									
36.0	69.0	136.6	5.3	72.3	137.8	5.5									
38.0	67.5	135.8	5.1	70.9	137.1	5.4									
40.0	66.1	134.9	5.0	69.5	136.4	5.3									
42.0	64.6	134.0	4.9	68.0	135.6	5.2									
44.0	63.1 61.6	133.0	4.8 4.7	66.6	134.8	5.0 4.9									
46.0 48.0	60.1	131.9 130.8	4.7	65.1 63.6	133.8 132.9	4.9									
50.0	58.5	129.5	4.5	62.1	131.8	4.6									
53.5	36.5	129.5	4.5	02.1	131.0	4.7	65.0	132.2	4.8						
55.0	54.5	126.2	4.3	58.3	128.9	4.5	63.9	131.5	4.8						
60.0	50.3	120.2	4.1	54.2	125.5	4.3	60.1	128.7	4.6				i		
65.0	45.8	117.7	3.9	50.0	121.5	4.1	56.1	125.6	4.4						
70.0	40.9	112.3	3.7	45.5	116.9	3.9	52.0	121.9	4.2						
75.0	35.5	105.8	3.5	40.6	111.4	3.7	47.6	117.6	4.0						
75.2										55.0	121.2	4.0	i		
80.0	29.2	97.8	3.2	35.1	104.9	3.6	42.9	112.5	3.9	50.9	117.5	4.0			
85.0	21.3	86.9	3.0	28.7	96.7	3.4	37.7	106.5	3.7	46.5	113.0	3.9			
88.0	16.3	79.7	2.6												
90.0				20.6	85.6	3.3	31.8	99.2	3.6	41.7	107.8	3.8			
93.0				15.4	78.1	2.8									
95.0							24.7	89.7	3.5	36.3	101.5	3.7			
100.0							16.2	77.7	3.0	30.2	93.7	3.6			
105.0										22.6	83.4	3.3			
109.0										15.6	73.4	2.9			



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

		gulo de principa		83° Án	gulo de orincipa	pluma I	75° Án I	gulo de principa	pluma I		gulo de orincipa			gulo de orincipa	
Alcan- ce [ m ]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]
				53.0 ı	m Pluma Cab	eza de p	il, Punto llumín (19 n] Posici	916-1) 8	9.5 m Plı	eza de p umín	lumín				
23.7 24.0 26.0 28.0 30.0	78.0 77.8 76.5 75.1 73.8	143.5 143.4 142.9 142.4 141.8	5.5 5.5 5.3 5.2 5.0												
32.0 34.0 35.8 36.0 38.0	72.4 71.1 69.7 68.3	141.2 140.5 139.8 139.0	4.9 4.7 4.6 4.5	73.0 72.9 71.5	141.0 141.0 140.3	4.8 4.8 4.8									
40.0 42.0 44.0 46.0 48.0	66.9 65.5 64.1 62.7 61.2	138.2 137.3 136.3 135.3 134.2	4.4 4.3 4.2 4.1 4.0	70.2 68.8 67.4 66.0 64.6	139.6 138.8 138.0 137.1 136.2	4.7 4.5 4.4 4.3 4.2									
50.0 54.7 55.0 60.0	59.7 55.9 51.9	133.1 129.8 126.1	3.9 3.7 3.5	63.1 59.5 55.6	135.2 132.4 129.2	4.1 3.9 3.7	65.0 64.8 61.2	134.9 134.8 132.2 129.2	4.1 4.1 3.9						
65.0 70.0 75.0 76.9 80.0	47.7 43.1 38.1 32.5	121.8 116.8 110.9	3.3 3.1 3.0 2.8	51.6 47.4 42.8 37.8	125.4 121.1 116.0 110.0	3.5 3.3 3.2 3.0	57.4 53.5 49.4 45.0	125.7 121.6 116.9	3.7 3.6 3.4 3.3	55.0 52.5	123.7 121.4	3.4 3.4			
85.0 90.0 91.0 95.0 96.0	25.8 16.8 16.0	94.5 81.4 80.1	2.6 2.4 2.1	32.1 25.3 16.1 15.1	102.7 93.4 79.8 78.5	2.9 2.8 2.6 2.2	34.8 28.7	111.4 104.7 96.5	3.2 3.0 2.9	48.3 43.8 38.9	117.2 112.2 106.5	3.2 3.1 3.1			
100.0 103.0 105.0 110.0 112.0							20.9 16.0	85.4 78.1	2.8	26.9 19.7 15.3	99.5 90.7 80.3 73.8	2.9 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 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]
				53.0 ı	m Pluma Cab	eza de p	ıl, Punto lumín (1: ı ] Posici	916-1) 9:	2.5 m Pli	eza de p umín	lumín				
24.3	78.0	146.4	4.9												
26.0	76.9	146.0	4.8												
28.0	75.6	145.5	4.6										İ		
30.0	74.3	145.0	4.5												
32.0	73.0	144.4	4.4												
34.0	71.7	143.7	4.2												
36.0	70.4	143.0	4.1												
36.7				73.0	143.9	4.3									
38.0	69.1	142.3	4.0	72.2	143.5	4.3									
40.0	67.7	141.4	3.9	70.9	142.8	4.1									
42.0	66.4	140.6	3.8	69.5	142.1	4.0									
44.0	65.0	139.7	3.6	68.2	141.3	3.9									
46.0	63.6	138.7	3.5	66.8	140.4	3.8									
48.0	62.2	137.6	3.5	65.5	139.5	3.7									
50.0	60.8	136.5	3.4	64.1	138.6	3.6									
55.0	57.2	133.5	3.2	60.6	135.9	3.4									
56.0							65.0	137.6	3.5						
60.0	53.4	129.9	3.0	56.9	132.8	3.2	62.2	135.6	3.4						
65.0	49.3 45.1	125.9	2.8	53.1 49.1	129.2 125.1	3.0	58.6 54.9	132.7 129.4	3.2						
70.0 75.0	40.5	121.2 115.7	2.7	49.1	120.4	2.9	54.9 51.0	129.4	3.1 2.9						
78.6	40.5	115.7	2.5	44.0	120.4	2.1	51.0	125.6	2.9	55.0	126.2	2.9			
80.0	35.4	109.1	2.4	40.1	114.8	2.6	46.8	121.1	2.8	53.9	125.2	2.9			
85.0	33.4	109.1	2.4	35.0	108.2	2.5	42.4	116.0	2.7	50.0	121.2	2.8			
90.0				29.1	100.2	2.3	37.5	109.9	2.7	45.7	116.5	2.7			
95.0				20.1	100.1	2.0	31.9	102.5	2.5	41.2	111.2	2.6			
100.0							25.4	93.2	2.3	36.1	104.8	2.5			
105.0							20.7	00. <u>L</u>	2.0	30.4	97.1	2.4			
110.0										23.5	87.0	2.4			
113.0										19.3	80.8	2.0			



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

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

Valor de vuelco: 2 - Vía ancha Lastre trasero [ t ]: 124.0 Lastre central [ t ]: 52.6 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]
				53.0 ı	m Pluma Cab	eza de p	il, Punto Iumín (19 n] Posici	916-1) 9	5.5 m Pli	eza de p umín	lumín				
24.9	78.0	149.3	4.5												
26.0	77.3	149.1	4.5												
28.0	76.1	148.6	4.3												
30.0	74.8	148.1	4.2												
32.0	73.6	147.5	4.1												
34.0	72.3	146.9	3.9												
36.0	71.1	146.2	3.8												
37.6				73.0	146.8	3.9									
38.0	69.8	145.5	3.7	72.7	146.6	3.9									
40.0	68.5	144.7	3.6	71.5	146.0	3.8									
42.0	67.2	143.9	3.5	70.2	145.3	3.7									
44.0	65.9	143.0	3.4	68.9	144.5	3.6									
46.0	64.5	142.0	3.3	67.6	143.7	3.6							•		
48.0	63.2	141.0	3.2	66.3	142.8	3.4									
50.0	61.8	140.0	3.2	65.0	141.9	3.3									
55.0	58.3	137.0	2.9	61.6	139.3	3.2									
57.3							65.0	140.4	3.2				•		
60.0	54.7	133.7	2.7	58.1	136.4	2.9	63.2	139.0	3.2				•		
65.0	50.9	129.8	2.5	54.4	133.0	2.7	59.7	136.2	3.0						
70.0				50.6	129.1	2.5	56.2	133.1	2.8						
75.0				46.6	124.6	2.3	52.4	129.4	2.6						
80.0							48.5	125.2	2.4						
80.3										55.0	128.6	2.6			
85.0										51.5	125.1	2.5			
90.0										47.5	120.7	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 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]
				56.0 ו	n Pluma Cab	eza de p	ıl, Punto lumín (2 ı ] Posici	316-1) 3	8.5 m Pl	eza de p umín	lumín		_		
13.1	78.0	96.6	45.8												
14.0	76.7	96.4	45.7												
16.0	73.6	95.8	39.9												
18.0	70.4	95.1	34.5												
20.0	67.2	94.3	30.3												
21.3				73.0	95.2	38.6									
22.0	63.9	93.4	26.6	71.9	95.0	38.4									
24.0	60.5	92.3	24.0	68.7	94.2	35.7							<u> </u>		
26.0	57.0	91.0	21.8	65.4	93.4	32.4									
28.0	53.4	89.6	20.0	62.1	92.3	29.5									
30.0	49.5	88.0	18.6	58.7	91.2	27.0									
32.0	45.4	86.1	17.4	55.1	89.8	24.7									
34.0	41.0	83.9	16.2	51.3	88.3	22.9	65.0	91.6	24.6						
36.0	36.1	81.3	15.3	47.3	86.5	21.2	61.7	90.6	23.8						
38.0	30.6	78.2	14.5	43.1	84.5	19.7	58.2	89.4	22.5						
40.0	23.9	74.1	13.8	38.4	82.1	18.4	54.6	88.0	21.2						
42.0	16.4	69.4	10.2	33.3 27.2	79.2	17.3	50.8	86.4	20.2 19.3						
44.0 46.0				27.2 19.4	75.7 70.8	16.3 15.3	46.8 42.5	84.6 82.6	19.3 18.4						
46.0 47.0				16.0	68.6	10.7	42.5	02.0	10.4						
48.0				10.0	00.0	10.7	37.8	80.1	17.6						
48.9							37.0	60.1	17.0	55.0	84.6	14.4			
50.0							32.5	77.2	17.0	53.2	83.9	15.3			
54.0							18.2	68.4	15.7	33.2	00.8	13.3			
55.0							10.2	00.7	10.1	43.0	79.3	13.8			
60.0										30.3	72.4	12.6			
64.0										15.8	63.4	10.7			
74.0										10.0	00.4	10.1	35.0	63.5	4.6
75.0													34.0	62.9	4.4
80.0													15.5	51.6	3.6



N° de ident.: 9842523/95738/ P

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

3/95738/ Pieza de articulación de pluma principal: 2821-1 360 ° Cabeza de pluma principal: 2821-1 ía ancha

		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]
				56.0 ו		eza de p	II, Punto Ilumín (2: I ] Posici	316-1) 4	1.5 m Pli		lumín				
13.7 14.0 18.0 20.0 22.0 22.2 24.0 26.0 30.0 32.0 34.0 35.2 36.0 38.0	78.0 77.6 74.8 71.9 68.9 65.9 62.9 59.7 56.4 53.0 49.4 45.6	99.5 99.5 98.9 98.3 97.6 96.7 95.7 94.6 93.3 91.9 90.2 88.3 86.2 83.7	42.5 42.5 38.6 33.7 30.0 26.2 23.3 21.3 19.6 18.1 17.0 15.9	73.0 70.3 67.3 64.3 61.2 57.9 54.6	98.1 97.5 96.7 95.7 94.7 93.5 92.1 90.5 88.8	35.9 34.6 32.4 29.2 27.0 24.6 22.6	65.0 63.9 60.8	94.3 94.0 92.9	22.7 23.2 22.0						
40.0 42.0 44.0 45.0 46.0 50.0 50.6 55.0 57.0 60.0 65.0 67.0 67.0 80.0	32.2 26.4 19.0 15.7	80.7 77.0 72.0 69.8	13.3 12.7 12.0 9.4	43.5 39.2 34.5 29.2 22.7 15.3	86.7 84.4 81.7 78.3 74.1 69.0	18.2 17.0 16.0 15.1 14.2 10.3	57.5 54.1 50.6 46.9 42.9 38.6 25.3	91.7 90.3 88.7 86.9 84.8 82.4 74.2 68.9	20.9 19.8 18.9 18.1 17.2 16.5	55.0 47.3 36.9 22.6 15.2	87.1 83.6 77.9 68.9 63.8	13.7 13.5 12.2 11.3 9.8	35.0 27.0	65.2 60.2	3.7
82.0													19.8	55.4	2.9



Lastre trasero [ t ]: 124.0 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			gulo de orincipa			gulo de principa		65° Án I	gulo de orincipa	pluma I	45° Án	gulo de orincipa	pluma I
Alcan- ce [ m ]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]
				56.0 ı		eza de p	II, Punto Iumín (2 1 ] Posici	316-1) 4	4.5 m Pli	eza de p umín	lumín				
14.4 16.0 18.0 20.0 22.0 23.0	78.0 75.8 73.2 70.4 67.7	102.5 102.1 101.5 100.8 100.0	39.6 37.9 33.3 29.0 25.9	73.0	101.0	33.4									
24.0 26.0 28.0 30.0 32.0	64.8 61.9 59.0 55.9	99.1 98.1 96.9 95.6 94.1	23.0 20.8 19.2 17.8	73.0 71.7 69.0 66.1 63.3 60.3	101.0 100.7 99.9 99.1 98.1	33.1 31.3 29.2 26.6 24.6									
34.0 36.0 36.5 38.0	49.3 45.8 42.0	92.4 90.6 88.4	15.7 14.7 13.8	57.3 54.2 50.9	95.7 94.3 92.8	22.5 20.8 19.5	65.0 62.9	97.0 96.3	22.0 21.7						
40.0 42.0 44.0 46.0 48.0	38.0 33.5 28.4 22.2 15.2	86.0 83.1 79.7 75.3 70.2	13.0 12.4 11.8 11.2 8.6	47.5 43.8 39.9 35.6 30.8	91.0 89.0 86.7 84.0 80.9	18.2 16.9 15.9 14.9 14.2	60.0 56.9 53.8 50.5 47.0	95.2 93.9 92.5 90.9 89.1	20.5 19.5 18.5 17.7 17.0						
50.0 52.0 52.3 55.0 60.0				25.2 18.0	77.0 71.8	13.4 12.6	43.3 32.7 16.8	87.1 80.5 69.3	16.2 14.7 13.4	55.0 50.8 41.8	89.6 87.6 82.7	12.9 13.1 11.9			
65.0 69.0 79.0 80.0 85.0										30.8 17.9	75.7 66.5	10.9 10.1	35.0 33.9 19.1	66.9 66.2 55.9	3.2 3.1 2.4



2821-1

2821-1

N° de ident.: 9842523/95738/

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

95738/ Pieza de articulación de pluma principal: 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]
				56.0 ו		eza de p	ıl, Punto lumín (2 ı ] Posici	316-1) 4	7.5 m Pl		lumín				
15.0	78.0	105.4	36.7												
16.0	76.8	105.2	36.7												
18.0	74.3	104.6	32.3												
20.0	71.7 69.1	104.0 103.2	28.3												
22.0 23.9	69.1	103.2	25.2	73.0	103.8	31.1									
24.0	66.5	102.4	22.5	73.0	103.8	31.1				i			i		
26.0	63.9	102.4	20.3	70.3	103.0	30.1									
28.0	61.1	100.4	18.7	67.7	102.3	28.7				i			i		
30.0	58.3	99.2	17.3	65.1	101.4	26.3				İ			i		
32.0	55.4	97.8	16.1	62.4	100.4	24.2									
34.0	52.4	96.3	15.1	59.6	99.3	22.4									
36.0	49.3	94.7	14.2	56.8	98.0	20.6									
37.8							65.0	99.8	20.7						
38.0	45.9	92.8	13.4	53.8	96.6	19.1	64.8	99.7	20.6						
40.0	42.4	90.7	12.6	50.7	95.0	17.9	62.0	98.6	20.1						
42.0	38.7	88.3	11.9	47.5	93.2	16.7	59.3	97.5	19.0						
44.0 46.0	34.6 30.0	85.5 82.3	11.3 10.8	44.1 40.5	91.2 89.0	15.6 14.6	56.4 53.4	96.2 94.8	18.1 17.2	ł			ł		
48.0	24.6	78.3	10.8	36.5	86.4	13.8	50.3	93.1	16.5						
50.0	17.7	73.0	9.7	32.2	83.4	13.1	47.1	91.3	15.8						
54.1		70.0	0.7	02.2	00.4	10.1		01.0	10.0	55.0	92.0	12.1	i		
55.0				17.4	72.2	11.3	38.0	85.8	14.2	53.8	91.4	12.8			
60.0							26.5	77.6	13.0	45.8	87.1	11.6	İ		
63.0							16.3	69.7	12.3						
65.0										36.5	81.2	10.5			
70.0										24.3	72.5	9.5			
72.0										17.3	67.0	9.0			
81.4													35.0	68.7	2.4
84.0													30.4	65.4	2.1



 $N^{\circ}$  de ident.: 9842523/95738/ Pieza de articulación de pluma principal:

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

60 ° Cabeza de pluma principal:

2821-1 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]
				56.0 ו		eza de p	ıl, Punto lumín (2 ı ] Posici	316-1) 5	0.5 m Pl	eza de p umín	lumín				
15.6	78.0	108.3	34.3												
16.0	77.6	108.2	34.3												
18.0	75.2	107.7	31.6												
20.0	72.8	107.1	27.9												
22.0	70.4	106.4	24.5												
24.0	68.0	105.7	22.1												
24.8				73.0	106.7	29.1									
26.0	65.5	104.8	20.0	71.6	106.3	28.8									
28.0	63.0	103.8	18.3	69.1	105.6	27.6									
30.0	60.4	102.7	17.0	66.7	104.7	26.2									
32.0	57.7	101.5	15.8	64.2	103.8	23.9									
34.0	55.0	100.1	14.8	61.6	102.7	22.3									
36.0	52.1	98.6	13.9	59.0	101.6	20.6									
38.0	49.2	96.9	13.1	56.3	100.3	19.0	05.0	400.5	40.4						
39.0	46.1	05.0	12.4	50.5	00.0	47.0	65.0	102.5	19.1						
40.0 42.0	40.1	95.0 93.0	11.6	53.5 50.6	98.8 97.2	17.6 16.6	63.8 61.3	102.0 101.0	19.4 18.7						
42.0 44.0	39.3	90.6	11.0	47.5	97.2 95.5	15.5	58.6	99.8	17.7						
46.0	35.5	87.9	10.4	44.3	93.5	14.5	55.9	98.5	16.9						
48.0	31.3	84.8	10.4	41.0	91.3	13.6	53.1	97.0	16.1						
50.0	26.5	81.1	9.5	37.3	88.8	12.9	50.2	95.4	15.5						
53.0	17.1	73.4	8.8	01.0	00.0	12.0	00.2	00.4	10.0						
55.0			0.0	26.4	80.5	11.2	42.2	90.5	13.9				i		
55.8										55.0	94.5	11.3			
58.0				16.8	72.7	10.3									
60.0							32.8	83.8	12.7	49.0	91.2	11.2			
65.0							19.6	73.4	11.6	40.9	86.1	10.2			
66.0							15.7	70.1	11.3						
70.0										31.1	79.0	9.2			
75.0										15.4	66.3	8.0			



N° de ident.: 9842523/95738/ Piez

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]
				56.0 ו		eza de p	ıl, Punto lumín (2 ı ] Posici	316-1) 5	3.5 m Pli	eza de p umín	lumín				
16.2	78.0	111.3	31.8												
18.0	76.1	110.8	31.0												
20.0	73.8	110.3	27.4												
22.0	71.6	109.6	24.1												
24.0	69.3	108.9	21.5												
25.7				73.0	109.6	27.5									
26.0	67.0	108.1	19.6	72.6	109.5	27.4									
28.0	64.6	107.1	18.0	70.4	108.8	26.7									
30.0	62.2	106.1	16.7	68.1	108.0	25.6									
32.0	59.8	105.0	15.6	65.7	107.1	23.9									
34.0	57.2	103.7	14.5	63.3	106.1	22.0									
36.0	54.6	102.3	13.6	60.9	105.1	20.6									
38.0	51.9	100.8	12.8	58.4	103.9	19.0									
40.0	49.1	99.1	12.1	55.8	102.5	17.5									
40.3							65.0	105.2	18.0						
42.0	46.2	97.3	11.4	53.2	101.1	16.3	63.0	104.4	18.3						
44.0	43.1	95.2	10.7	50.4	99.5	15.4	60.6	103.3	17.4						
46.0 48.0	39.9 36.3	92.9 90.3	10.1 9.6	47.6 44.6	97.7 95.7	14.4 13.5	58.1 55.5	102.1 100.7	16.7 15.8						
	30.3	90.3 87.3	9.6	44.6 41.4	95.7 93.5	13.5	55.5 52.8	99.2	15.8						
50.0 55.0	20.1	76.9	9.2 8.1	32.3	93.5 86.7	11.0	52.8 45.7	99.2	13.6						
56.0	16.6	73.8	7.9	32.3	00.7	11.0	45.7	94.9	13.0						
57.5	10.0	13.0	7.9							55.0	96.9	10.7			
60.0				19.9	76.3	9.6	37.5	89.1	12.3	51.8	95.1	11.0			
61.0				16.3	73.1	9.0	31.3	09.1	12.0	31.0	33.1	11.0			
65.0				10.0	70.1	0.0	27.4	81.1	11.3	44.5	90.5	10.0			
69.0							15.3	70.5	10.5	44.5	55.5	10.0			
70.0							10.0	70.0	10.0	36.2	84.5	8.8			
75.0										24.8	75.4	7.6			
78.0										17.5	69.0	7.0			



2821-1

2821-1

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

		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]
				56.0 ו		eza de p	II, Punto Ilumín (2: I Posicio	316-1) 5	6.5 m Pli	eza de p umín	lumín				
16.9	78.0	114.2	29.6												
18.0	76.8	113.9	29.6												
20.0	74.7	113.4	26.7												
22.0	72.6	112.8	23.7												
24.0	70.5	112.1	21.0												
26.0	68.3	111.3	19.1												
26.5				73.0	112.4	25.9									
28.0	66.1	110.5	17.6	71.4	112.0	25.6									
30.0	63.8	109.5	16.3	69.3	111.2	24.6									
32.0	61.5	108.4	15.3	67.1	110.4	23.8									
34.0	59.2	107.3	14.3	64.9	109.5	21.8									
36.0	56.8	106.0	13.3	62.6	108.5	20.2									
38.0	54.3	104.6	12.5	60.3	107.4	19.0									
40.0	51.7	103.1	11.8	57.9	106.1	17.5									
41.6							65.0	107.9	17.5						
42.0	49.1	101.4	11.2	55.4	104.8	16.3	64.6	107.7	17.5						
44.0	46.3	99.5	10.5	52.9	103.3	15.2	62.3	106.7	17.1						
46.0	43.4	97.5	9.9	50.3	101.7	14.3	60.0	105.6	16.3						
48.0	40.3	95.2	9.4	47.6	99.9	13.4	57.6	104.3	15.6						
50.0	37.1	92.7	8.9	44.8	98.0	12.6	55.1	103.0	14.8						
55.0	27.4	84.5	7.9	36.9	92.1	10.9	48.6	99.0	13.3						
59.0	16.2	74.2	7.2							0	00.4	40.0			
59.2				07.0	00.0	0.5	44.4	00.0	40.0	55.0	99.4	10.0			
60.0				27.2 15.9	83.9	9.5	41.4	93.9	12.0	54.2	98.9	10.6			
64.0 65.0				15.9	73.5	8.5	22.0	87.1	11.0	47.6	94.8	9.7			
70.0							32.9 21.5	87.1 77.2	11.0 10.1	47.6 40.2	94.8 89.5	9.7 8.7			
70.0 72.0							21.5 16.1	77.2 72.1	9.0	40.2	89.5	8.7			
72.0 75.0							10.1	12.1	9.0	30.9	81.9	7.6			
80.0										20.3	72.5	6.5			
81.0										17.0	69.4	6.4			



N° de ident.: 9842523/95738/

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

Valor de vuelco: Lastre trasero [ t ]:

Lastre central [ t ]:

2 - Vía ancha 124.0

52.6

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

		gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [ m ]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]
				56.0 ו		eza de p	al, Punto dumín (2 n ] Posici	316-1) 5	9.5 m Pli	eza de p umín	lumín				
17.5	78.0	117.1	27.3												
18.0	77.5	117.0	27.3												
20.0	75.5	116.5	25.9												
22.0	73.5	115.9	23.2												
24.0	71.5	115.3	20.5												
26.0	69.4	114.6	18.5												
27.4				73.0	115.3	24.1									
28.0	67.3	113.7	17.1	72.4	115.1	24.0									
30.0	65.2	112.8	15.8	70.4	114.4	23.5									
32.0	63.1	111.9	14.7	68.3	113.7	22.6									
34.0	60.9	110.8	13.8	66.2	112.8	21.4									
36.0	58.7	109.6	12.9	64.1	111.9	19.8									
38.0	56.4	108.3	12.1	61.9	110.8	18.5									
40.0	54.0	106.9	11.3	59.7	109.7	17.3									
42.0	51.6	105.3	10.7	57.4	108.4	16.0									
42.8							65.0	110.6	16.0						
44.0	49.0	103.6	10.1	55.1	107.1	14.9	63.8	110.1	16.5						
46.0	46.4	101.8	9.6	52.7	105.6	13.9	61.6	109.0	15.8						
48.0	43.7	99.7	9.0	50.2	103.9	13.1	59.4	107.9	15.1						
50.0	40.8	97.5	8.5	47.6	102.2	12.3	57.1	106.6	14.5						
55.0	32.6	90.6	7.5	40.7	96.9	10.5	51.1	102.9	12.9						
60.0	21.9	80.7	6.6	32.5	90.1	9.2	44.6	98.3	11.7						
60.9										55.0	101.8	9.4			
62.0	15.7	74.6	6.3												
65.0				21.7	80.0	8.0	37.2	92.4	10.6	50.2	98.8	9.3			
67.0				15.4	73.9	7.5									
70.0							28.1	84.5	9.7	43.5	94.0	8.3			
75.0							15.7	72.5	8.2	35.5	87.5	7.2			
80 O	1	I	I			I		I		27.2	80.1	62	I		l

84.0



Nº de ident.: 9842523/95738/

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

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

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [ m ]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [ m ]	Carga [t]
				56.0 ו		eza de p	ıl, Punto lumín (2 ı ] Posici	316-1) 6	2.5 m Pl	eza de p umín	lumín		_		
18.1	78.0	120.1	25.4												
20.0	76.2	119.6	25.1												
22.0	74.3	119.1	22.5												
24.0	72.4	118.5	20.2												
26.0	70.5	117.8	18.2												
28.0	68.5	117.0	16.8												
28.3				73.0	118.2	22.7									
30.0	66.5	116.1	15.5	71.4	117.6	22.4							<u> </u>		
32.0	64.5	115.2	14.4	69.4	116.9	21.7									
34.0	62.4	114.2	13.5	67.4	116.1	20.9									
36.0	60.3	113.1	12.6	65.4	115.2	19.5									
38.0	58.2	111.9	11.8	63.4	114.2	18.1									
40.0	56.0	110.5	11.1	61.3	113.1	17.1									
42.0	53.7	109.1	10.4	59.2	112.0	15.9									
44.0	51.4	107.5	9.9	57.0	110.7	14.7									
44.1							65.0	113.4	15.0						
46.0	49.0	105.8	9.3	54.8	109.3	13.7	63.1	112.4	15.5						
48.0	46.5	104.0	8.8	52.5	107.8	12.8	61.0	111.4	14.7						
50.0	43.9	102.0	8.3	50.1	106.2	12.1	58.9	110.2	14.1						
55.0	36.7	96.0	7.2	43.8	101.4	10.3	53.3	106.8	12.6						
60.0	28.0	87.9	6.4	36.6	95.4	8.9	47.3	102.5	11.4						
62.7										55.0	104.3	8.7			
65.0	15.3	75.0	5.6	27.9	87.3	7.8	40.7	97.3	10.3	52.5	102.6	9.0			
70.0				15.1	74.3	6.7	32.9	90.5	9.4	46.4	98.3	8.0			
75.0							23.0	80.8	8.6	39.3	92.6	6.9			
78.0							15.3	72.9	7.5						
80.0										32.2	86.2	5.9			
85.0										21.9	76.2	5.0			
87.0										16.1	70.3	4.7			



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

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

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

		gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa		45° 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]
				56.0 ו		eza de p	ıl, Punto lumín (2 ı ] Posici	316-1) 6	5.5 m Pl	eza de p umín	lumín				
18.7	78.0	123.0	22.7												
20.0	76.9	122.7	22.7												
22.0	75.1	122.2	21.2												
24.0	73.2	121.6	19.5												
26.0	71.4	120.9	17.6												
28.0	69.5	120.2	16.1												
29.2	07.0	440.4	440	73.0	121.1	20.7									
30.0	67.6 65.7	119.4 118.5	14.9	72.2 70.4	120.8 120.1	20.6 20.2									
32.0 34.0	63.8	118.5	13.8 12.9	70.4 68.5	120.1	19.5									
36.0	61.8	116.5	12.9	66.6	118.5	18.8									
38.0	59.8	115.4	11.4	64.7	117.6	17.5									
40.0	57.7	114.1	10.6	62.7	116.5	16.5									
42.0	55.6	112.8	9.9	60.7	115.5	15.7									
44.0	53.5	111.4	9.4	58.7	114.3	14.5									
45.4			•				65.0	116.1	14.5						
46.0	51.3	109.8	8.8	56.6	113.0	13.4	64.4	115.8	14.5						
48.0	49.0	108.1	8.4	54.5	111.6	12.5	62.5	114.8	14.3						
50.0	46.6	106.2	7.9	52.3	110.1	11.7	60.5	113.7	13.6						
55.0	40.1	100.9	6.8	46.5	105.7	10.1	55.3	110.5	12.1						
60.0	32.7	94.0	6.0	40.0	100.3	8.6	49.7	106.6	11.0						
64.4										55.0	106.8	8.2			
65.0	23.2	84.3	5.3	32.6	93.4	7.5	43.7	101.8	9.9	54.5	106.4	8.5			
68.0	16.1	76.6	4.5												
70.0				23.0	83.7	6.6	36.8	95.8	9.0	48.8	102.4	7.6			
73.0				15.8	75.9	5.5									
75.0							28.6	87.8	8.3	42.4	97.2	6.5			
80.0							17.1	75.7	7.6	36.2	91.6	5.5			
85.0										27.8	83.5	4.7			
90.0										15.7	70.7	3.8			



N° de ident.: 9842523/95738/

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

Valor de vuelco: Lastre trasero [ t ]:

Lastre central [ t ]:

2 - Vía ancha 124.0

52.6

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

		gulo de principa			gulo de orincipa			gulo de orincipa			gulo de orincipa		na 45° Ángulo 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]
56.0 m Pluma principal, Punto de carga 1 - Cabeza de plumín Cabeza de plumín (2316-1) 68.5 m Plumín 34.0 [ m ] Posición midfall (2316)															
19.4	78.0	125.9	20.8						,						
20.0	77.4	125.8	20.8												
22.0	75.7	125.3	20.2												
24.0	74.0	124.7	18.8												
26.0	72.2	124.1	17.2												
28.0	70.5	123.4	15.8												
30.0	68.7	122.7	14.7												
30.1				73.0	123.9	19.2									
32.0	66.9	121.8	13.6	71.3	123.3	19.0									
34.0	65.0	120.9	12.6	69.5	122.6	18.4									
36.0	63.2	119.9	11.8	67.7	121.7	18.0									
38.0	61.3	118.8	11.2	65.9	120.9	17.1									
40.0	59.3	117.7	10.4	64.0	119.9	16.1									
42.0	57.3	116.4	9.7	62.1	118.9	15.3									
44.0	55.3	115.1	9.1	60.2	117.8	14.6									
46.0	53.3	113.6	8.6	58.3	116.5	13.5									
46.6							65.0	118.8	13.4						
48.0	51.1	112.0	8.1	56.3	115.2	12.5	63.8	118.2	13.7						
50.0	48.9	110.3	7.7	54.2	113.8	11.7	61.9	117.1	13.4						
55.0	43.1	105.4	6.6	48.8	109.8	10.0	57.0	114.1	11.9						
60.0	36.5	99.3	5.8	43.0	104.9	8.6	51.8	110.5	10.6						
65.0	28.6	91.3	5.1	36.3	98.7	7.4	46.3	106.1	9.7	55.0	400.0	7.7			
66.1	17.7	70.4	4.5	20.4	00.7	6.5	40.1	100.6	8.7	55.0	109.2	7.7 7.4			
70.0	1	79.4 77.1	3.9	28.4	90.7	0.5	40.1	100.6	8.7	51.0	106.3	7.4			
71.0	15.7	17.1	3.9	17 F	70.6	5.6	22.0	02.0	8.0	45.4	101.6	6.3			
75.0 76.0				17.5 15.5	78.6 76.3	4.9	33.0	93.8	6.0	45.1	101.6	0.3			
76.0 80.0				15.5	10.3	4.9	24.1	84.4	7.4	39.5	96.6	5.4			
83.0				I			16.7	76.1	7.4	39.5	90.0	0.4			
85.0							10.7	70.1	7.0	32.3	89.6	4.5			
90.0										23.2	79.9	3.7			
90.0										15.4	71.1	3.7			



2821-1

2821-1

N° 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				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]
				56.0 ו		eza de p	ıl, Punto lumín (2 ı ] Posici	316-1) 7	1.5 m Pli	eza de p umín	lumín				
20.0	78.0	128.9	19.1												
22.0	76.4	128.4	18.9												
24.0	74.7	127.9	17.6										<u> </u>		
26.0	73.0	127.3	16.4												
28.0	71.3	126.6	15.0												
30.0	69.6	125.9	13.8												
31.0				73.0	126.8	17.5									
32.0	67.9	125.1	12.9	72.1	126.5	17.4									
34.0	66.1	124.2	11.9	70.4	125.8	17.1									
36.0	64.3	123.2	11.1	68.7	125.0	16.6									
38.0	62.5	122.2	10.4	66.9	124.1	16.2									
40.0	60.7	121.1	9.8	65.2	123.2	15.2									
42.0	58.8 56.9	119.9 118.6	9.2 8.6	63.4 61.5	122.2 121.2	14.4 13.8									
44.0 46.0	54.9	117.2	8.0	59.7	121.2	13.0									
47.9	54.9	117.2	0.0	59.7	120.0	13.0	65.0	121.5	12.7						
48.0	52.9	115.8	7.6	57.8	118.8	12.1	64.9	121.5	12.7						
50.0	50.9	114.1	7.0	55.8	117.4	11.2	63.5	121.5	12.7						
55.0	45.4	109.6	6.2	50.8	117.4	9.5	58.5	117.6	11.3						
60.0	39.4	104.0	5.3	45.3	109.0	8.1	53.6	114.2	10.1						
65.0	32.4	96.9	4.7	39.3	103.4	7.0	48.4	110.0	9.2						
67.8	02	55.5		00.0						55.0	111.7	7.2			
70.0	23.7	87.3	4.1	32.3	96.3	6.1	42.7	105.0	8.2	52.8	110.0	7.0			
74.0	15.4	77.4	3.4												
75.0				23.5	86.6	5.2	36.3	98.8	7.5	48.1	106.2	5.9			
79.0				15.1	76.7	4.3									
80.0							28.6	90.7	6.9	42.4	101.2	5.0			
85.0							18.3	78.9	6.3	36.0	95.0	4.1			
86.0							15.5	75.5	6.1						
90.0										28.3	86.9	3.3			
95.0										17.9	74.9	2.6			
96.0										15.0	71.4	2.4			



N° de ident.: 9842523/95738/ F

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

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

		3° Ángulo de pluma principal 83° Ángulo de pluma principal 65° Ángulo de pluma principal										45° Án	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]
				56.0 ו		eza de p	il, Punto lumín (2 n ] Posici	316-1) 7	4.5 m Pli	eza de p umín	lumín				
20.7 22.0 24.0	78.0 76.9 75.3	131.8 131.5 131.0	17.8 17.8 16.9												
26.0 28.0	73.7 72.1	130.4 129.8	15.8 14.5												
30.0 31.8 32.0	70.5 68.8	129.1 128.3	13.4	73.0 72.9	129.7 129.6	16.3 16.3									
34.0 36.0	67.1 65.4	127.5 126.6	11.7 10.8	71.2 69.6	128.9 128.2	16.2 15.8									
38.0 40.0 42.0	63.7 62.0 60.2	125.6 124.6 123.4	10.1 9.5 8.9	67.9 66.2 64.5	127.4 126.5 125.6	15.4 14.8 14.0									
44.0 46.0	58.4 56.5	122.2 120.9	8.4 7.8	62.8 61.0	124.6 123.5	13.4 12.9									
48.0 49.2 50.0	54.7 52.7	119.5 118.0	7.3 6.9	59.2 57.4	122.3 121.0	12.0	65.0 64.3	124.2 123.8	11.9 11.9						
55.0 60.0	47.7 42.1	113.7 108.6	6.0 5.1	52.7 47.6	117.5 113.2	9.4 8.0	59.9 55.3	121.1 117.9	10.9 9.8						
65.0 69.5 70.0	35.9 28.6	102.3 94.2	3.9	42.0 35.8	108.1 101.7	6.8 5.9	50.4 45.1	114.0 109.4	8.9	55.0 54.6	114.1 113.8	6.6 6.6			
75.0 77.0	18.8 15.0	82.5 77.8	3.3 2.9	28.5	93.6 81.8	5.1	39.3	103.7 96.7	7.2 6.6	50.1	110.2	5.7			
80.0 81.0 85.0				18.6 15.9	78.5	4.3	32.7 24.5	96.7 87.3	6.1	44.9 39.1	105.6 99.9	3.8			
89.0 90.0							15.1	75.9	5.6	32.4	92.9	3.0			
95.0 97.0										24.2 20.0	83.4 78.4	2.3 2.1			



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

2821-1 Cabeza de pluma principal: 2821-1

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

		gulo de orincipal			gulo de orincipa			gulo de principa			gulo de orincipa		45° Ángulo de plum 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]
				56.0 ı			II, Punto Iumín (2			eza de p	lumín				
					Cab		n ] Posici								
21.3	78.0	134.7	16.1												
22.0	77.5	134.6	16.1												
24.0	75.9	134.1	15.8												
26.0	74.4	133.5	15.0												
28.0	72.8	132.9	14.1												
30.0	71.3	132.3	13.0												
32.0	69.7	131.5	12.2												
32.7				73.0	132.5	14.9									
34.0	68.1	130.7	11.4	72.0	132.1	14.8									
36.0	66.5	129.9	10.5	70.4	131.4	14.6									
38.0	64.8	128.9	9.8	68.8	130.6	14.2									
40.0	63.2	127.9	9.2	67.2	129.8	13.9									
42.0	61.5	126.9	8.7	65.6	128.9	13.3									
44.0	59.8	125.7	8.1	63.9	128.0	12.8									
46.0	58.0	124.5	7.6	62.3	126.9	12.4									
48.0	56.2	123.2	7.1	60.6	125.8	12.0									
50.0	54.4	121.8	6.6	58.8	124.6	11.1									
50.5							65.0	127.0	11.3						
55.0	49.7	117.8	5.7	54.3	121.2	9.2	61.2	124.6	10.7						
60.0	44.6	113.0	4.9	49.6	117.2	7.9	56.8	121.5	9.6						
65.0	38.9	107.3	4.2	44.5	112.5	6.7	52.2	117.9	8.6						
70.0	32.5	100.2	3.6	38.8	106.8	5.7	47.3	113.6	7.8	55.0	116.6	6.0			
71.3	24.6	90.8	3.1	32.4	00.6	4.9	42.0	108.4	7.0			5.3			
75.0 79.0	24.6 15.8	90.8 79.6	2.7	32.4	99.6	4.9	42.0	100.4	7.0	52.0	114.1	5.3			
79.0 80.0	15.6	79.0	2.1	24.5	90.2	4.2	36.0	102.1	6.3	47.1	109.8	4.3			
84.0				24.5 15.6	78.9	3.6	30.0	102.1	0.3	47.1	109.0	4.3			
85.0				15.0	10.8	3.0	29.1	94.1	5.8	41.7	104.6	3.5			
90.0							19.9	82.8	5.3	35.8	98.3	2.7			
92.0							16.6	78.6	4.7	00.0	00.0	2.,			
94.0										30.3	92.0	2.1			



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

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

2821-1 Cabeza de pluma principal: 2821-1

Altura   Carga   Car			gulo de orincipa			gulo de orincipa			gulo de principa			gulo de orincipa			45° Ángulo de plum principal		
Cabeza de plumín (2316-1) 80.5 m Plumín 34.0 [m] Posición midfall (2316)  21.9	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]	
34.0 [ m ] Posición midfall (2316)  21.9					56.0 ı							lumín					
22.0						Cab					umm						
24.0       76.5       137.2       14.6         26.0       75.0       136.7       14.1         28.0       73.5       136.1       13.8         30.0       72.0       135.4       12.7         32.0       70.5       134.7       11.8         33.6       73.0       135.4       13.6         34.0       68.9       134.0       11.1       72.7       135.3       13.6         38.0       65.8       132.3       9.6       69.7       133.9       13.2         40.0       64.2       131.3       8.9       68.1       133.1       12.9         42.0       62.6       130.3       8.4       66.6       132.2       12.6         44.0       61.0       129.2       7.9       65.0       131.3       12.2         48.0       57.7       126.8       6.9       61.8       129.2       11.5         50.0       55.9       125.4       64.       60.1       128.1       11.1         51.7       55.5       55.9       124.9       9.2       62.4       128.0       10.5         60.0       46.7       117.3       4.7       51.4       121.2	21.9	78.0	137.7	14.7													
26.0       75.0       136.7       14.1       13.8         30.0       72.0       135.4       12.7       32.0       70.5       134.7       11.8       33.6       33.0       68.9       134.0       11.1       72.7       135.3       13.6       33.6       34.0       68.9       134.0       11.1       72.7       135.3       13.6       35.0       67.4       133.1       10.3       71.2       134.6       13.5       38.0       68.8       132.3       9.6       69.7       133.9       13.2       40.0       64.2       131.3       8.9       68.1       133.1       12.9       42.0       62.6       130.3       8.4       66.6       132.2       12.6       44.0       61.0       129.2       7.9       65.0       131.3       12.2       44.0       61.0       129.2       7.9       65.0       131.3       12.2       44.0       61.0       129.2       7.9       65.0       131.3       12.2       44.0       65.0       128.0       7.4       63.4       130.3       11.5       55.0       55.9       125.4       6.4       60.1       128.1       11.1       65.0       129.7       10.7       55.0       55.9       124.9       9.2 <t< td=""><td>22.0</td><td>77.9</td><td>137.7</td><td>14.7</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></t<>	22.0	77.9	137.7	14.7													
28.0         73.5         136.1         13.8         138.8         130.0         72.0         135.4         12.7         132.0         70.5         134.7         11.8         13.6         134.0         68.9         134.0         11.1         72.7         135.3         13.6         33.6         67.4         133.1         10.3         71.2         134.6         135.3         13.6         33.0         66.8         132.3         9.6         69.7         133.9         13.2         40.0         64.2         131.3         8.9         68.1         133.1         12.9         42.0         62.6         130.3         8.4         66.6         132.2         12.9         42.0         62.6         130.3         8.4         66.6         132.2         12.9         42.0         62.6         130.3         8.4         66.6         132.2         12.9         42.0         62.6         130.3         8.4         86.6         132.2         12.2         46.0         59.4         128.0         7.4         63.4         130.3         11.8         11.5         55.0         129.7         10.7         10.7         55.0         55.9         124.9         9.2         62.4         128.0         10.5         65.0	24.0	76.5	137.2	14.6													
30.0	26.0	75.0	136.7	14.1													
32.0	28.0	73.5	136.1	13.8													
33.6   34.0   68.9   134.0   11.1   72.7   135.3   13.6   13.5   13.6   36.0   67.4   133.1   10.3   71.2   134.6   13.5   38.0   65.8   132.3   9.6   69.7   133.9   13.2   40.0   64.2   131.3   8.9   68.1   133.1   12.9   42.0   62.6   130.3   8.4   66.6   132.2   12.6   44.0   61.0   129.2   7.9   65.0   131.3   12.2   46.0   59.4   128.0   7.4   63.4   130.3   11.8   48.0   57.7   126.8   6.9   61.8   129.2   11.5   55.0   55.9   125.4   6.4   60.1   128.1   11.1   55.5   55.9   124.9   9.2   62.4   128.0   10.5   60.0   46.7   117.3   4.7   51.4   121.2   7.7   58.2   125.1   9.3   65.0   41.5   112.0   4.0   46.6   116.7   66.6   53.9   121.7   8.3   70.0   35.8   105.6   3.4   41.5   111.5   5.5   49.3   117.6   7.6   7.6   7.6   7.6   7.5   7.0   7.0   36.8   105.6   3.4   41.5   111.5   5.5   49.3   117.6   7.6	30.0	72.0	135.4	12.7													
34.0       68.9       134.0       11.1       72.7       135.3       13.6       13.5       13.2       13.5       13.2       13.5       13.2       13.5       13.2       13.3       13.2       13.2       13.2       13.3       13.2       13.3       12.9       42.0       62.6       130.3       8.4       66.6       132.2       12.6       44.0       61.0       129.2       7.9       65.0       11.5		70.5	134.7	11.8													
36.0       67.4       133.1       10.3       71.2       134.6       13.5         38.0       65.8       132.3       9.6       69.7       133.9       13.2         40.0       64.2       131.3       8.9       68.1       133.1       12.9         42.0       62.6       130.3       8.4       66.6       132.2       12.6         44.0       61.0       129.2       7.9       65.0       131.3       12.2         46.0       59.4       128.0       7.4       63.4       130.3       11.8         48.0       57.7       126.8       6.9       61.8       129.2       11.5         50.0       55.9       125.4       6.4       60.1       128.1       11.1         55.0       51.5       121.7       5.5       55.9       124.9       9.2       62.4       128.0       10.5         60.0       46.7       117.3       4.7       51.4       121.2       7.7       58.2       125.1       9.3         65.0       41.5       112.0       4.0       46.6       116.7       6.6       53.9       121.7       8.3         70.0       35.8       105.6       3.4	33.6																
38.0       65.8       132.3       9.6       69.7       133.9       13.2         40.0       64.2       131.3       8.9       68.1       133.1       12.9         42.0       62.6       130.3       8.4       66.6       132.2       12.6         44.0       59.4       128.0       7.4       63.4       130.3       11.8         48.0       57.7       126.8       6.9       61.8       129.2       11.5         50.0       55.9       125.4       6.4       60.1       128.1       11.1         51.7       55.0       51.5       121.7       5.5       55.9       124.9       9.2       62.4       128.0       10.5         60.0       46.7       117.3       4.7       51.4       121.2       7.7       58.2       125.1       9.3         65.0       41.5       112.0       4.0       46.6       116.7       6.6       53.9       121.7       8.3         70.0       35.8       105.6       3.4       41.5       111.5       5.5       49.3       117.6       7.6         75.0       29.0       97.6       2.9       35.7       105.1       4.7       44.4 <td< td=""><td>34.0</td><td></td><td>134.0</td><td>11.1</td><td></td><td>135.3</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	34.0		134.0	11.1		135.3											
40.0       64.2       131.3       8.9       68.1       133.1       12.9         42.0       62.6       130.3       8.4       66.6       132.2       12.6         44.0       61.0       129.2       7.9       65.0       131.3       12.2         46.0       59.4       128.0       7.4       63.4       130.3       11.8         48.0       57.7       126.8       6.9       61.8       129.2       11.5         50.0       55.9       125.4       6.4       60.1       128.1       11.1         51.7       55.0       51.5       121.7       5.5       55.9       124.9       9.2       62.4       128.0       10.5         60.0       46.7       117.3       4.7       51.4       121.2       7.7       58.2       125.1       9.3         65.0       41.5       112.0       4.0       46.6       116.7       6.6       53.9       121.7       8.3         70.0       35.8       105.6       3.4       41.5       111.5       5.5       49.3       117.6       7.6         75.0       29.0       97.6       2.9       35.7       105.1       4.7       44.4 <td< td=""><td>36.0</td><td>67.4</td><td>133.1</td><td>10.3</td><td>71.2</td><td>134.6</td><td>13.5</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	36.0	67.4	133.1	10.3	71.2	134.6	13.5										
42.0       62.6       130.3       8.4       66.6       132.2       12.6         44.0       61.0       129.2       7.9       65.0       131.3       12.2         48.0       59.4       128.0       7.4       63.4       130.3       11.8         48.0       57.7       126.8       6.9       61.8       129.2       11.5         50.0       55.9       125.4       6.4       60.1       128.1       11.1         51.7	38.0						-										
44.0       61.0       129.2       7.9       65.0       131.3       12.2       11.8       12.2																	
46.0         59.4         128.0         7.4         63.4         130.3         11.8         48.0         57.7         126.8         6.9         61.8         129.2         11.5         11.5         11.5         11.5         125.4         6.4         60.1         128.1         11.1         11.1         11.5         10.7         10.5         10.7         10.7         10.7         10.7         10.7         10.5         10.7         10.7         10.7         10.5         10.7         10.7         10.7         10.7         10.7         10.7         10.7         10.7         10.7         10.7         10.7         10.7																	
48.0     57.7     126.8     6.9     61.8     129.2     11.5       50.0     55.9     125.4     6.4     60.1     128.1     11.1       51.7     55.0     51.5     121.7     5.5     55.9     124.9     9.2     62.4     128.0     10.5       60.0     46.7     117.3     4.7     51.4     121.2     7.7     58.2     125.1     9.3       65.0     41.5     112.0     4.0     46.6     116.7     6.6     53.9     121.7     8.3       70.0     35.8     105.6     3.4     41.5     111.5     5.5     49.3     117.6     7.6       73.0     75.0     29.0     97.6     2.9     35.7     105.1     4.7     44.4     112.8     6.8     53.6     117.9     5.1       80.0     20.3     86.4     2.4     28.9     97.0     4.1     38.9     107.1     6.1     49.0     113.8     4.2       82.0     15.5     80.0     2.2     20.1     85.7     3.4     32.8     100.0     5.6     44.1     109.0     3.3       87.0     90.0     15.3     79.3     3.1     25.3     90.8     5.1     38.7     103.3     2.6 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>																	
50.0         55.9         125.4         6.4         60.1         128.1         11.1         65.0         129.7         10.7         <																	
51.7     55.0     51.5     121.7     5.5     55.9     124.9     9.2     62.4     128.0     10.5       60.0     46.7     117.3     4.7     51.4     121.2     7.7     58.2     125.1     9.3       65.0     41.5     112.0     4.0     46.6     116.7     6.6     53.9     121.7     8.3       70.0     35.8     105.6     3.4     41.5     111.5     5.5     49.3     117.6     7.6       75.0     29.0     97.6     2.9     35.7     105.1     4.7     44.4     112.8     6.8     53.6     117.9     5.1       80.0     20.3     86.4     2.4     28.9     97.0     4.1     38.9     107.1     6.1     49.0     113.8     4.2       85.0     85.0     2.2     20.1     85.7     3.4     32.8     100.0     5.6     44.1     109.0     3.3       87.0     90.0     15.5     3.7     103.3     2.6     2.6     2.6							-										
55.0         51.5         121.7         5.5         55.9         124.9         9.2         62.4         128.0         10.5         10.5         10.5         10.5         10.5         10.5         10.5         10.5         10.5         10.5         10.5         10.5         10.5         12.7         8.3         121.7         8.3         121.7         8.3         117.6         7.6         117.6         7.6         117.6         7.6         117.6         7.6         117.6         7.6         117.6         7.6         117.6         7.6         119.0         5.5         5.5         119.0         5.5         119.0         5.5         5.5         119.0         5.6         4		55.9	125.4	6.4	60.1	128.1	11.1										
60.0         46.7         117.3         4.7         51.4         121.2         7.7         58.2         125.1         9.3           65.0         41.5         112.0         4.0         46.6         116.7         6.6         53.9         121.7         8.3           70.0         35.8         105.6         3.4         41.5         111.5         5.5         49.3         117.6         7.6           73.0         75.0         29.0         97.6         2.9         35.7         105.1         4.7         44.4         112.8         6.8         53.6         117.9         5.1           80.0         20.3         86.4         2.4         28.9         97.0         4.1         38.9         107.1         6.1         49.0         113.8         4.2           82.0         15.5         80.0         2.2         20.1         85.7         3.4         32.8         100.0         5.6         44.1         109.0         3.3           87.0         90.0         15.3         79.3         3.1         25.3         90.8         5.1         38.7         103.3         2.6																	
65.0     41.5     112.0     4.0     46.6     116.7     6.6     53.9     121.7     8.3       70.0     35.8     105.6     3.4     41.5     111.5     5.5     49.3     117.6     7.6       73.0     75.0     29.0     97.6     2.9     35.7     105.1     4.7     44.4     112.8     6.8     53.6     117.9     5.1       80.0     20.3     86.4     2.4     28.9     97.0     4.1     38.9     107.1     6.1     49.0     113.8     4.2       82.0     15.5     80.0     2.2       85.0     20.1     85.7     3.4     32.8     100.0     5.6     44.1     109.0     3.3       87.0     90.0     25.3     90.8     5.1     38.7     103.3     2.6							-	-									
70.0     35.8     105.6     3.4     41.5     111.5     5.5     49.3     117.6     7.6     55.0     119.0     5.5       75.0     29.0     97.6     2.9     35.7     105.1     4.7     44.4     112.8     6.8     53.6     117.9     5.1       80.0     20.3     86.4     2.4     28.9     97.0     4.1     38.9     107.1     6.1     49.0     113.8     4.2       82.0     15.5     80.0     2.2       85.0     87.0     20.1     85.7     3.4     32.8     100.0     5.6     44.1     109.0     3.3       90.0     90.0     15.3     79.3     3.1     25.3     90.8     5.1     38.7     103.3     2.6																	
73.0     75.0     29.0     97.6     2.9     35.7     105.1     4.7     44.4     112.8     6.8     53.6     117.9     5.1       80.0     20.3     86.4     2.4     28.9     97.0     4.1     38.9     107.1     6.1     49.0     113.8     4.2       82.0     15.5     80.0     2.2       85.0     20.1     85.7     3.4     32.8     100.0     5.6     44.1     109.0     3.3       87.0     90.0     25.3     90.8     5.1     38.7     103.3     2.6				-					l								
75.0     29.0     97.6     2.9     35.7     105.1     4.7     44.4     112.8     6.8     53.6     117.9     5.1       80.0     20.3     86.4     2.4     28.9     97.0     4.1     38.9     107.1     6.1     49.0     113.8     4.2       82.0     15.5     80.0     2.2     20.1     85.7     3.4     32.8     100.0     5.6     44.1     109.0     3.3       87.0     90.0     15.3     79.3     3.1     25.3     90.8     5.1     38.7     103.3     2.6		35.8	105.6	3.4	41.5	111.5	5.5	49.3	117.6	7.6	55.0	440.0					
80.0     20.3     86.4     2.4     28.9     97.0     4.1     38.9     107.1     6.1     49.0     113.8     4.2       82.0     15.5     80.0     2.2       85.0     20.1     85.7     3.4     32.8     100.0     5.6     44.1     109.0     3.3       87.0     90.0     25.3     90.8     5.1     38.7     103.3     2.6		20.0	07.6	2.0	25.7	105.1	4.7	44.4	110.0	6.0							
82.0     15.5     80.0     2.2       85.0     20.1     85.7     3.4     32.8     100.0     5.6     44.1     109.0     3.3       87.0     90.0     15.3     79.3     3.1     25.3     90.8     5.1     38.7     103.3     2.6																	
85.0     20.1     85.7     3.4     32.8     100.0     5.6     44.1     109.0     3.3       87.0     90.0     25.3     90.8     5.1     38.7     103.3     2.6					∠6.9	97.0	4.1	36.9	107.1	0.1	49.0	113.8	4.2				
87.0     90.0       15.3     79.3       3.1     25.3       90.8     5.1       38.7     103.3       2.6		15.5	00.0	2.2	20.1	0E 7	2.4	22.0	100.0	E 6	44.1	100.0	2.2				
90.0 25.3 90.8 5.1 38.7 103.3 2.6								32.0	100.0	0.0	44.1	109.0	3.3				
					10.5	18.3	3.1	25.3	90.8	5.1	38.7	103.3	26				
								23.3	30.0	J. I			-				
95.0								16.3	79 N	4.3	55.1	33.2	<b>4</b> . I				