

2821-1

2821-1

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

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

Source:a9841388



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

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				20.0 ו	m Pluma Cab	eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 8	0.5 m Pl		lumín				
20.6	78.0	101.7	19.5												
22.0	77.0	101.4	19.5												
24.0	75.5	100.9	17.7							•					
26.0	74.0	100.3	15.8												
28.0	72.5	99.7	14.0												
29.2				73.0	99.7	17.0									
30.0	71.3	99.1	12.6	72.4	99.4	17.0									
32.0	69.8	98.4	11.5	70.9	98.7	16.1									
34.0	68.2	97.6	10.4	69.6	98.1	14.0									
36.0	66.7	96.8	9.2	68.1	97.3	13.0									
38.0	64.9	95.7	8.3	66.5	96.5	11.5									
40.0	63.3	94.7	7.5	65.0	95.6	10.1									
42.0	61.7	93.7	6.9	63.4	94.6	8.9				ł					
42.4							65.0	94.9	11.3						
44.0	60.0	92.5	6.3	61.5	93.3	8.0	64.0	94.3	11.5						
46.0	58.4	91.3	5.8	59.9	92.2	7.3	62.4	93.3	10.7						
48.0	56.7	90.0	5.3	58.2	91.0	6.6	60.8	92.2	9.5						
50.0	55.0	88.7	4.8	56.5	89.7	6.0	59.2	91.0	8.6						
55.0	50.5	84.8	3.9	52.1	86.0	4.8	54.6	87.5	6.7		00.4				
57.8	45.0	00.0	0.0	47.4	04.7	0.0	50.4	00.0	5 4	55.0	86.4	5.7	-		
60.0	45.6	80.2	3.2	47.4	81.7	3.9	50.1	83.6	5.4	53.1	84.9	5.5			
65.0 70.0	40.4	74.8	2.6	42.3 36.4	76.6 70.2	3.2 2.5	45.2 39.9	78.9 73.4	4.4 3.5	48.5 43.5	80.7 75.8	4.2 3.3			
70.0 75.0				30.4	70.2	2.5	39.9 34.0	66.7	2.8	43.5 38.0	75.8	2.4			
75.0 80.0							26.8	58.0	2.8	36.0	70.0	2.4			
83.0							20.0	0.00	2.2				35.0	62.1	2.6
85.0													32.4	59.1	2.6
89.0													32.4 27.4	53.0	2.0



Nº de ident.: 9842523/95738/

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

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

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



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

2821-1 Cabeza de pluma principal: 2821-1

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

		gulo de orincipal			gulo de orincipa			gulo de principa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				20.0 r	m Pluma Cab	eza de p	al, Punto Jumín (2 n] Posici	316-1) 8	6.5 m Pl	eza de p umín	lumín				
21.8	78.0	107.6	16.8												
22.0	77.9	107.5	16.8												
24.0	76.5	107.1	16.6												
26.0	75.2	106.5	15.1												
28.0	74.0	106.1	14.3												
30.0	72.6	105.5	12.6												
30.9				73.0	105.4	14.9									
32.0	71.2	104.8	11.1	72.3	105.1	14.9									
34.0	69.8	104.1	9.9	70.9	104.4	14.2									
36.0	68.4	103.3	8.9	69.7	103.8	12.5									
38.0	66.7	102.3	8.0	68.3	103.0	11.4									
40.0	65.3	101.4	7.2	66.8	102.1	10.2									
42.0 44.0	63.8 62.3	100.4 99.4	6.5 6.0	65.4 63.9	101.2 100.3	8.9 7.8				ł			ł		
	62.3	99.4	6.0	63.9	100.3	7.8	05.0	100.3	9.6	ł					
44.9 46.0	60.8	98.3	5.5	62.2	99.1	7.1	65.0 64.3	99.8	9.6	-					
	59.3	98.3 97.1		60.6	99.1	6.4	63.0	99.8	9.8						
48.0 50.0	59.3 57.7	97.1 95.9	5.0 4.5	59.1	98.0 96.8	5.8	63.0	99.0	9.3 8.5						
55.0	53.7	95.9 92.4	4.5 3.5	59.1 55.1	96.6	4.5	57.4	94.7	6.7						
60.0	49.4	92. 4 88.4	2.8	51.0	89.7	3.6	53.4	94.7	5.1						
61.2	43.4	00.4	2.0	31.0	09.1	3.0	33.4	31.2	J. I	55.0	91.3	4.6			
65.0	44.9	83.7	2.3	46.6	85.3	2.8	49.1	87.2	4.1	52.0	88.6	4.0			
70.0		00.1	2.0	41.8	80.1	2.0	44.5	82.4	3.2	47.6	84.3	3.1			
75.0				71.0	00.1	2.1	39.3	76.5	2.4	42.9	79.3	2.3			
76.0										41.7	77.9	2.1			
87.9										····			35.0	65.6	2.0
89.0													34.0	64.3	2.1



N° de ident.: 9842523/95738/

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										
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				20.0 ו		eza de p	lumín (2	316-1) 8	9.5 m Pl	eza de p umín	lumín				
						43.0 [m] Posici	on midta	II (2316)						
22.5	78.0	110.5	14.6												
24.0	77.0	110.2	14.6												
26.0	75.7	109.7	13.8												
28.0	74.4	109.1	13.0												
30.0	73.2	108.6	12.0												
31.8				73.0	108.3	13.3									
32.0	71.9	108.0	10.6	72.9	108.2	13.3									
34.0	70.5	107.3	9.4	71.5	107.6	13.1									
36.0	69.2	106.5	8.5	70.2	106.8	12.0									
38.0	67.8	105.7	7.6	69.0	106.2	10.9									
40.0	66.4	104.9	6.8	67.6	105.4	10.2									
42.0	64.7	103.8	6.2	66.2	104.5	8.9									
44.0	63.3	102.8	5.6	64.8	103.6	7.7									
46.0	61.8	101.7	5.1	63.4	102.6	6.8	05.0	400.4	0.0						
46.2	00.0	400.0	4.6	61.7	101.4	0.4	65.0	103.1	8.8						
48.0	60.3	100.6	-			6.1	64.0	102.4	8.8						
50.0	58.8 55.0	99.4 96.1	4.2 3.2	60.2 56.4	100.2 97.1	5.5 4.2	62.6 58.6	101.3 98.2	8.2 6.6						
55.0 60.0	50.9	96.1	2.5	56.4 52.4	97.1	3.2	58.6	98.2	4.9						
62.9	50.9	92.2	2.5	52.4	93.4	3.2	54.7	94.9	4.9	55.0	93.8	4.0			
65.0				48.2	89.2	2.5	50.6	91.0	3.7	53.4	92.3	3.9			
68.0				46.2 45.6	86.4	2.5	50.6	91.0	3.7	55.4	92.3	3.9			
70.0				45.0	00.4	Z. I	46.3	86.5	2.9	49.2	88.2	2.9			
75.0							41.6	81.2	2.5	45.2	84.0	2.5			



N° de ident.: 9842523/95738/

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

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

		gulo de principa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				20.0 ו		eza de p	ıl, Punto lumín (2: ı l Posici	316-1) 9:	2.5 m Pli	eza de p umín	lumín		_		
23.1	78.0	113.4	13.3				<u> </u>								
24.0	77.5	113.2	13.3												
26.0	76.2	112.8	12.9												
28.0	74.9	112.2	12.3										İ		
30.0	73.6	111.6	11.8												
32.0	72.3	111.0	10.4												
32.7				73.0	111.1	12.1									
34.0	71.0	110.3	9.2	72.2	110.7	12.1									
36.0	69.6	109.6	8.3	70.8	110.0	11.8									
38.0	68.3	108.8	7.5	69.5	109.3	10.6									
40.0	67.2	108.1	6.7	68.4	108.7	9.8									
42.0	65.6	107.1	6.0	67.1	107.8	9.0									
44.0	64.2	106.1	5.4	65.7	106.9	7.8									
46.0 47.5	62.8	105.1	4.9	64.3	106.0	6.8	65.0	105.8	8.2						
47.5	61.4	104.0	4.5	63.0	105.0	6.0	64.6	105.8	8.2						
50.0	60.0	104.0	4.5	61.3	103.0	5.4	63.2	105.5	8.0						
55.0	56.3	99.7	3.1	57.6	103.7	4.1	59.7	104.5	6.5						
60.0	52.4	96.1	2.4	53.9	97.2	3.1	56.0	98.5	5.0						
64.7	02.3	00.1	2.7	00.0	07. <u>L</u>	0.1	00.0	00.0	0.0	55.0	96.2	3.6			
65.0				49.9	93.2	2.4	52.1	94.9	3.7	54.7	96.0	3.6			
67.0				48.2	91.5	2.1									
70.0							48.5	91.1	2.7	50.8	92.1	2.9			
74.0							44.6	86.7	2.1						



N° de ident.: 9842523/95738/

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

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

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				20.0 i	m Pluma Cab	eza de p	ıl, Punto llumín (2 ı] Posici	316-1) 9	5.5 m Plı	eza de p umín	lumín				
23.8	78.0	116.4	12.2												
24.0	77.9	116.3	12.2												
26.0 28.0	76.6 75.4	115.8 115.3	12.0 11.6										ł		
30.0	74.1	114.8	11.0										ł		
32.0	72.9	114.2	10.2												
33.6	72.0	117.2	10.2	73.0	114.0	11.1							i		
34.0	71.6	113.5	9.0	72.7	113.9	11.1							İ		
36.0	70.3	112.8	8.0	71.5	113.2	11.0									
38.0	69.0	112.0	7.2	70.2	112.5	10.3									
40.0	67.7	111.2	6.5	68.9	111.7	9.3									
42.0	66.4	110.4	5.8	67.8	111.1	8.6									
44.0	65.1	109.5	5.2	66.5	110.2	7.6									
46.0	63.7 62.4	108.5	4.6 4.2	65.2	109.3	6.6 5.9									
48.0 48.7	62.4	107.4	4.2	63.6	108.1	5.9	65.0	108.5	7.6						
50.0	61.0	106.3	3.8	62.3	107.1	5.2	64.2	107.9	7.6						
55.0	57.5	103.3	2.8	58.8	104.2	3.9	60.7	105.2	6.3				i		
60.0	07.0	100.0	2.0	55.2	100.9	2.9	57.5	102.4	4.9						
65.0				51.4	97.1	2.1	53.9	99.0	3.5						
66.4										55.0	98.7	3.1			
70.0							49.7	94.6	2.6	52.3	96.0	2.9			
73.0							47.6	92.4	2.1	49.9	93.5	2.2			



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

360°

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



Nº de ident.: 9842523/95738/

Pieza de articulación de pluma principal: 2821-1

Radio de descarga:

360°

Cabeza de pluma principal: 2821-1

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

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



N° de ident.: 9842523/95738/

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

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

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



Nº de ident.: 9842523/95738/

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

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

		gulo de principal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				20.0 ו		ża de pl	ıl, Punto umín (23 ı] Posicio	316-1) ĬC	7.5 m P	lumín [·]	lumín		-		
26.3	78.0	128.1	8.7												
28.0	77.0	127.7	8.7												
30.0	75.9	127.2	8.5												
32.0	74.8	126.7	8.2												
34.0	73.7	126.1	8.0												
36.0	72.6	125.5	7.1												
37.1				73.0	125.5	7.7									
38.0	71.5	124.8	6.3	72.5	125.2	7.7									
40.0	70.3	124.1	5.6	71.4	124.5	7.7									
42.0	69.2	123.4	5.1	70.2	123.8	7.3									
44.0	68.0	122.6	4.5	69.1	123.1	6.9									
46.0	66.9	121.7	3.9	67.9	122.3	6.6									
48.0	65.7	120.8	3.4	66.8	121.4	5.8									
50.0	64.5	119.9	3.0	65.6	120.5	5.0	05.0	440.4							
53.8	04.5	447.0	0.4	00.0	440.0	0.4	65.0	119.4	5.3						
55.0	61.5	117.3	2.1	62.6	118.0	3.4	64.3	118.8	5.3						
60.0 61.0				59.8 58.9	115.5 114.6	2.3 2.2	61.3	116.2	4.4						
65.0				56.9	114.0	2.2	58.4	113.5	3.5						
70.0							55.2	110.2	2.2						
71.0							54.6	109.5	2.0						



Nº de ident.: 9842523/95738/

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

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

		gulo de orincipa			gulo de orincipa			gulo de principa			gulo de principa			gulo de principa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				20.0	m Pluma Cabe	eza de pl	ıl, Punto umín (23 ı] Posici	316-1) 11	10.5 m P	eza de p lumín	lumín		-		
26.9	78.0	131.0	7.9												
28.0	77.4	130.8	7.9												
30.0	76.3	130.3	7.7												
32.0	75.3	129.8	7.5												
34.0	74.2 73.1	129.2	7.3												
36.0	73.1	128.6 128.0	6.7	70.0	128.4	7.0									
38.0 40.0	70.9	128.0	5.9 5.3	73.0 71.9	128.4	7.0 7.0									
42.0	69.8	126.6	4.8	70.8	127.7	6.8				ł			i		
44.0	68.7	125.8	4.3	69.7	126.3	6.5							i		
46.0	67.6	125.0	3.8	68.6	125.5	6.2									
48.0	66.6	124.3	3.2	67.4	124.7	5.8									
50.0	65.3	123.2	2.8	66.3	123.8	5.0		İ	İ				İ		
55.0				63.4	121.4	3.3									
55.1							65.0	122.1	4.8						
60.0				60.7	118.9	2.2	62.1	119.6	4.3						
61.0				60.1	118.4	2.0									
65.0							59.4	117.0	3.3						
70.0							56.3	113.8	2.2						



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 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]
	·			23.0		eza de p	II, Punto Ilumín (2: I Posici	316-1) 3	8.5 m Pl		lumín		_		
12.0	78.0	63.6	64.7			10.0[11	I 1 03101		11 (2310)	1			1		
13.0	76.4	63.4	62.9	l						i			i		
14.0	74.9	63.1	58.4												
16.0	71.8	62.5	49.1	i						İ			İ		
17.3				73.0	62.5	53.4				İ			İ		
18.0	68.6	61.7	42.6	71.8	62.2	53.2									
20.0	65.3	60.8	35.2	68.7	61.5	46.4									
22.0	61.9	59.8	30.1	65.4	60.6	38.8									
24.0	58.4	58.6	26.6	62.1	59.6	33.0									
25.4							65.0	59.7	30.1						
26.0	54.7	57.2	23.6	58.6	58.4	28.7	64.1	59.5	42.0						
28.0	51.2	55.7	21.5	55.0	57.1	25.3	60.7	58.4	37.0						
30.0	47.2	53.9	19.7	51.0	55.4	23.0	57.2	57.1	32.7						
32.0	42.9 38.3	51.9	18.1 16.7	47.3 43.0	53.7 51.7	21.0 19.3	53.6 49.4	55.7 54.0	28.2 25.6						
34.0 34.9	38.3	49.5	16.7	43.0	51.7	19.3	49.4	54.0	25.6	55.0	54.7	29.6			
34.9 36.0	33.0	46.6	15.5	38.4	49.3	17.9	45.3	52.0	23.0	53.0	53.9	28.9			
38.0	26.9	43.0	14.6	33.2	46.4	16.7	41.3	50.1	20.9	49.1	52.2	24.8			
40.0	19.0	38.1	13.6	27.1	42.9	15.5	36.4	47.5	19.2	44.9	50.3	21.7	i		
41.0	15.5	35.8	13.0										1		
42.0				19.3	38.0	14.3	31.0	44.4	17.8	40.9	48.3	19.2			
43.0				15.8	35.8	13.7									
44.0				[24.4	40.5	16.4	36.0	45.7	17.3	l		
46.0							15.2	34.6	14.9	30.5	42.5	15.9			
48.0										23.7	38.5	14.6			
50.0										16.1	33.7	13.4			
50.7													35.0	40.2	18.1
55.0				I									22.0	32.4	16.4
56.0													17.4	29.5	15.3

Source:a9841388



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

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

		gulo de principa			gulo de orincipa			gulo de principa			gulo de orincipa		45° Án	gulo de orincipa	pluma I
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				23.0		eza de p	al, Punto olumín (2 n] Posici	316-1) 4	1.5 m Pli	eza de p umín	lumín				
12.6	78.0	66.5	59.5												
13.0	77.4	66.4	59.5												
14.0	76.0	66.2	56.7												
16.0	73.1	65.6	48.9												
18.0	70.2	64.9	40.7												
18.1				73.0	65.3	49.1									
20.0	67.2	64.1	34.9	70.3	64.7	45.3									
22.0	64.2	63.2	29.4	67.3	63.9	39.8									
24.0	60.9	62.1	26.1	64.3	63.0	33.2									
26.0	57.6	60.8	23.3	61.0	61.9	29.3	05.0	00.4	00.0						
26.7	54.5	50.5	04.0	F7 7	00.0	05.7	65.0	62.4 61.8	38.9 37.9						
28.0 30.0	54.5 50.9	59.5 57.9	21.0 19.3	57.7 54.3	60.6 59.2	25.7 22.8	63.1 59.9	60.7	37.9						
32.0	47.3	56.2	17.8	54.3 51.0	59.2 57.8	20.7	59.9 56.6	59.4	28.9						
34.0	43.3	54.1	16.4	47.4	56.0	19.1	53.2	58.0	25.3						
36.0	39.1	51.8	15.2	43.4	54.0	17.6	49.4	56.2	23.0						
36.7	33.1	31.0	15.2	40.4	34.0	17.0	43.4	30.2	25.0	55.0	57.2	27.2			
38.0	35.2	49.5	14.3	39.2	51.6	16.3	45.9	54.5	20.9	52.7	56.2	26.0			
40.0	29.9	46.3	13.4	34.5	48.9	15.2	41.8	52.3	19.1	49.0	54.5	22.3			
42.0	22.4	41.4	12.5	29.1	45.5	14.2	37.4	49.8	17.7	45.5	52.7	19.7			
43.0	18.3	38.6	12.0												
44.0				22.6	41.3	13.2	32.5	46.9	16.4	41.5	50.6	17.6			
46.0				15.2	36.2	12.1	26.8	43.3	15.2	37.0	48.1	15.9			
48.0							19.5	38.4	13.9	32.9	45.6	14.7			
49.0							16.4	36.3	13.2						
50.0										27.3	42.0	13.6			
53.0										15.5	34.1	11.9			
53.2													35.0	41.9	16.8
55.0													30.9	39.3	17.0
59.0													18.3	31.0	14.0



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

		gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				23.0 ı	m Pluma Cab	eza de p	ıl, Punto ılumín (2: ı] Posici	316-1) 4	4.5 m Pli	eza de p umín	lumín				
13.2	78.0	69.5	55.3												
14.0	77.0	69.3	55.3												
16.0	74.3	68.8	48.6												
18.0	71.6	68.1	40.4												
19.0				73.0	68.2	45.9									
20.0	68.8	67.4	34.8	71.7	67.9	45.4									
22.0	66.0	66.5	29.3	68.9	67.1	39.4									
24.0 26.0	63.2 60.1	65.5 64.4	25.2 22.7	66.1	66.3 65.3	33.9 28.8									
28.0	57.2	63.2	20.6	63.3 60.2	64.2	26.8	65.0	65.2	36.5						
30.0	54.0	61.8	18.9	57.1	62.9	23.0	62.1	64.1	34.0						
32.0	50.8	60.2	17.6	54.1	61.6	20.6	59.0	62.9	30.0						
34.0	47.3	58.4	16.3	50.9	60.0	18.9	55.9	61.6	26.6						
36.0	43.7	56.4	15.1	47.4	58.2	17.5	52.7	60.1	23.3				i		
38.0	39.7	54.1	14.0	43.8	56.2	16.2	49.5	58.6	21.0						
38.4										55.0	59.6	25.3			
40.0	35.4	51.4	13.1	39.8	53.9	15.0	46.0	56.7	19.2	52.4	58.4	23.6			
42.0	30.6	48.3	12.3	36.3	51.7	14.3	42.3	54.6	17.7	49.0	56.7	20.3			
44.0	25.0	44.3	11.6	31.6	48.7	13.3	38.2	52.2	16.4	45.7	55.0	18.2			
46.0	17.6	39.0	10.8	26.1	44.9	12.3	33.8	49.3	15.3	41.9	52.8	16.3			
48.0				17.9	39.0	11.4	28.7	46.0	14.2	37.9	50.4	14.8			
50.0							22.6	41.7	13.1	34.1	48.0	14.2			
52.0							15.8	36.7	11.9						
55.0										19.5	37.8	11.2			
55.6													35.0	43.6	15.7
60.0													25.0	36.8	14.3
62.0													17.6	31.5	12.7



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

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				23.0 ı		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 4	7.5 m Pl	eza de p umín	lumín				
13.8	78.0	72.4	51.0												
14.0	77.8	72.4	51.0												
16.0	75.3	71.9	46.7										İ		
18.0	72.8	71.3	40.5												
19.9				73.0	71.1	42.2									
20.0	70.2	70.6	34.0	72.9	71.1	42.2									
22.0	67.6	69.8	29.2	70.3	70.4	38.8									
24.0	65.0	68.9	25.1	67.7	69.6	34.1									
26.0	62.2	67.8	22.2	65.1	68.7	29.0									
28.0	59.5	66.7	20.2	62.3	67.6	25.6									
29.2							65.0	67.9	30.1						
30.0	56.6	65.4	18.5	59.5	66.5	23.0	64.0	67.5	34.0						
32.0	53.7	64.0	17.1	56.6	65.2	20.5	61.3	66.5	30.2						
34.0	50.6	62.4	16.0	53.8	63.8	18.6	58.4	65.2	27.3						
36.0	47.4	60.6	14.8	50.7	62.2	17.2	55.4	63.9	23.8						
38.0	44.0	58.6	13.7	47.5	60.5	15.9	52.4	62.4	21.0						
40.0	40.3	56.4	12.7	44.1	58.5	14.8	49.5	60.8	19.2						
40.1										55.0	62.1	23.2			
42.0	36.4	53.8	11.9	40.4	56.2	13.8	46.2	58.9	17.6	52.1	60.7	21.3			
44.0	32.0	50.8	11.2	36.5	53.6	12.9	42.7	56.9	16.3	49.2	59.1	18.5			
46.0	27.0 20.9	47.1 42.5	10.6 9.9	32.9 27.1	51.1 47.0	12.1	38.9	54.5 52.2	15.1	45.9 42.4	57.2 55.1	16.7 15.1			
48.0		_	9.9	27.1	47.0	11.3	35.5	52.2	14.5	42.4	55.1	15.1	l		
49.0 50.0	17.1	39.5	9.6	21.1	42.4	10.6	31.1	49.1	13.4	38.6	52.7	13.6			
51.0				17.3	39.4	10.6	31.1	49.1	13.4	30.0	32.1	13.0			
55.0				17.3	38.4	10.2	15.3	37.0	10.5	28.2	45.4	11.3			
58.0							13.3	31.0	10.5	17.5	37.3	9.9			
58.1										17.5	31.3	3.3	35.0	45.3	14.5
60.0													31.2	42.7	14.7
65.0													17.0	31.9	11.3



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			gulo de orincipa			gulo de orincipa			gulo de orincipa		45° Án	gulo de orincipa	pluma I
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				23.0 ו	m Pluma Cab	eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 5	0.5 m Plı	eza de p umín	lumín				
14.5	78.0	75.3	47.5												
16.0	76.2	75.0	46.0												
18.0	73.9	74.4	40.9												
20.0	71.5	73.8	33.8												
20.8				73.0	74.0	39.4									
22.0	69.0	73.0	29.7	71.5	73.5	38.9									
24.0	66.5	72.2	25.6	69.1	72.8	33.5									
26.0 28.0	64.0 61.5	71.2 70.2	22.3 20.0	66.7 64.1	72.0 71.0	29.3 25.5									
30.0	58.9	69.0	18.3	61.5	69.9	23.2									
30.5	36.9	09.0	10.3	01.5	09.9	23.2	65.0	70.6	32.0						
32.0	56.2	67.7	16.9	58.8	68.7	20.6	63.2	69.9	31.3						
34.0	53.4	66.3	15.6	56.2	67.5	18.7	60.5	68.7	27.3						
36.0	50.9	64.9	15.0	53.4	66.1	17.1	57.8	67.5	24.6						
38.0	47.9	63.2	13.8	50.5	64.5	15.8	55.0	66.1	21.6						
40.0	44.8	61.2	12.7	47.5	62.7	14.7	52.3	64.7	19.3						
41.8										55.0	64.6	21.4			
42.0	40.8	58.7	11.8	44.3	60.7	13.7	49.4	63.0	17.7	54.8	64.4	21.4			
44.0	37.2	56.1	11.0	40.9	58.5	12.7	46.3	61.2	16.4	51.9	62.9	19.5			
46.0	33.2	53.2	10.4	37.3	56.0	11.9	43.0	59.1	15.1	49.1	61.3	17.1			
48.0	28.7	49.8	9.8	33.3	53.1	11.2	39.5	56.8	14.1	46.0	59.5	15.5			
50.0	23.4	45.6	9.2	28.8	49.7	10.5	36.4	54.6	13.3	42.7	57.4	14.0			
52.0	16.5	39.9	8.6	40.7	00.0										
54.0				16.7	39.8	9.2	04.0	45.0	44.0	24.4	54.0				
55.0 57.0							24.2 17.6	45.2 39.8	11.0 10.1	34.1	51.3	11.4			
60.0							17.6	39.8	10.1	20.6	40.8	9.3			
60.0										20.0	40.0	9.3	35.0	47.0	13.6
61.0										16.9	37.7	8.9	33.0	47.0	13.0
65.0										10.0	07.7	0.0	26.1	40.3	12.4
68.0													16.5	32.3	10.1



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

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

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

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa		45° Án	gulo de orincipa	pluma I
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				23.0 r		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 5	3.5 m Pli	eza de p umín	lumín				
15.1	78.0	78.3	43.4												
16.0	77.0	78.1	43.4												
18.0	74.8	77.5	38.9												
20.0	72.5	76.9	33.7												
21.6	70.0	70.0	00.4	73.0	76.8	36.4									
22.0	70.3 67.9	76.2 75.4	28.4 25.3	72.6 70.3	76.7	36.4 33.6									
24.0 26.0	67.9 65.6	75.4 74.6	25.3 22.1	70.3 68.0	76.0 75.2	33.6									
28.0	63.2	73.6	19.6	65.7	75.2 74.3	26.4									
30.0	60.8	72.5	17.9	63.2	73.3	23.1									
31.8	00.0	72.0	11.0	00.2	70.0	20.1	65.0	73.3	29.9						
32.0	58.3	71.3	16.5	60.8	72.2	20.7	64.8	73.2	29.9						
34.0	55.7	70.0	15.2	58.4	71.1	18.6	62.4	72.2	28.6						
36.0	53.1	68.5	14.1	55.8	69.8	16.9	59.8	71.0	24.8						
38.0	50.8	67.2	13.5	53.2	68.3	15.5	57.3	69.8	22.2						
40.0	47.9	65.4	12.5	50.9	67.0	14.8	54.6	68.4	19.6						
42.0	45.0	63.5	11.5	48.0	65.2	13.7	52.1	66.9	17.7						
43.6										55.0	67.0	19.6			
44.0	41.3	60.9	10.7	45.0	63.3	12.6	49.3	65.3	16.3	54.4	66.7	19.6			
46.0 48.0	37.9 34.2	58.5 55.7	10.0 9.4	41.9 38.0	61.1 58.3	11.6 10.9	46.4 43.3	63.4 61.4	15.0 13.9	51.9 49.1	65.3 63.6	17.8 15.7			
50.0	34.2 30.1	55.7 52.4	9.4 8.9	34.3	58.3 55.5	10.9	43.3 40.1	59.1	13.9	49.1 46.6	62.0	15.7			
55.0	16.0	40.3	7.7	22.8	46.1	8.7	30.7	51.9	10.9	38.6	56.5	11.4			
57.0	10.0	40.5	1.1	16.2	40.1	8.1	30.7	31.9	10.9	30.0	30.3	11.4			
60.0				. 5.2	. 5.0	0.1	17.1	40.3	9.0	28.1	48.2	9.3			
63.0													35.0	48.8	12.6
64.0										16.4	38.1	7.9			
65.0													31.5	46.0	12.6
70.0													19.6	36.0	9.6
71.0													16.0	32.8	8.9



N° de ident.: 9842523/95738/

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

2 - Vía ancha

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

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				23.0 ı		eza de p	al, Punto dumín (2 n] Posici	316-1) 5	6.5 m Pl	eza de p umín	lumín				
15.7	78.0	81.2	40.0												
16.0	77.7	81.2	40.0												
18.0	75.6	80.7	37.9												
20.0	73.5	80.1	34.0												
22.0	71.4	79.4	28.3												
22.5				73.0	79.7	34.1									
24.0	69.2	78.7	25.0	71.4	79.2	33.5									
26.0	67.0	77.8	21.9	69.3	78.5	29.5									
28.0	64.7	76.9	19.4	67.0	77.6	27.1									
30.0	62.5	75.9	17.6	64.8	76.7	23.5									
32.0	60.2	74.8	16.3	62.5	75.7	20.7									
33.0	57.8	70.0	15.0	00.0	74.0	18.7	65.0 64.0	76.0 75.6	27.8 28.3						
34.0 36.0	55.4	73.6 72.2	13.9	60.2 57.9	74.6 73.4	18.7	61.7	75.6 74.5	25.9						
38.0	52.8	70.8	13.9	57.9 55.4	73. 4 72.0	17.0	59.2	73.3	25.9						
40.0	50.7	69.4	12.3	52.9	70.6	14.2	56.8	72.0	20.3						
42.0	47.5	67.4	11.4	50.7	69.2	13.5	54.5	70.7	18.1						
44.0	44.7	65.4	10.6	48.0	67.5	12.5	51.9	69.2	16.4						
45.3	44.7	05.4	10.0	40.0	07.5	12.5	31.3	03.2	10.4	55.0	69.5	18.1	i		
46.0	41.7	63.2	9.9	45.2	65.5	11.5	49.3	67.5	15.1	54.2	69.0	18.2			
48.0	38.5	60.8	9.3	41.8	63.0	10.7	46.5	65.7	14.0	51.7	67.5	16.5			
50.0	35.0	58.1	8.7	38.6	60.6	10.1	43.6	63.6	13.0	49.0	65.8	14.6			
55.0	24.7	49.1	7.6	29.3	53.0	8.7	35.5	57.5	10.9	42.3	61.1	11.9	i		
58.0	15.6	40.7	6.9												
60.0				15.8	40.7	7.3	25.3	48.8	9.2	33.4	54.2	9.4			
63.0							16.6	40.7	8.1						
65.0										22.3	44.5	7.7			
65.5													35.0	50.5	11.7
67.0										16.0	38.5	7.1			
70.0													27.0	43.7	10.3
74.0													15.6	33.2	8.0



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]:

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				23.0 r		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 5	9.5 m Plı	eza de p umín	lumín				
16.3	78.0	84.1	36.6												
18.0	76.4	83.8	36.2												
20.0	74.4	83.2	32.6												
22.0	72.3	82.6	28.2												
23.4				73.0	82.6	31.8									
24.0	70.3	81.9	24.1	72.4	82.4	31.8									
26.0	68.2	81.1	21.5	70.4	81.7	29.7									
28.0 30.0	66.1 64.0	80.2 79.3	19.1 17.3	68.3 66.2	80.9 80.0	27.0 23.9									
30.0	61.8	79.3 78.3	17.3	64.0	80.0 79.1	23.9									
34.0	59.6	77.1	14.6	61.9	78.0	18.6									
34.3	33.0	77.1	14.0	01.5	70.0	10.0	65.0	78.8	26.6						
36.0	57.3	75.9	13.5	59.7	76.9	16.9	63.2	77.9	26.3						
38.0	55.0	74.5	12.5	57.4	75.7	15.4	61.0	76.9	23.3						
40.0	52.6	73.0	11.6	55.1	74.3	14.0	58.7	75.6	20.7						
42.0	50.1	71.4	10.9	52.7	72.8	12.9	56.4	74.3	18.4						
44.0	47.5	69.6	10.2	50.6	71.5	12.2	54.1	73.0	16.6						
46.0	44.8	67.6	9.5	48.0	69.7	11.3	51.7	71.4	15.1						
47.0										55.0	71.9	16.6			
48.0	42.0	65.5	8.9	44.9	67.4	10.5	49.6	70.0	14.5	53.9	71.3	16.8			
50.0	39.0	63.1	8.4	42.1	65.3	9.8	47.0	68.2	13.3	51.5	69.7	15.2			
55.0	30.4	55.7	7.3	34.2	58.8	8.4	39.9	62.9	10.7	45.4	65.5	12.2			
60.0	18.6 15.2	44.5 41.1	6.2 6.0	24.1	49.7	7.2	31.0	55.2	9.1	37.6	59.4	9.4			
61.0 63.0	15.2	41.1	6.0	15.4	41.1	6.4									
65.0				10.4	41.1	0.4	19.4	44.3	7.5	28.7	51.6	7.8			
66.0							16.2	44.3	7.3	20.7	31.0	7.0			
67.9							10.2	71.1	1.2				35.0	52.2	10.7
70.0										15.6	38.9	6.2	31.7	49.3	10.8
75.0													20.6	38.9	8.2
77.0													15.1	33.5	7.0



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 orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				23.0 ı		eza de p	il, Punto Iumín (2 i] Posici	316-1) 6	2.5 m Pli	eza de p umín	lumín				
17.0 18.0 20.0 22.0 24.0	78.0 77.0 75.1 73.2 71.3	87.1 86.8 86.3 85.7 85.1	33.9 33.9 31.3 28.9 24.4												
24.3 26.0 28.0 30.0 32.0	69.3 67.4 65.3 63.3	84.3 83.5 82.6 81.7	21.3 19.0 17.1 15.6	73.0 71.3 69.4 67.4 65.4	85.4 84.9 84.1 83.3 82.4	29.9 29.4 26.5 24.6 21.3									
34.0 35.6 36.0 38.0 40.0	59.4 57.3 55.1	79.6 78.4 77.0	15.0 13.6 12.4 11.3	63.3 61.3 59.2 57.0	81.4 80.4 79.2 77.9	18.7 17.0 15.4 14.1	65.0 64.6 62.6 60.5	81.5 81.3 80.3 79.2	25.2 25.2 24.4 21.3						
42.0 44.0 46.0 48.0 48.7	52.4 50.0 47.6 45.0	75.2 73.6 71.8 69.9	10.5 9.8 9.2 8.7	54.8 52.5 50.5 47.6	76.5 75.0 73.7 71.6	12.9 11.9 11.1 10.4	58.2 56.1 53.9 51.5	77.9 76.7 75.2 73.7	19.0 17.1 15.4 14.0	55.0	74.4	15.3			
50.0 55.0 60.0 64.0 65.0	42.3 34.9 25.7 16.0	67.7 61.4 52.6 42.7	8.1 7.1 6.1 4.9	45.1 38.1 29.8 18.3	69.7 64.0 56.4 44.9	9.7 8.3 7.1	49.5 43.2 35.3 26.3	72.3 67.4 60.8 52.2	13.4 10.7 9.0 7.6	53.7 48.1 41.5 33.4	73.5 69.7 64.6 57.5	15.6 12.5 9.6 7.8			
66.0 69.0 70.0 70.4 73.0				16.1	42.7	5.3	15.8	41.5	6.5	23.7 15.2	48.1 39.3	6.4 5.5	35.0	53.9	9.9
75.0 79.0													27.1 17.1	46.5 36.4	8.8 7.1



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

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

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]
				23.0	m Pluma Cab	eza de p	il, Punto Ilumín (2 n] Posici	316-1) 6	5.5 m Plı	eza de p umín	lumín				
17.6 18.0 20.0 22.0 24.0	78.0 77.6 75.8 74.0 72.2	90.0 89.9 89.4 88.9 88.3	29.9 29.9 28.9 27.1 23.7												
25.2 26.0 28.0 30.0 32.0	70.3 68.4 66.5 64.6	87.6 86.8 85.9 85.0	20.8 18.7 16.8 15.3	73.0 72.2 70.4 68.5 66.6	88.3 88.0 87.3 86.6 85.7	26.5 26.5 25.4 23.8 21.6									
34.0 36.0 36.8 38.0	62.7 61.0 59.0	84.0 83.1 81.9	14.0 13.3	64.6 62.7 60.7	84.8 83.8 82.7	18.8 16.8	65.0 63.9	84.2 83.7	22.6 23.1						
40.0 42.0 44.0 46.0 48.0	56.9 54.4 52.2 49.9 47.6	80.6 79.0 77.5 75.8 74.1	11.0 10.2 9.5 8.9 8.3	58.7 56.6 54.5 52.3 50.0	81.5 80.2 78.8 77.3 75.7	13.9 12.7 11.7 10.8 10.1	61.9 59.9 57.8 55.7 53.6	82.6 81.5 80.2 78.8 77.5	22.0 19.3 17.5 15.6 14.1						
50.0 50.4 55.0 60.0 65.0	38.5 30.7 20.4	72.1 66.4 59.1 48.4	7.8 6.7 5.8 5.0	47.7 41.4 34.1 25.2	73.9 68.7 62.1 53.2	9.4 8.0 6.8 5.8	51.4 45.9 38.9 31.2	75.9 71.7 65.8 58.6	12.9 10.7 8.8 7.5	55.0 50.4 44.5 37.3	76.8 73.7 69.0 62.7	14.1 13.0 9.8 7.7			
67.0 69.0 70.0 72.0 72.8	15.6	43.1	4.3	15.8	43.1	4.6	21.1 15.4	48.2 41.9	6.2 5.6	29.2	54.9	6.3	35.0	55.7	9.1
75.0 76.0 80.0 82.0										18.0 15.9	43.2 40.9	5.0 4.5	31.9 22.1 16.7	52.7 42.6 36.8	9.1 7.0 6.3



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

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

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

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				23.0 i		eza de p	II, Punto Ilumín (2: I Posici	316-1) 6	8.5 m Pl		lumín				
18.2	78.0	93.0	27.0												
20.0	76.5	92.5	26.6												
22.0	74.7	92.0	25.4												
24.0	73.0	91.4	23.5												
26.0	71.2	90.7	20.7	73.0	91.2	24.0									
28.0	69.4	90.0	18.6	71.3	90.5	23.8									
30.0	67.6	89.2	16.8	69.5	89.8	22.6									
32.0	65.8 64.0	88.3 87.4	15.2 13.9	67.7 65.8	89.0 88.1	22.1 19.3									
34.0 36.0	62.4	87.4 86.5	13.9	64.0	88.1 87.2	19.3									
38.0	60.5	85.4	12.0	62.1	86.1	15.3									
38.1	00.5	05.4	12.0	02.1	00.1	13.3	65.0	86.9	20.9	i					
40.0	58.5	84.2	10.9	60.5	85.2	14.4	63.3	86.0	21.6						
42.0	56.2	82.7	10.0	58.6	84.0	13.0	61.4	84.9	20.1	i			i		
44.0	54.1	81.3	9.3	56.6	82.7	11.8	59.4	83.7	17.8						
46.0	52.0	79.7	8.7	54.5	81.3	10.7	57.4	82.5	16.3						
48.0	49.9	78.1	8.1	52.1	79.5	9.9	55.3	81.1	14.5	l					
50.0	47.6	76.3	7.6	49.9	77.9	9.3	53.4	79.7	13.1						
52.2										55.0	79.3	13.1			
55.0	41.6	71.2	6.5	44.2	73.2	7.9	48.3	75.9	10.7	52.5	77.5	13.3			
60.0	34.8	64.7	5.7	37.7	67.3	6.7	42.0	70.5	8.8	47.0	73.2	10.1			
65.0	26.5	56.1	4.9	30.1	59.7	5.7	35.2	64.1	7.4	40.5	67.6	7.8			
70.0	15.2	43.5	3.8	20.1	48.8	4.8	27.0	55.7	6.3	33.4	60.8	6.3			
72.0				15.4	43.5	4.1									
75.0							15.0	42.3	5.0	24.7	51.6	5.2			
75.3													35.0	57.4	8.4
79.0										15.6	41.3	3.9			
80.0													27.7	49.9	7.4
85.0													16.3	37.2	5.6



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

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

		gulo de principal		83° Án	gulo de orincipa	pluma I		gulo de orincipa			gulo de orincipa		45° Án	gulo de orincipa	pluma I
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				23.0 ı		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 7	1.5 m Pl	eza de p umín	lumín				
18.8 20.0 22.0 24.0 26.9 28.0 30.0 32.0 34.0 36.0 38.0 39.4 40.0 46.0 48.0 50.0 65.0 60.0 67.0	78.0 77.0 75.4 73.7 72.0 70.3 68.6 66.9 65.1 63.3 61.8 60.0 58.1 55.9 53.9 51.9 49.8 44.3 38.1 31.0 21.8	95.9 95.6 95.1 94.5 93.9 93.2 92.4 91.6 90.7 89.7 88.8 87.7 86.5 84.9 83.5 82.0 80.3	24.9 24.9 23.7 22.8 20.1 18.0 16.4 14.8 13.5 12.3 11.6 10.6 9.7 9.0 8.3 7.7 7.3 6.2 5.3 4.6 3.9	73.0 72.1 70.4 68.9 65.2 63.4 61.9 60.0 58.2 56.2 54.3 51.9	94.0 93.7 93.0 92.2 91.4 90.5 89.5 86.3 85.0 83.6 81.8 77.4 72.1 65.4 66.6	22.2 22.1 21.7 20.9 19.5 17.2 15.3 14.3 13.2 11.9 10.7 9.7 9.0	65.0 64.5 62.7 60.9 58.9 57.0 55.2	89.6 89.4 88.3 87.3 86.0 84.7 83.4	20.0 20.0 19.8 18.2 16.6 15.1 13.5	55.0 54.3 49.2 43.6 37.0	81.8 81.3 77.3 72.4 66.1	12.1 12.5 10.2 7.9 6.2			
72.0 75.0 77.7 78.0 80.0 82.0	16.9	46.3	3.6	15.1	43.9	3.5	22.4 15.7	51.9 43.9	5.0	29.6 19.8 15.2	58.3 47.2 41.7	5.0 4.0 3.3	35.0 32.0	59.1 56.0	7.6
85.0 88.0													23.3 15.9	46.3 37.6	5.9 4.9



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 principa			gulo de orincipa			gulo de principa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				23.0 ı	m Pluma Cab	eza de p	il, Punto Ilumín (2 n] Posici	316-1) 7	4.5 m Pli	eza de p umín	lumín				
19.5 20.0 22.0 24.0 26.0	78.0 77.6 76.0 74.4 72.8	98.8 98.7 98.2 97.7 97.1	23.3 23.3 22.7 21.7 20.0												
27.8 28.0 30.0 32.0 34.0	71.2 69.5 67.9 66.2	96.4 95.7 94.9 94.0	17.8 16.2 14.7 13.3	73.0 72.8 71.2 69.6 67.9	96.9 96.8 96.2 95.4 94.7	21.1 21.1 20.9 20.3 19.7									
36.0 38.0 40.0 40.6	64.5 63.1 61.3	93.1 92.2 91.2	12.2 11.2 10.4	66.2 64.5 62.8	93.8 92.9 91.8	17.7 15.6 13.9	65.0	92.4	18.4						
42.0 44.0 46.0 48.0 50.0	59.2 57.4 55.6 53.7 51.7	89.8 88.5 87.2 85.8 84.2	9.6 8.8 8.2 7.6 7.0	61.4 59.6 57.8 55.9 53.7	90.9 89.8 88.6 87.2 85.6	13.2 11.9 10.8 9.7 8.9	63.9 62.1 60.4 58.5 57.1	91.7 90.7 89.6 88.3 87.3	19.0 18.6 16.9 15.7 14.2						
55.0 55.6 60.0 65.0 70.0	46.6 41.0 34.7 27.1	79.8 74.5 68.0 59.5	5.1 4.4 3.7	48.8 43.4 37.4 30.4	76.6 70.6 63.1	6.2 5.3 4.5	52.3 46.9 41.3 35.1	79.1 73.9 67.4	8.7 7.2 6.0	55.0 51.2 46.0 39.9	84.2 81.2 76.7 70.9	11.3 10.6 8.2 6.3			
75.0 77.0 80.0 80.2 81.0 84.0	16.5	46.7	3.1	21.5 16.7	52.6 46.7	3.7	27.6 17.3 15.4	59.1 46.7 44.3	5.0 4.0 3.5	25.5 16.8	55.1 44.6	4.0 3.2	35.0	60.8	7.0
85.0 90.0 91.0										10.0	44.0	3.2	28.2 18.3 15.6	53.3 41.4 38.0	6.2 4.6 4.3



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

		gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				23.0 ı	m Pluma Cab	eza de p	il, Punto Iumín (2: i] Posicio	316-1) 7	7.5 m Plı	eza de p umín	lumín				
20.1 22.0 24.0 26.0 28.0	78.0 76.5 75.0 73.5 71.9	101.8 101.3 100.8 100.2 99.6	21.1 20.8 20.0 19.0 17.2	70.0		10.1									
28.7 30.0 32.0 34.0 36.0 38.0	70.4 69.0 67.4 65.8 64.2	98.9 98.2 97.4 96.5	15.7 15.1 13.5 12.2	73.0 72.0 70.4 68.8 67.2	99.8 99.3 98.6 97.9 97.1	19.1 19.1 18.7 18.1 17.3									
40.0 41.9 42.0 44.0	62.5 60.6 58.8	94.6 93.3 92.1	9.3 8.6	64.0 62.6 60.9	95.2 94.4 93.3	13.8 12.6 11.8	65.0 65.0 63.3	95.1 95.1 94.1	15.4 16.0 16.0						
46.0 48.0 50.0 55.0 57.3	57.1 55.3 53.5 48.7	90.8 89.5 88.0 83.9	7.9 7.3 6.8 5.7	59.2 57.4 55.3 50.7	92.1 90.8 89.3 85.4	10.6 9.6 8.7 7.2	61.6 59.9 58.2 53.7	93.0 91.9 90.7 87.2	15.4 14.5 13.9 10.3	55.0	86.7	10.4			
60.0 65.0 70.0 75.0 78.0	43.5 37.8 31.2 23.0 16.2	79.0 73.1 65.7 55.8 47.2	4.8 4.1 3.5 2.9 2.5	45.7 40.2 34.1 26.6	80.9 75.5 68.8 60.1	6.0 5.0 4.2 3.5	49.0 43.8 38.1 31.6	83.2 78.3 72.5 65.2	7.9 6.4 5.2 4.3	52.9 48.1 42.5 36.7	85.0 80.9 75.5 69.4	10.3 8.2 6.5 4.9			
80.0 82.7 84.0 85.0 87.0				16.4	47.1	2.8	23.5 15.1	55.5 44.7	2.5	29.9 21.2 16.5	61.6 51.0 45.0	3.9 3.0 2.7	35.0 32.2	62.5 59.3	6.3
90.0 94.0													24.2 15.3	49.8 38.4	5.0 3.7



2821-1

2821-1

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

		gulo de principal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
	-			23.0 ı	m Pluma Cab	principa eza de p	II, Punto Iumín (2:	de carga 316-1) 8	1 - Cab	eza de p	lumín		_		
] Posici								
20.7	78.0	104.7	19.4												
22.0	77.1	104.4	19.4												
24.0	75.6	103.9	18.5												
26.0	74.1	103.3	17.9												
28.0	72.6	102.7	16.5	70.0	400.0	47.5									
29.5	71.1	400.4	15.2	73.0 72.7	102.6 102.5	17.5 17.5									
30.0 32.0	69.9	102.1 101.4	15.2	71.2	102.5	17.5									
34.0	68.3	101.4	13.5	69.6	101.8	16.9									
36.0	66.8	99.8	12.1	68.1	100.3	16.5									
38.0	65.2	98.9	10.9	66.6	99.5	15.2									
40.0	63.6	97.9	9.9	65.0	98.5	13.7									
42.0	61.8	96.7	9.1	63.4	97.6	12.4						İ			
43.2							65.0	97.8	13.6						
44.0	60.1	95.6	8.4	62.1	96.7	11.6	64.4	97.4	13.6						
46.0	58.5	94.4	7.8	60.4	95.6	10.7	62.8	96.4	13.5						
48.0	56.8	93.1	7.2	58.8	94.4	9.6	61.2	95.3	13.1						
50.0	55.0	91.7	6.6	57.1	93.1	8.7	59.5	94.2	12.8						
55.0	50.6	87.9	5.5	52.4	89.3	7.0	55.3	90.9	10.2						
59.0										55.0	89.1	9.7			
60.0	45.7	83.3	4.7	47.8	85.1	5.9	50.8	87.1	7.4	54.3	88.5	9.9			
65.0	40.5	77.9	3.9	42.7	80.0	4.9	46.0	82.6	5.9	49.7	84.6	8.4			
70.0 75.0	34.6 27.2	71.3 62.4	3.3 2.7	37.1 30.7	74.0 66.4	4.1 3.4	40.8 35.0	77.3 70.7	4.7 3.7	44.8 39.5	79.9 74.3	6.7 5.1			
80.0	18.4	50.9	2.7	22.6	56.3	2.8	35.0 28.1	62.5	2.9	33.5	74.3 67.4	3.9			
83.0	10.4	30.8		16.0	47.5	2.4	20.1	02.3	2.3	33.3	07.4	3.9			
85.0				10.0	71.5	2.7				26.2	58.6	3.1			
85.1										20.2	00.0	0.1	35.0	64.3	5.8
90.0										16.2	45.4	2.2	28.7	56.7	5.2
95.0													19.8	45.3	3.8
97.0													15.9	40.0	3.0



N° de ident.: 9842523/95738/ Pieza de

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

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

		gulo de principa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				23.0 ו		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 8	3.5 m Pli	eza de p umín	lumín				
21.3	78.0	107.6	17.8												
22.0	77.5	107.5	17.8												
24.0	76.1	107.0	17.4												
26.0	74.7	106.5	16.8												
28.0	73.3	105.9	16.0												
30.0	71.8	105.2	14.7												
30.4				73.0	105.5	16.2									
32.0	70.6	104.6	13.7	71.9	105.0	16.2									
34.0	69.1	103.9	13.3	70.4	104.3	15.9									
36.0	67.7	103.1	12.0	68.9	103.5	15.5									
38.0	66.2	102.2	10.7	67.5	102.7	15.1									
40.0 42.0	64.7 62.9	101.3 100.1	9.6 8.9	66.0 64.4	101.9 100.9	13.6 12.3									
42.0 44.0	61.3	99.0	8.2	62.9	99.9	11.2									
44.4	01.5	99.0	0.2	02.5	33.3	11.2	65.0	100.5	13.0						
46.0	59.7	97.9	7.6	61.6	99.0	10.5	63.8	99.8	13.6						
48.0	58.1	96.7	7.0	60.0	97.9	9.6	62.3	98.7	13.4						
50.0	56.5	95.4	6.4	58.4	96.7	8.6	60.7	97.6	13.4						
55.0	52.2	91.7	5.3	54.0	93.1	6.9	56.7	94.6	11.4						
60.0	47.7	87.5	4.4	49.6	89.1	5.7	52.5	91.0	8.3						
60.8		****				•			0.0	55.0	91.6	8.9			
65.0	42.9	82.5	3.7	44.9	84.4	4.7	48.0	86.7	6.4	51.4	88.5	8.5			
70.0	37.5	76.5	3.0	39.8	78.8	3.9	43.1	81.8	5.2	46.9	84.1	6.8			
75.0	31.4	69.1	2.5	34.0	72.1	3.2	37.8	75.8	4.1	42.0	78.9	5.2			
80.0				27.2	63.5	2.6	31.7	68.5	3.3	36.5	72.7	3.8			
85.0							23.9	58.4	2.5	30.2	65.0	2.9		, and the second	
87.6													35.0	66.0	5.2
90.0										22.3	54.7	2.2	31.9	62.2	5.0
95.0													25.0	53.3	4.2
100.0													15.6	40.4	2.5



360°

Cargas pluma principal + plumín abatible + midfall

N° de ident.: 9842523/95738/

Radio de descarga:

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

		gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				23.0 ı		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 8	6.5 m Pl	eza de p umín	lumín				
21.9	78.0	110.6	16.5												
22.0	78.0	110.5	16.5												
24.0	76.6	110.1	16.3												
26.0 28.0	75.2 73.9	109.6 109.0	15.8 15.5												
30.0	73.9	109.0	14.3												
31.3	12.5	100.4	14.5	73.0	108.4	15.2									
32.0	71.1	107.7	13.3	72.5	108.2	15.2									
34.0	69.9	107.1	12.6	71.1	107.5	15.0									
36.0	68.5	106.3	11.9	69.7	106.8	14.7									
38.0	67.0	105.5	10.6	68.3	106.0	14.4									
40.0	65.6	104.6	9.5	66.8	105.1	13.6									
42.0	63.9	103.5	8.7	65.4	104.2	12.3									
44.0	62.4	102.5	8.0	63.9	103.3	11.2									
45.7							65.0	103.2	13.0						
46.0	60.9	101.4	7.4	62.4	102.2	10.3	64.8	103.1	13.6						
48.0	59.3 57.8	100.2	6.8	61.2 59.6	101.3	9.6	63.3 61.8	102.1	13.6 13.3						
50.0 55.0	53.8	99.0 95.5	6.3 5.1	55.4	100.2 96.7	8.7 6.8	58.0	101.1 98.1	12.6						
60.0	49.5	91.5	4.2	51.3	93.0	5.5	54.0	94.7	9.3						
62.5	40.0	01.0	7.2	01.0	00.0	0.0	01.0	04.7	0.0	55.0	94.1	8.3			
65.0	45.0	86.8	3.5	46.9	88.6	4.6	49.8	90.7	6.9	53.0	92.3	8.3			
70.0	40.0	81.3	2.8	42.1	83.4	3.7	45.2	86.1	5.7	48.7	88.2	6.8			
75.0	34.5	74.6	2.3	36.9	77.3	3.0	40.3	80.6	4.6	44.1	83.3	5.4			
80.0				30.9	69.8	2.5	34.9	74.1	3.7	39.1	77.6	3.9			
85.0							28.5	65.8	2.9	33.5	70.7	2.9			
90.0							20.3	54.6	2.2	26.4	61.4	2.1	35.0	67.7	4.7
95.0													29.5	60.6	4.0
100.0													21.1	49.1	3.0
103.0													15.3	40.8	2.1



2821-1

2821-1

N° de ident.: 9842523/95738/

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

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

		gulo de orincipa			gulo de orincipa			gulo de 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]
				23.0		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 8	9.5 m Pl	eza de p umín	lumín				
22.6	78.0	113.5	14.4												
24.0	77.1	113.2	14.4												
26.0	75.8	112.7	13.9												
28.0	74.4	112.1	13.6												
30.0	73.1	111.5	13.0												
32.0	71.7	110.9	12.2	70.0	444.0	40.0									
32.2 34.0	70.6	110.3	11.6	73.0 71.8	111.3 110.7	13.2 13.2				ł					
34.0 36.0	70.6 69.2	10.3	11.6	71.8	110.7	13.2				ł					
38.0	67.9	109.6	10.3	69.0	109.2	12.9				i					
40.0	66.5	107.9	9.2	67.6	108.4	12.3									
42.0	65.1	107.0	8.3	66.2	107.5	11.3									
44.0	63.4	105.8	7.6	64.8	106.6	10.5				i			i		
46.0	61.9	104.8	7.0	63.4	105.6	9.7				İ			i		
47.0				1			65.0	106.0	11.6						
48.0	60.4	103.6	6.4	62.2	104.8	9.1	64.3	105.5	11.6						
50.0	58.9	102.4	5.9	60.8	103.7	8.5	62.8	104.4	11.5						
55.0	55.1	99.1	4.7	57.0	100.6	6.6	59.1	101.6	10.9						
60.0	51.0	95.3	3.8	52.7	96.7	5.2	55.3	98.3	8.8						
64.2										55.0	96.5	7.6			
65.0	46.7	90.9	3.1	48.5	92.5	4.2	51.3	94.5	6.8	54.4	95.9	7.6			
70.0	42.1	85.7	2.5	44.1	87.7	3.4	47.0	90.1	5.4	50.3	92.0	6.6			
75.0				39.2	81.9	2.7	42.4	85.0	4.2	46.4	87.9	5.3			
80.0				33.7	75.0	2.2	37.3	78.9	3.3	41.7	82.7	3.8			
85.0							31.6	71.5	2.6	36.6	76.5	2.7			
89.0							26.2	64.1	2.1	32.1	70.6	2.1	25.0		4.0
92.5													35.0	69.4 66.5	4.0 3.6
95.0 100.0													32.7 26.2	57.5	2.9
100.0													26.2 19.4	57.5 47.8	2.9
104.0													19.4	47.0	۷.۱



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

		gulo de principal		ŗ	gulo de principal			gulo de orincipa			gulo de orincipa			gulo de principa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				23.0 r	n Pluma	principa	ıl, Punto lumín (2:	de carga	1 - Cab	eza de p	lumín		-		
					Cab		n] Posici			umm					
23.3	78.0	116.4	13.3												
24.0	77.5	116.3	13.3												
26.0	76.2	115.8	12.9												
28.0	75.0	115.3	12.6												
30.0	73.7	114.7	12.3												
32.0	72.4	114.0	11.6												
33.1				73.0	114.1	12.1									
34.0	71.0	113.4	11.1	72.4	113.8	12.1									
36.0	69.7	112.6	10.7	71.1	113.1	11.9									
38.0	68.6	112.0	10.0	69.8	112.4	11.6									
40.0	67.3	111.2	9.0	68.4	111.6	11.3									
42.0	65.7	110.1	8.2	67.1 65.7	110.8	10.8									
44.0 46.0	64.3 62.9	109.2 108.2	7.5 6.8	64.3	109.9 109.0	10.0 9.4									
48.0	61.5	106.2	6.3	62.9	109.0	9.4 8.8									
48.2	01.5	107.1	0.3	02.9	107.9	0.0	65.0	108.7	10.4						
50.0	60.1	105.9	5.8	61.5	106.9	8.4	63.8	100.7	10.4						
55.0	56.4	102.8	4.6	57.9	100.9	6.6	60.3	107.5	9.8						
60.0	52.5	99.1	3.7	54.1	100.5	5.1	56.6	102.0	8.6						
65.0	48.5	95.0	3.0	50.2	96.5	4.1	52.7	98.4	6.7						
65.9	12.0		2.0		22.0					55.0	99.0	7.0			
70.0	44.1	90.1	2.3	46.0	91.9	3.3	48.7	94.2	5.4	51.8	95.9	6.7			
75.0	''			41.4	86.6	2.6	44.4	89.4	4.2	47.7	91.6	5.3			
79.0		j		37.5	81.7	2.1									
80.0							39.7	83.8	3.2	43.8	87.1	4.0			
85.0							34.5	77.0	2.4	39.1	81.4	2.7			
88.0										36.0	77.5	2.1			
94.9													35.0	71.1	3.4
95.0													34.9	71.1	3.4
100.0													29.8	64.0	2.7
104.0													24.2	56.0	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]
				23.0 r		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 9	5.5 m Pl	eza de p umín	lumín				
23.9	78.0	119.4	12.1												
24.0	77.9	119.3	12.1												
26.0	76.7	118.9	11.9												
28.0	75.4	118.4	11.6												
30.0	74.2	117.8	11.4												
32.0	72.9	117.2	10.9												
33.9				73.0	117.0	11.0									
34.0	71.7	116.5	10.4	73.0	117.0	11.0				•					
36.0	70.4	115.8	10.0	71.7	116.3	10.9									
38.0	69.1	115.1	9.7	70.4	115.6	10.7									
40.0	67.8	114.3	8.8	69.1	114.9	10.4									
42.0	66.5	113.4	8.0	67.8	114.1	10.2									
44.0	65.2	112.5	7.2	66.5	113.2	9.6									
46.0	63.8	111.5	6.6	65.2	112.3	8.9									
48.0	62.5	110.5	6.0	63.9	111.3	8.4									
49.5							65.0	111.4	9.5						
50.0	61.1	109.4	5.5	62.5	110.3	7.9	64.7	111.2	9.5						
55.0	57.6	106.4	4.4	59.3	107.7	6.5	61.3	108.6	9.2						
60.0	53.9	102.9	3.4	55.4	104.2	5.0	57.8	105.6	8.6						
65.0	50.1	98.9	2.7	51.7	100.4	3.9	54.1	102.1	6.7						
67.6										55.0	101.4	6.4			
70.0	46.0	94.4	2.1	47.7	96.1	3.1	50.3	98.2	5.3	53.2	99.7	6.4			
75.0				43.5	91.1	2.4	46.2	93.6	4.1	49.4	95.6	5.2			
77.0				41.7	88.9	2.1	44.0	00.4	0.4	45.7	04.4	1.1			
80.0							41.9	88.4	3.1	45.7	91.4	4.1			
85.0							37.6	82.9	2.2	41.3	86.1	2.8			
86.0							36.1	80.8	2.1	20.4	00.5	0.4			
88.0 97.4										38.4	82.5	2.1	25.0	72.9	2.7
100.0													35.0		
100.0													32.8	69.8	2.4
102.0													30.5	66.5	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]
				23.0 ı		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 9	8.5 m Pl	eza de p umín	lumín				
24.5	78.0	122.3	11.1												
26.0	77.1	122.0	11.1												
28.0	75.9	121.5	10.8												
30.0	74.7	120.9	10.6												
32.0	73.5	120.3	10.3												
34.0	72.2	119.7	9.9												
34.8				73.0	119.9	10.1									
36.0	71.0	119.0	9.5	72.3	119.5	10.1									
38.0	69.8	118.3	9.2	71.0	118.8	9.9									
40.0	68.5	117.5	8.7	69.8	118.1	9.7									
42.0	67.2	116.7	7.9	68.5	117.3	9.5									
44.0	66.0	115.8	7.1	67.3	116.5	9.2									
46.0	64.7	114.9	6.4	66.0	115.6	8.6				ł					
48.0	63.4	113.9	5.9	64.7	114.7	8.1									
50.0	62.1	112.8	5.4	63.4	113.7	7.6	05.0	114.1	0.0						
50.8	50.7	400.0	4.0	00.4	444.0	0.5	65.0		8.8						
55.0	58.7 55.2	109.9 106.6	4.2 3.3	60.4 56.9	111.2 108.1	6.5	62.2	112.0	8.6						
60.0 65.0	55.2 51.5	106.6	3.3 2.5	53.4	108.1	4.9 3.7	58.9 55.4	109.1 105.8	8.3 6.8	ł					
69.4	51.5	102.6	2.5	55.4	104.6	3.1	55.4	105.6	0.0	55.0	103.9	5.9			
70.0				49.3	100.1	2.9	51.7	102.1	5.3	54.5	103.9	5.9			
				49.3 45.3	95.4	2.9	-	98.2				5.9			
75.0 76.0				45.3 44.4	95.4 94.4	2.2	48.3	90.2	4.1	50.9	99.5	5.3			
76.0 80.0				44.4	94.4	2.1	43.8	92.8	3.1	47.0	95.1	4.2			
85.0							39.4	92.6 87.1	2.2	43.2	90.6	3.0			
89.0							33.4	01.1	2.2	39.7	86.0	2.0			
99.9										39.1	00.0	2.0	35.0	74.6	2.1
100.0										i			34.9	74.6	2.1
100.0													35.0	74.4	2.0



N° de ident.: 9842523/95738/ Pieza

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

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

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



N° de ident.: 9842523/95738/

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

Valor de vuelco: Lastre trasero [t]:

Lastre central [t]:

2 - Vía ancha 124.0

52.6

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



N° de ident.: 9842523/95738/ Pieza d

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

Valor de vuelco: Lastre trasero [t]:

Lastre central [t]:

2 - Vía ancha 124.0 52.6

	88° Ángulo de pluma principal			83° Ángulo de pluma principal			75° Ángulo de pluma principal			65° Ángulo de pluma principal			45° Ángulo de pluma principal		
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
23.0 m Pluma principal, Punto de carga 1 - Cabeza de plumín Cabeza de plumín (2316-1) 107.5 m Plumín 49.0 [m] Posición midfall (2316)															
26.4	78.0	131.1	8.5												
28.0	77.1	130.7	8.5												
30.0	76.0	130.2	8.3												
32.0	74.9	129.7	8.1												
34.0	73.8	129.1	7.9												
36.0	72.7	128.5	7.7												
37.5				73.0	128.5	7.7									
38.0	71.5	127.9	7.4	72.7	128.3	7.7									
40.0	70.4	127.2	7.2	71.6	127.6	7.6									
42.0	69.3	126.4	7.1	70.4	126.9	7.4									
44.0	68.1	125.6	6.5	69.3	126.2	7.2									
46.0	66.9	124.8	5.8	68.1	125.4	7.1									
48.0	65.8	123.9	5.2	67.0	124.5	6.8							<u> </u>		
50.0	64.6	122.9	4.7	65.8	123.7	6.5									
54.6							65.0	122.3	6.5						
55.0	61.6	120.3	3.6	62.8	121.2	5.8	64.8	122.1	6.5						
60.0	58.5	117.4	2.7	60.0	118.7	4.8	61.8	119.5	6.3						
65.0				56.6	115.3	3.5	58.7	116.6	6.0						
70.0				53.3	111.7	2.4	55.5	113.3	4.8						
74.5										55.0	111.3	4.2			
75.0							52.1	109.6	3.8	54.7	110.9	4.2			
80.0							49.0	105.8	2.9	51.3	107.1	3.9			
85.0							45.3	101.1	2.0	47.8	102.8	3.1			
90.0										44.4	98.4	2.2			



2821-1 2821-1

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

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



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

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

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

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa		45° Án I	gulo de orincipa	pluma I
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				26.0 ו	m Pluma Cab	eza de p	ıl, Punto llumín (2 ı] Posici	316-1) 3	8.5 m Pli	eza de p umín	lumín				
12.1 13.0 14.0 16.0 17.6	78.0 76.6 75.0 71.9	66.6 66.4 66.1 65.5	64.8 63.6 59.3 50.5	73.0 72.4	65.5 65.3	53.8 53.7									
20.0 22.0 24.0 26.0	65.5 62.2 58.7 55.1	63.9 62.8 61.7 60.3	36.1 31.1 27.6 24.7	69.3 66.0 62.7 59.3	64.6 63.8 62.8 61.6	48.1 42.0 36.6 32.4									
26.2 28.0 30.0 32.0 34.0	51.4 47.4 43.1 38.5	58.8 57.0 55.0 52.6	22.4 20.6 19.0 17.7	55.7 52.0 48.0 43.8	60.3 58.8 57.1 55.1	28.8 26.0 23.8 21.8	65.0 62.1 58.6 55.0 51.3	62.6 61.7 60.5 59.2 57.7	40.3 38.3 34.7 31.4 28.9						
36.0 36.2 38.0 40.0 41.0	33.3 27.3 19.5 16.1	49.8 46.2 41.4 39.2	16.6 15.6 14.6 13.6	39.3 34.2 28.3	52.7 50.0 46.6	20.1 18.7 17.4	47.3 43.0 38.4	55.9 53.8 51.4	26.9 25.0 23.4	55.0 51.9 47.9	57.4 56.2 54.4	27.7 26.5 24.1			
42.0 43.0 44.0 46.0 47.0				20.9 16.0	42.0 38.9	16.1 15.4	33.2 27.1 19.3 15.8	48.6 45.0 40.2 37.9	21.8 20.0 18.2 15.1	43.7 39.2 34.1	52.4 50.1 47.3	22.3 20.8 19.6			
48.0 50.0 51.0 52.8 55.0 58.0										28.2 20.7 15.8	43.9 39.3 36.2	18.5 17.3 16.7	35.0 29.5 18.0	42.3 39.1 32.0	16.5 16.9 15.1



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]:

	88° Án	gulo de orincipal	pluma		gulo de orincipa			gulo de principa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				26.0 ו	m Pluma Cab	eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 4	1.5 m Pl		lumín				
12.7 13.0 14.0	78.0 77.6 76.1	69.5 69.5 69.2	59.3 59.3 57.4												
16.0 18.0	73.3 70.4	68.6 68.0	50.2 41.9												
18.5 20.0 22.0 24.0	67.4 64.3 61.2	67.2 66.2 65.2	35.9 30.5 26.8	73.0 70.8 67.9 64.8	68.3 67.8 67.0 66.1	49.5 47.5 42.0 36.3									
26.0 27.5	58.0	64.0	24.1	61.7	65.1	32.3	65.0	65.3	37.7						
28.0 30.0 32.0	54.6 51.1 47.5	62.6 61.0 59.3	21.9 20.2 18.7	58.5 55.2 51.7	63.9 62.6 61.0	28.8 25.8 23.5	64.3 61.1 57.9	65.1 64.0 62.8	37.7 34.4 31.3						
34.0 36.0 37.9	43.5 39.3	57.2 54.9	17.3 16.1	48.0 44.2	59.3 57.3	21.5 19.8	54.5 51.0	61.5 59.9	28.4 26.2	55.0	59.9	25.8			
38.0 40.0 42.0	34.6 29.3 22.8	52.2 48.9 44.6	15.1 14.2 13.4	40.0 35.4 30.2	55.0 52.4 49.2	18.3 17.0 15.9	47.4 43.4 39.2	58.1 56.1 53.8	24.4 22.7 21.3	54.9 51.6 48.0	59.9 58.4 56.7	25.8 24.3 22.1			
44.0 46.0 48.0 50.0	15.5	39.6	12.0	23.9 15.4	45.1 39.3	14.8 13.7	34.5 29.1 22.6 15.2	51.0 47.7 43.4 38.3	20.0 18.5 16.9 15.0	44.1 39.9 35.3 30.0	54.7 52.4 49.7 46.5	20.5 19.1 17.9 16.9			
54.0 55.3 60.0 61.0										15.2	36.5	14.7	35.0 21.6 17.3	44.0 35.4 32.5	15.5 14.4 13.8



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

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

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

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa		45° Án I	gulo de orincipa	pluma I
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				26.0 r		eza de p	II, Punto Ilumín (2 1] Posici	316-1) 4	4.5 m Pl	eza de p umín	lumín				
13.3	78.0	72.5	54.8												
14.0	77.1	72.3	54.8												
16.0	74.4	71.8	49.3												
18.0 19.4	71.7	71.1	41.8	73.0	71.2	46.2							ł		
20.0	69.0	70.4	35.9	73.0	71.2	46.2									
22.0	66.2	69.6	30.5	69.4	70.3	41.2									
24.0	63.3	68.6	26.4	66.6	69.4	36.7							i		
26.0	60.4	67.5	23.7	63.8	68.5	32.5									
28.0	57.4	66.2	21.7	60.9	67.4	29.5									
28.7							65.0	68.1	30.1						
30.0	54.2	64.8	19.9	57.8	66.2	26.4	63.3	67.5	34.8						
32.0	50.9	63.3	18.6	54.7	64.8	23.9	60.3	66.4	31.4						
34.0	47.5	61.5	17.3	51.5	63.3	21.9	57.1	65.0	28.8						
36.0	43.9	59.5	16.1	48.1	61.5	20.2	54.1	63.7	26.4						
38.0	39.9	57.2	15.0	44.4	59.6	18.6	50.9	62.1	24.5	55.0	00.4	04.0	l		
39.7 40.0	35.7	54.6	14.1	40.6	57.3	17.2	47.4	60.4	22.9	55.0 54.4	62.4 62.1	24.0 24.0			
42.0	30.9	51.4	13.3	36.4	54.8	16.0	43.8	58.3	21.4	51.4	60.7	22.6	ł		
44.0	25.3	47.6	12.5	31.7	51.7	15.0	39.8	56.1	20.1	48.0	58.9	20.7			
46.0	18.1	42.4	11.8	26.3	48.0	14.0	35.6	53.4	19.0	44.4	56.9	19.3			
48.0				19.4	43.1	13.0	30.8	50.3	17.7	40.5	54.7	18.0			
49.0				16.5	40.9	12.1									
50.0							25.1	46.4	16.3	36.3	52.1	17.0			
52.0							17.9	41.1	14.9						
55.0										22.9	43.1	14.6			
57.0										16.3	38.2	13.4			
57.8													35.0	45.7	14.4
60.0													30.1	42.5	14.6
64.0													16.7	32.9	12.7



N° de ident.: 9842523/95738/ Pieza

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

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

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				26.0 r		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 4	7.5 m Pl	eza de p umín	lumín				
13.9	78.0	75.4	50.3												
14.0	77.9	75.4	50.3												
16.0	75.4	74.9	47.2												
18.0	72.9	74.3	41.5												
20.0	70.4	73.6	35.0												
20.3				73.0	74.1	42.5									
22.0	67.8	72.8	30.3	70.8	73.5	40.8									
24.0	65.1	71.9	26.3	68.2	72.7	36.0									
26.0	62.4 59.7	70.9	23.3	65.6 62.9	71.8	32.0									
28.0 30.0	56.8	69.8 68.5	21.2 19.4	60.1	70.8 69.7	29.0 26.3	65.0	70.8	30.1						
32.0	53.8	67.1	18.0	57.3	68.5	20.3	62.4	70.8 69.8	31.7						
34.0	50.8	65.5	16.8	54.3	67.1	21.4	59.6	68.7	28.5				ł		
36.0	47.5	63.7	15.6	51.3	65.5	19.7	56.6	67.3	26.1						
38.0	44.1	61.7	14.6	48.1	63.8	18.2	53.8	66.0	24.0						
40.0	40.5	59.5	13.6	44.7	61.8	16.9	50.7	64.4	22.4						
41.4								•		55.0	64.8	22.3	İ		
42.0	36.6	56.9	12.8	41.1	59.6	15.6	47.5	62.6	20.9	54.1	64.4	22.3	İ		
44.0	32.2	53.9	12.1	37.2	57.1	14.6	44.1	60.6	19.5	51.2	62.9	20.7			
46.0	27.3	50.3	11.4	33.0	54.2	13.7	40.4	58.3	18.3	48.0	61.2	19.1			
48.0	21.3	45.8	10.8	28.1	50.7	12.8	36.5	55.8	17.3	44.6	59.2	17.8			
49.0	17.5	42.8	10.4										ļ		
50.0				22.3	46.3	12.0	32.1	52.8	16.1	41.0	57.0	16.6			
52.0				15.9	41.3	10.6									
55.0							17.3	41.5	13.2	30.5	49.9	14.3			
60.0										15.7	38.6	11.8			
60.2													35.0	47.4	13.4
65.0													23.5	39.1	12.4
67.0													16.1	33.3	11.5



N° de ident.: 9842523/95738/ Pieza

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

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

		gulo de principa			gulo de orincipa			gulo de principa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				26.0 ו	m Pluma Cab	eza de p	al, Punto dumín (2 n] Posici	316-1) 5	0.5 m Pl	eza de p umín	lumín				
14.6	78.0	78.3	46.6												
16.0	76.3	78.0	45.8												
18.0	74.0	77.4	41.5												
20.0 21.1	71.6	76.8	34.9	73.0	76.9	39.8				ł					
22.0	69.2	76.1	30.3	73.0	76.9	39.8									
24.0	66.7	75.2	26.5	69.6	75.9	35.7									
26.0	64.2	74.3	23.4	67.1	75.5 75.1	32.2				i					
28.0	61.6	73.2	21.1	64.6	74.2	29.1							İ		
30.0	59.0	72.1	19.4	62.1	73.2	26.9				İ			İ		
31.3							65.0	73.5	31.3						
32.0	56.3	70.8	17.9	59.4	72.0	24.4	64.1	73.2	31.3						
34.0	53.5	69.3	16.6	56.7	70.7	22.0	61.6	72.1	28.9						
36.0	50.6	67.7	15.6	54.0	69.3	20.0	58.9	70.9	26.4						
38.0	47.6	66.0	14.5	51.1	67.7	18.5	56.2	69.6	24.3						
40.0	44.4	64.0	13.6	48.1	66.0	17.1	53.4	68.2	22.5						
42.0 43.1	41.0	61.8	12.7	44.9	64.1	15.9	50.5	66.6	21.2	55.0	67.3	20.7			
44.0	37.4	59.3	11.9	41.6	61.9	14.7	47.5	64.8	19.8	53.9	66.7	21.0			
46.0	33.4	56.4	11.3	38.0	59.4	13.7	44.3	62.9	18.5	51.0	65.1	19.4			
48.0	28.9	53.0	10.7	34.0	56.6	12.9	40.9	60.6	17.4	48.0	63.4	18.0			
50.0	23.7	48.8	10.1	29.7	53.3	12.1	37.3	58.1	16.4	44.8	61.4	16.9			
52.0	16.9	43.3	9.5]]		
55.0				15.4	41.7	9.5	26.3	49.8	13.8	36.0	55.4	14.5			
58.0							16.7	42.0	12.2						
60.0										24.4	46.6	12.4			
62.7													35.0	49.2	12.5
63.0										15.2	39.0	10.9	20.5	45.0	40.0
65.0 70.0													30.5	45.8	12.6
70.0													15.6	33.7	10.7



2821-1

2821-1

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

		gulo de principa			gulo de orincipa			gulo de principa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				26.0	m Pluma Cab	eza de p	al, Punto Ilumín (2 n l Posici	316-1) 5	3.5 m Pl	eza de p umín	lumín		_		
15.2	78.0	81.3	42.5	1					(_0,0)						
16.0	77.1	81.1	42.5												
18.0	74.9	80.6	39.2												
20.0	72.7	80.0	34.6												
22.0	70.4	79.3	29.4	73.0	79.8	36.5									
24.0	68.1	78.5	25.9	70.8	79.1	35.2									
26.0	65.8	77.6	22.9	68.5	78.4	31.4									
28.0 30.0	63.4 60.9	76.6 75.6	20.6 18.9	66.1 63.8	77.5 76.5	28.5 26.0									
30.0	58.4	75.6	17.4	63.8	75.5 75.5	26.0									
32.5	30.4	74.4	17.4	01.3	75.5	24.1	65.0	76.2	28.9						
34.0	55.9	73.0	16.1	58.8	74.3	21.8	63.3	75.5	29.0						
36.0	53.2	71.6	15.0	56.3	73.0	19.7	60.9	74.4	26.4						
38.0	50.5	70.0	14.1	53.7	71.6	18.0	58.3	73.2	24.2				i		
40.0	47.6	68.2	13.1	50.9	70.0	16.6	55.8	71.9	22.2						
42.0	44.6	66.2	12.3	48.1	68.2	15.4	53.2	70.5	20.6						
44.0	41.4	64.1	11.5	45.1	66.3	14.3	50.4	68.8	19.3						
44.8		į -		i -						55.0	69.7	19.2	İ		
46.0	38.1	61.6	10.8	42.0	64.2	13.3	47.5	67.1	18.1	53.6	69.0	19.4			
48.0	34.4	58.8	10.2	38.6	61.8	12.4	44.5	65.1	16.9	50.9	67.4	17.8			
50.0	30.3	55.6	9.7	35.0	59.0	11.6	41.4	62.9	15.8	48.0	65.6	16.5			
55.0	16.4	43.7	8.4	23.9	49.9	10.0	33.0	56.6	13.7	40.2	60.4	14.0			
57.0				17.6	44.5	9.3									
60.0							19.8	45.6	11.2	30.9	53.2	12.1			
61.0							16.2	42.4	10.8						
65.0										17.5	41.8	10.1			
65.1													35.0	50.9	11.7
70.0													24.8	42.6	10.7
73.0	1	I	l	I	1	ı			I	I		l	15.2	34.1	9.6



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

Altura ce Pumin			gulo de orincipal			gulo de orincipa			gulo de principa		65° Án I	gulo de orincipa	pluma I		gulo de principa	
Cabeza de plumín (2316-1) 56.5 m Plumín 22.0 [m] Posición midfall (2316) 15.8 78.0 84.2 39.1 39	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]
15.8 78.0 84.2 39.1 180 77.8 84.2 39.1 180 77.8 84.2 39.1 180 75.7 83.7 37.7 20.0 73.6 83.1 34.8 22.3 71.5 82.5 29.3 73.0 82.7 34.1 25.5 29.3 73.0 82.7 34.1 25.5 29.3 73.0 82.7 34.1 25.5 29.3 73.0 82.7 34.0 25.0 67.1 80.9 22.8 69.7 81.6 31.2 25.0 64.9 80.0 20.6 67.4 80.8 29.0 30.0 62.6 79.0 18.8 65.2 79.9 26.2 32.0 60.3 77.9 17.4 63.0 78.9 24.2 33.8 33.8 33.8 33.8 33.8 33.8 33.8 33					26.0 ı	n Pluma	principa	I, Punto	de carga	1 - Cab	eza de p	lumín				
16.0 77.8 84.2 39.1 18.0 75.7 83.7 37.7 20.0 73.6 83.1 34.8 22.0 71.5 82.5 29.3 73.0 82.7 73.0 82.7 73.0 82.7 73.0 82.7 73.0 82.7 73.0 82.7 71.8 82.3 34.0 26.0 67.1 80.9 22.8 69.7 81.6 31.2 82.3 34.0 82.0 83.1 83.8 83.1 83.8 83.1 83.8 83.1 83.8 83.2 77.9 81.6 31.2 82.2 83.0 83.6 83.8 83.8 83.8 83.8 83.8 83.8 83.8 83.8 83.8 83.8 83.8 83.8 83.8 83.8 83.8 83.8 83.8 83.8 83.8 83.9 83.8 83.8 83.8 83.8 83.8 83.8 83.8 83.8 83.8 83.9 83.8 83.9 83.8 83.9 83.8 83.9 83.8 83.9 83.8 83.9 83.8 83.9 83.8 83.9 83.8						Cab										
18.0 75.7 83.7 37.7 20.0 73.6 83.1 34.8 20.0 71.5 82.5 29.3 34.1 25.5 71.8 82.3 34.0 22.0 71.1 82.3 34.0 22.0 71.1 82.3 34.0 22.0 71.1 82.3 34.0 22.0 71.1 82.3 34.0 22.0 71.1 82.3 34.0 22.0 71.1 82.3 34.0 22.0 71.8 82.3 34.0 22.0 71.8 82.3 34.0 22.0 69.7 81.6 81.2 29.0 26.2 20.0 60.0 78.9 28.2 20.0 32.0 60.3 77.9 17.4 80.8 29.0 26.2 27.3 24.2 27.3 24.2 27.3 27.3 27.3 27.3 24.0 45.8 78.9 27.3																
20.0																
22.0 71.5 82.5 29.3 73.0 82.7 34.1 34.0 <td< td=""><td></td><td></td><td></td><td>-</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>				-												
22.9 69.3 81.7 25.5 71.8 82.3 34.0 34.0 34.0 34.0 34.0 34.0 34.0 34.0 34.0 34.0 34.0 34.0 34.0 34.0 34.0 34.0 34.0 34.0 36.0 62.6 79.0 18.8 65.2 79.9 26.2 65.0 78.9 27.3 34.0 57.9 76.6 16.1 60.7 77.8 22.4 65.0 78.9 27.3 33.8 34.0 57.9 76.6 16.1 60.7 77.8 22.4 64.8 78.9 27.7 36.0 55.5 75.3 14.9 58.3 76.6 20.3 62.6 77.9 22.7 36.0 55.5 75.3 14.9 58.9 76.6 20.3 62.6 77.9 22.7 36.0 55.5 75.3 14.9 55.9 75.3 18.4 60.2 76.7 24.4 40.0 44.0 42.2 11.5 41.1 42.2 42.0 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>																
24.0 69.3 81.7 25.5 71.8 82.3 34.0 31.2 28.0 64.9 80.0 20.6 67.4 80.8 29.0 64.9 80.0 20.6 67.4 80.8 29.0 65.0 78.9 22.3 32.0 60.3 77.9 17.4 63.0 78.9 24.2 65.0 78.9 27.3 33.8 33.8 76.6 16.1 60.7 77.8 22.4 64.8 78.9 27.7 26.9 33.0 55.5 75.3 14.9 58.3 76.6 20.3 62.6 77.9 26.9 27.3 27.7 26.9 27.3 27.7 26.9 27.3 27.7 26.9 27.3 27.7 26.9 27.7 26.9 27.7 26.9 27.7 26.9 27.7 26.9 27.7 26.9 27.7 26.9 27.7 26.9 27.7 24.4 20.9 27.7 24.4 20.9 27.7 24.4 20.9 27.7 19.4 <td< td=""><td></td><td>71.5</td><td>62.5</td><td>29.3</td><td>73 N</td><td>82.7</td><td>3/11</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>		71.5	62.5	29.3	73 N	82.7	3/11									
26.0 67.1 80.9 22.8 69.7 81.6 31.2 31.2 31.2 31.2 31.2 32.0 62.6 79.0 18.8 65.2 79.9 26.2 79.9 26.2 40.0 27.3 27.7 40.0 57.9 76.6 16.1 60.7 77.8 22.4 64.8 78.9 27.7 27.7 26.9 27.7 27.7 26.9 27.7 27.7 27.7 27.7 27.7 27.7 <td< td=""><td></td><td>60.3</td><td>817</td><td>25.5</td><td></td><td></td><td>-</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>		60.3	817	25.5			-									
28.0 64.9 80.0 20.6 67.4 80.8 29.0 26.2 32.0 60.3 77.9 17.4 63.0 78.9 24.2 65.0 78.9 27.3 33.8 33.8 34.0 57.9 76.6 16.1 60.7 77.8 22.4 64.8 78.9 27.7 36.0 55.5 75.3 14.9 58.3 76.6 20.3 62.6 77.9 26.9 38.0 53.0 73.8 13.9 55.9 75.3 18.4 60.2 76.7 24.4 40.0 50.4 72.2 13.1 53.4 73.8 16.9 57.9 75.5 22.6 42.0 47.6 70.4 12.3 50.8 72.2 15.6 55.4 74.2 20.9 44.0 44.8 66.5 11.5 48.1 70.5 14.5 52.9 72.7 19.4 46.5 46.0 41.8 66.3 39.2 66.4 12.5 47.6 69.3 17.2 53.3 71.2 18.2											i			i		
32.0 60.3 77.9 17.4 63.0 78.9 24.2 65.0 78.9 27.3 33.8 34.0 57.9 76.6 16.1 60.7 77.8 22.4 64.8 78.9 27.7 36.0 55.5 75.3 14.9 58.3 76.6 20.3 62.6 77.9 26.9 38.0 53.0 73.8 13.9 55.9 75.3 18.4 60.2 76.7 24.4 40.0 50.4 72.2 13.1 53.4 73.8 16.9 57.9 75.5 22.6 42.0 47.6 70.4 12.3 50.8 72.2 15.6 55.4 74.2 20.9 44.0 44.8 68.5 11.5 48.1 70.5 14.5 52.9 72.7 19.4 46.0 41.8 66.3 10.8 45.3 68.6 13.5 50.3 71.1 18.3 46.5 38.6 63.9 10.1 42.3 66.4 12.5 47.6 69.3 17.2 53.3 71.2 18.2 55.0 24.9 52.4 8.4 30.1 56.7 10.0 36.9 61.4 13.8 43.7 64.9<							-									
33.8 34.0 57.9 76.6 16.1 60.7 77.8 22.4 64.8 78.9 27.7 36.0 55.5 75.3 14.9 58.3 76.6 20.3 62.6 77.9 26.9 38.0 53.0 73.8 13.9 55.9 75.3 18.4 60.2 76.7 24.4 40.0 50.4 77.8 12.3 50.8 72.2 15.6 55.4 70.5 14.5 52.9 72.7 17.1 18.3 55.0 72.2 17.9 48.0 38.6 38.6 63.9 10.1 42.3 66.4 11.7 44.7 67.3 16.1 50.7 69.6 16.8 55.0 24.9 52.4 8.4 30.1 56.7 10.0 36.9 68.0 67.6 68.0 67.6 68.0 67.6 68.0 70.0 70.0 70.0 75.0	30.0	62.6	79.0	18.8	65.2	79.9	26.2									
34.0 57.9 76.6 16.1 60.7 77.8 22.4 64.8 78.9 27.7 26.9 4.0 26.9 4.0 26.9 4.0 26.9 4.0 26.9 4.0 26.9 4.0 26.9 4.0 26.9 4.0 26.9 4.0 26.9 4.0 26.9 4.0 26.9 4.0 26.9 4.0 26.9 4.0 4.0 4.0 46.0 47.6 70.4 12.3 50.8 72.2 15.6 55.4 74.2 20.9 44.0 44.8 68.5 11.5 48.1 70.5 14.5 52.9 72.7 19.4 46.0 41.8 66.3 10.8 45.3 68.6 13.5 50.3 71.1 18.3 55.0 72.2 17.9 48.0 38.6 63.9 10.1 42.3 66.4 12.5 47.6 69.3 17.2 53.3 71.2 18.2 48.0 55.0 72.2 17.9 48.0 48.0 30.1 56.7 10.0 36.9 61.4 13.8 43.7 64.9 14.3 43.0	32.0	60.3	77.9	17.4	63.0	78.9	24.2									
36.0 55.5 75.3 14.9 58.3 76.6 20.3 62.6 77.9 26.9 4.4 4.0 58.0 73.8 13.9 55.9 75.3 18.4 60.2 76.7 24.4 4.0 4.0 50.4 72.2 13.1 53.4 73.8 16.9 57.9 75.5 22.6 42.0 47.6 70.4 12.3 50.8 72.2 15.6 55.4 74.2 20.9 44.0 44.8 68.5 11.5 48.1 70.5 14.5 52.9 72.7 19.4 46.0 41.8 66.3 10.8 45.3 68.6 13.5 50.3 71.1 18.3 55.0 72.2 17.9 48.0 38.6 63.9 10.1 42.3 66.4 12.5 47.6 69.3 17.2 53.3 71.2 18.2 55.0 72.2 17.9 48.2 55.0 72.2 17.9 48.2 45.3 66.4 12.5 47.6 69.3 17.2 53.3 71.2 18.2 48.2 45.3 44.3 44.3 44.3 44.3 <td< td=""><td>33.8</td><td></td><td></td><td></td><td></td><td></td><td></td><td>65.0</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	33.8							65.0								
38.0 53.0 73.8 13.9 55.9 75.3 18.4 60.2 76.7 24.4 4 4 4 40.0 50.4 72.2 13.1 53.4 73.8 16.9 57.9 75.5 22.6 22.9 22.6 22.6 22.6 22.6 22.6 22.6 22.6 22.6 22.9 22.6 22.6 22.9 22.7 19.4 22.6 22.6 22.6 22.6 22.6 22.7 22.7 19.4 22.6 22.6 22.6 22.6 22.6 22.6 22.6 22.6 22.6 22.6 22.2 22.6 22.6 22.6 22.6 <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>																
40.0 50.4 72.2 13.1 53.4 73.8 16.9 57.9 75.5 22.6 22.6 20.9																
42.0 47.6 70.4 12.3 50.8 72.2 15.6 55.4 74.2 20.9 44.0 44.8 68.5 11.5 48.1 70.5 14.5 52.9 72.7 19.4																
44.0 44.8 68.5 11.5 48.1 70.5 14.5 52.9 72.7 19.4 19.2 19.2 19.2 19.2 19.2 19.2 19.2 19.2 19.4 19.4 19.4 19.4 19.2 19.4 19.4 19.4 19.4 19.4 19.4 19.4 19.2 19.4 19.4 19.4 19.4 19.2 19.2 19.2 19.2 19.2				-						-						
46.0 41.8 66.3 10.8 45.3 68.6 13.5 50.3 71.1 18.3 55.0 72.2 17.9 17.9 48.0 38.6 63.9 10.1 42.3 66.4 12.5 47.6 69.3 17.2 53.3 71.2 18.2 50.0 35.2 61.2 9.6 39.2 64.1 11.7 44.7 67.3 16.1 50.7 69.6 16.8 55.0 24.9 52.4 8.4 30.1 56.7 10.0 36.9 61.4 13.8 43.7 64.9 14.3 58.0 16.0 44.1 7.7 17.1 44.9 8.5 27.2 53.3 11.7 35.7 58.8 12.4 64.0 65.0 67.6 68.0 15.8 42.8 10.0 25.6 50.1 10.6 68.0 70.0 17.0 42.2 9.4 30.9 49.2 10.9 75.0 18.4 38.0 9.2											ł			ł		
46.5									ı		ł			ł		
48.0 38.6 63.9 10.1 42.3 66.4 12.5 47.6 69.3 17.2 53.3 71.2 18.2 50.0 35.2 61.2 9.6 39.2 64.1 11.7 44.7 67.3 16.1 50.7 69.6 16.8 55.0 24.9 52.4 8.4 30.1 56.7 10.0 36.9 61.4 13.8 43.7 64.9 14.3 58.0 16.0 44.1 7.7 17.1 44.9 8.5 27.2 53.3 11.7 35.7 58.8 12.4 64.0 65.0 67.6 68.0 70.0 17.0 42.2 9.4 70.0 17.0 42.2 9.4 30.9 49.2 10.9 75.0 18.4 38.0 9.2		41.0	00.5	10.0	45.5	00.0	13.3	30.3	/ 1.1	10.5	55.0	72.2	17.9	i		
50.0 35.2 61.2 9.6 39.2 64.1 11.7 44.7 67.3 16.1 50.7 69.6 16.8 55.0 24.9 52.4 8.4 30.1 56.7 10.0 36.9 61.4 13.8 43.7 64.9 14.3 58.0 16.0 44.1 7.7 17.1 44.9 8.5 27.2 53.3 11.7 35.7 58.8 12.4 64.0 65.0 67.6 68.0 25.6 50.1 10.6 68.0 17.0 42.2 9.4 70.0 17.0 42.2 30.9 49.2 10.9 75.0 18.4 38.0 9.2		38.6	63.9	10.1	42.3	66.4	12.5	47.6	69.3	17.2						
55.0 24.9 52.4 8.4 30.1 56.7 10.0 36.9 61.4 13.8 43.7 64.9 14.3				-			-	-					-			
60.0 17.1 44.9 8.5 27.2 53.3 11.7 35.7 58.8 12.4 64.0 15.8 42.8 10.0 65.0 25.6 50.1 10.6 67.6 35.0 52.6 10.9 68.0 17.0 42.2 9.4 70.0 30.9 49.2 10.9 75.0 18.4 38.0 9.2	55.0	24.9	52.4	8.4	30.1	56.7	10.0	36.9	61.4	13.8	43.7	64.9	14.3			
64.0 65.0 67.6 68.0 70.0 75.0	58.0	16.0	44.1	7.7												
65.0 67.6 68.0 70.0 75.0 68.0 70.0 75.0					17.1	44.9	8.5	27.2			35.7	58.8	12.4			
67.6 68.0 70.0 17.0 42.2 9.4 35.0 52.6 10.9 30.9 49.2 10.9 18.4 38.0 9.2								15.8	42.8	10.0						
68.0 17.0 42.2 9.4 70.0 30.9 49.2 10.9 75.0 18.4 38.0 9.2											25.6	50.1	10.6			
70.0 30.9 49.2 10.9 75.0 18.4 38.0 9.2											47.0	40.0		35.0	52.6	10.9
75.0 18.4 38.0 9.2											17.0	42.2	9.4	20.0	40.0	10.0
											-					
	76.0 76.0													16.0	35.7	9.2 8.2



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

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

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

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de principa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				26.0 r		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 5	9.5 m Pli	eza de p umín	lumín				
16.4 18.0 20.0 22.0 23.8	78.0 76.5 74.5 72.4	87.1 86.8 86.2 85.6	35.9 35.5 32.9 29.1	73.0	85.5	31.6									
24.0 26.0 28.0 30.0 32.0	70.4 68.3 66.2 64.1 61.9	84.9 84.2 83.3 82.4 81.3	25.1 22.4 20.2 18.4 16.9	72.8 70.7 68.7 66.5 64.5	85.5 84.8 84.0 83.2 82.2	31.6 30.7 28.0 25.9 23.6									
34.0 35.1 36.0 38.0 40.0	59.7 57.5 55.1 52.7	80.2 78.9 77.6 76.1	15.6 14.5 13.4 12.5	62.3 60.1 57.8 55.5	81.2 80.1 78.9 77.5	21.9 20.2 18.3 16.7	65.0 64.1 61.9 59.7	81.7 81.2 80.2 79.0	26.1 26.1 24.7 22.4						
42.0 44.0 46.0 48.0 48.3	50.3 47.7 45.0 42.2	74.5 72.7 70.7 68.6	11.8 11.1 10.4 9.7	53.1 50.6 48.1 45.4	76.1 74.5 72.7 70.8	15.3 14.2 13.2 12.3	57.4 55.1 52.7 50.2	77.8 76.4 74.9 73.3	20.7 19.2 17.9 16.8	55.0	74.7	16.6			
50.0 55.0 60.0 61.0 63.0	39.2 30.6 18.9 15.6	66.2 58.9 47.8 44.5	9.2 8.0 6.9 6.7	42.6 34.8 25.0 16.7	68.7 62.3 53.5 45.4	11.5 9.7 8.4 7.5	47.6 40.6 32.4	71.5 66.3 59.4	15.8 13.4 11.5	53.1 46.7 39.6	73.5 69.2 63.7	16.8 14.0 12.0			
65.0 67.0 70.0 71.0 75.0							21.6 15.4	49.4 43.2	9.6 8.8	31.2 19.7 16.5	56.5 45.8 42.6	8.6 8.3	35.0 25.9 15.6	54.3 46.1 36.1	10.0 9.3 7.3



N° de ident.: 9842523/95738/ Pi

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

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

		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]
				26.0 ו		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 6	2.5 m Pl		lumín				
17.1 18.0 20.0 22.0 24.0	78.0 77.1 75.2 73.3 71.4	90.1 89.9 89.4 88.8 88.1	33.1 33.1 31.4 29.1 25.1												
24.6 26.0 28.0 30.0 32.0	69.4 67.5 65.4 63.4	87.4 86.6 85.7 84.7	22.2 20.1 18.3 16.8	73.0 71.7 69.7 67.7 65.8	88.4 88.0 87.2 86.4 85.6	29.5 29.5 27.7 25.9 23.8									
34.0 36.0 36.3 38.0 40.0	61.3 59.2 57.0 54.8	83.6 82.5 81.2 79.8	15.6 14.4 13.3 12.4	63.7 61.7 59.5 57.4	84.6 83.5 82.4 81.1	22.0 20.6 18.8 17.1	65.0 63.4 61.3	84.4 83.6 82.5	24.2 24.7 22.9						
42.0 44.0 46.0 48.0 50.0	52.5 50.2 47.7 45.1 42.5	78.3 76.7 74.9 73.0 70.9	11.5 10.9 10.2 9.6 9.0	55.2 52.9 50.5 48.1 45.6	79.8 78.3 76.7 74.9 73.0	15.7 14.4 13.4 12.5 11.6	59.2 57.0 54.8 52.5 50.1	81.3 80.1 78.7 77.2 75.6	20.9 19.5 18.1 16.9 16.0	55.0	77.1	15.5			
55.0 60.0 64.0 65.0 66.0	35.1 25.9 15.2	64.5 55.9 44.9	7.9 6.9 6.1	38.7 30.5 19.3 16.3	67.4 60.0 49.0 45.8	9.8 8.4 7.1 6.9	43.8 36.6 27.8	70.8 64.8 56.7	13.6 11.7 9.9	49.3 42.8 35.5	73.2 68.3 62.1	14.2 12.2 10.6			
70.0 72.5 74.0 75.0 80.0 82.0							16.1	44.8	7.6	26.5 16.1	53.6 43.0	9.0 7.7	35.0 31.1 20.4 15.2	56.1 52.5 41.9 36.5	9.3 9.4 7.9 6.7



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

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

		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]
				26.0 ו	m Pluma Cab	eza de p	al, Punto dumín (2 n] Posici	316-1) 6	5.5 m Pl	eza de p umín	lumín				
17.7 18.0 20.0 22.0 24.0 25.5 26.0 28.0 30.0 32.0	78.0 77.7 75.9 74.1 72.3 70.4 68.5 66.6 64.7	93.0 92.9 92.5 91.9 91.3 90.6 89.8 89.0 88.1	29.3 29.3 28.5 27.0 24.3 21.6 19.7 17.8 16.3	73.0 72.6 70.7 68.8 66.9	91.3 91.1 90.4 89.7 88.8	26.1 26.1 25.7 24.2 22.8									
34.0 36.0 37.6 38.0 40.0	62.8 61.1 58.7 56.6 54.5	87.0 86.1 84.8 83.5 82.1	15.0 13.9 12.9 11.9	65.0 63.1 61.1 59.1 57.0	87.9 87.0 85.9 84.7 83.4	21.0 19.6 18.4 16.8 15.3	65.0 64.7 62.7 60.7	87.1 86.9 85.9 84.8	22.3 22.8 22.5 20.7						
44.0 46.0 48.0 50.0	52.3 50.1 47.7 45.3	80.6 78.9 77.2 75.2	10.4 9.7 9.2 8.6	54.9 52.7 50.4 48.1	82.0 80.6 78.9 77.2	14.0 12.9 12.1 11.2	58.7 56.6 54.5 52.3	83.6 82.3 80.9 79.4	19.2 17.9 16.6 15.5	55.0	79.6	14.4			
55.0 60.0 65.0 67.0	38.7 30.9 20.7 15.9	69.6 62.3 51.7 46.5	7.4 6.5 5.6 4.7	41.9 34.7 25.9	72.1 65.7 56.9	9.4 8.0 6.9	46.5 40.0 32.5	75.1 69.7 62.7	13.3 11.2 9.6	51.9 45.6 39.1	77.4 72.7 67.1	14.2 11.9 10.2			
69.0 70.0 73.0 75.0 77.0				15.9	46.2	5.9	23.0 15.7	53.0 45.2	8.1 6.6	31.4 21.4 15.7	59.9 49.6 43.4	8.8 7.2 6.6	35.0	57.8	8.6
80.0 84.0													26.7 17.0	49.5 39.3	7.9 6.8



2821-1

2821-1

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

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				26.0 ו		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 6	8.5 m Pli	eza de p umín	lumín				
18.3 20.0 22.0 24.0 26.0	78.0 76.5 74.8 73.1 71.3	96.0 95.6 95.0 94.4 93.8	26.5 26.1 25.0 23.5 21.2												
26.4 28.0 30.0 32.0 34.0	69.5 67.7 65.9 64.1	93.0 92.2 91.4 90.4	19.6 17.9 16.3 14.9	73.0 71.6 69.8 68.0 66.2	94.1 93.6 92.9 92.1 91.3	23.6 23.5 22.8 22.0 20.7									
36.0 38.0 38.9 40.0 42.0	62.2 60.2 58.3 56.3	89.4 88.3 87.1 85.7	13.8 12.8 11.9 11.0	64.3 62.5 60.6 58.6	90.3 89.3 88.2 87.0	19.4 18.3 17.2 15.7	65.0 64.0 62.1	89.8 89.3 88.3	21.4 21.4 21.0						
44.0 46.0 48.0 50.0 53.4	54.2 52.1 50.0 47.7	84.3 82.8 81.2 79.4	10.3 9.6 9.0 8.5	56.6 54.6 52.5 50.3	85.7 84.3 82.8 81.2	14.4 13.2 12.2 11.4	60.2 58.2 56.2 54.2	87.1 85.9 84.6 83.2	19.3 18.1 16.9 15.7	55.0	82.0	13.6			
55.0 60.0 65.0 70.0 72.0	41.8 34.9 26.7 15.6	74.3 67.8 59.3 46.9	7.3 6.3 5.5 4.2	44.6 38.2 30.7 21.0 15.5	76.5 70.8 63.3 52.8 46.6	9.6 8.1 6.9 5.9 5.4	48.8 42.9 36.3 28.4	79.2 74.2 68.1 60.1	13.6 11.5 9.8 8.4	53.5 48.0 42.1 35.3	81.0 76.8 71.7 65.4	14.0 12.0 10.3 9.0			
75.0 76.0 77.4 80.0 85.0							17.4 15.4	48.0 45.6	6.9 6.1	27.2 15.4	57.0 43.8	7.6 6.1	35.0 31.4 21.8 16.7	59.5 55.8 45.6 39.8	7.9 7.8 6.7



N° de ident.: 9842523/95738/ F

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

Lastre trasero [t]:

Lastre central [t]:

2 - Vía ancha 124.0

52.6

		gulo de orincipal			gulo de orincipa		75° Án I	gulo de orincipa	pluma		gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				26.0 ו		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 7	1.5 m Pli	eza de p umín	lumín				
18.9	78.0	98.9	24.3												
20.0	77.1	98.6	24.3												
22.0	75.5	98.1	23.3												
24.0	73.8	97.6	22.4												
26.0	72.1	96.9	20.4												
27.3				73.0	97.0	21.8									
28.0	70.4	96.2	18.7	72.4	96.8	21.8									
30.0	68.7	95.5	17.4	70.7	96.1	21.6									
32.0 34.0	67.0 65.2	94.7 93.7	15.8 14.4	69.0 67.3	95.3 94.5	20.9 20.2									
36.0	63.4	93.7	13.3	65.5	94.5	18.7									
38.0	61.6	92.6 91.7	12.4	63.7	93.6	17.4									
40.0	59.8	90.6	11.4	61.9	91.6	16.4									
40.0	39.0	30.0	11.4	01.9	31.0	10.4	65.0	92.5	19.8						
42.0	57.9	89.3	10.6	60.1	90.5	15.3	63.4	91.6	19.8						
44.0	56.0	88.0	9.8	58.2	89.3	14.0	61.6	90.6	19.0						
46.0	54.0	86.6	9.1	56.3	88.0	12.8	59.7	89.4	17.7						
48.0	52.0	85.1	8.5	54.3	86.6	11.8	57.8	88.2	16.7						
50.0	49.9	83.4	8.0	52.3	85.0	10.9	55.9	86.9	15.4						
55.0	44.4	78.7	6.9	47.0	80.7	9.2	50.9	83.1	12.9						
55.1										55.0	84.5	12.6			
60.0	38.3	72.9	5.9	41.2	75.5	7.7	45.5	78.6	11.0	50.2	80.8	11.7			
65.0	31.2	65.6	5.1	34.6	69.0	6.5	39.5	73.0	9.3	44.7	76.1	10.0			
70.0	22.1	55.4	4.4	26.6	60.4	5.6	32.6	66.0	8.0	38.6	70.4	8.5			
73.0	15.2	47.3	3.6												
75.0				15.2	47.0	4.6	24.0	56.6	6.7	31.6	63.2	7.3			
79.0							15.0	46.0	5.3						
79.9										00.0	50.0	0.0	35.0	61.2	7.3
80.0										22.6	53.2	6.0	34.8	61.0	7.3
83.0 85.0										15.0	44.2	5.2	27.3	53.0	6.4



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

	88° Án	gulo de orincipal	pluma I	83° Án	gulo de orincipa	pluma I	75° Án I	gulo de orincipa	pluma I	65° Án	gulo de orincipa	pluma I	45° Án	gulo de orincipa	pluma I
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				26.0 ו		eza de p	il, Punto Iumín (2 i] Posici	316-1) 7	4.5 m Pli	eza de p umín	lumín				
19.6 20.0 22.0 24.0 26.0 28.0 28.2	78.0 77.7 76.1 74.5 72.9 71.2	101.8 101.7 101.2 100.7 100.1 99.4	22.8 22.8 22.3 21.3 20.1 18.4	73.0	99.9	20.7									
30.0 32.0 34.0 36.0	69.6 68.0 66.3 64.6	98.7 97.9 97.0 96.1	17.2 15.8 14.4 13.2	71.5 69.9 68.2 66.5	99.9 99.3 98.6 97.8 96.9	20.7 20.6 20.2 19.7									
38.0 40.0 41.4	62.9 61.1 59.3	95.1 95.1 94.0	12.2 11.4	64.9 63.1 61.4	96.0 95.0	17.4 16.3	65.0 64.5	95.3 95.0	18.3 18.8						
42.0 44.0 46.0 48.0 50.0	57.5 55.7 53.8 51.8	91.6 90.3 88.8 87.3	9.8 9.1 8.5 8.0	59.6 57.8 56.0 54.1	93.9 92.8 91.6 90.2 88.8	14.3 13.1 12.0 11.1	62.8 61.1 59.3 57.5	94.0 92.9 91.7 90.5	18.6 17.7 16.7 15.8						
55.0 56.9 60.0 65.0 70.0	41.1 34.8 27.3	77.7 71.2 62.7	5.8 5.0 4.3	49.1 43.8 37.9 31.0	84.8 80.0 74.1 66.7	9.3 7.8 6.5 5.6	52.8 47.7 42.2 36.1	86.9 82.7 77.6 71.4	13.1 11.2 9.5 8.2	55.0 52.1 47.0 41.5	86.9 84.7 80.3 75.1	11.9 11.8 10.1 8.7			
75.0 78.0 80.0 81.0 82.3	16.8	50.1	3.6	22.3 15.8	56.5 48.6	3.8	28.8 19.2 16.7	52.0 48.8	5.6 5.4	27.7	60.4	6.3	35.0	62.9	6.6
85.0 86.0 90.0 93.0										17.5 15.7	48.2 45.9	5.0 4.5	32.0 23.7 15.9	59.7 50.1 40.6	5.2 4.7



N° de ident.: 9842523/95738/ Pieza

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

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

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa		45° Án I	gulo de orincipa	pluma I
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				26.0		eza de p	il, Punto lumín (2 n] Posici	316-1) 7	7.5 m Pl	eza de p umín	lumín				
20.2 22.0 24.0 26.0 28.0	78.0 76.6 75.1 73.6 72.0	104.8 104.3 103.8 103.2 102.6	20.7 20.5 19.7 19.0 17.5												
29.0 30.0 32.0 34.0 36.0	70.4 68.9 67.3 65.6	101.9 101.1 100.3 99.4	16.4 15.5 14.1 12.9	73.0 72.2 70.7 69.1 67.5	102.8 102.4 101.8 101.0 100.2	18.8 18.8 18.6 18.1 17.7									
38.0 40.0 42.0 42.7 44.0	64.0 62.3 60.6 58.9	98.5 97.4 96.3 95.2	11.9 11.0 10.2 9.5	65.9 64.3 62.6 60.9	99.3 98.4 97.4 96.3	16.4 15.4 14.5	65.0 64.0	98.0 97.4	16.4 16.4						
46.0 48.0 50.0 55.0 58.6	57.2 55.4 53.6 48.8	93.9 92.5 91.1 87.0	8.8 8.2 7.6 6.5	59.2 57.5 55.7 51.0	95.1 93.8 92.5 88.7	12.6 11.6 10.7 8.9	62.3 60.6 58.9 54.4	96.3 95.2 94.0 90.7	16.2 15.5 14.9 12.5	55.0	89.4	11.0			
60.0 65.0 70.0 75.0 78.0	43.6 37.9 31.4 23.2 16.5	82.1 76.3 68.9 59.0 50.5	5.5 4.6 4.0 3.4 3.0	46.1 40.7 34.5 27.2	84.2 78.9 72.3 63.8	7.5 6.2 5.3 4.5	49.7 44.7 39.1 32.7	86.7 82.0 76.4 69.4	10.6 9.0 7.5 6.4	53.8 49.1 43.9 38.3	88.5 84.4 79.6 73.8	11.3 9.8 8.5 7.2			
80.0 81.0 84.0 84.8 85.0				17.3 15.5	51.3 49.0	3.6 3.2	24.9 16.4	60.1 49.3	5.3 4.3	31.7	66.5 56.8	5.0	35.0 35.0	64.7 64.7	5.8 5.8
89.0 90.0 95.0 96.0										15.4	46.2	3.8	28.4 19.0 16.5	57.0 45.4 42.2	4.9 4.1 3.9



Nº de ident.: 9842523/95738/

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

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

		gulo de principa			gulo de orincipa			gulo de orincipa			gulo de orincipa		45° Án	gulo de orincipa	pluma I
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				26.0 ו		eza de p	al, Punto dumín (2 n] Posici	316-1) 8	0.5 m Pli	eza de p umín	lumín				
20.8 22.0 24.0 26.0 28.0	78.0 77.1 75.7 74.2 72.7	107.7 107.4 106.9 106.4 105.8	19.0 19.0 18.3 17.7 16.8												
29.9 30.0 32.0 34.0 36.0	71.2 69.7 68.2 66.6	105.1 104.4 103.6 102.7	15.9 15.2 14.1 12.9	73.0 72.9 71.4 69.9 68.4	105.6 105.6 104.9 104.2 103.4	17.3 17.3 17.2 16.8 16.4									
38.0 40.0 42.0 44.0	65.0 63.5 61.8 60.2	101.8 100.8 99.8 98.7	11.8 10.9 10.1 9.4	66.9 65.3 63.7 62.1	102.6 101.7 100.7 99.7	15.8 14.8 14.1 13.4	65.0	100.7	14.6						
46.0 48.0 50.0 55.0 60.0	58.6 56.9 55.1 50.6 45.8	97.5 96.2 94.8 91.0 86.4	8.7 8.1 7.5 6.3 5.4	60.5 58.8 57.1 52.8 48.1	98.6 97.4 96.1 92.6 88.4	12.6 11.7 10.8 8.9 7.5	63.4 61.8 60.2 56.0 51.5	99.7 98.7 97.5 94.4 90.6	14.6 14.3 13.9 12.5 10.5						
60.3 65.0 70.0 75.0 80.0	40.6 34.7 27.8 18.6 16.2	81.0 74.5 66.1 54.2 51.0	4.6 3.9 3.3 2.7 2.6	43.1 37.6 31.2 23.3	83.4 77.4 70.0 60.1	6.3 5.3 4.4 3.7	46.8 41.6 35.9 29.2	86.3 81.1 74.7 66.8	9.0 7.5 6.4 5.3	55.0 50.9 46.1 40.9 35.1	91.9 88.3 83.9 78.5 72.0	9.9 8.6 7.3 6.3			
81.0 84.0 85.0 87.0 87.2 90.0	10.2	51.0	2.0	15.2	49.4	2.8	20.7 16.0	55.8 49.7	4.2 3.8	28.2	63.8	5.2	35.0 32.1	66.4 63.0	5.2 4.8
92.0 95.0 99.0										19.2 15.1	46.6	3.4	24.5 16.2	53.6 42.6	4.0



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]:

		gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa		45° Án I	gulo de orincipa	pluma I
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				26.0	m Pluma Cab	eza de p	al, Punto dumín (2 n] Posici	316-1) 8	3.5 m Pl		lumín				
21.4 22.0 24.0 26.0 28.0 30.0 30.8 32.0 34.0 36.0 40.0 42.0 44.0 45.2 46.0 50.0 55.0	78.0 77.6 76.2 74.8 73.3 71.9 70.4 69.0 67.5 66.0 64.5 62.9 61.4 59.8 58.2 56.6 52.3	110.6 110.5 110.0 109.5 108.9 108.3 107.6 106.8 106.0 105.1 104.2 103.2 102.1	17.5 17.5 17.1 16.6 16.0 15.1 14.4 13.9 12.6 11.5 10.6 9.8 9.1	73.0 72.1 70.7 69.2 67.7 66.2 64.7 63.2 61.6 60.1 58.5 54.3	108.5 108.1 107.4 106.7 105.9 105.0 104.1 103.1 102.0 100.9 99.7 96.3	16.0 16.0 15.7 15.4 15.1 14.3 13.4 12.7 12.2 11.4 10.5 8.6	65.0 64.4 62.9 61.3 57.3	103.4 103.1 102.1 101.0 98.0	13.3 13.9 13.8 13.5 12.6						
60.0 62.0 65.0 70.0 75.0 80.0 85.0 86.0 89.7 90.0 94.0 95.0 100.0	47.8 43.0 37.6 31.5 24.1	90.6 85.6 79.6 72.2 62.6	5.1 4.2 3.5 3.0 2.4	49.9 45.3 40.2 34.5 27.7 19.0 16.7	92.4 87.7 82.3 75.6 67.2 55.4 52.2	7.2 6.0 5.0 4.1 3.4 2.7 2.5	53.1 48.7 43.9 38.7 32.8 25.6	94.5 90.3 85.5 79.7 72.7 63.6 50.1	9.0 7.5 6.2 5.3 4.3	55.0 52.6 48.1 43.2 37.9 31.9 24.5 16.5	94.3 92.2 88.0 83.0 77.1 69.9 60.4 49.5	9.6 9.6 8.3 7.1 6.0 5.0	35.0 34.6 28.8 20.4 15.9	68.1 67.7 60.4 49.2 43.0	4.4 4.4 3.6 2.9 2.6



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

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

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

		gulo de orincipa			gulo de orincipa			gulo de principa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				26.0 ו		eza de p	al, Punto dumín (2 n] Posici	316-1) 8	6.5 m Pli	eza de p umín	lumín				
22.1 24.0 26.0 28.0 30.0	78.0 76.7 75.3 73.9 72.5	113.6 113.1 112.6 112.0 111.4	16.2 16.1 15.6 15.3 14.6												
31.7 32.0 34.0 36.0 38.0 40.0	71.1 69.7 68.3 66.9 65.4	110.7 110.0 109.2 108.4 107.5	13.9 13.4 12.7 11.5	73.0 72.8 71.4 70.0 68.5 67.1	111.4 111.3 110.6 109.9 109.1 108.3	14.9 14.9 14.8 14.5 14.3									
42.0 44.0 46.0 46.5 48.0	64.0 62.5 61.0	106.5 105.5 104.4	9.7 9.0 8.4	65.7 64.2 62.7	107.4 106.4 105.4	13.1 12.5 11.9	65.0 63.9	106.1 105.4	13.4 13.4						
50.0 55.0 60.0 63.7	57.9 53.9 49.6	102.0 98.6 94.6	7.2 5.9 5.0	59.7 55.7 51.6	103.2 100.0 96.3	10.6 8.7 7.3	62.4 58.6 54.6	104.4 101.5 98.2	13.2 12.6 10.9	55.0	96.8	9.1			
65.0 70.0 75.0 80.0 85.0	45.1 40.2 34.7 28.2	89.9 84.4 77.8 69.5	4.1 3.4 2.8 2.3	47.2 42.5 37.3 31.4 24.2	91.9 86.8 80.8 73.3 63.7	6.1 5.0 4.1 3.4 2.7	50.4 46.0 41.1 35.8 29.5	94.3 89.8 84.4 78.1 70.1	9.4 7.9 6.6 5.6 4.7	54.1 49.8 45.3 40.4 35.0	95.9 92.0 87.4 81.9 75.4	9.3 8.3 7.2 6.1 5.2			
90.0 92.2 93.0 95.0 97.0							21.8 15.5	59.6 50.5	3.7	28.6 20.5 16.2	67.2 56.0 49.9	3.2 2.8	35.0 32.2	69.8 66.3	3.8
100.0 104.0													25.3 18.0	57.1 46.8	2.6 2.1



Nº de ident.: 9842523/95738/

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

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

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				26.0 ı		eza de p	II, Punto Ilumín (2 1] Posici	316-1) 8	9.5 m Plı	eza de p umín	lumín				
22.7	78.0	116.5	14.2												
24.0	77.2	116.2	14.2												
26.0	75.8	115.7	13.8												
28.0	74.5	115.2	13.4												
30.0	73.2	114.6	13.0												
32.0	71.8	113.9	12.5												
32.6				73.0	114.2	13.0									
34.0	70.4	113.2 112.5	12.0	72.0	113.8	13.0									
36.0 38.0	69.1 67.7	112.5 111.7	11.7 10.7	70.7 69.3	113.1 112.3	12.8 12.5									
40.0	66.3	110.8	9.8	67.9	111.5	12.5									
42.0	64.9	10.8	9.0	66.5	110.7	11.7									
44.0	63.4	109.9	8.4	65.1	109.7	11.7									
46.0	62.0	107.8	7.8	63.7	108.8	10.6							i		
47.8	02.0	101.0	7.0	00	100.0	10.0	65.0	108.8	11.5						
48.0	60.5	106.7	7.2	62.2	107.7	10.2	64.8	108.7	11.5						
50.0	59.0	105.5	6.6	60.7	106.6	9.7	63.4	107.7	11.5						
55.0	55.2	102.2	5.4	57.0	103.5	8.0	59.7	105.0	10.9			İ	İ		
60.0	51.1	98.4	4.4	53.0	100.0	6.7	55.9	101.8	9.8						
65.0	46.8	94.0	3.7	48.8	95.8	5.6	51.9	98.1	8.4						
65.5										55.0	99.2	8.3			
70.0	42.2	88.8	3.0	44.4	91.0	4.6	47.7	93.8	7.2	51.3	95.8	7.9			
75.0	37.1	82.6	2.4	39.5	85.4	3.7	43.1	88.7	6.0	47.1	91.4	6.7			
80.0				34.1	78.6	3.0	38.1	82.8	5.0	42.5	86.2	5.7			
85.0				27.8	70.1	2.4	32.5	75.6	4.1	37.4	80.2	4.7			
90.0							25.8	66.5	3.3	31.7	72.8	3.9			
94.6							40.0	50.4	0.5		00.0		35.0	71.5	3.0
95.0							16.8	53.4	2.5	24.8	63.3	3.0	34.6	71.0	3.0
96.0							16.0	52.1	2.2	16.7	E4 E	2.1	20.4	62.7	2.2
100.0 102.0										16.7	51.5	2.1	29.1 26.3	63.7 59.9	2.3
102.0													20.3	59.9	2.0



N° de ident.: 9842523/95738/

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

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

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				26.0 ו		eza de p	II, Punto Ilumín (2: Il Posici	316-1) 9:	2.5 m Pli	eza de p umín	lumín				
23.4	78.0	119.4	13.1												
24.0	77.6	119.3	13.1												
26.0	76.3	118.8	12.8												
28.0	75.0	118.3	12.4												
30.0	73.7	117.7	12.2												
32.0	72.4	117.1	11.7												
33.4				73.0	117.1	11.9									
34.0	71.1	116.4	11.3	72.6	116.9	11.9									
36.0	69.8	115.7	11.0	71.3	116.3	11.8									
38.0	68.5	114.9	10.4	70.0	115.5	11.5									
40.0	67.1	114.1	9.6	68.7	114.8	11.2									
42.0	65.7	113.2	8.8	67.3	113.9	10.9									
44.0	64.4	112.2	8.2	66.0	113.1	10.4									
46.0	63.0	111.2	7.6	64.6	112.1	10.0									
48.0	61.6	110.1	7.1	63.2	111.1	9.6	25.0	444.0	40.4						
49.0	20.4	400.0	0.0	24.0	440.0	0.0	65.0	111.6	10.4						
50.0	60.1	109.0	6.6	61.8	110.0	9.3	64.3	111.1	10.4						
55.0	56.5	105.9 102.2	5.3	58.2 54.4	107.1 103.7	7.9	60.8 57.2	108.5 105.4	9.9 9.2						
60.0 65.0	52.6 48.6	98.0	4.3 3.6	54.4 50.5	99.8	6.6 5.6	57.2 53.4	105.4	9.2 8.0						
67.2	40.0	96.0	3.0	50.5	99.6	5.0	55.4	101.9	0.0	55.0	101.7	7.9			
70.0	44.2	93.2	2.9	46.3	95.3	4.6	49.4	97.8	7.1	52.8	99.6	7.9			
70.0 75.0	39.5	93.2 87.5	2.9	41.8	90.0	3.7	49.4 45.1	97.8	5.9	48.8	99.6 95.5	6.7			
80.0	38.5	01.0	2.3	36.8	83.8	2.9	40.5	93.1 87.6	4.9	44.5	95.5	5.8			
85.0				31.2	76.3	2.9	35.4	81.1	4.9	39.8	85.0	4.8			
90.0				31.4	10.5	2.5	29.5	73.0	3.4	34.6	78.3	4.0			
95.0							22.3	62.5	2.6	28.6	70.3	3.2			
97.1							22.0	02.0	2.0	20.0	70.1	0.2	35.0	73.3	2.5
98.0							16.6	53.8	2.2				00.0	70.0	2.0
100.0										21.1	59.0	2.4	32.3	69.7	2.1



2821-1

2821-1

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

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

360 ° Cabeza de pluma principal: 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]
				26.0		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 9	5.5 m Pli	eza de p umín	lumín				
24.0	78.0	122.4	11.9												
26.0	76.8	121.9	11.8												
28.0	75.5	121.4	11.5												
30.0	74.3	120.8	11.2												
32.0	73.0	120.2	10.9												
34.0	71.7	119.6	10.5												
34.3				73.0	120.0	10.9									
36.0	70.5	118.9	10.2	71.9	119.4	10.8									
38.0	69.2	118.1	9.9	70.7	118.7	10.6									
40.0	67.9	117.3	9.2	69.4	118.0	10.3									
42.0	66.6	116.5	8.4	68.1	117.2	10.1									
44.0	65.2	115.5	7.8	66.8	116.3	9.8									
46.0	63.9	114.6	7.2	65.4	115.4	9.3									
48.0	62.5	113.5	6.7	64.1	114.5	8.9									
50.0	61.2	112.5	6.3	62.8	113.5	8.6									
50.3							65.0	114.3	9.4						
55.0	57.6	109.4	5.0	59.3	110.6	7.5	61.8	111.9	9.2						
60.0	54.0	106.0	4.0	55.7	107.4	6.2	58.3	109.0	8.8						
65.0	50.1	102.0	3.2	52.0	103.7	5.3	54.7	105.6	7.6						
68.9										55.0	104.1	7.2			
70.0	46.1	97.5	2.6	48.0	99.4	4.3	50.9	101.7	6.7	54.2	103.4	7.2			
75.0				43.8	94.5	3.4	46.9	97.3	5.7	50.4	99.4	6.5			
80.0				39.2	88.7	2.6	42.6	92.2	4.7	46.3	94.9	5.6			
85.0							37.9	86.1	3.8	41.9	89.7	4.6			
90.0				-			32.6	78.9	3.1	37.2	83.5	3.7			
95.0							26.4	69.9	2.4	31.8	76.1	3.0			
97.0							24.4	66.9	2.1	05.4		0.0			
100.0										25.4	66.8	2.3			
101.0										24.9	65.9	2.1			



Nº de ident.: 9842523/95738/

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

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

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				26.0 ו	m Pluma	principa	al, Punto Jumín (2:	de carga	1 - Cab	eza de p	lumín				
					Cab	52.0 [m	n] Posici	ón midfa	II (2316)	umm					
24.6	78.0	125.3	10.9												
26.0	77.2	125.0	10.9												
28.0	76.0	124.5	10.7												
30.0	74.8	123.9	10.4												
32.0	73.5	123.4	10.2												
34.0	72.3	122.7	9.8												
35.2				73.0	122.8	10.0									
36.0	71.1	122.1	9.5	72.5	122.6	9.9									
38.0	69.8	121.3	9.3	71.3	121.9	9.8									
40.0	68.6	120.6	8.9	70.0	121.2	9.6									
42.0	67.3	119.7	8.2	68.8	120.4	9.4									
44.0	66.0	118.8	7.6	67.5	119.6	9.2									
46.0	64.7	117.9	7.0	66.2	118.7	8.8									
48.0	63.4	116.9	6.5	65.0	117.8	8.5									
50.0	62.1	115.9	6.1	63.7	116.8	8.2									
51.6							65.0	117.0	8.7						
55.0	58.8	113.0	4.9	60.3	114.1	7.4	62.8	115.3	8.6						
60.0	55.3	109.7	3.9	56.9	111.0	6.2	59.4	112.5	8.2						
65.0	51.6	105.9	3.1	53.3	107.5	5.2	55.9	109.3	7.5						
70.0	47.8	101.6	2.4	49.6	103.4	4.3	52.3	105.6	6.7						
70.6										55.0	106.6	6.7			
75.0				45.6	98.8	3.4	48.5	101.4	5.9	51.8	103.3	6.5			
80.0				41.3	93.4	2.6	44.4	96.5	4.8	48.0	99.0	5.5			
85.0							40.1	91.0	3.8	43.9	94.1	4.7			
90.0							35.3	84.4	3.1	39.4	88.4	3.9			
95.0							30.5	77.4	2.4	34.6	81.6	3.2			
98.0							26.0	70.6	2.1						
100.0										28.9	73.4	2.5			



N° de ident.: 9842523/95738/ Pi

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

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]
				26.0		eża de pl	ıl, Punto umín (23 ı] Posici	316-1) ĬC	1.5 m P	eza de p lumín	lumín				
25.2	78.0	128.2	10.1												
26.0	77.6	128.1	10.1												
28.0	76.4	127.6	10.0												
30.0	75.2	127.1	9.7												
32.0	74.0	126.5	9.5												
34.0	72.9	125.9	9.2												
36.0	71.7	125.2	8.9	70.0	405.7										
36.1 38.0	70.5	124.5	8.7	73.0 71.8	125.7 125.1	9.2 9.1							ł		
38.0 40.0	69.2	124.5	8.7	70.6	125.1	9.1									
42.0	68.0	123.0	7.9	69.4	123.6	8.7									
42.0 44.0	66.8	123.0	7.9	69.4 68.2	123.6	8.6									
44.0 46.0	65.6	121.2	6.7	67.0	122.9	8.3									
48.0	64.3	120.3	6.2	65.7	121.1	8.0							i		
50.0	63.0	119.3	5.7	64.5	120.2	7.6									
52.8	03.0	110.0	5.1	04.0	120.2	7.0	65.0	119.7	7.9						
55.0	59.8	116.5	4.7	61.3	117.6	7.0	63.6	118.7	7.9						
60.0	56.4	113.3	3.6	58.0	114.6	5.8	60.4	116.0	7.6				i		
65.0	52.9	109.7	2.8	54.6	111.2	4.8	57.1	112.9	7.1						
70.0	49.3	105.6	2.1	51.0	107.3	4.0	53.6	109.4	6.2						
72.4										55.0	109.1	6.0			
75.0				47.6	103.4	3.1	50.0	105.4	5.5	53.1	107.1	6.0			
80.0				43.6	98.5	2.3	46.2	100.8	4.5	49.5	103.0	5.3			
85.0							42.1	95.6	3.5	45.6	98.4	4.5			
90.0							37.6	89.5	2.8	41.5	93.1	3.6			
95.0							32.6	82.3	2.2	37.0	86.8	2.8			
96.0							31.6	80.6	2.1						
100.0				<u> </u>						31.9	79.4	2.2			



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

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

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

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				26.0 ו		ża de pl	ıl, Punto umín (23 ı] Posici	316-1) ĬC	4.5 m P	eza de p lumín	lumín				
25.9	78.0	131.2	9.4												
26.0	77.9	131.1	9.4												
28.0	76.8	130.7	9.3												
30.0	75.7	130.2	9.1												
32.0	74.5	129.6	8.9												
34.0	73.4	129.0	8.7												
36.0	72.2	128.4	8.4												
36.9				73.0	128.6	8.5									
38.0	71.0	127.7	8.2	72.4	128.2	8.5									
40.0	69.9	127.0	8.0	71.2	127.6	8.4									
42.0	68.7	126.2	7.7	70.1	126.8	8.2									
44.0	67.5	125.4	7.1	68.9	126.1	8.0									
46.0	66.3	124.5	6.5	67.7	125.3	7.9									
48.0	65.1	123.6	6.0	66.5	124.4	7.6									
50.0	63.9	122.6	5.6	65.3	123.5	7.3									
54.1							65.0	122.4	7.3						
55.0	60.7	120.0	4.6	62.2	121.0	6.7	64.4	122.0	7.3						
60.0	57.5	116.9	3.6	59.0	118.1	5.8	61.3	119.4	7.1				•		
65.0	54.2	113.5	2.7	55.8	114.9	4.8	58.1	116.4	6.8						
69.0	51.4	110.4	2.1												
70.0				52.3	111.2	4.0	54.8	113.1	6.0						
74.1										55.0	111.5	5.5			
75.0				48.8	107.0	3.2	51.4	109.3	5.3	54.4	110.8	5.5			
80.0				45.0	102.3	2.4	47.7	104.9	4.5	50.9	107.0	5.2			
82.0				43.4	100.2	2.1									
85.0							43.9	100.0	3.6	47.2	102.6	4.5			
90.0							39.7	94.3	2.8	43.3	97.5	3.7			
95.0							35.7	88.5	2.1	39.1	91.7	2.9			
100.0										34.5	85.0	2.3			



Nº de ident.: 9842523/95738/

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

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

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa		45° Án	gulo de orincipa	pluma I
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				26.0 ו		eża de pl	ıl, Punto umín (23 ı] Posici	316-1) ĬC	7.5 m P	eza de p lumín	lumín				
26.5	78.0	134.1	8.4												
28.0	77.2	133.8	8.4												
30.0	76.1	133.3	8.2												
32.0	75.0	132.7	8.0												
34.0	73.8	132.2	7.8												
36.0	72.7	131.5	7.6												
37.8				73.0	131.4	7.6									
38.0	71.6	130.9	7.4	72.9	131.4	7.6									
40.0	70.5	130.2	7.2	71.8	130.7	7.5									
42.0	69.3	129.4	7.1	70.6	130.0	7.4									
44.0	68.2	128.6	6.6	69.5	129.3	7.2									
46.0	67.0	127.8	6.1	68.3	128.5	7.0									
48.0	65.8	126.9	5.6	67.2	127.7	6.8									
50.0	64.7	126.0	5.1	66.0	126.8	6.6									
55.0	61.6	123.4	4.3	63.0	124.4	6.0									
55.4							65.0	125.2	6.4						
60.0	58.5	120.5	3.3	60.0	121.6	5.4	62.2	122.8	6.3						
65.0	55.3	117.2	2.4	56.8	118.5	4.4	59.1	120.0	6.0						
70.0				53.6	115.0	3.6	56.0	116.7	5.4						
75.0				50.2	111.0	2.9	52.7	113.1	4.7		4440	4.0			
75.8				40.0	400.0	0.4	40.0	400.0		55.0	114.0	4.8			
80.0				46.9	106.9	2.1	49.2	109.0	4.1	52.2	110.8	4.7			
85.0							45.5	104.3	3.3	48.7	106.6	4.1			
90.0							41.6	99.0	2.5	45.0	101.9	3.5			
95.0										41.1	96.4	2.8			
100.0										36.8	90.2	2.1			



 N° 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

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				26.0 ו		eża de pl	ıl, Punto umín (23 ı] Posicio	316-1) 11	0.5 m P	eza de p lumín	lumín		-		
27.1	78.0	137.0	7.6												
28.0	77.5	136.8	7.6												
30.0	76.5	136.4	7.5												
32.0	75.4	135.8	7.3												
34.0	74.3	135.3	7.1												
36.0	73.2	134.7	6.9												
38.0	72.1	134.1	6.7												
38.7				73.0	134.3	6.8									
40.0	71.0	133.4	6.5	72.3	133.9	6.8									
42.0	69.9	132.6	6.4	71.2	133.2	6.6									
44.0	68.8	131.9	6.2	70.1	132.5	6.5									
46.0	67.7	131.1	5.7	69.0	131.7	6.3									
48.0	66.5	130.2	5.2	67.8	130.9	6.2									
50.0	65.4	129.3	4.8	66.7	130.1	6.0									
55.0	62.5	126.8	4.0	63.8	127.7	5.6									
56.6							65.0	127.9	5.7						
60.0	59.5	124.0	3.1	60.9	125.1	5.1	63.0	126.2	5.6						
65.0	56.4	120.8	2.3	57.9	122.1	4.2	60.1	123.5	5.3						
66.0	55.8	120.1	2.1												
70.0				54.7	118.7	3.4	57.0	120.4	4.9						
75.0				51.5	114.9	2.8	53.8	116.9	4.3						
77.5										55.0	116.4	4.2			
80.0				48.4	111.0	2.1	50.5	112.9	3.9	53.4	114.6	4.2			
85.0							47.1	108.5	3.2	50.1	110.6	3.9			
90.0							43.4	103.4	2.5	46.6	106.1	3.5			
95.0										42.8	101.0	2.9			
100.0										38.8	95.1	2.3			
101.0										38.5	94.5	2.1			



N° de ident.: 9842523/95738/ Pieza de

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

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

		gulo de 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]
				29.0 r		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 3	8.5 m Pl	eza de p umín	lumín				
12.2 13.0	78.0 76.7	69.6 69.4	64.9 64.3												
14.0 16.0 18.0	75.2 72.1 68.9	69.1 68.5 67.8	60.1 51.9 44.8	73.0	68.4	54.2									
20.0	65.7 62.3	66.9 65.9	37.6 32.3	69.8 66.6	67.7 66.9	50.2 45.0									
24.0 26.0	58.9 55.3	64.7 63.4	28.6 25.6	63.3 59.9	65.9 64.8	39.9 35.8									
27.0 28.0	51.6	61.9	23.2	56.4	63.5	31.8	65.0 63.4	65.5 65.0	39.0 38.5						
30.0 32.0	47.6 43.4	60.1 58.1	21.4 19.9	52.7 48.8	62.1 60.4	28.7 26.3	60.0 56.4	63.9 62.6	36.1 33.9						
34.0 36.0 37.5	38.8 33.6	55.7 52.9	18.5 17.4	44.6 40.1	58.4 56.2	24.0 22.0	52.7 48.9	61.2 59.5	31.8 30.1	55.0	60.2	26.2			
38.0 40.0 41.0	27.6 20.0 16.7	49.4 44.7 42.6	16.4 15.4 14.1	35.2 29.5	53.5 50.2	20.4	44.7 40.2	57.6 55.3	28.3 26.8	54.3 50.5	59.9 58.3	27.3 25.8			
42.0 43.0 44.0				22.5 18.0	46.0 43.1	17.6 16.9	29.6	52.7 49.4	25.5	46.4	56.5 54.4	23.4			
46.0 47.0 48.0							22.6 18.2	45.2 42.4	21.2 20.2	37.4 32.0	51.9 48.9	22.5			
50.0 52.0 55.0										25.7 17.2	45.1 39.8	20.6 19.5	35.0	44.4	15.2
60.0													18.6	34.5	14.9



2821-1

2821-1

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

	88° Án	gulo de principa	pluma I		gulo de orincipa		75° Án	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]
				29.0	m Pluma Cab	eza de p	al, Punto olumín (2 n] Posici	316-1) 4°	1.5 m Pl		lumín				
12.8	78.0	72.5	59.0												
13.0	77.7	72.5	59.0												
14.0	76.3	72.2	57.9												
16.0	73.4	71.7	51.4												
18.0	70.5	71.0	43.4												
18.9				73.0	71.3	49.8									
20.0	67.5	70.2	37.3	71.4	70.9	48.9									
22.0	64.5	69.3	31.8	68.4	70.2	44.0									
24.0	61.4	68.2	27.9	65.4	69.3	39.5									
26.0	58.2	67.0	25.2	62.3	68.3	36.0	-								
28.0	54.8	65.7	22.9	59.1	67.1	32.4				ł					
28.2	54.0		24.0		05.0	00.0	65.0	68.2 67.4	30.1						
30.0 32.0	51.3 47.6	64.1 62.4	21.0 19.5	55.8 52.3	65.8 64.3	29.0 26.3	62.4 59.2	66.2	35.4 33.1	l					
32.0 34.0	47.6	60.4	19.5	52.3 48.7	64.3 62.6	26.3	59.2 55.9	64.9	33.1						
36.0	39.5	58.0	17.0	44.9	60.7	22.1	52.4	63.4	29.3						
38.0	34.9	55.3	16.0	40.8	58.5	20.3	48.8	61.7	29.3						
39.2	34.9	33.3	10.0	40.6	36.3	20.3	40.0	01.7	21.0	55.0	62.6	24.4	i		
40.0	29.6	52.1	15.1	36.3	55.9	18.9	45.0	59.8	26.2	53.8	62.1	25.3			
42.0	23.2	47.9	14.3	31.2	52.8	17.6	40.9	57.6	24.8	50.3	60.5	24.0			
44.0	16.0	43.0	12.7	25.2	48.9	16.4	36.4	55.0	23.6	46.6	58.7	22.8			
46.0				17.3	43.6	15.2	31.3	52.0	21.9	42.6	56.6	21.8			
48.0					. 5.0		25.3	48.1	20.1	38.2	54.2	20.9			
50.0				i			17.5	42.8	18.3	33.4	51.4	20.1			
55.0										16.6	40.3	17.6			
57.4													35.0	46.1	14.2
60.0													28.7	42.2	14.6
	1	I	1			I		I	1		I	I			



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	gulo de orincipa	pluma I
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				29.0	m Pluma Cab	eza de p	al, Punto olumín (2: n] Posici	316-1) 4	4.5 m Pl		lumín				
13.4	78.0	75.5	54.3				Ĺ								
14.0	77.2	75.3	54.3	i			İ		İ				İ		
16.0	74.6	74.8	49.9												
18.0	71.9	74.2	43.2	1											
19.7				73.0	74.2	46.4									
20.0	69.1	73.4	37.5	72.7	74.1	46.4									
22.0	66.3	72.6	31.9	69.9	73.4	43.2									
24.0	63.5	71.6	27.5	67.1	72.6	39.4									
26.0	60.5	70.5	24.6	64.3	71.6	35.7									
28.0	57.5	69.3	22.5	61.4	70.6	33.2									
29.5							65.0	71.0	30.1						
30.0	54.4	67.9	20.8	58.4	69.4	29.7	64.4	70.7	34.4						
32.0	51.1	66.4	19.4	55.3	68.0	26.7	61.5	69.7	32.7				<u> </u>		
34.0	47.7	64.6	18.1	52.1	66.5	24.4	58.5	68.5	30.8						
36.0	44.1	62.6	16.9	48.7	64.8	22.5	55.4	67.2	28.9						
38.0	40.2	60.3	15.8	45.1	62.9	20.7	52.1	65.7	27.3						
40.0	35.9	57.7	14.8	41.3	60.7	19.0	48.8	64.0	26.0						
40.9										55.0	65.1	22.9			
42.0	31.2	54.6	14.1	37.2	58.2	17.7	45.2	62.1	24.5	53.5	64.4	23.7			
44.0	25.6	50.8	13.3	32.6	55.3	16.5	41.4	59.9	23.2	50.2	62.8	22.5			
46.0	18.5	45.7	12.6	27.3	51.7	15.5	37.3	57.4	22.1	46.7	60.9	21.5			
47.0	15.5	43.4	11.4												
48.0				20.8	47.1	14.4	32.7	54.4	20.8	43.0	58.9	20.5			
49.0				16.7	44.0	13.8	07.4		40.0		50.5	40.0			
50.0							27.4	50.9	19.2	39.0	56.5	19.6			-
53.0							16.9	43.3	16.8	00.0	40.0	47.5			
55.0										26.9	48.6	17.5			
58.0										16.0	40.7	16.1	25.0	47.8	13.4
59.9 60.0													35.0 34.7	47.8 47.7	13.4
65.0													21.3	38.4	13.4
0.00	1	I	I	I		ı	I	I			l	ı	∠1.3	J 36.4	J 13.0



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

		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]
				29.0 ו		eza de p	II, Punto Ilumín (2: Il Posicio	316-1) 4	7.5 m Pl		lumín				
14.0	78.0	78.4	49.6			23.0 [11	l ji osici	Jii iiiidia	11 (2310)			1	1		
16.0	76.0 75.6	76.4 77.9	49.6 47.6							ł			ł		
18.0	73.1	77.3	42.9												
20.0	70.5	76.7	36.4							İ			İ		
20.6				73.0	77.0	42.8				İ					
22.0	67.9	75.9	31.7	71.3	76.6	41.9									
24.0	65.3	75.0	27.5	68.7	75.8	38.1									
26.0	62.6	74.0	24.4	66.0	75.0	35.1				•			•		
28.0	59.8	72.8	22.2	63.4	74.0	32.4									
30.0	57.0	71.6	20.4	60.6	72.9	30.1									
30.8							65.0	73.7	32.3						
32.0	54.0	70.2	18.9	57.8	71.7	27.0	63.4	73.1	32.1						
34.0 36.0	50.9 47.7	68.6 66.8	17.7 16.5	54.9 51.8	70.3 68.8	24.4 22.3	60.7 57.8	72.0 70.8	30.0 28.4	ł			ł		
38.0	44.3	64.9	15.4	48.7	67.1	20.6	54.9	69.4	26.7				i		
40.0	40.7	62.6	14.5	45.3	65.2	19.0	51.9	67.9	25.4						
42.0	36.8	60.1	13.6	41.8	63.0	17.6	48.7	66.2	24.2						
42.6	00.0	00.1	10.0	41.0	00.0	17.0	40.7	00.2	24.2	55.0	67.5	21.4	i		
44.0	32.5	57.1	12.9	38.0	60.6	16.3	45.4	64.3	22.8	53.1	66.6	22.0	i		
46.0	27.6	53.6	12.3	33.8	57.7	15.3	41.9	62.2	21.5	50.0	65.0	21.0			
48.0	21.6	49.0	11.6	29.1	54.4	14.4	38.1	59.7	20.4	46.8	63.2	20.1			
49.0	17.9	46.2	11.2												
50.0				23.5	50.2	13.4	33.9	56.9	19.3	43.3	61.1	19.2			
52.0				16.1	44.4	12.4									
55.0							20.3	46.8	15.9	33.5	54.7	17.3			
56.0							16.3	43.7	15.2	40.0	l	45.0			
60.0										19.6	44.4	15.0			
61.0 62.3										15.4	41.1	14.5	35.0	49.6	12.4
65.0													29.4	45.6	12.4
69.0													16.7	35.9	11.6



2821-1

2821-1

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

		gulo de 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]
				29.0						eza de p	lumín				
					Cab		lumín (2: 1] Posici			umin					
14.7	78.0	81.3	45.9												
16.0	76.5	81.0	45.6												
18.0	74.1	80.5	42.2												
20.0	71.7	79.8	36.3												
21.5				73.0	79.9	40.0									
22.0	69.3	79.1	31.5	72.4	79.8	40.0									
24.0	66.8	78.3	27.6	70.0	79.0	37.4									
26.0	64.3	77.3	24.5	67.6	78.2	34.7									
28.0	61.8	76.3	22.1	65.1	77.3	32.0									
30.0	59.2	75.1	20.3	62.5	76.3	30.0									
32.0	56.5	73.8	18.7	59.9	75.2	27.6									
32.1							65.0	76.4	30.7						
34.0	53.7	72.4	17.4	57.2	74.0	24.9	62.6	75.4	29.8						
36.0	50.8	70.8	16.3	54.5	72.6	22.6	60.0	74.3	28.0						
38.0	47.7	69.1	15.3	51.6	71.0	20.8	57.3	73.1	26.5						
40.0	44.6	67.1	14.3	48.6	69.3	19.2	54.5	71.7	25.0						
42.0	41.2	64.9	13.5 12.7	45.5	67.4	17.8	51.7	70.1	23.9 22.8						
44.0 44.4	37.6	62.4	12.7	42.2	65.3	16.5	48.7	68.4	22.8	55.0	70.0	20.1			
46.0	33.6	59.6	12.0	38.6	62.9	15.3	45.6	66.5	21.4	52.9	68.9	20.1			
48.0	29.2	56.2	11.4	34.8	60.1	14.3	42.3	64.4	20.2	49.9	67.2	19.8			
50.0	24.0	52.1	10.8	30.5	56.9	13.5	38.7	62.0	19.1	46.9	65.4	19.0			
52.0	17.4	46.6	10.8	30.3	30.8	13.3	30.7	02.0	19.1	40.5	03.4	19.0			
55.0			10.2	15.6	44.8	11.4	28.3	54.3	16.3	38.4	59.9	17.1			
59.0							15.8	44.1	13.8		00.0				
60.0										27.8	52.0	15.1			
64.0										16.4	42.7	13.2			
64.8										,			35.0	51.3	11.5
65.0													35.0	51.3	12.4
70.0													23.1	42.1	11.2
72.0													16.1	36.3	10.7



N° de ident.: 9842523/95738/ Piez

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

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

		gulo de principal		ŗ	gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				29.0 r		eza de p	ıl, Punto llumín (2 ı] Posici	316-1) 5	3.5 m Pl	eza de p umín	lumín				
15.3 16.0 18.0 20.0 22.0	78.0 77.2 75.0 72.8 70.5	84.3 84.1 83.6 83.0 82.3	41.7 41.7 39.6 35.8 30.5												
22.4 24.0 26.0 28.0 30.0	68.2 65.9 63.5 61.1	81.5 80.7 79.7 78.6	27.0 24.0 21.7 19.9	73.0 71.2 68.9 66.6 64.2	82.8 82.2 81.5 80.6 79.7	36.6 35.9 33.3 31.2 29.1									
32.0 33.3 34.0 36.0 38.0	58.6 56.0 53.4 50.6	77.4 76.1 74.7 73.1	18.4 17.0 15.8 14.9	61.8 59.3 56.8 54.1	78.7 77.5 76.2 74.8	27.6 25.1 22.7 20.6	65.0 64.2 61.8 59.4	79.1 78.8 77.8 76.6	28.3 28.7 27.5 26.0						
40.0 42.0 44.0 46.0 46.1	47.8 44.8 41.6 38.2	71.3 69.4 67.2 64.7	13.9 13.1 12.3 11.6	51.4 48.6 45.7 42.5	73.3 71.6 69.7 67.5	19.0 17.6 16.3 15.1	56.8 54.2 51.5 48.7	75.3 73.9 72.4 70.7	24.6 23.2 22.1 21.1	55.0	72.5	18.8			
48.0 50.0 55.0 58.0 60.0	34.6 30.5 16.8	62.0 58.8 47.0	11.0 10.4 9.1	39.2 35.7 24.8 15.1	65.2 62.5 53.7 45.2	14.0 13.1 11.2 10.1	45.7 42.6 33.8 22.2	68.8 66.7 60.2 50.6	19.8 18.7 16.3	52.6 49.8 42.3 33.5	71.1 69.5 64.6 58.0	19.3 18.4 16.6			
62.0 65.0 67.0 67.2 70.0							15.3	44.5	12.5	21.6 15.9	48.2 43.1	12.9 11.8	35.0 29.9 15.7	53.0 49.0 36.7	10.8 10.9 9.5



N° de ident.: 9842523/95738/ Pie

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

Valor de vuelco: Lastre trasero [t]:

Lastre central [t]:

2 - Vía ancha 124.0 52.6

		gulo de principa			gulo de orincipa			gulo de principa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				29.0 ו	m Pluma Cab	eza de p	al, Punto dumín (2 n] Posici	316-1) 5	6.5 m Pl	eza de p umín	lumín				
15.9	78.0	87.2	38.4												
16.0	77.9	87.2	38.4												
18.0	75.8	86.7	37.5												
20.0	73.7	86.1	35.9												
22.0	71.6	85.5	30.4												
23.3				73.0	85.6	34.0									
24.0	69.4	84.8	26.5	72.2	85.4	34.0									
26.0	67.2	83.9	23.8	70.1	84.7	32.5									
28.0	65.0	83.0	21.6	67.9	83.9	30.7									
30.0	62.7	82.0	19.8	65.7	83.0	28.7									
32.0	60.4	80.9	18.3	63.4	82.1	27.1									
34.0	58.1	79.7	17.0	61.1	81.0	25.8	25.0	04.0	07.0						
34.6	55.0	70.4	45.7	50.7	79.8	00.0	65.0	81.8 81.2	27.3 27.2						
36.0	55.6	78.4	15.7	58.7		23.2	63.5								
38.0	53.1 50.5	76.9	14.7	56.3 53.8	78.5 77.1	21.0 19.2	61.2 58.8	80.1 78.9	25.6 24.3						
40.0 42.0	47.8	75.3 73.5	13.9 13.0	53.8 51.3	77.1 75.5	19.2	58.8 56.4	78.9 77.6	24.3						
42.0 44.0	47.6	73.5	12.2	48.6	73.8	16.4	53.9	76.2	21.8						
46.0	42.0	69.4	11.5	45.8	71.9	15.2	51.3	74.6	20.9						
47.8	42.0	05.4	11.5	45.0	11.5	13.2	31.3	74.0	20.9	55.0	74.9	17.8			
48.0	38.8	67.1	10.8	42.9	69.8	14.1	48.6	72.9	19.9	54.9	74.9	18.6			
50.0	35.4	64.4	10.3	39.8	67.5	13.1	45.9	71.0	18.7	52.4	73.4	18.2			
55.0	25.2	55.6	9.1	30.9	60.3	11.2	38.2	65.4	16.2	45.6	68.9	16.3	i		
58.0	16.4	47.5	8.3										i		
60.0				18.4	49.1	9.5	28.9	57.7	14.0	37.9	63.2	14.8			
61.0				16.0	46.8	8.4		-							
65.0							16.2	46.1	11.0	28.5	55.4	13.1			
69.7													35.0	54.7	10.1
70.0										15.5	43.5	10.7	34.9	54.6	10.7
75.0													24.4	45.7	9.5
78.0													15.2	37.1	8.8



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

		gulo de orincipa			gulo de orincipa			gulo de principa			gulo de orincipa		45° Án I	gulo de principa	pluma I
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				29.0 i	m Pluma Cab	eza de p	al, Punto dumín (2 n] Posici	316-1) 5	9.5 m Pl		lumín				
16.5 18.0 20.0 22.0 24.0 24.1	78.0 76.6 74.6 72.6 70.5	90.1 89.8 89.3 88.7 88.0	35.1 34.9 33.4 30.2 26.2	73.0 71.1	88.5 87.9	31.4 31.0									
26.0 28.0 30.0 32.0 34.0	68.5 66.4 64.2 62.1 59.8	87.2 86.3 85.4 84.4 83.2	23.5 21.3 19.4 18.0	69.1 67.0 64.8 62.7	87.9 87.1 86.3 85.4 84.4	29.5 28.1 26.4 25.0									
35.9 36.0 38.0 40.0	57.6 55.3 52.9	82.0 80.6 79.2	15.5 14.4 13.5	60.5 58.2 55.9	83.3 82.1 80.8	23.6 21.3 19.4	65.0 64.9 62.7 60.5	84.6 84.5 83.5 82.4	25.7 25.7 25.2 23.8						
42.0 44.0 46.0 48.0 49.5	50.4 47.8 45.1 42.3	77.5 75.8 73.8 71.7	12.7 11.9 11.2 10.5	53.6 51.1 48.6 45.9	79.3 77.7 76.0 74.1	17.8 16.4 15.3 14.2	58.3 56.0 53.6 51.2	81.2 79.9 78.4 76.9	22.7 21.5 20.4 19.5	55.0	77.4	16.6			
50.0 55.0 60.0 61.0 64.0	39.3 30.8 19.2 15.9	69.4 62.1 51.1 47.9	9.9 8.7 7.7 7.4	43.1 35.5 25.8	72.1 65.8 57.2	13.2 11.1 9.5	48.6 41.8 34.4	75.1 70.1 64.0	18.6 16.0 14.1	54.6 48.4 41.5	77.1 73.1 68.0	17.4 15.9 14.4			
65.0 68.0 70.0 72.2 73.0							23.6 15.8	54.2 46.5	11.8 10.0	33.5 23.1 15.0	61.3 51.8 43.9	13.1 11.2 9.6	35.0	56.5	9.4
75.0 80.0 81.0													30.3 18.3 16.0	52.3 40.9 38.7	9.1 8.0 7.6



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 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]
				29.0 ו		eza de p	al, Punto dumín (2 n] Posici	316-1) 6	2.5 m Pl		lumín				
17.2	78.0	93.1	32.5												
18.0	77.2	92.9	32.5												
20.0	75.3	92.4	31.4							•					
22.0	73.4	91.8	30.0												
24.0	71.5	91.2	26.0												
25.0				73.0	91.4	29.2									
26.0	69.5	90.4	23.2	72.0	91.1	29.2									
28.0	67.6	89.6	21.1	70.1	90.4	28.5									
30.0	65.6	88.7	19.3	68.1	89.6	27.4									
32.0	63.5	87.8	17.8	66.1	88.7	26.0									
34.0 36.0	61.4 59.3	86.7 85.5	16.6 15.4	64.1 62.0	87.8 86.7	24.5 23.4									
37.1	59.5	00.0	15.4	02.0	00.7	23.4	65.0	87.3	23.9	i					
38.0	57.2	84.3	14.3	59.9	85.6	21.8	64.2	86.9	24.4	i					
40.0	54.9	82.9	13.3	57.8	84.4	19.8	62.1	85.8	23.7						
42.0	52.6	81.4	12.4	55.6	83.0	18.1	60.0	84.7	22.3						
44.0	50.3	79.8	11.7	53.3	81.6	16.6	57.8	83.5	21.3						
46.0	47.8	78.0	11.0	51.0	80.0	15.4	55.6	82.1	20.2	i			i		
48.0	45.3	76.1	10.4	48.5	78.3	14.3	53.4	80.7	19.2						
50.0	42.6	74.0	9.8	46.0	76.4	13.3	51.0	79.1	18.5						
51.2										55.0	79.8	15.7			
55.0	35.2	67.7	8.5	39.2	70.8	11.1	44.8	74.5	16.1	50.8	77.0	15.7			
60.0	26.1	59.1	7.5	31.1	63.6	9.6	37.8	68.7	13.9	44.5	72.4	14.2			
64.0	15.5	48.3	6.7												
65.0				20.4	53.0	8.1	29.4	61.0	12.0	37.5	66.5	12.9			
67.0				15.2	47.6	6.7									
70.0							17.6	49.2	9.9	29.0	58.8	11.4			
71.0							15.4	46.9	9.1				25.0	50.0	0.7
74.6										17.0	46.7	0.5	35.0	58.2	8.7
75.0 80.0										17.0	46.7	9.5	34.8 24.9	58.0 48.6	8.9 7.7
80.0 84.0													24.9 15.6	48.6 39.1	6.9
04.0		I				1		l	l				10.0	J9.1	0.9



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	75° Án	gulo de orincipa	pluma I		gulo de orincipa		45° Án	gulo de orincipa	pluma I
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				29.0 ו	m Pluma Cab	eza de p	il, Punto Ilumín (2 n] Posici	316-1) 6	5.5 m Plı	eza de p umín	lumín				
17.8 18.0 20.0 22.0 24.0	78.0 77.8 76.0 74.2 72.4	96.0 96.0 95.5 94.9 94.3	28.8 28.8 28.1 27.0 24.7												
25.9 26.0 28.0 30.0 32.0	70.5 68.6 66.7 64.8	93.6 92.9 92.0 91.1	22.4 20.7 18.9 17.3	73.0 72.9 71.1 69.2 67.3	94.3 94.2 93.6 92.8 92.0	25.8 25.8 25.6 24.8 24.1									
34.0 36.0 38.0 38.4	62.9 60.9 58.8	90.1 89.0 87.8	16.0 15.0 13.9	65.4 63.4 61.5	91.1 90.1 89.1	23.0 22.1 21.4	65.0	90.0	22.6						
40.0 42.0 44.0 46.0 48.0	56.8 54.6 52.4 50.2 47.8	86.5 85.2 83.6 82.0 80.3	12.9 12.0 11.3 10.7 10.0	59.4 57.4 55.2 53.1 50.8	87.9 86.6 85.3 83.8 82.2	19.8 18.0 16.5 15.2 14.1	63.5 61.5 59.5 57.4 55.3	89.2 88.2 87.0 85.8 84.4	22.6 21.7 20.6 19.8 18.8						
50.0 53.0 55.0 60.0 65.0 67.0	38.8 31.1 21.0 15.2	78.3 72.7 65.4 55.0 48.7	9.4 8.1 7.1 6.2 5.8	48.5 42.3 35.3 26.7	75.5 69.2 60.7	13.1 10.9 9.2 7.9	53.1 47.4 41.1 34.3	78.7 73.5 67.3	16.0 13.7 11.9	55.0 52.9 47.2 40.8	82.3 80.9 76.6 71.3	14.7 15.2 13.7 12.5			
69.0 70.0 73.0 75.0 77.1	13.2	70.7	0.0	17.0	50.4	6.9	24.7 17.2	57.7 49.7	10.0 8.9	33.5 24.3	64.6 55.4	9.6	35.0	59.9	8.0
78.0 80.0 85.0 87.0										16.6	47.1	8.5	30.1 21.0 15.3	55.2 45.8 39.5	7.4 6.4 6.0



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			gulo de principa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				29.0 ו	m Pluma Cab	eza de p	al, Punto dumín (2 n] Posici	316-1) 6	8.5 m Pl	eza de p umín	lumín				
18.4	78.0	98.9	26.1												
20.0	76.6	98.6	25.8												
22.0	74.9 73.2	98.1	24.6												
24.0 26.0	71.4	97.5 96.8	23.4 21.7												
26.8	71.4	90.0	21.7	73.0	97.1	23.3									
28.0	69.6	96.1	20.3	71.9	96.7	23.3									
30.0	67.8	95.3	18.8	70.1	96.0	22.8									
32.0	66.0	94.4	17.2	68.3	95.2	22.3		İ	İ			İ	İ		
34.0	64.1	93.5	15.8	66.5	94.4	21.7									
36.0	62.3	92.4	14.7	64.7	93.5	21.1									
38.0	60.4	91.3	13.7	62.8	92.5	20.6									
39.7							65.0	92.7	21.2						
40.0	58.4	90.1	12.8	60.9	91.4	20.1	64.7	92.6	21.2						
42.0	56.4	88.8	11.9	59.0	90.2	18.3	62.9	91.6	21.0						
44.0	54.4	87.4	11.1	57.0	88.9	16.8	60.9	90.5	20.2						
46.0 48.0	52.3 50.1	85.9 84.3	10.4 9.8	55.0 52.9	87.5 86.1	15.4 14.2	59.0 57.0	89.3 88.0	19.4 18.6						
50.0	47.9	82.5	9.6	50.7	84.5	13.2	55.0	86.7	17.7						
54.7	47.0	02.0	0.2	00.1	04.0	10.2	00.0	00.7	.,,,	55.0	84.7	13.9			
55.0	41.9	77.4	7.9	45.0	79.9	11.1	49.7	82.7	16.1	54.8	84.6	14.6			
60.0	35.1	71.0	6.9	38.7	74.2	9.3	43.9	78.0	13.8	49.5	80.7	13.5			
65.0	26.8	62.5	6.0	31.3	66.9	8.0	37.4	72.0	11.9	43.7	75.8	12.3			
70.0	15.9	50.3	4.6	21.8	56.8	6.8	29.8	64.4	10.2	37.1	69.9	11.2			
72.0				16.6	50.9	6.3									
75.0							19.5	53.2	8.5	29.4	62.1	9.8			
76.0							16.8	50.1	8.1				05.0		7.0
79.5										10.0	50.8	8.1	35.0	61.6	7.3 7.2
80.0 81.0										19.0 16.2	50.8 47.5	7.8	34.3	60.9	1.2
85.0										10.2	41.5	1.0	26.9	53.3	6.2
89.0													18.0	43.4	5.5



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

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

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

		gulo de orincipal		ı	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]
				29.0 ו		eza de p	il, Punto Ilumín (2 i] Posici	316-1) 7	1.5 m Pli	eza de p umín	lumín				
19.0 20.0 22.0 24.0 26.0	78.0 77.2 75.6 73.9 72.2	101.9 101.7 101.2 100.6 100.0	23.8 23.8 22.9 22.1 20.6												
27.6 28.0 30.0 32.0 34.0	70.5 68.8 67.1 65.3	99.3 98.5 97.7 96.8	19.4 18.4 16.8 15.4	73.0 72.7 71.0 69.3 67.6	100.0 99.9 99.2 98.5 97.7	21.5 21.5 21.3 20.8 20.5									
36.0 38.0 40.0 40.9	63.5 61.7 59.9	95.8 94.8 93.6	14.2 13.3 12.4	65.8 64.0 62.2	96.8 95.8 94.8	19.8 19.3 18.8	65.0	95.4	19.1						
42.0 44.0 46.0 48.0 50.0	58.0 56.1 54.1 52.1 50.0	92.4 91.1 89.7 88.1 86.5	11.5 10.7 10.0 9.4 8.9	60.4 58.5 56.6 54.7 52.7	93.7 92.5 91.2 89.8 88.3	18.0 16.5 15.2 14.0 13.0	64.1 62.3 60.4 58.6 56.7	94.9 93.9 92.8 91.6 90.3	19.6 19.4 18.5 17.9 17.1						
55.0 56.4 60.0 65.0 70.0 73.0	38.4 31.3 22.3 15.5	76.1 68.8 58.7 50.7	7.6 6.5 5.7 4.9 4.1	47.4 41.7 35.1 27.3	78.9 72.5 64.1	9.1 7.7 6.6	51.7 46.4 40.5 33.8	86.6 82.2 76.9 70.1	15.2 13.4 11.6 10.1	55.0 51.5 46.1 40.2	87.2 84.6 80.1 74.7	13.0 13.0 11.8 10.7			
75.0 75.0 79.0 80.0 82.0 84.0	15.5	50.7	4.1	16.3	51.3	5.5	25.6 16.4	61.2 50.5	8.5 7.2	33.5 25.2 15.8	67.9 58.9 47.9	9.7 8.2 6.9	35.0	63.3	6.4
85.0 90.0 92.0										10.0	41.8	0.9	31.4 22.4 17.6	59.5 49.5 43.8	5.9 5.0 4.6



N° de ident.: 9842523/95738/ Pie

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

Valor de vuelco: Lastre trasero [t]:

Lastre central [t]:

2 - Vía ancha 124.0

52.6

		gulo de principa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				29.0		eza de p	al, Punto Jumín (2: n] Posici	316-1) 7	4.5 m Pli	eza de p umín	lumín				
19.7 20.0 22.0 24.0 26.0 28.0 28.5	78.0 77.7 76.2 74.6 73.0 71.3	104.8 104.7 104.3 103.7 103.1 102.5	22.3 22.3 21.9 21.0 20.1 18.9	73.0	102.9	20.4									
30.0 32.0 34.0 36.0 38.0 40.0	69.7 68.0 66.4 64.7 63.0 61.2	101.7 101.0 100.1 99.2 98.2 97.1	18.0 16.8 15.4 14.1 13.1 12.3	71.8 70.2 68.5 66.9 65.2 63.5	102.4 101.7 100.9 100.1 99.2 98.2	20.4 20.1 19.7 19.2 18.6 18.1									
42.0 42.2 44.0 46.0 48.0	59.4 57.6 55.8 53.9	95.9 94.7 93.3 91.9	11.4 10.6 9.9 9.3	59.9 58.1 56.3	97.1 96.0 94.8 93.5	17.7 16.7 15.3 14.1	65.0 63.5 61.8 60.0	98.2 97.3 96.2 95.1	18.7 18.7 18.3 17.5						
50.0 55.0 58.1 60.0 65.0 70.0 75.0	51.9 46.8 41.3 35.0 27.5 17.1	90.4 86.0 80.8 74.3 65.9	8.7 7.5 6.4 5.5 4.8	54.4 49.5 44.2 38.3 31.5 23.0	92.1 88.1 83.3 77.5 70.3 60.4	13.0 10.9 9.1 7.6 6.5	58.2 53.5 48.5 43.1 37.1 30.1	93.9 90.4 86.3 81.4 75.4 67.7	16.9 15.0 13.5 11.6 10.0 8.6	55.0 53.3 48.3 42.9 36.9	89.7 88.4 84.2 79.3 73.2	12.3 12.7 11.5 10.5 9.6			
75.0 76.0 78.0 80.0 82.0 84.4	15.2	53.5 51.1	3.6	15.9	51.7	5.5 4.9	21.0 16.1	57.1 50.9	7.1 6.5	29.8	65.5	8.4	35.0	65.1	5.7
85.0 87.0 90.0 95.0										20.6 15.5	54.6 48.3	6.9 6.3	35.0 27.5 17.2	65.1 56.7 44.3	5.6 4.7 3.9



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

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

2 - Vía ancha Valor de vuelco: Lastre trasero [t]: 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]
				29.0 ו		eza de p	ıl, Punto llumín (2 ı] Posici	316-1) 7	7.5 m Pli	eza de p umín	lumín				
20.3 22.0 24.0	78.0 76.7 75.2	107.8 107.4 106.8	20.4 20.2 19.4												
26.0 28.0	73.6 72.1	106.8 106.3 105.6	18.8 17.9												
29.4 30.0 32.0	70.5 68.9	104.9 104.2	17.2 16.6	73.0 72.5 71.0	105.7 105.5 104.9	18.6 18.6 18.4									
34.0 36.0	67.3 65.7	103.4 102.5	15.2 13.9	69.4 67.8	104.1 103.3	18.0 17.7									
38.0 40.0 42.0	64.1 62.4 60.7	101.5 100.5 99.4	12.8 11.9 11.1	66.2 64.6 62.9	102.5 101.5 100.5	17.2 16.7 16.3									
43.5 44.0	59.0	98.2	10.4	61.2	99.4	16.0	65.0 64.6	100.9 100.6	16.8 16.8						
46.0 48.0 50.0	57.3 55.5 53.7	97.0 95.6 94.2	9.6 9.0 8.4	59.5 57.8 56.0	98.3 97.1 95.7	14.9 13.8 12.7	62.9 61.3 59.6	99.6 98.6 97.4	16.8 16.3 15.8						
55.0 59.9 60.0	48.9	90.1 85.3	7.2 6.1	51.4 46.5	92.0 87.6	9.0	55.1 50.5	94.1	14.5	55.0 55.0	92.1 92.1	11.6 12.0			
65.0 70.0	38.1 31.5	79.4 72.1	5.2 4.5	41.1 35.0	82.3 75.8	7.5 6.3	45.5 40.0	85.7 80.2	11.6 9.9	50.3 45.3	88.2 83.6	11.2 10.2			
75.0 78.0 80.0	23.4 16.8	62.3 53.9	3.9 3.5	18.2	67.5 55.5	5.4 4.4	33.8 26.3	73.5 64.7	7.2	39.8	78.1	9.2			
81.0 85.0				15.6	52.1	4.2	15.7	51.4	5.8	25.9	62.4	7.0	25.0	66.0	4.0
86.9 90.0 95.0										15.2	48.7	5.6	35.0 31.5 23.4	66.8 62.9 53.1	4.8 4.4 3.6
98.0													16.8	44.7	3.1



N° de ident.: 9842523/95738/ Pieza de

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

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

	F	gulo de orincipa		ı	gulo de orincipa		ı	gulo de orincipa		1	gulo de orincipa		1	gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				29.0		eza de p	al, Punto dumín (2 n] Posici	316-1) 8	0.5 m Pl	eza de p umín	lumín				
20.9	78.0	110.7	18.8												
22.0	77.2	110.4	18.8												
24.0	75.7	109.9	18.1												
26.0	74.3	109.4	17.5												
28.0	72.8	108.8	16.9												
30.0	71.3	108.1	16.4				l								
30.3				73.0	108.6	17.1									
32.0	69.8 68.2	107.4	16.0	71.7 70.2	108.0	17.1 16.7									
34.0 36.0	66.7	106.6 105.8	15.1 13.8	70.2 68.7	107.3 106.6	16.7									
38.0	65.1	105.6	12.7	67.1	105.7	16.0									
40.0	63.5	104.9	11.7	65.6	103.7	15.6									
42.0	61.9	103.3	10.9	64.0	103.9	15.2	i								
44.0	60.3	101.7	10.2	62.4	102.9	14.9									
44.7							65.0	103.6	14.7						
46.0	58.6	100.5	9.5	60.8	101.8	14.5	64.0	103.0	15.4						
48.0	56.9	99.2	8.8	59.1	100.6	13.5	62.4	102.0	15.2						
50.0	55.2	97.9	8.2	57.4	99.3	12.5	60.8	100.9	14.9						
55.0	50.7	94.0	7.0	53.1	95.8	10.5	56.6	97.8	14.0						
60.0	46.0	89.5	6.0	48.5	91.7	9.0	52.2	94.2	12.9			11.5			
61.6	40.7		- 4	40.5		7.5	47.5		44.7	55.0	94.6	11.0			
65.0	40.7 34.9	84.2 77.6	5.1 4.3	43.5 38.0	86.8 80.9	7.5 6.3	47.5 42.5	89.9 84.8	11.7 10.0	52.1 47.4	92.1 87.8	11.0 10.0			
70.0 75.0	28.0	69.3	3.7	31.7	73.6	5.3	42.5 36.9	78.7	8.6	47.4	82.7	9.1			
80.0	18.8	57.5	3.1	24.0	64.0	4.4	30.4	71.1	7.3	36.6	76.5	8.3			
81.0	16.4	54.3	3.0	20	01.0				7.0	00.0		0.0			
84.0				15.3	52.5	3.7	l								
85.0							22.2	60.8	6.1	30.1	68.8	7.2			ļ i
88.0							15.4	51.8	5.3						
89.4													35.0	68.5	4.3
90.0										21.8	58.4	5.9	34.9	68.4	4.3
93.0										15.8	50.4	4.7			
95.0													28.0	60.1	3.5 2.7
100.0 101.0													18.9 16.5	48.3 45.1	2.7
101.0													10.5	40.1	2.0



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			gulo de principa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				29.0 ו		eza de p	al, Punto Jumín (2 n] Posici	316-1) 8	3.5 m Pli	eza de p umín	lumín				
21.5 22.0 24.0 26.0 28.0	78.0 77.7 76.3 74.8 73.4	113.6 113.5 113.0 112.5 111.9	17.3 17.3 16.9 16.4 16.0												
30.0 31.2 32.0 34.0 36.0	72.0 70.5 69.1 67.6	111.3 110.6 109.8 109.0	15.5 15.1 14.8 13.6	73.0 72.4 70.9 69.5	111.5 111.2 110.5 109.8	15.8 15.8 15.6 15.3									
38.0 40.0 42.0 44.0 46.0	66.1 64.6 63.0 61.5 59.9	108.2 107.2 106.2 105.2 104.0	12.5 11.5 10.7 10.0 9.3	68.0 66.5 65.0 63.5 61.9	109.0 108.1 107.2 106.2 105.2	15.0 14.7 14.4 14.1 13.8	65.0	106.3	14.2						
48.0 50.0 55.0 60.0 63.3	58.3 56.6 52.4 47.9	102.8 101.5 97.9 93.7	8.6 8.0 6.7 5.7	60.3 58.8 54.6 50.3	104.1 102.9 99.5 95.6	13.3 12.4 10.3 8.8	63.5 62.0 58.0 53.8	105.3 104.3 101.4 97.9	14.2 14.0 13.4 12.3	55.0	97.0	10.3			
65.0 70.0 75.0 80.0 84.0	43.1 37.7 31.7 24.2 16.1	88.7 82.7 75.4 65.8 54.7	4.8 4.1 3.5 2.9 2.4	45.6 40.6 34.9 28.3	91.1 85.7 79.1 70.9	7.4 6.1 5.1 4.3	49.4 44.7 39.5 33.7	93.9 89.2 83.6 76.8	11.6 9.9 8.4 7.3	53.7 49.2 44.5 39.3	95.9 91.8 87.1 81.4	10.6 9.6 8.8 8.0			
85.0 87.0 90.0 91.0 91.8				19.7 15.0	59.4 52.9	3.4 3.1	26.9 17.6 15.1	68.1 55.6 52.1	6.1 4.9 4.6	33.2 26.6	74.2 65.8	7.0 6.0	35.0	70.2	3.6
95.0 96.0 100.0 103.0										17.2 15.5	53.1 50.8	4.7 4.1	31.7 24.3 18.6	66.2 56.6 48.8	3.1 2.4 2.0



2821-1

2821-1

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

		gulo de principa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				29.0 i		eza de p	II, Punto Ilumín (2: I Posici	316-1) 8	6.5 m Pli	eza de p umín	lumín				
22.2	78.0	116.6	16.0												
24.0	76.7	116.1	15.9												
26.0	75.4	115.6	15.4												
28.0	74.0	115.1	15.1												
30.0	72.6	114.4	14.7												
32.0	71.2	113.8	14.4	73.0	114.3	14.7									
34.0	69.8	113.1	14.1	71.6	113.7	14.7									
36.0	68.4	112.3	13.6	70.2	113.0	14.4									
38.0	67.0	111.4	12.4	68.8	112.2	14.2									
40.0	65.5	110.5	11.4	67.4	111.4	14.0									
42.0	64.0	109.6	10.6	65.9	110.5	13.6									
44.0	62.5	108.6	9.8	64.5	109.6	13.4									
46.0	61.0	107.5	9.2	63.0	108.6	13.1	05.0	400.0	40.0						
47.3	50.5	400.0	0.5	04.5	407.5	40.0	65.0	109.0	13.2						
48.0	59.5	106.3	8.5	61.5	107.5	12.9	64.5	108.7	13.2						
50.0	58.0	105.1	7.9	60.0	106.4	12.3	63.0	107.7 104.9	13.2 12.7						
55.0 60.0	53.9 49.7	101.7 97.7	6.6 5.6	56.0 51.9	103.2 99.5	10.3 8.7	59.2 55.3	104.9 101.6	12.7 11.9						
65.0	45.2	93.0	4.7	47.6	99.5 95.2	7.4	55.3 51.1	97.8	11.9	55.0	99.5	9.7			
70.0	40.3	87.5	3.9	42.9	90.2	6.1	46.7	93.4	9.9	50.9	95.8	9.7			
75.0	34.8	80.9	3.3	37.7	84.2	5.0	41.9	88.2	8.4	46.5	91.3	8.6			
80.0	28.4	72.7	2.7	31.8	76.9	4.2	36.6	82.0	7.2	41.7	86.1	7.8			
85.0	20.4	12.1	2.1	24.7	67.5	3.4	30.6	74.4	6.1	36.4	79.9	6.8			
90.0				15.6	54.5	2.4	23.2	64.4	5.0	30.0	71.7	5.8			
94.0					00		15.7	53.8	3.7	00.0		0.0			
94.3									U. .				35.0	71.9	2.9
95.0										22.8	62.0	4.9	34.8	71.7	2.9
99.0										15.2	51.2	3.6	20		
100.0											-		28.4	63.5	2.2
101.0													27.0	61.5	2.0



N° de ident.: 9842523/95738/

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

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

		gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				29.0 ו		eza de p	il, Punto lumín (2 n] Posici	316-1) 8	9.5 m Pli	eza de p umín	lumín				
22.8 24.0 26.0 28.0 30.0	78.0 77.2 75.9 74.6 73.2	119.5 119.2 118.7 118.2 117.6	14.0 14.0 13.6 13.3 13.0												
32.0 32.9 34.0 36.0 38.0 40.0	71.9 70.5 69.1 67.8 66.4	117.0 116.3 115.5 114.7 113.8	12.7 12.4 12.2 11.4 10.5	73.0 72.3 70.9 69.5 68.2	117.2 116.9 116.2 115.4 114.6	12.9 12.9 12.7 12.4									
42.0 44.0 46.0 48.0 48.5	64.9 63.5 62.1 60.6	112.9 111.9 110.9 109.7	9.8 9.1 8.6 8.0	66.8 65.3 63.9 62.5	113.8 112.9 111.9 110.9	11.9 11.6 11.3 11.1	65.0	111.7	11.4						
50.0 55.0 60.0 65.0	59.1 55.2 51.2 46.9	108.6 105.3 101.5 97.1	7.4 6.1 5.1 4.3	61.0 57.2 53.3 49.2	109.8 106.7 103.2 99.1	10.9 9.4 8.1 7.0	63.0 64.0 60.3 56.5 52.5	111.7 111.0 108.3 105.2 101.6	11.4 11.4 10.9 10.4 9.7						
66.7 70.0 75.0 80.0 85.0	42.3 37.2 31.5	91.9 85.8 78.3	3.5 2.8 2.3	44.7 39.9 34.6 28.3	94.4 88.8 82.1 73.8	5.8 4.7 3.8 3.1	48.3 43.8 38.9 33.4	97.4 92.5 86.7 79.7	9.0 7.8 6.7 5.8	55.0 52.4 48.2 43.7 38.7	101.9 99.5 95.3 90.3 84.5	9.1 8.9 8.0 7.3 6.4			
90.0 95.0 96.7 97.0 98.0				20.4	62.5	2.4	27.0 18.5 15.4	71.0 58.8 54.2	4.8 3.7 3.1	33.9 27.6	78.4 69.9	5.5 4.6	35.0 34.2	73.7 72.6	2.2
100.0 101.0										18.1 15.9	56.3 52.9	3.6 3.4		-	



N° de ident.: 9842523/95738/ Pi

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

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

		gulo de orincipal			gulo de orincipa			gulo de principa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				29.0 ו		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 9:	2.5 m Pl	eza de p umín	lumín				
23.5	78.0	122.4	12.9												
24.0	77.7	122.3	12.9												
26.0	76.4	121.8	12.7												
28.0	75.1	121.3	12.3												
30.0	73.8	120.7	12.1												
32.0	72.5	120.1	11.7												
33.8				73.0	120.1	11.9									
34.0	71.2	119.4	11.4	72.9	120.0	11.9									
36.0	69.9	118.7	11.2	71.6	119.4	11.8									
38.0	68.5	117.9	10.8	70.2	118.6	11.5									
40.0	67.2	117.1	10.1	68.9	117.9	11.2									
42.0	65.8	116.2	9.4	67.6	117.1	11.0									
44.0	64.4	115.3	8.8	66.2	116.2	10.7									
46.0	63.0	114.3	8.3	64.8	115.3	10.4									
48.0	61.6	113.2	7.8	63.4	114.3	10.2									
49.8							65.0	114.5	10.3						
50.0	60.2	112.1	7.3	62.0	113.2	10.0	64.9	114.4	10.3						
55.0	56.5	108.9	6.0	58.4	110.3	8.9	61.4	111.8	9.9						
60.0	52.7	105.3	4.9	54.7	106.9	7.8	57.7	108.8	9.4						
65.0	48.7	101.1	4.1	50.8	103.1	7.0	54.0	105.3	8.9	55.0	104.4	8.6			
68.5	44.0	00.0	0.0	40.0	00.0	<i>-</i>	50.0	404.4	0.4	55.0					
70.0 75.0	44.3 39.6	96.3 90.7	3.3 2.7	46.6	98.6 93.4	5.7 4.6	50.0 45.8	101.4 96.8	8.4 7.4	53.8 49.8	103.3 99.3	8.6 7.8			
	39.6	90.7 83.9	2.7	42.1 37.2	93.4 87.3	3.7	45.8 41.2	96.8	6.4	49.8 45.6	99.3 94.7	7.8			
80.0 85.0	34.4	63.9	2.1	37.2 31.6	87.3 79.8	3.7	36.2	91.4 85.0	5.6	45.6 41.0	94.7 89.3	6.2			
90.0				25.0	79.6	2.4	30.5	77.3	4.7	36.6	83.6	5.3			
90.0 95.0				25.0	70.4	2.4	23.5	67.3	3.8	31.0	76.1	5.3 4.4			
100.0							23.5 15.2	54.6	2.6	24.2	66.3	3.6			
100.0							10.2	34.0	2.0	17.0	55.5	2.9			



Nº de ident.: 9842523/95738/

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

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

		gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				29.0 ו		eza de p	al, Punto dumín (2 n] Posici	316-1) 9	5.5 m Pli	eza de p umín	lumín				
24.1	78.0	125.4	11.7												
26.0	76.8	124.9	11.7												
28.0	75.6	124.4	11.3												
30.0	74.3	123.9	11.1												
32.0	73.1	123.3	10.8												
34.0	71.8	122.6	10.5												
34.7				73.0	122.9	10.7									
36.0	70.5	121.9	10.3	72.2	122.5	10.7									
38.0	69.2	121.2	10.1	70.9	121.8	10.6									
40.0	67.9	120.4	9.5	69.6	121.1	10.3									
42.0	66.6	119.5	8.9	68.3	120.3	10.1									
44.0	65.3 64.0	118.6 117.6	8.3 7.8	67.0 65.7	119.5 118.6	9.9 9.6									
46.0 48.0	62.6	117.6	7.8	64.3	118.6	9.6									
50.0	61.2	115.5	7.4	63.0	116.6	9.4									
51.1	01.2	110.0	1.0	03.0	110.0	9.2	65.0	117.2	9.4						
55.0	57.7	112.5	5.7	59.5	113.8	8.5	62.3	115.2	9.2						
60.0	54.1	109.1	4.6	56.0	110.6	7.4	58.9	112.3	8.8						
65.0	50.2	105.1	3.8	52.2	106.9	6.6	55.3	109.0	8.4						
70.0	46.2	100.6	3.1	48.3	102.7	5.6	51.5	105.3	8.0						
70.2										55.0	106.9	7.9			
75.0	41.8	95.3	2.4	44.1	97.8	4.5	47.5	100.9	7.3	51.4	103.2	7.6			
80.0				39.5	92.2	3.5	43.3	95.9	6.3	47.4	98.8	6.8			
85.0				34.5	85.4	2.7	38.6	90.0	5.3	43.1	93.8	5.9			
90.0							33.5	83.0	4.5	39.0	88.6	5.0			
95.0							27.4	74.4	3.7	33.9	81.7	4.1			
100.0							19.8	62.7	2.8	28.0	73.3	3.3			
102.0							15.8	56.3	2.4						
105.0										20.6	62.0	2.6			
107.0										16.8	56.0	2.3			



2821-1

2821-1

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

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

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

		gulo de principa			gulo de orincipa			gulo de principa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				29.0		eza de p	ıl, Punto lumín (2 ı l Posici	316-1) 9	8.5 m Pl	eza de p umín	lumín				
04.7	70.0	100.0	40.0	1		J2.0 [11		I	11 (2310)						l
24.7 26.0	78.0 77.2	128.3 128.0	10.8 10.8												
	76.0	128.0	10.8												
28.0 30.0	74.8	127.5	10.5												
32.0	73.6	126.4	10.3												
34.0	72.4	125.8	9.8												
35.6	12.4	123.6	9.0	73.0	125.8	9.8									
36.0	71.1	125.1	9.6	72.7	125.6	9.8									
38.0	69.9	124.4	9.4	71.5	125.7	9.8									
40.0	68.6	123.6	9.1	70.3	124.3	9.6									
42.0	67.4	122.8	8.5	69.0	123.5	9.3									
44.0	66.1	121.9	8.0	67.7	122.7	9.2									
46.0	64.8	121.0	7.5	66.5	121.9	9.0							i		
48.0	63.5	120.0	7.0	65.2	121.0	8.8							i		
50.0	62.2	118.9	6.7	63.9	120.0	8.6									
52.3							65.0	119.9	8.6						
55.0	58.8	116.1	5.5	60.6	117.3	8.2	63.3	118.6	8.6						
60.0	55.3	112.8	4.4	57.2	114.2	7.2	59.9	115.8	8.2				İ		
65.0	51.7	109.0	3.6	53.6	110.7	6.3	56.5	112.7	7.9						
70.0	47.8	104.7	2.9	49.8	106.7	5.5	52.9	109.1	7.6						
71.9										55.0	109.3	7.4			
75.0	43.7	99.8	2.2	45.9	102.1	4.4	49.1	105.0	7.4	52.7	107.0	7.3			
80.0				41.6	96.8	3.4	45.1	100.2	6.2	49.0	102.9	6.6			
85.0				37.0	90.6	2.6	40.8	94.8	5.3	45.4	98.6	5.6			
90.0							36.0	88.4	4.4	41.1	93.3	4.7			
95.0							30.7	80.6	3.6	36.4	87.0	3.8			
100.0							24.3	70.9	2.8	31.1	79.4	3.0			
104.0							18.8	62.1	2.1						
105.0										24.9	69.9	2.3			
107.0	1	1						1		21.9	65.2	2.0			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]
				29.0 ו		eża de pl	ıl, Punto umín (23 ı] Posici	316-1) 10	1.5 m P	eza de p lumín	lumín				
25.3	78.0	131.2	10.0												
26.0	77.6	131.1	10.0												
28.0	76.4	130.6	9.8												
30.0	75.3	130.1	9.6												
32.0 34.0	74.1 72.9	129.5 128.9	9.4 9.1												
34.0 36.0	72.9	128.9	9.1 8.9												
36.4	/ 1./	120.3	6.9	73.0	128.7	9.1									
38.0	70.5	127.6	8.7	73.0	128.2	9.0									
40.0	69.3	126.8	8.6	70.9	127.5	8.9									
42.0	68.1	126.0	8.1	69.7	126.8	8.7									
44.0	66.9	125.2	7.6	68.4	126.0	8.5									
46.0	65.6	124.3	7.1	67.2	125.1	8.3									
48.0	64.4	123.3	6.7	66.0	124.3	8.1									
50.0	63.1	122.3	6.3	64.7	123.3	8.0									
53.6							65.0	122.6	7.8						
55.0	59.9	119.6	5.3	61.5	120.7	7.6	64.1	121.9	7.8						
60.0	56.5	116.4	4.2	58.2	117.8	6.8	60.9	119.3	7.5						
65.0	53.0	112.8	3.3	54.8	114.4	6.0	57.6	116.3	7.3						
70.0	49.4	108.7	2.6	51.3	110.6	5.4	54.2	112.8	7.0						
73.6										55.0	111.8	6.7			
75.0				47.5	106.3	4.3	50.6	108.9	6.8	54.0	110.8	6.7			
80.0				43.5	101.3	3.3	46.8	104.4	6.0	50.4	106.8	6.3			
85.0				39.2	95.5	2.4	42.7	99.3	5.0	47.0	102.8	5.3			
87.0 90.0				37.4	92.9	2.1	20.2	93.4	4.0	43.0	97.8	4.4			
90.0 95.0							38.3 33.5	93.4 86.4	4.2 3.5	43.0 38.7	97.8 91.9	3.5			
100.0							33.5 27.8	77.8	2.7	38.7	91.9 85.0	2.7			
100.0							23.3	70.6	2.7	33.0	03.0	2.1			
105.0							20.0	, 0.0	2.0	28.3	76.6	2.0			



N° de ident.: 9842523/95738/

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

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

		gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				29.0 ı	m Pluma Cabe	eża de pl	ıl, Punto umín (23 ı] Posici	316-1) 10	4.5 m P	eza de p lumín	lumín				
26.0	78.0	134.2	9.3												
28.0	76.8	133.7	9.2												
30.0	75.7	133.2	9.0												
32.0	74.6	132.6	8.8												
34.0	73.4	132.1	8.6												
36.0	72.3	131.4	8.4												
37.3				73.0	131.6	8.4									
38.0	71.1	130.8	8.2	72.6	131.3	8.4									
40.0	69.9	130.0	8.0	71.4	130.7	8.4									
42.0	68.8	129.3	7.8	70.3	130.0	8.2									
44.0	67.6	128.4	7.3	69.1	129.2	8.0									
46.0	66.4	127.6	6.8	67.9	128.4	7.8									
48.0 50.0	65.2 63.9	126.7 125.7	6.4 6.0	66.7 65.5	127.5 126.6	7.6 7.4									
	63.9	125.7	6.0	05.5	126.6	7.4	05.0	125.3	7.2						
54.9 55.0	60.8	123.0	5.2	62.4	124.2	7.1	65.0 64.9	125.3	7.2						
60.0	57.6	123.0	4.1	59.3	124.2	6.5	61.8	123.3	7.2						
65.0	54.3	116.6	3.2	59.3 56.0	121.3	5.7	58.7	119.8	6.8						
70.0	50.8	112.7	2.4	52.6	114.5	5.7	55.4	116.5	6.5						
75.0	30.0	112.7	2.4	49.0	110.3	4.3	51.9	112.8	6.3						
75.3				43.0	110.5	4.0	31.8	112.0	0.5	55.0	114.2	6.1			
80.0				45.2	105.6	3.3	48.3	108.5	5.9	51.8	110.7	6.1			
85.0				41.2	100.2	2.4	44.5	103.7	4.9	48.2	106.7	5.2			
90.0				71.2	100.2	2.7	40.4	98.2	4.1	44.7	100.3	4.2			
95.0							35.9	91.7	3.4	40.7	96.7	3.4			
100.0							30.9	84.0	2.7	36.2	90.3	2.6			
104.0							26.2	76.5	2.1	32.3	84.4	2.0			



N° de ident.: 9842523/95738/

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

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

		gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				29.0	m Pluma Cabe	eza de pl	ıl, Punto umín (23 ı] Posici	316-1) 10	17.5 m P	eza de p lumín	lumín				
26.6	78.0	137.1	8.3												
28.0	77.2	136.8	8.3												
30.0	76.1	136.3	8.1												
32.0	75.0	135.8	7.9												
34.0	73.9	135.2	7.8												
36.0	72.8	134.6	7.5												
38.0	71.7	133.9	7.3												
38.2				73.0	134.4	7.5							<u> </u>		
40.0	70.5	133.2	7.2	72.0	133.8	7.5									
42.0	69.4	132.5	7.0	70.8	133.1	7.3									
44.0	68.2	131.7	6.7	69.7	132.4	7.1									
46.0	67.1	130.8	6.3	68.6	131.6	6.9									
48.0	65.9	130.0	5.9	67.4	130.8	6.8									
50.0	64.7	129.0	5.6	66.2	129.9	6.6									
55.0	61.7	126.5	4.9	63.3	127.5	6.3									
56.1							65.0	128.1	6.3						
60.0	58.6	123.5	3.8	60.2	124.8	5.9	62.7	126.1	6.2						
65.0	55.4	120.2	2.9	57.1	121.7	5.2	59.6	123.3	5.9						
70.0	52.1	116.5	2.2	53.8	118.2	4.7	56.5	120.2	5.7						
75.0				50.4	114.3	4.1	53.2	116.6	5.5						
77.1										55.0	116.7	5.3			
80.0				47.2	110.3	3.1	49.7	112.5	5.3	53.0	114.5	5.3			
85.0				43.4	105.3	2.2	46.1	108.0	4.6	49.6	110.5	4.8			
86.0				42.6	104.2	2.0									
90.0							42.3	102.7	3.8	46.3	106.3	3.9			
95.0							38.1	96.7	3.2	42.5	101.2	3.1			
100.0							33.5	89.7	2.6	38.4	95.3	2.3			
101.0										37.5	94.0	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:

		gulo de principa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				29.0 ו		eża de pl	il, Punto umín (23 i] Posici	316-1) 11	0.5 m P	eza de p lumín	lumín				
27.2	78.0	140.0	7.6												
28.0	77.6	139.9	7.6												
30.0	76.5	139.4	7.4												
32.0	75.4	138.9	7.2												
34.0	74.4	138.3	7.0												
36.0	73.3	137.7	6.8												
38.0	72.2	137.1	6.6												
39.1				73.0	137.3	6.7									
40.0	71.1	136.4	6.5	72.5	137.0	6.7									
42.0	70.0	135.7	6.3	71.4	136.3	6.6									
44.0	68.9	134.9	6.2	70.3	135.6	6.4									
46.0	67.7	134.1	5.8	69.2	134.9	6.3									
48.0	66.6	133.3	5.5	68.1	134.1	6.1									
50.0	65.5	132.3	5.2	66.9	133.2	6.0									
55.0	62.5	129.9	4.5	64.1	130.9	5.6									
57.4							65.0	130.8	5.6						
60.0	59.6	127.1	3.7	61.1	128.3	5.4	63.5	129.5	5.6						
65.0	56.5	123.9	2.7	58.1	125.3	4.8	60.5	126.8	5.3						
69.0	53.9	121.1	2.1												
70.0				55.0	121.9	4.3	57.5	123.8	5.1						
75.0				51.7	118.1	3.9	54.3	120.3	4.8						
78.8										55.0	119.1	4.6			
80.0				48.3	113.9	3.1	51.1	116.5	4.7	54.2	118.3	4.6			
85.0				45.0	109.6	2.1	47.6	112.1	4.2	50.9	114.4	4.5			
90.0							44.0	107.2	3.6	47.8	110.5	3.7			
95.0							40.0	101.5	3.0	44.2	105.6	2.8			
100.0							35.8	95.0	2.5	40.3	100.0	2.0			



N° de ident.: 9842523/95738/ Pie

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

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

		gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				29.0 ו	m Pluma Cab	eza de p	ıl, Punto lumín (19 n] Posici	916-1) 3:	2.5 m Pl	eza de p umín	lumín				
12.0 13.0 14.0 16.0 16.2 18.0 20.0 22.0 24.0 24.4 26.0 28.0 30.0	76.1 74.2 72.4 68.6 64.7 60.7 56.6 52.2 47.5 42.4 36.8	63.5 63.2 62.9 62.1 61.2 60.1 58.9 57.4 55.6 53.6 51.1	44.0 42.1 40.0 36.8 33.7 31.4 28.9 27.0 25.2 23.5 22.0	73.0 69.7 65.9 61.9 57.8 53.5 48.9 43.9	62.7 62.1 61.2 60.2 59.0 57.6 55.9 53.9	39.2 37.0 34.1 31.8 29.6 27.8 26.3 24.7	65.0 62.0 57.9 53.6	60.1 59.3 58.1 56.7	30.1 31.7 30.2 28.5						
32.0 34.0 35.0 36.0 38.0 40.0 42.0 44.0 46.0 50.0 55.0	30.2 21.9 16.2	47.9 43.7 40.6	20.3 18.4 17.4	38.5 32.2 24.6 15.5	51.6 48.6 44.8 40.0	23.4 21.8 19.8 15.1	38.6 32.4 24.8 15.8	55.0 53.1 50.7 47.8 44.0 39.2	27.2 25.5 24.1 22.6 20.9 15.1	55.0 50.9 46.1 40.9 35.0 28.1 18.9	55.3 53.8 52.0 49.8 47.1 43.8 38.9	26.7 28.0 26.7 25.0 23.7 22.3 20.8	35.0 16.4	41.0 31.4	18.7 15.1



N° de ident.: 9842523/95738/ Pieza de

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

Valor de vuelco: Lastre trasero [t]:

Lastre central [t]:

2 - Vía ancha 124.0 52.6

		gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				29.0 ו		eza de p	ıl, Punto lumín (19 ı] Posicio	916-1) 3	5.5 m Pl	eza de p umín	lumín				
11.6	78.0	66.7	39.8												
12.0	77.3	66.6	39.8												
13.0	75.6	66.3	37.9												
14.0	73.9	66.0	36.5												
16.0	70.5	65.3	33.4												
17.1				73.0	65.6	34.1									
18.0	67.0	64.5	30.7	71.5	65.3	33.6									
20.0	63.4	63.6	28.5	68.0	64.5	31.2									
22.0	59.7	62.4	26.6	64.5	63.6	28.8									
24.0	55.9	61.1	24.8	60.8	62.5	27.1	05.0	00.0	00.7						
25.7 26.0	51.8	59.6	23.4	57.0	61.3	25.4	65.0 64.6	62.8 62.7	26.7 28.6						
28.0	47.6	59.6 57.9	23.4	57.0	59.8	25.4	60.9	62.7 61.6	28.6						
30.0	42.9	55.8	20.7	48.8	58.1	22.8	57.1	60.4	26.1						
32.0	37.9	53.4	19.5	44.3	56.2	21.5	53.1	58.9	24.8						
34.0	32.1	50.5	18.3	39.4	53.9	20.4	48.9	57.3	23.6						
35.8	02.1	00.0	10.0	00.4	00.0	20.4	40.0	07.0	20.0	55.0	57.7	23.5			
36.0	25.2	46.7	16.9	33.9	51.1	19.3	44.4	55.3	22.2	54.8	57.6	25.3			
38.0	15.4	41.0	15.4	27.3	47.6	17.9	39.5	53.0	21.0	50.7	56.1	24.3			
40.0				18.8	42.7	16.5	34.0	50.3	19.9	46.3	54.2	23.2			
42.0							27.5	46.8	18.7	41.5	52.1	21.9			
44.0							19.0	41.9	17.5	36.3	49.5	20.9			
45.0							15.1	39.6	14.7						
46.0										30.3	46.4	19.8			
48.0										22.8	42.2	18.7			
49.0										18.0	39.4	18.1			
52.5													35.0	42.7	17.4
55.0													27.8	38.8	17.6
58.0													15.6	31.8	15.1



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

		gulo de 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]
				29.0		eza de p	al, Punto Jumín (1 n] Posici	916-1) 3	8.5 m Pl		lumín				
12.2 13.0 14.0 16.0 18.0	78.0 76.7 75.2 72.1 68.9	69.6 69.4 69.1 68.5 67.8	35.6 35.1 33.5 30.8 28.7	73.0	68.4	30.4									
20.0 22.0 24.0 26.0 27.0	65.7 62.3 58.9 55.3	66.9 65.9 64.7 63.4	26.4 24.7 23.2 21.8	69.8 66.6 63.3 59.9	67.7 66.9 65.9 64.8	28.7 26.7 25.0 23.6	65.0	65.5	25.6						
28.0 30.0 32.0 34.0 36.0	51.6 47.6 43.4 38.8 33.6	61.9 60.1 58.1 55.7 52.9	20.8 19.6 18.5 17.5 16.7	56.4 52.7 48.8 44.6 40.1	63.5 62.1 60.4 58.4 56.2	22.4 21.4 20.3 19.1 18.1	63.4 60.0 56.4 52.7 48.9	65.0 63.9 62.6 61.2 59.5	25.8 25.3 24.2 23.0 22.0 21.0						
37.5 38.0 40.0 41.0 42.0	27.6 20.0 16.7	49.4 44.7 42.6	15.6 14.6 12.2	35.2 29.5 22.5	53.5 50.2 46.0	17.3 16.3	44.7 40.2 35.3	57.6 55.3 52.7	19.8 18.7	55.0 54.3 50.5	60.2 59.9 58.3	20.9 22.5 21.6			
43.0 44.0 46.0 47.0 48.0				18.0	43.1	14.9	29.6 22.6 18.2	49.4 45.2 42.4	17.0 16.1 15.6	42.1 37.4 32.0	54.4 51.9 48.9	19.5 18.6			
50.0 52.0 55.0 60.0										25.7 17.2	45.1 39.8	16.9 16.0	35.0 18.6	44.4 34.5	16.4 15.8



2821-1

2821-1

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

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				29.0 r	n Pluma Cab	eza de p	ıl, Punto lumín (19 n] Posici	916-1) 4	1.5 m Pl	eza de p umín	lumín				
12.8	78.0	72.5	31.4												
13.0	77.7	72.5	31.4												
14.0	76.3	72.2	30.5												
16.0	73.4	71.7	28.2												
18.0	70.5	71.0	26.0												
18.9				73.0	71.3	26.7									
20.0	67.5	70.2	24.1	71.4	70.9	26.2									
22.0	64.5	69.3	22.4	68.4	70.2	24.4				<u> </u>			<u> </u>		
24.0	61.4	68.2	21.1	65.4	69.3	22.7									
26.0	58.2	67.0	19.9	62.3	68.3	21.5									
28.0	54.8	65.7	18.8	59.1	67.1	20.3									
28.2							65.0	68.2	21.2						
30.0	51.3	64.1	17.9	55.8	65.8	19.3	62.4	67.4	21.9						
32.0	47.6	62.4	16.9	52.3	64.3	18.5	59.2	66.2	20.9						
34.0	43.7	60.4	16.0	48.7	62.6	17.5	55.9	64.9	19.8						
36.0	39.5	58.0	15.2	44.9	60.7	16.5	52.4	63.4	18.9						
38.0	34.9	55.3	14.5	40.8	58.5	15.7	48.8	61.7	18.1						
39.2										55.0	62.6	18.2			
40.0	29.6	52.1	13.7	36.3	55.9	15.0	45.0	59.8	17.1	53.8	62.1	19.5			
42.0	23.2	47.9	12.9	31.2	52.8	14.2	40.9	57.6	16.2	50.3	60.5	18.6			
44.0	16.0	43.0	10.4	25.2	48.9	13.5	36.4	55.0	15.4	46.6	58.7	17.8			
46.0				17.3	43.6	12.7	31.3	52.0	14.7	42.6	56.6	16.9			
48.0							25.3	48.1	14.0	38.2	54.2	16.0			
50.0							17.5	42.8	13.2	33.4	51.4	15.4			
55.0										16.6	40.3	13.5			
57.4													35.0	46.1	14.3
60.0													28.7	42.2	14.7
63.0													17.9	35.0	13.8



N° de ident.: 9842523/95738/ P

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

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

		gulo de principal		ı	gulo de orincipa	<u> </u>	ı	gulo de orincipa	i .	ı	gulo de orincipa	ľ	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]
				29.0 ו		eza de p	il, Punto lumín (1: n] Posici	916-1) 4	4.5 m Pli	eza de p umín	lumín				
13.4	78.0	75.5	28.5												
14.0	77.2	75.3	28.5												
16.0	74.6	74.8	26.4												
18.0	71.9	74.2	24.3												
19.7				73.0	74.2	24.2									
20.0	69.1	73.4	22.8	72.7	74.1	24.2									
22.0	66.3	72.6	21.0	69.9	73.4	22.7									
24.0 26.0	63.5 60.5	71.6 70.5	19.6 18.5	67.1 64.3	72.6 71.6	21.3 20.0									
28.0	57.5	70.5 69.3	18.5	61.4	70.6	19.1									
29.5	57.5	09.3	17.5	01.4	70.0	19.1	65.0	71.0	19.0						
30.0	54.4	67.9	16.6	58.4	69.4	18.0	64.4	70.7	20.3						
32.0	51.1	66.4	15.9	55.3	68.0	17.1	61.5	69.7	19.4						
34.0	47.7	64.6	15.0	52.1	66.5	16.3	58.5	68.5	18.6				i		
36.0	44.1	62.6	14.2	48.7	64.8	15.5	55.4	67.2	17.6						
38.0	40.2	60.3	13.5	45.1	62.9	14.7	52.1	65.7	16.8						
40.0	35.9	57.7	12.9	41.3	60.7	14.0	48.8	64.0	16.0						
40.9										55.0	65.1	16.1			
42.0	31.2	54.6	12.3	37.2	58.2	13.3	45.2	62.1	15.1	53.5	64.4	17.3			
44.0	25.6	50.8	11.6	32.6	55.3	12.7	41.4	59.9	14.4	50.2	62.8	16.5			
46.0	18.5	45.7	11.0	27.3	51.7	12.0	37.3	57.4	13.7	46.7	60.9	15.8			
47.0	15.5	43.4	8.9												
48.0				20.8	47.1	11.4	32.7	54.4	13.1	43.0	58.9	15.0			
49.0				16.7	44.0	11.0									
50.0							27.4	50.9	12.5	39.0	56.5	14.2			
53.0							16.9	43.3	11.5	00.0	40.0	10.7			
55.0										26.9	48.6	12.7			
58.0 59.9										16.0	40.7	11.7	35.0	47.8	12.7
60.0													35.0 34.7	47.8 47.7	12.7
65.0													21.3	38.4	12.7
66.0													17.2	35.4	12.3



2821-1

2821-1

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

		gulo de principa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
		2		29.0 ו						eza de p	lumín		_		
					Cab		lumín (19 1] Posici			umin					
14.0	78.0	78.4	25.3												
16.0	75.6	77.9	24.1												
18.0	73.1	77.3	22.5												
20.0	70.5	76.7	21.2												
20.6				73.0	77.0	21.6									
22.0	67.9	75.9	20.0	71.3	76.6	21.2									
24.0	65.3	75.0	19.0	68.7	75.8	20.0									
26.0	62.6	74.0	18.2	66.0	75.0	19.1							<u> </u>		
28.0	59.8	72.8	17.4	63.4	74.0	18.4									
30.0	57.0	71.6	16.7	60.6	72.9	17.8									
30.8							65.0	73.7	18.8						
32.0	54.0	70.2	16.1	57.8	71.7	17.1	63.4	73.1	18.6						
34.0	50.9	68.6	15.6	54.9	70.3	16.6	60.7	72.0	18.0						
36.0	47.7	66.8	14.9	51.8	68.8	16.1	57.8	70.8	17.4						
38.0	44.3	64.9	14.1	48.7	67.1	15.4	54.9	69.4	16.8						
40.0	40.7	62.6	13.4	45.3	65.2	14.7	51.9	67.9	16.3						
42.0	36.8	60.1	12.8	41.8	63.0	14.1	48.7	66.2	15.8						
42.6										55.0	67.5	15.9			
44.0	32.5	57.1	12.1	38.0	60.6	13.5	45.4	64.3	15.0	53.1	66.6	16.5			
46.0	27.6	53.6	11.4	33.8	57.7	12.9	41.9	62.2	14.3	50.0	65.0	16.0			
48.0	21.6	49.0	10.6	29.1	54.4	12.1	38.1	59.7	13.7	46.8	63.2	15.6			
49.0	17.9	46.2	10.3												
50.0				23.5	50.2	11.3	33.9	56.9	13.1	43.3	61.1	14.8			
52.0				16.1	44.4	10.4		40.0	44.4	00.5		40.0			
55.0							20.3	46.8	11.4	33.5	54.7	13.2			
56.0							16.3	43.7	11.0	40.0	44.4	44.7			
60.0										19.6	44.4 41.1	11.7			
61.0 62.3										15.4	41.1	11.4	35.0	49.6	12.7
65.0													35.0 29.4	49.6 45.6	12.7
69.0													16.7	35.9	11.5
09.0													10.7	JU.8	11.5



2821-1

2821-1

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

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				29.0 ו	m Pluma Cab	eza de p	ıl, Punto lumín (19 n] Posici	916-1) 5	0.5 m Pl	eza de p umín	lumín				
14.7	78.0	81.3	23.1												
16.0	76.5	81.0	22.7												
18.0	74.1	80.5	21.5												
20.0	71.7	79.8	20.3												
21.5	00.0	70.4	10.5	73.0	79.9	20.1									
22.0	69.3	79.1	19.5	72.4	79.8	20.1				ł					
24.0 26.0	66.8 64.3	78.3 77.3	18.7 18.0	70.0 67.6	79.0 78.2	19.3 18.6				ł			ł		
28.0	61.8	77.3 76.3	17.5	65.1	77.3	18.1				ł			ł		
30.0	59.2	75.1	17.0	62.5	76.3	17.7									
32.0	56.5	73.8	16.6	59.9	75.2	17.3									
32.1	00.0	70.0	10.0	00.0	70.2	17.0	65.0	76.4	18.0	i			i		
34.0	53.7	72.4	16.2	57.2	74.0	16.9	62.6	75.4	17.8	i					
36.0	50.8	70.8	15.8	54.5	72.6	16.6	60.0	74.3	17.3	İ			İ		
38.0	47.7	69.1	15.1	51.6	71.0	16.3	57.3	73.1	17.0						
40.0	44.6	67.1	14.3	48.6	69.3	15.7	54.5	71.7	16.7						
42.0	41.2	64.9	13.6	45.5	67.4	15.0	51.7	70.1	16.4						
44.0	37.6	62.4	13.0	42.2	65.3	14.5	48.7	68.4	15.9	ļ			!		
44.4										55.0	70.0	15.7			
46.0	33.6	59.6	12.4	38.6	62.9	14.0	45.6	66.5	15.2	52.9	68.9	16.2			
48.0	29.2	56.2	11.6	34.8	60.1	13.4	42.3	64.4	14.6	49.9	67.2	16.0			
50.0	24.0	52.1	10.8	30.5	56.9	12.5	38.7	62.0	14.0	46.9	65.4	15.8			
52.0	17.4	46.6	9.9	45.0	44.0	40.0	00.0	540	40.4		50.0	40.0	ł		
55.0				15.6	44.8	10.2	28.3 15.8	54.3 44.1	12.4 10.9	38.4	59.9	13.9			
59.0 60.0							15.8	44.1	10.9	28.6	52.6	12.6			
64.0										26.6 16.4	42.7	11.2			
64.8										10.4	42.1	11.2	35.0	51.3	12.7
65.0													35.0	51.3	13.0
70.0													23.1	42.1	11.7
72.0													16.1	36.3	11.2



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

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

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

		gulo de orincipal		ı	gulo de orincipa		ı	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]
				29.0 ו	m Pluma Cab	eza de p	al, Punto Ilumín (1 n] Posici	916-1) 5	3.5 m Pl	eza de p umín	lumín		-		
15.3 16.0 18.0 20.0 22.0 22.4 24.0 26.0 28.0 30.0	78.0 77.2 75.0 72.8 70.5 68.2 65.9 63.5 61.1 58.6	84.3 84.1 83.6 83.0 82.3 81.5 80.7 79.7 78.6	20.8 20.8 19.7 18.7 17.8 17.2 16.6 16.2 15.8	73.0 71.2 68.9 66.6 64.2	82.8 82.2 81.5 80.6 79.7 78.7	18.1 17.8 17.1 16.7 16.3									
33.3 34.0 36.0 38.0 40.0 42.0 44.0 46.0 46.1	56.0 53.4 50.6 47.8 44.8 41.6 38.2	76.1 74.7 73.1 71.3 69.4 67.2 64.7	15.1 14.8 14.5 13.8 13.2 12.6 12.1	59.3 56.8 54.1 51.4 48.6 45.7 42.5	77.5 76.2 74.8 73.3 71.6 69.7 67.5	15.6 15.3 15.0 14.8 14.3 13.8 13.3	65.0 64.2 61.8 59.4 56.8 54.2 51.5 48.7	79.1 78.8 77.8 76.6 75.3 73.9 72.4 70.7	15.7 16.3 16.0 15.7 15.4 15.1 14.9 14.5	55.0	72.5	14.2			
48.0 50.0 55.0 58.0 60.0 62.0 65.0 67.0 67.2 70.0	34.6 30.5 16.8	62.0 58.8 47.0	11.6 10.9 9.0	39.2 35.7 24.8 15.1	65.2 62.5 53.7 45.2	12.9 12.5 10.5 9.3	45.7 42.6 33.8 22.2 15.3	68.8 66.7 60.2 50.6 44.5	13.9 13.4 12.2 10.6 10.0	52.6 49.8 42.3 34.1 21.6 15.9	71.1 69.5 64.6 58.5 48.2 43.1	14.7 14.5 13.4 12.2 10.9 10.1	35.0 29.9 15.7	53.0 49.0 36.7	11.7 11.4 10.2



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

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

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

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa		45° Án I	gulo de principa	pluma I
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				29.0 ו		eza de p	II, Punto Ilumín (1: I Posici	916-1) 5	6.5 m Pl		lumín				
15.9	78.0	87.2	19.0						(/						
16.0	77.9	87.2	19.0										i		
18.0	75.8	86.7	18.3										İ		
20.0	73.7	86.1	17.4												
22.0	71.6	85.5	16.5												
23.3				73.0	85.6	16.4									
24.0	69.4	84.8	15.9	72.2	85.4	16.4									
26.0	67.2	83.9	15.4	70.1	84.7	15.9									
28.0	65.0	83.0	15.0	67.9	83.9	15.5									
30.0	62.7	82.0	14.7	65.7	83.0	15.1									
32.0	60.4	80.9	14.4	63.4	82.1	14.8									
34.0	58.1	79.7	14.1	61.1	81.0	14.5									
34.6		-0.	40.0	-0-	70.0	440	65.0	81.8	14.9						
36.0 38.0	55.6 53.1	78.4 76.9	13.8 13.6	58.7 56.3	79.8 78.5	14.2 14.0	63.5 61.2	81.2 80.1	14.9 14.6						
40.0	50.5	75.3	13.4	53.8	77.1	13.8	58.8	78.9	14.6						
42.0	47.8	73.5	12.8	51.3	75.5	13.6	56.4	77.6	14.3						
44.0	45.0	71.6	12.3	48.6	73.8	13.1	53.9	76.2	13.8				i		
46.0	42.0	69.4	11.8	45.8	71.9	12.7	51.3	74.6	13.7				i		
47.8		00.1		10.0			01.0			55.0	74.9	13.0	i		
48.0	38.8	67.1	11.3	42.9	69.8	12.3	48.6	72.9	13.3	54.9	74.9	13.6			
50.0	35.4	64.4	10.9	39.8	67.5	12.0	45.9	71.0	12.8	52.4	73.4	13.5			
55.0	25.2	55.6	9.3	30.9	60.3	10.7	38.2	65.4	11.8	45.6	68.9	12.9			
58.0	16.4	47.5	8.3												
60.0				18.4	49.1	8.9	28.9	57.7	10.6	37.9	63.2	11.8			
61.0				16.0	46.8	8.1							I		
65.0							16.2	46.1	8.8	28.5	55.4	10.7			
69.7													35.0	54.7	10.8
70.0										15.5	43.5	9.3	34.9	54.6	11.0
75.0													24.4	45.7	10.1
78.0													15.2	37.1	9.4



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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				gulo de orincipa			gulo de principa			gulo de orincipa		45° Án I	pluma I	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
29.0 m Pluma principal, Punto de carga 1 - Cabeza de plumín Cabeza de plumín (1916-1) 59.5 m Plumín 28.0 [m] Posición midfall (1916)															
16.6 18.0 20.0 22.0 24.0	78.0 76.6 74.6 72.6 70.5	90.1 89.8 89.3 88.7 88.0	16.5 16.1 15.2 14.5 13.9	70.0	00.5										
24.2 26.0 28.0 30.0 32.0	68.4 66.3 64.2 62.0	87.2 86.3 85.4 84.3	13.5 13.1 12.8 12.6	73.0 71.1 69.0 66.9 64.8	88.5 87.9 87.1 86.3 85.4	14.1 13.9 13.5 13.2 12.9									
34.0 35.9 36.0 38.0 40.0	59.8 57.5 55.1 52.7	83.2 81.9 80.6 79.1	12.3 12.0 11.8 11.6	62.6 60.4 58.1 55.8	84.4 83.2 82.0 80.7	12.6 12.4 12.1 11.9	65.0 64.8 62.7 60.5	84.6 84.5 83.5 82.4	12.9 12.9 12.7 12.4						
42.0 44.0 46.0 48.0 49.5	50.2 47.6 44.9 42.0	77.4 75.6 73.7 71.5	11.4 11.0 10.7 10.3	53.4 50.9 48.4 45.7	79.2 77.6 75.9 74.0	11.7 11.6 11.3 11.0	58.2 55.9 53.5 51.0	81.1 79.8 78.3 76.7	12.2 12.0 11.8 11.7	55.0	77.4	11.6			
50.0 55.0 60.0 61.0 64.0	39.0 30.4 18.3 17.1	69.1 61.7 50.2 49.0	10.0 9.0 7.6 6.8	42.9 35.1 25.2 15.6	71.9 65.5 56.6 47.2	10.8 10.3 8.8	48.4 41.5 33.4	75.0 69.9 63.1	11.4 10.8 10.2	54.4 48.2 41.2	77.0 72.9 67.7	11.6 11.3 10.7			
65.0 68.0 70.0 72.2 73.0							22.9 15.8	53.5 46.5	8.9 7.9	33.0 22.4 15.0	60.9 51.1 43.9	9.1 8.3	35.0	56.5	9.9
75.0 80.0 81.0													29.8 17.3 16.0	51.8 40.0 38.7	9.5 8.6 8.3



N° de ident.: 9842523/95738/

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

Valor de vuelco: Lastre trasero [t]:

Lastre central [t]:

2 - Vía ancha 124.0

52.6

		gulo de orincipa			gulo de orincipa			gulo de principa			gulo de orincipa			gulo de orincipa	e pluma al			
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]			
	29.0 m Pluma principal, Punto de carga 1 - Cabeza de plumín Cabeza de plumín (1916-1) 62.5 m Plumín 31.0 [m] Posición midfall (1916)																	
17.2	78.0	93.1	14.8															
18.0	77.3	92.9	14.8															
20.0	75.4	92.4	14.0															
22.0	73.4	91.8	13.4															
24.0	71.5	91.2	12.8															
25.0				73.0	91.4	12.9												
26.0	69.5	90.4	12.4	72.1	91.1	12.8												
28.0	67.5	89.6	12.0	70.1	90.4	12.5												
30.0	65.5	88.7	11.7	68.1	89.6	12.2												
32.0	63.5	87.7	11.5	66.1	88.7	11.9												
34.0	61.4	86.7	11.3	64.1	87.7	11.6												
36.0	59.2	85.5	11.1	62.0	86.7	11.4				l								
37.1	57.0	04.0	40.0	50.0	05.5	44.4	65.0	87.3 86.8	11.7									
38.0 40.0	57.0 54.8	84.2 82.8	10.8 10.6	59.8 57.7	85.5 84.3	11.1 10.9	64.1 62.0	85.8	11.7 11.4									
42.0	52.5	81.3	10.5	55.4	82.9	10.9	59.9	84.7	11.4									
44.0	50.1	79.7	10.5	53.4	81.5	10.7	59.9 57.7	83.4	11.2									
46.0	47.6	77.9	10.3	50.8	79.9	10.6	55.5	82.1	10.8	ł								
48.0	45.1	75.9	9.8	48.3	78.1	10.4	53.2	80.6	10.6				i					
50.0	42.4	73.8	9.5	45.8	76.2	10.0	50.8	79.0	10.5									
51.2		7 0.0	0.0	10.0		10.0	00.0	7 0.0	10.0	55.0	79.8	10.5						
55.0	34.9	67.3	9.0	38.9	70.6	9.6	44.5	74.3	10.1	50.6	76.9	10.3						
60.0	25.5	58.5	7.8	30.7	63.2	8.8	37.4	68.4	9.8	44.3	72.2	10.0	i					
64.0	16.7	49.4	6.3															
65.0				19.6	52.2	7.5	28.9	60.5	8.9	37.1	66.2	9.7						
67.0				15.2	47.6	6.6												
70.0							16.6	48.2	7.8	28.5	58.3	9.0						
71.0							15.4	46.9	7.2									
74.6													35.0	58.2	9.2			
75.0										16.0	45.6	8.1	34.4	57.6	9.2			
80.0													24.9	48.6	8.4			
84.0													15.6	39.1	7.5			



2821-1

2821-1

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

		gulo de orincipa			gulo de orincipa		75° Án	gulo de orincipa	pluma		gulo de orincipa			5° Ángulo de plur principal			
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]		
	29.0 m Pluma principal, Punto de carga 1 - Cabeza de plumín Cabeza de plumín (1916-1) 65.5 m Plumín 34.0 [m] Posición midfall (1916)																
17.8 18.0 20.0 22.0 24.0	78.0 77.9 76.1 74.2 72.4	96.0 96.0 95.5 94.9 94.3	13.5 13.5 13.0 12.4 11.9														
25.9 26.0 28.0 30.0 32.0	70.5 68.6 66.7 64.8	93.6 92.9 92.0 91.1	11.5 11.2 10.9 10.6	73.0 72.9 71.1 69.2 67.3	94.3 94.2 93.6 92.8 92.0	11.8 11.8 11.6 11.3 11.0											
34.0 36.0 38.0 38.4	62.8 60.8 58.7	90.1 89.0 87.8	10.4 10.2 9.9	65.3 63.4 61.4	91.1 90.1 89.0	10.7 10.5 10.3	65.0	90.0	10.7								
40.0 42.0 44.0 46.0 48.0	56.6 54.5 52.3 50.0 47.7	86.5 85.1 83.5 81.9 80.1	9.7 9.5 9.3 9.1 8.9 8.7	59.3 57.3 55.1 52.9 50.7	87.8 86.6 85.2 83.7 82.1	9.8 9.6 9.5 9.3	63.4 61.4 59.4 57.3 55.2	89.2 88.1 87.0 85.7 84.3	10.6 10.3 10.2 10.0 9.7 9.6								
50.0 53.0 55.0 60.0 65.0 67.0	38.5 30.7 20.2 16.3	78.2 72.4 65.0 54.2 49.9	8.7 8.1 7.5 6.5 5.7	42.1 34.9 26.1	75.3 68.8 60.1	9.1 8.6 8.2 7.3	53.0 47.2 40.8 33.4	78.5 73.2 66.5	9.6 9.2 8.7 8.3	55.0 52.8 47.0 40.5	82.3 80.8 76.4 71.1	9.5 9.4 9.1 8.7					
69.0 70.0 73.0 75.0 77.1	10.0	40.0	0.1	16.1	49.4	6.5	24.1 16.2	57.1 48.6	7.5 7.1	33.1 23.7	64.3 54.7	8.4 7.7	35.0	59.9	8.1		
78.0 80.0 85.0 87.0										15.6	46.0	7.3	30.1 19.4 15.3	55.2 44.0 39.5	8.0 7.4 6.7		



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

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

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

	88° Ángulo de pluma principal				gulo de orincipa		75° Án	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]
29.0 m Pluma principal, Punto de carga 1 - Cabeza de plumín Cabeza de plumín (1916-1) 68.5 m Plumín 37.0 [m] Posición midfall (1916)															
18.5 20.0 22.0 24.0 26.0	78.0 76.7 74.9 73.2 71.4	98.9 98.6 98.1 97.5 96.8	12.4 12.2 11.6 11.2 10.8												
26.8 28.0 30.0 32.0 34.0	69.6 67.8 66.0 64.1	96.1 95.3 94.4 93.4	10.5 10.2 9.9 9.7	73.0 71.9 70.1 68.3 66.5	97.1 96.7 96.0 95.2 94.4	10.9 10.9 10.6 10.4 10.1									
36.0 38.0 39.7 40.0 42.0	62.2 60.3 58.3 56.3	92.4 91.3 90.1 88.7	9.5 9.3 9.0 8.8	64.6 62.8 60.8 58.9	93.4 92.4 91.3 90.1	9.8 9.6 9.4 9.2	65.0 64.7 62.8	92.7 92.5 91.5	9.8 9.8 9.7						
44.0 46.0 48.0 50.0 54.7	54.2 52.1 49.9 47.7	87.3 85.8 84.1 82.3	8.6 8.4 8.2 8.0	56.9 54.8 52.7 50.6	88.8 87.5 86.0 84.3	8.9 8.7 8.6 8.4	60.9 58.9 56.9 54.9	90.4 89.2 88.0 86.6	9.5 9.3 9.1 8.9	55.0	84.7	8.7			
55.0 60.0 65.0 70.0 72.0	41.6 34.7 26.3 15.9	77.2 70.7 62.0 50.3	7.5 7.0 6.3 5.2	44.8 38.4 30.9 21.2 15.7	79.7 73.9 66.5 56.0 49.8	7.9 7.4 6.9 6.3 6.0	49.5 43.7 37.1 29.3	82.6 77.8 71.7 63.9	8.5 8.0 7.5 7.1	54.7 49.3 43.4 36.8	84.5 80.5 75.6 69.6	8.7 8.4 8.0 7.6			
75.0 76.0 79.5 80.0 81.0							18.8 15.9	52.4 49.1	6.6 6.5	29.0 18.3 15.2	61.7 49.9 46.4	7.3 6.9 6.8	35.0 34.3	61.6 60.9	7.3 7.3
85.0 89.0											-		25.8 16.1	52.0 41.3	7.2 6.7