

Nº de ident.: 9842523/95738/

Radio de descarga:

360 °

Pieza de articulación de pluma principal:

Cabeza de pluma principal:

2821-1 2821-1

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				56.0 ו		eza de p	II, Punto Ilumín (2: Il Posicio	316-1) 5	9.5 m Pli	eza de p umín	lumín		-		
47.5	70.0	447.4	07.0			20.0 [11	1 1 03101	Jii iiiidia	11 (2010)						
17.5 18.0	78.0 77.5	117.1 117.0	27.3 27.3												
20.0	75.5	116.5	25.9												
22.0	73.5	115.9	23.9												
24.0	71.5	115.3	20.5												
26.0	69.4	114.6	18.5												
27.4	00		10.0	73.0	115.3	24.1									
28.0	67.3	113.7	17.1	72.4	115.1	24.0									
30.0	65.2	112.8	15.8	70.4	114.4	23.5									
32.0	63.1	111.9	14.7	68.3	113.7	22.6									
34.0	60.9	110.8	13.8	66.2	112.8	21.4									
36.0	58.7	109.6	12.9	64.1	111.9	19.8									
38.0	56.4	108.3	12.1	61.9	110.8	18.5									
40.0	54.0	106.9	11.3	59.7	109.7	17.3									
42.0	51.6	105.3	10.7	57.4	108.4	16.0									
42.8							65.0	110.6	16.0						
44.0	49.0	103.6	10.1	55.1	107.1	14.9	63.8	110.1	16.5						
46.0	46.4	101.8	9.6	52.7	105.6	13.9	61.6	109.0	15.8						
48.0	43.7	99.7	9.0	50.2	103.9	13.1	59.4	107.9	15.1						
50.0	40.8	97.5	8.5	47.6	102.2	12.3	57.1	106.6	14.5						
55.0	32.6	90.6	7.5	40.7	96.9	10.5	51.1	102.9	12.9						
60.0	21.9	80.7	6.6	32.5	90.1	9.2	44.6	98.3	11.7						
60.9	4	740	0.0							55.0	101.8	9.4			
62.0	15.7	74.6	6.3	04.7	00.0	0.0	07.0	00.4	40.0	50.0	00.0	8.6			
65.0				21.7 15.4	80.0 73.9	8.0	37.2	92.4	10.6	50.0	98.6	შ.ნ			
67.0 70.0				15.4	73.9	7.5	28.1	04.5	9.7	44.0	94.3	7.5			
70.0 75.0							28.1 15.7	84.5 72.5	9.7 8.2	36.4	94.3 88.3	7.5 6.4			
80.0							13.7	12.3	0.2	27.2	80.1	5.5			
84.0										16.5	69.8	4.7			



N° de ident.: 9842523/95738/

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

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

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				56.0 ו		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 6	2.5 m Pli	eza de p umín	lumín				
18.1	78.0	120.1	25.4												
20.0	76.2	119.6	25.1												
22.0	74.3	119.1	22.5										•		
24.0	72.4	118.5	20.2												
26.0	70.5	117.8	18.2												
28.0	68.5	117.0	16.8												
28.3				73.0	118.2	22.7									
30.0	66.5	116.1	15.5	71.4	117.6	22.4									
32.0	64.5	115.2	14.4	69.4	116.9	21.7									
34.0	62.4	114.2	13.5	67.4	116.1	20.9									
36.0	60.3	113.1	12.6	65.4	115.2	19.5									
38.0	58.2	111.9	11.8	63.4	114.2	18.1									
40.0	56.0	110.5	11.1	61.3	113.1	17.1									
42.0	53.7	109.1	10.4	59.2	112.0	15.9									
44.0	51.4	107.5	9.9	57.0	110.7	14.7									
44.1							65.0	113.4	15.0						
46.0	49.0	105.8	9.3	54.8	109.3	13.7	63.1	112.4	15.5						
48.0	46.5	104.0	8.8	52.5	107.8	12.8	61.0	111.4	14.7						
50.0	43.9	102.0	8.3	50.1	106.2	12.1	58.9	110.2	14.1						
55.0	36.7	96.0	7.2	43.8	101.4	10.3	53.3	106.8	12.6						
60.0	28.0	87.9	6.4	36.6	95.4	8.9	47.3	102.5	11.4	55.0	404.0	0.7			
62.7 65.0	15.3	75.0	5.6	27.9	87.3	7.8	40.7	97.3	10.3	55.0 52.3	104.3 102.5	8.7 8.2	ł		
70.0	15.3	75.0	5.6	27.9 15.1	87.3 74.3	6.7	40.7 32.9	97.3 90.5	9.4	52.3 46.8	98.6	7.2	ł		
70.0 75.0				15.1	14.3	0.7	23.0	90.5 80.8	9.4 8.6	40.8	98.6	6.1			
78.0							15.3	72.9	7.5	40.1	93.2	0.1			
78.0 80.0							15.3	12.9	1.5	32.2	86.2	5.2			
85.0										21.9	76.2	4.3			
87.0										16.1	70.2	4.0			



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 principa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				56.0		eza de p	ıl, Punto lumín (2: ı l Posici	316-1) 6	5.5 m Pli	eza de p umín	lumín		_		
18.7	78.0	123.0	22.7												
20.0	76.9	122.7	22.7												
22.0	75.1	122.2	21.2												
24.0	73.2	121.6	19.5												
26.0	71.4	120.9	17.6												
28.0	69.5	120.2	16.1												
29.2				73.0	121.1	20.7									
30.0	67.6	119.4	14.9	72.2	120.8	20.6									
32.0	65.7	118.5	13.8	70.4	120.1	20.2									
34.0	63.8	117.6	12.9	68.5	119.3	19.5									
36.0	61.8	116.5	12.1	66.6	118.5	18.8									
38.0	59.8	115.4	11.4	64.7	117.6	17.5									
40.0	57.7	114.1	10.6	62.7	116.5	16.5									
42.0	55.6	112.8	9.9	60.7	115.5	15.7									
44.0	53.5	111.4	9.4	58.7	114.3	14.5									
45.4							65.0	116.1	14.5						
46.0	51.3	109.8	8.8	56.6	113.0	13.4	64.4	115.8	14.5						
48.0	49.0	108.1	8.4	54.5	111.6	12.5	62.5	114.8	14.3						
50.0	46.6	106.2	7.9	52.3	110.1	11.7	60.5	113.7	13.6						
55.0	40.1	100.9	6.8	46.5	105.7	10.1	55.3	110.5	12.1						
60.0	32.7	94.0	6.0	40.0	100.3	8.6	49.7	106.6	11.0						
64.4										55.0	106.8	7.9			
65.0	23.2	84.3	5.3	32.6	93.4	7.5	43.7	101.8	9.9	54.3	106.3	7.8			
68.0	16.1	76.6	4.5												
70.0				23.0	83.7	6.6	36.8	95.8	9.0	49.2	102.7	6.8			
73.0				15.8	75.9	5.5	00.0			40.4		5.0			
75.0							28.6	87.8	8.3	43.1	97.8	5.8			
80.0 85.0							17.1	75.7	7.6	36.2 27.8	91.6 83.5	4.8 4.0			
											70.7	3.2			
90.0								1		15.7	/0./	3.2			



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

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

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

		gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				56.0		eza de p	ıl, Punto ılumín (2 ı] Posici	316-1) 6	8.5 m Pli	eza de p umín	lumín				
19.4 20.0 22.0 24.0	78.0 77.4 75.7 74.0	125.9 125.8 125.3 124.7	20.8 20.8 20.2 18.8												
26.0 28.0 30.0 30.1	72.2 70.5 68.7	124.1 123.4 122.7	17.2 15.8 14.7	73.0	123.9	19.2									
32.0 34.0 36.0 38.0	66.9 65.0 63.2 61.3	121.8 120.9 119.9 118.8	13.6 12.6 11.8 11.2	71.3 69.5 67.7 65.9	123.3 122.6 121.7 120.9	19.0 18.4 18.0 17.1									
40.0 42.0 44.0 46.0	59.3 57.3 55.3	117.7 116.4 115.1 113.6	10.4 9.7 9.1 8.6	64.0 62.1 60.2 58.3	119.9 118.9 117.8 116.5	16.1 15.3 14.6									
46.6 48.0 50.0 55.0	51.1 48.9 43.1	112.0 110.3 105.4	8.1 7.7 6.6	56.3 54.2 48.8	115.2 113.8 109.8	12.5 11.7 10.0	65.0 63.8 61.9 57.0	118.8 118.2 117.1 114.1	13.4 13.7 13.4 11.9						
60.0 65.0 66.1 70.0	36.5 28.6	99.3 91.3 79.4	5.8 5.1 4.5	43.0 36.3 28.4	104.9 98.7 90.7	8.6 7.4 6.5	51.8 46.3 40.1	110.5 106.1 100.6	10.6 9.7 8.7	55.0 51.4	109.2 106.6	7.3 6.6			
71.0 75.0 76.0	15.7	79.4	3.9	17.5 15.5	78.6 76.3	5.6 4.9	33.0	93.8	8.0	45.7	102.1	5.6			
80.0 83.0 85.0 90.0							24.1 16.7	84.4 76.1	7.4 6.8	39.5 32.3 23.2	96.6 89.6 79.9	4.6 3.8 3.0			
93.0										15.4	71.1	2.6			



N° de ident.: 9842523/95738/

Radio de descarga: 36

360 ° Cabeza de pluma principal:

2821-1 2821-1

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

		gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				56.0 ı		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 7	1.5 m Pli	eza de p umín	lumín				
20.0	78.0	128.9	19.1												
22.0	76.4	128.4	18.9												
24.0	74.7	127.9	17.6												
26.0	73.0	127.3	16.4												
28.0	71.3	126.6	15.0												
30.0	69.6	125.9	13.8												
31.0	07.0	405.4	40.0	73.0	126.8	17.5									
32.0	67.9	125.1 124.2	12.9 11.9	72.1 70.4	126.5	17.4 17.1									
34.0 36.0	66.1 64.3	124.2	11.9	70.4 68.7	125.8 125.0	16.6									
38.0	62.5	123.2	10.4	66.9	125.0	16.2									
40.0	60.7	121.1	9.8	65.2	123.2	15.2									
42.0	58.8	119.9	9.2	63.4	123.2	14.4									
44.0	56.9	118.6	8.6	61.5	121.2	13.8									
46.0	54.9	117.2	8.0	59.7	120.0	13.0									
47.9							65.0	121.5	12.7						
48.0	52.9	115.8	7.6	57.8	118.8	12.1	64.9	121.5	12.7						
50.0	50.9	114.1	7.2	55.8	117.4	11.2	63.5	120.7	12.6						
55.0	45.4	109.6	6.2	50.8	113.6	9.5	58.5	117.6	11.3						
60.0	39.4	104.0	5.3	45.3	109.0	8.1	53.6	114.2	10.1						
65.0	32.4	96.9	4.7	39.3	103.4	7.0	48.4	110.0	9.2						
67.8										55.0	111.7	6.6			
70.0	23.7	87.3	4.1	32.3	96.3	6.1	42.7	105.0	8.2	53.3	110.4	6.2			
74.0	15.4	77.4	3.4												
75.0				23.5	86.6	5.2	36.3	98.8	7.5	48.1	106.2	5.2			
79.0				15.1	76.7	4.3									
80.0							28.6	90.7	6.9	42.4	101.2	4.2			
85.0							18.3 15.5	78.9 75.5	6.1 5.9	36.0	95.0	3.4			
86.0 90.0							15.5	/5.5	5.9	28.3	86.9	2.7			
94.0										20.4	77.9	2.1			
34.0										20.4	11.5	2.1			

Pieza de articulación de pluma principal:



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

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

Lastre trasero [t]: 114.0

Lastre central [t]: 52.6

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

	ŗ	gulo de orincipa		ı	gulo de orincipa		1	gulo de orincipa	pluma I	1	gulo de orincipa	pluma I	F	gulo de orincipa	pluma I
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				56.0 ı		eza de p	ıl, Punto ılumín (2: ı] Posicio	316-1) 7	4.5 m Pli	eza de p umín	lumín				
20.7	78.0 76.9	131.8	17.8												
22.0 24.0	76.9 75.3	131.5 131.0	17.8 16.9												
24.0 26.0	75.3	131.0	15.8												
28.0	72.1	129.8	14.5												
30.0	70.5	129.1	13.4												
31.8				73.0	129.7	16.3									
32.0	68.8	128.3	12.6	72.9	129.6	16.3									
34.0	67.1	127.5	11.7	71.2	128.9	16.2									
36.0	65.4	126.6	10.8	69.6	128.2	15.8									
38.0	63.7	125.6	10.1	67.9	127.4	15.4									
40.0	62.0	124.6	9.5	66.2	126.5	14.8									
42.0	60.2	123.4	8.9	64.5	125.6	14.0									
44.0	58.4	122.2	8.4	62.8	124.6	13.4									
46.0	56.5	120.9	7.8	61.0	123.5	12.9									
48.0	54.7	119.5	7.3	59.2	122.3	12.0									
49.2	-o	440.0	0.0		404.0	44.0	65.0	124.2	11.9						
50.0	52.7	118.0 113.7	6.9	57.4	121.0 117.5	11.2	64.3	123.8	11.9						
55.0 60.0	47.7 42.1	113.7	6.0 5.1	52.7 47.6	117.5	9.4 8.0	59.9 55.3	121.1 117.9	10.9 9.8						
65.0	35.9	102.3	4.4	42.0	108.1	6.8	50.4	114.0	8.9						
69.5	33.9	102.3	7.7	42.0	100.1	0.0	30.4	114.0	0.9	55.0	114.1	5.9			
70.0	28.6	94.2	3.9	35.8	101.7	5.9	45.1	109.4	8.0	55.0	114.1	5.9			
75.0	18.8	82.5	3.3	28.5	93.6	5.1	39.3	103.7	7.2	50.1	110.2	4.9			
77.0	15.0	77.8	2.9												
80.0				18.6	81.8	4.3	32.7	96.7	6.6	44.9	105.6	3.9			
81.0				15.9	78.5	4.2									
85.0							24.5	87.3	5.8	39.1	99.9	3.1			
89.0							16.9	78.1	5.2						
90.0										32.4	92.9	2.4			
92.0										29.4	89.5	2.1			

Source:a9841388



N° de ident.: 9842523/95738/ Pi

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

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

	88° Án I	gulo de principa	pluma l		gulo de orincipa										
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				56.0 ı			II, Punto Iumín (2			eza de p	lumín				
					Cab		i Posici			ullilli					
21.3	78.0	134.7	16.1												
22.0	77.5	134.6	16.1												
24.0	75.9	134.1	15.8												
26.0	74.4	133.5	15.0												
28.0	72.8	132.9	14.1												
30.0	71.3	132.3	13.0												
32.0	69.7	131.5	12.2												
32.7				73.0	132.5	14.9									
34.0	68.1	130.7	11.4	72.0	132.1	14.8									
36.0	66.5	129.9	10.5	70.4	131.4	14.6									
38.0	64.8	128.9	9.8	68.8	130.6	14.2									
40.0	63.2	127.9	9.2	67.2	129.8	13.9									
42.0	61.5	126.9	8.7	65.6	128.9	13.3									
44.0	59.8	125.7	8.1	63.9	128.0	12.8									
46.0	58.0	124.5	7.6	62.3	126.9	12.4									
48.0	56.2	123.2	7.1	60.6	125.8	12.0									
50.0	54.4	121.8	6.6	58.8	124.6	11.1									
50.5							65.0	127.0	11.3				<u> </u>		
55.0	49.7	117.8	5.7	54.3	121.2	9.2	61.2	124.6	10.7						
60.0	44.6	113.0	4.9	49.6	117.2	7.9	56.8	121.5	9.6						
65.0	38.9	107.3	4.2	44.5	112.5	6.7	52.2	117.9	8.6						
70.0	32.5	100.2	3.6	38.8	106.8	5.7	47.3	113.6	7.8						
71.3										55.0	116.6	5.2			
75.0	24.6	90.8	3.1	32.4	99.6	4.9	42.0	108.4	7.0	52.0	114.1	4.5			
79.0	15.8	79.6	2.7												
80.0				24.5	90.2	4.2	36.0	102.1	6.3	47.1	109.8	3.6			
84.0				15.6	78.9	3.6									
85.0							29.1	94.1	5.5	41.7	104.6	2.7			
90.0							21.3	84.5	4.7	35.8	98.3	2.0			
92.0							16.6	78.6	4.3						



2821-1

2821-1

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

		gulo de orincipal			gulo de orincipa										
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				56.0 ו			ıl, Punto lumín (2:			eza de p	lumín				
					Oub	34.0 [m	n] Posici	ón midfa	II (2316)	arriiri					
21.9	78.0	137.7	14.7												
22.0	77.9	137.7	14.7												
24.0	76.5	137.2	14.6												
26.0	75.0	136.7	14.1												
28.0	73.5	136.1	13.8												
30.0	72.0	135.4	12.7												
32.0	70.5	134.7	11.8												
33.6				73.0	135.4	13.6									
34.0	68.9	134.0	11.1	72.7	135.3	13.6									
36.0	67.4	133.1	10.3	71.2	134.6	13.5									
38.0	65.8	132.3	9.6	69.7	133.9	13.2									
40.0	64.2	131.3	8.9	68.1	133.1	12.9									
42.0 44.0	62.6 61.0	130.3 129.2	8.4 7.9	66.6 65.0	132.2 131.3	12.6 12.2				ł					
44.0 46.0	59.4	129.2	7.9	63.4	131.3	12.2									
48.0	57.7	126.0	6.9	61.8	129.2	11.5									
50.0	55.9	125.6	6.4	60.1	129.2	11.5									
50.0	55.9	125.4	0.4	60.1	120.1	11.1	65.0	129.7	10.7	l					
55.0	51.5	121.7	5.5	55.9	124.9	9.2	62.4	129.7	10.7	i					
60.0	46.7	117.3	4.7	51.4	121.2	7.7	58.2	125.1	9.3						
65.0	41.5	112.0	4.0	46.6	116.7	6.6	53.9	121.7	8.3						
70.0	35.8	105.6	3.4	41.5	111.5	5.5	49.3	117.6	7.6						
73.0	00.0	100.0	0.7	41.0	111.5	0.0	40.0	111.0	7.0	55.0	119.0	4.7	i		
75.0	29.0	97.6	2.9	35.7	105.1	4.7	44.4	112.8	6.8	53.6	117.9	4.3			
80.0	20.3	86.4	2.4	28.9	97.0	4.1	38.9	107.1	6.1	49.0	113.8	3.4			
82.0	15.5	80.0	2.2												
85.0				20.1	85.7	3.4	32.8	100.0	5.4	44.1	109.0	2.6			
87.0				15.3	79.3	3.1									
89.0										39.8	104.5	2.0			
90.0							26.3	92.1	4.6						
95.0							16.3	79.0	3.7						



Nº de ident.: 9842523/95738/

Radio de descarga:

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

360° 2 - Vía ancha Valor de vuelco:

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

		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]
				56.0		eza de p	al, Punto dumín (2 n] Posici	316-1) 8	3.5 m Pl		lumín				
22.5	78.0	140.6	13.6												
24.0	77.0	140.3	13.6												
26.0	75.5	139.8	13.3												
28.0	74.1	139.2	13.0	1											
30.0	72.7	138.6	12.3												
32.0	71.2	137.9	11.4												
34.0	69.7	137.2	10.7												
34.5				73.0	138.3	12.8									
36.0	68.3	136.4	10.0	71.9	137.8	12.7									
38.0	66.8	135.6	9.3	70.4	137.1	12.5									
40.0	65.2	134.6	8.6	68.9	136.3	12.2									
42.0	63.7	133.7	8.0	67.5	135.5	12.0									
44.0	62.2	132.6	7.6	65.9	134.6	11.7									
46.0	60.6	131.5	7.1	64.4	133.7	11.3									
48.0	59.0	130.3	6.6	62.9	132.6	11.0									
50.0	57.3	129.0	6.2	61.3	131.6	10.8									
53.0							65.0	132.4	10.1						
55.0	53.1	125.5	5.2	57.3	128.5	9.1	63.5	131.4	10.1						
60.0	48.6	121.4	4.4	53.1	125.0	7.5	59.5	128.6	9.0						
65.0	43.8	116.5	3.7	48.6	120.8	6.4	55.4	125.4	8.1						
70.0	38.6	110.7	3.1	43.8	115.9	5.4	51.1	121.6	7.3						
74.7										55.0	121.5	3.9			
75.0	32.6	103.5	2.6	38.5	110.1	4.5	46.5	117.1	6.6	54.8	121.3	3.9			
80.0	25.4	94.3	2.2	32.5	102.9	3.8	41.4	111.8	5.9	50.8	117.8	3.0			
85.0				25.2	93.7	3.2	35.9	105.4	5.1	46.2	113.3	2.2			
86.0										45.2	112.3	2.1			
90.0				16.6	81.9	2.5	30.2	98.5	4.2						
95.0				I			22.4	88.2	3.4						
98.0	1						16.0	79.4	3.0			1			



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

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

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

		gulo de orincipal			gulo de orincipa			gulo de principa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				56.0 ı				de carga 316-1) 8		eza de p	lumín		_		
					Cab			ón midfa							
23.2	78.0	143.5	12.7												
24.0	77.4	143.3	12.7												
26.0	76.1	142.9	12.5							•			•		
28.0	74.7	142.3	12.2												
30.0	73.3	141.7	12.0												
32.0	71.9	141.1	11.0												
34.0	70.5	140.4	10.3												
35.3				73.0	141.1	12.0									
36.0	69.1	139.6	9.7	72.5	140.9	11.9									
38.0	67.6	138.8	9.0	71.1	140.3	11.8									
40.0	66.2	137.9	8.4	69.7	139.5	11.6									
42.0	64.7	137.0	7.8	68.3	138.7	11.4									
44.0	63.2	136.0	7.3	66.8	137.9	11.1									
46.0	61.7	134.9	6.8	65.4	137.0	10.8									
48.0	60.2	133.8	6.4	63.9	136.0	10.5									
50.0	58.6	132.6	6.0	62.4	135.0	10.2				l					
54.3							65.0	135.1	9.5						
55.0	54.6	129.2	5.0	58.6	132.1	9.0	64.4	134.7	9.5						
60.0	50.4	125.3	4.2	54.6	128.7	7.4	60.7	132.1	8.8						
65.0	45.9	120.8	3.5	50.3	124.8	6.3	56.8	129.0 125.4	7.9	-					
70.0	41.0 35.6	115.4 109.0	2.9 2.4	45.8	120.2	5.3 4.4	52.7		7.0 6.3						
75.0 76.4	35.6	109.0	2.4	40.9	114.8	4.4	48.3	121.2	6.3	55.0	124.0	3.3	ł		
76.4 80.0				35.5	108.4	3.6	43.7	116.3	5.7	52.4	124.0	2.7			
84.0				33.3	100.4	3.0	43.1	110.3	5.7	52.4 49.0	118.3	2.7			
85.0				29.2	100.3	3.1	38.6	110.4	4.8	49.0	110.3	Z. I			
90.0				29.2	89.5	2.5	33.5	104.2	4.0						
93.0				16.3	82.4	2.0	33.3	104.2	4.0	Ī					
95.0				10.5	02.7	2.0	26.8	95.5	3.2	i					
100.0							18.0	83.2	2.5						
101.0							15.7	79.8	2.3						



Pieza de articulación de pluma principal: Nº de ident.: 9842523/95738/ Radio de descarga: 36

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

738/	Pieza de articulación de pluma principal:	2821-1
60 °	Cabeza de pluma principal:	2821-1

		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]
				56.0 ı		eza de p	il, Punto lumín (2 n] Posici	316-1) 8	9.5 m Pli	eza de p umín	lumín				
23.8	78.0	146.5	11.6												
24.0	77.9	146.4	11.6												
26.0	76.5	146.0	11.5												
28.0	75.2	145.4	11.3												
30.0	73.9	144.9	11.1												
32.0	72.5	144.2	10.5												
34.0	71.2	143.6	9.8												
36.0	69.8	142.8	9.3												
36.2				73.0	144.0	10.9									
38.0	68.4	142.1	8.8	71.8	143.4	10.8									
40.0	67.0	141.2	8.1	70.4	142.7	10.6									
42.0	65.6	140.3	7.5	69.1	142.0	10.4									
44.0	64.2	139.4	7.0	67.7	141.2	10.2									
46.0	62.7	138.4	6.5	66.3	140.3	10.0									
48.0	61.3	137.3	6.1	64.8	139.4	9.7									
50.0	59.8	136.1	5.7	63.4	138.4	9.4									
55.0	56.0	132.9	4.7	59.7	135.6	8.7									
55.5							65.0	137.8	8.9						
60.0	52.0	129.2	3.9	55.9	132.4	7.2	61.8	135.5	8.5						
65.0	47.7	124.9	3.3	51.9	128.7	6.0	58.0	132.6	7.6						
70.0	43.2	119.9	2.7	47.7	124.4	5.1	54.1	129.2	6.8						
75.0	38.2	114.0	2.1	43.1	119.4	4.2	50.0	125.2	6.1						
78.1										55.0	126.4	2.6			
80.0				38.2	113.4	3.4	45.7	120.6	5.4	53.9	125.4	2.4			
82.0										52.3	123.9	2.0			
85.0				32.5	106.3	2.8	41.5	115.8	4.5						
90.0				25.9	97.1	2.3	36.3	109.5	3.7						
95.0							30.5	101.8	2.9						
100.0							23.3	91.8	2.1						
101.0							21.6	89.4	2.0						



2821-1

2821-1

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

		gulo de 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]
				56.0		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 9:	2.5 m Pl	eza de p umín	lumín				
24.4	78.0	149.4	10.6												
26.0	77.0	149.0	10.6									İ	İ		
28.0	75.7	148.5	10.4										İ		
30.0	74.4	148.0	10.2												
32.0	73.1	147.4	9.9												
34.0	71.8	146.7	9.3												
36.0	70.5	146.0	8.8												
37.1				73.0	146.9	9.9									
38.0	69.2	145.3	8.4	72.4	146.6	9.9									
40.0	67.8	144.5	7.8	71.1	145.9	9.8									
42.0	66.5	143.6	7.2	69.8	145.2	9.6									
44.0	65.1	142.7	6.7	68.4	144.4	9.4									
46.0	63.7	141.7	6.2	67.1	143.6	9.2									
48.0	62.3	140.7	5.8	65.7	142.7	8.9									
50.0	60.9	139.6	5.5	64.3	141.7	8.7									
55.0	57.2	136.5	4.5	60.8	139.1	8.3									
56.8							65.0	140.5	8.3						
60.0	53.4	133.0	3.7	57.2	136.0	6.9	62.8	138.9	8.3						
65.0	49.4	129.0	3.1	53.4	132.5	5.8	59.2	136.1	7.3						
70.0	45.2	124.3	2.5	49.4	128.4	4.9	55.5	132.8	6.5						
75.0				45.1	123.7	4.0	51.6	129.1	5.8						
79.9										55.0	128.9	2.1			
80.0				40.5	118.2	3.2	47.5	124.7	5.2	54.9	128.8	2.1			
80.3										55.0	128.9	2.1			
85.0				35.4	111.7	2.6	43.5	120.3	4.3						
90.0				29.5	103.7	2.1	38.8	114.5	3.5						
95.0							33.5	107.6	2.7						
99.0							28.7	100.8	2.1						



2821-1

2821-1

 N^{o} de ident.: 9842523/95738/ Pieza de articulación de pluma principal:

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

360 ° Cabeza de pluma principal:

		gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				56.0 ı		eza de p	ıl, Punto ılumín (2: ı] Posici	316-1) 9	5.5 m Pl		lumín				
25.0	78.0	152.3	9.8												
26.0	77.4	152.1	9.8												
28.0	76.2	151.6	9.7												
30.0	74.9	151.1	9.5												
32.0	73.7	150.5	9.3												
34.0	72.4	149.9	8.8												
36.0	71.1	149.2	8.4												
38.0	69.8	148.5	8.0	73.0	149.7	9.1									
40.0	68.5	147.7	7.6	71.7	149.1	9.0									
42.0	67.2	146.9	7.0	70.4	148.4	8.9									
44.0	65.9	146.0	6.5	69.1	147.6	8.7									
46.0	64.6	145.1	6.0	67.8	146.8	8.5									
48.0	63.2	144.1	5.5	66.5	146.0	8.3									
50.0	61.9	143.0	5.2	65.2	145.0	8.1									
55.0	58.4	140.1	4.3	61.8	142.5	7.7									
58.1							65.0	143.3	7.7						
60.0	54.8	136.7	3.4	58.3	139.6	6.7	63.7	142.3	7.7						
65.0	51.0 47.0	132.9	2.8	54.7	136.2	5.6	60.3	139.6	7.1				ł		
70.0	47.0	128.5	2.2	50.9	132.4	4.7	56.7	136.5	6.3						
75.0				46.9	127.9	3.9	53.0	132.9	5.4						
80.0				42.6	122.8	3.1	49.1	128.8	4.8						
85.0				37.9	116.8	2.4	45.4	124.6	4.0 3.1						
90.0 95.0							41.0 36.2	119.2 112.9	2.3						
97.0							34.1	110.0	2.3						



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

360°

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

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

		gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				56.0 ו		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 9	8.5 m Pl		lumín				
25.7	78.0	155.3	9.1												
26.0	77.8	155.2	9.1												
28.0	76.6	154.7	9.1												
30.0	75.4	154.2	8.9												
32.0	74.2	153.7	8.7												
34.0	73.0	153.1	8.4												
36.0	71.7	152.4	7.9												
38.0	70.5	151.7	7.6												
38.8				73.0	152.6	8.4									
40.0	69.2	151.0	7.2	72.3	152.2	8.4									
42.0	68.0	150.2	6.8	71.1	151.6	8.3									
44.0	66.7	149.3	6.2	69.8	150.8	8.1									
46.0	65.4	148.4	5.7	68.6	150.1	8.0				•			<u> </u>		
48.0	64.1	147.4	5.3	67.3	149.2	7.8									
50.0	62.8	146.4	4.9	66.0	148.4	7.6									
55.0	59.5	143.6	4.1	62.8	145.9	7.2									
59.3							65.0	146.0	7.1						
60.0	56.0	140.4	3.2	59.4	143.1	6.6	64.6	145.7	7.1						
65.0	52.4	136.7	2.6	56.0	139.9	5.4	61.3	143.1	6.8						
70.0				52.3	136.2	4.5	57.9	140.1	5.9						
75.0				48.5	132.0	3.7	54.3	136.6	5.1						
80.0				44.5	127.2	3.0	51.0	133.1	4.4						
85.0				40.1	121.6	2.3	47.1	128.8	3.7						
90.0							43.0	123.7	2.9						
95.0							38.5	117.8	2.1						



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

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

		gulo de principa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				56.0		eża de pl	ıl, Punto umín (23 ı] Posici	316-1) 10	1.5 m P	eza de p lumín	lumín		_		
26.3	78.0	158.2	8.4												
28.0	77.0	157.8	8.4												
30.0	75.8	157.3	8.3												
32.0	74.7	156.8	8.1												
34.0	73.5	156.2	8.0												
36.0	72.3	155.6	7.5												
38.0	71.1	154.9	7.1												
39.7				73.0	155.5	7.7									
40.0	69.9	154.2	6.8	72.8	155.4	7.7									
42.0	68.7	153.4	6.5	71.6	154.7	7.7									
44.0	67.4	152.6	6.0	70.4	154.0	7.6									
46.0	66.2	151.7	5.5	69.2	153.3	7.4									
48.0	65.0	150.8	5.0	68.0	152.5	7.2									
50.0	63.7	149.8	4.6	66.8	151.6	7.1									
55.0	60.5	147.1	3.8	63.6	149.3	6.7									
60.0	57.1	144.0	3.0	60.4	146.6	6.3									
60.6							65.0	148.7	6.6						
65.0	53.7	140.5	2.3	57.1	143.5	5.2	62.2	146.5	6.3						
70.0				53.6	140.0	4.3	58.9	143.6	5.4						
75.0				50.0	136.0	3.5	55.9	140.6	4.7						
80.0				46.2	131.4	2.8	52.4	137.0	4.0						
85.0							48.7	132.8	3.4						
90.0							44.8	128.1	2.5						
93.0							42.3	124.9	2.1						



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]: 114.0 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]
				56.0 ו	m Pluma Cabe	eza de pl	ıl, Punto umín (23 ı] Posici	316-1) 10	14.5 m P	eza de p lumín	lumín				
26.9	78.0	161.1	7.8												
28.0	77.4	160.9	7.8												
30.0	76.2	160.4	7.7												
32.0	75.1	159.9	7.6												
34.0	74.0	159.3	7.4												
36.0	72.8	158.7	7.1												
38.0	71.7	158.1	6.7												
40.0	70.5	157.4	6.4												
40.6				73.0	158.4	7.2									
42.0	69.3	156.6	6.1	72.2	157.9	7.1									
44.0	68.1	155.8	5.8	71.0	157.2	7.1									
46.0	66.9	155.0	5.3	69.9	156.5	6.9									
48.0	65.7	154.1	4.8	68.7	155.7	6.8									
50.0	64.5	153.1	4.4	67.5	154.9	6.6									
55.0	61.4	150.5	3.6	64.5	152.6	6.2									
60.0	58.2	147.6	2.8	61.4	150.0	5.9									
61.9							65.0	151.4	6.1						
65.0				58.2	147.1	5.0	63.1	149.9	6.1						
70.0				54.8	143.7	4.1	59.9	147.1	5.2						
75.0				51.4	139.9	3.3	57.0	144.3	4.4						
80.0				47.8	135.6	2.6	53.6	140.8	3.7						
85.0							50.1	136.8	3.2						
90.0							46.4	132.3	2.4						
92.0							44.9	130.3	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:

		gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				56.0 ו	m Pluma Cabe	eża de pl	ıl, Punto umín (23 ı] Posici	316-1) 10	7.5 m P	eza de p lumín	lumín		-		
27.5	78.0	164.1	7.0												
28.0	77.7	164.0	7.0												
30.0	76.6	163.5	7.0												
32.0	75.5	163.0	6.8												
34.0	74.4	162.4	6.7												
36.0	73.3	161.9	6.5												
38.0	72.2 71.1	161.2	6.2 5.9												
40.0 41.5	/1.1	160.5	5.9	73.0	161.2	6.4				ł					
42.0	69.9	159.8	5.7	73.0 72.7	161.2	6.4				i			i		
44.0	68.8	159.1	5.5	71.6	160.4	6.3									
46.0	67.6	158.2	5.0	70.4	159.7	6.2									
48.0	66.4	157.4	4.5	69.3	158.9	6.1				i			i		i
50.0	65.3	156.5	4.1	68.2	158.2	5.9				İ			Ī		i i
55.0	62.3	154.0	3.3	65.2	156.0	5.5									
60.0	59.2	151.1	2.5	62.2	153.4	5.2									
63.1							65.0	154.1	5.3	1					
65.0				59.2	150.6	4.6	63.9	153.2	5.3						
70.0				56.0	147.4	3.8	60.9	150.6	4.7						
75.0				52.7	143.7	3.0	58.0	147.8	4.0						
80.0				49.2	139.6	2.4	54.8	144.5	3.3						
85.0							51.4	140.7	2.7						
90.0							47.9	136.4	2.1						



Nº de ident.: 9842523/95738/ 360°

Radio de descarga:

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

2 - Vía ancha Valor de vuelco: Lastre trasero [t]: 114.0 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]
				56.0 ו	m Pluma Cabe	eza de pl	ıl, Punto umín (23 ı] Posici	316-1) 11	0.5 m P	lumín	lumín		-		
28.1	78.0	167.0	6.3												
30.0	77.0	166.6	6.3												
32.0	75.9	166.1	6.2												
34.0	74.9	165.6	6.0												
36.0	73.8	165.0	5.9												
38.0	72.7	164.4	5.7												
40.0	71.6	163.7	5.4												
42.0	70.5	163.0	5.2												
42.4				73.0	164.1	5.7									
44.0	69.4	162.3	5.0	72.1	163.6	5.7									
46.0	68.3	161.5	4.7	71.0	162.9	5.6									
48.0	67.1	160.6	4.3	69.9	162.2	5.5									
50.0	66.0	159.8	3.9	68.8	161.4	5.3									
55.0	63.1	157.3	3.0	66.0	159.3	5.0									
60.0	60.1	154.6	2.3	63.1	156.8	4.6	25.0	450.0	4 7						
64.4				00.4	4-44	4.0	65.0	156.9	4.7						
65.0				60.1	154.1	4.3	64.7	156.6	4.7						
70.0 75.0				57.0 53.9	151.0 147.5	3.5 2.8	61.7 59.0	154.0 151.4	4.3 3.6						
80.0				50.5	147.5	2.6	59.0 55.9	148.1	2.9						
85.0				50.5	143.5	2.3	52.7	144.5	2.9						
88.0							52.7 50.7	144.5	2.4						



Nº de ident.: 9842523/95738/

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

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

	88° Án I	gulo de principa	pluma I	83° Án I	gulo de orincipa	pluma I		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]
				56.0	m Pluma Cab	eza de p	lumín (1	916-1) 3	2.5 m Pl		lumín		_		
						13.0 [m	n] Posici	ón midfa	ll (1916)				_		
11.9	78.0	90.7	37.3												
12.0	77.8	90.7	37.3												
13.0	76.0	90.4	36.8												
14.0	74.1	90.2	35.7												
16.0	70.4	89.5 88.6	33.6 31.3												
18.0 19.5	66.6	88.6	31.3	73.0	89.5	32.7	ł								
20.0	62.6	87.7	29.2	73.0 72.1	89.5 89.3	32.7				ł					
22.0	58.6	86.5	26.8	68.4	88.6	31.3									
24.0	54.3	85.1	24.3	64.5	87.7	29.5	i			i			i		
26.0	49.7	83.5	22.5	60.5	86.6	28.2									
28.0	44.9	81.6	20.8	56.3	85.3	26.7	l			l					
30.0	39.5	79.3	19.4	51.9	83.8	25.5									
31.4							65.0	86.2	27.0						
32.0	33.4	76.5	18.3	47.2	82.0	24.1	64.0	85.9	27.8						
34.0	26.1	72.9	17.3	42.1	79.9	22.6	59.9	84.8	26.4						
36.0	15.8	67.4	16.3	36.4	77.4	21.5	55.7	83.5	25.0						
38.0				29.7	74.2	20.2	51.3	82.0	23.8						
40.0				21.2	69.8	18.8	46.5	80.2	22.7	1					
41.0 42.0				15.3	66.6	18.1	41.4	78.0	21.6						
44.0							35.6	75.4	20.7						
45.5				i			33.0	75.4	20.1	55.0	79.7	17.5	i		
46.0				İ			28.8	72.1	19.9	54.1	79.4	18.2	i		
48.0							19.9	67.5	19.1	49.5	77.8	17.5			
49.0							15.8	65.2	15.1						
50.0										44.6	75.9	16.7			
55.0				[[29.6	69.0	15.4	l		
58.0										15.1	61.3	14.4			
69.1				ļ									35.0	60.1	7.1
70.0													34.0	59.6	7.0
74.0	1												17.0	50.8	6.2



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

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

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

		gulo de orincipal		83° Án	gulo de orincipa	pluma I		gulo de orincipa		65° Án	gulo de orincipa	pluma I		gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				56.0 ו	m Pluma Cab	eza de p	al, Punto dumín (19 n] Posici	916-1) 3	5.5 m Pl	eza de p umín	lumín		-		
12.5 13.0 14.0 16.0 20.0 20.4 22.0 26.0 28.0 30.0 32.7 34.0 36.0 38.0 39.0 40.0 42.0 44.0 45.0 55.0	78.0 77.2 75.5 72.1 68.7 65.1 61.5 57.7 53.8 49.6 45.2 40.3 34.9 28.6 20.6 15.1	93.7 93.5 93.3 92.7 91.9 91.0 90.0 88.8 87.4 85.7 83.8 81.6 78.9 75.6 71.0 67.7	33.3 33.3 32.4 30.3 28.6 26.5 25.1 23.2 21.6 20.4 19.0 17.8 16.7 15.9 15.0 14.6	73.0 70.3 66.8 63.2 59.5 55.6 51.6 47.3 42.6 37.5 31.7 24.6	92.4 91.8 91.0 90.0 88.9 87.6 86.0 84.3 82.2 79.8 76.8 72.9 68.2	28.8 28.1 26.7 25.4 24.3 23.2 22.3 21.2 20.0 19.1 18.1 17.1	65.0 62.7 59.0 55.1 51.0 46.7 42.0 36.8 30.9 23.6 15.0	88.9 88.2 87.1 85.8 84.2 82.4 80.3 77.8 74.7 70.6 65.6	25.2 25.0 23.9 22.8 21.8 20.8 19.9 19.1 18.3 17.6 14.9	55.0 53.6 49.4	82.2 81.7 80.0	16.5 17.0 16.4			
55.0 60.0 61.0 71.6 75.0 77.0										37.4 20.1 16.5	74.6 65.1 63.0	14.9 13.5 12.7	35.0 25.6 16.2	61.8 56.7 51.3	6.3 5.7 5.4



2821-1

2821-1

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

		gulo de principa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				56.0		eza de p	al, Punto dumín (19 n] Posici	916-1) 3	8.5 m Pl	eza de p umín	lumín				
13.1	78.0	96.6	30.1												
14.0	76.7	96.4	30.0												
16.0	73.6	95.8	28.1												
18.0	70.4	95.1	26.3												
20.0	67.2	94.3	24.7												
21.3				73.0	95.2	25.9									
22.0	63.9	93.4	23.1	71.9	95.0	25.9									
24.0	60.5	92.3	21.9	68.7	94.2	24.5									
26.0	57.0	91.0	20.7	65.4	93.4	23.4									
28.0	53.4	89.6	19.7	62.1	92.3	22.5									
30.0	49.5	88.0	18.8	58.7	91.2	21.6									
32.0	45.4	86.1	17.6	55.1	89.8	20.7	05.0	04.0	00.0						
34.0 36.0	41.0 36.1	83.9 81.3	16.5 15.6	51.3 47.3	88.3 86.5	20.0 19.0	65.0 61.7	91.6 90.6	23.0 22.7						
38.0	30.6	78.2	14.8	47.3	84.5	18.1	58.2	89.4	22.7						
40.0	23.9	74.1	14.1	38.4	82.1	17.3	54.6	88.0	21.0						
42.0	16.4	69.4	10.5	33.3	79.2	16.5	50.8	86.4	20.2						
44.0	10.4	05.4	10.5	27.2	75.7	15.7	46.8	84.6	19.4						
46.0				19.4	70.8	14.9	42.5	82.6	18.5						
47.0				16.0	68.6	11.6	72.0	02.0	10.0						
48.0				10.0	00.0	11.0	37.8	80.1	17.7						
48.9							07.0	00.1		55.0	84.6	15.4			
50.0							32.5	77.2	17.0	53.2	83.9	16.0			
54.0				Ī			18.2	68.4	15.6						
55.0										43.0	79.3	14.6			
60.0										30.3	72.4	13.5			
64.0										15.8	63.4	11.7			
74.0													35.0	63.5	5.8
75.0													34.0	62.9	5.7
80.0													15.5	51.6	4.9



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

2821-1 Cabeza de pluma principal: 2821-1

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

		gulo de principa			gulo de orincipa			gulo de principa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				56.0 ו	m Pluma Cab	eza de p	al, Punto dumín (1: n] Posici	916-1) 4	1.5 m Pl		lumín				
13.7 14.0 16.0	78.0 77.6 74.8	99.5 99.5 98.9	27.2 27.2 25.9												
18.0 20.0 22.0	71.9 68.9 65.9	98.3 97.6 96.7	24.3 23.0 21.5												
22.2 24.0 26.0	62.9 59.7	95.7 94.6	20.3	73.0 70.3 67.3	98.1 97.5 96.7	23.3 22.7 21.8									
28.0 30.0 32.0 34.0	56.4 53.0 49.4 45.6	93.3 91.9 90.2 88.3	18.3 17.5 16.7 15.8	64.3 61.2 57.9 54.6	95.7 94.7 93.5 92.1	20.7 20.0 19.1 18.3									
35.2 36.0 38.0	41.6 37.1	86.2 83.7	15.0 14.2	51.1 47.4	90.5	17.7 16.8	65.0 63.9 60.8	94.3 94.0 92.9	19.5 20.7 20.1						
40.0 42.0 44.0	32.2 26.4 19.0	80.7 77.0 72.0	13.6 12.9 12.3	43.5 39.2 34.5	86.7 84.4 81.7	16.0 15.3 14.7	57.5 54.1 50.6	91.7 90.3 88.7	19.4 18.6 17.9						
45.0 46.0 48.0	15.7	69.8	9.6	29.2 22.7	78.3 74.1	14.0 13.3	46.9 42.9	86.9 84.8	17.2 16.4						
50.0 50.6 55.0 57.0				15.3	69.0	10.4	38.6 25.3	74.2	15.7	55.0 47.3	87.1 83.6	14.6 14.3			
60.0 65.0 67.0							17.4	68.9	13.5	36.9 22.6 15.2	77.9 68.9 63.8	13.1 11.8 10.7			
76.5 80.0 82.0													35.0 27.0 19.8	65.2 60.2 55.4	5.1 4.6 4.3



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

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

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

		gulo de orincipal			gulo de orincipa			gulo de principa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				56.0 r	n Pluma Cab	eza de p	ıl, Punto lumín (1: ı] Posici	916-1) 4	4.5 m Pl	eza de p umín	lumín				
14.4	78.0	102.5	24.7												
16.0	75.8	102.1	24.1												
18.0	73.2	101.5	22.7												
20.0	70.4	100.8	21.3												
22.0 23.0	67.7	100.0	20.1	73.0	101.0	21.1									
23.0	64.8	99.1	18.9	73.0	101.0	21.1									
26.0	61.9	98.1	18.0	69.0	99.9	20.2				ł			ł		
28.0	59.0	96.9	17.1	66.1	99.1	19.4									
30.0	55.9	95.6	16.3	63.3	98.1	18.5									
32.0	52.7	94.1	15.6	60.3	97.0	17.8									
34.0	49.3	92.4	15.0	57.3	95.7	17.0									
36.0	45.8	90.6	14.3	54.2	94.3	16.3									
36.5							65.0	97.0	18.8						
38.0	42.0	88.4	13.6	50.9	92.8	15.7	62.9	96.3	18.6						
40.0	38.0	86.0	13.0	47.5	91.0	15.0	60.0	95.2	17.9						
42.0	33.5	83.1	12.5	43.8	89.0	14.3	56.9	93.9	17.3						
44.0	28.4 22.2	79.7	12.0	39.9	86.7	13.7	53.8	92.5	16.6						
46.0 48.0	15.2	75.3 70.2	11.4 8.3	35.6 30.8	84.0 80.9	13.1 12.5	50.5 47.0	90.9 89.1	16.0 15.3						
50.0	15.2	70.2	0.3	25.2	77.0	11.9	43.3	87.1	14.6						
52.0				18.0	71.8	11.3	43.3	07.1	14.0						
52.3				10.0	71.0	11.5				55.0	89.6	13.7	i		
55.0							32.7	80.5	13.2	50.8	87.6	14.1			
60.0							16.8	69.3	11.7	41.8	82.7	12.8			
65.0										30.8	75.7	11.7			
69.0										17.9	66.5	10.7			
79.0													35.0	66.9	4.5
80.0													33.9	66.2	4.4
85.0													19.1	55.9	3.7



 $\mbox{N}^{\rm o}$ de ident.: 9842523/95738/ Pieza de articulaci Radio de descarga: 360 $^{\circ}$ Cabeza de pluma

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

		gulo de orincipal			gulo de orincipa		75° Án I	gulo de orincipa	pluma I		gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				56.0 ו		eza de p	ıl, Punto lumín (1 ı] Posici	916-1) 4	7.5 m Pli	eza de p umín	lumín				
15.0	78.0	105.4	22.0												
16.0	76.8	105.2	21.9												
18.0	74.3	104.6	20.7												
20.0	71.7	104.0	19.6												
22.0	69.1	103.2	18.8	70.0	100.0	10.0									
23.9	00.5	400.4	47.0	73.0	103.8	19.0							ł		
24.0 26.0	66.5 63.9	102.4 101.4	17.9 17.2	72.9 70.3	103.8 103.1	19.0 18.7							ł		
28.0	61.1	101.4	16.7	67.7	103.1	18.1							ł		
30.0	58.3	99.2	15.9	65.1	102.3	17.5									
32.0	55.4	97.8	15.2	62.4	100.4	17.1									
34.0	52.4	96.3	14.7	59.6	99.3	16.6									
36.0	49.3	94.7	14.1	56.8	98.0	16.0							İ		
37.8							65.0	99.8	17.3						
38.0	45.9	92.8	13.4	53.8	96.6	15.5	64.8	99.7	17.3						
40.0	42.4	90.7	12.7	50.7	95.0	15.2	62.0	98.6	17.1						
42.0	38.7	88.3	12.1	47.5	93.2	14.6	59.3	97.5	16.6						
44.0	34.6	85.5	11.6	44.1	91.2	14.0	56.4	96.2	16.2				•		
46.0	30.0	82.3	11.1	40.5	89.0	13.5	53.4	94.8	15.8						
48.0	24.6	78.3	10.6	36.5	86.4	13.0	50.3	93.1	15.5						
50.0	17.7	73.0	10.0	32.2	83.4	12.5	47.1	91.3	14.9						
54.1										55.0	92.0	13.1			
55.0				17.4	72.2	10.8	38.0	85.8	13.6	53.8	91.4	13.5			
60.0							26.5	77.6 69.7	12.2	45.8	87.1	12.4			
63.0 65.0							16.3	69.7	11.3	36.5	81.2	11.4			
70.0										24.3	72.5	10.3			
70.0 72.0										16.0	65.9	9.9	ĺ		
81.4										10.0	00.0	0.0	35.0	68.7	3.9
85.0													27.9	63.6	3.4
88.0													18.4	56.3	3.0



2821-1

2821-1

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

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

		gulo de principa			gulo de orincipa		75° Án	gulo de principa	pluma I		gulo de orincipa		45° Án	gulo de orincipa	pluma I
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				56.0	m Pluma Cab	eza de p	al, Punto lumín (1 n] Posici	916-1) 5	0.5 m Pl	eza de p umín	lumín				
15.6	78.0	108.3	20.2												
16.0	77.6	108.2	20.2												
18.0	75.2	107.7	19.4												
20.0	72.8	107.1	18.6												
22.0	70.4	106.4	17.8												
24.0	68.0	105.7	17.2												
24.8				73.0	106.7	17.6									
26.0	65.5	104.8	16.7	71.6	106.3	17.6									
28.0	63.0	103.8	16.3	69.1	105.6	17.2									
30.0	60.4	102.7	15.9	66.7	104.7	16.9									
32.0	57.7	101.5	15.2	64.2	103.8	16.6									
34.0	55.0	100.1	14.6	61.6	102.7	16.3									
36.0	52.1	98.6	14.1	59.0	101.6	15.9									
38.0	49.2	96.9	13.6	56.3	100.3	15.6									
39.0							65.0	102.5	15.8						
40.0	46.1	95.0	12.9	53.5	98.8	15.3	63.8	102.0	16.4						
42.0	42.8	93.0	12.2	50.6	97.2	15.0	61.3	101.0	16.2						
44.0	39.3	90.6	11.6	47.5	95.5	14.5	58.6	99.8	16.0						
46.0	35.5	87.9	11.0	44.3	93.5	14.0	55.9	98.5	15.7						
48.0	31.3	84.8	10.6	41.0	91.3	13.6	53.1	97.0	15.5						
50.0	26.5	81.1	10.1	37.3	88.8	13.2	50.2	95.4	15.3						
53.0	17.1	73.4	9.4	26.4	90.5	11.6	40.0	00.5	14.2						
55.0				26.4	80.5	11.6	42.2	90.5	14.2	55.0	04.5	12.4			
55.8	1		1	I				l	1	55.0	94.5	12.4			

83.8

73.4

70.1

32.8

19.6

10.5

49.0

40.9

31.1

13.1 11.5 11.2 91.2

86.1

79.0

12.2

10.3

35.0

33.9

21.3 17.8

58.0

60.0

65.0

66.0

70.0

75.0

83.9

85.0

90.0 91.0 3.5

3.4

2.8

70.4

69.5

59.7 56.8



2821-1

2821-1

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

		gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				56.0 ו	m Pluma Cab	eza de p	al, Punto dumín (1 n] Posici	916-1) 5	3.5 m Plı	eza de p umín	lumín				
16.2 18.0 20.0 22.0 24.0	78.0 76.1 73.8 71.6 69.3	111.3 110.8 110.3 109.6 108.9	18.3 18.0 17.2 16.4 15.8												
25.7 26.0 28.0 30.0 32.0	67.0 64.6 62.2 59.8	108.1 107.1 106.1 105.0	15.4 15.0 14.7 14.3	73.0 72.6 70.4 68.1 65.7	109.6 109.5 108.8 108.0 107.1	16.1 16.1 15.9 15.6 15.2									
34.0 36.0 38.0 40.0 40.3	57.2 54.6 51.9 49.1	103.7 102.3 100.8 99.1	13.8 13.4 13.1 12.6	63.3 60.9 58.4 55.8	106.1 105.1 103.9 102.5	14.9 14.7 14.4 14.1	65.0	105.2	14.3						
42.0 44.0 46.0 48.0 50.0	46.2 43.1 39.9 36.3 32.5	97.3 95.2 92.9 90.3 87.3	12.0 11.3 10.8 10.2 9.8	53.2 50.4 47.6 44.6 41.4	101.1 99.5 97.7 95.7 93.5	13.9 13.7 13.3 12.9 12.6	63.0 60.6 58.1 55.5 52.8	104.4 103.3 102.1 100.7 99.2	14.9 14.7 14.5 14.3 14.1						
55.0 56.0 57.5 60.0 61.0	20.1 16.6	76.9 73.8	8.8 8.6	32.3 19.9 16.3	76.3 73.1	11.6 10.0 9.6	45.7 37.5	94.9 89.1	13.4	55.0 51.8	96.9 95.1	11.8 12.0			
65.0 69.0 70.0 75.0 78.0							27.4 15.3	81.1 70.5	11.4 10.2	44.5 36.2 25.5 16.2	90.5 84.5 76.0 67.8	11.0 10.1 9.1 8.4			
86.3 90.0 94.0													35.0 28.6 17.3	72.1 67.0 57.3	2.9 2.5 2.1



2821-1

2821-1

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

	88° Án F	gulo de orincipal	pluma I	83° Án	gulo de orincipa	pluma I		gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				56.0 ı	m Pluma Cab	eza de p	il, Punto lumín (1 n] Posici	916-1) 5	6.5 m Pl		lumín				
16.9 18.0 20.0 22.0 24.0 26.0 26.5 28.0 30.0	78.0 76.8 74.7 72.6 70.5 68.3 66.1 63.8	114.2 113.9 113.4 112.8 112.1 111.3 110.5 109.5	16.8 16.7 16.0 15.3 14.6 14.2	73.0 71.4 69.3	112.4 112.0 111.2	14.8 14.7 14.4									
32.0 34.0 36.0 38.0 40.0 41.6	61.5 59.2 56.8 54.3 51.7	108.4 107.3 106.0 104.6 103.1	13.4 13.1 12.7 12.4 12.1	67.1 64.9 62.6 60.3 57.9	110.4 109.5 108.5 107.4 106.1	14.2 13.9 13.6 13.4 13.1	65.0	107.9	13.6						
42.0 44.0 46.0 48.0 50.0 55.0	49.1 46.3 43.4 40.3 37.1 27.4	101.4 99.5 97.5 95.2 92.7 84.5	11.8 11.2 10.6 10.1 9.6 8.6	55.4 52.9 50.3 47.6 44.8 36.9	104.8 103.3 101.7 99.9 98.0 92.1	12.9 12.7 12.6 12.3 12.0 11.3	64.6 62.3 60.0 57.6 55.1 48.6	107.7 106.7 105.6 104.3 103.0 99.0	13.6 13.5 13.3 13.2 13.0 12.7						
59.0 59.2 60.0 64.0 65.0 70.0	16.2	74.2	7.9	27.2 15.9	83.9 73.5	10.1 8.9	41.4 32.9 21.5	93.9 87.1 77.2	12.0 11.4 10.0	55.0 54.2 47.6 40.2	99.4 98.9 94.8 89.5	11.1 11.5 10.7 9.9			
72.0 75.0 80.0 81.0 88.8 90.0 93.0							16.1	72.1	8.9	30.9 19.3 17.0	81.9 71.5 69.4	8.9 7.9 7.7	35.0 33.8 27.8	73.8 72.9 67.7	2.4 2.3 2.0



2821-1

2821-1

N° de ident.: 9842523/95738/

Radio de descarga: 360

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

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				56.0 ו		eza de p	II, Punto Ilumín (19 Il Posicio	916-1) 5	9.5 m Plı	eza de p umín	lumín				
17.5	78.0	117.1	14.6												
18.0	77.5	117.0	14.6												
20.0	75.5	116.5	14.0												
22.0	73.5	115.9	13.5												
24.0	71.5	115.3	12.9												
26.0	69.4	114.6	12.5												
27.4				73.0	115.3	12.9									
28.0	67.3	113.7	12.2	72.4	115.1	12.9									
30.0	65.2	112.8	11.9	70.4	114.4	12.7									
32.0	63.0	111.8	11.7	68.3	113.7	12.4									
34.0	60.8	110.7	11.5	66.2	112.8	12.2									
36.0	58.5	109.5	11.2	64.0	111.8	11.9									
38.0	56.2	108.2	11.0	61.8	110.8	11.7									
40.0	53.8	106.8	10.8	59.6	109.6	11.5									
42.0	51.4	105.2	10.6	57.3	108.4	11.3									
42.8							65.0	110.6	11.8						
44.0	48.8	103.5	10.3	55.0	107.0	11.1	63.7	110.1	11.8						
46.0	46.2	101.6	9.8	52.5	105.5	11.0	61.6	109.0	11.6						
48.0	43.4	99.5	9.4	50.0	103.8	10.8	59.3	107.8	11.5						
50.0	40.5 32.2	97.2	9.0	47.4	102.0 96.7	10.6	57.0 51.0	106.6 102.8	11.3 11.0						
55.0	21.1	90.2 80.0	8.1 7.3	40.3 32.0	96.7 89.7	10.2 9.5	51.0 44.3	98.1	10.7						
60.0 60.9	21.1	80.0	7.3	32.0	89.7	9.5	44.3	98.1	10.7	55.0	101.8	10.3			
62.0	16.9	75.8	5.4							00.0	101.6	10.3			
65.0	10.9	10.0	3.4	20.9	79.3	8.3	36.8	92.1	10.4	50.0	98.6	10.0			
67.0				16.6	75.1	6.3	30.0	92.1	10.4	50.0	90.0	10.0			
70.0				10.0	73.1	0.3	27.5	84.0	9.5	43.3	93.8	9.3			
70.0 75.0							27.5 15.7	72.5	7.7	35.5	93.6 87.5	9.3 8.6			
80.0							13.7	12.0	1.1	27.2	80.1	7.6			
84.0										16.5	69.8	6.9			



N° de ident.: 9842523/95738/

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

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

		gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				56.0 ו		eza de p	ıl, Punto lumín (19 n] Posici	916-1) 6:	2.5 m Pli	eza de p umín	lumín				
18.2	78.0	120.1	13.3												
20.0	76.3	119.6	13.0												
22.0	74.3	119.1	12.4												
24.0	72.4	118.5	12.0												
26.0	70.5	117.8	11.6												
28.0	68.5	117.0	11.3												
28.3				73.0	118.2	11.8									
30.0	66.5	116.1	11.0	71.4	117.6	11.7							<u> </u>		
32.0	64.4	115.2	10.8	69.4	116.9	11.4									
34.0	62.4	114.2	10.6	67.4	116.1	11.2									
36.0	60.2	113.0	10.4	65.4	115.2	11.0									
38.0	58.1	111.8	10.2	63.3	114.2	10.8									
40.0	55.9	110.5	10.0	61.2	113.1	10.6									
42.0	53.6	109.0	9.9	59.1	111.9	10.4									
44.0	51.2	107.4	9.7	56.9	110.6	10.2									
44.1							65.0	113.4	10.7						
46.0	48.8	105.7	9.5	54.6	109.2	10.0	63.1	112.4	10.7						
48.0	46.3	103.8	9.0	52.3	107.7	9.9	60.9	111.3	10.5						
50.0	43.6	101.8	8.7	49.9	106.1	9.8	58.8	110.1	10.3						
55.0	36.4	95.7	7.9	43.5	101.2	9.4	53.2	106.7	10.0						
60.0	27.5	87.4	7.1	36.3	95.1	9.1	47.1	102.4	9.8						
62.7										55.0	104.3	9.6			
65.0	16.5	76.2	4.7	27.4	86.8	8.3	40.4	97.0	9.6	52.3	102.5	9.5			
70.0				16.2	75.5	5.3	32.5	90.1	9.2	46.1	98.1	9.0			
75.0							22.3	80.1	8.3	39.3	92.6	8.4			
78.0							15.3	72.9	6.7						
80.0										31.2	85.3	7.5			
85.0										21.9	76.2	6.6			
87.0										16.1	70.3	6.3			



N° de ident.: 9842523/95738/

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

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

		gulo de 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]
				56.0 ו	m Pluma Cab	eza de p	lumín (1	de carga 916-1) 6 ón midfa	5.5 m Pli	eza de p umín	lumín				
18.8	78.0	123.0	12.1												
20.0	76.9	122.7	12.1												
22.0	75.1	122.2	11.5												
24.0	73.3	121.6	11.1												
26.0	71.4	120.9	10.7												
28.0	69.5	120.2	10.5												
29.2				73.0	121.1	10.8									
30.0	67.6	119.4	10.2	72.3	120.8	10.8									
32.0	65.7	118.5	9.9	70.4	120.1	10.6									
34.0	63.7	117.5	9.7	68.5	119.3	10.3									
36.0	61.7	116.5	9.6	66.6	118.5	10.1									
38.0	59.7	115.3	9.4	64.6	117.5	9.9									
40.0	57.6	114.1	9.2	62.7	116.5	9.8									
42.0	55.5	112.7	9.0	60.7	115.4	9.6									
44.0	53.3	111.3	8.8	58.6	114.2	9.4	25.0	440.4	0.7						
45.4	54.4	400.7	0.7	50.5	440.0	0.0	65.0	116.1	9.7						
46.0	51.1 48.8	109.7 107.9	8.7	56.5	112.9 111.5	9.2	64.4 62.4	115.8 114.7	9.7						
48.0 50.0	46.4	107.9	8.5 8.2	54.4 52.1	110.0	9.1 8.9	60.4	113.6	9.7 9.5						
55.0	39.9	100.1	7.5	46.3	105.5	8.5	55.2	110.4	9.5						
60.0	32.3	93.6	6.9	39.8	100.0	8.2	49.6	106.4	8.9						
64.4	32.3	95.0	0.9	39.0	100.0	0.2	49.0	100.4	0.9	55.0	106.8	8.7			
65.0	22.5	83.7	6.2	32.2	93.0	7.7	43.4	101.6	8.6	54.3	106.3	8.7			
68.0	16.1	76.6	4.4	02.2	00.0	7.7	40.4	101.0	0.0	01.0	100.0	0.7			
70.0				22.4	83.0	7.0	36.5	95.5	8.3	48.7	102.2	8.4			
73.0				15.8	75.9	5.1	23.0	23.0	2.0						
75.0							28.1	87.4	7.8	42.4	97.2	8.0			
80.0							16.2	74.7	7.3	35.3	90.8	7.2	Ī		
85.0										27.8	83.5	6.4			
90.0										15.7	70.7	5.6			



2821-1

2821-1

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

		gulo de orincipal			gulo de orincipa			gulo de principa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				56.0 ו	m Pluma Cab	eza de p	al, Punto llumín (1 n] Posici	916-1) 6	8.5 m Plı	eza de p umín	lumín				
19.4	78.0	125.9	11.1												
20.0	77.5	125.8	11.1												
22.0	75.8	125.3	10.7												
24.0	74.0	124.7	10.3												
26.0	72.2	124.1	10.0												
28.0	70.5	123.4	9.7												
30.0	68.7	122.6	9.5												
30.1				73.0	123.9	9.9									
32.0	66.8	121.8	9.3	71.3	123.3	9.9									
34.0	65.0	120.9	9.1	69.5	122.5	9.6									
36.0	63.1	119.9	8.9	67.7	121.7	9.5									
38.0 40.0	61.2 59.2	118.8 117.6	8.8 8.5	65.8 64.0	120.9 119.9	9.2 9.1									
40.0	57.2	117.6	8.3	62.1	118.8	8.9									
44.0	55.2	115.0	8.2	60.1	117.7	8.8									
46.0	53.1	113.5	8.0	58.2	116.5	8.6									
46.6	33.1	110.0	0.0	30.2	110.5	0.0	65.0	118.8	8.9						
48.0	51.0	111.9	7.9	56.2	115.2	8.4	63.7	118.1	8.9						
50.0	48.7	110.2	7.7	54.1	113.7	8.2	61.8	117.1	8.8						
55.0	42.8	105.2	7.1	48.7	109.6	7.9	56.9	114.0	8.5						
60.0	36.1	99.0	6.6	42.7	104.7	7.4	51.7	110.4	8.2						
65.0	28.1	90.8	6.1	36.0	98.4	7.1	46.1	105.9	7.9						
66.1										55.0	109.2	7.9			
70.0	16.8	78.4	5.4	28.0	90.2	6.6	39.8	100.4	7.5	50.9	106.2	7.8			
71.0	15.7	77.1	4.2												
75.0				16.6	77.6	6.2	32.6	93.4	7.2	45.1	101.6	7.6			
76.0				15.5	76.3	5.0									
80.0							23.5	83.8	6.9	38.8	95.9	7.0			
83.0							15.8	75.1	6.7						
85.0										32.3	89.6	6.2			
90.0										23.2	79.9	5.4			
93.0										15.4	71.1	5.0			



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

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

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

		gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				56.0 ı	m Pluma Cab	eza de p	il, Punto lumín (19 n] Posici	916-1) 7	1.5 m Plı	eza de p umín	lumín				
20.0 22.0 24.0 26.0	78.0 76.4 74.7 73.0	128.9 128.4 127.9 127.3	10.0 9.8 9.4 9.1												
28.0 30.0 31.0 32.0	71.3 69.6 67.9	126.6 125.9 125.1	8.9 8.7 8.5	73.0 72.1	126.8 126.5	9.0 9.0									
34.0 36.0 38.0 40.0	66.1 64.3 62.5 60.7	124.2 123.2 122.2 121.1	8.3 8.1 8.0 7.9	70.4 68.7 66.9 65.2	125.8 125.0 124.1 123.2	8.8 8.6 8.5 8.3									
42.0 44.0 46.0 47.9	58.8 56.9 54.9	119.9 118.6 117.2	7.7 7.5 7.4	63.4 61.5 59.7	122.2 121.2 120.0	8.1 8.0 7.8	65.0	121.5	8.1						
48.0 50.0 55.0 60.0	52.9 50.9 45.4 39.4	115.8 114.1 109.6 104.0	7.3 7.1 6.7 6.2	57.8 55.8 50.8 45.3	118.8 117.4 113.6 109.0	7.7 7.5 7.3 7.0	64.9 63.1 58.5 53.6	121.5 120.5 117.6 114.2	8.1 8.0 7.7 7.5						
65.0 67.8 70.0 74.0	32.4 23.7 15.4	96.9 87.3 77.4	5.8 5.2 3.9	39.3 32.3	103.4 96.3	6.7	48.4 42.7	110.0 105.0	7.2	55.0 52.8	111.7 110.0	7.1 7.1			
75.0 79.0 80.0 85.0				23.5 15.1	86.6 76.7	5.9 4.6	28.6 18.3	98.8 90.7 78.9	6.8 6.5 6.2	47.5 41.7 36.0	105.8 100.6 95.0	6.9 6.7 5.9			
86.0 90.0 95.0 96.0							15.5	75.5	6.1	28.3 17.9 15.0	86.9 74.9 71.4	5.1 4.4 4.3			



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

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				56.0 ו	m Pluma Cab	eza de p	il, Punto lumín (1: i] Posici	916-1) 7 _'	4.5 m Plı	eza de p umín	lumín				
20.7	78.0	131.8	9.1												
22.0	76.9	131.5	9.1												
24.0	75.3	131.0	8.7												
26.0	73.7	130.4	8.4												
28.0	72.1	129.8	8.2												
30.0	70.5	129.1	8.0												
31.8				73.0	129.7	8.2									
32.0	68.8	128.3	7.9	72.9	129.6	8.2									
34.0	67.1	127.5	7.7	71.2	128.9	8.1									
36.0	65.4	126.6	7.5	69.6	128.2	7.9									
38.0	63.7	125.6	7.4	67.9	127.4	7.8									
40.0	62.0	124.6	7.2	66.2	126.5	7.6									
42.0 44.0	60.2 58.4	123.4 122.2	7.1 7.0	64.5 62.8	125.6 124.6	7.5 7.3									
46.0	56.5	120.9	6.9	61.0	123.5	7.2									
48.0	54.7	119.5	6.7	59.2	122.3	7.1									
49.2	34.7	118.5	0.7	39.2	122.5	7.1	65.0	124.2	7.3						
50.0	52.7	118.0	6.6	57.4	121.0	7.0	64.3	123.8	7.3						
55.0	47.7	113.7	6.3	52.7	117.5	6.7	59.9	121.1	7.1						
60.0	42.1	108.6	5.9	47.6	113.2	6.5	55.3	117.9	6.9						
65.0	35.9	102.3	5.5	42.0	108.1	6.3	50.4	114.0	6.6						
69.5										55.0	114.1	6.4			
70.0	28.6	94.2	5.1	35.8	101.7	6.1	45.1	109.4	6.5	54.6	113.8	6.4			
75.0	18.8	82.5	4.5	28.5	93.6	5.8	39.3	103.7	6.4	49.6	109.8	6.3			
77.0	15.0	77.8	3.7												
80.0				18.6	81.8	5.3	32.7	96.7	6.2	44.3	105.1	6.2			
81.0				15.9	78.5	5.2									
85.0							24.5	87.3	5.9	38.4	99.2	5.8			
89.0							15.1	75.9	5.7						
90.0										32.4	92.9	5.1			
95.0										24.2	83.4	4.4			
98.0										17.6	75.4	4.0			



2821-1

2821-1

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

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				56.0 ו	m Pluma Cab	eza de p	il, Punto lumín (1 n] Posici	916-1) 7	7.5 m Pli	eza de p umín	lumín		-		
21.3 22.0 24.0 26.0	78.0 77.5 75.9 74.4	134.7 134.6 134.1 133.5	8.2 8.2 8.0 7.7			04.0[11	1 1 03101		(1310)						
28.0 30.0 32.0	72.8 71.3 69.7	132.9 132.3 131.5	7.7 7.5 7.3 7.1												
32.7 34.0 36.0 38.0	68.1 66.5 64.8	130.7 129.9 128.9	7.0 6.8 6.6	73.0 72.0 70.4 68.8	132.5 132.1 131.4 130.6	7.4 7.4 7.2 7.0									
40.0 42.0 44.0	63.2 61.5 59.8	127.9 126.9 125.7	6.5 6.4 6.3	67.2 65.6 63.9	129.8 128.9 128.0	6.9 6.7 6.6									
46.0 48.0 50.0 50.5	58.0 56.2 54.4	124.5 123.2 121.8	6.1 6.0 5.9	62.3 60.6 58.8	126.9 125.8 124.6	6.5 6.4 6.2	65.0	127.0	6.5						
55.0 60.0 65.0	49.7 44.6 38.9	117.8 113.0 107.3	5.7 5.4 5.1	54.3 49.6 44.5	121.2 117.2 112.5	6.0 5.8 5.6	61.2 56.8 52.2	124.6 121.5 117.9	6.4 6.1 5.9						
70.0 71.3 75.0 79.0	32.5 24.6 15.8	90.8 79.6	4.8 4.3 3.9	38.8 32.4	106.8 99.6	5.4	47.3 42.0	113.6 108.4	5.7	55.0 51.5	116.6 113.7	5.7 5.6			
80.0 84.0 85.0 90.0				24.5 15.6	90.2 78.9	4.9 4.7	36.0 29.1 19.9	102.1 94.1 82.8	5.5 5.3 5.2	46.6 41.1 35.8	109.3 104.0 98.3	5.5 5.4 4.8			
92.0 95.0 100.0 101.0							19.9	78.6	4.7	28.8 19.6 17.2	98.3 90.2 78.9 75.8	4.8 4.1 3.5 3.4			



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]
				56.0 ו	m Pluma Cab	eza de p	il, Punto lumín (1: i] Posici	916-1) 8	0.5 m Plı	eza de p umín	lumín				
21.9	78.0	137.7	7.5												
22.0	77.9	137.7	7.5												
24.0	76.5	137.2	7.3												
26.0	75.0	136.7	7.1												
28.0	73.5	136.1	6.9												
30.0	72.0	135.4	6.7												
32.0	70.5	134.7	6.5												
33.6				73.0	135.4	6.7									
34.0	68.9	134.0	6.4	72.7	135.3	6.7									
36.0	67.4	133.1	6.2	71.2	134.6	6.6									
38.0	65.8	132.3	6.1	69.7	133.9	6.4									
40.0	64.2	131.3	5.9	68.1	133.1	6.3									
42.0	62.6 61.0	130.3 129.2	5.8 5.7	66.6 65.0	132.2 131.3	6.1 6.0									
44.0 46.0	59.4	129.2	5.7 5.6	63.4	130.3	5.9									
48.0	57.7	126.8	5.5	61.8	129.2	5.8									
50.0	55.9	125.4	5.3	60.1	129.2	5.7									
51.7	33.8	123.4	0.0	00.1	120.1	5.1	65.0	129.7	5.8						
55.0	51.5	121.7	5.1	55.9	124.9	5.4	62.4	128.0	5.8						
60.0	46.7	117.3	4.9	51.4	121.2	5.2	58.2	125.1	5.5						
65.0	41.5	112.0	4.7	46.6	116.7	5.0	53.9	121.7	5.3						
70.0	35.8	105.6	4.5	41.5	111.5	4.8	49.3	117.6	5.1						
73.0										55.0	119.0	5.0			
75.0	29.0	97.6	4.2	35.7	105.1	4.7	44.4	112.8	5.0	53.2	117.6	5.0			
80.0	20.3	86.4	3.7	28.9	97.0	4.5	38.9	107.1	4.8	48.6	113.4	4.9			
82.0	15.5	80.0	3.5												
85.0				20.1	85.7	4.4	32.8	100.0	4.8	43.6	108.5	4.8			
87.0				15.3	79.3	4.3									
90.0							25.3	90.8	4.7	38.0	102.6	4.6			
95.0							16.3	79.0	4.2	32.5	96.2	4.0			
100.0										25.0	86.9	3.3			
104.0										16.9	76.3	2.9			



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

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

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

	88° Ángulo de pluma principal			83° Ángulo de pluma principal			75° Ángulo de pluma principal			65° Ángulo de pluma principal			45° Ángulo de pluma principal		
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
56.0 m Pluma principal, Punto de carga 1 - Cabeza de plumín Cabeza de plumín (1916-1) 83.5 m Plumín 40.0 [m] Posición midfall (1916)															
22.5	78.0	140.6	6.7												
24.0	77.0	140.3	6.7												
26.0	75.5	139.8	6.4												
28.0	74.1	139.2	6.2										i		
30.0	72.7	138.6	6.1										İ		
32.0	71.2	137.9	5.9												
34.0	69.7	137.2	5.8												
34.5				73.0	138.3	6.0									
36.0	68.3	136.4	5.7	71.9	137.8	6.0									
38.0	66.8	135.6	5.5	70.4	137.1	5.9									
40.0	65.2	134.6	5.4	68.9	136.3	5.7									
42.0	63.7	133.7	5.3	67.5	135.5	5.6									
44.0	62.2	132.6	5.2	65.9	134.6	5.4									
46.0	60.6	131.5	5.1	64.4	133.7	5.3									
48.0	59.0	130.3	5.0	62.9	132.6	5.2									
50.0	57.3	129.0	4.9	61.3	131.6	5.1									
53.0							65.0	132.4	5.2						
55.0	53.1	125.5	4.6	57.3	128.5	4.9	63.5	131.4	5.2						
60.0	48.6	121.4	4.4	53.1	125.0	4.7	59.5	128.6	5.0						
65.0	43.8	116.5	4.2	48.6	120.8	4.5	55.4	125.4	4.8						
70.0	38.6	110.7	4.0	43.8	115.9	4.3	51.1	121.6	4.6	55.0	404.5	4.5			
74.7 75.0	32.6	402 F	3.8	38.5	110.1	4.1	46.5	117.1	4.4	55.0 54.8	121.5 121.3	4.5			
75.0 80.0	32.6 25.4	103.5 94.3	3.8	38.5	102.9	4.1	46.5 41.4	117.1	4.4 4.3	54.8 50.4	121.3	4.5			
85.0	15.2	94.3 80.4	3.5	32.5 25.2	93.7	3.8	35.9	105.4	4.3	45.7	117.4	4.4			
90.0	10.2	00.4	3.1	16.6	81.9	3.1	29.4	97.5	4.2	40.6	107.4	4.3			
95.0				10.0	6.10	3.1	29.4	86.6	4.1	35.0	107.4	3.7			
98.0							16.0	79.4	3.5	33.0	100.0	0.1			
100.0							10.0	10.4	0.0	29.1	93.6	3.1			
105.0										20.9	82.7	2.5			
107.0										16.6	76.7	2.3			



2821-1

2821-1

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

		gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				56.0 ו	m Pluma Cab	eza de p	al, Punto lumín (1 n l Posici	916-1) 8	6.5 m Pl		lumín		-		
23.2 24.0 26.0 28.0	78.0 77.4 76.1 74.7	143.5 143.3 142.9 142.3	6.1 6.1 5.9 5.7												
30.0 32.0 34.0 35.3 36.0	73.3 71.9 70.5 69.1	141.7 141.1 140.4 139.6	5.6 5.4 5.3	73.0 72.5	141.1 140.9	5.5 5.5									
38.0 40.0 42.0 44.0	67.6 66.2 64.7 63.2	138.8 137.9 137.0 136.0	5.1 4.9 4.8 4.7	71.1 69.7 68.3 66.8	140.3 139.5 138.7 137.9	5.4 5.2 5.1 5.0									
46.0 48.0 50.0 54.3	61.7 60.2 58.6	134.9 133.8 132.6	4.7 4.6 4.5	65.4 63.9 62.4	137.0 136.0 135.0	4.9 4.8 4.7	65.0	135.1	4.7						
55.0 60.0 65.0 70.0 75.0	54.6 50.4 45.9 41.0 35.6	129.2 125.3 120.8 115.4 109.0	4.2 4.1 3.8 3.6 3.5	58.6 54.6 50.3 45.8 40.9	132.1 128.7 124.8 120.2 114.8	4.5 4.3 4.1 3.9 3.7	64.4 60.7 56.8 52.7 48.3	134.7 132.1 129.0 125.4 121.2	4.7 4.5 4.3 4.2 4.0						
76.4 80.0 85.0 88.0	29.3 21.5 16.5	100.9 90.2 83.1	3.2 2.9 2.5	35.5 29.2	108.4	3.6 3.4	43.7 38.6	116.3 110.4	3.9 3.7	55.0 52.0 47.6	124.0 121.3 117.0	4.0 3.9 3.8			
90.0 93.0 95.0 100.0	10.5	03.1	2.3	21.3 16.3	89.5 82.4	3.3 2.7	32.8 25.9 16.6	103.4 94.3 81.1	3.6 3.5 3.4	42.9 37.7 32.6	111.9 105.9 99.5	3.7 3.5 3.0			
101.0 105.0 108.0							15.7	79.8	2.9	25.7 20.5	99.5 90.4 83.3	2.4 2.1			



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

		gulo de 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]
				56.0 ו	m Pluma Cab	eza de p	lumín (1	916-1) 8	9.5 m Pl		lumín				
						46.0 [n	ı] Posici	ón midfa	II (1916)						
23.8	78.0	146.5	5.4												
24.0	77.9	146.4	5.4												
26.0	76.5	146.0	5.3												
28.0	75.2	145.4	5.1												
30.0	73.9	144.9	5.0												
32.0	72.5	144.2	4.8												
34.0	71.2	143.6	4.7												
36.0	69.8	142.8	4.6	70.0	444.0	4.0									
36.2		440.4		73.0	144.0	4.8									
38.0	68.4	142.1	4.5	71.8	143.4	4.8									
40.0	67.0	141.2	4.3	70.4	142.7	4.6				ł					
42.0 44.0	65.6 64.2	140.3 139.4	4.2 4.1	69.1 67.7	142.0 141.2	4.5 4.4				ł					
46.0	62.7	138.4	4.0	66.3	140.3	4.4				ł					
48.0	61.3	137.3	3.9	64.8	139.4	4.2									
50.0	59.8	136.1	3.8	63.4	138.4	4.1									
55.0	56.0	132.9	3.6	59.7	135.6	3.9				i					
55.5	00.0	102.0	0.0	00.1	100.0	0.0	65.0	137.8	4.0	i					
60.0	52.0	129.2	3.5	55.9	132.4	3.7	61.8	135.5	3.9						
65.0	47.7	124.9	3.3	51.9	128.7	3.5	58.0	132.6	3.7						
70.0	43.2	119.9	3.1	47.7	124.4	3.3	54.1	129.2	3.6						
75.0	38.2	114.0	2.9	43.1	119.4	3.2	50.0	125.2	3.4						
78.1										55.0	126.4	3.3			
80.0	32.6	106.8	2.8	38.2	113.4	3.0	45.7	120.6	3.3	53.5	125.1	3.3			
85.0	26.0	97.8	2.6	32.5	106.3	2.9	40.9	115.2	3.2	49.4	121.0	3.2			
90.0	17.1	84.8	2.3	25.9	97.1	2.7	35.7	108.7	3.0	45.0	116.3	3.1			
91.0	16.2	83.5	2.1												
95.0				16.9	84.1	2.6	29.7	100.8	2.9	40.2	110.7	3.0			
96.0				16.0	82.8	2.2									
100.0							22.3	90.3	2.8	34.9	104.1	2.7			
104.0							15.4	80.2	2.4	00.5	07.0	0.0			
105.0										29.5	97.0	2.2 2.1			
106.0	l					l		l	l	28.1	95.1	2.1			



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

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

Valor de vuelco: 2 - Vía ancha Lastre trasero [t]: 114.0 Lastre central [t]: 52.6 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]
				56.0	m Pluma Cab	eza de p	al, Punto Ilumín (1: n l Posici	916-1) 9:	2.5 m Pl	eza de p umín	lumín				
24.4	78.0	149.4	4.8	ı			1 00.0.		()	1			1		
26.0	77.0	149.0	4.8	i						i			i		
28.0	75.7	148.5	4.6	i						i			i		
30.0	74.4	148.0	4.5	i						İ			Ī		
32.0	73.1	147.4	4.3	i						İ			i		
34.0	71.8	146.7	4.2												
36.0	70.5	146.0	4.1	l						i			i		
37.1		1.0.0		73.0	146.9	4.2				İ			Ī		
38.0	69.2	145.3	4.0	72.4	146.6	4.2				İ			İ		
40.0	67.8	144.5	3.8	71.1	145.9	4.1									
42.0	66.5	143.6	3.7	69.8	145.2	4.0									
44.0	65.1	142.7	3.6	68.4	144.4	3.9									
46.0	63.7	141.7	3.5	67.1	143.6	3.8									
48.0	62.3	140.7	3.4	65.7	142.7	3.7									
50.0	60.9	139.6	3.4	64.3	141.7	3.6									
55.0	57.2	136.5	3.1	60.8	139.1	3.4									
56.8							65.0	140.5	3.5						
60.0	53.4	133.0	3.0	57.2	136.0	3.2	62.8	138.9	3.4						
65.0	49.4	129.0	2.8	53.4	132.5	3.0	59.2	136.1	3.2						
70.0	45.2	124.3	2.6	49.4	128.4	2.8	55.5	132.8	3.1						
75.0	40.6	118.8	2.5	45.1	123.7	2.7	51.6	129.1	2.9						
79.9										55.0	128.9	2.8			
80.0	35.5	112.3	2.4	40.5	118.2	2.6	47.5	124.7	2.8	54.9	128.8	2.8			
85.0				35.4	111.7	2.5	43.1	119.7	2.7	51.0	124.9	2.7			
90.0				29.5	103.7	2.3	38.3	113.8	2.6	46.8	120.5	2.6			
95.0							32.9	106.7	2.5	42.4	115.3	2.5			
100.0							26.5	97.7	2.4	37.5	109.3	2.5			
104.0										33.8	104.4	2.1			



Nº de ident.: 9842523/95738/

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

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

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				56.0 ו		eza de p	ıl, Punto lumín (1: ı] Posici	916-1) 9	5.5 m Pl		lumín		_		
25.0	78.0	152.3	4.4												
26.0	77.4	152.1	4.4												
28.0	76.2	151.6	4.3												
30.0	74.9	151.1	4.1												
32.0	73.7	150.5	4.0												
34.0	72.4	149.9	3.9												
36.0	71.1	149.2	3.8												
38.0	69.8	148.5	3.7	73.0	149.7	3.9									
40.0	68.5	147.7	3.6	71.7	149.1	3.8									
42.0	67.2	146.9	3.5	70.4	148.4	3.7									
44.0	65.9	146.0	3.4	69.1	147.6	3.6									
46.0	64.6	145.1	3.3	67.8	146.8	3.5									
48.0	63.2	144.1	3.2	66.5	146.0	3.4									
50.0	61.9	143.0	3.1	65.2	145.0	3.3									
55.0	58.4	140.1	2.9	61.8	142.5	3.1									
58.1							65.0	143.3	3.2						
60.0	54.8	136.7	2.7	58.3	139.6	2.9	63.7	142.3	3.2						
65.0	51.0	132.9	2.5	54.7	136.2	2.7	60.3	139.6	3.0				<u> </u>		
70.0				50.9	132.4	2.5	56.7	136.5	2.8						
75.0				46.9	127.9	2.3	53.0	132.9	2.6						
80.0							49.1	128.8	2.5						
81.6										55.0	131.3	2.5			
85.0										52.4	128.8	2.5			
90.0										48.5	124.6	2.3			



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

		gulo de 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]
				59.0 ו	m Pluma Cab	eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 3	8.5 m Pl	eza de p umín	lumín		-		
13.2	78.0	99.6	43.8												
14.0	76.8	99.4	43.8												
16.0	73.7	98.8	38.5												
18.0	70.6	98.2	33.4												
20.0	67.4	97.4	29.5												
21.7				73.0	98.2	36.3									
22.0	64.1	96.4	26.0	72.5	98.1	36.2									
24.0	60.7	95.3	23.5	69.3	97.4	34.0									
26.0	57.2	94.1	21.4	66.1	96.5	31.4									
28.0	53.5	92.7	19.6	62.7	95.5	28.8									
30.0	49.7	91.1	18.3	59.3	94.4	26.6									
32.0	45.6	89.2	17.1	55.7	93.1	24.3 22.6									
34.0 34.7	41.2	87.0	16.0	52.0	91.6	22.6	65.0	94.5	22.9						
34.7 36.0	36.4	84.4	15.1	48.1	89.8	21.0	63.0	93.9	23.2						
38.0	30.4	81.3	14.3	43.9	87.8	19.5	59.6	93.9	21.9						
40.0	24.3	77.4	13.6	43.9 39.3	85.5	18.2	59.6 56.0	92.6	20.7						
40.0	15.1	71.4	12.8	39.3 34.3	82.8	17.2	52.3	90.0	19.7						
44.0	15.1	71.5	12.0	28.4	79.4	16.2	48.4	88.3	18.8						
46.0				21.0	74.9	15.2	44.2	86.3	17.9						
47.0				16.2	71.7	14.7	77.2	00.0	17.0						
48.0				10.2	' ' ' '	17.7	39.7	84.0	17.2						
50.0							34.7	81.3	16.5						
50.2							04.7	01.0	10.0	55.0	87.4	13.5			
55.0							17.0	70.6	15.0	45.8	83.3	13.0			
60.0										33.9	77.2	11.6			
65.0										15.5	65.9	10.2			
76.2				İ									35.0	65.6	2.6
80.0													25.0	59.8	2.1



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]
				59.0	m Pluma Cab	eza de p	al, Punto olumín (2 n] Posici	316-1) 4	1.5 m Pl	eza de p umín	lumín		_		
13.8	78.0	102.5	40.5												
14.0	77.8	102.5	40.5												
16.0	74.9	102.0	37.1												
18.0	72.0	101.4	32.5												
20.0	69.1	100.6	28.9												
22.0	66.1	99.8	25.5												
22.5				73.0	101.1	33.5									
24.0	63.0	98.8	22.7	70.9	100.6	32.7									
26.0	59.9	97.7	20.8	67.9	99.8	30.7									
28.0	56.6	96.4	19.1	64.9	98.9	28.2									
30.0	53.2	94.9	17.7	61.7	97.8	26.2									
32.0	49.6	93.3	16.6	58.5	96.7	24.1									
34.0	45.8	91.4	15.6	55.2	95.3	22.2	•			!			<u> </u>		
36.0	41.8	89.3	14.6	51.7	93.8	20.6	65.0	97.2	21.5						
38.0	37.4	86.8	13.8	48.1	92.1	19.3	62.0	96.2	21.4						
40.0	32.4	83.8	13.1	44.2	90.1	17.9	58.8	95.0	20.3						
42.0	26.7	80.2	12.4	40.0	87.8	16.8	55.5	93.7	19.2						
44.0	19.4	75.3	11.8	35.4	85.2	15.8	52.0	92.2	18.3	ļ			<u> </u>		
45.0	16.3	73.2	8.6												
46.0				30.2	82.0	14.9	48.4	90.5	17.5						
48.0				24.0	77.9	14.1	44.5	88.5	16.7						
50.0				15.5	72.1	13.2	40.4	86.3	16.0						
51.9										55.0	89.8	12.7			
55.0							27.8	78.7	14.6	49.7	87.4	12.5			
58.0							16.3	71.0	13.8						
60.0										39.8	82.3	11.1			
65.0										26.1	73.9	9.9			
68.0	1			I		1	I	l	1	16.6	67.5	9.1		1	l



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

		gulo de principa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				59.0 ו	m Pluma Cab	eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 4	4.5 m Pl	eza de p umín	lumín				
14.5	78.0	105.5	38.0												
16.0	76.0	105.1	36.6												
18.0	73.3	104.5	32.3												
20.0	70.6	103.8	28.2												
22.0	67.8	103.0	25.3	70.0	404.0	04.4									
23.4	05.0	400.4	00.5	73.0	104.0	31.4									
24.0 26.0	65.0 62.1	102.1 101.1	22.5 20.4	72.2 69.5	103.8 103.0	31.3 29.8									
28.0	59.1	99.9	18.9	69.5 66.7	103.0	29.8									
30.0	56.0	98.6	17.5	63.8	102.2	25.8									
32.0	52.8	97.2	16.3	60.9	100.2	24.2									
34.0	49.5	95.5	15.4	57.9	98.9	22.2									
36.0	46.0	93.7	14.4	54.8	97.6	20.5									
37.3	10.0	00		00	07.0	20.0	65.0	99.9	20.9				İ		
38.0	42.2	91.5	13.6	51.5	96.0	19.2	64.0	99.6	20.9						
40.0	38.2	89.1	12.8	48.1	94.3	17.9	61.1	98.5	20.0						
42.0	33.7	86.3	12.1	44.5	92.3	16.8	58.1	97.3	19.1						
44.0	28.6	82.9	11.6	40.6	90.1	15.7	55.0	96.0	18.0						
46.0	22.5	78.6	11.0	36.4	87.5	14.8	51.8	94.5	17.2						
48.0	15.7	73.6	8.7	31.7	84.5	14.0	48.4	92.7	16.5						
50.0				26.3	80.8	13.3	44.8	90.8	15.8						
53.0				16.6	73.7	9.4									
53.6										55.0	92.3	12.1			
55.0							34.5	84.6	14.3	52.9	91.3	12.2			
60.0							20.1	74.6	13.0	44.3	86.8	10.9			
61.0							15.7	71.4	12.8						
65.0										33.3	80.1	9.7			
70.0										20.3	71.1	8.5			
71.0			1			ı	I		1	16.0	67.9	8.2	I	l	



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

		gulo de principal			gulo de orincipa										
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				59.0 ו			ıl, Punto lumín (2			eza de p umín	lumín	-			
							ı] Posici								
15.1	78.0	108.4	34.9												
16.0	76.9	108.2	34.9												
18.0	74.4	107.6	31.0												
20.0	71.9	107.0	27.4												
22.0	69.3	106.3	24.4												
24.0	66.7	105.4	21.9												
24.3				73.0	106.8	29.2									
26.0	64.0	104.5	19.8	70.8	106.2	28.5									
28.0	61.3	103.4	18.3	68.2	105.5	27.1									
30.0	58.5 55.6	102.2	16.9	65.6	104.6	25.3 23.4									
32.0 34.0	55.6	100.9 99.4	15.7 14.8	62.9 60.1	103.6 102.5	23.4									
36.0	49.4	99.4	13.9	57.3	102.5	20.2									
38.0	46.1	95.9	13.1	54.4	99.8	18.7									
38.5	40.1	33.3	15.1	54.4	33.0	10.7	65.0	102.7	19.1						
40.0	42.6	93.8	12.3	51.3	98.3	17.5	63.1	102.0	19.5						
42.0	38.9	91.4	11.6	48.1	96.5	16.4	60.3	100.8	18.4						
44.0	34.8	88.7	11.1	44.7	94.6	15.4	57.5	99.6	17.6						
46.0	30.2	85.5	10.6	41.1	92.4	14.4	54.6	98.2	16.7				İ		
48.0	24.9	81.5	10.1	37.3	89.9	13.6	51.5	96.7	16.0						
50.0	18.1	76.3	9.5	33.0	87.0	12.9	48.3	95.0	15.3						
51.0	15.2	73.9	7.2												
55.0				18.8	76.4	11.2	39.5	89.7	13.8						
55.3										55.0	94.7	11.3			
56.0				16.0	74.2	8.2									
60.0							28.6	82.1	12.6	47.6	90.9	10.4			
64.0							15.2	71.8	11.7						
65.0										38.6	85.3	9.3			
70.0										28.7	78.5	8.1			
74.0										15.5	68.3	7.2			



10.6

10.1

9.0

7.8

6.7

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]: 114.0 Lastre central [t]: 52.6

		gulo de principa			gulo de orincipa			gulo de principa			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]
				59.0		eza de p	al, Punto dumín (2: n] Posici	316-1) 5	0.5 m Pl	umín [·]	lumín				
15.7	78.0	111.3	32.7												
16.0	77.7	111.3	32.7												
18.0	75.3	110.8	30.4												
20.0	73.0	110.2	27.1												
22.0	70.6	109.5	23.8												
24.0 25.2	68.1	108.7	21.5	70.0	109.7	27.5									
26.0	65.7	107.8	19.5	73.0 72.0	109.7	27.3									
28.0	63.1	107.8	17.9	69.6	109.4	26.3									
30.0	60.5	105.7	16.7	67.1	107.9	25.2									
32.0	57.9	104.5	15.5	64.6	107.0	23.2									
34.0	55.1	103.2	14.5	62.1	105.9	21.7									
36.0	52.3	101.7	13.6	59.5	104.8	20.2									
38.0	49.3	100.0	12.9	56.8	103.5	18.7									
39.8							65.0	105.4	18.1						
40.0	46.3	98.1	12.1	54.0	102.1	17.4	64.8	105.3	18.6						
42.0	43.0	96.1	11.4	51.1	100.5	16.3	62.3	104.3	18.3						
44.0	39.5	93.7	10.8	48.1	98.8	15.3	59.7	103.2	17.2						
46.0	35.7	91.1	10.3	44.9	96.8	14.3	57.0	101.9	16.4						
48.0	31.6	88.0	9.8	41.6	94.7	13.5	54.2	100.5	15.6						<u> </u>
50.0	26.8	84.3	9.3	38.0	92.2	12.7	51.3	98.9	15.0						

11.1

43.6

34.4

22.2 16.2 13.5

12.3

11.3

10.0

55.0

50.7

42.8

34.5

22.3

97.2

94.9

90.0

84.3

72.1

94.2

87.9

78.4

73.4

84.2

74.6

27.3

53.0

55.0 57.0

59.0

60.0

65.0

67.0

70.0

75.0

76.0

17.5

76.7



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

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

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

		gulo de 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]
				59.0 ו		eza de p	ıl, Punto lumín (2: ı] Posici	316-1) 5	3.5 m Pli	eza de p umín	lumín		-		
16.3	78.0	114.3	30.3						,						
18.0	76.2	113.9	29.7										İ		
20.0	74.0	113.3	26.4										İ		
22.0	71.7	112.7	23.3												
24.0	69.4	111.9	20.9												
26.0	67.1	111.1	19.0	73.0	112.6	25.8									
28.0	64.8	110.2	17.5	70.8	111.9	25.3									
30.0	62.3	109.2	16.3	68.5	111.1	24.2									
32.0	59.9	108.0	15.2	66.2	110.3	22.9									
34.0	57.4	106.8	14.2	63.8	109.3	21.2									
36.0	54.8	105.4	13.2	61.4	108.2	20.0									
38.0	52.1	103.9	12.5	58.9	107.1	18.5									
40.0	49.3	102.2	11.8	56.3	105.8	17.2									
41.1							65.0	108.1	17.6						
42.0	46.4	100.4	11.1	53.7	104.3	16.0	64.0	107.7	17.5						
44.0	43.3	98.3	10.5	51.0	102.8	15.1	61.5	106.6	16.9						
46.0	40.0	96.0	9.9	48.1	101.0	14.2	59.1	105.4	16.0						
48.0	36.5	93.4	9.4	45.1	99.1	13.3	56.5	104.2	15.3						
50.0	32.7	90.5	9.0	42.0	96.9	12.5	53.9	102.7	14.6						
55.0	20.5	80.2	8.0	33.1	90.3	10.9	46.9	98.5	13.2						
56.0	17.0	77.2	7.8												
58.8				24.0	00.0	0.5			44.0	55.0	99.6	9.9			
60.0				21.0	80.2	9.5	38.9	93.0	11.9	53.3	98.7	9.6			
62.0				15.1	74.9	7.2	00.0	05.4	40.0	40.0	04.0	0.5			
65.0							29.2	85.4	10.9	46.9	94.9	8.5			
70.0 75.0							15.7	73.8	9.2	39.0	89.4 81.8	7.4 6.3			
75.0 79.0										29.3 18.4	72.5	5.6			



2821-1

2821-1

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

		gulo de orincipal			gulo de orincipa			gulo de 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]
				59.0 ו		eza de p	II, Punto Iumín (2: 1 Posicio	316-1) 5	6.5 m Pli	eza de p umín	lumín		-		
47.0	78.0	117.2	00.4			22.0 [11		Jii iiiiuia	11 (2310)						
17.0 18.0	76.9	117.2	28.4 28.4												
20.0	74.8	116.4	25.8												
22.0	72.7	115.8	23.0												
24.0	70.6	115.0	20.4												
26.0	68.4	114.4	18.6												
26.9	00.1		10.0	73.0	115.4	24.5									
28.0	66.2	113.5	17.1	71.8	115.1	24.3									
30.0	63.9	112.6	15.9	69.7	114.4	23.5									
32.0	61.6	111.5	15.0	67.5	113.5	22.6									
34.0	59.3	110.3	14.0	65.3	112.6	21.0									
36.0	56.9	109.1	13.0	63.0	111.7	19.6									
38.0	54.4	107.7	12.2	60.7	110.6	18.6									
40.0	51.9	106.1	11.5	58.3	109.4	17.2									
42.0	49.2	104.5	10.9	55.9	108.0	16.0									
42.4							65.0	110.8	16.7						
44.0	46.5	102.6	10.3	53.4	106.6	14.9	63.2	110.0	16.7						
46.0	43.6	100.6	9.7	50.8	105.0	14.1	60.9	108.9	15.8						
48.0	40.5	98.3	9.2	48.1	103.3	13.2	58.5	107.7	15.1						
50.0	37.2	95.8	8.7	45.3	101.3	12.4	56.1	106.4	14.4						
55.0	27.6	87.7	7.8	37.5	95.6	10.7	49.7	102.6	13.0						
59.0	16.5	77.6	7.0	20.0	07.6	9.4	40.6	07.7	11.7						
60.0 60.5				28.0	87.6	9.4	42.6	97.7	11.7	55.0	102.1	9.3			
64.0				17.2	77.8	8.4				55.0	102.1	9.3			
65.0				11.2	11.0	0.4	34.3	91.2	10.7	49.3	98.6	8.4			
70.0							23.6	82.0	9.8	49.3	94.0	7.3			
73.0							15.3	74.2	8.4	44.1	34.∪	1.5			
75.0							10.0	7-7.2	0.1	34.4	87.6	6.3			
80.0										23.8	78.4	5.3			
82.0										17.9	73.0	4.9			



N° de ident.: 9842523/95738/

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

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

		gulo de 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]
				59.0 ו		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 5	9.5 m Pl	eza de p umín	lumín				
17.6	78.0	120.1	26.1												
18.0 20.0	77.6 75.6	120.0 119.5	26.1 24.9												
20.0	73.6	119.5	24.9												
24.0	71.6	118.3	19.8												
26.0	69.5	117.6	18.0												
27.8				73.0	118.3	22.7							İ		
28.0	67.5	116.8	16.6	72.8	118.2	22.7									
30.0	65.3	115.9	15.3	70.8	117.5	22.2									
32.0	63.2	114.9	14.3	68.7	116.8	21.3									
34.0	61.0	113.8	13.5	66.6	115.9	20.4									
36.0	58.8	112.6	12.6	64.5	115.0	19.0									
38.0	56.5	111.3	11.8	62.3	114.0	17.8									
40.0	54.1	109.9	11.0	60.1	112.9	16.8									
42.0	51.7	108.4	10.4	57.8	111.6	15.5	05.0	113.5	45.4						
43.6 44.0	49.2	106.7	9.9	55.5	110.3	14.4	65.0 64.6	113.5	15.1 15.6						
46.0	46.6	100.7	9.9	53.5	10.3	13.5	62.5	112.4	15.3						
48.0	43.8	102.8	8.8	50.7	107.2	12.7	60.3	111.2	14.5						
50.0	40.9	100.6	8.3	48.1	105.5	12.0	58.0	110.0	14.0						
55.0	32.8	93.8	7.3	41.2	100.3	10.3	52.1	106.5	12.4						
60.0	22.1	84.0	6.5	33.1	93.6	9.0	45.7	102.0	11.3						
62.0	16.1	78.0	6.1												
62.2										55.0	104.6	8.5			
65.0				22.6	83.9	7.8	38.4	96.4	10.2	52.2	102.8	7.9			
67.0				16.8	78.2	7.4									
70.0							29.7	88.8	9.4	45.7	98.4	6.9			
75.0							17.3	77.0	8.6	38.5	92.7	5.9			
80.0 85.0										29.8 17.5	85.2 73.5	4.9 4.1			
85.0										17.5	/3.5	4.1			



Nº de ident.: 9842523/95738/

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

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

		gulo de orincipa			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]
				59.0 ו		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 6	2.5 m Pli	eza de p umín	lumín				
18.2	78.0	123.1	24.5												
20.0	76.3	122.6	24.2												
22.0	74.4	122.1	21.7												
24.0	72.5	121.5	19.6												
26.0	70.6	120.8	17.7												
28.0	68.6	120.0	16.3												
28.7				73.0	121.2	21.5									
30.0	66.6	119.2	15.1	71.7	120.7	21.3									
32.0	64.6	118.3	14.0	69.8	120.0	20.6									
34.0	62.5	117.2	13.1	67.8	119.2	19.9									
36.0	60.4	116.1	12.4	65.8	118.3	18.7									
38.0	58.3	114.9	11.5	63.8	117.4	17.5									
40.0	56.1	113.6	10.8	61.7	116.3	16.5									
42.0	53.8	112.2	10.2	59.6	115.2	15.5									
44.0	51.5	110.6	9.6	57.4	113.9	14.3									
44.9							65.0	116.3	14.8						
46.0	49.1	108.9	9.1	55.2	112.6	13.3	63.9	115.7	14.8						
48.0	46.6	107.1	8.6	52.9	111.1	12.5	61.8	114.7	14.2						
50.0	44.0	105.1	8.1	50.6	109.5	11.8	59.7	113.5	13.6						
55.0	36.9	99.1	7.1	44.3	104.8	10.1	54.2	110.2	12.2						
60.0	28.2	91.1	6.3	37.2	98.9	8.7	48.3	106.1	11.0						
63.9										55.0	107.0	7.8			
65.0	15.7	78.4	5.5	28.6	91.0	7.6	41.8	101.1	9.9	54.3	106.6	7.6			
70.0				16.3	78.6	6.6	34.2	94.6	9.1	48.4	102.5	6.6			
75.0							24.8	85.5	8.4	41.8	97.4	5.6			
78.0							16.8	77.4	7.9	04.0	00.0	4.7			
80.0 85.0										34.3 24.9	90.9 81.9	4.7 3.8			
85.0 88.0										24.9 17.0	73.9	3.8			
00.0										17.0	13.9	3.4			



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

360°

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

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

		gulo de 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]
				59.0 ı	m Pluma Cab	eza de p	ıl, Punto ılumín (23 ı] Posici	316-1) 6	5.5 m Plı	eza de p umín	lumín				
18.8 20.0 22.0 24.0	78.0 77.0 75.2 73.3	126.0 125.7 125.2 124.6	22.0 22.0 20.5 18.8												
26.0 28.0 29.5 30.0 32.0	71.5 69.6 67.7 65.8	124.0 123.3 122.5 121.6	17.0 15.6 14.5 13.4	73.0 72.6 70.7	124.0 123.9 123.2	19.8 19.7 19.4									
34.0 36.0 38.0 40.0	63.9 61.9 59.9 57.9	121.6 120.6 119.6 118.4 117.2	12.5 11.8 11.1 10.3	68.9 67.0 65.0 63.1	123.2 122.5 121.6 120.7 119.7	18.7 18.1 16.9 15.9									
42.0 44.0 46.0 46.2	55.8 53.6 51.4	115.9 114.4 112.9	9.7 9.1 8.6	61.1 59.1 57.0	118.6 117.5 116.2	15.1 14.1 13.1	65.0	119.0	13.7						
48.0 50.0 55.0 60.0	49.1 46.7 40.3 32.9	111.2 109.3 104.0 97.1	8.1 7.7 6.7 5.9	54.9 52.7 46.9 40.5	114.8 113.3 109.0 103.7	12.2 11.4 9.8 8.4	63.2 61.3 56.1 50.6	118.1 117.0 113.9 110.1	13.7 13.1 11.7						
65.0 65.6 68.0 70.0	23.4	87.6 78.8	5.2	33.2	96.9	7.3	44.7	105.5	9.5	55.0 50.7	109.5 106.5	7.0 6.2			
73.0 75.0 80.0 81.0				15.9	79.0	5.8	30.0 19.4 16.4	92.2 81.0 77.8	8.0 7.3 7.1	44.7 38.0	101.8 96.1	5.2 4.3			
85.0 90.0 91.0										30.1 19.5 16.6	88.5 77.5 74.3	3.5 2.7 2.6			



N° de ident.: 9842523/95738/

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

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

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				59.0 ו	n Pluma Cab	eza de p	al, Punto dumín (2 n] Posici	316-1) 6	8.5 m Plı	eza de p umín	lumín				
19.5	78.0	128.9	20.2												
20.0	77.5	128.8	20.2												
22.0	75.8	128.3	19.8												
24.0	74.1	127.8	18.2												
26.0	72.3	127.1	16.7												
28.0	70.6	126.5	15.3												
30.0	68.8	125.7	14.3												
30.4	07.0	404.0	40.0	73.0	126.9	18.7									
32.0	67.0	124.9	13.2	71.6	126.4	18.5									
34.0	65.1 63.3	124.0	12.3	69.8	125.7	18.0 17.4									
36.0		123.0	11.5	68.0	124.9										
38.0 40.0	61.4 59.4	121.9 120.7	10.9 10.2	66.2 64.4	124.0 123.1	16.7 15.7									
42.0	57.5	119.5	9.5	62.5	123.1	14.8									
44.0	55.4	118.1	8.9	60.6	120.9	14.2									
46.0	53.4	116.7	8.4	58.6	119.8	13.1									
47.4	00.4	110.7	0.4	00.0	110.0	10.1	65.0	121.7	12.8						
48.0	51.2	115.1	8.0	56.6	118.5	12.2	64.5	121.4	13.1						
50.0	49.0	113.4	7.5	54.6	117.1	11.4	62.6	120.4	12.9				i		
55.0	43.2	108.5	6.5	49.2	113.1	9.8	57.8	117.5	11.5						
60.0	36.6	102.4	5.6	43.4	108.2	8.4	52.7	114.0	10.2						
65.0	28.8	94.5	5.0	36.9	102.2	7.3	47.2	109.7	9.3						
67.4										55.0	111.9	6.4			
70.0	18.0	82.7	4.4	29.1	94.4	6.4	41.1	104.5	8.4	52.7	110.3	6.0			
71.0	16.0	80.4	3.9												
75.0				18.5	82.8	5.5	34.2	97.9	7.7	47.2	106.0	5.0			
76.0				15.6	79.4	5.4									
80.0							25.7	89.0	7.1	41.2	100.8	4.1			
84.0							15.1	77.1	6.3						
85.0										34.3	94.2	3.3			
90.0										25.8	85.4	2.6			
93.0	l .									19.1	78.0	2.1			



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

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

		gulo de 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]
				59.0 ו		eza de p	II, Punto Ilumín (2 1] Posici	316-1) 7	1.5 m Pl		lumín				
20.1	78.0	131.9	18.5												
22.0	76.5	131.4	18.4												
24.0	74.8	130.9	17.0												
26.0	73.1	130.3	15.8												
28.0	71.4	129.6	14.4												
30.0	69.7	128.9	13.3	70.0	400.0	40.0									
31.3 32.0	68.0	128.1	12.4	73.0 72.4	129.8 129.6	16.9 16.9				ł					
34.0	66.2	126.1	11.5	72.4	129.6	16.7				ł					
36.0	64.4	126.3	10.7	69.0	128.1	16.1									
38.0	62.6	125.3	10.1	67.2	127.3	15.7									
40.0	60.8	124.2	9.5	65.5	126.4	14.8				i					
42.0	58.9	123.0	8.9	63.7	125.4	13.9									
44.0	57.0	121.7	8.3	61.9	124.3	13.3				İ					
46.0	55.0	120.3	7.8	60.0	123.2	12.6									
48.0	53.0	118.8	7.3	58.1	122.0	11.7									
48.7							65.0	124.4	11.9						
50.0	51.0	117.2	7.0	56.2	120.7	10.9	63.8	123.8	11.9						
55.0	45.5	112.7	6.0	51.2	116.9	9.3	59.2	121.0	10.8						
60.0	39.5	107.1	5.2	45.7	112.4	7.9	54.4	117.6	9.7						
65.0	32.6	100.1	4.5	39.7	106.8	6.8	49.2	113.6	8.8						
69.1	23.9	00.5	4.0	32.8	99.9	5.9	40.0	400.7	7.9	55.0	114.4 114.1	5.7 5.6			
70.0 74.0	23.9 15.7	90.5 80.8	3.3	32.8	99.9	5.9	43.6	108.7	7.9	54.5	114.1	5.6			
75.0	15.7	60.6	3.3	24.3	90.4	5.2	37.3	102.7	7.2	49.4	110.1	4.6			
79.0				16.2	81.0	4.3	37.3	102.7	1.2	45.4	110.1	4.0			
80.0				10.2	01.0	7.0	29.9	95.0	6.6	43.9	105.3	3.7			
85.0							20.3	84.1	5.8	37.7	99.4	2.9			
87.0							16.7	79.8	5.4						
90.0										30.4	91.9	2.2			
91.0										28.8	90.1	2.1			



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]: 114.0 52.6 Lastre central [t]:

		gulo de orincipa			gulo de orincipa			gulo de principa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				59.0 ו		eza de p	al, Punto Ilumín (2: n l Posici	316-1) 7	4.5 m Pli	eza de p umín	lumín		_		
20.0	78.0	134.8	17.4			10.0[11	1 1 1 00101		11 (2010)						
20.8 22.0	77.0	134.6	17.4												
24.0	75.4	134.0	16.5												
26.0	73.4	133.4	15.2												
28.0	72.2	132.8	14.0												
30.0	70.6	132.1	13.0												
32.0	68.9	131.3	12.2												
32.2	00.3	101.0	12.2	73.0	132.6	15.9									
34.0	67.2	130.5	11.3	71.5	132.0	15.7							i		
36.0	65.5	129.6	10.5	69.9	131.3	15.4									
38.0	63.8	128.7	9.8	68.2	130.5	14.9									
40.0	62.1	127.6	9.2	66.5	129.7	14.4							İ		
42.0	60.3	126.5	8.7	64.8	128.8	13.6		İ				İ	İ		
44.0	58.5	125.3	8.1	63.1	127.7	12.9									
46.0	56.6	124.0	7.6	61.3	126.7	12.4									
48.0	54.8	122.6	7.1	59.6	125.5	11.7									
50.0	52.8	121.1	6.7	57.7	124.3	10.8	65.0	127.1	11.3						
55.0	47.8	116.8	5.8	53.0	120.7	9.1	60.6	124.5	10.6						
60.0	42.3	111.7	5.0	48.0	116.5	7.8	56.0	121.3	9.5						
65.0	36.1	105.5	4.3	42.5	111.5	6.7	51.2	117.6	8.5						
70.0	28.8	97.4	3.8	36.3	105.2	5.7	46.0	113.0	7.7						
70.8										55.0	116.8	5.1			
75.0	19.0	85.8	3.2	29.1	97.3	5.0	40.3	107.6	7.0	51.4	114.0	4.3			
77.0	15.3	81.2	2.8												
80.0				19.5	85.9	4.3	33.8	100.8	6.4	46.2	109.6	3.4			
82.0				15.9	81.4	3.8									
85.0							25.9	91.9	5.5	40.6	104.2	2.6			
89.0							40.0	000	4.7	35.6	99.0	2.1			
90.0							16.3	80.3	4.7						



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 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]
				59.0	m Pluma Cab	eza de p	al, Punto Jumín (2 n] Posici	316-1) 7	7.5 m Pl		lumín		_		
21.4	78.0	137.7	15.6												
22.0	77.5	137.6	15.6												
24.0	76.0	137.1	15.4												
26.0	74.5	136.6	14.5												
28.0	72.9	136.0	13.6												
30.0	71.3	135.3	12.6												
32.0	69.8	134.6	11.7												
33.1				73.0	135.5	14.4									
34.0	68.2	133.8	11.0	72.3	135.2	14.3									
36.0	66.5	132.9	10.2	70.7	134.5	14.2									
38.0	64.9	132.0	9.5	69.1	133.8	13.8									
40.0	63.2	131.0	8.9	67.5	132.9	13.5									
42.0	61.6	129.9	8.4	65.9	132.1	12.9									
44.0	59.9	128.8	7.8	64.2	131.1	12.4									
46.0	58.1	127.6	7.3	62.6	130.1	11.9									
48.0	56.3	126.2	6.8	60.9	129.0	11.5									
50.0	54.5	124.8	6.4	59.1	127.8	10.7									
51.2							65.0	129.8	10.6						
55.0	49.8	120.9	5.5	54.7	124.5	8.9	61.9	127.9	10.3						
60.0	44.7	116.1	4.7	50.0	120.5	7.6	57.5	124.9	9.2						
65.0	39.1	110.4	4.0	44.9	115.8	6.5	53.0	121.4	8.2						
70.0	32.6	103.4	3.5	39.3	110.2	5.5	48.1	117.2	7.5						
72.5										55.0	119.3	4.3			
75.0	24.8	94.0	3.0	32.9	103.2	4.8	42.9	112.2	6.7	53.1	117.8	3.9			
80.0	15.0	81.6	2.3	25.1	94.0	4.1	37.0	106.1	6.1	48.3	113.7	3.0			
85.0				15.6	81.8	3.2	31.1	99.4	5.2	43.1	108.7	2.2			
86.0										42.0	107.6	2.1			
90.0				•			22.8	89.4	4.4						
93.0	1			I			16.0	80.7	3.9	I		1		l	l



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]
				59.0		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 8	0.5 m Plı		lumín				
22.0	78.0	140.7	14.3												
24.0	76.5	140.2	14.2												
26.0	75.1	139.7	13.7												
28.0	73.6	139.1	13.3												
30.0	72.1	138.5	12.3												
32.0	70.6	137.8	11.4												
33.9				73.0	138.4	13.3									
34.0	69.0	137.0	10.7	73.0	138.4	13.3				•					
36.0	67.5	136.2	10.0	71.5	137.7	13.2									
38.0	65.9	135.3	9.3	69.9	137.0	12.9									
40.0	64.3	134.4	8.6	68.4	136.2	12.6									
42.0	62.7	133.3	8.1	66.8	135.4	12.4									
44.0	61.1	132.2	7.7	65.3	134.4	11.9				•					
46.0	59.4	131.1	7.1	63.7	133.5	11.4									
48.0	57.8	129.8	6.7	62.1	132.4	11.1									
50.0	56.0	128.5	6.2	60.4	131.3	10.7									
52.5							65.0	132.6	10.1						
55.0	51.6	124.8	5.3	56.2	128.1	8.9	63.0	131.3	10.1	•					
60.0	46.8	120.4	4.6	51.7	124.4	7.5	58.9	128.5	9.0						
65.0	41.7	115.1	3.9	47.0	120.1	6.4	54.6	125.1	8.0						
70.0	35.9	108.8	3.3	41.9	114.9	5.4	50.0	121.2	7.3						
74.3										55.0	121.8	3.8			
75.0	29.1	100.8	2.8	36.1	108.6	4.6	45.2	116.5	6.5	54.7	121.5	3.8			
80.0	20.5	89.7	2.3	29.4	100.6	4.0	39.8	111.0	5.9	50.2	117.7	2.9			
82.0	15.8	83.4	2.1												
85.0				20.9	89.7	3.3	33.8	104.1	5.1	45.4	113.1	2.1			
88.0				15.3	82.2	2.8									
90.0							27.5	96.5	4.3						
95.0							18.2	84.4	3.5						
96.0							15.7	81.1	3.3						



N° de ident.: 9842523/95738/

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

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

		gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				59.0 ו		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 8	3.5 m Pl	eza de p umín	lumín				
22.6	78.0	143.6	13.3												
24.0	77.0	143.3	13.3												
26.0	75.6	142.8	13.0												
28.0	74.2	142.2	12.6												
30.0	72.7	141.6	12.0												
32.0	71.3	141.0	11.0												
34.0	69.8	140.2	10.3												
34.8				73.0	141.2	12.4									
36.0	68.3	139.4	9.7	72.1	140.9	12.4									
38.0	66.8	138.6	8.9	70.7	140.2	12.2									
40.0	65.3	137.7	8.3	69.2	139.4	11.9									
42.0	63.8	136.7	7.7	67.7	138.6	11.7									
44.0	62.2	135.7	7.3	66.2	137.7	11.3									
46.0	60.7	134.6	6.9	64.7	136.8	10.9									
48.0	59.1	133.4	6.4	63.2	135.8	10.5									
50.0	57.4	132.1	5.9	61.6	134.7	10.2									
53.8							65.0	135.3	9.5						
55.0	53.2	128.6	5.0	57.6	131.7	8.7	64.1	134.7	9.5						
60.0	48.7	124.5	4.3	53.4	128.2	7.3	60.1	132.0	8.6						
65.0	43.9	119.6	3.6	48.9	124.1	6.2	56.0	128.8	7.8						
70.0	38.7	113.8	3.0	44.1	119.3	5.2	51.8	125.1	6.9						
75.0	32.7	106.7	2.5	38.9	113.5	4.4	47.2	120.7	6.3						
76.0										55.0	124.2	3.1			
80.0				32.9	106.5	3.7	42.3	115.6	5.6	51.9	121.5	2.5			
83.0				25.0	07.4	0.4	00.0	100.1	4.0	49.2	119.0	2.0			
85.0				25.8	97.4	3.1	36.8	109.4	4.8						
90.0				16.0	84.0	2.5	31.3	102.7	3.9						
95.0							23.7	93.0	3.2						
99.0							15.4	81.5	2.6						



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

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

		gulo de orincipal			gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				59.0 ı	m Pluma Cab	eza de p	ıl, Punto lumín (2 n] Posici	316-1) 8	6.5 m Pl		lumín				
23.3	78.0	146.5	12.4												
24.0	77.5	146.4	12.4												
26.0	76.1	145.9	12.3												
28.0	74.7	145.4	12.0												
30.0	73.4	144.8	11.7												
32.0	72.0	144.1	10.8												
34.0	70.6	143.4	10.0												
35.7	00.4	440 =	0.4	73.0	144.1	11.7									
36.0	69.1	142.7	9.4	72.8	144.0	11.7									
38.0	67.7	141.9	8.7	71.4	143.4	11.6									
40.0	66.2 64.8	141.0	8.1	70.0	142.6 141.9	11.3									
42.0 44.0	63.3	140.1 139.1	7.5 7.0	68.5 67.1	141.9 141.0	11.1 10.9				ł					
44.0 46.0	61.8	139.1	7.0 6.6	65.6	141.0	10.9				ł					
48.0	60.3	136.0	6.2	64.2	139.2	10.5									
50.0	58.7	135.7	5.8	62.7	138.2	9.8									
55.0	54.7	132.3	4.8	58.8	135.3	9.6 8.7	65.0	138.0	9.0	i					
60.0	50.5	128.4	4.0	54.9	132.0	7.2	61.3	135.4	8.4	l					
65.0	46.0	123.9	3.4	50.6	128.1	6.1	57.4	132.4	7.6	i					
70.0	41.1	118.5	2.8	46.2	123.6	5.1	53.3	128.9	6.7						
75.0	35.7	112.1	2.3	41.3	118.2	4.2	49.0	124.8	6.1						
77.7	55.7		0				.5.0	4.0	0.1	55.0	126.7	2.5			
80.0				35.9	111.9	3.5	44.4	120.0	5.4	53.5	125.3	2.2			
81.0										52.6	124.6	2.0	Ī		
85.0				29.7	104.0	3.0	40.0	115.0	4.5						
90.0				22.0	93.4	2.4	34.4	108.3	3.7						
95.0							28.0	99.9	2.9						
100.0							19.6	88.4	2.2						
101.0							17.5	85.4	2.1						



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

		gulo de 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]
				59.0 ı		eza de p	ıl, Punto ılumín (2: ı] Posici	316-1) 8	9.5 m Pli	eza de p umín	lumín				
23.9	78.0	149.5	11.3												
24.0	77.9	149.4	11.3												
26.0	76.6	149.0	11.3												
28.0	75.3	148.5	11.0												
30.0	73.9	147.9	10.8												
32.0	72.6	147.3	10.2												
34.0	71.2	146.6	9.5												
36.0	69.9	145.9	8.9												
36.6			0.4	73.0	147.0	10.6									
38.0 40.0	68.5 67.1	145.1 144.3	8.4 7.8	72.0 70.7	146.5 145.8	10.5 10.4									
40.0	65.7	144.3	7.6	69.3	145.6	10.4									
44.0	64.3	143.4	6.7	67.9	145.1	10.2									
46.0	62.8	141.4	6.3	66.5	143.4	9.7									
48.0	61.4	140.3	5.9	65.1	142.5	9.4									
50.0	59.9	139.2	5.5	63.7	141.5	9.1									
55.0	56.1	136.0	4.5	60.0	138.8	8.4									
56.3	00	100.0		00.0	100.0	0	65.0	140.7	8.3				i		
60.0	52.1	132.3	3.8	56.2	135.6	6.9	62.3	138.9	8.1				i		
65.0	47.8	128.0	3.1	52.2	132.0	5.8	58.6	136.0	7.2						
70.0	43.3	123.0	2.5	48.0	127.7	4.9	54.8	132.6	6.4						
75.0				43.5	122.7	4.0	50.7	128.7	5.7						
80.0				38.5	116.9	3.3	46.4	124.2	5.0						
85.0				33.0	109.8	2.7	42.2	119.6	4.2						
90.0				26.4	100.9	2.2	37.2	113.5	3.4						
95.0							31.4	106.1	2.6						
99.0							26.0	98.7	2.0						



2821-1

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

Radio de descarga:	360 °	Cabeza de pluma principal:	2821-1
Valor de vuelco:	2 - Vía ancha		

		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]
				59.0 ו		eza de p	al, Punto dumín (2 n] Posici	316-1) 9:	2.5 m Pli	eza de p umín	lumín				
24.5	78.0	152.4	10.4												
26.0	77.0	152.1	10.4												
28.0	75.8	151.6	10.2												
30.0	74.5	151.0	10.0												
32.0	73.2	150.4	9.7												
34.0	71.9	149.8	9.1												
36.0	70.6	149.1	8.5												
37.5				73.0	149.9	9.7							<u> </u>		
38.0	69.2	148.3	8.1	72.6	149.7	9.7									
40.0	67.9	147.5	7.5	71.3	149.0	9.6									
42.0	66.5	146.7	7.0	70.0	148.3	9.4									
44.0	65.2	145.8	6.5	68.7	147.5	9.2									
46.0	63.8	144.8	6.0	67.3	146.7	9.0									
48.0	62.4	143.7	5.6	66.0	145.8	8.8									
50.0	61.0	142.6	5.3	64.6	144.9	8.5									
55.0	57.3	139.6	4.3	61.1	142.3	8.1									
57.6							65.0	143.4	7.8						
60.0	53.5	136.1	3.6	57.5	139.2	6.8	63.3	142.2	7.8						
65.0	49.5	132.0	2.9	53.7	135.7	5.6	59.8	139.5	7.0						
70.0	45.3	127.4	2.4	49.7	131.7	4.7	56.1	136.3	6.2						
75.0				45.4	127.1	3.9	52.2	132.6	5.4						
80.0				40.8	121.6	3.1	48.1	128.4	4.8						
85.0				35.8	115.2	2.5	44.2	124.0	4.0						
90.0							39.6	118.3	3.2						
95.0							34.4	111.6	2.4						
97.0							32.1	108.5	2.1						



N° de ident.: 9842523/95738/ Pie

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

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

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				59.0 ı		eza de p	ıl, Punto ılumín (2 ı] Posici	316-1) 9	5.5 m Pl		lumín				
25.1	78.0	155.3	9.6												
26.0	77.5	155.1	9.6												
28.0	76.2	154.7	9.5												
30.0	75.0	154.1	9.3												
32.0	73.7	153.6	9.1												
34.0	72.5	152.9	8.6												
36.0	71.2	152.3	8.1												
38.0	69.9	151.5	7.7												
38.3				73.0	152.7	8.9									
40.0	68.6	150.8	7.3	71.9	152.2	8.8									
42.0	67.3	149.9	6.7	70.7	151.5	8.7									
44.0	66.0	149.1	6.2	69.4	150.7	8.5									
46.0	64.7	148.1	5.7	68.1	149.9	8.3									
48.0	63.3	147.1	5.3	66.8	149.1	8.2									
50.0	62.0	146.1	5.0	65.5	148.2	7.9									
55.0	58.5	143.2	4.1	62.1	145.7	7.5	05.0	440.0	7.0	l					
58.8 60.0	54.8	120.0	3.3	58.6	142.8	6.6	65.0 64.2	146.2 145.6	7.3	ł					
65.0	54.8 51.1	139.8 136.0	2.6	58.6 55.0	142.8	5.4	60.8	145.6	7.2 6.7	ł					
•	51.1	130.0	2.0					_	5.8						
70.0 75.0				51.2 47.2	135.6 131.2	4.5 3.7	57.3 53.6	139.9 136.4	5.8						
80.0				42.9	126.2	2.9	50.1	130.4	4.4						
85.0				38.2	120.2	2.9	46.1	128.2	3.7	l					
90.0				30.2	120.2	2.3	41.7	123.0	2.8	i					
95.0							37.0	116.8	2.0						



2821-1

2821-1

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

	88° Án I	gulo de principa	pluma l	83° Án I	gulo de orincipa	pluma I	75° Án I	gulo de principa	pluma I	65° Án	gulo de principa	pluma I		gulo de principa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				59.0		eza de p	al, Punto dumín (2 n] Posici	316-1) 9	8.5 m Pl		lumín		-		
25.8	78.0	158.3	8.9												
26.0	77.9	158.2	8.9												
28.0	76.7	157.8	8.9												
30.0	75.4	157.2	8.7												
32.0	74.2	156.7	8.6												
34.0	73.0	156.1	8.3												
36.0	71.8	155.4	7.8												
38.0	70.5	154.7	7.3												
39.2				73.0	155.6	8.3									
40.0	69.3	154.0	7.0	72.5	155.3	8.2									
42.0	68.0	153.2	6.5	71.3	154.7	8.2									
44.0	66.8	152.3	6.0	70.0	154.0	8.0									
46.0	65.5	151.4	5.5	68.8	153.2	7.8									
48.0	64.2	150.5	5.1	67.5	152.4	7.6									
50.0	62.9	149.5	4.7	66.3	151.5	7.5									
55.0	59.5	146.7	3.9	63.0	149.1	7.0									
60.0	56.1	143.5	3.1	59.7	146.3	6.5									
60.1							65.0	148.9	6.8						
65.0	52.5	139.8	2.4	56.2	143.1	5.3	61.8	146.4	6.3						
70.0				52.6	139.5	4.4	58.4	143.5	5.4						
75.0				48.8	135.3	3.6	55.2	140.4	4.7						
80.0				44.8	130.5	2.8	51.6	136.7	4.0						
85.0				40.4	125.0	2.2	47.7	132.4	3.4						
90.0							43.7	127.4	2.6						
93.0							41.0	124.1	2.1						



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

		gulo de orincipal		83° Án	gulo de orincipa	pluma I		gulo de principa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				59.0 r	m Pluma Cab	eza de p	al, Punto dumín (19 n] Posici	916-1) 3	2.5 m Plı	eza de p umín	lumín				
12.0 13.0 14.0 16.0 18.0	78.0 76.1 74.3 70.6 66.8	93.7 93.5 93.2 92.5 91.7	36.5 36.0 35.0 33.1 30.9												
19.9 20.0 22.0 24.0 26.0	62.9 58.8 54.5 50.0	90.7 89.5 88.2 86.6	28.8 26.4 23.9 22.1	73.0 72.8 69.1 65.2 61.2	92.5 92.4 91.7 90.8 89.8	31.9 31.9 30.9 29.4 28.1									
28.0 30.0 32.0 32.2	45.1 39.8 33.8	84.7 82.4 79.7	20.5 19.2 18.0	57.1 52.7 48.1	88.5 87.1 85.4	26.6 25.4 24.0	65.0	89.1	26.3						
34.0 36.0 38.0 40.0 41.0 42.0	26.6 16.5	76.1 70.7	17.1 16.1	43.0 37.5 31.0 23.0 17.7	83.3 80.9 77.8 73.7 70.9	22.5 21.2 20.1 18.8 18.1	61.5 57.4 53.0 48.4 43.4	88.1 86.9 85.5 83.8	25.8 24.5 23.2 22.2 21.1						
44.0 46.0 46.7 48.0 49.0							37.9 31.6 23.7 18.6	79.4 76.4 72.4 69.7	20.2 19.5 18.7 18.4	55.0 52.4	82.4 81.6	16.4 17.1			
50.0 55.0 59.0 71.3 75.0 76.0										47.8 34.0 16.9	79.8 73.8 65.1	16.2 14.9 13.6	35.0 23.1 17.8	62.2 56.2 53.4	5.9 5.3 5.1



2821-1

2821-1

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

		gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				59.0 ו	m Pluma Cab	eza de p	II, Punto Iumín (1: n] Posici	916-1) 3	5.5 m Pl	eza de p umín	lumín				
12.6	78.0	96.7	32.5												
13.0	77.3	96.6	32.5												
14.0	75.7	96.3	31.8												
16.0	72.3	95.7	29.8												
18.0	68.9	95.0	28.3												
20.0	65.3	94.1	26.2												
20.8				73.0	95.3	28.2									
22.0	61.7	93.0	24.8	70.9	94.9	27.8									
24.0	57.9	91.8	22.9	67.4	94.1	26.5									
26.0	54.0	90.4	21.3	63.9	93.2	25.2									
28.0	49.8	88.8	20.0	60.2	92.1	24.2									
30.0	45.4	86.9	18.7	56.3	90.8	23.1									
32.0	40.6	84.7	17.5	52.3	89.3	22.2									
33.5							65.0	91.8	24.3						
34.0	35.2	82.1	16.5	48.1	87.6	21.1	64.1	91.5	24.3						
36.0	29.0	78.8	15.7	43.5	85.6	20.0	60.5	90.5	23.6						
38.0	21.1	74.3	14.8	38.5	83.2	19.0	56.6	89.2	22.6						
39.0 40.0	15.7	71.1	14.4	32.8	80.3	18.1	52.6	87.7	21.4						
40.0				32.6 26.1	76.7	17.1	52.6 48.4	86.0	20.5						
44.0				16.9	71.3	16.1	43.9	84.0	19.6						
46.0				10.9	71.3	10.1	38.9	81.7	18.8						
48.0							33.3	78.9	18.1						
48.4							55.5	10.0	10.1	55.0	84.9	15.4			
50.0							26.6	75.3	17.4	52.1	83.8	15.8			
52.0							17.7	70.1	16.7	<u> </u>					
55.0							l			40.7	78.9	14.4			
60.0										25.6	71.0	13.0			
62.0										16.1	65.5	12.5			
73.7													35.0	63.9	5.1
75.0													32.9	62.8	5.0
79.0													16.9	53.8	4.3



Nº de ident.: 9842523/95738/ 360°

Radio de descarga:

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

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

		gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				59.0		eza de p	II, Punto Ilumín (19 Il Posicio	916-1) 3	8.5 m Pl		lumín				
13.2	78.0	99.6	29.5												
14.0	76.8	99.4	29.5												
16.0	73.7	98.8	27.8												
18.0	70.6	98.2	26.0												
20.0	67.4	97.4	24.5												
21.7				73.0	98.2	25.5									
22.0	64.1	96.4	22.9	72.5	98.1	25.5									
24.0	60.7	95.3	21.7	69.3	97.4	24.4									
26.0	57.2	94.1	20.4	66.1	96.5	23.2									
28.0	53.5	92.7	19.3	62.7	95.5	22.4									
30.0	49.7	91.1	18.5	59.3	94.4	21.5									
32.0	45.6	89.2	17.3 16.2	55.7	93.1	20.6 19.9									
34.0 34.7	41.2	87.0	10.2	52.0	91.6	19.9	65.0	94.5	21.6						
36.0	36.4	84.4	15.3	48.1	89.8	19.0	63.0	93.9	22.6						
38.0	30.4	81.3	14.6	43.9	87.8	18.1	59.6	92.8	22.0						
40.0	24.3	77.4	13.9	39.3	85.5	17.3	56.0	91.5	21.1						
42.0	15.1	71.5	13.1	34.3	82.8	16.6	52.3	90.0	20.2						
44.0				28.4	79.4	15.8	48.4	88.3	19.4						
46.0				21.0	74.9	15.0	44.2	86.3	18.5						
47.0				16.2	71.7	14.6									
48.0							39.7	84.0	17.7						
50.0							34.7	81.3	17.1						
50.2										55.0	87.4	14.5			
55.0							17.0	70.6	15.5	45.8	83.3	14.2			
60.0										33.9	77.2	13.0			
65.0										15.5	65.9	11.6			
76.2													35.0	65.6	4.7
80.0													25.0	59.8	4.1
82.0													16.2	54.2	3.9



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			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				59.0 r		eza de p	ıl, Punto lumín (1: ı] Posici	916-1) 4	1.5 m Pl	eza de p umín	lumín				
13.8	78.0	102.5	26.7												
14.0	77.8	102.5	26.7												
16.0	74.9	102.0	25.5												
18.0	72.0	101.4	24.0												
20.0	69.1	100.6	22.8												
22.0	66.1	99.8	21.3												
22.5				73.0	101.1	22.9									
24.0	63.0	98.8	20.1	70.9	100.6	22.5									
26.0	59.9	97.7	19.1	67.9	99.8	21.6				ł					
28.0 30.0	56.6 53.2	96.4 94.9	18.1 17.2	64.9 61.7	98.9 97.8	20.6 19.9									
32.0	49.6	93.3	16.5	58.5	97.8 96.7	19.9									
34.0	45.8	91.4	15.6	55.2	95.3	18.2				ł					
36.0	41.8	89.3	14.8	51.7	93.8	17.6	65.0	97.2	19.3	i					
38.0	37.4	86.8	14.1	48.1	92.1	16.8	62.0	96.2	20.1						
40.0	32.4	83.8	13.5	44.2	90.1	16.0	58.8	95.0	19.5						
42.0	26.7	80.2	12.8	40.0	87.8	15.3	55.5	93.7	18.7						
44.0	19.4	75.3	12.2	35.4	85.2	14.7	52.0	92.2	17.9	i					
45.0	16.3	73.2	8.9							i					
46.0				30.2	82.0	14.1	48.4	90.5	17.3						
48.0				24.0	77.9	13.4	44.5	88.5	16.5						
50.0				15.5	72.1	12.7	40.4	86.3	15.8						
51.9										55.0	89.8	13.7			
55.0							27.8	78.7	14.3	49.7	87.4	13.8			
58.0							16.3	71.0	13.4						
60.0										39.8	82.3	12.6			
65.0										26.9	74.4	11.4			
68.0										16.6	67.5	10.3			
78.6													35.0	67.3	4.0
80.0													33.0	66.1	3.8
85.0													15.6	54.6	3.2



2821-1

2821-1

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

		gulo de orincipa			gulo de orincipa			gulo de principa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				59.0 ו	m Pluma Cab	eza de p	al, Punto dumín (19 n] Posici	916-1) 4	4.5 m Plı	eza de p umín	lumín				
14.5	78.0	105.5	24.3												
16.0	76.0	105.1	23.8												
18.0	73.3	104.5	22.5												
20.0	70.6	103.8	21.1												
22.0	67.8	103.0	20.0	70.0	104.0	20.8									
23.4 24.0	65.0	102.1	18.8	73.0 72.2	104.0	20.8									
26.0	62.1	102.1	17.9	69.5	103.6	20.6									
28.0	59.1	99.9	17.9	66.7	103.0	19.4									
30.0	56.0	98.6	16.2	63.8	101.2	18.5									
32.0	52.8	97.2	15.6	60.9	100.2	17.8									
34.0	49.5	95.5	15.0	57.9	98.9	17.0									
36.0	46.0	93.7	14.3	54.8	97.6	16.3									
37.3							65.0	99.9	18.6						
38.0	42.2	91.5	13.6	51.5	96.0	15.8	64.0	99.6	18.5						
40.0	38.2	89.1	13.0	48.1	94.3	15.1	61.1	98.5	18.0						
42.0	33.7	86.3	12.5	44.5	92.3	14.4	58.1	97.3	17.4						
44.0	28.6	82.9	12.0	40.6	90.1	13.7	55.0	96.0	16.7						
46.0 48.0	22.5 15.7	78.6 73.6	11.4 8.1	36.4 31.7	87.5 84.5	13.2 12.6	51.8 48.4	94.5 92.7	16.1 15.6						
50.0	15.7	73.0	0.1	26.3	80.8	12.0	44.8	90.8	14.8						
53.0				16.6	73.7	9.8	44.0	90.0	14.0						
53.6				10.0	70.7	0.0				55.0	92.3	13.0			
55.0							34.5	84.6	13.4	52.9	91.3	13.6			
60.0							20.1	74.6	11.9	44.3	86.8	12.5			
61.0							15.7	71.4	11.6						
65.0										33.9	80.5	11.3			
70.0										17.8	69.2	10.1			
71.0										16.0	67.9	9.5			
81.1													35.0	69.1	3.5
85.0													26.4	63.2	3.0
88.0	l												15.0	55.0	2.6



N° de ident.: 9842523/95738/

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

Valor de vuelco: 2 - Vía ancha Lastre trasero [t]: 114.0 Lastre central [t]: 52.6 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]
				59.0 ו		eza de p	al, Punto dumín (19 n] Posici	916-1) 4	7.5 m Pl	eza de p umín	lumín				
15.1 16.0 18.0 20.0 22.0 24.0	78.0 76.9 74.4 71.9 69.3 66.7	108.4 108.2 107.6 107.0 106.3	21.6 21.5 20.4 19.4 18.5												
24.3 26.0 28.0 30.0	64.0 61.3 58.5	104.5 103.4 102.2	17.0 16.5 15.7	73.0 70.8 68.2 65.6	106.8 106.2 105.5 104.6	18.7 18.5 18.0 17.4									
32.0 34.0 36.0 38.0 38.5	55.6 52.6 49.4 46.1	100.9 99.4 97.8 95.9	15.0 14.5 13.9 13.2	62.9 60.1 57.3 54.4	103.6 102.5 101.2 99.8	16.9 16.5 15.9 15.5	65.0	102.7	16.4						
40.0 42.0 44.0 46.0	42.6 38.9 34.8 30.2	93.8 91.4 88.7 85.5	12.6 12.0 11.5 11.0	51.3 48.1 44.7 41.1	98.3 96.5 94.6 92.4	15.1 14.5 14.0 13.4	63.1 60.3 57.5 54.6	102.0 100.8 99.6 98.2	17.0 16.6 16.2 15.8						
48.0 50.0 51.0 55.0 55.3	24.9 18.1 15.2	81.5 76.3 73.9	10.5 10.0 7.4	37.3 33.0 18.8	89.9 87.0 76.4	13.0 12.5 10.9	51.5 48.3 39.5	96.7 95.0 89.7	15.4 15.0 13.6	55.0	94.7	12.3			
56.0 60.0 64.0 65.0 70.0				16.0	74.2	9.3	28.6 15.2	82.1 71.8	12.4 11.2	47.9 39.0 27.1	91.0 85.6 77.3	11.9 11.0 9.9			
74.0 83.5 85.0 90.0										15.5	68.3	8.9	35.0 33.0 18.9	70.8 69.4 58.8	2.8 2.7 2.1



Nº de ident.: 9842523/95738/

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

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

		gulo de orincipa			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]
				59.0 ı	m Pluma Cab	eza de p	il, Punto Ilumín (19 n] Posici	916-1) 5	0.5 m Pl	eza de p umín	lumín				
15.7 16.0 18.0 20.0 22.0 24.0 25.2 26.0 28.0 30.0 32.0 34.0 36.0 38.0 39.8 40.0 44.0 44.0 46.0 45.0 50.0 50.0	78.0 77.7 75.3 73.0 70.6 68.1 65.7 63.1 60.5 57.9 55.1 52.3 49.3 49.3 43.0 39.5 36.7 31.6 26.8 17.5	111.3 111.3 110.8 110.2 109.5 108.7 107.8 106.8 105.7 104.5 103.2 101.7 100.0 98.1 96.1 93.7 91.1 88.0 84.3 76.7	19.8 19.8 19.2 18.4 17.6 17.0 16.5 16.1 15.7 15.0 14.4 13.9 13.4 12.7 12.0 11.4 10.8 10.4 9.9	73.0 72.0 69.6 67.1 64.6 62.1 59.5 56.8 54.0 51.1 44.9 41.6 38.0	109.7 109.4 108.7 107.9 107.0 105.9 104.8 103.5 102.1 100.5 98.8 96.8 94.7 92.2	17.4 17.4 17.1 16.8 16.2 15.8 15.5 15.2 14.9 14.5 13.9 13.5	65.0 64.8 62.3 59.7 57.0 54.2 51.3	105.4 105.3 104.3 103.2 101.9 100.5 98.9	15.6 16.2 16.1 15.9 15.7 15.5						
55.0 57.0 59.0	17.0	70.7	0.0	27.3 15.5	84.2 74.6	11.6 8.3	43.6	94.2	14.2	55.0	97.2	11.8			
60.0 65.0 67.0 70.0 75.0					-		34.4 22.2 16.2	87.9 78.4 73.4	13.1 11.7 10.7	50.9 43.1 33.8 20.3	95.0 90.2 83.8 73.2	11.8 10.9 9.9 8.8			
76.0 86.0 90.0 91.0										16.6	70.0	8.6	35.0 27.3 24.7	72.5 66.7 64.6	2.5 2.1 2.0



N° de ident.: 9842523/95738/

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

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

		gulo de orincipal			gulo de orincipa			gulo de principa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				59.0	m Pluma Cab	eza de p	lumín (1	de carga 916-1) 5 ón midfa	3.5 m Pl	eza de p umín	lumín				
16.3	78.0	114.3	18.0												
18.0	76.2	113.9	17.7												
20.0	74.0	113.3	17.0												
22.0	71.7	112.7	16.2												
24.0	69.4	111.9	15.6												
26.0	67.1	111.1	15.2	73.0	112.6	15.9									
28.0	64.8	110.2	14.8	70.8	111.9	15.7									
30.0	62.3	109.2	14.5	68.5	111.1	15.4									
32.0	59.9	108.0	14.1	66.2	110.3	15.1									
34.0	57.4	106.8	13.6	63.8	109.3	14.8									
36.0	54.8	105.4	13.2	61.4	108.2	14.6									
38.0	52.1	103.9	12.8	58.9	107.1	14.3									
40.0	49.3	102.2	12.4	56.3	105.8	14.0									
41.1							65.0	108.1	14.7						
42.0	46.4	100.4	11.7	53.7	104.3	13.8	64.0	107.7	14.7						
44.0	43.3	98.3	11.1	51.0	102.8	13.6	61.5	106.6	14.6						
46.0	40.0	96.0	10.6	48.1	101.0	13.2	59.1	105.4	14.4						
48.0	36.5	93.4	10.1	45.1	99.1	12.8	56.5	104.2	14.2						
50.0	32.7	90.5	9.6	42.0	96.9	12.4	53.9	102.7	14.0						
55.0	20.5	80.2	8.7	33.1	90.3	11.6	46.9	98.5	13.4						
56.0	17.0	77.2	8.5												
58.8				•						55.0	99.6	11.1			
60.0				21.0	80.2	10.0	38.9	93.0	12.6	53.5	98.8	11.4			
62.0				15.1	74.9	8.0									
65.0							29.2	85.4	11.6	46.5	94.5	10.6			
70.0							15.7	73.8	9.7	38.4	89.0	9.7			
75.0										28.6	81.2	8.6			
79.0										18.4	72.5	7.8			



N° de ident.: 9842523/95738/ Piez

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

Valor de vuelco: Lastre trasero [t]:

Lastre central [t]:

2 - Vía ancha 114.0

52.6

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]
				59.0 ו		eza de p	il, Punto lumín (1: i] Posici	916-1) 5	6.5 m Pli	eza de p umín	lumín				
17.0	78.0	117.2	16.5												
18.0	76.9	117.0	16.5												
20.0	74.8	116.4	15.8												
22.0	72.7	115.8	15.1												
24.0	70.6	115.1	14.5												
26.0	68.4	114.4	14.1												
26.9		440.5	40.0	73.0	115.4	14.6									
28.0	66.2 63.9	113.5	13.8	71.8	115.1	14.6									
30.0 32.0	63.9	112.6 111.5	13.5 13.3	69.7 67.5	114.4 113.5	14.3 14.1									
34.0	59.3	110.3	12.9	65.3	112.6	13.8									
36.0	56.9	10.3	12.5	63.0	111.7	13.5									
38.0	54.4	109.1	12.3	60.7	110.6	13.3									
40.0	51.9	106.1	11.9	58.3	109.4	13.1									
42.0	49.2	104.5	11.6	55.9	108.0	12.8									
42.4							65.0	110.8	13.5						
44.0	46.5	102.6	11.0	53.4	106.6	12.6	63.2	110.0	13.5						
46.0	43.6	100.6	10.4	50.8	105.0	12.5	60.9	108.9	13.3						
48.0	40.5	98.3	9.9	48.1	103.3	12.2	58.5	107.7	13.1						
50.0	37.2	95.8	9.4	45.3	101.3	11.9	56.1	106.4	13.0						
55.0	27.6	87.7	8.5	37.5	95.6	11.2	49.7	102.6	12.6						
59.0	16.5	77.6	7.8												
60.0				28.0	87.6	10.1	42.6	97.7	12.1						
60.5										55.0	102.1	10.5			
64.0				17.2	77.8	9.0									
65.0							34.3	91.2	11.5	49.3	98.6	10.3			
70.0							23.6	82.0	10.2	42.2	93.6	9.5			
73.0							15.3	74.2	8.0	00.4	00.7	0.4			
75.0										33.4	86.7	8.4			
80.0 82.0										23.8 17.9	78.4 73.0	7.4 7.1			
02.0									l	17.9	13.0	7.1			



N° de ident.: 9842523/95738/ Pieza de

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

Valor de vuelco: 2 - Vía ancha Lastre trasero [t]: 114.0 Lastre central [t]: 52.6 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]
				59.0 ו		eza de p	ıl, Punto lumín (19 n] Posici	916-1) 5	9.5 m Pli	eza de p umín	lumín				
17.6	78.0	120.1	14.3												
18.0	77.7	120.0	14.3												
20.0	75.7	119.5	13.9												
22.0	73.6	119.0	13.4												
24.0	71.6	118.3	12.8												
26.0	69.5	117.6	12.4												
27.8				73.0	118.3	12.7									
28.0	67.4	116.8	12.1	72.8	118.2	12.7									
30.0	65.3	115.9	11.8	70.8	117.5	12.6									
32.0	63.1	114.9	11.6	68.7	116.8	12.3									
34.0	60.9	113.8	11.4	66.6	115.9	12.1									
36.0	58.7	112.6	11.1	64.4	115.0	11.8									
38.0	56.4	111.3	10.9	62.2	114.0	11.6									
40.0	54.0	109.8	10.7	60.0	112.8	11.4									
42.0	51.5	108.3	10.5	57.7	111.6	11.2									
43.6							65.0	113.5	11.6						
44.0	49.0	106.6	10.2	55.4	110.2	11.0	64.6	113.4	11.6						
46.0	46.3	104.7	9.7	53.0	108.7	10.9	62.4	112.3	11.6						
48.0	43.5	102.6	9.2	50.5	107.1	10.7	60.2	111.2	11.4						
50.0	40.6 32.3	100.4	8.8 7.9	47.9 40.9	105.3 100.1	10.5 10.1	57.9 51.9	110.0 106.4	11.3 10.9						
55.0	21.4	93.4	7.9	40.9 32.7	93.2		-	106.4	10.9						
60.0 62.0	17.2	83.2 79.2	7.2 5.5	32.7	93.2	9.5	45.4	101.8	10.6						
62.0	17.2	79.2	5.5							55.0	104.6	9.9			
65.0				21.9	83.2	8.4	38.0	96.1	10.4	55.0 51.6	104.6	9.9			
67.0				15.7	77.1	7.9	30.0	90.1	10.4	31.0	102.4	9.1			
70.0				13.7	11.1	7.9	29.1	88.3	9.7	45.0	97.8	9.0			
75.0							16.2	76.0	8.6	37.6	92.0	8.1			
80.0							10.2	7 0.0	0.0	29.8	85.2	7.2			
85.0										17.5	73.5	6.3			



Nº de ident.: 9842523/95738/

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

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

	88° Ángulo de pluma principal			83° Ángulo de pluma principal			75° Ángulo de pluma principal			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]
59.0 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)															
18.3	78.0	123.1	13.1												
20.0	76.4	122.6	12.9												
22.0	74.4	122.1	12.3												
24.0	72.5	121.5	11.8												
26.0	70.6	120.8	11.5												
28.0	68.6	120.0	11.2												
28.7				73.0	121.2	11.6									
30.0	66.6	119.2	10.9	71.7	120.7	11.6									
32.0	64.5 62.5	118.2 117.2	10.7	69.8 67.8	120.0 119.2	11.3 11.1									
34.0 36.0	60.4	117.2	10.5 10.3	65.8	119.2	10.9									
38.0	58.2	114.9	10.3	63.7	117.3	10.9									
40.0	56.0	113.5	9.9	61.6	117.3	10.7									
42.0	53.7	112.1	9.8	59.5	115.1	10.3									
44.0	51.4	110.5	9.7	57.3	113.1	10.3									
44.9	01.4	110.0	0.7	01.0	110.0	10.1	65.0	116.3	10.6						
46.0	48.9	108.8	9.4	55.1	112.5	10.0	63.9	115.7	10.6						
48.0	46.4	106.9	9.0	52.8	111.0	9.8	61.8	114.6	10.5						
50.0	43.8	104.9	8.6	50.4	109.3	9.7	59.6	113.5	10.3						
55.0	36.5	98.8	7.7	44.0	104.6	9.4	54.1	110.1	10.0						
60.0	27.7	90.6	7.0	36.8	98.6	9.1	48.1	106.0	9.7						
63.9										55.0	107.0	9.4			
65.0	16.8	79.6	4.5	28.1	90.5	8.3	41.5	100.8	9.5	53.8	106.2	9.4			
70.0				15.3	77.5	7.3	33.8	94.2	9.3	47.8	102.0	8.8			
75.0							24.1	84.9	8.5	41.1	96.8	8.0			
78.0							15.8	76.4	7.9						
80.0										34.3	90.9	7.0			
85.0										24.9	81.9	6.2			
88.0										17.0	73.9	5.7			



2821-1

2821-1

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

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				59.0 ו	m Pluma Cab	eza de p	ıl, Punto lumín (1: ı] Posici	916-1) 6	5.5 m Plı	eza de p umín	lumín				
18.9	78.0	126.0	11.9												
20.0	77.0	125.7	11.9												
22.0	75.2	125.2	11.4												
24.0	73.3	124.6	11.0												
26.0	71.5	124.0	10.6												
28.0	69.6	123.3	10.3												
29.6				73.0	124.0	10.6									
30.0	67.7	122.4	10.1	72.6	123.9	10.6									
32.0	65.8	121.6	9.9	70.7	123.2	10.5									
34.0	63.8	120.6	9.7	68.8	122.4	10.3									
36.0	61.9	119.5	9.5	66.9	121.6	10.1									
38.0	59.8 57.8	118.4	9.3	65.0 63.0	120.7 119.7	9.8 9.7									
40.0 42.0	57.8	117.1 115.8	9.1 8.9	61.0	119.7	9.7									
44.0	53.5	114.3	8.8	59.0	117.4	9.3									
46.0	51.2	112.8	8.6	56.9	116.1	9.3									
46.2	31.2	112.0	0.0	30.9	110.1	9.2	65.0	119.0	9.6						
48.0	48.9	111.0	8.4	54.8	114.7	9.0	63.2	118.1	9.6						
50.0	46.5	109.2	8.1	52.6	113.2	8.9	61.2	117.0	9.5						
55.0	40.0	103.7	7.3	46.7	108.9	8.5	56.0	113.8	9.1						
60.0	32.5	96.7	6.7	40.3	103.5	8.1	50.5	110.0	8.9						
65.0	22.8	86.9	6.1	32.8	96.5	7.7	44.4	105.3	8.6						
65.6										55.0	109.5	8.5			
68.0	16.4	80.0	4.2												
70.0				23.2	86.9	7.0	37.6	99.4	8.3	50.1	106.1	8.3			
73.0				17.0	80.2	5.2									
75.0							29.6	91.7	7.9	44.1	101.3	7.7			
80.0							18.5	80.2	7.3	38.0	96.1	6.7			
81.0							15.5	76.8	7.2						
85.0										30.1	88.5	5.9			
90.0										19.5	77.5	5.1			
91.0										16.6	74.3	5.0			



Nº de ident.: 9842523/95738/

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

Valor de vuelco: Lastre trasero [t]:

Lastre central [t]:

2 - Vía ancha 114.0 52.6 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]
				59.0 i	m Pluma Cab	eza de p	al, Punto dumín (1 n] Posici	916-1) 6	8.5 m Plı	eza de p umín	lumín				
19.5	78.0	128.9	10.9												
20.0	77.6	128.8	10.9												
22.0	75.9	128.3	10.6												
24.0	74.1	127.8	10.2												
26.0	72.3	127.1	9.9												
28.0	70.6	126.5	9.7												
30.0	68.8	125.7	9.5												
30.4				73.0	126.9	9.8									
32.0	66.9	124.8	9.2	71.6	126.4	9.8									
34.0	65.1	123.9	9.0	69.8	125.7	9.6									
36.0	63.2	122.9	8.8	68.0	124.9	9.4									
38.0	61.3	121.9	8.7	66.2	124.0	9.2									
40.0	59.3	120.7	8.5	64.3	123.1	9.0									
42.0	57.4	119.4	8.3	62.4	122.0	8.9									
44.0	55.3	118.1	8.1	60.5	120.9	8.7									
46.0	53.2	116.6	7.9	58.5	119.7	8.5									
47.4		445.0	7.0	50.5	440.4		65.0	121.7	8.8						
48.0	51.1 48.9	115.0	7.8	56.5	118.4 117.0	8.4	64.5	121.4 120.4	8.8						
50.0	1	113.3	7.6	54.5	_	8.2	62.6	1	8.8 8.5						
55.0 60.0	43.0 36.3	108.3 102.1	7.0 6.5	49.1 43.2	113.0 108.0	7.9 7.4	57.7 52.5	117.4 113.9	8.1						
65.0	28.3	94.0	5.9	43.2 36.5	106.0	7.4	52.5 47.0	109.5	7.9						
67.4	20.3	94.0	5.9	30.5	101.9	7.0	47.0	109.5	7.9	55.0	111.9	7.8			
70.0	17.2	81.7	5.3	28.6	93.9	6.6	40.8	104.2	7.5	52.2	109.9	7.8			
71.0	16.0	80.4	3.9	20.0	33.3	0.0	40.0	104.2	1.5	J2.2	103.3	7.0			
75.0	10.0	00.4	0.9	17.7	81.9	6.2	33.8	97.5	7.3	46.6	105.6	7.5			
76.0				16.6	80.6	4.6	55.0	37.5	1.5	70.0	100.0	1.5			
80.0				10.0	00.0	4.0	25.1	88.4	6.9	40.5	100.2	6.6			
84.0							15.1	77.1	6.7			0.0			
85.0							1			34.3	94.2	5.7			
90.0										25.8	85.4	5.0			
94.0										16.2	74.7	4.4			



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

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

Valor de vuelco: 2 - Vía ancha Lastre trasero [t]: 114.0 Lastre central [t]: 52.6 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]
				59.0 ı	m Pluma Cab	eza de p	il, Punto Iumín (19 i] Posicio	916-1) 7	1.5 m Plı	eza de p umín	lumín				
20.1 22.0 24.0 26.0 28.0	78.0 76.5 74.8 73.1 71.4	131.9 131.4 130.9 130.3 129.6	9.9 9.7 9.3 9.0 8.8												
30.0 31.3 32.0 34.0 36.0	69.7 68.0 66.2 64.4	128.9 128.1 127.2 126.3	8.6 8.4 8.2 8.1	73.0 72.4 70.7 69.0	129.8 129.6 128.9 128.1	8.9 8.9 8.7 8.6									
38.0 40.0 42.0 44.0 46.0	62.6 60.8 58.9 57.0 55.0	125.3 124.2 123.0 121.7 120.3	7.9 7.8 7.6 7.5 7.3	67.2 65.5 63.7 61.9 60.0	127.3 126.4 125.4 124.3 123.2	8.4 8.2 8.1 7.9 7.8									
48.0 48.7 50.0 55.0 60.0	53.0 51.0 45.5 39.5	118.8 117.2 112.7 107.1	7.2 7.1 6.6 6.1	58.1 56.2 51.2 45.7	122.0 120.7 116.9 112.4	7.7 7.5 7.2 6.9	65.0 63.8 59.2 54.4	124.4 123.8 121.0 117.6	8.0 8.0 7.7 7.4						
65.0 69.1 70.0 74.0 75.0	32.6 23.9 15.7	90.5 80.8	5.7 5.1 3.6	39.7 32.8 24.3	106.8 99.9 90.4	6.6 6.4 5.9	49.2 43.6 37.3	113.6 108.7 102.7	7.2 7.0 6.8	55.0 54.1 48.9	114.4 113.7 109.7	7.0 7.0 6.9			
79.0 80.0 85.0 87.0 90.0				16.2	81.0	4.7	29.9 20.3 16.7	95.0 84.1 79.8	6.5 6.2 5.5	43.3 37.7 30.4	104.7 99.4 91.9	6.3 5.5			
95.0 97.0										21.1 15.9	81.3 75.2	4.0 3.8			



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 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]
				59.0 ו	m Pluma Cab	eza de p	ıl, Punto lumín (1 ı] Posici	916-1) 7	4.5 m Pl	eza de p umín	lumín				
20.8	78.0	134.8	9.0												
22.0	77.0	134.5	9.0												
24.0	75.4	134.0	8.6												
26.0	73.8	133.4	8.3												
28.0	72.2	132.8	8.1												
30.0	70.6	132.1	7.9												
32.0	68.9	131.3	7.8												
32.2				73.0	132.6	8.1									
34.0	67.2	130.5	7.6	71.5	132.0	8.1									
36.0	65.5 63.8	129.6	7.4	69.9 68.2	131.3	7.9 7.7									
38.0 40.0	62.1	128.7 127.6	7.3 7.2	66.5	130.5 129.7	7.7									
40.0 42.0	60.3	127.6	7.2	64.8	129.7	7.6				ł					
44.0	58.5	125.3	6.9	63.1	127.7	7.4				ł					
46.0	56.6	123.3	6.8	61.3	126.7	7.2									
48.0	54.8	122.6	6.7	59.6	125.5	7.1									
50.0	52.8	121.1	6.6	57.7	124.3	6.9	65.0	127.1	7.2	i					
55.0	47.8	116.8	6.3	53.0	120.7	6.7	60.6	124.5	7.1	i					
60.0	42.3	111.7	5.8	48.0	116.5	6.5	56.0	121.3	6.8	i					
65.0	36.1	105.5	5.4	42.5	111.5	6.3	51.2	117.6	6.6						
70.0	28.8	97.4	5.0	36.3	105.2	6.1	46.0	113.0	6.5						
70.8										55.0	116.8	6.4			
75.0	19.0	85.8	4.5	29.1	97.3	5.7	40.3	107.6	6.3	50.9	113.6	6.3			
77.0	15.3	81.2	3.4												
80.0				19.5	85.9	5.3	33.8	100.8	6.2	45.7	109.1	6.2			
82.0				15.9	81.4	4.3				l					
85.0							25.9	91.9	5.9	40.6	104.2	5.4			
90.0							16.3	80.3	5.2	34.2	97.6	4.7			
95.0										26.5	88.9	4.0			
100.0										15.5	75.6	3.4			



2821-1

2821-1

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

		gulo de orincipal			gulo de orincipa			gulo de principa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				59.0 ו	m Pluma Cab	eza de p	al, Punto dumín (19 n] Posici	916-1) 7	7.5 m Plı	eza de p umín	lumín				
21.4	78.0	137.7	8.1												
22.0	77.5	137.6	8.1												
24.0	76.0	137.1	7.9												
26.0	74.5	136.6	7.6												
28.0	72.9	136.0	7.4												
30.0	71.3	135.3	7.2												
32.0	69.8	134.6	7.1												
33.1				73.0	135.5	7.3									
34.0	68.2	133.8	6.9	72.3	135.2	7.3									
36.0	66.5	132.9	6.7	70.7	134.5	7.2									
38.0	64.9	132.0	6.6	69.1	133.8	7.0									
40.0	63.2	131.0	6.5	67.5	132.9	6.9									
42.0	61.6	129.9	6.4	65.9	132.1	6.7									
44.0	59.9	128.8	6.2	64.2	131.1	6.6									
46.0	58.1	127.6	6.1	62.6	130.1	6.5									
48.0	56.3	126.2	6.0	60.9	129.0	6.4									
50.0	54.5	124.8	5.9	59.1	127.8	6.2									
51.2							65.0	129.8	6.4						
55.0	49.8	120.9	5.7	54.7	124.5	5.9	61.9	127.9	6.3						
60.0	44.7	116.1	5.3	50.0	120.5	5.7	57.5	124.9	6.1						
65.0	39.1	110.4	5.0	44.9	115.8	5.5	53.0	121.4	5.9						
70.0	32.6	103.4	4.7	39.3	110.2	5.4	48.1	117.2	5.7						
72.5										55.0	119.3	5.6			
75.0	24.8	94.0	4.2	32.9	103.2	5.2	42.9	112.2	5.6	52.7	117.5	5.6			
80.0	15.0	81.6	3.2	25.1	94.0	4.9	37.0	106.1	5.4	47.8	113.2	5.5			
85.0				15.6	81.8	3.8	30.2	98.4	5.3	42.6	108.2	5.1			
90.0							21.6	87.9	5.2	37.4	102.7	4.4			
93.0							16.0	80.7	4.7						
95.0										30.7	95.2	3.7			
100.0										22.3	85.0	3.1			
103.0										15.2	76.0	2.8			



Nº de ident.: 9842523/95738/

Radio de descarga: 360°

2 - Vía ancha

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

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

	88° Án	gulo de orincipa	pluma I		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]
				59.0 ו	m Pluma Cab	eza de p	il, Punto lumín (1 n] Posici	916-1) 8	0.5 m Pl	eza de p umín	lumín				
22.0	78.0	140.7	7.4												
24.0	76.5	140.2	7.3												
26.0	75.1	139.7	7.0												
28.0	73.6	139.1	6.8												
30.0	72.1	138.5	6.6												
32.0	70.6	137.8	6.5												
33.9				73.0	138.4	6.6									
34.0	69.0	137.0	6.3	73.0	138.4	6.6									
36.0	67.5	136.2	6.2	71.5	137.7	6.6									
38.0	65.9	135.3	6.0	69.9	137.0	6.4									
40.0	64.3	134.4	5.9	68.4	136.2	6.3									
42.0	62.7	133.3	5.8	66.8	135.4	6.1									
44.0	61.1	132.2	5.7	65.3	134.4	6.0									
46.0	59.4	131.1	5.5	63.7	133.5	5.9									
48.0	57.8	129.8	5.4	62.1	132.4	5.7									
50.0	56.0	128.5	5.3	60.4	131.3	5.6	05.0	400.0	5.8						
52.5	51.6	104.0	5.1	56.2	128.1	5.4	65.0 63.0	132.6 131.3	5.8						
55.0 60.0	46.8	124.8 120.4	4.9	51.7	124.4	5.4	58.9	128.5	5.5						
65.0	41.7	115.1	4.6	47.0	120.1	5.0	54.6	125.1	5.3						
70.0	35.9	108.8	4.4	41.9	114.9	4.8	50.0	121.2	5.1						
74.3	00.0	100.0	7.7	41.0	114.0	4.0	00.0	121.2	0.1	55.0	121.8	5.0			
75.0	29.1	100.8	4.1	36.1	108.6	4.7	45.2	116.5	5.0	54.3	121.2	5.0			
80.0	20.5	89.7	3.6	29.4	100.6	4.5	39.8	111.0	4.8	49.8	117.2	4.9			
82.0	15.8	83.4	3.5												
85.0				20.9	89.7	4.3	33.8	104.1	4.7	44.9	112.5	4.8			
88.0				15.3	82.2	3.3									
90.0							26.6	95.4	4.7	40.1	107.6	4.2			
95.0							16.7	82.4	4.7	34.2	100.9	3.6			
96.0							15.7	81.1	4.2						
100.0										27.1	92.3	3.0			
105.0										17.5	79.9	2.4			



2821-1

2821-1

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

		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]
				59.0 i	m Pluma Cab	eza de p	ıl, Punto lumín (1 ı] Posici	916-1) 8	3.5 m Plı	eza de p umín	lumín				
22.6	78.0	143.6	6.6												
24.0	77.0	143.3	6.6												
26.0	75.6	142.8	6.4												
28.0	74.2	142.2	6.2												
30.0	72.7	141.6	6.0												
32.0	71.3	141.0	5.9												
34.0	69.8	140.2	5.7												
34.8				73.0	141.2	5.9									
36.0	68.3	139.4	5.6	72.1	140.9	5.9									
38.0	66.8	138.6	5.5	70.7	140.2	5.8									
40.0	65.3	137.7	5.3	69.2	139.4	5.7									
42.0	63.8	136.7	5.2	67.7	138.6	5.6									
44.0	62.2	135.7	5.1	66.2	137.7	5.4									
46.0	60.7	134.6	5.0	64.7	136.8	5.3									
48.0	59.1	133.4	4.9	63.2	135.8	5.2									
50.0	57.4	132.1	4.8	61.6	134.7	5.1									
53.8							65.0	135.3	5.2						
55.0	53.2	128.6	4.6	57.6	131.7	4.9	64.1	134.7	5.2						
60.0	48.7	124.5	4.4	53.4	128.2	4.6	60.1	132.0	5.0						
65.0	43.9	119.6	4.2	48.9	124.1	4.5	56.0	128.8	4.8						
70.0	38.7	113.8	4.0	44.1	119.3	4.3	51.8	125.1	4.6						
75.0	32.7	106.7	3.8	38.9	113.5	4.1	47.2	120.7	4.4						
76.0										55.0	124.2	4.4			
80.0	25.5	97.5	3.4	32.9	106.5	4.0	42.3	115.6	4.3	51.5	121.2	4.3			
85.0	15.5	83.8	3.0	25.8	97.4	3.8	36.8	109.4	4.2	46.9	116.8	4.3			
90.0				16.0	84.0	3.6	30.5	101.7	4.1	42.0	111.6	3.9			
95.0							22.7	91.5	4.0	37.1	106.1	3.3			
99.0							15.4	81.5	3.5						
100.0										30.9	98.6	2.7			
105.0										23.3	88.6	2.1			
106.0	l .									21.4	86.1	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 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]
				59.0	m Pluma Cab	eza de p	II, Punto Iumín (1 I Posici	916-1) 8	6.5 m Plı	eza de p umín	lumín				
23.3	78.0	146.5	6.0												
24.0	77.5	146.4	6.0												
26.0	76.1	145.9	5.8												
28.0	74.7	145.4	5.7												
30.0	73.4	144.8	5.6												
32.0	72.0	144.1	5.4												
34.0	70.6	143.4	5.3												
35.7				73.0	144.1	5.4									
36.0	69.1	142.7	5.2	72.8	144.0	5.4									
38.0	67.7	141.9	5.0	71.4	143.4	5.3									
40.0	66.2	141.0	4.9	70.0	142.6	5.2									
42.0	64.8	140.1	4.8	68.5	141.9	5.1									
44.0	63.3	139.1	4.7	67.1	141.0	5.0									
46.0	61.8	138.0	4.6	65.6	140.1	4.9									
48.0	60.3	136.9	4.5	64.2	139.2	4.8									
50.0	58.7	135.7	4.4	62.7	138.2	4.7									
55.0	54.7	132.3	4.2	58.8	135.3	4.5	65.0	138.0	4.7						
60.0	50.5	128.4	4.1	54.9	132.0	4.2	61.3	135.4	4.5						
65.0	46.0	123.9	3.8	50.6	128.1	4.1	57.4	132.4	4.4						
70.0	41.1	118.5	3.6	46.2	123.6	3.9	53.3	128.9	4.2						
75.0	35.7	112.1	3.5	41.3	118.2	3.7	49.0	124.8	4.0						
77.7										55.0	126.7	3.9			
80.0	29.5	104.1	3.2	35.9	111.9	3.6	44.4	120.0	3.9	53.1	125.0	3.9			
85.0	21.6	93.4	2.9	29.7	104.0	3.4	39.4	114.3	3.7	48.8	120.8	3.8			
88.0	15.2	84.2	2.7												
90.0				22.0	93.4	3.2	33.8	107.5	3.6	44.2	116.0	3.7			
93.0				15.7	84.4	3.1									
95.0							27.1	98.8	3.5	39.7	110.9	3.2			
100.0							18.4	86.6	3.4	34.1	104.2	2.6			
102.0							15.1	81.9	2.9						
105.0	1									27.6	95.7	2.0			



2821-1

2821-1

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

		gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa		45° Án	gulo de orincipa	pluma l
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				59.0 ו		eza de p	al, Punto dumín (19 n] Posici	916-1) 8	9.5 m Pli	eza de p umín	lumín				
23.9	78.0	149.5	5.3												
24.0	77.9	149.4	5.3												
26.0	76.6	149.0	5.2												
28.0	75.3	148.5	5.1												
30.0	73.9	147.9	4.9												
32.0	72.6	147.3	4.8												
34.0	71.2	146.6	4.6												
36.0	69.9	145.9	4.5												
36.6				73.0	147.0	4.7									
38.0	68.5	145.1	4.4	72.0	146.5	4.7									
40.0	67.1	144.3	4.3	70.7	145.8	4.6									
42.0	65.7	143.4	4.2	69.3	145.1	4.5									
44.0 46.0	64.3 62.8	142.4 141.4	4.1 4.0	67.9 66.5	144.3 143.4	4.4 4.3									
48.0	61.4	141.4	3.9	65.1	143.4	4.3									
50.0	59.9	139.2	3.8	63.7	142.5	4.1									
55.0	56.1	136.0	3.6	60.0	138.8	3.8									
56.3	30.1	130.0	3.0	00.0	130.0	3.0	65.0	140.7	4.0						
60.0	52.1	132.3	3.4	56.2	135.6	3.6	62.3	138.9	3.9						
65.0	47.8	128.0	3.3	52.2	132.0	3.5	58.6	136.0	3.7						
70.0	43.3	123.0	3.1	48.0	127.7	3.3	54.8	132.6	3.6						
75.0	38.3	117.1	2.9	43.5	122.7	3.1	50.7	128.7	3.4						
79.4							1			55.0	129.1	3.3			
80.0	32.8	110.0	2.8	38.5	116.9	3.0	46.4	124.2	3.3	54.5	128.7	3.3			
85.0	26.1	101.0	2.5	33.0	109.8	2.9	41.7	119.0	3.1	50.5	124.8	3.2			
90.0	17.3	88.1	2.3	26.4	100.9	2.7	36.6	112.7	3.0	46.1	120.3	3.1			
91.0	16.5	86.9	2.0												
95.0				17.7	88.3	2.6	30.7	105.1	2.9	41.4	115.0	2.9			
96.0				15.4	84.8	2.6									
100.0							23.6	95.1	2.8	36.9	109.4	2.3			
102.0										34.7	106.6	2.1			
104.0	I						15.8	83.6	2.8						



2821-1

2821-1

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

		gulo de principa			gulo de orincipa			gulo de 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]
				59.0 ו	m Pluma Cab	eza de p	ıl, Punto lumín (19 n] Posici	916-1) 9:	2.5 m Pli	eza de p umín	lumín				
24.5	78.0	152.4	4.8												
26.0	77.0	152.1	4.7												
28.0	75.8	151.6	4.6												
30.0	74.5	151.0	4.4												
32.0	73.2	150.4	4.3												
34.0	71.9	149.8	4.2												
36.0	70.6	149.1	4.0												
37.5				73.0	149.9	4.2									
38.0	69.2	148.3	3.9	72.6	149.7	4.2									
40.0	67.9	147.5	3.8	71.3	149.0	4.1									
42.0	66.5	146.7	3.7	70.0	148.3	4.0									
44.0	65.2	145.8	3.6	68.7	147.5	3.9									
46.0	63.8	144.8	3.5	67.3	146.7	3.8							<u> </u>		
48.0	62.4	143.7	3.4	66.0	145.8	3.7									
50.0	61.0	142.6	3.3	64.6	144.9	3.6									
55.0	57.3	139.6	3.1	61.1	142.3	3.4									
57.6							65.0	143.4	3.4						
60.0	53.5	136.1	3.0	57.5	139.2	3.1	63.3	142.2	3.4						
65.0	49.5	132.0	2.8	53.7	135.7	3.0	59.8	139.5	3.2						
70.0	45.3	127.4	2.6	49.7	131.7	2.8	56.1	136.3	3.1						
75.0	40.7	121.9	2.5	45.4	127.1	2.7	52.2	132.6	2.9						
80.0	35.6	115.4	2.4	40.8	121.6	2.6	48.1	128.4	2.8						
81.1										55.0	131.6	2.8			
85.0				35.8	115.2	2.5	43.8	123.4	2.7	52.0	128.7	2.8			
90.0				30.0	107.3	2.3	39.0	117.7	2.6	47.9	124.4	2.6			
95.0							33.7	110.8	2.5	43.5	119.4	2.6			
100.0							27.6	102.2	2.4	39.3	114.3	2.1			
101.0										38.3	113.0	2.0			



Nº de ident.: 9842523/95738/

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

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

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				59.0 ı	m Pluma Cab	eza de p	il, Punto Iumín (19 n] Posici	916-1) 9	5.5 m Pli	eza de p umín	lumín				
25.1	78.0	155.3	4.4												
26.0	77.5	155.1	4.4												
28.0	76.2	154.7	4.3										•		
30.0	75.0	154.1	4.1												
32.0	73.7	153.6	4.0												
34.0	72.5	152.9	3.9												
36.0	71.2	152.3	3.8												
38.0	69.9	151.5	3.7												
38.3				73.0	152.7	3.8									
40.0	68.6	150.8	3.6	71.9	152.2	3.8									
42.0	67.3	149.9	3.4	70.7	151.5	3.7									
44.0	66.0	149.1	3.3	69.4	150.7	3.6									
46.0	64.7	148.1	3.3	68.1	149.9	3.5									
48.0	63.3	147.1	3.2	66.8	149.1	3.4									
50.0	62.0	146.1	3.1	65.5	148.2	3.3									
55.0	58.5	143.2	2.9	62.1	145.7	3.1	05.0	440.0	3.2						
58.8 60.0	54.8	139.8	2.6	58.6	142.8	2.9	65.0 64.2	146.2 145.6	3.2				ł		
60.0 65.0	54.8	139.8	2.5	55.0	142.8	2.9	60.8	145.6	3.2						
70.0	31.1	130.0	2.5	51.2	135.6	2.7	57.3	139.9	2.8						
75.0				47.2	131.2	2.3	53.6	136.4	2.6						
80.0				41.2	131.2	2.5	49.7	130.4	2.5						
82.9							43.7	132.4	2.0	55.0	134.0	2.5	i		
85.0										53.4	132.5	2.5			
90.0										49.5	128.4	2.3			



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

		gulo de principal			gulo de orincipa			gulo de principa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				62.0		eza de p	lumín (2	316-1) 3	8.5 m Pl	eza de p umín	lumín				
						16.0 [m	1 J Posici	ón midfa	II (2316)						
13.3	78.0	102.6	40.8												
14.0	77.0	102.4	40.8												
16.0	73.9	101.9	36.6												
18.0	70.7	101.2	32.0												
20.0	67.5	100.4	28.4												
22.0	64.3	99.5	25.0	73.0	101.2	33.5									
24.0	60.9	98.4	22.6	69.9	100.5	32.0									
26.0	57.4	97.2	20.6	66.6	99.7	29.8									
28.0	53.7	95.8	19.0	63.3	98.7	27.6									
30.0	49.9 45.8	94.1	17.7	59.9	97.6	25.8									
32.0 34.0	45.8 41.5	92.3 90.1	16.6	56.4 52.7	96.3 94.8	23.6 21.9									
34.0 35.5	41.5	90.1	15.5	52.7	94.8	21.9	65.0	97.4	21.5						
36.0	36.7	87.6	14.6	48.8	93.1	20.4	64.3	97.4	21.5						
38.0	31.2	84.5	13.9	44.7	91.2	19.0	60.9	96.1	21.1						
40.0	24.7	80.6	13.9	40.2	89.0	17.7	57.4	94.9	20.1						
42.0	15.7	74.9	12.5	35.2	86.3	16.7	53.8	93.5	19.0						
44.0	15.7	14.5	12.5	29.5	83.0	15.8	49.9	91.9	18.2						
46.0				22.6	78.8	14.9	45.9	90.0	17.3						
47.0				18.1	76.0	14.4	10.0	00.0							
48.0				10.1	7 0.0		41.5	87.8	16.5						
50.0							36.7	85.3	15.9						
51.4				Ī				23.0	. 5.0	55.0	90.1	12.6	i		
55.0							20.7	75.9	14.4	48.4	87.3	12.2			
56.0							15.8	72.7	14.1						
60.0										37.2	81.7	10.9			
65.0										20.4	71.8	9.6			
66.0										18.6	70.6	9.3			



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

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

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

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				62.0 ı	n Pluma	principa	ıl, Punto lumín (2	de carga	1 - Cab	eza de p	lumín		_		
					Cab	19.0 [m	n] Posici	ón midfa	II (2316)	umm					
14.0	78.0	105.5	37.8												
16.0	75.1	105.0	35.3												
18.0	72.2	104.4	31.2										<u> </u>		
20.0	69.3	103.7	27.8												
22.0	66.3	102.8	24.5												
22.9				73.0	104.1	31.1									
24.0	63.2	101.8	21.9	71.4	103.7	30.8									
26.0	60.0	100.7	20.1	68.4	102.9	28.9									
28.0	56.8	99.4	18.5	65.4	102.0	26.9									
30.0	53.4	98.0	17.2	62.3	101.0	25.2									
32.0	49.8	96.4	16.1	59.1	99.9	23.4									
34.0	46.0	94.5	15.1	55.8	98.6	21.5									
36.0	42.0	92.4	14.2	52.4	97.1	20.0									
36.8							65.0	100.1	20.8						
38.0	37.6	89.9	13.4	48.8	95.4	18.8	63.2	99.5	20.7						
40.0	32.7	87.0	12.7	44.9	93.5	17.5	60.0	98.4	19.5						
42.0	27.0	83.4	12.1	40.8	91.2	16.4	56.8	97.2	18.6						
44.0	19.9	78.6	11.5	36.3	88.7	15.4	53.4	95.7	17.7						
45.0	15.1	75.3	11.2	l .											
46.0				31.2	85.6	14.6	49.8	94.1	16.9						
48.0				25.3	81.7	13.8	46.0	92.2	16.2						
50.0				17.4	76.4	13.0	42.0	90.1	15.4						
53.2										55.0	92.5	11.9			
55.0							30.0	83.0	14.1	52.0	91.2	11.7			
59.0							15.1	73.1	13.0						
60.0										42.1	86.2	10.4			
65.0										31.5	80.1	9.2			
69.0										17.9	71.1	8.2			



N° de ident.: 9842523/95738/

Radio de descarga: 360 °

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

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				62.0 ı		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 4	4.5 m Pl	eza de p umín	lumín				
14.6	78.0	108.5	35.2												
16.0	76.1	108.1	34.5												
18.0	73.4	107.5	30.9												
20.0	70.7	106.9	27.0												
22.0	68.0	106.1	24.3												
23.8				73.0	106.9	29.0									
24.0	65.1	105.2	21.6	72.7	106.9	29.0									
26.0	62.2	104.2	19.6	70.0	106.2	27.9									
28.0	59.3	103.0	18.1	67.2	105.3	26.5									
30.0	56.2	101.7	16.8	64.3	104.4	24.6									
32.0	53.0	100.3	15.7	61.4	103.4	23.2									
34.0	49.7	98.6	14.9	58.4	102.2	21.4									
36.0	46.2	96.8	14.0	55.3	100.8	19.8									
38.0	42.4	94.7	13.1	52.1	99.3	18.5									
38.1							65.0	102.8	19.6						
40.0	38.4	92.3	12.4	48.7	97.6	17.4	62.3	101.9	19.2						
42.0	34.0	89.4	11.8	45.2	95.7	16.3	59.3	100.7	18.2						
44.0	28.9	86.1	11.3	41.4	93.5	15.3	56.2	99.4	17.3						
46.0	22.9	81.8	10.7	37.2	91.0	14.4	53.0	98.0	16.5						
48.0	16.2	76.9	7.9	32.6 27.4	88.1 84.5	13.6	49.7	96.3	15.9						
50.0						12.9	46.2	94.5	15.1						
53.0 54.9				16.8	76.8	11.8				55.0	95.0	11.1			
54.9 55.0							36.3	88.6	13.7	55.0 55.0	95.0 95.0	11.1	ł		
60.0							36.3 22.9	79.6	13.7	55.0 46.3	95.0 90.6	10.1			
62.0							16.3	79.6	10.8	40.3	90.0	10.1			
65.0							10.3	14.1	10.8	36.7	85.0	9.1			
70.0										24.7	77.0	7.9	l		
70.0										17.3	71.5	7.9			



Nº de ident.: 9842523/95738/

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

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

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				62.0 ı	m Pluma Cab	eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 4	7.5 m Pl	eza de p umín	lumín				
15.2	78.0	111.4	32.9												
16.0	77.0	111.2	32.9												
18.0	74.5	110.7	29.8												
20.0	72.0	110.0	26.5												
22.0	69.4	109.3	23.6												
24.0	66.8	108.5	21.3												
24.6				73.0	109.8	27.4									
26.0 28.0	64.1 61.4	107.5 106.5	19.3 17.8	71.3 68.7	109.3 108.6	27.0									
30.0	58.6	105.5	16.5	66.1	108.6	25.7 24.2									
32.0	55.7	105.3	15.4	63.4	107.7	22.6									
34.0	52.7	104.0	14.4	60.6	105.7	21.4									
36.0	49.6	100.9	13.6	57.8	104.4	19.7									
38.0	46.3	99.0	12.8	54.9	103.1	18.3							i		
39.3							65.0	105.6	18.1						
40.0	42.8	96.9	12.1	51.9	101.6	17.1	64.2	105.2	18.6						
42.0	39.1	94.6	11.4	48.7	99.9	16.1	61.4	104.2	17.9						
44.0	35.0	91.9	10.8	45.4	97.9	15.1	58.6	103.0	17.0						
46.0	30.5	88.7	10.4	41.8	95.8	14.2	55.7	101.7	16.2						
48.0	25.2	84.8	9.9	38.0	93.3	13.3	52.7	100.2	15.4						
50.0	18.5	79.6	9.4	33.8	90.5	12.7	49.6	98.6	14.9						
51.0	15.7	77.3	6.7												
55.0				20.2	80.4	11.0	41.0	93.5	13.3						
56.0				16.2	77.3	10.7									
56.6									10.0	55.0	97.4	10.5			
60.0							30.5	86.4	12.2	49.7	94.7	9.7			
65.0							15.7	75.1	10.0	42.0	90.2	8.6			
70.0 75.0										31.8 16.7	83.4 72.0	7.5			
75.0										10.7	12.0	6.4			



Nº de ident.: 9842523/95738/ 360°

Radio de descarga:

Pieza de articulación de pluma principal: 2821-1

Valor de vuelco:

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

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]
				62.0 ו		eza de p	II, Punto Iumín (2 1] Posici	316-1) 5	0.5 m Pli	eza de p umín	lumín				
15.8 16.0 18.0 20.0 22.0	78.0 77.8 75.5 73.1 70.7	114.3 114.3 113.8 113.2 112.5	30.7 30.7 29.1 26.1 22.9												
24.0 25.5 26.0 28.0 30.0	68.3 65.8 63.3 60.7	111.7 110.9 109.9 108.8	20.8 18.9 17.4 16.2	73.0 72.4 70.0 67.6	112.7 112.5 111.8 111.0	25.8 25.6 24.7 23.6									
32.0 34.0 36.0 38.0 40.0	58.0 55.3 52.5 49.5 46.4	107.6 106.2 104.7 103.1 101.2	15.1 14.1 13.2 12.5 11.8	65.1 62.6 59.9 57.3 54.5	110.1 109.1 108.0 106.7 105.3	22.1 20.8 19.6 18.1 16.9									
40.6 42.0 44.0 46.0 48.0	43.2 39.7 35.9 31.8	99.2 96.9 94.2 91.2	11.2 10.5 10.0 9.6	51.6 48.7 45.5 42.2	103.8 102.1 100.2 98.1	15.9 14.9 14.0 13.2	65.0 63.3 60.7 58.0 55.3	108.3 107.6 106.5 105.3 103.9	17.5 17.5 16.6 15.9 15.1						
50.0 54.0 55.0 58.3 59.0	27.1 15.2	87.5 77.7	9.1 5.6	38.7 28.2 15.7	95.7 87.9 77.7	12.4 10.9 9.8	52.5 44.8	98.0	13.0	55.0	99.9	9.7			
60.0 65.0 68.0 70.0 75.0 78.0							36.0 24.4 15.2	91.9 83.1 75.5	11.8 10.9 9.3	53.2 45.7 37.0 25.9 16.2	99.0 94.6 88.8 80.4 72.4	9.3 8.3 7.2 6.1 5.5			



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

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]
				62.0 ı		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 5	3.5 m Pl	eza de p umín	lumín				
16.4	78.0	117.3	28.4												
18.0	76.3	116.9	28.0												
20.0	74.1	116.3	25.1												
22.0	71.8	115.7	22.3												
24.0	69.5	115.0	20.0												
26.0	67.2	114.2	18.3												
26.4				73.0	115.5	24.1									
28.0	64.9	113.2	16.8	71.2	115.0	23.7									
30.0	62.5	112.2	15.7	68.9	114.3	22.6									
32.0	60.0	111.1	14.6	66.6	113.4	21.6									
34.0	57.5	109.9	13.6	64.2	112.5	20.2									
36.0	54.9	108.5	12.8	61.8	111.4	19.1									
38.0	52.2	107.0	12.0	59.3	110.3	17.9									
40.0	49.4	105.3	11.4	56.8	109.0	16.6									
41.9							65.0	111.0	16.5						
42.0	46.5	103.5	10.8	54.2	107.6	15.5	64.9	111.0	16.5						
44.0	43.5	101.4	10.2	51.5	106.0	14.6	62.5	109.9	16.2						
46.0	40.2	99.2	9.6	48.6	104.3	13.7	60.0	108.8	15.4						
48.0	36.7	96.6	9.1	45.7	102.4	12.9	57.5	107.6	14.8						
50.0	32.9	93.6	8.7	42.6	100.3	12.1	54.9	106.2	14.0						
55.0	20.8	83.5	7.7	33.8	93.8	10.6	48.0	102.1	12.7						
56.0	17.4	80.5	7.5	00.4	04.0	0.0	40.0		44.4	0	400.4				
60.0				22.1	84.2	9.3	40.2	96.9	11.4	55.0	102.4	8.8			
62.0 65.0				15.2	78.1	8.7	30.9	89.7	10.5	48.8	98.7	7.8			
70.0							17.5	78.3	9.6	48.8	98.7	6.8			
70.0 75.0							17.5	10.3	9.0	32.0	93.6 86.7	5.8			
75.0 80.0										32.0 19.4	76.1	4.8			
80.0 81.0										15.7	76.1	4.6			



2821-1

2821-1

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

		gulo de principa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				62.0		eza de p	al, Punto dumín (2 n] Posici	316-1) 5	6.5 m Pl	eza de p umín	lumín				
17.1	78.0	120.2	26.5												
18.0	77.0	120.0	26.5												
20.0	74.9	119.5	24.4												
22.0	72.8	118.9	21.9												
24.0	70.7	118.2	19.5												
26.0	68.5	117.4	17.8												
27.3				73.0	118.4	22.6									
28.0	66.3	116.6	16.4	72.2	118.2	22.5									
30.0	64.1	115.6	15.3	70.1	117.5	21.8									
32.0	61.8	114.6	14.3	67.9	116.7	20.9									
34.0	59.4	113.4	13.4	65.7	115.8	19.8									
36.0	57.0	112.1	12.5	63.4	114.8	18.6									
38.0	54.6	110.8	11.8	61.1	113.7	17.7									
40.0	52.0	109.2	11.1	58.8	112.6	16.5									
42.0	49.4	107.6	10.5	56.4	111.3	15.4									
43.1							65.0	113.7	15.1						
44.0	46.6	105.7	10.0	53.9	109.8	14.4	64.1	113.3	15.6						
46.0	43.7	103.7	9.4	51.3	108.3	13.6	61.8	112.3	15.1						
48.0	40.7	101.4	8.9	48.6	106.6	12.8	59.4	111.1	14.4						
50.0	37.4	98.9	8.5	45.8	104.7	12.0	57.0	109.8	13.8						
55.0	27.9	90.9	7.5	38.2	99.0	10.4	50.7	106.1	12.3						
59.0	16.9	81.0	6.8												
60.0				28.8	91.3	9.2	43.7	101.4	11.1						
61.8										55.0	104.8	8.3			
65.0				16.1	79.7	6.4	35.7	95.3	10.2	51.4	102.7	7.7			
70.0							25.6	86.6	9.3	44.5	98.1	6.7			
73.0							17.0	78.7	8.8	00.7	00.4				
75.0										36.7	92.1	5.7			
80.0										26.9	83.9	4.8			
84.0										15.2	73.2	4.1			



2821-1

2821-1

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

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				62.0 ı		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 5	9.5 m Pli	eza de p umín	lumín				
17.7	78.0	123.1	24.8												
18.0	77.7	123.1	24.8												
20.0	75.7	122.6	23.9												
22.0	73.7	122.0	21.5												
24.0	71.7	121.4	19.2												
26.0	69.6	120.6	17.4												
28.0	67.6	119.8	16.1	70.0	404.0	21.4									
28.2 30.0	65.5	118.9	14.9	73.0 71.1	121.3 120.7	21.4									
32.0	63.3	118.0	13.9	69.1	120.7	20.2									
34.0	61.1	116.0	13.1	67.0	119.9	19.5									
36.0	58.9	115.7	12.2	64.9	118.2	18.2									
38.0	56.6	114.4	11.5	62.7	117.2	17.2									
40.0	54.2	113.0	10.8	60.5	116.1	16.4									
42.0	51.8	111.5	10.2	58.3	114.8	15.2									
44.0	49.3	109.8	9.7	56.0	113.5	14.1									
44.4							65.0	116.4	14.8						
46.0	46.7	108.0	9.1	53.6	112.1	13.2	63.3	115.7	14.7						
48.0	44.0	105.9	8.6	51.1	110.5	12.5	61.1	114.6	14.1						
50.0	41.1	103.7	8.1	48.6	108.8	11.8	58.9	113.4	13.4						
55.0	33.0	97.0	7.2	41.7	103.7	10.1	53.1	110.0	12.0						
60.0	22.4	87.2	6.4	33.8	97.2	8.8	46.7	105.7	10.9						
62.0	16.5	81.4	6.0												
63.5										55.0	107.3	7.5			
65.0				23.5	87.8	7.8	39.6	100.2	9.8	53.7	106.5	7.2			
68.0				15.7	80.1	6.0	24.0	00.4	0.0	47.4	400.0	0.0			
70.0 75.0							31.2 19.7	93.1 82.3	9.0 8.3	47.4 40.4	102.3 97.0	6.3 5.3			
75.0 76.0							19.7	79.1	8.1	40.4	97.0	5.3			
80.0							10.5	19.1	0.1	32.2	90.1	4.4			
85.0										21.2	79.9	3.6			
86.0										18.3	77.0	3.4			



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

2821-1 Cabeza de pluma principal: 2821-1

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

		gulo de orincipal			gulo de orincipa			gulo de principa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				62.0 ı		eza de p	lumín (2	de carga 316-1) 6 ón midfa	2.5 m Pli	eza de p umín	lumín				
18.3	78.0	126.1	23.2												
20.0	76.4	125.7	22.9												
22.0	74.5	125.1	20.7												
24.0	72.6	124.5	18.8												
26.0	70.7	123.8	17.1												
28.0	68.7	123.1	15.8												
29.0				73.0	124.1	20.1									
30.0	66.7	122.2	14.6	72.1	123.8	20.0									
32.0	64.7	121.3	13.5	70.1	123.1	19.4									
34.0	62.6	120.3	12.7	68.2	122.3	18.7									
36.0	60.5	119.2	12.0	66.2	121.5	17.8									
38.0	58.4	118.0	11.2	64.1	120.5	16.8									
40.0	56.2	116.7	10.5	62.1	119.5	15.9									
42.0	54.0	115.3	9.9	60.0	118.4	15.1									
44.0	51.6	113.7	9.4	57.8	117.1	14.0	25.0	440.0	40.0						
45.7	40.0	440.0	0.0	55.0	445.0	40.0	65.0	119.2	13.9						
46.0	49.3 46.8	112.0	8.9	55.6	115.8	13.0	64.7 62.6	119.0 118.0	13.9						
48.0 50.0	44.2	110.2 108.2	8.4 7.9	53.3 51.0	114.3 112.8	12.2 11.5	60.6	116.0	13.7 13.1						
55.0	37.1	108.2	6.9	44.8	108.2	9.9	55.1	113.7	11.7						
60.0	28.5	94.3	6.1	37.7	100.2	8.6	49.3	109.7	10.6						
65.0	16.1	81.8	5.4	29.3	94.7	7.6	42.8	104.8	9.6						
65.2	10.1	01.0	J.7	20.0	34.7	7.0	42.0	104.0	3.0	55.0	109.7	6.8			
70.0				17.5	82.8	6.6	35.5	98.6	8.7	49.9	106.3	6.0			
71.0				15.3	80.5	5.5	00.0	55.5	J.,			0.0			
75.0				. 5.0	23.0		26.4	90.1	8.0	43.6	101.5	5.0			
79.0							16.1	79.5	7.4	1					
80.0										36.4	95.5	4.1			j i
85.0										27.6	87.3	3.3			
89.0										17.9	77.5	2.7			



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		65° Án I	gulo de orincipa	pluma I		gulo de principa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				62.0 ı	m Pluma	principa	I, Punto	de carga	1 - Cab	eza de p	lumín				
					Cab		lumín (2 1] Posici								
18.9	78.0	129.0	21.0												
20.0	77.1	128.8	21.0												
22.0	75.2	128.2	19.8												
24.0	73.4	127.7	18.2												
26.0	71.6	127.0	16.4												
28.0	69.7	126.3	15.1												
29.9				73.0	127.0	18.6									
30.0	67.8	125.5	14.0	72.9	127.0	18.6									
32.0	65.9	124.6	13.0	71.1	126.3	18.3									
34.0	64.0	123.7	12.1	69.2	125.6	17.7									
36.0	62.0	122.6	11.4	67.3	124.8	17.1									
38.0	60.0	121.5	10.7	65.4	123.9	16.1									
40.0	58.0	120.3	10.0	63.5	122.9	15.3									
42.0	55.9	118.9	9.4	61.5	121.8	14.6									
44.0	53.7	117.5	8.9	59.5	120.7	13.7									
46.0	51.5	116.0	8.4	57.4	119.4	12.7				l					
46.9							65.0	121.9	12.7						
48.0	49.2	114.3	8.0	55.3	118.1	11.9	64.0	121.4	13.0						
50.0	46.8	112.4	7.5	53.1 47.4	116.6	11.1	62.0	120.3	12.7						
55.0 60.0	40.4 33.0	107.1 100.3	6.5 5.7	41.0	112.4 107.1	9.6 8.3	56.9 51.5	117.3 113.7	11.3 10.1	-					
65.0	23.7	90.8	5.7	33.8	107.1	7.2	51.5 45.6	109.2	9.2						
66.9	23.7	90.6	5.1	33.0	100.5	1.2	45.0	109.2	9.2	55.0	112.2	6.0			
68.0	15.7	82.2	4.6							55.0	112.2	0.0			
70.0	13.7	02.2	4.0	24.6	91.3	6.4	39.1	103.6	8.3	52.1	110.2	5.6			
73.0				17.1	83.3	5.8	33.1	100.0	0.0	JZ. 1	110.2	3.0			
75.0 75.0				17.1	00.0	0.0	31.4	96.4	7.6	46.3	105.8	4.6			
80.0							21.4	86.1	7.0	39.8	100.4	3.7			
82.0							15.7	79.9	6.5	55.6		0.7			
85.0										32.3	93.4	2.9			
90.0										22.7	83.6	2.2			
91.0										20.2	81.0	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 orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				62.0 ı		eza de p	lumín (2	316-1) 6	8.5 m Pli		lumín				
						34.0 [m	ı] Posici	ón midfa	II (2316)						
19.6	78.0	131.9	19.5												
20.0	77.6	131.8	19.5												
22.0	75.9	131.3	19.2							•			<u> </u>		
24.0	74.2	130.8	17.4												
26.0	72.4	130.2	16.0												
28.0	70.7	129.5	14.7												
30.0	68.9	128.7	13.8												
30.8				73.0	129.9	17.5									
32.0	67.1	127.9	12.8	71.9	129.5	17.4									
34.0	65.2	127.0	11.9	70.2	128.8	17.0									
36.0	63.4	126.0	11.1	68.4	128.0	16.4									
38.0	61.5	125.0	10.5	66.5	127.2	15.8									
40.0	59.5 57.6	123.8 122.6	9.8 9.2	64.7	126.2 125.2	14.9 14.2				ł					
42.0		122.6	9.2 8.6	62.8 60.9	125.2	13.6									
44.0 46.0	55.5 53.5	119.8	8.1	59.0	123.0	12.7									
48.0	51.3	118.2	7.7	59.0 57.0	123.0	11.8									
48.2	51.3	110.2	1.1	57.0	121.7	11.0	65.0	124.6	12.3	l					
50.0	49.2	116.5	7.3	55.0	120.3	11.0	63.4	123.7	12.3	i					
55.0	43.3	111.6	6.3	49.7	116.4	9.5	58.6	120.9	11.0						
60.0	36.8	105.6	5.5	43.9	111.6	8.2	53.5	117.5	9.8						
65.0	28.9	97.7	4.9	37.4	105.7	7.1	48.0	113.3	8.9						
68.6	20.0	07.7	4.0	07.4	100.7	7	40.0	110.0	0.0	55.0	114.7	5.5	i		
70.0	18.3	86.0	4.3	29.7	98.0	6.3	42.1	108.2	8.1	54.1	114.0	5.3			
71.0	15.3	82.6	4.1												
75.0				19.5	86.8	5.4	35.3	101.9	7.4	48.7	109.9	4.4			
76.0				16.7	83.7	5.3									
80.0							27.2	93.5	6.8	42.8	105.0	3.5			
85.0							15.3	80.3	5.8	36.1	98.8	2.7			
90.0										28.1	90.7	2.0			



N° de ident.: 9842523/95738/

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

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

		gulo de 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]
				62.0 ı		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 7	1.5 m Pli	eza de p umín	lumín				
20.2	78.0	134.9	17.7												
22.0	76.5	134.5	17.7												
24.0	74.9	133.9	16.4												
26.0	73.2	133.3	15.2												
28.0	71.5	132.7	13.9												
30.0	69.8	131.9	12.9												
31.7				73.0	132.7	15.9									
32.0	68.1	131.2	12.0	72.7	132.6	15.9									
34.0	66.3	130.3	11.1	71.0	132.0	15.7									
36.0	64.5	129.3	10.4	69.3	131.2	15.2									
38.0	62.7	128.3	9.8	67.6	130.4	14.7									
40.0	60.9	127.2	9.2	65.8	129.5	14.0									
42.0	59.0	126.0	8.6	64.0	128.6	13.3									
44.0	57.1	124.8	8.1	62.2	127.5	12.7 12.1									
46.0	55.1 53.1	123.4	7.6 7.1	60.4	126.4										
48.0 49.5	53.1	121.9	7.1	58.5	125.2	11.3	65.0	127.3	11.3						
50.0	51.1	120.3	6.8	56.5	123.9	10.5	64.5	127.3	11.3						
55.0	45.6	115.8	5.8	51.5	120.2	9.0	59.9	124.4	10.4						
60.0	39.6	110.2	5.0	46.1	115.7	7.7	55.1	121.1	9.3						
65.0	32.7	103.2	4.4	40.2	110.3	6.6	50.0	117.2	8.4						
70.0	24.1	93.7	3.8	33.4	103.4	5.8	44.5	112.5	7.6						
70.4		00	0.0	00.1		0.0				55.0	117.1	4.8			
74.0	16.0	84.2	3.2												
75.0				25.0	94.2	5.0	38.3	106.7	6.9	50.8	113.9	4.0			
79.0				15.4	83.0	4.4									
80.0							31.2	99.3	6.3	45.3	109.3	3.1			
85.0							23.3	90.5	5.4	39.3	103.7	2.4			
87.0										36.7	101.1	2.1			
88.0							16.0	81.9	5.0						



Nº de ident.: 9842523/95738/

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

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

Valor de vuelco: 2 - Vía ancha

Lastre trasero [t]: 114.0

Lastre central [t]: 52.6

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				62.0 r			ıl, Punto lumín (2:			eza de p	lumín				
					Oub] Posici			a					
20.9	78.0	137.8	16.4												
22.0	77.1	137.5	16.4												
24.0	75.5	137.0	15.8												
26.0	73.9	136.5	14.6												
28.0	72.3	135.8	13.4												
30.0	70.6	135.1	12.5												
32.0	69.0	134.4	11.7												
32.6				73.0	135.6	14.9							<u> </u>		
34.0	67.3	133.6	10.9	71.8	135.1	14.8									
36.0	65.6	132.7	10.1	70.2	134.4	14.5									
38.0	63.9	131.7	9.4	68.5	133.7	14.0									
40.0	62.2	130.7	8.9	66.8	132.8	13.6									
42.0	60.4	129.5	8.4	65.1	131.9	12.9									
44.0	58.6	128.3	7.8	63.4	130.9	12.3									
46.0	56.7	127.0	7.3	61.7	129.9	11.8									
48.0	54.9	125.6	6.9	59.9	128.7	11.2									
50.0	52.9	124.2	6.5	58.1	127.5	10.4									
50.7							65.0	130.0	10.6						
55.0	47.9	119.9	5.6	53.4	124.0	8.8	61.3	127.8	10.2						
60.0	42.4	114.8	4.8	48.3	119.8	7.6	56.8	124.7	9.1						
65.0	36.2	108.6	4.2	42.9	114.8	6.5	52.0	121.1	8.1						
70.0	28.9	100.6	3.6	36.8	108.7	5.6	46.8	116.7	7.4	0	440.0	4.0			
72.1	19.3	00.4	3.1	20.6	100.0	4.9	44.0	111.4	6.6	55.0	119.6 117.7	4.2 3.7			
75.0	19.3 15.7	89.1	3.1 2.8	29.6	100.9	4.9	41.2	111.4	6.6	52.6	117.7	3.7			
77.0	15.7	84.6	2.8	20.2	00.0	4.2	34.9	104.9	6.0	47.6	113.5	2.8			
80.0				20.3 15.1	89.9 83.4	4.2 3.9	34.9	104.9	6.0	47.0	113.5	2.8			
82.0 85.0				15.1	03.4	3.9	28.3	97.5	5.2	42.1	108.4	2.1			
90.0							26.3 18.4	97.5 85.7	4.4	42.1	100.4	2.1			
91.0							15.7	82.4	4.4						



2821-1

2821-1

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

	88° Ángulo de pluma principal				gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
62.0 m Pluma principal, Punto de carga 1 - Cabeza de plumín Cabeza de plumín (2316-1) 77.5 m Plumín 43.0 [m] Posición midfall (2316)															
21.5	78.0	140.7	15.0												
22.0	77.6	140.6	15.0												
24.0	76.1	140.1	14.8							•					
26.0	74.5	139.6	13.9												
28.0	73.0	139.0	13.1												
30.0	71.4	138.3	12.1												
32.0	69.8	137.6	11.3												
33.4				73.0	138.5	13.8									
34.0	68.2	136.8	10.6	72.6	138.3	13.8									
36.0	66.6	136.0	9.8	71.0	137.6	13.6									
38.0	65.0	135.0	9.1	69.4	136.9	13.2									
40.0	63.3	134.1	8.6	67.8	136.1	12.9									
42.0	61.7	133.0	8.1	66.2	135.2	12.4									
44.0	59.9	131.8	7.6	64.5	134.3	11.8									
46.0	58.2	130.6	7.1	62.9	133.3	11.3									
48.0	56.4	129.3	6.6	61.2	132.2	10.9									
50.0	54.6	127.9	6.2	59.5	131.0	10.3									
52.0							65.0	132.7	10.0						
55.0	49.9	123.9	5.4	55.0	127.7	8.6	62.5	131.2	9.9						
60.0	44.8	119.2	4.6	50.3	123.8	7.4	58.2	128.3	8.8						
65.0	39.2	113.6	3.9	45.3	119.2	6.3	53.7	124.9	7.9						
70.0	32.8	106.5	3.4	39.7	113.6	5.4	48.9	120.8	7.2	55.0	122.0	3.4			
73.8 75.0	25.0	97.3	2.9	33.4	106.7	4.6	43.7	115.9	6.4	55.0 54.3	122.0 121.5	3.4			
75.0 80.0	25.0 15.3	97.3 85.0	2.9	33.4 25.8	97.7	-	43.7 38.0	115.9	5.8	54.3 49.6	121.5	2.4			
82.0	15.3	05.0	2.3	∠5.8	97.7	4.0	36.0	110.0	5.8	49.6	117.5	2.4			
82.0 85.0				16.6	86.1	3.2	32.2	103.6	4.9	47.6	115.7	2.1			
90.0				10.0	00.1	3.2	32.2 24.3	94.1	4.9						
94.0							15.4	82.8	3.4	i					



N° de ident.: 9842523/95738/

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

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

	88° Ángulo de pluma principal				gulo de orincipa			gulo de principa			gulo de orincipa		45° Án	pluma I	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
62.0 m Pluma principal, Punto de carga 1 - Cabeza de plumín Cabeza de plumín (2316-1) 80.5 m Plumín 34.0 [m] Posición midfall (2316)															
22.1	78.0	143.7	13.8												
24.0	76.6	143.2	13.8												
26.0	75.1	142.7	13.2												
28.0	73.6	142.1	12.7												
30.0	72.1	141.5	11.8												
32.0	70.6	140.8	10.9												
34.0	69.1	140.0	10.3												
34.3				73.0	141.4	12.8									
36.0	67.6	139.2	9.6	71.7	140.8	12.7									
38.0	66.0	138.4	8.9	70.2	140.1	12.5									
40.0	64.4	137.4	8.3	68.7	139.3	12.1									
42.0	62.8	136.4	7.8	67.1	138.5	11.8									
44.0	61.2	135.3	7.4	65.6	137.6	11.3									
46.0	59.5	134.1	6.9	64.0	136.6	10.9									
48.0	57.8	132.9	6.4	62.4	135.6	10.5									
50.0	56.1	131.6	6.0	60.7	134.5	10.2	05.0	405.5	0.5						
53.3	51.7	407.0	5.1	50.5	404.4	0.5	65.0	135.5 134.6	9.5						
55.0 60.0	46.9	127.9 123.5	4.4	56.5 52.1	131.4 127.7	8.5 7.2	63.6 59.5	131.8	9.4 8.5						
65.0	41.8	118.2	3.7	47.4	127.7	6.2	55.3	128.6	7.6						
70.0	36.0	111.9	3.1	42.2	118.2	5.2	50.8	124.7	6.9						
75.0	29.3	104.0	2.7	36.6	112.0	4.4	45.9	120.2	6.2						
75.5	23.5	104.0	2.1	30.0	112.0	7.7	40.0	120.2	0.2	55.0	124.5	3.0			
80.0	20.7	93.0	2.2	30.0	104.3	3.8	40.7	114.8	5.5	51.4	121.4	2.3			
81.0		00.0		00.0	.0	0.0			0.0	50.5	120.6	2.1			
85.0				21.6	93.7	3.2	34.8	108.2	4.8		.20.0				
88.0				16.3	86.5	2.7									
90.0							28.7	100.9	4.0						
95.0							19.9	89.6	3.2						
97.0							15.1	83.1	2.9						



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

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

	88° Ángulo de pluma principal				gulo de orincipa		75° Án I	gulo de principa	pluma I		gulo de orincipa		45° Án I	gulo de principa	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]			
62.0 m Pluma principal, Punto de carga 1 - Cabeza de plumín Cabeza de plumín (1916-1) 32.5 m Plumín 13.0 [m] Posición midfall (1916)																		
12.1 13.0 14.0 16.0	78.0 76.3 74.5 70.8	96.7 96.5 96.2 95.5	35.0 34.7 33.7 31.8															
18.0 20.0 20.3	67.0 63.1	94.7	29.8 27.8	73.0	95.5	30.4												
22.0 24.0 26.0	59.0 54.7 50.2	92.6 91.3 89.7	25.5 23.1 21.3	69.7 65.9 62.0	94.8 94.0 93.0	29.8 28.5 27.3												
28.0 30.0 32.0 33.0	45.4 40.1 34.1	87.8 85.6 82.8	19.8 18.5 17.4	57.8 53.5 48.9	91.8 90.3 88.7	25.9 24.7 23.5	65.0	92.0	24.9									
34.0 36.0 38.0	27.0 17.2	79.3 74.1	16.5 15.6	44.0 38.5 32.3	86.7 84.3 81.4	21.9 20.6 19.5	63.1 59.0 54.8	91.5 90.3 89.0	24.8 23.5 22.3									
40.0 42.0 44.0				24.7 15.7	77.6 72.8	18.3 13.6	50.3 45.4 40.1	87.4 85.5 83.3	21.2 20.3 19.4									
46.0 48.0 50.0 55.0							34.2 27.0 17.2	80.5 77.0 71.8	18.7 18.0 17.3	55.0 50.8 37.9	85.2 83.7 78.4	15.2 15.5 14.1						
60.0 73.4 75.0										18.6	68.7	12.8	35.0 31.5	64.3 62.6	4.6 4.4 4.0			



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

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

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

	88° Ángulo de pluma principal			83° Án	gulo de orincipa	pluma I		gulo de orincipa		65° Án I	gulo de orincipa	pluma I		gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
	62.0 m Pluma principal, Punto de carga 1 - Cabeza de plumín														
Cabeza de plumín (1916-1) 35.5 m Plumín 16.0 [m] Posición midfall (1916)															
12.7	78.0	99.7	31.6												
13.0	77.5	99.6	31.6												
14.0	75.8	99.3	31.0												
16.0	72.5	98.7	29.2												
18.0	69.0	98.0	27.7												
20.0	65.5	97.1	25.8	70.0	00.0	07.4									
21.1 22.0	61.9	96.1	24.3	73.0 71.5	98.3 98.0	27.4 27.4				ł					
24.0	58.1	96.1	24.3	68.1	98.0 97.3	26.1									
26.0	54.2	93.5	20.8	64.5	96.3	25.0									
28.0	50.1	91.9	19.6	60.9	95.3	24.1									
30.0	45.6	90.0	18.2	57.1	94.0	22.9				i					
32.0	40.9	87.8	17.1	53.1	92.6	22.0				İ					
34.0	35.5	85.2	16.1	48.9	90.9	21.0									
34.3							65.0	94.7	23.3						
36.0	29.4	82.0	15.3	44.4	89.0	19.8	61.9	93.8	22.9						
38.0	21.6	77.6	14.5	39.4	86.7	18.8	58.1	92.6	22.0						
39.0	16.4	74.5	14.1							l					
40.0				33.9	83.9	17.9	54.2	91.2	20.9						
42.0				27.4	80.4	17.0	50.1	89.6	20.0	-					
44.0				18.9	75.5	16.0	45.7	87.7	19.1						
46.0 48.0							40.9 35.6	85.6 82.9	18.3 17.6						
46.0 49.7							33.0	62.9	17.0	55.0	87.6	14.4			
50.0							29.4	79.7	17.0	54.7	87.5	15.1			
53.0							16.4	72.3	16.0	54.7	01.0	10.1			
55.0							10.4	72.0	10.0	43.8	83.0	13.8			
60.0										30.1	76.2	12.5	Ī		
63.0										17.7	69.1	11.7			
75.8													35.0	66.0	3.9
80.0													22.5	59.2	3.4
81.0													17.6	56.3	3.3