

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 principa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				35.0		eza de p	al, Punto dumín (19 n] Posici	916-1) 8	9.5 m Pl		lumín				
23.0	78.0	125.5	5.8												
24.0	77.4	125.3	5.8												
26.0	76.0	124.8	5.6												
28.0	74.7	124.2	5.4												
30.0	73.4	123.7	5.2	<u> </u>											
32.0	72.0	123.0	5.1	70.0	400.0	5 4									
33.7 34.0	70.7	122.3	4.9	73.0 72.8	123.2 123.1	5.1 5.1									
36.0	69.3	121.6	4.8	72.6 71.4	123.1	5.0							ł		
38.0	67.9	120.8	4.7	70.0	121.7	4.9									
40.0	66.5	119.9	4.5	68.7	120.9	4.7									
42.0	65.1	119.0	4.4	67.3	120.1	4.6									
44.0	63.7	118.0	4.3	65.9	119.2	4.5									
46.0	62.2	117.0	4.2	64.4	118.2	4.4									
48.0	60.7	115.9	4.1	63.0	117.2	4.3									
50.0	59.2	114.7	4.0	61.5	116.2	4.2									
50.1			0.0		440.0	0.0	65.0	117.5	4.3						
55.0 60.0	55.4 51.4	111.4 107.6	3.8 3.6	57.8 53.9	113.2 109.7	3.9 3.7	61.4 57.7	115.0 112.0	4.1 3.9						
65.0	47.1	107.6	3.6	49.8	109.7	3.7	53.8	108.5	3.9						
69.3	47.1	103.2	J. 4	49.0	105.7	3.3	33.0	100.5	3.1	55.0	107.4	3.6			
70.0	42.5	98.1	3.2	45.4	101.1	3.4	49.7	104.5	3.6	54.4	106.9	3.6			
75.0	37.5	92.1	3.0	40.7	95.6	3.2	45.3	99.9	3.4	50.3	102.9	3.5			
80.0	31.7	84.7	2.9	35.4	89.1	3.0	40.5	94.4	3.2	46.0	98.4	3.3			
85.0	24.9	75.2	2.7	29.3	81.1	2.9	35.2	87.8	3.1	41.3	93.0	3.2			
90.0	15.3	61.2	2.5	21.7	70.4	2.7	29.1	79.7	3.0	36.1	86.7	3.1			
93.0				15.6	61.3	2.6									
95.0							21.5	68.9	2.8	30.2	78.9	3.0			
98.0 100.0							15.3	59.7	2.7	22.9	68.7	2.9			
101.0										22.8	00.1	2.9	35.0	77.9	2.8
101.0										16.3	58.9	2.5	33.0	11.5	2.0
105.0				i			Ī			10.0	00.0	2.0	30.1	71.5	2.8
110.0				ĺ									22.8	61.2	2.5
114.0				L									16.2	51.5	2.1



2821-1

2821-1

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

		gulo de orincipal			gulo de orincipa			gulo de principa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				35.0 ı		eza de p	al, Punto dumín (19 n] Posici	916-1) 9:	2.5 m Pli		lumín				
23.7	78.0	128.4	5.2												
24.0	77.8	128.3	5.2												
26.0	76.5	127.9	5.0												
28.0	75.2	127.4	4.8												
30.0	73.9	126.8	4.7												
32.0	72.6	126.2	4.5												
34.0	71.3	125.5	4.4												
34.5				73.0	126.0	4.5									
36.0	70.0	124.8	4.3	72.0	125.6	4.5									
38.0	68.7	124.0	4.1	70.7	124.9	4.3									
40.0	67.3	123.2	4.0	69.4	124.1	4.2									
42.0	66.0	122.3	3.9	68.1	123.3	4.1									
44.0	64.6	121.4	3.8	66.7	122.5	4.0									
46.0	63.2	120.4	3.7	65.3	121.6	3.8									
48.0	61.8	119.3	3.6	64.0	120.6	3.7									
50.0	60.4	118.2	3.5	62.6	119.6	3.6									
51.4							65.0	120.3	3.7						
55.0	56.7	115.1	3.3	59.0	116.7	3.4	62.5	118.4	3.6						
60.0	52.9	111.5	3.1	55.3	113.4	3.2	58.9	115.6	3.4						
65.0	48.8	107.3	2.9	51.4	109.6	3.0	55.2	112.3	3.2						
70.0	44.5	102.5	2.7	47.2	105.3	2.9	51.2	108.5	3.0						
71.0										55.0	109.8	3.1			
75.0	39.9	96.9	2.6	42.8	100.2	2.7	47.1	104.1	2.9	51.9	106.8	3.0			
80.0	34.7	90.2	2.4	38.0	94.2	2.6	42.7	99.0	2.8	47.8	102.5	2.8			
85.0	28.7	82.0	2.3	32.5	87.0	2.5	37.8	92.9	2.6	43.4	97.5	2.7			
90.0				26.1	77.9	2.3	32.4	85.7	2.5	38.6	91.7	2.6			
95.0							25.9	76.5	2.4	33.3	84.7	2.5			
100.0										27.0	75.9	2.4	25.0	70.0	0.0
103.4										40.0		0.0	35.0	79.6	2.3
105.0										18.9	63.8	2.3	33.2	77.3	2.3
107.0										16.0	59.4	2.0			



Nº de ident.: 9842523/95738/

Radio de descarga: 360°

Valor de vuelco:

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

		gulo de principa			gulo de orincipa			gulo de principa			gulo de 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]
				35.0 ו		eza de p	ıl, Punto lumín (1: n] Posici	916-1) 9	5.5 m Pl	eza de p umín	lumín		_		
24.3	78.0	131.4	4.8												
26.0	76.9	131.0	4.7												
28.0	75.7	130.5	4.5												
30.0	74.5	129.9	4.4												
32.0	73.2	129.3	4.2												
34.0	71.9	128.7	4.1												
35.4				73.0	128.9	4.2									
36.0	70.7	128.0	4.0	72.6	128.7	4.2									
38.0	69.4	127.2	3.9	71.4	128.0	4.1									
40.0	68.1	126.4	3.7	70.1	127.3	3.9									
42.0	66.8	125.6	3.6	68.8	126.6	3.8									
44.0	65.4	124.7	3.5	67.5	125.7	3.7									
46.0	64.1	123.7	3.4	66.2	124.9	3.6									
48.0	62.7	122.7	3.4	64.8	123.9	3.5									
50.0	61.4	121.6	3.3	63.5	123.0	3.4									
52.6							65.0	123.0	3.4						
55.0	57.9	118.6	3.0	60.1	120.2	3.2	63.4	121.8	3.4						
60.0	54.2	115.2	2.8	56.5	117.1	2.9	60.0	119.1	3.2						
65.0	50.4	111.3	2.6	52.8	113.5	2.7	56.4	115.9	3.0						
70.0	46.3	106.8	2.3	48.9	109.3	2.5	52.7	112.3	2.7						
72.7										55.0	112.3	2.8			
75.0							48.8	108.1	2.5	53.3	110.6	2.7			
80.0							44.6	103.3	2.3	49.4	106.6	2.5			
85.0										45.3	101.9	2.3			

Source:a9841388



N° de ident.: 9842523/95738/

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

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

		gulo de 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]
				1 0.8E		eza de p	al, Punto lumín (2 n] Posici	316-1) 3	8.5 m Pli		lumín				
12.5 13.0 14.0 16.0 18.0	78.0 77.2 75.7 72.6 69.4	78.6 78.5 78.2 77.6 76.9	61.2 61.2 57.7 48.5 41.5	73.0	77.4	51.1									
20.0 22.0 24.0 26.0 28.0	66.2 62.9 59.4 55.9 52.2	76.1 75.1 73.9 72.6 71.1	35.3 30.6 27.2 24.5 22.3	71.6 68.4 65.1 61.8 58.3	77.1 76.3 75.4 74.4 73.2	50.8 46.2 40.4 35.6 31.9	05.0	74.0	20.4						
29.3 30.0 32.0 34.0 36.0	48.2 44.1 39.5 34.5	69.4 67.4 65.1 62.4	20.6 19.1 17.9 16.8	54.7 50.9 46.9 42.6	71.8 70.3 68.5 66.4	28.7 26.3 24.1 22.2	65.0 63.9 60.5 57.0 53.4	74.2 73.9 72.8 71.6 70.1	30.1 33.5 31.3 29.6 27.8						
38.0 40.0 41.0 41.3 42.0	28.7 21.4 16.6	59.0 54.6 51.5	15.9 15.0 14.6	38.0 32.7 26.5	64.0 61.1 57.4	20.5 19.2	49.5 45.4 41.0	68.5 66.6	26.4 24.9 23.6	55.0 53.9	68.3 67.9	21.7 22.5			
44.0 46.0 48.0 50.0				18.5	52.4	16.7	36.1 30.6 23.9 16.4	61.8 58.7 54.7 49.9	22.5 21.6 20.6 15.1	50.1 46.0 41.7 36.9	66.3 64.4 62.3 59.8	21.4 20.6 19.5 18.7			
55.0 56.0 61.3 65.0 67.0										21.0 16.2	50.4 47.3	17.0 16.7	35.0 24.4 15.2	50.8 44.5 38.7	11.9 11.5 11.0



16.5 15.3

52.5 51.0 40.3

11.2 9.6

35.0 32.5 16.4

2821-1

2821-1

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

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

		gulo de principa			gulo de orincipa			gulo de orincipa		65° Án	gulo de orincipa	pluma I	45° Án	gulo de orincipa	pluma I
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				38.0	m Pluma Cab	eza de p	lumín (2	316-1) 4	1.5 m Pl	eza de p umín	lumín		_	,	
						19.0 [m	ı] Posici	ón midfa	II (2316)						
13.1	78.0	81.5	55.5												
14.0	76.7	81.3	55.4												
16.0	73.9	80.8	48.1												
18.0	71.0	80.1	40.6												
20.0	68.0	79.3	35.2	73.0	80.2	47.3									
22.0	65.0	78.4	30.3	70.0	79.5	45.1									
24.0	61.9	77.4	26.7	67.0	78.7	41.4									
26.0	58.7	76.2	24.1	64.0	77.8	36.0									
28.0	55.3	74.9	22.0	60.9	76.7	32.3									
30.0	51.9	73.4	20.3	57.6	75.5	29.0									
30.6				l			65.0	76.9	31.2						
32.0	48.2	71.6	18.9	54.3	74.1	26.3	62.9	76.2	30.6						
34.0	44.4	69.7	17.6	50.7	72.5	24.2	59.7	75.1	28.7						
36.0	40.2	67.4	16.5	47.0	70.7	22.3	56.4	73.8	27.1						
38.0	35.6	64.8	15.5	43.1	68.7	20.6	53.0	72.4	25.5						
40.0	30.5	61.6	14.7	38.8	66.3	19.0	49.4	70.7	24.4						
42.0	24.3	57.6	13.9	34.1	63.5	17.8	45.6	68.8	23.0			00.0			
43.0 44.0	16.0	51.9	13.1	28.6	60.1	16.7	41.6	66.7	24.0	55.0 53.5	70.8 70.1	20.0			
	16.0	51.9	13.1	28.6 22.0	55.7		41.6 37.1	64.2	21.9	53.5 49.9		19.8			
46.0 47.0				17.8	55.7 52.8	15.6 15.1	3/.1	04.2	20.9	49.9	68.5	19.8			
				17.8	5∠.8	15.1	20.0	64.0	20.0	46.2	66.7	10.0			
48.0 50.0							32.2 26.4	61.2 57.5	20.0 19.0	46.2 42.2	64.6	19.0 18.1			
50.0							26.4 15.8	50.3	19.0	42.2	04.0	10.1			
55.0							13.6	50.3	13.1	00.0		40.5			

30.2

15.5

57.5

47.7

55.0

59.0

63.8

65.0



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

2821-1 Cabeza de pluma principal: 2821-1

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

		gulo de orincipal			gulo de orincipa			gulo de principa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				38.0 ו		eza de p	al, Punto Ilumín (2 n l Posici	316-1) 4	4.5 m Pli		lumín				
13.7	78.0	84.5	50.6			22.0[11	1 1 03101		11 (2310)						l
14.0	76.0	84.4	50.6												
16.0	75.0	83.9	46.7												
18.0	72.3	83.3	40.3				i								
20.0	69.6	82.6	34.8												
20.8				73.0	83.1	44.1									
22.0	66.8	81.7	30.1	71.4	82.7	43.7									
24.0	63.9	80.8	26.3	68.7	82.0	40.6									
26.0	61.0	79.7	23.5	65.9	81.1	36.6									
28.0	58.0	78.5	21.6	63.0	80.1	32.5									
30.0	54.9	77.1	20.0	60.1	79.0	29.5									
31.8							65.0	79.7	28.3						
32.0	51.6	75.6	18.6	57.0	77.7	26.6	64.8	79.6	28.8						
34.0	48.2	73.9	17.4	53.9	76.3	24.3	61.9	78.6	27.9						
36.0	44.6	71.9	16.3	50.6	74.7	22.4	59.0	77.4	26.2						
38.0	40.8	69.7	15.3	47.1 43.4	72.9 70.9	20.7 19.2	55.9	76.1 74.6	24.7						
40.0 42.0	36.6 31.9	67.2 64.1	14.4 13.6	43.4 39.5	70.9 68.6	19.2	52.7 49.3	74.6	23.4 22.4						
42.0 44.0	26.6	60.5	13.0	35.2	65.9	16.7	49.3 45.8	71.1	21.2						
44.7	20.0	00.5	13.0	33.2	05.5	10.7	45.0	/ 1.1	21.2	55.0	73.2	18.3			
46.0	19.8	55.6	12.2	30.3	62.7	15.7	42.0	69.0	20.2	53.1	72.4	19.2			
47.0	15.4	52.3	11.9	00.0	02		12.0	00.0		00.1					
48.0				24.6	58.7	14.7	38.0	66.5	19.3	49.8	70.7	18.2			
50.0				17.1	53.3	13.7	33.5	63.7	18.5	46.3	68.9	17.4			
55.0							18.3	53.0	16.4	36.4	63.1	15.9			
56.0							15.2	50.7	15.0						
60.0										23.2	54.1	14.5			
62.0										16.6	49.3	12.8			
66.2													35.0	54.2	10.2
70.0													25.0	47.4	9.6
73.0													15.8	40.7	8.8

Source:a9841388



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		75° Án	gulo de orincipa	pluma I		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]
				38.0 r		eza de p	ıl, Punto lumín (23 ı] Posicio	316-1) 4	7.5 m Pli	eza de p umín	lumín				
14.4 16.0 18.0 20.0	78.0 76.0 73.5 70.9	87.4 87.0 86.4 85.8	46.2 45.2 40.1 34.0												
21.7 22.0 24.0	68.3 65.7	85.0 84.1	29.8 26.1	73.0 72.6 70.1	86.0 85.9 85.2	40.8 40.8 39.3									
26.0 28.0 30.0	63.0 60.2 57.4	83.1 82.0 80.8	23.3 21.2 19.6	67.5 64.8 62.1	84.4 83.5 82.4	36.9 32.7 29.5									
32.0 33.1 34.0	54.5 51.4	79.4 77.8	18.1 17.0	59.3 56.5	81.3 80.0	26.8	65.0 63.9	82.4 82.0	27.2 27.6						
36.0 38.0 40.0 42.0	48.2 44.9 41.3 37.4	76.1 74.2 72.0 69.5	15.9 14.9 14.0 13.2	53.5 50.4 47.2 43.8	78.6 77.0 75.2 73.2	22.3 20.6 19.1 17.7	61.1 58.3 55.4 52.4	80.9 79.7 78.4 76.9	26.1 24.8 23.3 22.2						
44.0 46.0 46.4	33.2 28.4	66.6 63.2	12.5 11.9	40.1 36.1	70.9 68.3	16.5 15.4	49.3 46.0	75.2 73.3	21.3 20.2	55.0	75.7	17.6			
48.0 50.0 53.0	22.6 16.4	58.8 53.9	11.3 9.9	31.7 26.7 16.5	65.2 61.5 53.7	14.5 13.7 12.4	42.5 38.7	71.2 68.8	19.2 18.4	52.8 49.7	74.6 73.0	18.3 17.4			
55.0 58.0 60.0 65.0							27.4 17.7	60.9 53.5	16.5 15.3	30.7 16.1	67.9 60.9 49.7	15.7 14.4 12.1			
65.0 68.7 70.0 75.0										16.1	49.7	12.1	35.0 32.1 19.5	55.9 53.9 44.4	9.6 9.2 8.1
76.0													15.3	41.1	7.8



N° de ident.: 9842523/95738/

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

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

	88° Án	gulo de orincipa	pluma I		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]
				38.0 i		eza de p	al, Punto dumín (2 n] Posici	316-1) 5	0.5 m Pl		lumín				
15.0 16.0 18.0 20.0 22.0 22.6 24.0 26.0	78.0 76.8 74.5 72.1 69.7	90.3 90.1 89.6 88.9 88.2 87.4 86.5	42.8 42.8 38.7 33.7 29.3 26.0 23.2	73.0 71.3 68.9	88.8 88.4 87.6	38.3 38.0 35.8									
28.0 30.0 32.0 34.0 34.4 36.0	62.2 59.6 56.9 54.1	85.5 84.3 83.1 81.6	21.0 19.4 17.9 16.7	66.4 63.9 61.4 58.7 56.0	86.8 85.8 84.8 83.6 82.3	33.1 29.7 27.2 24.7	65.0 63.0	85.1 84.3	26.5 26.1						
38.0 40.0 42.0 44.0 46.0 48.0	48.2 45.1 41.7 38.2 34.3 29.9	78.4 76.4 74.3 71.8 69.0 65.8	14.7 13.8 12.9 12.2 11.6 11.0	53.2 50.3 47.2 44.0 40.6 36.9	80.8 79.2 77.4 75.4 73.2 70.6	20.6 19.2 17.8 16.5 15.4 14.4	60.4 57.7 55.0 52.2 49.2 46.1	83.2 82.0 80.6 79.1 77.4 75.6	24.5 23.3 22.1 21.1 20.2 19.2	55.0	78.2	16.7			
50.0 53.0 55.0 56.0 60.0 61.0	24.9 15.9	61.8 54.4	10.5 8.8	32.9 19.8 16.0	67.7 57.3 54.1	13.6 11.7 11.3	42.8 33.5 20.8 17.2	73.5 67.0 56.9 53.9	18.4 16.5 14.7 14.3	52.6 44.9 36.1	76.9 72.4 66.4	17.3 15.6			
65.0 68.0 71.2 75.0 78.0								33.3		24.6 15.5	57.7 50.1	13.0 11.3	35.0 27.7 18.8	57.7 52.1 44.9	8.7 7.8 7.2



Nº de ident.: 9842523/95738/

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

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

		gulo de orincipa			gulo de orincipa			gulo de 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]
				38.0		eza de p	il, Punto lumín (2 n] Posici	316-1) 5	3.5 m Pl		lumín				
15.6	78.0	93.3	38.8												
16.0	77.6	93.2	38.8												
18.0	75.4	92.7	36.9												
20.0	73.1	92.1	33.4												
22.0	70.9	91.4	28.6	73.0	01.7	247									
23.5 24.0	68.6	90.7	25.3	73.0 72.4	91.7 91.5	34.7 34.6									
26.0	66.3	89.8	22.7	70.1	90.8	33.7							i		
28.0	63.9	88.8	20.6	67.8	90.1	32.3				i					
30.0	61.5	87.8	19.0	65.5	89.2	29.6									
32.0	59.0	86.6	17.6	63.1	88.2	26.9									
34.0	56.4	85.3	16.3	60.7	87.1	24.9				İ					
35.6							65.0	87.8	24.6						
36.0	53.8	83.9	15.2	58.2	85.9	22.6	64.6	87.7	25.0						
38.0	51.1	82.3	14.3	55.6	84.5	20.6	62.2	86.6	24.2						
40.0	48.2	80.6	13.4	52.9	83.1	19.0	59.8	85.5	22.8						
42.0	45.3	78.7	12.6	50.2	81.4	17.6	57.2	84.3	21.8						
44.0	42.1	76.5	11.9	47.3	79.7	16.4	54.6	82.9	20.6						
46.0	38.8	74.1	11.2	44.3	77.7	15.2	51.9	81.3	19.7						
48.0	35.2	71.4	10.6	41.1	75.5	14.2	49.1	79.7	18.9	55.0	00.0	45.7			
49.9	24.2	68.3	10.1	37.7	72.0	10.0	46.0	77.8	10.0	55.0 55.0	80.6 80.6	15.7 16.5			
50.0 55.0	31.2 18.0	57.1	8.8	27.5	73.0 65.0	13.3 11.5	46.2 38.1	72.2	18.0 16.2	48.1	76.6	15.2	ł		
56.0	15.4	54.7	7.8	21.5	05.0	11.5	30.1	12.2	10.2	40.1	70.0	13.2	i		
59.0	10.4	04.7	7.0	15.5	54.5	10.1									
60.0							28.2	64.3	14.5	40.3	71.3	13.7			
64.0							16.7	54.4	13.0		-				
65.0										31.0	64.2	12.6			
70.0										17.7	52.9	11.6			
71.0										15.1	50.5	10.4			
73.6													35.0	59.4	7.7
75.0													33.4	58.1	7.4
80.0													21.5	48.3	6.4
81.0													18.3	45.4	6.2



2821-1

2821-1

Nº de ident.: 9842523/95738/

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

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

	88° Án	gulo de principa	pluma I		gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				38.0		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 5	6.5 m Pl		lumín				
16.2 18.0 20.0 22.0 24.0	78.0 76.2 74.1 71.9 69.8	96.2 95.8 95.2 94.6 93.9	35.6 35.2 32.6 28.4 24.8												
24.4 26.0 28.0 30.0 32.0	67.6 65.4 63.1 60.8	93.1 92.2 91.2 90.1	22.3 20.3 18.7 17.4	73.0 71.2 69.1 66.9 64.6	94.6 94.0 93.3 92.5 91.5	31.9 31.6 30.7 29.6 26.9									
34.0 36.0 36.9 38.0 40.0	58.4 56.0 53.5 50.9	88.9 87.6 86.1 84.6	16.1 15.0 14.0 13.2	62.4 60.0 57.7 55.2	90.5 89.4 88.2 86.8	24.8 22.9 20.9 19.1	65.0 63.8 61.5	90.5 90.0 89.0	23.3 23.6 22.6						
42.0 44.0 46.0 48.0 50.0	48.2 45.4 42.5 39.3 36.0	82.8 80.9 78.8 76.4 73.8	12.5 11.7 11.0 10.4 9.8	52.7 50.1 47.3 44.5 41.5	85.3 83.7 81.9 79.9 77.7	17.6 16.4 15.3 14.2 13.3	59.2 56.8 54.3 51.7 49.1	87.8 86.5 85.1 83.6 81.9	21.4 20.4 19.3 18.5 17.8						
51.6 55.0 58.0 60.0 62.0	25.9 17.5	65.3 57.5	8.7 8.0	33.0 21.7 15.1	71.0 61.1 54.9	9.8 9.2	41.9	76.9 70.3	15.8	55.0 50.8 43.8	83.1 80.5 75.8	14.7 14.9 13.5			
65.0 67.0 70.0 73.0 76.1				13.1	J4.8	9.2	22.5 16.2	60.7 54.8	12.7 12.0	35.8 25.7 17.2	69.7 61.2 53.3	12.3 11.3 10.8	35.0	61.1	7.1
80.0 84.0													28.4 17.8	55.5 45.9	6.3 5.6



2821-1

2821-1

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

		gulo de orincipal			gulo de orincipa			gulo de 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]
				38.0 ı		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 5	9.5 m Pl	eza de p umín	lumín				
16.9	78.0	99.1	32.5												
18.0	76.9	98.9	32.5												
20.0	74.9	98.4	30.7												
22.0	72.9	97.8	28.1												
24.0	70.8	97.1	24.4	70.0	07.5	00.0									
25.2 26.0	68.8	00.0	21.8	73.0 72.2	97.5 97.2	29.2 29.1									
26.0 28.0	66.7	96.3 95.5	21.8 19.8	70.2	97.2 96.5	29.1									
30.0	64.6	94.6	18.2	68.1	95.7	27.9							i		
32.0	62.4	93.5	16.9	66.0	94.8	26.3									
34.0	60.2	92.4	15.7	63.9	93.9	24.3									
36.0	57.9	91.2	14.6	61.7	92.8	22.8									
38.0	55.6	89.9	13.6	59.5	91.7	21.0							İ		
38.2							65.0	93.3	22.2						
40.0	53.2	88.4	12.7	57.2	90.4	19.1	63.1	92.4	22.0						
42.0	50.8	86.8	12.0	54.9	89.1	17.5	60.9	91.3	20.8						
44.0	48.2	85.1	11.3	52.5	87.6	16.2	58.7	90.1	19.9						
46.0	45.6	83.2	10.6	50.0	85.9	15.1	56.4	88.8	18.9						
48.0	42.8	81.1	10.0	47.4	84.1	14.0	54.0	87.4	17.9						
50.0	39.8	78.7	9.4	44.7	82.2	13.1	51.6	85.8	17.2		05.5	40.0			
53.3 55.0	31.4	71.6	8.3	37.3	76.3	11.0	45.1	81.3	15.4	55.0 53.1	85.5 84.4	13.9 14.5			
60.0	20.1	61.0	8.3 7.3	28.2	76.3 68.4	9.6	45.1 37.7	75.5	13.9	46.8	84.4 80.1	13.1			
61.0	17.0	58.0	7.3	20.2	00.4	9.0	31.1	75.5	13.5	40.0	00.1	13.1	Ī		
65.0	17.0	00.0	7.1	15.9	56.5	7.5	28.8	67.7	12.4	39.7	74.7	11.9	ĺ		
70.0							15.8	55.2	10.8	31.3	67.5	11.0			
75.0										19.9	56.9	10.1			
76.0										16.8	53.7	9.9			
78.5													35.0	62.8	6.2
80.0													33.4	61.4	5.9
85.0													23.0	51.9	5.0
87.0													17.3	46.3	4.7



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

		gulo de orincipal			gulo de orincipa			gulo de principa			gulo de orincipa			gulo de 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]
				38.0 ı	m Pluma Cab	eza de p	al, Punto dumín (2: n] Posici	316-1) 6	2.5 m Pl		lumín				
17.5 18.0 20.0 22.0 24.0	78.0 77.5 75.6 73.7 71.8	102.1 102.0 101.5 100.9 100.3	30.0 30.0 29.2 27.8 24.3												
26.0 26.1 28.0 30.0 32.0	69.8 67.9 65.9 63.8	99.5 98.7 97.9 96.9	21.6 19.6 18.0 16.6	73.0 71.2 69.2 67.2	100.3 99.7 99.0 98.1	27.3 27.0 26.5 26.0									
34.0 36.0 38.0 39.5	61.8 59.7 57.5	95.9 94.7 93.5	15.5 14.4 13.4	65.2 63.2 61.1	97.2 96.2 95.2	24.1 22.5 21.3	65.0	96.0	21.1 21.1						
40.0 42.0 44.0 46.0 48.0	55.3 53.0 50.7 48.2 45.7	92.1 90.6 89.0 87.3 85.4	11.7 11.1 10.4 9.8	59.0 56.8 54.6 52.3 49.9	94.0 92.7 91.3 89.8 88.2	19.4 17.7 16.3 15.0 14.0	64.5 62.4 60.3 58.2 56.0	95.7 94.7 93.6 92.4 91.1	20.6 19.5 18.6 17.7						
50.0 55.0 55.1 60.0 64.0	43.0 35.7 26.8 16.6	83.3 77.1 68.7 58.4	9.3 8.0 7.1 6.3	47.4 40.8 33.0	86.4 81.1 74.3	13.1 11.0 9.4	53.7 47.8 41.2	89.6 85.5 80.3	16.8 15.1 13.6	55.0 49.4	88.0 84.2	13.1 12.7			
65.0 68.0 70.0 73.0 75.0				23.1 15.5	64.8 56.9	6.7	23.8 15.4	73.6 64.3 55.6	10.9 9.9	35.6 26.6	79.3 73.1 64.6	11.6 10.6 9.8			
79.0 81.0 85.0 90.0										16.3	54.2	8.9	35.0 28.9 16.9	64.5 58.9 46.8	5.4 4.8 4.0



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

360°

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

2 - Vía ancha Valor de vuelco: Lastre trasero [t]: 124.0 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]
				38.0	m Pluma Cab	eza de p	al, Punto Jumín (2: n] Posici	316-1) 6	5.5 m Pl		lumín				
18.1 20.0 22.0 24.0 26.0	78.0 76.3 74.5 72.7 70.8	105.0 104.6 104.0 103.4 102.7	27.0 26.7 25.5 23.6 21.1												
27.0 28.0 30.0 32.0 34.0	68.9 67.0 65.1 63.2	102.0 101.2 100.2 99.3	19.4 17.7 16.3 15.1	73.0 72.1 70.2 68.3 66.4	103.2 102.9 102.2 101.4 100.5	24.5 24.5 24.1 23.5 22.8									
36.0 38.0 40.0 40.7 42.0	61.2 59.2 57.1	98.2 97.0 95.7	14.2 13.2 12.3	64.5 62.5 60.5 58.5	99.6 98.6 97.5	21.6 20.8 19.8	65.0 63.8	98.7 98.1	19.6 20.0						
44.0 46.0 48.0 50.0 55.0	52.8 50.5 48.2 45.8 39.3	92.9 91.3 89.5 87.6 82.1	10.8 10.2 9.6 9.0 7.8	56.4 54.3 52.1 49.8 43.8	95.0 93.6 92.0 90.4 85.6	16.5 15.2 14.0 13.1 11.0	61.8 59.8 57.8 55.6 50.1	97.0 95.9 94.7 93.3 89.5	19.2 18.2 17.5 16.6 14.9						
56.8 60.0 65.0 67.0 70.0	31.6 21.7 16.2	75.0 64.8 58.8	6.8 6.0 5.6	36.9 28.7	79.6 71.7 59.7	9.3 8.1 6.8	44.1 37.3 29.3	84.8 78.8 71.1	13.4 12.2	55.0 51.6 45.7 39.2	90.4 88.1 83.6 78.0	12.3 12.5 11.4			
71.0 75.0 76.0 80.0 82.0				15.2	57.3	6.0	18.1 16.1	59.4 57.2	9.4 8.5	31.5 20.8 16.0	70.9 59.9 54.6	9.5 8.3 7.9			
83.4 85.0 90.0 93.0											5 5		35.0 33.4 24.2 16.5	66.3 64.8 55.5 47.2	4.6 4.4 3.6 3.2



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

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

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

	88° Án	gulo de orincipal	pluma I		gulo de orincipa			gulo de orincipa		65° Án I	gulo de orincipa	pluma I	45° Án	gulo de orincipa	pluma I
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				38.0 ı		eza de c	ıl, Punto lumín (2 ı] Posici	316-1) 6	8.5 m Pl	eza de p umín	lumín				
18.7 20.0 22.0 24.0 26.0 27.9 28.0 30.0 32.0 34.0 40.0 42.0 44.0 46.0 48.0 55.0 55.0 55.0 65.0 70.0 73.0 75.0	78.0 76.9 75.2 73.4 71.7 69.9 68.1 66.3 64.4 62.6 60.7 58.7 54.7 52.6 50.4 48.2 42.3 35.6 27.4 15.8	107.9 107.7 107.1 106.6 105.9 105.2 104.4 103.6 102.6 101.6 100.5 99.3 98.0 96.6 95.1 93.5 91.8 86.7	24.5 24.5 23.5 22.6 20.5 19.0 17.6 16.2 14.9 13.9 13.0 12.1 11.3 10.6 9.9 9.4 8.9 7.6	73.0 72.9 71.1 69.3 67.5 65.7 63.8 62.0 60.0 58.1 56.1 54.0 51.9 46.3 40.2 33.1 24.2 16.9	106.1 106.0 105.3 104.6 103.8 102.9 102.0 100.9 99.8 98.6 97.2 95.8 94.3 89.9 84.5 77.6 68.3 60.1	22.2 22.2 22.0 21.5 21.1 20.4 19.9 19.4 18.5 16.9 15.4 14.2 13.1 11.1	65.0 63.2 61.3 59.3 57.4 52.2 46.7 40.5 33.5 24.8 15.7	101.4 100.4 99.4 98.9 96.9 93.4 89.0 83.7 76.9 67.8 57.6	18.9 18.9 17.9 17.1 16.4 14.5 13.2 11.9 10.8 9.5 7.7	55.0 53.6 48.1 42.2 35.4 27.3	92.9 91.9 87.7 82.7 76.4 68.0	11.6 12.2 11.0 10.1 9.2			
85.0 85.9 90.0 95.0 96.0										15.6	55.0	7.1	35.0 29.4 18.9 16.1	68.0 62.2 50.9 47.6	4.0 3.4 2.7 2.6



2821-1

2821-1

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

		gulo de orincipal			gulo de orincipa			gulo de 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]
				38.0 ı	m Pluma Cab	eza de p	ıl, Punto ılumín (2 ı] Posici	316-1) 7	1.5 m Pl		lumín				
19.4	78.0	110.9	22.4												
20.0	77.5	110.7	22.4							i			İ		
22.0	75.8	110.2	21.8							i			İ		
24.0	74.2	109.7	21.0												
26.0	72.5	109.1	19.6												
28.0	70.8	108.4	18.2												
28.7				73.0	108.9	20.4									
30.0	69.1	107.6	17.1	71.9	108.5	20.4									
32.0	67.3	106.8	15.7	70.2	107.8	20.1									
34.0	65.6	105.9	14.4	68.5	107.0	19.7									
36.0	63.8	105.0	13.4	66.8	106.2	19.3									
38.0	62.0 60.2	103.9 102.8	12.5 11.7	65.0 63.2	105.3 104.3	18.8 18.4							ł		
40.0 42.0	58.3	102.8	10.9	61.4	104.3	18.4									
43.3	30.3	101.0	10.9	01.4	103.2	10.0	65.0	104.1	17.7						
44.0	56.4	100.3	10.2	59.6	102.1	16.8	64.4	103.8	17.7						
46.0	54.4	98.9	9.5	57.7	100.8	15.4	62.6	102.8	17.4						
48.0	52.4	97.4	8.9	55.8	99.5	14.1	60.8	101.7	16.5	i			İ		
50.0	50.3	95.8	8.5	53.8	98.1	13.0	58.9	100.5	15.8						
55.0	44.9	91.1	7.2	48.6	94.0	10.8	54.1	97.1	14.0						
60.0	38.8	85.5	6.2	43.0	89.0	9.1	48.9	93.1	12.7						
60.2										55.0	95.4	10.9			
65.0	31.8	78.3	5.4	36.7	83.0	7.7	43.3	88.2	11.5	50.3	91.7	10.6			
70.0	23.0	68.4	4.7	29.2	75.1	6.6	37.0	82.2	10.4	44.8	87.1	9.7			
73.0	15.5	59.6	4.3												
75.0				19.2	63.7	5.6	29.6	74.4	9.3	38.7	81.4	8.8			
76.0				16.6	60.6	5.4	10.0	62.4	0.0	24.2	72.0	7.0			
80.0 82.0							19.9 15.4	63.4 58.0	8.0 6.8	31.3	73.8	7.8	l		
85.0							10.4	36.0	0.0	22.2	63.6	6.8			
88.0										16.2	56.6	6.2	i e		
88.4										10.2	00.0	0.2	35.0	69.7	3.2
90.0													33.4	68.1	3.1
95.0													25.1	59.0	2.4
97.0													21.0	54.2	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			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				38.0 ı		eza de p	II, Punto Ilumín (2: Il Posici	316-1) 7	4.5 m Pli	eza de p umín	lumín				
20.0 22.0 24.0 26.0 28.0 29.6 30.0	78.0 76.4 74.8 73.2 71.6	113.8 113.3 112.8 112.2 111.6	21.0 20.7 20.0 19.1 17.7	73.0 72.7	111.8 111.7	19.3 19.3									
32.0 34.0 36.0 38.0 40.0 42.0	68.3 66.6 64.9 63.2 61.5 59.7	110.1 109.2 108.3 107.3 106.3 105.1	15.5 14.3 13.2 12.2 11.5 10.7	71.1 69.4 67.8 66.1 64.4 62.7	111.0 110.3 109.5 108.6 107.7 106.6	19.2 18.8 18.5 18.1 17.7 17.4									
44.0 44.5 46.0 48.0 50.0 55.0	57.9 56.1 54.2 52.2 47.2	103.9 102.6 101.1 99.6 95.3	9.3 8.7 8.2 7.1	59.1 57.3 55.5 50.6	105.6 104.4 103.1 101.8 97.9	17.1 15.7 14.3 13.1 10.8	65.0 63.8 62.0 60.3 55.7	106.8 106.1 105.1 104.0 100.8	16.5 16.8 16.3 15.4 13.8						
60.0 61.9 65.0 70.0 75.0 76.0	35.4 28.0 17.9 15.2	90.1 83.8 75.5 63.5 60.0	5.2 4.5 3.9 3.7	39.7 33.1 25.1	93.4 87.9 81.0 71.8	9.1 7.6 6.5 5.6	50.9 45.7 40.0 33.5	97.0 92.5 87.0 80.2	12.4 11.2 10.2 9.2	55.0 52.2 47.1 41.5	97.8 95.6 91.3 86.1	10.3 10.3 9.4 8.5			
79.0 80.0 85.0 90.0 90.8 91.0 95.0				16.2	61.0	4.8	25.6 15.1	71.3 58.4	8.0 6.2	35.0 28.4 18.6	79.4 72.0 60.3	7.6 6.5 5.6	35.0 29.7	71.4 65.6	2.6



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

2 - Vía ancha 124.0

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

Valor de vuelco:

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

		gulo de orincipal			gulo de orincipa										
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				38.0 r						eza de p	lumín				
					Cab		lumín (2: 1] Posici								
20.6	78.0	116.7	19.3												
22.0	76.9	116.4	19.3												
24.0	75.4	115.9	18.5												
26.0	73.9	115.4	18.0												
28.0	72.3	114.7	16.9												
30.0	70.8	114.0	15.9												
30.5				73.0	114.7	17.7									
32.0	69.2	113.3	15.2	71.8	114.2	17.6									
34.0	67.6	112.5	14.0	70.3	113.5	17.4									
36.0	66.0	111.6	12.9	68.7	112.7	17.0									
38.0	64.3	110.7	12.0	67.1	111.9	16.7									
40.0	62.7	109.7	11.2	65.5	111.0	16.3									
42.0	61.0	108.6	10.5	63.8	110.0	15.9									
44.0	59.3	107.4	9.7	62.2	109.0	15.6									
45.8							65.0	109.6	15.6						
46.0	57.5	106.2	9.1	60.5	107.9	15.2	64.9	109.5	15.6						
48.0	55.8	104.8	8.5	58.7	106.7	14.0	63.2	108.5	15.6						
50.0	54.0	103.4	7.9	57.0	105.4	12.9	61.5	107.4	15.0						
55.0	49.2	99.4	6.8	52.4	101.8	10.6	57.2	104.4	13.6						
60.0	44.1	94.6	5.8	47.6	97.5	9.0	52.7	100.9	12.1						
63.7		00.0	4.0	40.0	00.5		47.0		44.0	55.0	100.3	9.7			
65.0	38.4 32.0	88.8	4.9	42.3	92.5	7.5	47.9	96.6	11.0	53.9 49.1	99.4	9.9			
70.0	32.0 24.0	81.6 72.0	4.3 3.7	36.4	86.3	6.3	42.6	91.6	9.9	-	95.3 90.5	9.1 8.3			
75.0 79.0	24.0 15.8	72.0 61.6	3.7 2.9	29.6	78.5	5.4	36.8	85.5	9.0	44.0	90.5	0.3			
80.0	15.6	01.0	2.9	20.7	67.6	4.5	30.0	77.8	8.0	38.1	84.5	7.2			
82.0				20.7 15.9	61.4	4.5	30.0	11.0	0.0	30.1	04.0	1.2			
85.0				10.8	01.4	4.1	21.3	67.2	6.8	32.3	78.1	6.2			
87.0							16.6	61.2	6.3	32.3	70.1	0.2			
90.0							10.0	01.2	0.0	24.4	68.6	5.3			
94.0										15.6	57.4	4.6			



Nº de ident.: 9842523/95738/

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

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

		gulo de principa			gulo de orincipa			gulo de 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]
				38.0		eza de p	II, Punto Ilumín (2 I Posici	316-1) 8	0.5 m Pli	eza de p umín	lumín		_		
					1	34.0 [11	i j Posici	on miuia	11 (2310)			1			
21.2	78.0	119.7	17.8												
22.0	77.4	119.5	17.8												
24.0	76.0	119.0	17.3												
26.0	74.5 73.0	118.5 117.9	16.7 16.1												
28.0 30.0	71.5	117.9	15.2	-											
30.0	/1.5	117.2	15.2	73.0	117.5	16.3									
32.0	70.0	116.5	14.6	73.0 72.5	117.5	16.3									
34.0	68.5	115.7	13.8	72.5 71.0	117.3	16.3									
36.0	66.9	114.9	12.7	69.5	115.9	15.8									
38.0	65.4	114.0	11.8	68.0	115.1	15.5									
40.0	63.8	113.0	10.9	66.4	114.3	15.2									
42.0	62.2	112.0	10.2	64.9	113.4	14.8									
44.0	60.6	110.9	9.6	63.3	112.4	14.5							i		
46.0	58.9	109.7	8.9	61.7	111.3	14.2									
47.1							65.0	112.3	14.7						
48.0	57.2	108.4	8.3	60.0	110.2	13.6	64.3	111.9	14.7						
50.0	55.5	107.1	7.7	58.4	109.0	12.6	62.7	110.8	14.5						
55.0	51.0	103.3	6.6	54.1	105.6	10.5	58.6	108.0	13.2						
60.0	46.3	98.8	5.6	49.5	101.6	8.9	54.3	104.6	11.8						
65.0	41.1	93.5	4.8	44.6	96.9	7.5	49.8	100.7	10.7						
65.4				!						55.0	102.7	9.0			
70.0	35.3	87.1	4.0	39.2	91.2	6.2	44.9	96.0	9.7	51.0	99.3	8.9			
75.0	28.4	78.9	3.5	33.2	84.3	5.3	39.6	90.4	8.8	46.2	94.8	8.1			
80.0	19.5	67.5	2.9	25.8	75.3	4.4	33.5	83.6	8.0	40.8	89.2	7.1			
82.0	15.5	62.0	2.4												
85.0				15.6	61.8	3.6	26.3	74.7	6.8	34.9	82.7	6.1			
90.0							16.3	61.6	5.7	28.8	75.4	5.2			
95.0										20.1	64.2	4.3			
97.0										15.3	57.8	4.0			



N° de ident.: 9842523/95738/ Pi

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

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

		gulo de orincipal		83° Án	gulo de orincipa	pluma I		gulo de orincipa			gulo de orincipa		45° Án	gulo de orincipa	pluma I
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				38.0 ı		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 8	3.5 m Pl	eza de p umín	lumín				
21.8 22.0 24.0 26.0 28.0	78.0 77.9 76.5 75.1 73.6	122.6 122.6 122.1 121.6 121.0	16.3 16.3 16.1 15.6 15.3												
30.0 32.0 32.2 34.0 36.0	72.2 70.7 69.3 67.8	120.4 119.7 119.0 118.2	14.5 13.9 13.4 12.5	73.0 71.7 70.3	120.4 119.8 119.1	15.1 15.1 14.8									
38.0 40.0 42.0 44.0 46.0	66.3 64.8 63.3 61.7 60.1	117.3 116.4 115.4 114.3 113.2	11.6 10.7 9.9 9.3 8.7	68.8 67.3 65.8 64.3 62.8	118.4 117.5 116.7 115.7 114.7	14.5 14.2 13.9 13.6 13.4									
48.0 48.3 50.0 55.0 60.0	58.5 56.9 52.7 48.2	112.0 110.7 107.1 102.9	7.5 6.3 5.4	61.2 59.6 55.5 51.3	113.6 112.5 109.3 105.5	13.2 12.4 10.3 8.8	65.0 63.8 59.9 55.8	115.0 114.2 111.5 108.3	13.0 13.5 12.7 11.6						
65.0 67.1 70.0 75.0 80.0	43.4 38.1 32.1 24.8	98.0 92.1 84.9 75.5	4.5 3.8 3.2 2.7	46.7 41.7 36.2 29.9	101.1 95.9 89.6 81.8	7.4 6.1 5.0 4.2	51.5 46.9 42.0 36.5	104.6 100.2 95.0 88.8	9.5 8.5 7.8	55.0 52.6 48.1 43.3	105.2 103.1 98.9 94.0	8.5 8.6 7.8 6.8			
84.0 85.0 88.0 90.0 93.0	16.9	64.8	2.2	21.9 15.3	71.3 62.2	3.5 3.0	30.2 22.4 16.0	81.1 70.9 62.1	6.8 5.7 5.0	38.4 32.4	88.5 81.4	5.8 4.9			
95.0 99.0										25.2 17.5	72.1 61.7	4.0 3.4			



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

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

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				38.0 i		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 8	6.5 m Pli	eza de p umín	lumín				
22.5	78.0	125.6	15.1												
24.0	77.0	125.2	15.1												
26.0	75.6	124.7	14.7												
28.0	74.2	124.1	14.4												
30.0	72.8	123.5	13.9												
32.0	71.4	122.9	13.3												
33.1				73.0	123.3	14.1									
34.0	70.0	122.2	12.9	72.4	123.0	14.0									
36.0	68.6	121.4	12.4	71.0	122.3	13.9									
38.0	67.2	120.6	11.4	69.6	121.6	13.6									
40.0 42.0	65.7 64.3	119.7 118.7	10.5 9.7	68.2 66.7	120.8 120.0	13.4 13.1									
42.0 44.0	62.8	118.7	9.7 9.1	65.3	120.0	13.1									
44.0 46.0	61.3	117.7	9.1 8.5	63.8	118.1	12.9									
48.0	59.8	115.5	7.9	62.3	117.0	12.4									
49.6	33.0	110.0	7.5	02.5	117.0	12.7	65.0	117.7	12.6						
50.0	58.2	114.3	7.3	60.8	115.9	12.3	64.7	117.6	12.6						
55.0	54.2	110.9	6.1	56.9	112.9	10.2	61.0	114.9	12.3						
60.0	50.0	106.9	5.2	52.8	109.3	8.6	57.1	111.9	11.3						
65.0	45.5	102.3	4.3	48.5	105.2	7.3	53.1	108.4	10.1						
68.8										55.0	107.6	8.0			
70.0	40.6	96.9	3.6	43.9	100.3	6.0	48.8	104.3	9.2	54.1	106.9	8.2			
75.0	35.1	90.4	3.0	38.9	94.6	4.9	44.2	99.4	8.3	49.9	102.9	7.6			
80.0	28.8	82.3	2.5	33.2	87.6	4.1	39.2	93.8	7.5	45.2	98.1	6.5			
85.0				26.5	78.7	3.4	33.5	86.9	6.8	40.8	93.3	5.5			
90.0				17.4	66.1	2.7	26.9	78.2	5.8	35.4	86.8	4.6			
91.0				15.0	62.6	2.5									
95.0							18.0	65.8	4.7	29.2	78.8	3.8			
96.0							15.7	62.5	4.4						
100.0										21.3	68.0	3.0			
102.0										17.2	62.1	2.7			



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

	88° Án I	gulo de principa	pluma l		gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				38.0 ı		eza de p	lumín (2	316-1) 8	9.5 m Pli	eza de p umín	lumín				
						43.0 [11] Posici	on midia	11 (2316)						
23.2	78.0	128.5	13.2												
24.0	77.4	128.3	13.2												
26.0	76.1	127.8	13.0												
28.0	74.8	127.3	12.7												
30.0	73.4	126.7	12.5												
32.0	72.1	126.1	12.0	70.0	400.4	40.0									
34.0	70.7 69.4	125.4 124.6	11.7 11.4	73.0 71.7	126.1 125.5	12.3 12.3									
36.0 38.0	68.0	124.6	10.7	71.7	125.5	12.3									
40.0	66.6	123.0	9.9	68.9	124.0	11.8									
42.0	65.2	122.0	9.1	67.5	123.2	11.6									
44.0	63.7	121.1	8.5	66.1	122.3	11.3									
46.0	62.3	120.0	7.9	64.7	121.4	11.0									
48.0	60.8	118.9	7.4	63.3	120.4	10.8									
50.0	59.3	117.7	6.8	61.8	119.3	10.6									
50.9							65.0	120.4	10.9						
55.0	55.5	114.5	5.7	58.1	116.4	9.3	62.0	118.3	10.8						
60.0	51.5	110.7	4.7	54.2	113.0	8.0	58.3	115.4	10.2						
65.0	47.2	106.3	3.9	50.1	109.0	7.0	54.4	112.0	9.3						
70.0	42.6	101.2	3.2	45.7	104.4	5.7	50.3	108.1	8.6						
70.5										55.0	110.1	7.4			
75.0	37.6	95.2	2.6	41.0	99.0	4.6	46.0	103.5	7.8	51.4	106.7	7.1			
80.0				35.8	92.6	3.7	41.3	98.2	7.1	47.1	102.3	6.1			
85.0				29.8	84.7	3.1	36.1	91.8	6.5	43.0	97.8	5.2			
90.0				22.4	74.3	2.4	30.1	84.0	5.5	38.1	91.9	4.3			
92.0				18.6	68.8	2.1									
95.0							22.8	73.8	4.5	32.5	84.7	3.4			
99.0							16.2	64.1	3.5						
100.0										25.8	75.6	2.7			
104.0										19.0	65.7	2.1			



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

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

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa		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]
				38.0 ı						eza de p	lumín				
					Cab		lumín (2: 1] Posici			umin					
23.8	78.0	131.4	12.2												
24.0	77.9	131.4	12.2												
26.0	76.6	130.9	12.1												
28.0	75.3	130.4	11.8												
30.0	74.0	129.8	11.6												
32.0	72.7	129.2	11.2												
34.0	71.4	128.5	10.9												
34.9				73.0	129.0	11.3									
36.0	70.1	127.8	10.7	72.3	128.7	11.3									
38.0	68.7	127.1	10.4	71.0	128.0	11.1									
40.0	67.4	126.2	9.6	69.6	127.2	10.9									
42.0	66.0	125.4	8.9	68.3	126.5	10.7									
44.0	64.7	124.4	8.2	67.0	125.6	10.4									
46.0	63.3	123.4	7.7	65.6	124.7	10.1									
48.0	61.9	122.4	7.2	64.2	123.8	9.9									
50.0	60.4	121.2	6.7	62.8	122.7	9.7									
52.1							65.0	123.2	9.8						
55.0	56.8	118.1	5.5	59.2	119.9	8.8	63.0	121.7	9.8						
60.0	52.9	114.5	4.5	55.5	116.7	7.7	59.4	118.9	9.3						
65.0	48.9	110.4	3.8	51.6	112.9	6.8	55.7	115.7	8.8						
70.0	44.6	105.6	3.1	47.5	108.6	5.7	51.9	112.0	8.2		4400	0.0			
72.3	400	400.0	0.4	40.4	400.0	4.0	47.0	407.7	7.0	55.0	112.6	6.9			
75.0	40.0	100.0	2.4	43.1	103.6 97.6	4.6	47.8	107.7 102.7	7.6	52.9	110.5	6.8 5.9			
80.0 85.0				38.3 32.9		3.6	43.4 38.6	102.7 96.8	6.8 6.2	48.8	106.4 102.1	5.9 5.0			
90.0				26.6	90.5 81.6	2.9	38.6	96.8 89.8	5.6	45.0 40.4	96.6	4.1			
90.0 95.0				20.0	01.0	2.3	33.3 27.0	89.8 81.0	4.6	40.4 35.3	90.6	3.2			
100.0							27.0 18.9	69.0	3.6	35.3 29.5	90.1 82.1	2.5			
100.0							16.9	64.5	3.0	29.0	02.1	2.0			
102.0							10.0	04.5	J. I	25.4	76.3	2.1			
103.0										20.4	10.3	Z. I			



Nº de ident.: 9842523/95738/

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

98/ Pieza de articulación de pluma principal: 2821-1 0° 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]
				38.0 ı		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 9	5.5 m Pl	eza de p umín	lumín				
24.4	78.0	134.4	11.1												
26.0	77.0	134.0	11.1												
28.0	75.8	133.5	10.9												
30.0	74.5	132.9	10.6												
32.0	73.3	132.4	10.4												
34.0	72.0	131.7	10.1												
35.8				73.0	131.9	10.3									
36.0	70.7	131.0	9.9	72.9	131.8	10.3									
38.0	69.4	130.3	9.7	71.6	131.1	10.3									
40.0	68.1	129.5	9.2	70.3	130.4	10.0									
42.0	66.8	128.6	8.5	69.0	129.7	9.8									
44.0	65.5	127.7	7.9	67.7	128.9	9.6									
46.0	64.2	126.8	7.3	66.4	128.0	9.4									
48.0	62.8	125.8	6.8	65.1	127.1	9.2									
50.0	61.5	124.7	6.4	63.7	126.1	9.0									
53.4							65.0	125.9	8.9						
55.0	57.9	121.7	5.3	60.3	123.4	8.4	63.9	125.1	8.9						
60.0	54.3	118.3	4.3	56.8	120.3	7.3	60.5	122.4	8.6						
65.0	50.5	114.4	3.5	53.1	116.7	6.5	57.0	119.3	8.2						
70.0	46.4	109.9	2.8	49.2	112.6	5.6	53.3	115.8	7.7	55.0	115.0	0.4			
74.0	40.4	404.7	0.0	45.0	407.0	4.5	40.4	444.7	7.0	55.0		6.4			
75.0 80.0	42.1	104.7	2.2	45.0 40.6	107.9 102.4	4.5 3.5	49.4 45.3	111.7 107.0	7.3 6.6	54.2 50.4	114.3 110.4	6.4 5.6			
80.0 85.0				35.7	95.9	2.7	45.3 40.8	107.0	6.0	50.4 46.8	10.4	4.6			
90.0				30.0	95.9 88.0	2.7	40.8 35.9	95.2	5.4	40.6 42.5	100.3	3.7			
95.0				30.0	00.0	Z. I	30.4	95.2 87.4	4.5	37.8	95.2	2.9			
100.0							23.7	77.4	3.6	32.5	95.2 88.0	2.9			
100.0							23.1	17.4	3.0	31.4	86.4	2.2	i		
105.0							15.7	64.9	2.5	01.4	00.4	2.0	i		



Nº de ident.: 9842523/95738/

Radio de descarga:

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

360° Valor de vuelco: 2 - Vía ancha

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

		gulo de principa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				38.0	m Pluma Cab	eza de p	al, Punto dumín (2 n] Posici	316-1) 9	8.5 m Pl	eza de p umín	lumín				
25.0	78.0	137.3	10.3												
26.0	77.4	137.1	10.3												
28.0	76.2	136.6	10.1												
30.0	75.0	136.1	9.8												
32.0	73.8	135.5	9.7												
34.0	72.6	134.9	9.4	1											
36.0	71.3	134.2	9.2												
36.7				73.0	134.7	9.4									
38.0	70.1	133.5	9.0	72.2	134.3	9.4									
40.0	68.8	132.7	8.9	70.9	133.6	9.3									
42.0	67.6	131.9	8.2	69.7	132.9	9.1									
44.0	66.3	131.0	7.6	68.4	132.1	8.9									
46.0	65.0	130.1	7.0	67.2	131.3	8.7									
48.0	63.7	129.1	6.6	65.9	130.4	8.5									
50.0	62.4	128.1	6.1	64.6	129.5	8.3									
54.7							65.0	128.6	8.2						
55.0	59.0	125.2	5.1	61.3	126.9	8.0	64.8	128.4	8.2						
60.0	55.6	122.0	4.1	57.9	123.9	7.1	61.5	125.9	8.0						
65.0	51.9	118.2	3.3	54.4	120.5	6.2	58.1	122.9	7.7						
70.0	48.1	114.0	2.6	50.7	116.6	5.6	54.6	119.5	7.3						
75.0				46.8	112.1	4.5	50.9	115.6	6.9						
75.7										55.0	117.5	5.9			
80.0				42.6	107.0	3.5	47.0	111.2	6.4	52.2	114.6	5.3			
85.0				38.0	101.0	2.6	42.8	106.1	5.8	48.4	110.4	4.3			
90.0							38.3	100.2	5.2	44.4	105.6	3.4			
95.0							33.9	94.0	4.3	40.0	100.0	2.6			
99.0										36.2	94.8	2.0			
100.0							28.2	85.6	3.5						
105.0							20.1	72.9	2.7						
	1	I	I	I		1						1		1	

108.0



2821-1

2821-1

N° de ident.: 9842523/95738/

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

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

		gulo de principa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				38.0 i		eża de pl	ıl, Punto umín (23 ı] Posici	316-1) 10	1.5 m P	eza de p lumín	lumín				
25.6	78.0	140.2	9.5												
26.0	77.8	140.1	9.5												
28.0	76.6	139.7	9.4												
30.0	75.5	139.2	9.2												
32.0	74.3	138.6	9.0												
34.0	73.1	138.0	8.8												
36.0	71.9	137.4	8.6												
37.5				73.0	137.6	8.7									
38.0	70.7	136.7	8.4	72.7	137.5	8.7									
40.0	69.5	135.9	8.2	71.5	136.8	8.6									
42.0	68.3	135.1	7.9	70.3	136.1	8.5									
44.0	67.1	134.3	7.3	69.1	135.3	8.3									
46.0	65.8	133.4	6.7	67.9	134.5	8.1									
48.0	64.6	132.5	6.3	66.7	133.7	7.9									
50.0	63.3	131.5	5.8	65.4	132.8	7.7									
55.0	60.1	128.7	4.9	62.2	130.3	7.4									
55.9							65.0	131.3	7.5						
60.0	56.7	125.6	3.9	59.0	127.4	6.7	62.4	129.3	7.4						
65.0	53.2	122.0	3.0	55.6	124.1	5.9	59.2	126.4	7.1						
70.0	49.6	118.0	2.4	52.1	120.4	5.3	55.8	123.2	6.8						
75.0 77.4				48.4	116.2	4.4	52.3	119.5	6.5	55.0	119.9	5.5			
80.0				44.4	111.4	3.4	48.6	115.3	6.2	53.5	119.9	5.5			
80.0 85.0				44.4	111.4	2.5	48.6 44.6	110.5	5.5	49.9	118.4	4.0			
90.0				40.2	105.6	2.5	44.6	10.5	5.5 4.9	49.9 46.1	109.8	3.1			
95.0							36.3	99.3	4.9	42.0	109.8	2.3			
95.0 97.0							30.3	99.3	4.0	42.0	104.6	2.3			
100.0							31.2	91.7	3.2	40.3	102.3	2.0			
105.0							25.2	82.3	2.5						
108.0							20.8	75.1	2.0						



N° de ident.: 9842523/95738/

360°

Radio de descarga:

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

		gulo de 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]
				38.0 ı		eża de pl	ıl, Punto umín (23 ı] Posici	316-1) ĬC	4.5 m P	eza de p lumín	lumín				
26.3 28.0 30.0 32.0 34.0 36.0 38.4 40.0 42.0 44.0 46.0 48.0 55.0 57.2 60.0 65.0 75.0	78.0 77.0 75.9 74.7 73.6 72.4 71.3 70.1 68.9 67.8 66.6 65.3 64.1 61.0	143.2 142.8 142.3 141.7 141.1 140.5 139.9 139.1 138.4 137.6 136.7 135.8 134.8 132.2 129.2 125.8 121.9	8.8 8.8 8.6 8.4 8.3 8.1 7.9 7.7 7.6 7.1 6.5 6.0 5.6 4.7	73.0 72.1 70.9 69.7 68.6 67.4 66.2 63.1	140.5 140.0 139.3 138.6 137.8 137.0 136.1 133.7	8.0 8.0 7.9 7.7 7.6 7.4 7.3 6.9 6.4 5.0 4.3	65.0 63.3 60.1 56.9 53.5	134.0 132.7 129.9 126.8 123.3	6.9 6.9 6.6 6.4 6.0						
79.1 80.0 85.0 87.0 90.0 95.0 96.0 100.0 105.0 107.0				46.1 42.1 40.4	115.6 110.4 108.1	3.3 2.4 2.1	50.0 46.3 42.3 38.5 33.9 28.5 26.1	119.3 114.7 109.5 104.2 97.3 89.0 85.0	5.8 5.3 4.7 3.9 3.1 2.3 2.1	55.0 54.4 51.3 47.7 43.8 43.0	122.4 121.8 118.3 114.0 109.0 108.0	5.0 4.8 3.8 3.0 2.2 2.0			



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

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

		gulo de orincipa		ı	gulo de orincipa			gulo de orincipa			gulo de orincipa		1	gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				38.0	m Pluma Cabe	eza de pl	al, Punto lumín (23 n] Posici	316-1) 10	17.5 m P		lumín				
26.9	78.0	146.1	7.9												
28.0	77.4	145.8	7.9	1											
30.0	76.3	145.4	7.8												
32.0	75.2	144.8	7.6												
34.0	74.1	144.3	7.4												
36.0	73.0	143.7	7.2												
38.0	71.8	143.0	7.1												
39.3				73.0	143.4	7.1									
40.0	70.7	142.3	6.9	72.6	143.1	7.1									
42.0	69.6	141.6	6.8	71.5	142.5	7.1									
44.0	68.4	140.8	6.5	70.3	141.8	6.9									
46.0	67.3	140.0	6.0	69.2	141.0	6.8									
48.0	66.1	139.1	5.6	68.0	140.2	6.6				•			<u> </u>		
50.0	64.9	138.2	5.2	66.9	139.4	6.5									
55.0	61.9	135.6	4.4	63.9	137.0	6.1									
58.5							65.0	136.8	6.0						
60.0	58.8	132.7	3.4	60.9	134.4	5.8	64.1	136.0	6.0						
65.0	55.6	129.5	2.6	57.8	131.4	5.2	61.1	133.4	5.8						
70.0				54.5	128.0	4.6	58.0	130.4	5.6						
75.0				51.2	124.1	4.2	54.7	127.0	5.3						
80.0				47.6	119.8	3.2	51.4	123.2	5.1						
80.9				•						55.0	124.8	4.3			
85.0				43.9	114.8	2.3	47.8	118.9	4.8	52.6	122.1	3.5			
86.0				43.1	113.7	2.2									
90.0							44.1	114.0	4.3	49.1	118.0	2.6			
93.0										46.9	115.3	2.1			
95.0							40.5	109.0	3.6						
100.0							36.2	102.6	2.8						
105.0							31.4	95.0	2.0						



2821-1

2821-1

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

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

		gulo de principa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				38.0		eża de pl	ıl, Punto umín (23 ı] Posici	316-1) 11	0.5 m P	eza de p lumín	lumín				
27.5	78.0	149.0	7.2												
28.0	77.7	148.9	7.2												
30.0	76.7	148.5	7.1												
32.0	75.6	147.9	6.9												
34.0	74.5	147.4	6.7												
36.0	73.4	146.8	6.6												
38.0	72.3	146.2	6.4												
40.0	71.2	145.5	6.2												
40.2				73.0	146.2	6.4									
42.0	70.1	144.8	6.1	72.0	145.6	6.4									
44.0	69.0	144.0	6.0	70.9	144.9	6.3									
46.0	67.9	143.2	5.6	69.8	144.2	6.1									
48.0	66.8	142.4	5.1	68.7	143.4	6.0									
50.0	65.6	141.5	4.8	67.5	142.6	5.9									
55.0	62.7	139.0	4.0	64.7	140.4	5.5									
59.7							65.0	139.5	5.3						
60.0	59.8	136.2	3.2	61.8	137.8	5.2	64.8	139.3	5.3						
65.0	56.7	133.1	2.4	58.8	134.9	4.7	61.9	136.8	5.2						
70.0				55.7	131.6	4.2	58.9	133.9	5.0						
75.0				52.4	127.9	3.8	55.8	130.7	4.8						
80.0				49.0	123.8	3.2	52.6	127.0	4.6						
82.6										55.0	127.3	3.6			
85.0				45.5	119.1	2.3	49.2	122.9	4.4	53.7	125.9	3.2			
86.0				44.7	118.1	2.1									
90.0							45.7	118.2	4.0	50.4	121.9	2.3			
92.0										49.1	120.2	2.0			
95.0							41.9	112.9	3.3						
100.0							38.3	107.6	2.5						
103.0							35.7	103.6	2.1						



2821-1

2821-1

Nº de ident.: 9842523/95738/

Radio de descarga: 36

Pieza de articulación de pluma principal:

360 ° Cabeza de pluma principal:

		gulo de principa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				38.0		eza de p	ll, Punto lumín (1 n] Posici	916-1) 3:	2.5 m Pl	eza de p umín	lumín				
11.2	78.0	72.7	43.0												
12.0	76.6	72.5	42.5												
13.0	74.8	72.3	40.6												
14.0	73.0	72.0	38.9												
16.0	69.2	71.2	36.1												
17.3				73.0	71.6	37.1									
18.0	65.4	70.4	33.0	71.8	71.4	36.9									
20.0	61.4	69.3	30.9	68.0	70.6	34.3									
22.0	57.2	68.1	28.4	64.1	69.7	31.7									
24.0	52.9	66.6	26.5	60.1	68.6	29.9									
26.0	48.3	64.9	24.7	55.9	67.3	28.1									
26.8							65.0	68.8	31.5						
28.0	43.2	62.9	22.8	51.4	65.8	26.8	62.7	68.2	31.1						
30.0	37.7	60.5	21.2	46.7	64.0	25.2	58.6	67.0	29.8						
32.0	31.3 23.4	57.5 53.4	19.9 18.5	41.5 35.8	61.9	23.8	54.3	65.6	28.3 27.2						
34.0	18.2		18.5	35.8	59.3	22.6	49.8	64.0	21.2						
35.0 36.0	18.2	50.7	17.8	29.0	56.0	20.9	44.9	62.1	25.5						
37.8				29.0	36.0	20.9	44.9	02.1	25.5	55.0	63.4	25.1			
38.0				20.2	51.4	19.0	39.5	59.8	24.2	55.0	63.4	26.0			
39.0				16.2	49.3	15.1	39.3	39.0	24.2	33.0	03.4	20.0			
40.0				10.2	43.5	13.1	33.5	57.0	22.9	50.4	61.8	25.0			
42.0				i			26.2	53.4	21.3	45.6	59.9	23.9			
44.0				i			15.9	47.9	19.6	40.3	57.7	22.7			
46.0										34.4	55.0	21.7			
48.0										27.3	51.5	20.8			
50.0										17.7	46.5	19.9			
56.4													35.0	47.3	14.5
60.0													22.2	40.9	14.6
61.0													16.6	37.9	14.3



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

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

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

		gulo de principa			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]
				38.0 ı		eza de p	al, Punto dumín (1: n] Posicio	916-1) 3	5.5 m Pl		lumín		_		
11.9	78.0	75.7	37.8							I					
12.0	77.8	75.6	37.8							i					
13.0	76.1	75.4	36.7							Ī					
14.0	74.4	75.1	35.2			İ		İ	İ	İ		İ	İ		
16.0	71.0	74.5	32.3												
18.0	67.6	73.7	30.0												
18.2				73.0	74.5	32.3									
20.0	64.0	72.7	27.8	69.9	73.9	30.8									
22.0	60.3	71.6	26.1	66.4	73.0	28.7									
24.0	56.5	70.4	24.4	62.8	72.0	27.0									
26.0	52.5	68.9	23.0	59.1	70.9	25.5									
28.0	48.2	67.2	21.7	55.2	69.6	24.2	65.0	71.5	26.2						
30.0	43.7	65.2	20.3	51.2	68.0	23.2	61.5	70.5	26.7	•			<u> </u>		
32.0	38.7	62.8	19.1	46.8	66.2	21.8	57.7	69.3	25.6						
34.0	33.1	60.0	18.1	42.1	64.1	20.7	53.8	67.9	24.4						
36.0	26.4	56.3	17.0	37.0	61.6	19.7	49.6	66.2	23.4						
38.0	17.3	51.1	15.8	31.1	58.6	18.5	45.2	64.4	22.1						
39.6										55.0	65.9	22.7			
40.0				23.9	54.6	17.3	40.3	62.1	20.9	54.4	65.6	23.7			
42.0				15.5	49.6	14.3	34.9	59.4	20.0	50.2	64.0	22.7			
44.0							28.7	56.1	18.9	45.8	62.2	21.7			
46.0							20.6	51.6	17.7	41.1	60.0	20.6			
47.0							15.1	48.3	17.1						
48.0										35.8	57.4	19.8			
50.0										29.6	54.2	19.0			
53.0										16.9	46.9	17.7			
58.9													35.0	49.1	13.7
60.0													32.3	47.6	14.3
64.0													15.9	38.3	13.3



Nº de ident.: 9842523/95738/

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

360° Cabeza de plu - Vía ancha

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

		gulo de 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]
				38.0 ı		eza de p	al, Punto llumín (1 n] Posici	916-1) 3	8.5 m Pli	eza de p umín	lumín				
12.5 13.0 14.0 16.0 18.0	78.0 77.2 75.7 72.6 69.4	78.6 78.5 78.2 77.6 76.9	33.8 33.8 32.3 29.8 27.9	73.0	77.4	28.7									
20.0 22.0 24.0 26.0 28.0	66.2 62.9 59.4 55.9	76.1 75.1 73.9 72.6 71.1	25.8 24.1 22.8 21.5 20.5	71.6 68.4 65.1 61.8 58.3	77.1 76.3 75.4 74.4 73.2	28.4 26.5 24.9 23.7 22.5									
29.3 30.0 32.0 34.0 36.0	48.2 44.1 39.5 34.5	69.4 67.4 65.1 62.4	19.5 18.4 17.4 16.7	54.7 50.9 46.9 42.6	71.8 70.3 68.5 66.4	21.4 20.6 19.5 18.4	65.0 63.9 60.5 57.0	74.2 73.9 72.8 71.6 70.1	23.4 24.7 23.6 22.7 21.6						
38.0 40.0 41.0 41.3	28.7 21.4 16.6	59.0 54.6 51.5	15.7 14.8 14.4	38.0 32.7 26.5	64.0 61.1	17.5 16.7	49.5 45.4 41.0	68.5 66.6	20.8 19.7	55.0 53.9	68.3 67.9	20.6 21.8			
42.0 44.0 46.0 48.0 50.0				18.5	52.4	15.0	36.1 30.6 23.9 16.4	64.4 61.8 58.7 54.7 49.9	16.7 17.8 17.0 16.2 13.1	50.1 46.0 41.7 36.9	66.3 64.4 62.3 59.8	20.9 20.1 19.1 18.3			
55.0 56.0 61.3 65.0 67.0										21.0 16.2	50.4 47.3	16.4 16.0	35.0 24.4 15.2	50.8 44.5 38.7	12.8 12.8 12.4



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 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]
				38.0 ı	m Pluma Cab	eza de p	il, Punto lumín (1 n] Posici	916-1) 4	1.5 m Pl	eza de p umín	lumín				
13.1	78.0	81.5	30.2												
14.0	76.7	81.3	29.9												
16.0	73.9	80.8	27.8												
18.0	71.0	80.1	25.7												
20.0	68.0	79.3	24.0	73.0	80.2	25.8									
22.0	65.0	78.4	22.3	70.0	79.5	24.6									
24.0	61.9	77.4	21.1	67.0	78.7	23.1									
26.0 28.0	58.7 55.3	76.2 74.9	19.9 18.8	64.0 60.9	77.8 76.7	21.8 20.8									
30.0	51.9	73.4	18.0	57.6	75.7 75.5	19.7									
30.6	51.9	73.4	16.0	57.0	75.5	19.7	65.0	76.9	22.1						
32.0	48.2	71.6	17.1	54.3	74.1	18.8	62.9	76.9	21.8						
34.0	44.4	69.7	16.2	50.7	72.5	18.1	59.7	75.1	20.8						
36.0	40.2	67.4	15.4	47.0	70.7	17.1	56.4	73.8	19.9				i		
38.0	35.6	64.8	14.7	43.1	68.7	16.2	53.0	72.4	19.0						
40.0	30.5	61.6	14.0	38.8	66.3	15.5	49.4	70.7	18.3						
42.0	24.3	57.6	13.2	34.1	63.5	14.8	45.6	68.8	17.3						
43.0										55.0	70.8	18.0	İ		
44.0	16.0	51.9	12.4	28.6	60.1	14.0	41.6	66.7	16.4	53.5	70.1	19.2			
46.0				22.0	55.7	13.3	37.1	64.2	15.7	49.9	68.5	18.4			
47.0				17.8	52.8	12.9									
48.0							32.2	61.2	15.0	46.2	66.7	17.7			
50.0							26.4	57.5	14.3	42.2	64.6	16.8			
53.0							15.8	50.3	11.4						
55.0										30.2	57.5	15.1			
59.0										15.5	47.7	13.7			
63.8													35.0	52.5	12.1
65.0													32.5	51.0	12.6
70.0													16.4	40.3	10.6



2821-1

2821-1

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

		gulo de principa			gulo de orincipa		75° Án	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]
				38.0		eza de p	al, Punto dumín (1 n] Posici	916-1) 4	4.5 m Pl		lumín				
13.7	78.0	84.5	27.4												
14.0	77.7	84.4	27.4												
16.0	75.0	83.9	25.8	•											
18.0	72.3	83.3	24.0												
20.0	69.6	82.6	22.5												
20.8				73.0	83.1	23.3									
22.0	66.8	81.7	20.9	71.4	82.7	23.0									
24.0	63.9	80.8	19.6	68.7	82.0	21.5									
26.0	61.0 58.0	79.7	18.5	65.9 63.0	81.1	20.3									
28.0 30.0	54.9	78.5 77.1	17.5 16.6	60.1	80.1 79.0	19.4 18.5									
31.8	54.9	//.1	10.0	60.1	79.0	16.5	65.0	79.7	18.7						
32.0	51.6	75.6	15.9	57.0	77.7	17.5	64.8	79.7	19.9						
34.0	48.2	73.9	15.9	53.9	76.3	16.7	61.9	78.6	19.3						
36.0	44.6	71.9	14.4	50.6	74.7	16.0	59.0	77.4	18.5						
38.0	40.8	69.7	13.7	47.1	72.9	15.2	55.9	76.1	17.6						
40.0	36.6	67.2	13.1	43.4	70.9	14.4	52.7	74.6	16.8						
42.0	31.9	64.1	12.5	39.5	68.6	13.8	49.3	73.0	16.2						
44.0	26.6	60.5	11.8	35.2	65.9	13.2	45.8	71.1	15.3						
44.7										55.0	73.2	15.9			
46.0	19.8	55.6	11.2	30.3	62.7	12.5	42.0	69.0	14.6	53.1	72.4	17.0			
47.0	15.4	52.3	10.9												
48.0				24.6	58.7	11.9	38.0	66.5	13.9	49.8	70.7	16.3			
50.0				17.1	53.3	11.2	33.5	63.7	13.3	46.3	68.9	15.7			
55.0	-						18.3	53.0	11.7	36.4	63.1	14.0			
56.0							15.2	50.7	9.9						
60.0										23.2	54.1	12.5			
62.0										16.6	49.3	10.0	05.0		44.4
66.2													35.0	54.2	11.4
70.0				-									25.8 15.8	48.0 40.7	11.3 9.7
73.0	l												15.8	40.7	9.7



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

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

Valor de vuelco: 2 - Vía ancha Lastre trasero [t]: 124.0 Lastre central [t]: 52.6 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]
				38.0 ו		eza de p	ıl, Punto lumín (19 n] Posici	916-1) 4	7.5 m Pl	eza de p umín	lumín				
14.4 16.0 18.0 20.0 21.7	78.0 76.0 73.5 70.9	87.4 87.0 86.4 85.8	24.3 23.5 22.2 20.8	73.0	86.0	20.8									
22.0 24.0 26.0 28.0 30.0	68.3 65.7 63.0 60.2 57.4	85.0 84.1 83.1 82.0 80.8	19.8 18.8 18.0 17.3 16.6	72.6 70.1 67.5 64.8 62.1	85.9 85.2 84.4 83.5 82.4	20.8 20.0 19.2 18.4 17.9									
32.0 33.1 34.0 36.0	54.5 51.4 48.2	79.4 77.8 76.1 74.2	16.1 15.6 14.9	59.3 56.5 53.5	81.3 80.0 78.6	17.3 16.7 16.2	65.0 63.9 61.1	82.4 82.0 80.9	17.8 18.4 17.8 17.3						
38.0 40.0 42.0 44.0 46.0 46.4	44.9 41.3 37.4 33.2 28.4	72.0 69.5 66.6 63.2	14.1 13.3 12.7 12.1 11.5	50.4 47.2 43.8 40.1 36.1	77.0 75.2 73.2 70.9 68.3	15.7 15.0 14.4 13.8 13.3	58.3 55.4 52.4 49.3 46.0	79.7 78.4 76.9 75.2 73.3	16.7 16.3 15.8 15.1	55.0	75.7	15.6			
48.0 50.0 53.0 55.0 58.0	22.6 16.4	58.8 53.9	10.8 9.2	31.7 26.7 16.5	65.2 61.5 53.7	12.6 11.8 10.7	42.5 38.7 27.4 17.7	71.2 68.8 60.9 53.5	14.5 13.9 12.4 11.3	52.8 49.7 41.1	74.6 73.0 67.9	16.2 15.8 14.4			
60.0 65.0 68.7 70.0 75.0										30.7 16.1	60.9 49.7	13.0 10.8	35.0 32.6 18.2 15.3	55.9 54.3 43.4 41.1	10.7 11.0 10.0 9.2



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

2821-1 Cabeza de pluma principal: 2821-1

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

		gulo de orincipal			gulo de orincipa			gulo de orincipa		65° Án I	gulo de orincipa	pluma I		gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				38.0 ו	n Pluma	principa	I, Punto	de carga	1 - Cab	eza de p	lumín		=		
					Cab		lumín (19 1 Posici								
15.0	78.0	90.3	22.2												
16.0	76.8	90.1	22.0												
18.0	74.5	89.6	20.9												
20.0	72.1	88.9	19.8												
22.0	69.7	88.2	19.0												
22.6				73.0	88.8	19.3									
24.0	67.2	87.4	18.3	71.3	88.4	19.0									
26.0	64.7	86.5	17.7	68.9	87.6	18.4									
28.0	62.2	85.5	17.2	66.4	86.8	18.0									
30.0	59.6	84.3	16.7	63.9	85.8	17.5									
32.0	56.9	83.1	16.3	61.4	84.8	17.2									
34.0 34.4	54.1	81.6	16.0	58.7	83.6	16.8	65.0	85.1	17.6	ł			ł		
36.0	51.2	80.1	15.7	56.0	82.3	16.4	63.0	84.3	17.6	ł			ł		
38.0	48.2	78.4	15.7	53.2	80.8	16.2	60.4	83.2	17.4						
40.0	45.1	76.4	14.1	50.3	79.2	15.8	57.7	82.0	16.8						
42.0	41.7	74.3	13.4	47.2	77.4	15.2	55.0	80.6	16.4						
44.0	38.2	71.8	12.7	44.0	75.4	14.7	52.2	79.1	16.2	i					
46.0	34.3	69.0	12.1	40.6	73.2	14.2	49.2	77.4	15.9	İ			İ		
48.0	29.9	65.8	11.4	36.9	70.6	13.8	46.1	75.6	15.3						
48.2										55.0	78.2	15.3			
50.0	24.9	61.8	10.8	32.9	67.7	13.1	42.8	73.5	14.7	52.6	76.9	15.8			
53.0	15.9	54.4	9.2												
55.0				19.8	57.3	10.9	33.5	67.0	13.5	44.9	72.4	15.2			
56.0				16.0	54.1	10.4									
60.0							20.8	56.9	11.6	36.1	66.4	13.8			
61.0							17.2	53.9	11.2						
65.0										24.6	57.7	12.4			
68.0										15.5	50.1	11.4	25.0	F 7 7	40.4
71.2										-			35.0	57.7	10.1 10.0
75.0													26.9	51.5	
78.0	l								l .	I .			17.6	43.9	9.3



N° de ident.: 9842523/95738/

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

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

		gulo de orincipa		ı	gulo de orincipa		ı	gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				38.0	m Pluma Cab	eza de p	al, Punto dumín (19 n] Posici	916-1) 5	3.5 m Plı	eza de p umín	lumín				
15.6	78.0	93.3	20.1												
16.0	77.6	93.2	20.1												
18.0	75.4	92.7	19.2												
20.0	73.1	92.1	18.3												
22.0 23.5	70.9	91.4	17.4	73.0	91.7	17.4									
24.0	68.6	90.7	16.8	73.0 72.4	91.7	17.4									
26.0	66.3	89.8	16.3	70.1	90.8	16.9									
28.0	63.9	88.8	15.8	67.8	90.1	16.6									
30.0	61.5	87.8	15.5	65.5	89.2	16.1									
32.0	59.0	86.6	15.1	63.1	88.2	15.8									
34.0	56.4	85.3	14.8	60.7	87.1	15.5									
35.6							65.0	87.8	15.3						
36.0	53.8	83.9	14.5	58.2	85.9	15.2	64.6	87.7	15.9						
38.0	51.1	82.3	14.3	55.6	84.5	14.9	62.2	86.6	15.7						
40.0	48.2	80.6 78.7	13.7	52.9	83.1	14.7 14.4	59.8	85.5	15.4 15.2						
42.0 44.0	45.3 42.1	76.7	13.0 12.3	50.2 47.3	81.4 79.7	13.9	57.2 54.6	84.3 82.9	14.9						
46.0	38.8	74.1	11.7	44.3	77.7	13.5	51.9	81.3	14.5						
48.0	35.2	71.4	11.2	41.1	75.5	13.1	49.1	79.7	14.4						
49.9										55.0	80.6	13.9			
50.0	31.2	68.3	10.7	37.7	73.0	12.7	46.2	77.8	13.9	55.0	80.6	14.4			
55.0	18.0	57.1	9.3	27.5	65.0	11.1	38.1	72.2	12.9	48.1	76.6	14.1			
56.0	15.4	54.7	8.4												
59.0				15.5	54.5	9.5									
60.0							28.2	64.3	11.6	40.3	71.3	13.1			
64.0 65.0				I			16.7	54.4	10.3	31.0	64.2	12.1			
70.0				l						17.7	52.9	10.7			
71.0										15.1	50.5	10.7			
73.6													35.0	59.4	9.5
75.0													32.7	57.6	9.7
80.0				[19.6	46.6	8.6
81.0													15.9	43.3	8.4



Nº de ident.: 9842523/95738/

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

Valor de vuelco: Lastre trasero [t]:

Lastre central [t]:

2 - Vía ancha 124.0

52.6

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

	88° Án	gulo de orincipa	pluma I	83° Án	gulo de orincipa	pluma I	l	gulo de orincipa	pluma I	65° Án I	gulo de orincipa	pluma I	45° Án	gulo de orincipa	pluma
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				38.0 ı		eza de p	lumin (1	916-1) 5	6.5 m Pl		lumín				
						25.0 [m	n] Posici	ón midfa	II (1916)	_					
16.2	78.0	96.2	18.3												
18.0	76.2	95.8	17.8												
20.0	74.1	95.2	17.0												
22.0	71.9	94.6	16.1												
24.0	69.8	93.9	15.5												
24.4				73.0	94.6	15.9									
26.0	67.6	93.1	15.1	71.2	94.0	15.7									
28.0	65.4	92.2	14.7	69.1	93.3	15.3									
30.0	63.1	91.2	14.4	66.9	92.5	15.0									
32.0	60.8	90.1	14.1	64.6	91.5	14.6									
34.0	58.4	88.9	13.8	62.4	90.5	14.4									
36.0	56.0	87.6	13.6	60.0	89.4	14.1									
36.9							65.0	90.5	14.0						
38.0	53.5	86.1	13.4	57.7	88.2	13.9	63.8	90.0	14.5						
40.0	50.9 48.2	84.6	13.2	55.2	86.8	13.6	61.5	89.0	14.3						
42.0		82.8	12.7	52.7	85.3	13.4	59.2	87.8	14.1						
44.0	45.4	80.9	12.1 11.5	50.1 47.3	83.7	13.2	56.8	86.5 85.1	13.8						
46.0 48.0	42.5 39.3	78.8 76.4	11.5	44.5	81.9 79.9	12.8 12.5	54.3 51.7	83.6	13.6 13.4						
50.0	36.0	73.8	10.5	44.5	79.9	12.3	49.1	81.9	13.4						
51.6	30.0	13.0	10.5	41.0	11.1	12.2	49.1	01.8	13.2	55.0	83.1	12.7			
55.0	25.9	65.3	9.3	33.0	71.0	11.2	41.9	76.9	12.3	50.8	80.5	13.1			
58.0	17.5	57.5	9.5 8.5	33.0	71.0	11.2	41.5	10.8	12.3	30.0	00.5	13.1			
60.0	17.5	57.5	0.0	21.7	61.1	9.5	33.5	70.3	11.5	43.8	75.8	12.5			
62.0				15.1	54.9	8.8	55.0	. 5.0	. 1.0	.5.0	. 5.0	0			
65.0					<u> </u>	0.0	22.5	60.7	10.1	35.8	69.7	11.7			
00.0	1					1	22.0	J 55.7	10.1	J 55.5	55.7	11.7	1		

16.2

54.8

9.5

25.7

17.2

61.2

53.3

10.6

9.9

27.7

67.0

70.0

73.0

80.0

84.0

8.5 7.7

54.9



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

360

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

38/	Pieza de articulación de pluma principal:	2821-1
0°	Cabeza de pluma principal:	2821-1
cha		

		gulo de orincipal		83° Án	gulo de orincipa	pluma I		gulo de orincipa			gulo de orincipa		45° Án I	gulo de orincipa	pluma I
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				38.0 ו		eza de p	ıl, Punto lumín (19 n] Posici	916-1) 5	9.5 m Pl	eza de p umín	lumín		-		
16.9 18.0 20.0 22.0 24.0 25.2	78.0 76.9 74.9 72.9 70.8	99.1 98.9 98.4 97.8 97.1	15.9 15.7 14.9 14.2 13.6	73.0 72.2	97.5 97.2	13.8 13.7									
26.0 28.0 30.0 32.0 34.0 36.0	68.8 66.7 64.5 62.3 60.1 57.8	96.3 95.5 94.5 93.5 92.4 91.1	12.8 12.5 12.3 12.1 11.8	70.2 68.1 66.0 63.8 61.6	96.5 95.7 94.8 93.9 92.8	13.4 13.1 12.8 12.5 12.3									
38.0 38.2 40.0 42.0	55.5 53.1 50.6	89.8 88.3 86.7	11.6 11.4 11.3	59.4 57.1 54.7	91.6 90.4 89.0	12.1 11.8 11.6	65.0 63.0 60.8	93.3 92.3 91.2	12.6 12.5 12.2						
44.0 46.0 48.0 50.0	48.0 45.3 42.5 39.5	84.9 83.0 80.8 78.5	10.9 10.5 10.1 9.7	52.3 49.8 47.2 44.4	87.4 85.8 84.0 82.0	11.5 11.3 11.1 10.8	58.6 56.2 53.9 51.4	90.0 88.7 87.3 85.7	12.0 11.8 11.6 11.5						
53.3 55.0 60.0 61.0 65.0	31.0 19.3 16.0	71.2 60.2 56.9	8.9 7.8 7.5	36.9 27.7 15.9	76.0 67.8 56.5	10.4 9.2 7.4	44.8 37.3 28.2	81.1 75.2 67.2	11.0 10.6 9.6	55.0 53.0 46.6 39.4	85.5 84.3 79.9	11.3 11.3 11.0			
70.0 75.0 76.0 78.5 80.0				13.8	30.3	7.4	16.9	56.3	8.2	30.8 19.1 15.7	67.1 56.0 52.7	10.0 9.0 8.8	35.0 32.4	62.8 60.5	8.4 8.2
85.0 87.0													23.0 17.3	51.9 46.3	7.3 6.9



2821-1

2821-1

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

		gulo de orincipal			gulo de orincipa			gulo de principa			gulo de orincipa		45° Án I	gulo de orincipa	pluma I
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				38.0 i		eza de p	al, Punto dumín (19 n] Posicio	916-1) 6	2.5 m Pl		lumín		-		
17.5 18.0 20.0 22.0 24.0	78.0 77.6 75.7 73.7 71.8	102.1 102.0 101.5 100.9 100.3	14.4 14.4 13.7 13.1 12.6												
26.0 26.1 28.0 30.0 32.0	69.8 67.9 65.8 63.8	99.5 98.7 97.9 96.9	12.2 11.8 11.5 11.3	73.0 71.2 69.2 67.2	100.3 99.7 98.9 98.1	12.5 12.4 12.0 11.8									
34.0 36.0 38.0 39.5 40.0	61.7 59.6 57.4 55.1	95.8 94.7 93.4 92.0	11.1 10.9 10.7	65.2 63.1 61.0 58.9	97.2 96.2 95.1 93.9	11.5 11.3 11.1	65.0 64.4	96.0 95.7	11.4 11.4						
42.0 44.0 46.0 48.0 50.0	52.9 50.5 48.0 45.5 42.8	90.5 88.9 87.1 85.2 83.1	10.3 10.1 9.8 9.5 9.3	56.7 54.4 52.1 49.7 47.2	92.6 91.2 89.7 88.0 86.2	10.6 10.5 10.3 10.2 10.0	62.4 60.2 58.1 55.9 53.6	94.7 93.5 92.3 91.0 89.5	11.4 11.2 11.0 10.8 10.6 10.5						
55.0 55.1 60.0 64.0 65.0	35.4 26.2 15.6	76.8 68.2 57.3	9.3 8.7 7.7 6.9	47.2 40.5 32.6 22.5	80.9 73.9 64.1	9.7 9.1 7.9	47.6 40.9 33.1	85.3 80.0 73.2	9.9	55.0 49.2 42.7	88.0 84.0 79.1	10.2 10.0 9.8			
68.0 70.0 73.0 75.0 79.0				15.5	56.9	6.8	23.1 16.5	63.6 56.8	8.4 7.4	35.2 26.0 15.3	79.1 72.7 64.0 53.1	9.8 9.6 8.9 8.1			
81.0 85.0 90.0										15.3	53.1	0.1	35.0 27.8 16.9	64.5 57.8 46.8	7.9 7.1 6.3



N° de ident.: 9842523/95738/ P

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

Valor de vuelco:

Lastre trasero [t]:

Lastre central [t]:

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

	88° Án	gulo de orincipa	pluma		gulo de orincipa			gulo de principa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				38.0	m Pluma Cab	eza de p	al, Punto llumín (1 n] Posici	916-1) 6	5.5 m Pl	eza de p umín	lumín				
18.2	78.0	105.0	13.1												
20.0	76.3	104.6	12.8												
22.0	74.5	104.0	12.2												
24.0	72.7	103.4	11.7												
26.0	70.8	102.7	11.3												
27.0				73.0	103.2	11.5									
28.0	68.9	102.0	11.0	72.1	102.9	11.5									
30.0	67.0	101.1	10.7	70.2	102.2	11.2							<u> </u>		
32.0	65.1	100.2	10.4	68.3	101.4	10.9									
34.0	63.1	99.2	10.2	66.4	100.5	10.7									
36.0	61.1	98.1	10.0	64.5	99.6	10.4									
38.0	59.1	97.0	9.8	62.5	98.5	10.2									
40.0	57.0	95.7	9.6	60.5	97.4	10.0									
40.7							65.0	98.7	10.4						
42.0	54.8	94.3	9.4	58.4	96.2	9.8	63.7	98.1	10.4						
44.0	52.6	92.8	9.2	56.3	94.9	9.6	61.8	97.0	10.2						
46.0	50.4	91.2	9.1	54.1	93.5	9.4	59.7	95.8	10.0						
48.0	48.0	89.4	8.8	51.9	91.9	9.3	57.6	94.6	9.8						
50.0	45.6	87.5	8.6	49.6	90.3	9.1	55.5	93.2	9.6						
55.0	39.0	81.8	8.0	43.5	85.4	8.7	50.0	89.3	9.3						
56.8										55.0	90.4	9.3			
60.0	31.2	74.5	7.4	36.6	79.3	8.3	43.9	84.6	8.9	51.4	88.0	9.1			
65.0	21.0	64.0	6.6	28.3	71.2	7.6	37.0	78.5	8.6	45.5	83.4	8.9			
67.0	15.2	57.7	6.3												
70.0				16.4	58.7	6.7	28.8	70.6	8.0	38.9	77.8	8.6			
71.0				15.2	57.3	6.1									
75.0							17.3	58.5	7.3	31.1	70.4	8.3			
76.0							16.1	57.2	6.6	00.0	50.0	7.7			
80.0										20.8	59.9	7.7			
82.0										17.0	55.7	6.8	35.0	66.3	7.1
83.4 85.0													35.0 32.5	63.9	6.9
90.0							Ī						32.5 24.2	55.5	6.1



2821-1

2821-1

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

		gulo de 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]
				38.0 ı	m Pluma Cab	eza de p	il, Punto lumín (1 i] Posici	916-1) 6	8.5 m Pli	eza de p umín	lumín				
18.8 20.0 22.0 24.0 26.0 27.9	78.0 77.0 75.2 73.5 71.7	107.9 107.7 107.1 106.6 105.9	12.0 11.9 11.3 10.9 10.6	73.0	106.1	10.6									
28.0 30.0 32.0 34.0 36.0	69.9 68.1 66.3 64.4 62.5	105.2 104.4 103.5 102.6	10.3 10.0 9.8 9.5	72.9 71.1 69.3 67.5	106.0 105.3 104.6 103.8	10.6 10.5 10.2 10.0 9.8									
38.0 40.0 42.0 44.0	60.6 58.6 56.6 54.6	100.5 99.2 97.9 96.5	9.1 8.9 8.7 8.5	63.8 61.9 60.0 58.0	101.9 100.9 99.7 98.5	9.5 9.4 9.2 8.9	65.0 63.1	101.4 100.4	9.6 9.5						
46.0 48.0 50.0 55.0 58.5	52.4 50.3 48.0 42.0	95.0 93.4 91.6 86.5	8.3 8.2 7.9 7.5	56.0 53.9 51.8 46.1	97.2 95.7 94.2 89.7	8.7 8.6 8.4 7.9	61.2 59.2 57.3 52.1	99.3 98.1 96.9 93.2	9.3 9.2 9.0 8.5	55.0	92.9	8.5			
60.0 65.0 70.0 73.0 75.0	35.2 26.9 16.8	80.1 71.6 60.4	7.1 6.5 5.4	39.9 32.7 23.6 16.0	84.2 77.3 67.7 59.1	7.5 7.1 6.5 6.1	46.5 40.3 33.1 24.2	88.8 83.4 76.5	8.1 7.7 7.4 6.9	53.4 47.9 41.9 35.1	91.8 87.6 82.5 76.0	8.5 8.1 7.8			
79.0 80.0 85.0 85.9 90.0							15.7	57.6	5.9	26.8 16.6	67.5 56.2	7.2 6.2	35.0 29.4	68.0 62.2	6.5 5.9
95.0 96.0													18.9 16.1	50.9 47.6	5.2 5.0



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

360°

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

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

		gulo de principa			gulo de orincipa			gulo de orincipa			gulo de orincipa		45° Án	gulo de orincipa	pluma I
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				38.0 ו		eza de p	al, Punto dumín (19 n] Posici	916-1) 7	1.5 m Pl	eza de p umín	lumín				
19.4	78.0	110.9	10.8												
20.0	77.5	110.7	10.8												
22.0	75.9	110.3	10.4												
24.0	74.2	109.7	10.0												
26.0	72.5	109.1	9.6												
28.0	70.8	108.4	9.4												
28.8	00.4	407.0	9.2	73.0 71.9	108.9	9.6 9.5									
30.0 32.0	69.1 67.3	107.6 106.8	8.9	71.9	108.5 107.8	9.5									
34.0	65.6	105.9	8.7	68.5	107.8	9.3									
36.0	63.8	103.9	8.5	66.8	106.2	8.9									
38.0	61.9	103.9	8.4	65.0	105.2	8.7									
40.0	60.1	102.8	8.2	63.2	103.3	8.5									
42.0	58.2	101.5	8.0	61.4	103.2	8.4				i			i		
43.3							65.0	104.1	8.6	İ			İ		
44.0	56.3	100.2	7.8	59.5	102.0	8.2	64.3	103.8	8.6						
46.0	54.3	98.8	7.7	57.6	100.8	8.0	62.5	102.7	8.5						
48.0	52.3	97.3	7.5	55.6	99.4	7.8	60.7	101.6	8.3						
50.0	50.2	95.6	7.4	53.7	98.0	7.7	58.8	100.4	8.2						
55.0	44.7	90.9	7.0	48.4	93.8	7.4	53.9	97.0	7.8						
60.0	38.5	85.2	6.7	42.7	88.8	7.1	48.7	92.9	7.5						
60.2										55.0	95.4	7.6			
65.0	31.4	77.9	6.3	36.3	82.6	6.8	43.1	88.0	7.2	50.1	91.6	7.4			
70.0	22.4	67.7	5.7	28.8	74.6	6.3	36.7	81.9	7.0	44.6	86.9	7.2			
73.0	16.5	60.8	4.9	40.5	00.0	c 7	00.0	74.0	0.0	20.4	04.4	7.0			
75.0				18.5	62.9 59.5	5.7 5.6	29.2	74.0	6.6	38.4	81.1	7.0			
76.0 80.0				15.7	59.5	5.0	19.2	62.5	6.2	31.3	73.8	6.8			
82.0				1			15.4	58.0	5.5	31.3	73.0	0.0			
85.0							10.4	00.0	0.0	22.2	63.6	6.5			
88.0										16.2	56.6	5.8			
88.4													35.0	69.7	5.9
90.0													33.4	68.1	5.6
95.0													25.1	59.0	4.9
99.0													15.7	48.0	4.4



N° de ident.: 9842523/95738/

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

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

		gulo de orincipa		ı	gulo de orincipa		ı	gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				38.0 ו	m Pluma Cab	eza de p	al, Punto dumín (19 n] Posici	916-1) 7	4.5 m Plı	eza de p umín	lumín				
20.0	78.0	113.8	9.8												
22.0	76.4	113.3	9.6												
24.0	74.8	112.8	9.1												
26.0	73.2	112.2	8.8												
28.0	71.6	111.6	8.6												
29.6	70.0	440.0	0.4	73.0 72.7	111.8 111.7	8.7 8.7									
30.0 32.0	70.0 68.3	110.9 110.1	8.4 8.2	72.7 71.1	111.7	8.7									
34.0	66.6	109.2	8.0	69.4	110.3	8.3									
36.0	64.9	108.2	7.8	67.8	109.5	8.2									
38.0	63.2	107.3	7.7	66.1	108.6	8.0									
40.0	61.4	106.2	7.6	64.4	107.6	7.8									
42.0	59.6	105.1	7.4	62.6	106.6	7.7							i		
44.0	57.8	103.8	7.3	60.9	105.5	7.5									
44.5							65.0	106.8	7.8						
46.0	56.0	102.5	7.1	59.1	104.3	7.4	63.7	106.1	7.8						
48.0	54.1	101.0	7.0	57.2	103.1	7.3	62.0	105.1	7.6						
50.0	52.1	99.5	6.9	55.4	101.7	7.1	60.2	103.9	7.5						
55.0	47.0	95.2	6.7	50.5	97.8	6.9	55.6	100.7	7.2						
60.0	41.4	89.9	6.4	45.2	93.2	6.7	50.8	96.9	6.9	55.0	07.0	0.0			
61.9 65.0	35.1	83.4	6.2	39.4	87.6	6.5	45.5	92.3	6.7	55.0 52.0	97.8 95.5	6.9 6.8			
70.0	27.5	75.0	5.6	39.4	80.6	6.2	39.8	92.3 86.8	6.6	46.9	95.5 91.1	6.6			
75.0	17.2	62.5	5.0	24.6	71.2	5.6	33.2	79.9	6.4	41.3	85.9	6.5			
76.0	16.1	61.2	4.4	20		0.0	00.2		0		00.0	0.0			
79.0				15.3	59.9	5.2									
80.0							25.1	70.7	6.0	35.0	79.4	6.4			
85.0							15.1	58.4	5.2	27.4	70.9	6.1			
90.0										16.9	58.3	5.8			
90.8													35.0	71.4	5.4
91.0										15.9	57.0	5.5			
95.0													29.7	65.6	4.9
100.0													20.5	54.7	4.2
102.0													15.4	48.4	3.9



2821-1

2821-1

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

		gulo de orincipal		83° Án I	gulo de orincipa	pluma I	75° Án	gulo de orincipa	pluma I		gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				38.0	m Pluma Cab	eza de p	il, Punto llumín (1 n] Posici	916-1) 7	7.5 m Pl		lumín				
20.7	78.0	116.7	8.8						<u> </u>						
22.0	77.0	116.4	8.7												
24.0	75.4	115.9	8.3												
26.0	73.9	115.4	8.0												
28.0	72.3	114.7	7.8												
30.0	70.8	114.0	7.6												
30.5				73.0	114.7	7.8									
32.0	69.2	113.3	7.4	71.8	114.2	7.8									
34.0	67.6	112.5	7.2	70.3	113.5	7.6									
36.0	65.9	111.6	7.1	68.7	112.7	7.4									
38.0	64.3	110.7	6.9	67.1	111.9	7.2									
40.0	62.6	109.6	6.8	65.4	111.0	7.0									
42.0	60.9	108.5	6.6	63.8	110.0	6.9									
44.0	59.2	107.4	6.5	62.1	108.9	6.8	05.0	400.0							
45.8	57.5	400.4	0.4	00.4	407.0	0.0	65.0	109.6	6.9						
46.0	57.5 55.7	106.1 104.7	6.4 6.3	60.4 58.7	107.8 106.6	6.6 6.5	64.8 63.2	109.5 108.5	6.9 6.8						
48.0 50.0	53.8	104.7	6.1	56.7 56.9	105.3	6.4	61.5	106.5	6.7						
55.0	49.1	99.2	5.9	52.3	103.3	6.1	57.1	107.4	6.4				ł		
60.0	43.9	94.4	5.7	47.4	97.4	5.9	52.6	100.8	6.1						
63.7	40.0	04.4	0.1	-777	01.4	0.0	02.0	100.0	0.1	55.0	100.3	6.0			
65.0	38.2	88.5	5.5	42.1	92.2	5.7	47.7	96.5	5.9	53.8	99.3	6.0			
70.0	31.6	81.2	5.2	36.1	86.0	5.5	42.4	91.4	5.8	49.0	95.2	5.8			
75.0	23.4	71.4	4.7	29.2	78.0	5.2	36.5	85.2	5.6	43.8	90.3	5.7			
79.0	15.8	61.6	4.0												
80.0				20.1	66.8	4.8	29.6	77.3	5.4	38.1	84.5	5.6			
82.0				15.0	60.3	4.7									
85.0							20.7	66.4	5.2	31.5	77.1	5.5			
87.0							15.8	60.2	5.1						
90.0										23.3	67.2	5.4			
93.3													35.0	73.1	4.8
94.0										15.6	57.4	4.9			
95.0													33.4	71.4	4.6
100.0													25.9	62.5	3.9
105.0													15.1	48.8	3.3



N° de ident.: 9842523/95738/

360 °

Pieza de articulación de pluma principal: 2821-1

Radio de descarga: Valor de vuelco: 2 - V

2 - Vía ancha

Cabeza de pluma principal: 2821-1

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

		guio de principal	pluma	1	gulo de orincipa		ı	gulo de orincipa			gulo de orincipa			gulo de orincipa	
ce	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				38.0 ı	m Pluma Cab	eza de p	il, Punto Iumín (19 1] Posici	916-1) 8	0.5 m Plı	eza de p umín	lumín				
21.3	78.0	119.7	8.0												
22.0	77.5	119.5	8.0												
24.0	76.0	119.0	7.7												
26.0	74.5	118.5	7.4												
28.0	73.0	117.9	7.2												
30.0	71.5	117.2	7.0												
31.4		440.5	0.0	73.0	117.5	7.1									
32.0	70.0	116.5	6.8	72.5	117.3	7.1									
34.0	68.5 66.9	115.7 114.9	6.6	71.0 69.5	116.7 115.9	6.9 6.7									
36.0 38.0	65.3	114.9	6.4 6.3	68.0	115.9	6.6									
40.0	63.7	113.0	6.1	66.4	114.3	6.4									
42.0	62.1	112.0	6.0	64.8	113.3	6.3									
44.0	60.5	110.8	5.9	63.2	112.3	6.1									
46.0	58.8	109.6	5.8	61.6	111.3	6.0									
47.1							65.0	112.3	6.2						
48.0	57.1	108.4	5.6	60.0	110.1	5.9	64.3	111.8	6.2						
50.0	55.4	107.0	5.5	58.3	108.9	5.7	62.6	110.8	6.1						
55.0	50.9	103.2	5.3	54.0	105.5	5.5	58.5	107.9	5.8						
60.0	46.1	98.7	5.1	49.4	101.4	5.3	54.2	104.5	5.5						
65.0	40.8	93.3	4.9	44.4	96.7	5.1	49.6	100.5	5.3						
65.4										55.0	102.7	5.3			
70.0	35.0	86.7	4.8	39.0	90.9	4.9	44.7	95.8	5.1	50.8	99.2	5.2			
75.0	28.0	78.4	4.4	32.8	83.9	4.7	39.3	90.1	5.0	46.0	94.6	5.0			
80.0	18.9	66.6	4.1	25.4	74.7	4.5	33.2	83.2	4.9	40.8	89.2	4.9			
82.0	15.5	62.0	3.6												
85.0				16.4	63.0	3.9	25.8	74.2	4.8	34.9	82.7	4.8			
90.0 95.0							15.5	60.6	4.7	27.9	74.3 62.4	4.8 4.8			
										18.7	6∠.4	4.8	25.0	74.9	4.3
95.7 97.0										15.3	57.8	4.3	35.0	74.9	4.3
100.0										10.5	0.10	4.3	30.0	68.9	3.8
105.0													21.8	58.5	3.0
107.0	j												17.4	52.7	2.9



N° de ident.: 9842523/95738/ Pie

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

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

		gulo de orincipa		ı	gulo de orincipa		ı	gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				38.0 ו	m Pluma Cab	eza de p	al, Punto dumín (19 n] Posici	916-1) 8	3.5 m Pl	eza de p umín	lumín				
21.9	78.0	122.6	7.2												
22.0	77.9	122.6	7.2												
24.0	76.5	122.1	7.0												
26.0	75.1	121.6	6.8												
28.0 30.0	73.7 72.2	121.0 120.4	6.6 6.4												
32.0	70.7	119.7	6.2												
32.3	70.7	119.7	0.2	73.0	120.4	6.4									
34.0	69.3	119.0	6.1	71.7	119.8	6.3				İ					
36.0	67.8	118.2	5.9	70.3	119.1	6.2									
38.0	66.3	117.3	5.7	68.8	118.4	6.0									
40.0	64.8	116.4	5.6	67.3	117.5	5.9									
42.0	63.2	115.4	5.5	65.8	116.6	5.7									
44.0	61.7	114.3	5.4	64.3	115.7	5.6									
46.0 48.0	60.1 58.5	113.1 111.9	5.3 5.1	62.7 61.2	114.7 113.6	5.5 5.4									
48.3	36.5	111.9	5.1	01.2	113.0	5.4	65.0	115.0	5.5						
50.0	56.8	110.6	5.0	59.6	112.4	5.2	63.7	114.2	5.5						
55.0	52.6	107.0	4.8	55.5	109.2	5.0	59.8	111.4	5.2	i					
60.0	48.1	102.8	4.6	51.1	105.4	4.8	55.7	108.2	5.0						
65.0	43.2	97.8	4.4	46.5	100.9	4.5	51.4	104.4	4.8						
67.1										55.0	105.2	4.7			
70.0	37.9	91.9	4.2	41.5	95.6	4.4	46.8	100.0	4.6	52.5	103.0	4.7			
75.0	31.7	84.5	4.0	35.9	89.3	4.2	41.8	94.8	4.4	48.0	98.8	4.5			
80.0 85.0	24.3 15.2	74.9 62.4	3.7 3.1	29.5 21.3	81.3 70.6	4.0 3.8	36.3 29.9	88.5 80.7	4.3	43.1 37.8	93.8 87.8	4.4			
88.0	15.2	02.4	3.1	16.1	63.4	3.3	29.9	00.7	4.2	31.0	07.0	4.3			
90.0				10.1	00.4	0.0	21.9	70.1	4.1	31.6	80.4	4.2			
93.0				l			15.2	61.0	4.0						
95.0										24.2	70.8	4.2			
98.2													35.0	76.6	3.7
99.0				1						16.0	59.6	4.1			
100.0				l									32.7	73.8	3.5
105.0													26.5	65.9 53.2	2.9
110.0													17.1	53.2	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 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]
				38.0		eza de p	il, Punto lumín (19 n] Posici	916-1) 8	6.5 m Pl		lumín				
22.5	78.0	125.6	6.5												
24.0	77.0	125.2	6.4												
26.0	75.6	124.7	6.2												
28.0	74.2	124.2	6.0												
30.0	72.8	123.5	5.8												
32.0 33.1	71.4	122.9	5.7	73.0	123.3	5.8									
34.0	70.0	122.2	5.5	73.0	123.3	5.8									
36.0	68.6	121.4	5.4	71.0	122.3	5.7									
38.0	67.2	120.6	5.3	69.6	121.6	5.5									
40.0	65.7	119.7	5.1	68.1	120.8	5.4									
42.0	64.2	118.7	5.0	66.7	119.9	5.2									
44.0	62.7	117.7	4.9	65.2	119.0	5.1									
46.0	61.2	116.6	4.8	63.8	118.1	5.0									
48.0	59.7	115.5	4.7	62.3	117.0	4.9									
49.6							65.0	117.7	5.0						
50.0	58.1	114.2	4.6	60.7	115.9	4.8	64.7	117.5	5.0						
55.0 60.0	54.1 49.8	110.8 106.8	4.4 4.2	56.8 52.7	112.8 109.2	4.6 4.4	60.9 57.0	114.9 111.8	4.8 4.6						
65.0	45.3	100.8	4.2	48.4	105.0	4.4	53.0	108.3	4.6						
68.8	40.0	102.2	7.0	70.7	100.0	7.2	33.0	100.5	7.7	55.0	107.6	4.3			
70.0	40.4	96.7	3.7	43.7	100.1	3.9	48.6	104.1	4.2	54.0	106.8	4.3			
75.0	34.9	90.1	3.6	38.6	94.3	3.8	44.0	99.3	4.0	49.8	102.8	4.1			
80.0	28.5	81.8	3.4	32.9	87.2	3.6	38.9	93.5	3.8	45.2	98.1	4.0			
85.0	20.3	70.5	3.2	26.0	78.2	3.4	33.2	86.5	3.7	40.3	92.6	3.8			
87.0	15.9	64.2	3.1												
90.0				16.8	65.1	3.3	26.5	77.6	3.6	34.8	86.0	3.7			
91.0				15.9	63.8	2.8	17.4	640	2.4	20.2	77.7	3.6			
95.0 96.0							17.4 16.5	64.9 63.6	3.4 3.0	28.3	77.7	3.6			
100.0							10.5	03.0	3.0	20.1	66.3	3.6			
100.6										20.1	00.5	3.0	35.0	78.3	3.3
100.0										15.7	60.0	3.5	55.0	70.0	3.5
105.0													30.3	72.3	2.8
110.0													22.8	62.1	2.3
112.0													19.0	56.8	2.1



2821-1

2821-1

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

		gulo de principa			gulo de orincipa			gulo de 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]
				38.0 ı		eza de p	il, Punto lumín (1 il Posici	916-1) 8	9.5 m Plı	eza de p umín	lumín		_		
23.2	78.0	128.5	5.8												
24.0	77.4	128.3	5.8												
26.0	76.1	127.8	5.5												
28.0	74.8	127.3	5.4					İ				İ	İ		
30.0	73.4	126.7	5.2												
32.0	72.1	126.1	5.0												
34.0	70.7	125.4	4.9	73.0	126.1	5.1									
36.0	69.4	124.6	4.8	71.7	125.5	5.0									
38.0	68.0	123.8	4.6	70.3	124.8	4.9									
40.0	66.6	123.0	4.5	68.9	124.0	4.7									
42.0	65.2	122.0	4.4	67.5	123.2	4.6									
44.0	63.7	121.1	4.3	66.1	122.3	4.5									
46.0	62.3	120.0	4.2	64.7	121.4	4.3									
48.0	60.8	118.9	4.1	63.3	120.4	4.2									
50.0	59.3	117.7	4.0	61.8	119.3	4.2	05.0	100.1	4.0						
50.9 55.0		444.5	3.8	50.4	440.4	3.9	65.0 62.0	120.4 118.3	4.3 4.2						
	55.5 51.5	114.5 110.7	3.8	58.1 54.2	116.4 113.0	3.9	58.3	118.3	3.9						
60.0 65.0	47.2	106.3	3.4	54.2	109.0	3.7	56.3 54.4	112.0	3.9						
70.0	42.6	101.2	3.2	45.7	104.4	3.4	50.3	108.1	3.6						
70.5	42.0	101.2	5.2	45.7	104.4	J. 4	30.3	100.1	3.0	55.0	110.1	3.6			
75.0	37.6	95.2	3.0	41.0	99.0	3.2	46.0	103.5	3.4	51.4	106.7	3.5			
80.0	31.9	87.8	2.9	35.8	92.6	3.1	41.3	98.2	3.3	47.1	102.3	3.3	i		
85.0	25.0	78.4	2.7	29.8	84.7	2.9	36.1	91.8	3.1	42.5	97.2	3.2	i		
90.0	15.6	64.6	2.5	22.4	74.3	2.7	30.1	84.0	3.0	37.5	91.1	3.1			
94.0				15.6	64.2	2.3									
95.0							22.8	73.8	2.9	31.8	83.8	3.0			
99.0							16.2	64.1	2.4						
100.0										24.9	74.3	2.9			
103.1													35.0	80.0	2.7
105.0										15.4	60.4	2.9	32.8	77.1	2.5
110.0													27.0	69.3	2.0



2821-1

2821-1

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

ce [m] p	Ángu- o de olumín [°]	Altura de rolda-	Carga	Á		ĺ	ļ	orincipa	pluma I		orincipal	pluma I		orincipa	pluma I
		nas [m]	[t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				38.0 r		eza de p	ıl, Punto lumín (19 ı] Posicio	916-1) 9:	2.5 m Pli	eza de p umín	lumín				
	78.0	131.4	5.1												
	77.9	131.4	5.1												
	76.6	130.9	5.0												
	75.3	130.4	4.8												
	74.0	129.8	4.7												
	72.7	129.2	4.5												
	71.4	128.5	4.3												
34.9				73.0	129.0	4.5									
	70.1	127.8	4.2	72.3	128.7	4.5									
	68.7	127.1	4.1	71.0	128.0	4.3									
	67.4	126.2	4.0	69.6	127.2	4.2									
	66.0	125.4	3.9	68.3	126.5	4.1									
	64.7	124.4	3.7	67.0	125.6	3.9									
	63.3	123.4	3.6	65.6	124.7	3.8									
	61.9	122.4	3.6	64.2	123.8	3.7									
	60.4	121.2	3.5	62.8	122.7	3.6									
52.1							65.0	123.2	3.7						
	56.8	118.1	3.3	59.2	119.9	3.4	63.0	121.7	3.6						
	52.9	114.5	3.1	55.5	116.7	3.2	59.4	118.9	3.4						
	48.9	110.4	2.9	51.6	112.9	3.0	55.7	115.7	3.2						
	44.6	105.6	2.7	47.5	108.6	2.9	51.9	112.0	3.0						
72.3	40.0	400.0	0.0	40.4	400.0	0.7	47.0	407.7	0.0	55.0	112.6	3.0			
	40.0	100.0	2.6	43.1	103.6	2.7	47.8	107.7	2.9	52.9	110.5	3.0			
	34.8	93.4	2.4	38.3	97.6	2.6	43.4	102.7	2.8	48.8	106.4	2.8			
85.0				32.9	90.5	2.5	38.6	96.8	2.6	44.5	101.6	2.7			
90.0 95.0				26.6	81.6	2.3	33.3 27.0	89.8 81.0	2.5 2.4	39.9	96.0 89.3	2.6 2.5			
100.0							27.0	81.0	2.4	34.7 28.7	89.3 81.1	2.5			
100.0										28.7	81.1 70.1	2.4			
105.0										21.2	70.1	2.3	35.0	81.7	2.3
108.0										15.1	60.7	2.3	32.9	78.9	2.0



N° de ident.: 9842523/95738/

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

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

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				38.0 ı		eza de p	ıl, Punto lumín (1 ı] Posici	916-1) 9	5.5 m Pl	eza de p umín	lumín		_		
24.4	78.0	134.4	4.7												
26.0	77.0	134.0	4.6												
28.0	75.8	133.5	4.5												
30.0	74.5	132.9	4.3												
32.0	73.3	132.4	4.2												
34.0	72.0	131.7	4.1												
35.8				73.0	131.9	4.1									
36.0	70.7	131.0	4.0	72.9	131.8	4.1									
38.0	69.4	130.3	3.9	71.6	131.1	4.1									
40.0	68.1	129.5	3.7	70.3	130.4	3.9									
42.0	66.8	128.6	3.6	69.0	129.7	3.8									
44.0	65.5	127.7	3.5	67.7	128.9	3.7									
46.0	64.2	126.8	3.4	66.4	128.0	3.6									
48.0	62.8	125.8	3.3	65.1	127.1	3.5									
50.0	61.5	124.7	3.3	63.7	126.1	3.4									
53.4							65.0	125.9	3.4						
55.0	57.9	121.7	3.0	60.3	123.4	3.2	63.9	125.1	3.4						
60.0	54.3	118.3	2.8	56.8	120.3	2.9	60.5	122.4	3.2						
65.0	50.5	114.4	2.6	53.1	116.7	2.7	57.0	119.3	3.0						
70.0	46.4	109.9	2.3	49.2	112.6	2.5	53.3	115.8	2.8						
74.0										55.0	115.0	2.7			
75.0							49.4	111.7	2.6	54.2	114.3	2.7			
80.0							45.3	107.0	2.3	50.4	110.4	2.5			
85.0										46.4	105.8	2.3			



Nº de ident.: 9842523/95738/

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

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

		gulo de principa		83° Án I	gulo de orincipa	pluma I	75° Án I	gulo de principa	pluma I		gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				41.0	m Pluma Cab	eza de p	al, Punto Jumín (2 n] Posici	316-1) 3	8.5 m Pl		lumín				
12.6 13.0 14.0 16.0 18.0 19.5 20.0 22.0 24.0 26.0 28.0 30.0 30.1 32.0 34.0 36.0 38.0 40.0 41.0	78.0 77.4 75.8 72.7 69.6 66.4 63.0 59.6 56.1 52.4 48.5 44.3 39.8 34.8 29.0 21.8 17.2	81.6 81.5 81.3 80.7 79.9 79.1 78.1 77.0 75.7 74.2 72.5 70.5 68.3 65.5 62.2 57.9 54.9	58.9 58.9 55.9 47.3 40.5 34.7 30.0 26.8 24.1 22.0 20.4 19.0 17.7 16.6 15.8 14.9 14.4	73.0 72.2 69.0 65.7 62.4 59.0 55.4 51.6 47.7 43.5 38.9 33.7	80.3 80.2 79.4 78.6 77.6 76.4 75.1 73.5 71.8 69.8 67.4 64.6	49.2 49.0 45.2 40.3 35.5 31.8 28.7 26.3 24.1 22.2 20.5 19.2	65.0 61.9 58.4 54.8 51.0 47.0	77.1 76.1 75.0 73.6 72.0 70.3	32.1 30.7 29.1 27.3 25.9 24.5						
42.0 42.6 44.0 45.0 46.0 48.0 50.0 51.0 55.0 57.0 63.4				27.8 20.2 15.0	61.1 56.5 53.1	18.0 16.8 16.2	42.8 38.1 32.9 26.7 18.7 15.1	68.2 65.8 62.9 59.3 54.3 52.0	23.2 22.1 21.2 20.4 19.5 15.1	55.0 52.5 48.6 44.5 40.0 25.9 17.6	71.0 70.0 68.3 66.4 64.1 56.2 50.9	20.6 20.8 20.0 19.2 18.3 16.6 15.9	35.0	52.9	10.9
65.0 69.0													31.3 15.9	50.8 41.3	10.9 9.7



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

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

Valor de vuelco: 2 - Vía ancha Lastre trasero [t]: 124.0 Lastre central [t]: 52.6 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]
				41.0		eza de p	al, Punto Jumín (2: n] Posici	316-1) 4	1.5 m Pl		lumín				
13.2	78.0	84.5	53.7	l					(/	I					
14.0	76.9	84.3	53.7												
16.0	74.0	83.8	46.5												
18.0	71.1	83.1	39.5												
20.0	68.2	82.4	34.4												
20.3				73.0	83.2	45.8									
22.0	65.1	81.5	29.6	70.6	82.6	44.4									
24.0	62.0	80.5	26.2	67.6	81.8	40.9				•					
26.0	58.8	79.3	23.7	64.6	80.9	35.8									
28.0	55.5	78.0	21.7	61.4	79.9	32.1									
30.0	52.1	76.4	20.0	58.2	78.7	28.9									
31.4							65.0	79.8	29.2						
32.0	48.4	74.7	18.7	54.9	77.3	26.2	64.1	79.5	29.1						
34.0	44.6	72.8	17.4	51.4	75.8	24.1	60.9	78.5	27.5						
36.0	40.4	70.5	16.3	47.7	74.0	22.2	57.7	77.2	26.1						
38.0	35.9	67.9	15.3	43.8	72.0	20.5	54.3	75.9	24.5						
40.0	30.8	64.8	14.5	39.6	69.7	19.0	50.8	74.3	23.4						
42.0 44.0	24.7 16.5	60.9 55.3	13.8 13.0	35.0 29.7	67.0 63.8	17.8 16.7	47.1 43.2	72.5 70.5	22.2 21.0						
44.0	10.5	55.3	13.0	29.7	03.0	10.7	43.2	70.5	21.0	55.0	73.5	18.5			
46.0				23.3	59.6	15.7	38.9	68.1	20.0	52.2	72.3	18.9			
48.0				16.3	54.8	13.7	34.2	65.3	19.2	48.6	70.6	18.1			
50.0				10.5	J 4 .0	13.7	28.8	62.0	18.4	44.7	68.6	17.4			
53.0							18.0	54.8	17.3	77.7	00.0	17.4			
55.0								00		33.6	62.3	15.6			
60.0										16.9	51.4	14.1			
65.9										. 5.0			35.0	54.6	10.1
70.0				Ī			Ī						25.0	48.3	9.1
72.0													17.0	42.9	8.6



N° de ident.: 9842523/95738/ Pi

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]
				41.0 ו		eza de p	al, Punto dumín (2 n] Posici	316-1) 4	4.5 m Pl	eza de p umín	lumín				
13.8	78.0	87.5	49.5												
14.0	77.8	87.4	49.5												
16.0	75.1	86.9	45.7												
18.0	72.4	86.3	39.3												
20.0	69.7	85.6	34.0												
21.2				73.0	86.1	43.1									
22.0	66.9	84.8	29.6	71.9	85.8	42.9									
24.0	64.1	83.8	25.9	69.2	85.1	40.2									
26.0	61.2	82.8	23.2	66.4	84.2	36.6									
28.0	58.2	81.6	21.3	63.5	83.3	32.4									
30.0	55.0	80.2	19.7	60.6 57.6	82.2	29.3 26.5									
32.0 32.6	51.8	78.7	18.4	57.6	81.0	26.5	65.0	82.6	26.4						
34.0	48.4	77.0	17.2	54.4	79.6	24.2	63.1	81.9	26.4						
36.0	44.8	75.0	16.1	51.2	78.0	22.4	60.1	80.8	24.9						
38.0	41.0	72.8	15.1	47.8	76.3	20.7	57.1	79.5	23.6						
40.0	36.8	70.3	14.2	44.1	74.3	19.1	53.9	78.1	22.3						
42.0	32.2	67.3	13.5	40.2	72.0	17.8	50.7	76.5	21.3						
44.0	26.9	63.7	12.8	36.0	69.4	16.6	47.2	74.7	20.3						
46.0	20.2	58.9	12.1	31.3	66.3	15.7	43.5	72.7	19.2	55.0	76.0	16.8			
47.0	15.9	55.7	11.8												
48.0				25.7	62.5	14.8	39.6	70.4	18.3	51.9	74.5	17.3			
50.0				18.7	57.4	13.8	35.3	67.7	17.6	48.6	72.8	16.5			
51.0				15.7	55.2	12.6									
55.0							21.4	58.2	15.9	39.1	67.5	14.8			
56.0							17.4	55.2	15.5						
60.0										27.1	59.6	13.5			
63.0										16.3	51.8	12.7			
68.4													35.0	56.3	9.4
70.0													31.6	54.1	9.0
75.0													16.4	43.3	7.8



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]
				41.0 ו		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 4	7.5 m Pl		lumín				
14.5 16.0 18.0 20.0 22.0 22.1	78.0 76.1 73.6 71.1 68.5	90.4 90.0 89.5 88.8 88.0	45.0 44.4 38.8 33.1 29.2	73.0	89.0	39.8									
24.0 26.0 28.0 30.0	65.8 63.1 60.4 57.6	87.2 86.2 85.1 83.8	25.6 22.9 20.9 19.3	70.6 68.0 65.3 62.6	88.3 87.5 86.6 85.6	38.9 36.4 32.7 29.3									
32.0 33.9 34.0 36.0 38.0	54.6 51.6 48.4 45.1	82.5 80.9 79.2 77.3	17.9 16.7 15.7 14.7	59.9 57.0 54.1 51.0	84.5 83.2 81.8 80.3	26.6 24.2 22.1 20.5	65.0 64.9 62.2 59.4	85.3 85.2 84.2 83.1	26.0 26.0 25.2 23.7						
40.0 42.0 44.0 46.0 47.7	41.5 37.6 33.4 28.7	75.1 72.6 69.8 66.4	13.8 13.0 12.3 11.7	47.8 44.4 40.8 36.9	78.5 76.5 74.3 71.8	19.0 17.6 16.4 15.3	56.6 53.6 50.5 47.3	81.8 80.4 78.8 77.0	22.5 21.3 20.4 19.4	55.0	78.4	16.2			
48.0 50.0 54.0 55.0 59.0	23.0 15.4	62.1 56.1	11.1 10.5	32.6 27.7 15.1	68.8 65.3 55.6	14.5 13.7 11.3	43.8 40.2 29.4 16.8	75.0 72.7 65.3 55.6	18.5 17.6 16.0 14.7	54.8 51.7 43.5	78.3 76.8 72.1	17.1 16.7 14.9			
60.0 65.0 66.0 70.8 75.0 78.0										33.6 19.9 15.8	65.7 55.4 52.2	13.6 12.5 12.2	35.0 26.2 15.8	58.1 51.8 43.7	8.3 7.4 6.8



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

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

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

		gulo de 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]
				41.0 ı	m Pluma Cab	eza de p	il, Punto llumín (2 n] Posici	316-1) 5	0.5 m Pl	eza de p umín	lumín				
15.1 16.0 18.0 20.0	78.0 76.9 74.6 72.2	93.3 93.1 92.6 92.0	41.8 41.8 37.8 32.9												
22.0 23.0 24.0 26.0 28.0	69.8 67.4 64.9 62.3	91.3 90.5 89.5 88.5	28.7 25.6 22.8 20.7	73.0 71.8 69.3 66.9	91.8 91.5 90.8 89.9	37.4 37.2 35.5 33.3									
30.0 32.0 34.0 35.2	59.7 57.0 54.3	87.4 86.1 84.7	19.1 17.7 16.5	64.4 61.8 59.2	89.0 87.9 86.8	29.6 26.9 24.5	65.0	88.0	25.3						
36.0 38.0 40.0 42.0	51.4 48.4 45.2 41.9	83.2 81.4 79.5 77.4	15.5 14.5 13.6 12.8	56.5 53.7 50.8 47.8	85.5 84.1 82.5 80.7	22.4 20.5 19.1 17.7	64.0 61.4 58.8 56.1	87.6 86.5 85.4 84.1	25.3 24.1 22.8 21.6						
44.0 46.0 48.0 49.4	38.3 34.5 30.1	75.0 72.2 68.9	12.1 11.5 10.9	44.6 41.3 37.6	78.8 76.6 74.1	16.5 15.4 14.4	53.3 50.4 47.3	82.6 81.0 79.2	20.6 19.7 18.8	55.0	80.9	15.7			
50.0 53.0 55.0 56.0	25.2 16.3	65.0 57.7	10.4 8.8	33.7 21.1 17.5	71.2 61.3 58.4	13.6 11.7 11.3	35.1	77.2	18.0	54.4 47.0	76.4	15.1			
60.0 62.0 65.0 69.0							23.2 16.2	61.8 56.1	14.7 14.1	38.5 28.0 15.3	70.8 63.0 52.6	13.6 12.7 11.9	05.0	50.0	7.5
73.3 75.0 80.0 81.0													35.0 32.6 19.3 15.3	59.8 58.0 47.4 44.1	7.5 7.2 6.2 6.0



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]
				41.0 r	n Pluma Cab	eza de p	II, Punto Ilumín (2 1] Posici	316-1) 5:	3.5 m Plı	eza de p umín	lumín				
15.7	78.0	96.3	37.8												
16.0	77.7	96.2	37.8												
18.0	75.5	95.7	36.1												
20.0	73.2	95.1	32.4												
22.0	71.0	94.5	27.8												
23.8				73.0	94.7	33.9									
24.0	68.7	93.7	24.7	72.8	94.6	33.9									
26.0	66.4	92.8	22.3	70.6	94.0	33.2									
28.0 30.0	64.0 61.6	91.9 90.8	20.2	68.3 65.9	93.2 92.3	31.8 29.5									
30.0	59.1	90.8 89.7	18.7 17.3	63.5	92.3	29.5									
34.0	56.6	88.4	16.0	61.1	90.3	24.7									
36.0	53.9	87.0	15.0	58.6	90.3 89.1	22.4									
36.4	55.5	07.0	15.0	30.0	03.1	22.7	65.0	90.7	23.4						
38.0	51.2	85.4	14.1	56.1	87.8	20.5	63.2	89.9	23.6						
40.0	48.4	83.7	13.3	53.4	86.3	18.9	60.7	88.9	22.3						
42.0	45.4	81.8	12.5	50.7	84.7	17.6	58.2	87.6	21.3						
44.0	42.3	79.6	11.7	47.8	83.0	16.3	55.7	86.3	20.1						
46.0	39.0	77.3	11.1	44.8	81.0	15.2	53.0	84.9	19.2						
48.0	35.4	74.6	10.5	41.7	78.9	14.2	50.2	83.2	18.4						
50.0	31.4	71.5	10.0	38.3	76.4	13.3	47.4	81.4	17.6						
51.2										55.0	83.3	14.7			
55.0	18.4	60.4	8.8	28.4	68.6	11.5	39.5	76.1	15.7	49.9	80.4	14.7			
56.0	15.8	58.1	7.8												
59.0				17.0	58.8	10.2									
60.0							29.9	68.7	14.3	42.4	75.5	13.3			
65.0							15.8	56.5	12.8	33.6	69.0	12.2			
70.0										21.9	59.2	11.3			
72.0 75.7										16.2	54.2	9.9	35.0	61.5	6.6
80.0													27.2	55.2	5.8
83.0													18.7	55.2 47.9	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]
				41.0 ו	m Pluma Cab	eza de p	al, Punto Ilumín (2 n] Posici	316-1) 5	6.5 m Pl		lumín		-		
16.3 18.0 20.0 22.0 24.0 24.7 26.0 28.0 30.0 32.0	78.0 76.3 74.2 72.0 69.9 67.7 65.5 63.2 60.9	99.2 98.8 98.3 97.6 96.9 96.1 95.2 94.2 93.2	34.8 34.4 31.6 27.7 24.2 21.9 20.0 18.4 17.2	73.0 71.6 69.5 67.3 65.1	97.6 97.1 96.4 95.6 94.7	31.3 31.1 30.2 29.6 26.8									
34.0 36.0 37.7 38.0 40.0 42.0 44.0	58.6 56.1 53.6 51.1 48.4 45.6	92.0 90.7 89.2 87.6 85.9 84.0	15.9 14.8 13.9 13.1 12.3 11.6	62.8 60.5 58.1 55.7 53.1 50.6	93.7 92.6 91.4 90.0 88.6 87.0	24.6 22.8 20.8 19.1 17.6 16.4	65.0 64.7 62.4 60.1 57.7	93.4 93.3 92.3 91.2 89.9	22.6 22.6 22.1 20.9 20.0						
46.0 48.0 50.0 52.9 55.0 59.0	42.6 39.5 36.2 26.2 15.4	81.9 79.6 76.9 68.5 58.5	10.9 10.3 9.8 8.6 7.0	47.8 45.0 42.0 33.7	85.2 83.3 81.1 74.6	15.3 14.3 13.3	55.3 52.7 50.1 43.1	88.6 87.1 85.5 80.7	19.0 18.1 17.4 15.5	55.0 52.5	85.8 84.3	14.0 14.5			
60.0 62.0 65.0 68.0 70.0 75.0 78.2				22.7 16.5	65.0 59.2	9.9 9.3	24.5 15.3	74.4 65.4 56.9	14.1 12.7 11.9	45.7 38.0 28.6 15.7	79.9 74.2 66.4 54.6	13.2 11.9 11.0 9.1	35.0 32.7	63.2 61.3	6.0
85.0 86.0													21.3 18.2	51.3 48.4	4.8 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 orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				41.0	m Pluma Cab	eza de p	al, Punto olumín (2 n] Posici	316-1) 5	9.5 m Pl	eza de p umín	lumín				
17.0	78.0	102.1	31.7												
18.0	77.0	101.9	31.7												
20.0	75.0	101.4	29.8												
22.0	73.0	100.8	27.3												
24.0	70.9	100.1	23.8												
25.6				73.0	100.4	28.6									
26.0	68.9	99.4	21.3	72.6	100.3	28.5									
28.0	66.8	98.5	19.4	70.6	99.6	28.1									
30.0	64.7	97.6 96.6	17.8 16.6	68.5 66.4	98.8 98.0	27.5 26.2	l								
32.0	62.5				98.0		-								
34.0 36.0	60.3 58.1	95.5 94.3	15.5 14.4	64.3 62.1	96.0	24.0 22.4									
38.0	55.7	94.3	13.4	59.9	96.0	22.4									
39.0	33.7	92.9	13.4	39.9	94.9	20.7	65.0	96.1	21.2						
40.0	53.4	91.5	12.5	57.6	93.6	18.9	63.9	95.7	21.2						
42.0	50.9	89.9	11.8	55.3	92.3	17.4	61.8	94.6	20.3						
44.0	48.4	88.2	11.2	52.9	90.8	16.0	59.5	93.5	19.3						
46.0	45.7	86.3	10.5	50.4	89.2	15.0	57.3	92.2	18.5						
48.0	42.9	84.2	9.9	47.9	87.4	14.0	54.9	90.8	17.5						
50.0	40.0	81.9	9.3	45.2	85.5	13.0	52.5	89.3	16.6						
54.6										55.0	88.2	13.1			
55.0	31.6	74.8	8.2	37.8	79.8	11.0	46.1	85.0	15.0	54.7	88.0	13.7			
60.0	20.4	64.3	7.2	29.0	72.0	9.6	38.9	79.4	13.5	48.5	84.0	12.6			
61.0	17.4	61.3	7.0												
65.0				16.1	59.6	8.2	30.3	72.0	12.3	41.6	78.9	11.5			
70.0							18.4	60.7	11.0	33.6	72.3	10.5			
71.0							16.1	58.5	10.2						
75.0										23.3	62.9	9.7			
78.0										15.3	55.0	8.3			
80.6													35.0	64.9	5.1
85.0													27.9	58.6	4.4
89.0	1	l											17.7	48.8	3.8



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

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

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

	F	gulo de orincipa		ı	gulo de orincipa		ı	gulo de orincipa		ı	gulo de orincipa		ı	gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				41.0 ı	m Pluma Cab	eza de p	il, Punto lumín (2: n] Posici	316-1) 6:	2.5 m Pli	eza de p umín	lumín				
17.6	78.0	105.1	29.4												
18.0	77.6	105.0	29.4												
20.0	75.7	104.5	28.6												
22.0	73.8	103.9	26.9												
24.0	71.9	103.3	23.7												
26.0	69.9	102.6	21.1												
26.5				73.0	103.3	26.8									
28.0	68.0	101.8	19.2	71.5	102.8	26.6									
30.0	66.0	100.9	17.6	69.6	102.1	26.1									
32.0	63.9	100.0	16.3	67.6	101.3	25.6									
34.0	61.9	98.9	15.2	65.6	100.4	23.9									
36.0	59.8	97.8	14.2	63.6	99.4	22.1									
38.0	57.6	96.5	13.2	61.5	98.3	20.8									
40.0	55.4	95.2	12.3	59.4	97.2	19.2	05.0		40.0						
40.2	50.4	00.7	11.0		05.0	47.5	65.0	98.9	19.8						
42.0	53.1	93.7	11.6	57.2	95.9	17.5	63.2	98.0	20.1						
44.0	50.8 48.4	92.1 90.4	10.9 10.3	55.0 52.7	94.6 93.1	16.1 14.9	61.2 59.0	96.9 95.8	19.0 18.1						
46.0 48.0	46.4 45.8	90.4 88.5	9.7	50.3	93.1	13.9	59.0 56.8	95.6	17.3						
50.0	43.2	86.4	9.7	47.9	89.7	13.9	54.6	93.1	16.4						
55.0	35.9	80.3	8.0	41.3	84.5	10.9	48.7	89.1	14.7						
56.3	33.3	00.5	0.0	71.5	04.5	10.5	40.7	03.1	17.7	55.0	90.7	12.4			
60.0	27.0	71.9	7.0	33.7	77.9	9.4	42.2	84.1	13.3	50.9	88.0	12.4			
64.0	17.0	61.7	6.3	00.1	77.0	0.4	72.2	04.1	10.0	00.0	00.0	12.7			
65.0		*		24.0	68.6	8.1	34.8	77.7	12.1	44.6	83.3	11.3			
68.0				15.7	60.0	7.4									
70.0							25.5	68.9	10.9	37.6	77.5	10.2			
74.0							15.7	58.9	9.3						
75.0										29.1	69.8	9.5			
80.0										16.2	56.8	8.3			
83.1													35.0	66.7	4.4
85.0													32.8	64.6	4.2
90.0													22.8	54.9	3.4
92.0													17.3	49.3	3.1



2821-1

2821-1

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

		gulo de orincipal			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]
				41.0 ו	n Pluma Cab	eza de p	al, Punto dumín (2 n] Posici	316-1) 6	5.5 m Pl		lumín		-		
18.2 20.0 22.0 24.0 26.0	78.0 76.4 74.6 72.8 70.9	108.0 107.6 107.0 106.4 105.8	26.5 26.2 24.9 23.1 20.7												
27.4 28.0 30.0 32.0	69.0 67.1 65.2	105.0 104.2 103.3	18.9 17.4 16.0	73.0 72.4 70.6 68.7	106.2 106.0 105.3 104.5	24.1 24.0 23.7 23.2									
34.0 36.0 38.0 40.0 41.5	63.3 61.3 59.3 57.2	102.3 101.2 100.1 98.8	14.8 13.9 13.0 12.1	66.8 64.9 62.9 60.9	103.7 102.8 101.7 100.7	22.5 21.3 20.3 19.5	65.0	101.6	19.0						
42.0 44.0 46.0 48.0 50.0	55.1 52.9 50.7 48.3 45.9	97.4 96.0 94.4 92.6 90.7	11.3 10.6 10.0 9.5 8.9	58.9 56.8 54.7 52.5 50.2	99.5 98.2 96.8 95.3 93.7	17.8 16.3 15.0 13.9 13.0	64.6 62.6 60.6 58.6 56.5	101.4 100.4 99.2 98.1 96.8	19.0 18.7 17.7 16.9 16.1						
55.0 58.0 60.0 65.0 67.0	39.4 31.8 22.0 16.5	78.1 68.1 62.2	7.7 6.7 5.9 5.5	37.5 29.4	89.0 83.1 75.4	9.3 8.1	51.0 45.1 38.5	93.0 88.5 82.8	14.4 13.0 11.8	55.0 53.0 47.3	93.2 91.8 87.6	11.6 12.1 10.9			
70.0 71.0 75.0 77.0 80.0				18.4 15.3	63.8 60.4	6.9 6.6	30.6 20.3 15.4	75.4 64.6 59.3	9.5 8.4	33.6 24.4	75.6 66.4	9.9 9.1 8.0			
83.0 85.6 90.0 95.0										15.8	57.2	7.3	35.0 28.5 16.8	68.4 62.0 49.7	3.6 3.0 2.3



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

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

Valor de vuelco: 2 - Vía ancha Lastre trasero [t]: 124.0 Lastre central [t]: 52.6 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]
				41.0 ı		eza de p	il, Punto Iumín (2 i] Posici	316-1) 6	8.5 m Pl		lumín				
18.8 20.0 22.0 24.0 26.0	78.0 77.0 75.3 73.5 71.8	110.9 110.7 110.2 109.6 108.9	24.1 24.1 23.2 22.4 20.3												
28.0 28.2 30.0 32.0 34.0	70.0 68.2 66.4 64.5	108.2 107.5 106.6 105.7	18.6 17.2 15.8 14.7	73.0 71.4 69.7 67.9	109.0 108.5 107.7 106.9	21.9 21.7 21.3 20.8									
36.0 38.0 40.0 42.0 42.8	62.7 60.8 58.8 56.8	104.7 103.6 102.4 101.1	13.7 12.8 11.9 11.1	66.0 64.2 62.3 60.4	106.1 105.1 104.1 103.0	20.2 19.5 19.0 18.2	65.0	104.3	18.1						
44.0 46.0 48.0 50.0 55.0	54.8 52.7 50.6 48.3 42.4	99.7 98.2 96.6 94.9 89.8	10.4 9.8 9.3 8.7 7.5	58.4 56.4 54.4 52.3 46.8	101.8 100.5 99.1 97.6 93.2	16.7 15.3 14.1 13.1 11.0	63.9 62.0 60.1 58.1 53.0	103.7 102.7 101.6 100.3 96.9	18.1 17.5 16.6 16.0 14.2						
59.8 60.0 65.0 70.0 74.0	35.7 27.6 16.2	83.6 75.3 62.6	6.5 5.7 5.0	40.7 33.7 25.0 16.0	87.9 81.2 72.1 62.1	9.3 8.0 6.9 5.4	47.6 41.5 34.7	92.6 87.5 81.0	12.9 11.6 10.6	55.0 54.9 49.5 43.8	95.6 95.5 91.6 86.8	11.0 11.5 10.7 9.8			
75.0 79.0 80.0 85.0 86.0							26.3 17.1	72.3 62.1	9.5 8.6	37.2 29.1 20.1 17.4	80.8 72.7 62.8 59.8	7.8 6.7 6.6			
88.0 90.0 95.0 96.0													35.0 32.8 23.9 21.7	70.1 67.9 58.5 56.1	3.1 2.8 2.2 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

	88° Án	gulo de orincipa	pluma I		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]
				41.0 ı				de carga 316-1) 7		eza de p umín	lumín				
						37.0 [m	ı] Posici	ón midfa	II (2316)						
19.5	78.0	113.9	21.9												
20.0	77.6	113.8	21.9												
22.0	75.9	113.3	21.5												
24.0	74.2	112.7	20.6												
26.0 28.0	72.6 70.9	112.1 111.4	19.3 17.8												
29.1	70.9	111.4	17.0	73.0	111.9	20.1				ł					
30.0	69.2	110.7	16.6	72.2	111.6	20.1				i					
32.0	67.4	109.9	15.3	70.6	110.9	19.8				i					
34.0	65.7	109.0	14.1	68.8	110.2	19.4				i					
36.0	63.9	108.0	13.1	67.1	109.3	19.0									
38.0	62.1	107.0	12.3	65.3	108.4	18.5									
40.0	60.3	105.9	11.5	63.6	107.5	18.0									
42.0	58.4	104.7	10.7	61.8	106.4	17.6									
44.0	56.5	103.4	10.0	59.9	105.3	16.7	65.0	107.0	16.6						
46.0	54.5	102.0	9.3	58.0	104.1	15.3	63.3	106.1	16.9						
48.0	52.5	100.5	8.8	56.1	102.7	14.0	61.5	105.0	16.1						
50.0 55.0	50.5 45.0	98.8 94.2	8.3 7.1	54.1 49.0	101.3 97.3	12.9 10.7	59.6 54.8	103.9 100.6	15.3 13.7						
60.0	39.0	88.6	6.1	43.4	92.4	9.1	49.7	96.7	12.3						
61.5	00.0	00.0	0.1	70.7	32.4	3.1	43.7	30.7	12.0	55.0	98.1	10.3			
65.0	32.0	81.4	5.4	37.1	86.4	7.7	44.2	91.9	11.1	51.6	95.5	10.3			
70.0	23.2	71.7	4.7	29.8	78.7	6.6	38.1	86.1	10.1	46.2	91.1	9.3			
73.0	15.8	63.0	4.2												
75.0				20.1	67.8	5.6	30.9	78.7	9.2	40.3	85.7	8.5			
77.0				15.7	62.5	4.8									
80.0							21.7	68.4	8.1	33.2	78.6	7.4			
82.0							16.7	62.5	7.6						
85.0										25.9	70.6	6.4			
89.0										17.0	60.2	5.7	25.0	71.8	2.3
90.5 93.0													35.0 32.1	71.8 68.8	2.3
93.0	I												32.1	00.0	۷.۱



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]
				41.0 ו	m Pluma Cab	eza de p	ll, Punto lumín (2 l] Posici	316-1) 7	4.5 m Pl	eza de p umín	lumín				
20.1	78.0	116.8	20.6												
22.0	76.5	116.4	20.4												
24.0	74.9	115.8	19.7												
26.0	73.3	115.2	18.9												
28.0	71.7	114.6	17.4												
30.0	70.0	113.9	16.2	73.0	114.8	19.0									
32.0	68.4	113.1	15.2	71.4	114.1	18.9									
34.0	66.7	112.3	14.0	69.7	113.4	18.6							<u> </u>		
36.0	65.0	111.4	12.9	68.1	112.6	18.2									
38.0	63.3	110.4	12.0	66.4	111.7	17.9									
40.0	61.6	109.3	11.3	64.7	110.8	17.5									
42.0	59.8	108.2	10.6	63.0	109.8	17.1									
44.0	58.0	106.9	9.8	61.2	108.7	16.8									
45.3							65.0	109.7	16.1						
46.0	56.2	105.6	9.2	59.5	107.6	15.7	64.4	109.4	16.1						
48.0	54.3	104.2	8.6	57.7	106.3	14.3	62.7	108.4	15.8						
50.0	52.3	102.7	8.1	55.8	105.0	13.1	61.0	107.3	15.1						
55.0	47.3	98.4	7.0	51.0	101.2	10.7	56.4	104.2	13.5						
60.0	41.8	93.3	6.0	45.8	96.7	9.1	51.7	100.6	12.1						
63.2										55.0	100.5	9.7			
65.0	35.5	86.9	5.2	40.1	91.3	7.6	46.5	96.2	10.9	53.4	99.3	9.9			
70.0	28.2	78.7	4.5	33.6	84.5	6.5	40.9	90.9	9.9	48.4	95.2	9.0			
75.0	18.2	66.8	3.9 3.7	25.8	75.6	5.6	34.6	84.3	9.0	43.0	90.2	8.2			
76.0	15.5	63.4	3.7	15.0	62.9	4.2	27.0	75.0	8.0	26.7	02.0	7.2			
80.0				15.3	62.9	4.2		75.8 62.9	7.0	36.7 30.4	83.9 77.1	6.2			
85.0 90.0							16.4	02.9	7.0	30.4 21.5	66.6	5.3			
90.0										16.7	60.6	4.9			



N° de ident.: 9842523/95738/ Pieza de

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

Valor de vuelco: 2 - Vía ancha Lastre trasero [t]: 124.0 Lastre central [t]: 52.6 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]
				41.0 ı		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 7	7.5 m Pli	eza de p umín	lumín				
20.7	78.0	119.7	18.9												
22.0	77.0	119.4	18.9												
24.0	75.5	118.9	18.2												
26.0	74.0	118.4	17.7												
28.0	72.4	117.8	16.6												
30.0	70.8	117.1	15.5	70.0	447.0	47.4									
30.9 32.0	69.3	116.3	14.7	73.0 72.1	117.6 117.3	17.4 17.3									
34.0	67.7	115.5	13.7	72.1	117.3	17.3									
36.0	66.1	114.7	12.6	69.0	115.8	16.8									
38.0	64.4	113.7	11.7	67.4	115.0	16.5									
40.0	62.8	112.7	10.9	65.8	114.1	16.1									
42.0	61.1	111.6	10.3	64.1	113.2	15.7									
44.0	59.4	110.5	9.6	62.5	112.2	15.4									
46.0	57.6	109.2	8.9	60.8	111.1	15.2									
46.6							65.0	112.5	15.1						
48.0	55.9	107.9	8.3	59.1	109.9	13.9	63.9	111.8	15.1						
50.0	54.0	106.5	7.8	57.3	108.6	12.8	62.2	110.8	14.7						
55.0	49.3	102.5	6.7	52.8	105.1	10.6	57.9	107.8	13.2						
60.0	44.2	97.7	5.7	47.9	100.9	8.9	53.4	104.4	11.7						
64.9										55.0	103.0	9.0			
65.0	38.6 32.1	91.9 84.8	4.9 4.2	42.7 36.9	95.8 89.8	7.5 6.3	48.6 43.5	100.2 95.4	10.6	55.0	103.0 99.2	9.3 8.7			
70.0 75.0	24.1	75.3	3.6	30.9	89.8 82.1	5.4	43.5 37.7	95.4 89.4	9.6 8.7	50.4 45.3	99.2 94.6	8.7			
79.0	15.2	63.8	3.1	30.1	02.1	5.4	31.1	09.4	0.1	45.5	94.0	0.0			
80.0	13.2	03.0	J. I	21.5	71.5	4.5	31.1	82.0	7.9	39.6	88.8	6.8			
83.0				15.0	63.2	3.6	01.1	02.0	7.5	55.0	00.0	0.0			
85.0						0.0	22.8	72.0	6.9	34.0	82.7	5.8			
88.0							16.0	63.3	6.2						
90.0										26.6	74.1	4.9			
95.0										16.3	61.1	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 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]
				41.0 ו		eza de p	lumín (2	316-1) 8	0.5 m Pli	eza de p umín	lumín				
						34.0 [m	ı] Posici	ón midfa	II (2316)						
21.3	78.0	122.7	17.5												
22.0	77.5	122.5	17.5												
24.0	76.0	122.0	17.0												
26.0	74.6 73.1	121.5 120.9	16.4 15.8												
28.0 30.0	71.6	120.9	15.8												
31.7	/ 1.0	120.3	14.9	73.0	120.5	16.0									
32.0	70.1	119.5	14.2	73.0	120.5	16.0									
34.0	68.6	118.8	13.5	71.3	119.8	15.9									
36.0	67.0	117.9	12.4	69.8	119.0	15.6									
38.0	65.5	117.0	11.5	68.3	118.3	15.3									
40.0	63.9	116.1	10.7	66.7	117.4	15.0									
42.0	62.3	115.1	10.0	65.2	116.5	14.6									
44.0	60.6	113.9	9.4	63.6	115.5	14.3									
46.0	59.0	112.8	8.7	62.0	114.5	14.1									
47.8							65.0	115.2	13.9						
48.0	57.3	111.5	8.1	60.3	113.4	13.6	64.9	115.1	14.4						
50.0	55.6	110.2	7.6	58.7	112.2	12.6	63.3	114.1	14.4						
55.0	51.1	106.4	6.5	54.4	108.8	10.4	59.2	111.4	12.9						
60.0	46.4	101.9	5.5	49.9	104.9	8.9	55.0	108.1	11.5						
65.0	41.2	96.6	4.7	45.0	100.2	7.4	50.5	104.2	10.3	55.0	405.4	0.5			
66.6 70.0	35.4	90.2	4.0	39.7	94.6	6.2	45.7	99.7	9.4	55.0 52.1	105.4 103.0	8.5 8.6			
70.0 75.0	28.6	90.2 82.1	3.4	39.7	94.6 87.8	5.2	45.7 40.4	99.7 94.2	9.4 8.5	52.1 47.4	98.7	7.7			
80.0	19.8	70.8	2.9	26.4	79.0	4.4	34.5	94.2 87.6	7.8	42.1	93.4	6.7			
82.0	15.8	65.4	2.4	20.7	10.0	7.7	07.0	01.0	1.0	74.1	30.7	0.1			
85.0	.5.0	33.4		16.5	66.1	3.6	27.5	79.2	6.8	37.1	87.9	5.7			
90.0							18.2	67.1	5.8	30.7	80.4	4.8			
91.0							15.7	63.7	5.6						
95.0										22.6	70.2	4.0			
98.0										16.0	61.5	3.5			



N° de ident.: 9842523/95738/

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

360 ° Cabez

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]
				41.0 r		eza de p	lumín (2	316-1) 8	3.5 m Pli	eza de p umín	lumín			-	
						37.0[11	n] Posici	on midia	11 (2316)						
22.0	78.0	125.6	16.0												
24.0	76.6	125.1	15.8												
26.0 28.0	75.1 73.7	124.6 124.0	15.4 15.1												
30.0	72.3	124.0	14.3												
32.0	70.8	123.4	13.6												
32.6	70.0	122.7	13.0	73.0	123.4	14.8									
34.0	69.4	122.0	13.0	72.0	122.9	14.8									
36.0	67.9	121.2	12.2	70.5	122.2	14.6									
38.0	66.4	120.3	11.2	69.1	121.5	14.3									
40.0	64.9	119.4	10.4	67.6	120.7	14.0									
42.0	63.3	118.4	9.7	66.1	119.8	13.7									
44.0	61.8	117.4	9.1	64.6	118.9	13.4									
46.0	60.2	116.3	8.5	63.1	117.9	13.2									
48.0	58.6	115.1	7.9	61.5	116.8	13.0									
49.1							65.0	117.9	13.3						
50.0	57.0	113.8	7.3	59.9	115.7	12.4	64.4	117.5	13.3						
55.0	52.8	110.2	6.2	55.9	112.5	10.2	60.5	114.8	12.5						
60.0	48.3	106.0	5.3	51.6	108.8	8.6	56.4	111.7	11.2						
65.0 68.4	43.5	101.1	4.4	47.0	104.4	7.3	52.2	108.1	10.0	55.0	107.9	7.9			
70.0	38.2	95.3	3.7	42.1	99.3	6.0	47.7	103.8	9.1	55.0 53.7	107.9	7.9 8.2			
70.0 75.0	32.2	95.3 88.1	3.1 3.1	36.6	99.3	5.0	47.7	98.8	8.2	49.3	100.8	7.5			
80.0	24.9	78.8	2.6	30.4	85.4	4.2	37.4	92.8	7.5	44.4	97.8	6.3			
85.0	24.5	70.0	2.0	22.6	75.2	3.5	31.3	85.4	6.7	39.8	92.8	5.4			
88.0				16.2	66.5	3.0	01.0	00.4	0.7	00.0	02.0	0.1			
90.0					00.0	0.0	23.8	75.6	5.7	34.0	86.1	4.5			
94.0							15.4	64.1	4.9						
95.0										27.2	77.5	3.7			
100.0										18.1	65.3	2.9			
101.0										15.7	61.9	2.8			



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

		gulo de 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]
				41.0 ו		eza de p	ıl, Punto lumín (2: ı l Posici	316-1) 8	6.5 m Pli	eza de p umín	lumín		-		
22.6	78.0	128.5	14.8			10.0[11	1 1 00101	on maia	(2010)						
24.0	77.0	128.2	14.8												
26.0	75.7	127.7	14.5												
28.0	74.3	127.2	14.2												
30.0	72.9	126.6	13.7												
32.0	71.5	125.9	13.0												
33.5		120.0	10.0	73.0	126.2	13.9									
34.0	70.1	125.2	12.5	72.6	126.1	13.9									
36.0	68.7	124.4	12.1	71.3	125.4	13.8									
38.0	67.3	123.6	11.1	69.8	124.7	13.5									
40.0	65.8	122.7	10.2	68.4	123.9	13.2									
42.0	64.3	121.8	9.5	67.0	123.1	13.0									
44.0	62.9	120.8	8.8	65.5	122.2	12.7									
46.0	61.4	119.7	8.3	64.1	121.2	12.5									
48.0	59.8	118.6	7.7	62.6	120.2	12.3									
50.0	58.3	117.3	7.2	61.1	119.1	12.1									
50.4							65.0	120.6	12.4						
55.0	54.3	114.0	6.0	57.2	116.1	10.2	61.6	118.3	12.3						
60.0	50.1	110.0	5.1	53.1	112.6	8.5	57.7	115.3	11.1						
65.0	45.6	105.4	4.3	48.9	108.5	7.2	53.7	111.9	9.8						
70.0	40.7	100.0	3.5	44.3	103.7	6.0	49.5	107.8	8.9						
70.1										55.0	110.4	7.5			
75.0	35.3	93.5	2.9	39.3	98.0	4.9	44.9	103.1	8.1	51.0	106.7	7.2			
80.0	29.0	85.5	2.4	33.6	91.1	4.1	40.0	97.6	7.3	46.4	102.1	6.1			
85.0				27.0	82.5	3.4	34.5	90.9	6.7	42.1	97.4	5.1			
90.0				18.2	70.2	2.7	28.0	82.6	5.7	36.9	91.3	4.2			
91.0				15.9	66.9	2.5									
95.0							19.7	71.1	4.8	30.9	83.7	3.4			
97.0							15.1	64.5	4.4						
100.0										23.5	73.8	2.7			
104.0										15.4	62.3	2.1			



N° de ident.: 9842523/95738/ F

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

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

		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]
				41.0 ו		eza de p	ıl, Punto lumín (2 ı] Posici	316-1) 8	9.5 m Pl	eza de p umín	lumín				
23.3	78.0	131.5	13.0												
24.0	77.5	131.3	13.0												
26.0	76.2	130.8	12.8												
28.0	74.9	130.3	12.5												
30.0	73.5	129.7	12.3												
32.0	72.2	129.1	11.8												
34.0	70.8	128.4	11.4												
34.4				73.0	129.1	12.1									
36.0	69.4	127.7	11.0	71.9	128.6	12.1									
38.0	68.0	126.9	10.4	70.5	127.9	11.9									
40.0	66.7	126.0	9.6	69.2	127.1	11.6									
42.0	65.2	125.1	8.9	67.8	126.3	11.4									
44.0	63.8	124.1	8.2	66.4	125.5	11.1									
46.0	62.4	123.1	7.7	65.0	124.5	10.9									
48.0	60.9	122.0	7.2	63.5	123.6	10.7									
50.0	59.4	120.8	6.7	62.1	122.5	10.5									
51.6							65.0	123.3	10.7						
55.0	55.6	117.6	5.5	58.4	119.6	9.3	62.6	121.6	10.7						
60.0	51.5	113.8	4.6	54.5	116.2	7.9	58.9	118.8	10.0						
65.0	47.3	109.4	3.8	50.4	112.3	6.9	55.0	115.5	9.1						
70.0	42.7	104.4	3.1	46.1	107.8	5.7	51.0	111.6	8.3						
71.8										55.0	112.8	6.9			
75.0	37.7	98.3	2.5	41.4	102.4	4.6	46.7	107.2	7.6	52.4	110.4	6.8			
80.0				36.2	96.1	3.7	42.0	102.0	6.8	48.2	106.2	5.7			
85.0				30.3	88.3	3.0	36.9	95.8	6.2	44.2	101.8	4.8			
90.0				23.0	78.1	2.4	31.1	88.3	5.4	39.4	96.2	3.9			
95.0							24.1	78.5	4.5	34.0	89.4	3.1			
100.0							15.7	66.1	3.5	27.7	80.9	2.4			
102.0										24.7	76.7	2.1			



2821-1

2821-1

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

		gulo de orincipa			gulo de orincipa			gulo de principa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				41.0 ı			al, Punto Iumín (2			eza de p	lumín				
					Cab		n] Posici								
23.9	78.0	134.4	11.9												
24.0	77.9	134.4	11.9												
26.0	76.6	133.9	11.9												
28.0	75.4	133.4	11.6												
30.0	74.1	132.8	11.4												
32.0	72.8	132.2	11.1												
34.0	71.5	131.6	10.7												
35.3				73.0	132.0	11.1									
36.0	70.1	130.9	10.5	72.5	131.8	11.1									
38.0	68.8	130.1	10.3	71.2	131.1	11.0									
40.0	67.5	129.3	9.4	69.9	130.4	10.8									
42.0	66.1	128.4	8.7	68.5	129.6	10.5									
44.0	64.7	127.5	8.0	67.2	128.7	10.3									
46.0	63.3	126.5	7.5	65.8	127.9	10.0									
48.0	61.9	125.4	7.0	64.5	126.9	9.8									
50.0	60.5	124.3	6.5	63.1	125.9	9.6									
52.9							65.0	126.1	9.7						
55.0	56.8	121.2	5.4	59.5	123.1	8.8	63.5	125.0	9.7	•			<u> </u>		
60.0	53.0	117.6	4.4	55.8	119.9	7.6	60.0	122.3	9.3						
65.0	49.0	113.5	3.7	51.9	116.2	6.7	56.3	119.1	8.7						
70.0	44.7	108.7	3.0	47.8	111.9	5.7	52.5	115.5	8.0						
73.5										55.0	115.3	6.4			
75.0	40.1	103.2	2.4	43.5	106.9	4.6	48.4	111.3	7.4	53.9	114.2	6.4			
80.0				38.7	101.1	3.6	44.1	106.4	6.6	49.9	110.2	5.5			
85.0				33.4	94.1	2.9	39.4	100.7	6.0	46.1	106.1	4.6			
90.0				27.1	85.3	2.3	34.1	93.9	5.4	41.6	100.8	3.7			
95.0							28.0	85.5	4.6	36.7	94.6	2.9			
100.0							20.3	74.1	3.7	31.0	87.1	2.2			
101.0										29.8	85.3	2.0			
103.0							15.4	66.5	3.0						



2821-1

2821-1

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

		gulo de 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]
				41.0	m Pluma	principa	al, Punto lumín (2	de carga	1 - Cab	eza de p	lumín		_		
					Cab	49.0 [m	numm (2 n] Posici	ón midfa	II (2316)	ullilli					
24.5	78.0	137.4	10.9												
26.0	77.1	137.0	10.9												
28.0	75.8	136.5	10.7												
30.0	74.6	136.0	10.4												
32.0	73.3	135.4	10.2												
34.0	72.1	134.7	10.0												
36.0	70.8	134.1	9.7												
36.1				73.0	134.9	10.1									
38.0	69.5	133.3	9.5	71.8	134.3	10.1									
40.0	68.2	132.5	9.1	70.5	133.6	9.9									
42.0	66.9	131.7	8.4	69.3	132.8	9.7									
44.0	65.6	130.8	7.7	68.0	132.0	9.5									
46.0	64.2	129.8	7.1	66.6	131.1	9.3									
48.0	62.9	128.8	6.6	65.3	130.2	9.0									
50.0	61.5	127.7	6.2	64.0	129.3	8.8									
54.2							65.0	128.8	8.8						
55.0	58.0	124.8	5.1	60.6	126.6	8.4	64.4	128.4	8.8						
60.0	54.4	121.4	4.1	57.0	123.5	7.2	61.0	125.8	8.6						
65.0	50.6	117.5	3.4	53.3	120.0	6.3	57.5	122.7	8.2						
70.0	46.5	113.0	2.7	49.5	115.9	5.5	53.9	119.3	7.6						
75.0	42.2	107.8	2.1	45.4	111.2	4.4	50.0	115.3	7.0						
75.2										55.0	117.7	5.9			
80.0				40.9	105.8	3.5	45.9	110.7	6.4	51.8	114.5	5.2			
85.0				36.0	99.4	2.7	41.5	105.4	5.7	47.8	110.2	4.2			
90.0							36.7	99.1	5.1	43.6	105.3	3.3			
95.0							31.3	91.6	4.3	39.0	99.5	2.5			
98.0										36.1	95.6	2.1			
100.0							24.8	82.0	3.5						
105.0							16.0	68.3	2.7						
106.0	1						15.2	66.9	2.5						



2821-1

2821-1

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

	88° Ángulo de pluma principal			83° Ángulo de pluma principal			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]
41.0 m Pluma principal, Punto de carga 1 - Cabeza de plumín Cabeza de plumín (2316-1) 98.5 m Plumín															
52.0 [m] Posición midfall (2316)															
25.1	78.0	140.3	10.1												
26.0	77.5	140.1	10.1												
28.0	76.3	139.6	10.0												
30.0	75.1	139.1	9.7												
32.0	73.9	138.5	9.5												
34.0	72.6	137.9	9.3												
36.0	71.4	137.2	9.1												
37.0				73.0	137.7	9.3									
38.0	70.2	136.5	8.9	72.4	137.4	9.3									
40.0	68.9	135.8	8.8	71.2	136.7	9.2									
42.0	67.6	134.9	8.1	69.9	136.0	9.0									
44.0	66.4	134.1	7.5	68.7	135.2	8.8									
46.0	65.1	133.2	6.9	67.4	134.4	8.7									
48.0	63.8	132.2	6.4	66.1	133.5	8.4									
50.0	62.5	131.1	6.0	64.8	132.6	8.3									
55.0	59.1	128.3	4.9	61.6	130.0	7.9	05.0	404.5	0.4						
55.4	55.6	105.0	4.0	58.2	127.1	7.0	65.0 62.0	131.5 129.2	8.1 8.0						
60.0 65.0	52.0	125.0 121.3	4.0 3.2	58.2 54.6	127.1	6.1	58.6	129.2	7.7						
70.0	48.2	117.1	2.6	54.0 51.0	119.8	5.4	55.1	123.0	7.7						
75.0	40.2	117.1	2.0	47.1	115.4	4.4	51.5	119.2	6.7						
77.0				47.1	110.4	4.4	31.3	119.2	0.7	55.0	120.2	5.5			
80.0				42.9	110.4	3.4	47.6	114.8	6.2	53.1	118.3	4.9			
85.0				38.4	104.4	2.6	43.5	109.9	5.5	49.4	114.2	3.9			
90.0				00.4	104.4	2.0	39.0	103.3	4.9	45.4	109.6	3.1			
95.0							34.7	98.1	4.1	41.1	104.2	2.3			
96.0							J	00		40.3	103.0	2.1			
100.0				Ī			29.1	89.9	3.3						
105.0				ĺ			22.4	79.4	2.6						
108.0							17.1	70.9	2.1						



N° de ident.: 9842523/95738/ Pi

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]	
41.0 m Pluma principal, Punto de carga 1 - Cabeza de plumín Cabeza de plumín (2316-1) 101.5 m Plumín 55.0 [m] Posición midfall (2316)																
25.8	78.0	143.2	9.3													
26.0	77.9	143.2	9.3													
28.0	76.7	142.7	9.3													
30.0	75.5	142.2	9.0													
32.0	74.3	141.6	8.9													
34.0	73.2	141.0	8.7													
36.0	72.0	140.4	8.5													
37.9				73.0	140.6	8.5										
38.0	70.8	139.7	8.3	72.9	140.6	8.5										
40.0	69.6	139.0	8.1	71.7	139.9	8.5										
42.0	68.3	138.2	7.8	70.5	139.2	8.4										
44.0	67.1	137.4	7.2	69.3	138.5	8.2										
46.0	65.9	136.5	6.6	68.1	137.7	8.0										
48.0	64.6	135.5	6.1	66.9	136.8	7.9										
50.0	63.4	134.5	5.7	65.6	135.9	7.7										
55.0	60.1	131.8	4.7	62.5	133.4	7.3										
56.7							65.0	134.2	7.4							
60.0	56.8	128.7	3.7	59.2	130.6	6.7	62.9	132.6	7.4							
65.0	53.3	125.1	2.9	55.8	127.4	5.8	59.7	129.8	7.1							
70.0	49.7	121.1	2.3	52.3	123.7	5.1	56.3	126.6	6.7							
75.0				48.6	119.5	4.3	52.8	123.0	6.3							
78.7										55.0	122.7	4.8				
80.0				44.7	114.7	3.3	49.2	118.9	6.0	54.4	122.0	4.5				
85.0				40.5	109.2	2.5	45.3	114.2	5.3	50.8	118.2	3.6				
90.0							41.1	108.8	4.6	47.1	113.8	2.7				
94.0										43.9	109.8	2.1				
95.0							37.1	103.2	3.8							
100.0							32.1	95.9	3.0							
105.0							26.2	86.8	2.3							
106.0							24.9	84.7	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:

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

Lastre trasero [t]: 124.0

Lastre central [t]: 52.6

		gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				41.0		eża de pl	ıl, Punto umín (23 ı] Posici	316-1) ĬC)4.5 m P		lumín				
26.4	78.0	146.2	8.7												
28.0	77.1	145.8	8.7												
30.0	75.9	145.3	8.5	•											
32.0	74.8	144.8	8.3												
34.0	73.7	144.2	8.2												
36.0	72.5	143.6	8.0												
38.0	71.3	142.9	7.8												
38.8				73.0	143.5	7.9									
40.0	70.2	142.2	7.6	72.3	143.1	7.9									
42.0	69.0	141.4	7.5	71.1	142.4	7.8									
44.0	67.8	140.6	7.0	70.0	141.7	7.7									
46.0	66.6	139.8	6.4	68.8	140.9	7.5									
48.0	65.4	138.8	5.9	67.6	140.1	7.4									
50.0	64.2	137.9	5.5	66.4	139.2	7.2									
55.0	61.1	135.3	4.6	63.3	136.8	6.8									
58.0							65.0	136.9	6.8						
60.0	57.9	132.3	3.6	60.2	134.1	6.4	63.8	135.9	6.8						
65.0	54.5	128.9	2.7	57.0	131.0	5.6	60.6	133.3	6.6						
70.0	51.1	125.0	2.1	53.6	127.5	4.9	57.4	130.2	6.3						
75.0				50.1	123.5	4.3	54.1	126.8	5.9						
80.0				46.4	119.0	3.3	50.6	122.8	5.6						
80.4										55.0	125.1	4.3			
85.0				42.4	113.8	2.4	46.9	118.4	5.1	52.2	122.0	3.4			
87.0				40.7	111.5	2.1									
90.0							43.0	113.3	4.5	48.6	117.8	2.6			
93.0										46.3	115.1	2.1			
95.0							39.2	108.1	3.7						
100.0							34.6	101.4	2.9						
105.0				I			29.4	93.3	2.1						



2821-1

2821-1

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

Radio de descarga: 360°

360 ° Cabeza de pluma principal: - Vía ancha

		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]
				41.0 ו			ıl, Punto umín (23			eza de p	lumín				
					Oubc] Posici			iaiiiii					
27.0	78.0	149.1	7.8												
28.0	77.5	148.9	7.8												
30.0	76.4	148.4	7.7												
32.0	75.2	147.9	7.5												
34.0	74.1	147.3	7.3												
36.0	73.0	146.7	7.2												
38.0	71.9	146.1	7.0												
39.6				73.0	146.3	7.0									
40.0	70.8	145.4	6.8	72.8	146.2	7.0									
42.0	69.6	144.6	6.7	71.7	145.6	7.0									
44.0	68.5	143.9	6.4	70.5	144.9	6.9									
46.0	67.3	143.0	5.9	69.4	144.1	6.7									
48.0	66.1	142.1	5.4	68.3	143.3	6.6									
50.0	65.0	141.2	5.0	67.1	142.5	6.4									
55.0	62.0	138.7	4.2	64.1	140.2	6.0									
59.2							65.0	139.7	6.0						
60.0	58.9	135.8	3.3	61.1	137.6	5.8	64.6	139.3	6.0						
65.0	55.7	132.5	2.5	58.0	134.6	5.1	61.5	136.7	5.8						
70.0				54.8	131.2	4.5	58.4	133.8	5.6						
75.0				51.4	127.4	4.0	55.2	130.5	5.3						
80.0				47.9	123.1	3.1	51.9	126.7	5.0						
82.1										55.0	127.6	3.6			
85.0				44.2	118.2	2.3	48.4	122.5	4.8	53.4	125.8	3.1			
90.0							44.7	117.7	4.2	50.0	121.8	2.2			
91.0										49.3	121.0	2.1			
95.0							41.1	112.8	3.3						
100.0							36.9	106.5	2.5						
103.0							34.1	102.3	2.1						



2821-1

2821-1

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

		gulo de 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]
				41.0 ו	m Pluma Cabe	eża de pl	al, Punto lumín (23 n] Posici	316-1) 11	0.5 m P	eza de p lumín	lumín				
27.6	78.0	152.0	7.1												
28.0	77.8	151.9	7.1												
30.0	76.7	151.5	7.0												
32.0	75.7	151.0	6.8												
34.0	74.6	150.4	6.6												
36.0	73.5	149.8	6.5												
38.0	72.4	149.2	6.3												
40.0	71.3	148.5	6.1												
40.5				73.0	149.2	6.3									
42.0	70.2	147.8	6.0	72.2	148.7	6.3									
44.0	69.1	147.1	5.9	71.1	148.1	6.2									
46.0	68.0	146.3	5.5	70.0	147.3	6.1									
48.0	66.8	145.4	5.1	68.9	146.6	5.9									
50.0	65.7	144.5	4.7	67.8	145.8	5.8									
55.0	62.8	142.1	3.9	64.9	143.5	5.4									
60.0	59.8	139.3	3.1	62.0	141.0	5.1									
60.5							65.0	142.4	5.2						
65.0	56.7	136.2	2.3	59.0	138.1	4.6	62.4	140.1	5.2						
70.0				55.9	134.9	4.1	59.4	137.3	4.9						
75.0				52.7	131.2	3.7	56.3	134.1	4.7						
80.0				49.3	127.1	3.1	53.1	130.5	4.5						
83.9										55.0	130.0	2.9			
85.0				45.7	122.5	2.2	49.8	126.5	4.4	54.6	129.5	2.8			
89.0							40.0	404.0		52.0	126.5	2.1			
90.0							46.2	121.9	3.9						
95.0							42.9	117.3	3.1						
100.0							38.9	111.5	2.3						
101.0							38.1	110.2	2.1						



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

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

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

Alcan-	Ángu-			ŗ	principal	pluma I		gulo de orincipa		IIA CO	gulo de orincipa	l		rincipa	pluma I
	o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
		-		41.0 r	n Pluma Cab	eza de p	lumín (1	916-1) 3:	2.5 m Pli	eza de p umín	lumín				
						13.0 [m] Posici	ón midfa	II (1916)						
11.3	78.0	75.7	42.3												
12.0	76.8	75.6	42.0												
13.0	75.0	75.3	40.2												
14.0 16.0	73.2 69.4	75.0 74.3	38.7 35.9												
17.7	69.4	74.3	35.9	73.0	74.6	36.6									
18.0	65.6	73.4	32.9	72.4	74.5	36.6									
20.0	61.6	72.4	30.8	68.7	73.8	34.3									
22.0	57.5	71.2	28.3	64.8	72.9	31.8									
24.0	53.1	69.7	26.3	60.8	71.8	30.0									
26.0	48.5	68.0	24.6	56.7	70.5	28.2									
27.6							65.0	71.7	31.3						
28.0	43.5	66.0	22.7	52.3	69.1	26.9	64.2	71.5	31.3						
30.0	38.0	63.6	21.1	47.6	67.3	25.4	60.2	70.4	30.0						
32.0	31.7	60.7	19.8	42.5	65.3	24.0	56.0	69.1	28.7						
34.0	23.9	56.7	18.6	36.9	62.8	22.8	51.6	67.6	27.5						
35.0 36.0	18.8	54.0	17.9	30.3	59.6	21.2	46.8	65.8	26.1						
38.0				22.1	55.4	19.4	41.7	63.7	24.7						
39.0				16.5	52.4	18.5	71.7	05.7	24.1						
39.1				10.0	02	10.0				55.0	66.1	23.9			
40.0							35.9	61.1	23.5	53.3	65.6	24.4			
42.0							29.2	57.8	21.9	48.7	63.9	23.4			
44.0							20.5	53.3	20.3	43.7	61.9	22.4			
45.0							16.6	51.2	15.1						
46.0										38.3	59.5	21.3			
48.0										32.0	56.6	20.5			
50.0										24.2	52.7	19.8			
52.0										15.0	47.7	15.1	25.0	40 F	10.4
58.5 60.0													35.0 30.9	49.5 47.5	13.4 14.1
63.0													30.9 17.4	47.5 40.5	13.2



2821-1

2821-1

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

		gulo de 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]
				41.0 i	m Pluma Cab	eza de p	al, Punto dumín (1 n] Posici	916-1) 3	5.5 m Pl	eza de p umín	lumín				
12.0	78.0	78.7	37.2												
13.0	76.3	78.4	36.4												
14.0	74.6	78.1	34.9												
16.0	71.2	77.5	32.1												
18.0	67.8	76.7	29.8												
18.6				73.0	77.5	31.8									
20.0	64.2	75.8	27.7	70.6	77.0	30.8									
22.0	60.5	74.7	26.0	67.1	76.2	28.9									
24.0	56.7	73.4	24.3	63.5	75.2	27.0									
26.0	52.7	72.0	22.9	59.8	74.1	25.6									
28.0	48.5	70.3	21.7	56.0	72.8	24.3									
28.8				<u> </u>			65.0	74.4	26.0						
30.0	43.9	68.3	20.3	51.9	71.3	23.3	62.9	73.8	27.0	•			<u> </u>		
32.0	39.0	66.0	19.0	47.6	69.6	22.0	59.2	72.7	25.9						
34.0	33.4	63.1	18.0	43.0	67.5	20.8	55.3	71.3	24.7						
36.0	26.8	59.5	17.0	38.0	65.1	19.8	51.3	69.8	23.7						
38.0	17.9	54.5	15.9	32.2	62.2	18.8	46.9	68.0	22.6						
40.0				25.3	58.4	17.6	42.3	65.9	21.4	ļ					
40.8										55.0	68.6	22.0			
42.0				15.7	52.8	16.3	37.1	63.4	20.4	52.9	67.8	22.6			
44.0							31.2	60.4	19.3	48.7	66.1	21.6			
46.0							24.1	56.4	18.2	44.1	64.1	20.7			
48.0							15.8	51.6	15.0	39.2	61.8	19.8			
50.0										33.6	59.0	19.0			
54.0										18.4	50.5	17.6			
61.0													35.0	51.2	12.6
65.0													21.7	43.9	12.5
66.0	1			I		1		l		I		1	16.6	40.9	12.2



N° de ident.: 9842523/95738/

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

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

		gulo de 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]
				41.0 i		eza de p		916-1) 3	8.5 m Pl		lumín		-		
12.6	78.0	81.6	33.4												
13.0	77.4	81.5	33.4												
14.0	75.8	81.3	32.1												
16.0	72.7	80.7	29.7												
18.0	69.6	79.9	27.7												
19.5				73.0	80.3	28.4									
20.0	66.4	79.1	25.7	72.2	80.2	28.3									
22.0	63.0	78.1	24.1	69.0	79.4	26.5									
24.0 26.0	59.6 56.1	77.0 75.7	22.7 21.5	65.7 62.4	78.6 77.6	25.0 23.7									
28.0	52.4	74.2	20.5	59.0	76.4	22.6									
30.0	48.5	72.5	19.5	55.4	75.4 75.1	21.5							i		
30.0	40.5	12.5	19.5	33.4	73.1	21.0	65.0	77.1	24.6						
32.0	44.3	70.5	18.4	51.6	73.5	20.8	61.9	76.1	23.9				i		
34.0	39.8	68.3	17.5	47.7	71.8	19.6	58.4	75.0	23.0						
36.0	34.8	65.5	16.7	43.5	69.8	18.6	54.8	73.6	22.0						
38.0	29.0	62.2	15.8	38.9	67.4	17.7	51.0	72.0	21.1						
40.0	21.8	57.9	14.9	33.7	64.6	16.9	47.0	70.3	20.1						
41.0	17.2	54.9	14.5												
42.0				27.8	61.1	16.1	42.8	68.2	19.0						
42.6										55.0	71.0	20.5			
44.0				20.2	56.5	15.2	38.1	65.8	18.1	52.5	70.0	21.3			
45.0				15.0	53.1	14.7							ł		
46.0							32.9	62.9	17.4	48.6	68.3	20.4			
48.0							26.7	59.3 54.3	16.5	44.5	66.4	19.6	-		
50.0 51.0							18.7 15.1	54.3 52.0	15.7 13.1	40.0	64.1	18.7			
51.0 55.0							15.1	52.0	13.1	25.9	56.2	16.9	l		
57.0										17.6	50.2	16.1	ĺ		
63.4										17.0	00.0	10.1	35.0	52.9	12.0
65.0													31.3	50.8	12.3
69.0													15.9	41.3	11.4



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

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

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

		gulo de principa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de principa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				41.0		eza de p	al, Punto lumín (1 n] Posici	916-1) 4	1.5 m Pl	eza de p umín	lumín				
13.2	78.0	84.5	29.8												
14.0	76.9	84.3	29.6												
16.0	74.0	83.8	27.6												
18.0	71.1	83.1	25.5												
20.0	68.2	82.4	23.9												-
20.3				73.0	83.2	25.4									
22.0	65.1	81.5	22.2	70.6	82.6	24.6									
24.0	62.0	80.5	21.0	67.6	81.8	23.1									
26.0	58.8	79.3	19.8	64.6	80.9	21.8									
28.0	55.5 52.1	78.0	18.8	61.4 58.2	79.9 78.7	20.9									
30.0 31.4	52.1	76.4	18.0	58.2	78.7	19.8	65.0	79.8	22.0						
31.4	48.4	74.7	17.1	54.9	77.3	18.9	64.1	79.6	21.9						
34.0	44.6	72.8	16.2	54.9 51.4	77.3 75.8	18.2	60.9	78.5	21.9				f		
36.0	40.4	70.5	15.4	47.7	74.0	17.3	57.7	77.2	20.2						
38.0	35.9	67.9	14.7	43.8	72.0	16.4	54.3	75.9	19.3						
40.0	30.8	64.8	14.0	39.6	69.7	15.6	50.8	74.3	18.5						
42.0	24.7	60.9	13.3	35.0	67.0	14.9	47.1	72.5	17.7						
44.0	16.5	55.3	12.5	29.7	63.8	14.2	43.2	70.5	16.7						
44.3				1						55.0	73.5	18.0			
46.0				23.3	59.6	13.4	38.9	68.1	16.0	52.2	72.3	18.8			
48.0				16.3	54.8	10.8	34.2	65.3	15.3	48.6	70.6	18.0			
50.0				I			28.8	62.0	14.6	44.7	68.6	17.3			
53.0							18.0	54.8	13.5						
55.0										33.6	62.3	15.5			
60.0										16.9	51.4	13.8			
65.9													35.0	54.6	11.2
70.0													23.9	47.5	10.9
72.0													15.3	41.7	10.5



N° de ident.: 9842523/95738/

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

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

		gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				41.0 ו		eza de p	II, Punto Ilumín (1: I Posici	916-1) 4	4.5 m Pl		lumín				
13.8	78.0	87.5	27.0			20.0[11	1 1 00101		(1010)	ı					I
14.0	77.8	87.4	27.0												
16.0	75.1	86.9	25.6							i					
18.0	72.4	86.3	23.9							İ					
20.0	69.7	85.6	22.4							İ					
21.2				73.0	86.1	23.1									
22.0	66.9	84.8	20.8	71.9	85.8	23.0									
24.0	64.1	83.8	19.5	69.2	85.1	21.5									
26.0	61.2	82.8	18.5	66.4	84.2	20.3									
28.0	58.2	81.6	17.5	63.5	83.3	19.4									
30.0	55.0	80.2	16.6	60.6	82.2	18.6									
32.0	51.8	78.7	15.9	57.6	81.0	17.6									
32.6							65.0	82.6	18.6						
34.0	48.4	77.0	15.2	54.4	79.6	16.8	63.1	81.9	19.6						
36.0	44.8	75.0	14.4	51.2	78.0	16.1	60.1	80.8	18.7	-					
38.0	41.0	72.8	13.7	47.8	76.3	15.3	57.1	79.5	17.9						
40.0	36.8 32.2	70.3 67.3	13.1 12.5	44.1	74.3 72.0	14.5 13.9	53.9 50.7	78.1 76.5	17.1 16.4	ł					
42.0 44.0	26.9	63.7	12.5	40.2 36.0	72.0 69.4	13.9	50.7 47.2	76.5	15.6						
46.0	20.9	58.9	11.3	31.3	66.3	12.7	43.5	72.7	14.9	55.0	76.0	15.8			
47.0	15.9	55.7	10.9	31.3	00.5	12.1	40.0	12.1	14.5	33.0	70.0	15.0			
48.0	15.5	33.7	10.5	25.7	62.5	12.0	39.6	70.4	14.2	51.9	74.5	16.8			
50.0				18.7	57.4	11.4	35.3	67.7	13.6	48.6	72.8	16.0			
51.0				15.7	55.2	9.3									
55.0							21.4	58.2	12.0	39.1	67.5	14.3			
56.0							17.4	55.2	11.7						
60.0										27.1	59.6	12.9			
63.0										16.3	51.8	12.0			
68.4													35.0	56.3	10.6
70.0													31.6	54.1	10.8
75.0													16.4	43.3	9.2



N° de ident.: 9842523/95738/ Pieza

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

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

		gulo de 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]
				41.0 ı	m Pluma Cab	eza de p	II, Punto Ilumín (1 1] Posici	916-1) 4	7.5 m Plı	eza de p umín	lumín				
14.5 16.0 18.0 20.0 22.0	78.0 76.1 73.6 71.1 68.5	90.4 90.0 89.5 88.8 88.0	23.9 23.3 22.0 20.7 19.7												
22.1 24.0 26.0 28.0 30.0	65.8 63.1 60.4 57.6	87.2 86.2 85.1 83.8	18.7 17.9 17.2 16.6	73.0 70.6 68.0 65.3 62.6	89.0 88.3 87.5 86.6 85.6	20.6 19.9 19.2 18.4 17.8									
32.0 33.9 34.0 36.0 38.0	54.6 51.6 48.4 45.1	82.5 80.9 79.2 77.3	16.0 15.5 14.9 14.0	59.9 57.0 54.1 51.0	84.5 83.2 81.8 80.3	17.3 16.7 16.2 15.8	65.0 64.9 62.2 59.4	85.3 85.2 84.2 83.1	18.3 18.3 17.9 17.4						
40.0 42.0 44.0 46.0 47.7	41.5 37.6 33.4 28.7	75.1 72.6 69.8 66.4	13.3 12.6 12.0 11.5	47.8 44.4 40.8 36.9	78.5 76.5 74.3 71.8	15.1 14.5 13.9 13.4	56.6 53.6 50.5 47.3	81.8 80.4 78.8 77.0	16.9 16.4 16.0 15.4	55.0	78.4	15.5			
48.0 50.0 54.0 55.0 59.0	23.0 15.4	62.1 56.1	10.9 10.2	32.6 27.7 15.1	68.8 65.3 55.6	12.8 12.0 9.6	43.8 40.2 29.4 16.8	75.0 72.7 65.3 55.6	14.7 14.1 12.7 11.3	54.8 51.7 43.5	78.3 76.8 72.1	16.2 16.0 14.8			
60.0 65.0 66.0 70.8 75.0 78.0										33.6 19.9 15.8	65.7 55.4 52.2	13.4 11.9 11.6	35.0 25.3 15.8	58.1 51.1 43.7	9.9 9.4 8.5



2821-1

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

Radio de descarga: 360°

2821-1 Cabeza de pluma principal:

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

	88° Án	gulo de principa	pluma I	83° Án	gulo de orincipa	pluma I		gulo de orincipa		65° Án	gulo de orincipa	pluma I	45° Án I	gulo de orincipa	pluma I
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				41.0 ı	m Pluma Cab	eza de p	il, Punto lumín (1 n] Posici	916-1) 5	0.5 m Plı	eza de p umín	lumín				
15.1 16.0 18.0 20.0 22.0	78.0 76.9 74.6 72.2 69.8	93.3 93.1 92.6 92.0 91.3	21.9 21.8 20.7 19.7 18.9												
23.0 24.0 26.0 28.0 30.0	67.4 64.9 62.3 59.7	90.5 89.5 88.5 87.4	18.2 17.5 17.1 16.6	73.0 71.8 69.3 66.9 64.4	91.8 91.5 90.8 89.9 89.0	19.0 18.9 18.3 17.9 17.5									
32.0 34.0 35.2 36.0	57.0 54.3 51.4	86.1 84.7 83.2 81.4	16.2 15.9	61.8 59.2 56.5 53.7	87.9 86.8 85.5 84.1	17.1 16.8	65.0 64.0 61.4	88.0 87.6 86.5	17.4 17.4 17.1						
38.0 40.0 42.0 44.0 46.0	48.4 45.2 41.9 38.3 34.5	79.5 77.4 75.0 72.2	14.9 14.1 13.3 12.6 11.9	50.8 47.8 44.6 41.3	82.5 80.7 78.8 76.6	16.1 15.9 15.3 14.7 14.2	58.8 56.1 53.3 50.4	85.4 84.1 82.6 81.0	16.8 16.5 16.2 16.0						
48.0 49.4 50.0 53.0 55.0	25.2 16.3	65.0 57.7	11.4 10.8 9.1	37.6 33.7 21.1	71.2	13.8	47.3 44.1 35.1	79.2 77.2 71.0	15.4 14.9 13.8	55.0 54.4 47.0	80.9 80.6 76.4	15.2 15.8 15.4			
56.0 60.0 62.0 65.0 69.0				17.5	58.4	10.7	23.2 16.2	61.8 56.1	11.9 11.1	38.5 28.0 16.7	70.8 63.0 53.8	14.1 12.8 11.5	25.0	50.0	0.4
73.3 75.0 80.0 81.0													35.0 31.9 16.9 15.3	59.8 57.5 45.4 44.1	9.4 9.4 8.3 8.0



2821-1

2821-1

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

	88° Án I	gulo de principa	pluma I		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]
				41.0		eza de p	al, Punto lumín (1 n] Posici	916-1) 5	3.5 m Pl		lumín				
15.7	78.0	96.3	19.8												
16.0	77.7	96.2	19.8												
18.0	75.5	95.7	19.0												
20.0	73.2	95.1	18.1												
22.0	71.0	94.5	17.3												
23.8				73.0	94.7	17.2									
24.0	68.7	93.7	16.7	72.8	94.6	17.2									
26.0	66.4	92.8	16.1	70.6	94.0	16.9									
28.0	64.0 61.6	91.9 90.8	15.7	68.3 65.9	93.2 92.3	16.5 16.1				ł					
30.0	59.1	89.7	15.4 15.0	63.5	92.3	15.7									
32.0 34.0	56.6	89.7 88.4	15.0	61.1	91.3	15.7									
36.0	53.9	87.0	14.7	58.6	90.3 89.1	15.4				ł					
36.4	33.9	07.0	14.4	30.0	09.1	13.1	65.0	90.7	15.2	i			i		
38.0	51.2	85.4	14.2	56.1	87.8	14.8	63.2	89.9	15.7						
40.0	48.4	83.7	13.6	53.4	86.3	14.6	60.7	88.9	15.4						
42.0	45.4	81.8	12.9	50.7	84.7	14.4	58.2	87.6	15.2						
44.0	42.3	79.6	12.2	47.8	83.0	13.9	55.7	86.3	14.9	i			i		
46.0	39.0	77.3	11.6	44.8	81.0	13.5	53.0	84.9	14.7						
48.0	35.4	74.6	11.1	41.7	78.9	13.1	50.2	83.2	14.5						
50.0	31.4	71.5	10.6	38.3	76.4	12.8	47.4	81.4	14.1						
51.2										55.0	83.3	13.7			
55.0	18.4	60.4	9.3	28.4	68.6	11.3	39.5	76.1	13.1	49.9	80.4	14.1			
56.0	15.8	58.1	8.4												
59.0				17.0	58.8	9.7									
60.0							29.9	68.7	11.9	42.4	75.5	13.4			
65.0							15.8	56.5	10.2	34.2	69.5	12.4			
70.0										21.9	59.2	11.1			
72.0										16.2	54.2	10.3	25.0	04.5	0.0
75.7 80.0				-						-			35.0	61.5 54.0	8.8 8.1
83.0													25.7 18.7	54.0 47.9	7.5
o3.0													16./	47.9	7.5



N° de ident.: 9842523/95738/ Pieza

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

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

	88° Án	gulo de principa	pluma I	83° Án	gulo de orincipa	pluma I		gulo de orincipa		65° Án	gulo de orincipa	pluma I	45° Án	gulo de orincipa	pluma I
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				41.0 ı	m Pluma Cab	eza de p	il, Punto lumín (1 n] Posici	916-1) 5	6.5 m Plı	eza de p umín	lumín				
16.3 18.0 20.0 22.0 24.0	78.0 76.3 74.2 72.0 69.9	99.2 98.8 98.3 97.6 96.9	18.1 17.8 16.9 16.0 15.4												
24.7 26.0 28.0 30.0 32.0	67.7 65.5 63.2 60.9	96.1 95.2 94.2 93.2	15.0 14.6 14.3 14.0	73.0 71.6 69.5 67.3 65.1	97.6 97.1 96.4 95.6 94.7	15.7 15.6 15.3 14.9 14.6									
34.0 36.0 37.7 38.0	58.6 56.1 53.6	92.0 90.7 89.2	13.8 13.5	62.8 60.5 58.1	93.7 92.6 91.4	14.3 14.1	65.0 64.7	93.4 93.3	14.4 14.4						
40.0 42.0 44.0 46.0 48.0	51.1 48.4 45.6 42.6 39.5	87.6 85.9 84.0 81.9 79.6	13.1 12.6 12.0 11.4 10.9	55.7 53.1 50.6 47.8 45.0	90.0 88.6 87.0 85.2 83.3	13.6 13.4 13.2 12.8 12.5	62.4 60.1 57.7 55.3 52.7	92.3 91.2 89.9 88.6 87.1	14.3 14.0 13.9 13.6 13.4						
50.0 52.9 55.0 59.0 60.0	26.2 15.4	76.9 68.5 58.5	9.3 7.8	33.7 22.7	74.6 65.0	11.4	50.1 43.1 34.9	85.5 80.7 74.4	13.3 12.5 11.8	55.0 52.5 45.7	85.8 84.3 79.9	12.6 13.1 12.7			
62.0 65.0 68.0 70.0 75.0				16.5	59.2	8.9	24.5 15.3	65.4 56.9	10.3 9.4	38.0 28.6 15.7	74.2 66.4 54.6	11.9 10.9 9.5			
78.2 80.0 85.0 86.0													35.0 31.6 21.3 18.2	63.2 60.4 51.3 48.4	8.2 7.9 7.0 6.8



N° de ident.: 9842523/95738/

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

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

Alcan- ce [m] 17.0 78 18.0 70 60 60 60 77	de mín rolda- nas [m] 3.0 102.1 7.0 101.9 5.0 101.4	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m] m Pluma Cab	Carga [t] principa eza de p 28.0 [m	Ángu- o de plumín [°] II, Punto lumín (19	Altura de rolda- nas [m] de carga	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
18.0 77	7.0 101.9 5.0 101.4	15.6	41.0 ı	m Pluma Cab	eza de p	ıl, Punto lumín (1	de carga	1 - Cah						
18.0 77	7.0 101.9 5.0 101.4	15.6			20.0 [11	1 Posici		9.5 m Plı	eza de p umín	lumín				
18.0 77	7.0 101.9 5.0 101.4	15.6				I 1 03101		11 (1310)						
•	5.0 101.4													
20.0 75		14.8												
22.0 73	0.00 1 100.6	14.1												
24.0 70		13.5	i i											
25.6			73.0	100.4	13.6									
26.0 68	3.9 99.4	13.1	72.6	100.3	13.6									
28.0 66	6.8 98.5	12.8	70.6	99.6	13.4									
30.0 64		12.5	68.5	98.8	13.0									
32.0 62		12.2	66.4	98.0	12.7									
34.0 60		12.0	64.2	97.0	12.5									
36.0 57		11.8	62.0	96.0	12.3									
38.0 55	5.6 92.8	11.5	59.8	94.8	12.0	05.0	00.4	40.4						
39.0 40.0 53	3.2 91.4	11.4	57.5	93.6	11.8	65.0 63.9	96.1 95.6	12.4 12.4						
42.0 50		11.4	55.2	93.6	11.6	61.7	95.6	12.4						
44.0 48		10.8	53.2 52.7	90.7	11.6	59.4	93.4	12.2						
46.0 45		10.6	50.2	89.1	11.3	57.1	92.1	11.8						
48.0 42		10.0	47.6	87.3	11.0	54.8	90.8	11.6						
50.0 39		9.6	44.9	85.3	10.8	52.4	89.2	11.5						
54.6									55.0	88.2	11.2			
55.0 31	.2 74.4	8.8	37.5	79.5	10.4	45.9	84.8	11.1	54.5	88.0	11.2			
60.0 19		7.8	28.4	71.5	9.3	38.6	79.1	10.7	48.3	83.9	11.0			
61.0 16	60.3	7.6												
65.0			17.2	60.8	7.5	29.8	71.6	9.8	41.3	78.7	10.7			
70.0						17.4	59.8	8.6	33.2	71.9	10.3			
71.0						16.1	58.5	8.2						
75.0									22.6	62.2	9.3			
78.0									15.3	55.0	8.5	25.0	64.0	7.5
80.6 85.0		+										35.0 27.9	64.9 58.6	7.5 6.7
85.0 89.0												27.9 17.7	58.6 48.8	6.7



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

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

		gulo de orincipa		l	gulo de principa			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]
				41.0	m Pluma Cab	eza de p	il, Punto lumín (1 n] Posici	916-1) 6	2.5 m Pl		lumín				
17.6	78.0	105.1	14.2												
18.0	77.7	105.0	14.2		İ					İ		İ			
20.0	75.8	104.5	13.6							İ					
22.0	73.8	103.9	13.1												
24.0	71.9	103.3	12.5												
26.0	69.9	102.6	12.1												
26.5				73.0	103.3	12.4									
28.0	68.0	101.8	11.8	71.5	102.8	12.3									
30.0	65.9	100.9	11.5	69.6	102.1	12.0									
32.0	63.9	99.9	11.2	67.6	101.3	11.8									
34.0	61.8	98.9	11.0	65.6	100.4	11.5									
36.0	59.7	97.7	10.8	63.5	99.4	11.2									
38.0	57.5	96.5	10.6	61.4	98.3	11.1				<u> </u>					
40.0	55.3	95.1	10.4	59.3	97.1	10.8									
40.2							65.0	98.9	11.3						
42.0	53.0	93.6	10.2	57.1	95.9	10.6	63.2	98.0	11.2						
44.0	50.6	92.0	10.1	54.8	94.5	10.4	61.1	96.9	11.0						
46.0	48.2	90.2	9.8	52.5	93.0	10.3	58.9	95.7	10.8						
48.0	45.6	88.3	9.5	50.1	91.3	10.1	56.7	94.4	10.6						
50.0	42.9	86.2	9.2	47.7	89.5	10.0	54.5	93.0	10.5						
55.0	35.5	79.9	8.6	41.0	84.3	9.6	48.5	88.9	10.2						
56.3	00.4	74.4	7.7	20.0	77.5	0.0	40.0	000	0.0	55.0	90.7	10.1			
60.0	26.4	71.4	7.7	33.3	77.5	9.2	42.0	83.8	9.9	50.7	87.8	10.0			
64.0	16.0	60.7	7.0	23.3	67.0	8.0	34.4	77.3	9.6	44.4	83.2	9.8			
65.0 68.0				16.8	67.9 61.2	6.9	34.4	11.3	9.6	44.4	83.2	9.8			
70.0				10.0	01.2	0.9	24.9	68.3	8.6	37.2	77.2	9.6			
70.0 74.0							24.9 15.7	58.9	7.4	31.2	11.2	9.0			
74.0 75.0				I			10.7	30.9	7.4	28.6	69.3	9.1			
80.0										16.2	56.8	8.2			
83.1										10.2	50.0	0.2	35.0	66.7	6.9
85.0													32.8	64.6	6.6
90.0				Ī			Ī						22.8	54.9	5.8
92.0				Ī			Ī						17.3	49.3	5.5



2821-1

2821-1

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

		gulo de orincipal			gulo de orincipa			gulo de 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]
				41.0 ı	m Pluma Cab	eza de p	al, Punto dumín (19 n] Posici	916-1) 6	5.5 m Pl		lumín				
18.3	78.0	108.0	12.9												
20.0	76.4	107.6	12.7												
22.0	74.6	107.1	12.1												
24.0	72.8	106.4	11.6												
26.0	70.9	105.8	11.2												
27.4				73.0	106.2	11.4									
28.0	69.0	105.0	10.9	72.4	106.0	11.4									
30.0	67.1 65.2	104.2 103.3	10.6	70.6 68.7	105.3 104.5	11.2 10.9				ł			ł		
32.0	63.2	103.3	10.4 10.2	66.8	104.5	10.9									
34.0 36.0	61.2	102.3	10.2	64.8	103.7	10.6									
36.0	59.2	101.2	9.7	62.8	102.7	10.4									
40.0	59.2	98.7	9.7	60.8	101.7	10.2				ł			ł		
41.5	37.1	90.1	9.5	00.6	100.6	10.0	65.0	101.6	10.3	i			i		
42.0	55.0	97.4	9.3	58.8	99.4	9.8	64.5	101.3	10.3						
44.0	52.8	95.9	9.2	56.7	98.1	9.6	62.5	100.3	10.2						
46.0	50.5	94.2	9.0	54.5	96.7	9.4	60.5	99.2	10.0						
48.0	48.2	92.5	8.8	52.3	95.2	9.2	58.5	98.0	9.8	i					
50.0	45.7	90.6	8.5	50.1	93.6	9.1	56.4	96.7	9.6	İ			İ		
55.0	39.1	85.0	8.0	44.0	88.8	8.7	50.8	92.9	9.3						
58.0										55.0	93.2	9.2			
60.0	31.4	77.7	7.4	37.1	82.8	8.3	44.9	88.3	8.9	52.9	91.7	9.1			
65.0	21.3	67.3	6.7	28.9	74.9	7.6	38.1	82.5	8.6	47.1	87.4	8.8			
67.0	15.6	61.1	6.3												
70.0				17.5	62.9	6.8	30.2	74.9	8.1	40.6	82.1	8.6			
71.0				16.4	61.6	6.2									
75.0							19.5	63.8	7.4	33.2	75.2	8.4			
77.0							15.4	59.3	6.6						
80.0										23.8	65.8	7.8			
83.0										15.8	57.2	7.5	L		
85.6													35.0	68.4	6.2
90.0													28.5	62.0	5.6
95.0													16.8	49.7	4.8



N° de ident.: 9842523/95738/ Pieza

360 °

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

Radio de descarga: Valor de vuelco: 2

2 - Vía ancha

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

	ŗ	gulo de orincipa	pluma I	ī	gulo de orincipa		75° Án I	gulo de orincipa	pluma I	ı	gulo de orincipa		ı	gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				41.0 ו		eza de p	ıl, Punto lumín (19 n] Posici	916-1) 6	8.5 m Pl		lumín				
18.9	78.0	110.9	11.9												
20.0	77.0	110.7	11.8												
22.0	75.3	110.2	11.3												
24.0	73.6	109.6	10.9												
26.0	71.8	108.9	10.5												
28.0	70.0	108.2	10.2												
28.2				73.0	109.0	10.5									
30.0	68.2	107.4	10.0	71.4	108.5	10.5									
32.0	66.4	106.6	9.7	69.7	107.7	10.2									
34.0	64.5	105.6	9.5	67.8	106.9	10.0									
36.0	62.6	104.6	9.3	66.0	106.0	9.7									
38.0	60.7 58.7	103.5 102.3	9.1 8.9	64.1 62.2	105.1	9.5				ł			ł		
40.0 42.0	58.7 56.7	102.3	8.9	60.3	104.1 102.9	9.4 9.2				ł					
42.0 42.8	50.7	101.0	0.0	60.3	102.9	9.2	65.0	104.3	9.5	l					
44.0	54.7	99.6	8.4	58.3	101.7	8.9	63.8	104.3	9.5						
46.0	52.6	98.1	8.3	56.3	100.4	8.7	61.9	103.7	9.3						
48.0	50.4	96.5	8.1	54.3	99.0	8.5	60.0	101.5	9.2	i			i		
50.0	48.2	94.7	7.9	52.2	97.4	8.4	58.0	100.3	9.0	i			i		
55.0	42.2	89.6	7.4	46.6	93.1	7.9	52.9	96.8	8.6						
59.8										55.0	95.6	8.4			
60.0	35.4	83.3	7.1	40.4	87.7	7.5	47.4	92.5	8.2	54.8	95.4	8.4			
65.0	27.1	74.8	6.5	33.3	80.8	7.1	41.3	87.2	7.8	49.4	91.5	8.2			
70.0	15.2	61.5	5.8	24.4	71.5	6.6	34.3	80.6	7.5	43.5	86.6	7.9			
74.0				16.0	62.1	5.6									
75.0							25.8	71.8	7.0	36.9	80.5	7.6			
79.0							16.2	61.0	6.7	l			l		
80.0										29.1	72.7	7.3			
85.0										18.4	61.0	7.0			
86.0										15.5	57.6	6.9			
88.0													35.0	70.1	5.7
90.0													32.8	67.9	5.4
95.0													23.9	58.5	4.7
98.0													16.5	50.1	4.3



Nº de ident.: 9842523/95738/

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

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

		gulo de orincipal			gulo de orincipa			gulo de orincipa			gulo de orincipa		45° Án 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]
				41.0		eza de p	il, Punto Ilumín (19 n] Posici	916-1) 7	1.5 m Pl		lumín				
19.5 20.0 22.0 24.0	78.0 77.6 75.9 74.3	113.9 113.8 113.3 112.7	10.7 10.7 10.3 9.9												
26.0 28.0 29.1	72.6 70.9	112.1 111.4	9.5 9.3	73.0	111.9	9.5									
30.0 32.0 34.0	69.2 67.4 65.6	110.7 109.9 109.0	9.1 8.9 8.6	72.3 70.5 68.8	111.6 110.9 110.2	9.5 9.3 9.1									
36.0 38.0 40.0	63.9 62.0 60.2	108.0 106.9 105.8	8.5 8.3 8.1 8.0	67.1 65.3 63.5 61.7	109.3 108.4 107.4	8.9 8.7 8.5 8.3									
42.0 44.0 46.0 48.0	58.3 56.4 54.4 52.4	104.6 103.3 101.9 100.4	7.8 7.6 7.5	59.8 57.9 56.0	106.4 105.2 104.0 102.7	8.3 8.2 8.0 7.8	65.0 63.2 61.4	107.0 106.0 105.0	8.5 8.5 8.3						
50.0 55.0 60.0	50.3 44.8 38.7	98.7 94.0 88.3	7.4 7.0 6.7	54.0 48.8 43.2	101.2 97.1 92.2	7.7 7.4 7.1	59.5 54.7 49.6	103.8 100.5 96.5	8.2 7.8 7.5						
61.5 65.0 70.0 73.0	31.6 22.6 16.8	81.0 71.0 64.2	6.3 5.7 4.9	36.8 29.4	86.1 78.3	6.8	44.0 37.8	91.7 85.8	7.2 7.0	55.0 51.4 46.0	98.1 95.4 90.9	7.5 7.4 7.2			
75.0 77.0 80.0 82.0				19.4 15.7	66.9 62.5	5.8 5.1	30.5 21.1 15.8	78.3 67.6 61.4	6.7 6.3 6.1	33.2	78.6	6.8			
85.0 89.0 90.5										24.8 15.1	69.3 58.0	6.5 6.3	35.0	71.8	5.0
95.0 100.0 101.0													28.9 18.8 16.1	65.4 53.8 50.6	4.4 3.8 3.6



N° de ident.: 9842523/95738/

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

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

	88° Án	gulo de orincipa	pluma I		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]
				41.0 ı	n Pluma	principa eza de p	I, Punto	de carga	1 - Cab	eza de p	lumín	-			
					Oub] Posici								
20.1	78.0	116.8	9.7												
22.0	76.5	116.4	9.5												
24.0	74.9	115.8	9.1												
26.0	73.3	115.3	8.8												
28.0	71.7	114.6	8.5												
30.0	70.0	113.9	8.4	73.0	114.8	8.6									
32.0	68.4	113.1	8.2	71.4	114.1	8.5									
34.0 36.0	66.7 65.0	112.3 111.3	8.0 7.8	69.7 68.1	113.4 112.6	8.3 8.2				ł					
38.0	63.3	110.3	7.6	66.4	112.6	8.0									
40.0	61.5	109.3	7.5	64.7	110.8	7.8									
42.0	59.7	109.3	7.5	62.9	10.8	7.6				i					
44.0	57.9	106.1	7.2	61.2	109.8	7.5									
45.3	07.0	100.0	7.2	01.2	100.7	7.0	65.0	109.7	7.7	i			i		
46.0	56.1	105.6	7.1	59.4	107.5	7.4	64.4	109.4	7.7						
48.0	54.2	104.1	7.0	57.6	106.3	7.2	62.7	108.4	7.6						
50.0	52.2	102.6	6.9	55.7	104.9	7.1	60.9	107.3	7.5	l					
55.0	47.1	98.3	6.6	50.8	101.1	6.9	56.3	104.2	7.2						
60.0	41.5	93.0	6.4	45.6	96.5	6.7	51.5	100.4	6.9						
63.2										55.0	100.5	6.8			
65.0	35.2	86.6	6.1	39.9	91.0	6.5	46.4	96.0	6.7	53.3	99.2	6.8			
70.0	27.7	78.2	5.6	33.3	84.1	6.2	40.7	90.6	6.6	48.2	95.0	6.6			
75.0	17.4	65.9	4.9	25.3	75.0	5.7	34.3	84.0	6.4	42.8	90.0	6.5			
76.0	16.4	64.6	4.4												
80.0				15.3	62.9	4.8	26.5	75.2	6.0	36.7	83.9	6.4			
85.0							15.5	61.8	5.7	29.5	76.0	6.2			
90.0										20.1	64.9	5.9			
92.0										16.7	60.6	5.5	25.0	70.5	4.0
92.9													35.0	73.5 71.3	4.6 4.4
95.0 100.0													32.9	62.0	3.7
100.0													24.8 15.8	51.0	3.7
104.0													10.0	31.0	3.2



N° de ident.: 9842523/95738/

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

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

		gulo de orincipal		83° Án	gulo de orincipa	pluma I	75° Án	gulo de principa	pluma I		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]
				41.0 ı	m Pluma Cab	eza de p	il, Punto llumín (1 n] Posici	916-1) 7	7.5 m Pl		lumín				
20.8	78.0	119.7	8.7												
22.0	77.1	119.5	8.7						İ				İ		
24.0	75.5	119.0	8.3										İ		
26.0	74.0	118.4	8.0												
28.0	72.4	117.8	7.7												
30.0	70.8	117.1	7.6												
30.9				73.0	117.6	7.7									
32.0	69.3	116.3	7.4	72.1	117.3	7.7									
34.0	67.7	115.5	7.2	70.5	116.6	7.5									
36.0	66.0	114.6	7.0	69.0	115.8	7.4									
38.0	64.4	113.7	6.9	67.4	115.0	7.2									
40.0	62.7	112.7	6.7	65.7	114.1	7.0									
42.0	61.0	111.6	6.6	64.1	113.2	6.9									
44.0	59.3	110.4	6.5 6.3	62.4	112.1	6.7 6.6							ł		
46.0 46.6	57.6	109.2	6.3	60.7	111.0	0.0	65.0	112.5	6.9						
48.0	55.8	107.8	6.2	59.0	109.8	6.5	63.8	111.8	6.8						
50.0	53.9	107.8	6.1	57.2	109.6	6.3	62.1	110.7	6.7				ł		
55.0	49.2	102.3	5.9	52.6	105.0	6.1	57.8	107.8	6.4				i		
60.0	44.0	97.5	5.7	47.8	100.7	5.9	53.3	104.3	6.1						
64.9										55.0	103.0	6.0			
65.0	38.3	91.7	5.5	42.5	95.6	5.7	48.5	100.1	6.0	54.9	102.9	6.0			
70.0	31.7	84.4	5.2	36.6	89.5	5.5	43.2	95.2	5.8	50.2	99.0	5.8			
75.0	23.6	74.6	4.7	29.7	81.6	5.2	37.5	89.1	5.6	45.2	94.4	5.7			
79.0	16.1	65.0	4.0												
80.0				20.9	70.8	4.9	30.7	81.6	5.4	39.6	88.8	5.6			
83.0				15.0	63.2	4.3									
85.0							22.3	71.3	5.3	33.3	81.9	5.5			
88.0							15.2	62.2	5.1						
90.0										25.6	72.8	5.4			
95.0										16.3	61.1	4.9	05.0		4.0
95.4													35.0	75.3	4.0
100.0 105.0													29.3 20.4	68.7 57.7	3.5 2.9
105.0													20.4 15.4	51.4	2.9



N° de ident.: 9842523/95738/ Piez

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

Valor de vuelco: Lastre trasero [t]:

Lastre central [t]:

2 - Vía ancha 124.0 52.6

		gulo de orincipa		ı	gulo de orincipa		ı	gulo de orincipa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				41.0	m Pluma Cab	eza de p	al, Punto dumín (19 n] Posici	916-1) 8	0.5 m Pl	eza de p umín	lumín				
21.4	78.0	122.7	7.9												
22.0	77.6	122.5	7.9												
24.0	76.1	122.1	7.6												
26.0	74.6 73.1	121.5	7.4												
28.0 30.0	73.1	120.9 120.3	7.1 6.9												
31.8	/ 1.0	120.3	0.9	73.0	120.5	7.0									
32.0	70.1	119.5	6.8	72.8	120.3	7.0									
34.0	68.5	118.8	6.6	71.3	119.8	6.9				İ					
36.0	67.0	117.9	6.4	69.8	119.0	6.7									
38.0	65.4	117.0	6.3	68.2	118.3	6.6									
40.0	63.8	116.1	6.1	66.7	117.4	6.4									
42.0	62.2	115.0	6.0	65.1	116.5	6.2									
44.0	60.6	113.9	5.9	63.5	115.5	6.1									
46.0 47.8	58.9	112.7	5.7	61.9	114.4	6.0	65.0	115.2	6.1						
47.8	57.2	111.4	5.6	60.3	113.3	5.9	64.9	115.2	6.1						
50.0	55.5	110.1	5.5	58.6	112.1	5.7	63.3	114.1	6.1						
55.0	51.0	106.3	5.3	54.3	108.7	5.5	59.2	111.3	5.8	i					
60.0	46.2	101.8	5.1	49.7	104.7	5.3	54.9	108.0	5.5						
65.0	41.0	96.4	4.9	44.8	100.0	5.1	50.4	104.1	5.3						
66.6				ļ						55.0	105.4	5.3			
70.0	35.1	89.9	4.8	39.4	94.4	4.9	45.5	99.5	5.1	52.0	102.9	5.3			
75.0	28.2	81.6	4.4	33.3	87.5	4.7	40.2	94.0	5.0	47.3	98.6	5.1			
80.0	19.1 15.8	69.9	4.0 3.6	26.0	78.5	4.5	34.2	87.3	4.9	42.1	93.4	4.9			
82.0 85.0	15.6	65.4	3.0	15.8	65.0	4.3	27.1	78.7	4.8	36.4	87.2	4.8			
90.0				13.0	03.0	4.0	17.5	66.2	4.6	29.8	79.4	4.8			
91.0				i			16.6	64.9	4.3						
95.0										21.4	68.7	4.8			
97.8													35.0	77.0	3.5
98.0										16.0	61.5	4.3			
100.0													33.0	74.6	3.3
105.0													25.6	65.5	2.7
110.0													15.1	51.8	2.2



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

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

	ļ į	gulo de orincipa		1	gulo de principa		l	gulo de principa		1	gulo de principa		ı	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]
				41.0 ı		eza de p	al, Punto lumín (1 n] Posici	916-1) 8	3.5 m Pl	eza de p umín	lumín				
22.0	78.0	125.6	7.1												
24.0	76.6	125.1	7.0												
26.0	75.2	124.6	6.7												
28.0	73.7	124.1	6.5												
30.0	72.3	123.4	6.3												
32.0	70.8	122.7	6.1	70.0	400.4	0.0									
32.6	69.4	122.0	6.0	73.0 72.0	123.4 122.9	6.3 6.3									
34.0 36.0	69.4 67.9	122.0	5.9	72.0	122.9	6.1									
38.0	66.4	120.3	5.9	69.1	121.5	6.0									
40.0	64.8	119.4	5.6	67.6	120.7	5.8									
42.0	63.3	118.4	5.5	66.1	119.8	5.7									
44.0	61.7	117.3	5.4	64.6	118.9	5.6				i					
46.0	60.2	116.2	5.2	63.0	117.8	5.4		İ	İ	İ		İ			
48.0	58.5	115.0	5.1	61.4	116.8	5.3									
49.1							65.0	117.9	5.5						
50.0	56.9	113.7	5.0	59.9	115.6	5.2	64.3	117.5	5.5						
55.0	52.7	110.1	4.8	55.8	112.4	5.0	60.4	114.8	5.2						
60.0	48.2	105.9	4.6	51.5	108.7	4.8	56.3	111.6	5.0						
65.0	43.3	100.9	4.4	46.9	104.2	4.5	52.1	108.0	4.8						
68.4		05.0	4.0	44.0	00.0	4.0	47.5	400 7	4.0	55.0	107.9	4.7			
70.0 75.0	38.0 31.9	95.0 87.7	4.2 4.0	41.9 36.4	99.0 92.8	4.3 4.2	47.5 42.6	103.7 98.6	4.6 4.4	53.6 49.2	106.7 102.6	4.7 4.5			
75.0 80.0	24.5	87.7 78.2	3.7	30.4	92.8 85.0	4.2	42.6 37.2	98.6	4.4	49.2 44.4	97.8	4.5			
85.0	15.5	65.8	3.1	22.0	74.5	3.8	31.0	84.9	4.2	39.2	92.1	4.3			
88.0	10.0	00.0	0.1	15.5	65.4	3.7	31.0	04.0	7.2	JJ.2	J2.1	7.0			
90.0				10.0	00.4	0.7	23.3	75.0	4.1	33.3	85.2	4.2			
94.0							16.3	65.3	3.6	00.0					
95.0										26.3	76.3	4.2			
100.0										16.6	63.2	4.1			
100.3													35.0	78.7	2.9
101.0										15.7	61.9	3.6			
105.0													29.6	72.1	2.5
109.0													23.4	63.9	2.0



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

		gulo de orincipa		83° Án I	gulo de orincipa	pluma I	75° Án	gulo de principa	pluma I		gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
				41.0	m Pluma Cab	eza de p	il, Punto lumín (1 n] Posici	916-1) 8	6.5 m Pl		lumín				
22.6	78.0	128.5	6.5												
24.0	77.1	128.2	6.4	i						İ			İ		
26.0	75.7	127.7	6.2	i						İ			İ		
28.0	74.3	127.2	6.0												
30.0	72.9	126.6	5.8												
32.0	71.5	125.9	5.7												
33.5				73.0	126.2	5.8									
34.0	70.1	125.2	5.5	72.7	126.1	5.8									
36.0	68.7	124.4	5.4	71.3	125.4	5.7									
38.0	67.2	123.6	5.3	69.8	124.7	5.5									
40.0	65.8	122.7	5.1	68.4	123.9	5.4									
42.0	64.3	121.8	5.0	67.0	123.1	5.2									
44.0	62.8	120.7	4.9	65.5	122.2	5.1									
46.0	61.3	119.7	4.8	64.0	121.2	5.0									
48.0	59.8	118.5	4.7	62.5	120.2	4.9									
50.0	58.2	117.3	4.6	61.0	119.1	4.8	05.0	400.0	5 0	ł					
50.4	540	112.0	4.4	57.1	1100	4.6	65.0	120.6	5.0	ł			ł		
55.0 60.0	54.2 49.9	113.9 109.9	4.4	57.1 53.0	116.0 112.5	4.6 4.4	61.5 57.7	118.2 115.2	4.8 4.6						
65.0	45.4	105.3	4.0	48.7	108.3	4.4	53.6	111.8	4.4						
70.0	40.5	99.8	3.7	44.1	103.5	3.9	49.3	107.7	4.4						
70.1	40.5	33.0	5.7	77.1	100.0	3.3	43.5	107.7	7.2	55.0	110.4	4.2	i		
75.0	35.0	93.2	3.6	39.0	97.7	3.8	44.7	103.0	4.0	50.9	106.6	4.1	i		
80.0	28.6	85.0	3.4	33.3	90.8	3.6	39.8	97.4	3.9	46.4	102.1	4.0			
85.0	20.5	73.8	3.2	26.6	81.9	3.4	34.2	90.6	3.7	41.6	96.8	3.8			
88.0	15.2	66.2	2.6												
90.0				17.6	69.3	3.3	27.6	82.1	3.6	36.2	90.5	3.7			
91.0				15.2	65.8	3.2									
95.0							19.1	70.2	3.5	30.1	82.7	3.6			
97.0							16.0	65.7	3.0						
100.0										22.5	72.4	3.6			
102.8													35.0	80.4	2.5
104.0										15.4	62.3	3.0			
105.0													33.0	77.9	2.3
108.0													29.1	72.8	2.0



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

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

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

	88° Ángulo de pluma principal				gulo de orincipa			gulo de orincipa			gulo de orincipa		45° Ángulo de pluma principal		
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
41.0 m Pluma principal, Punto de carga 1 - Cabeza de plumín Cabeza de plumín (1916-1) 89.5 m Plumín 46.0 [m] Posición midfall (1916)															
23.3 24.0 26.0 28.0 30.0	78.0 77.5 76.2 74.9 73.5	131.5 131.3 130.8 130.3 129.7	5.7 5.7 5.5 5.3 5.2												
32.0 34.0 34.4 36.0 38.0	72.2 70.8 69.4 68.0	129.1 128.4 127.7 126.9	5.0 4.9 4.8 4.6	73.0 71.9 70.5	129.1 128.6 127.9	5.0 5.0 4.8									
40.0 42.0 44.0 46.0 48.0	66.7 65.2 63.8 62.4 60.9	126.0 125.1 124.1 123.1 122.0	4.5 4.4 4.2 4.2 4.1	69.2 67.8 66.4 65.0 63.5	127.1 126.3 125.5 124.5 123.6	4.7 4.6 4.5 4.3 4.2									
50.0 51.6 55.0 60.0 65.0	59.4 55.6 51.5 47.3	120.8 117.6 113.8 109.4	4.0 3.8 3.6 3.4	62.1 58.4 54.5 50.4	122.5 119.6 116.2 112.3	4.2 4.2 3.9 3.7 3.5	65.0 62.6 58.9 55.0	123.3 121.6 118.8 115.5	4.3 4.2 4.0 3.7						
70.0 71.8 75.0 80.0 85.0	42.7 42.7 37.7 32.0 25.2	98.3 91.0 81.7	3.2 3.0 2.9 2.7	46.1 41.4 36.2 30.3	107.8 102.4 96.1 88.3	3.4 3.2 3.1 2.9	51.0 46.7 42.0 36.9	111.6 107.2 102.0 95.8	3.6 3.4 3.3 3.1	55.0 52.4 48.2 43.7	112.8 110.4 106.2 101.3	3.6 3.5 3.4 3.2			
90.0 94.0 95.0 100.0 105.0	15.9	68.0	2.5	23.0 16.4	78.1 68.5	2.7 2.3	31.1 24.1 15.7	88.3 78.5 66.1	3.0 2.9 2.4	38.8 33.3 26.8 18.3	95.5 88.5 79.7 67.4	3.1 3.0 3.0 2.9			
105.2 107.0										15.2	62.7	2.5	35.0	82.1	2.0



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

		gulo de orincipa			gulo de orincipa			gulo de principa			gulo de orincipa			gulo de orincipa	
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
	41.0 m Pluma principal, Punto de carga 1 - Cabeza de plumín Cabeza de plumín (1916-1) 92.5 m Plumín 49.0 [m] Posición midfall (1916)														
						49.0 [m	ı] Posici	ón midfa	II (1916)						
23.9	78.0	134.4	5.1												
24.0	77.9	134.4	5.1												
26.0	76.6	133.9	5.0												
28.0	75.4	133.4	4.8												
30.0	74.1	132.8	4.7												
32.0	72.8	132.2	4.5												
34.0	71.5	131.6	4.3												
35.3				73.0	132.0	4.4									
36.0	70.1	130.9	4.2	72.5	131.8	4.4									
38.0	68.8	130.1	4.1	71.2	131.1	4.3									
40.0	67.5	129.3	4.0	69.9	130.4	4.2									
42.0	66.1	128.4	3.8	68.5	129.6	4.1									
44.0	64.7 63.3	127.5 126.5	3.7 3.6	67.2	128.7 127.9	3.9 3.8									
46.0 48.0	61.9	125.5	3.6	65.8 64.5	127.9	3.8									
50.0	60.5	125.4	3.5	63.1	125.9	3.6									
52.9	00.5	124.3	3.5	03.1	125.9	3.0	65.0	126.1	3.7						
55.0	56.8	121.2	3.3	59.5	123.1	3.4	63.5	125.0	3.6						
60.0	53.0	117.6	3.1	55.8	119.9	3.2	60.0	122.3	3.4				i		
65.0	49.0	113.5	2.9	51.9	116.2	3.0	56.3	119.1	3.2						
70.0	44.7	108.7	2.7	47.8	111.9	2.9	52.5	115.5	3.0						
73.5										55.0	115.3	3.0			
75.0	40.1	103.2	2.6	43.5	106.9	2.7	48.4	111.3	2.9	53.9	114.2	3.0	i		
80.0	34.9	96.5	2.4	38.7	101.1	2.6	44.1	106.4	2.8	49.9	110.2	2.8			
85.0	29.0	88.4	2.3	33.4	94.1	2.5	39.4	100.7	2.7	45.7	105.6	2.7			
90.0				27.1	85.3	2.3	34.1	93.9	2.5	41.1	100.2	2.6			
95.0							28.0	85.5	2.4	36.1	93.8	2.5			
100.0										30.3	86.1	2.5			
105.0										23.4	76.0	2.4			
109.0	1									15.8	64.5	2.3			



Nº de ident.: 9842523/95738/

Radio de descarga:

Pieza de articulación de pluma principal:

2821-1

360°

Cabeza de pluma principal: 2821-1

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

	88° Ángulo de pluma principal				83° Ángulo de pluma principal			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]
41.0 m Pluma principal, Punto de carga 1 - Cabeza de plumín Cabeza de plumín (1916-1) 95.5 m Plumín 52.0 [m] Posición midfall (1916)															
24.5	78.0	137.4	4.7												
26.0	77.1	137.0	4.6												
28.0	75.8	136.5	4.5												
30.0	74.6	136.0	4.3												
32.0	73.3	135.4	4.2												
34.0	72.1	134.7	4.1												
36.0	70.8	134.1	3.9												
36.1				73.0	134.9	4.1									
38.0	69.5	133.3	3.8	71.8	134.3	4.0									
40.0	68.2	132.5	3.7	70.5	133.6	3.9									
42.0	66.9	131.7	3.6	69.3	132.8	3.8									
44.0	65.6	130.8	3.5	68.0	132.0	3.7									
46.0	64.2	129.8	3.4	66.6	131.1	3.6									
48.0	62.9	128.8	3.3	65.3	130.2	3.5									
50.0	61.5	127.7	3.2	64.0	129.3	3.4									
54.2							65.0	128.8	3.4						
55.0	58.0	124.8	3.0	60.6	126.6	3.2	64.4	128.4	3.4						
60.0	54.4	121.4	2.8	57.0	123.5	2.9	61.0	125.8	3.2						
65.0	50.6	117.5	2.6	53.3	120.0	2.7	57.5	122.7	3.0						
70.0	46.5	113.0	2.3	49.5	115.9	2.5	53.9	119.3	2.8						
75.0							50.0	115.3	2.6						
75.2										55.0	117.7	2.7			
80.0							45.9	110.7	2.4	51.4	114.1	2.6			
85.0										47.4	109.8	2.4			



N° de ident.: 9842523/95738/

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

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

		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]
	44.0 m Pluma principal, Punto de carga 1 - Cabeza de plumín Cabeza de plumín (2316-1) 38.5 m Plumín 16.0 [m] Posición midfall (2316)														
12.7	78.0	84.6	55.8												
13.0	77.5	84.5	55.8												
14.0	76.0	84.3	53.8												
16.0	72.9	83.7	45.7												
18.0	69.8	83.0	39.2												
19.8				73.0	83.3	46.9									
20.0	66.5	82.1	33.7	72.7	83.3	46.9									
22.0	63.2	81.2	29.3	69.6	82.6	44.0									
24.0	59.8	80.0	26.2	66.3	81.7	39.8									
26.0	56.3	78.8	23.6	63.0	80.7	34.9									
28.0	52.6	77.3	21.6	59.6	79.6	31.5									
30.0	48.7	75.6	20.0	56.0	78.3	28.4									
30.9							65.0	80.0	30.4						
32.0	44.5	73.6	18.6	52.3	76.8	26.0	63.2	79.5	29.9						
34.0	40.0	71.4	17.4	48.4	75.1	23.9	59.8	78.3	28.1						
36.0	35.0	68.7	16.3	44.3	73.1	22.0	56.2	77.0	26.5						
38.0	29.3	65.4	15.5	39.7	70.9	20.4	52.5	75.6	25.1						
40.0	22.3	61.1	14.6 14.2	34.7	68.1	19.1	48.6	73.9	23.9						
41.0	17.7	58.2	14.2	00.0	04.0	17.9	44.5	74.0	22.6						
42.0 43.8				28.9	64.8	17.9	44.5	71.9	22.6	EE 0	73.8	19.0			
43.6 44.0				21.8	60.4	16.7	40.0	69.7	21.5	55.0 54.9	73.6	19.0			
44.0 45.0				17.1	57.5	16.1	40.0	69.7	21.5	54.9	13.1	19.6			
46.0				17.1	37.3	10.1	35.0	67.0	20.6	51.1	72.2	19.3			
48.0							29.2	63.7	19.8	47.1	70.4	18.5			
50.0							22.2	59.4	19.0	42.9	68.3	17.7			
51.0							17.6	56.5	18.5	72.0	00.0	17.7			
55.0							17.0	30.3	10.0	30.1	61.4	16.0			
59.0										15.4	52.2	13.7			
65.6													35.0	55.0	9.8
70.0													22.7	47.7	8.7
71.0													18.3	44.9	8.5



N° de ident.: 9842523/95738/ Pieza de

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

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

	88° Ángulo de pluma principal			83° Ángulo de pluma principal				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]
44.0 m Pluma principal, Punto de carga 1 - Cabeza de plumín Cabeza de plumín (2316-1) 41.5 m Plumín 19.0 [m] Posición midfall (2316)															
13.3 14.0 16.0 18.0 20.0	78.0 77.0 74.2 71.3 68.3	87.5 87.4 86.8 86.2 85.4	51.5 51.5 44.9 38.4 33.6	73.0	86.2	44.1									
22.0 24.0 26.0 28.0	65.3 62.2 59.0 55.7	84.5 83.5 82.3 81.0	29.0 25.6 23.3 21.3	71.1 68.1 65.1 62.0	85.8 85.0 84.1 83.1	43.3 39.8 35.4 31.7									
30.0 32.0 32.1 34.0 36.0	52.3 48.6 44.8 40.7	79.5 77.8 75.9 73.7	19.7 18.3 17.1 16.0	58.8 55.5 52.0 48.4	81.9 80.6 79.1 77.3	28.6 26.0 23.9 22.1	65.0 62.2 59.0	82.7 81.8 80.6	27.6 27.3 25.8						
38.0 40.0 42.0 44.0 45.5	36.1 31.0 25.0 17.0	71.1 68.0 64.1 58.7	15.1 14.3 13.6 12.8	44.6 40.4 35.9 30.7	75.4 73.1 70.5 67.4	20.4 18.9 17.7 16.7	55.7 52.2 48.6 44.7	79.3 77.8 76.1 74.2	24.3 23.1 22.0 20.9	55.0	76.2	17.6			
46.0 48.0 50.0 54.0 55.0				24.6 16.4	63.4 57.9	15.6 14.6	40.6 36.1 31.0 16.9	72.0 69.4 66.2 56.9	19.9 19.0 18.3 16.8	54.4 50.9 47.2	76.0 74.4 72.6	18.5 17.8 17.1			
60.0 61.0 68.0 70.0 74.0										22.3 18.2	57.8 55.0	14.0 13.7	35.0 31.4 17.6	56.7 54.5 45.4	8.7 8.3 7.4



N° de ident.: 9842523/95738/

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

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

	88° Ángulo de pluma principal			83° Án	gulo de orincipa	pluma I	75° Án I	gulo de orincipa	pluma I		gulo de orincipa		45° Án	gulo de orincipa	pluma I
Alcan- ce [m]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]	Ángu- o de plumín [°]	Altura de rolda- nas [m]	Carga [t]
	44.0 m Pluma principal, Punto de carga 1 - Cabeza de plumín Cabeza de plumín (2316-1) 44.5 m Plumín 22.0 [m] Posición midfall (2316)														
13.9 14.0 16.0 18.0 20.0 21.6 22.0 24.0	78.0 77.9 75.3 72.6 69.9 67.1 64.2	90.5 90.5 90.0 89.3 88.6 87.8 86.9	47.6 47.6 44.1 38.1 33.0 28.8 25.3	73.0 72.4 69.7	89.1 88.9 88.2	41.5 41.4 39.1									
26.0 28.0 30.0 32.0 33.4 34.0	61.3 58.3 55.2 52.0 48.6	85.8 84.6 83.3 81.8	22.7 20.9 19.3 18.0	66.9 64.1 61.1 58.1 55.0	87.4 86.4 85.4 84.2 82.8	36.0 31.9 29.0 26.2 23.9	65.0 64.2	85.5 85.2	26.3 26.3						
36.0 38.0 40.0 42.0 44.0 46.0	45.0 41.2 37.1 32.5 27.2 20.6	78.1 76.0 73.4 70.5 66.9 62.2 59.1	15.8 14.8 14.0 13.3 12.6 12.0	51.8 48.4 44.8 41.0 36.8 32.2	81.3 79.6 77.6 75.4 72.9 69.9	22.1 20.5 19.0 17.7 16.5 15.6	61.3 58.3 55.2 51.9 48.6 45.0	84.1 82.9 81.6 80.1 78.4 76.4	25.0 23.7 22.4 21.3 20.4 19.3						
47.3 48.0 50.0 51.0 55.0 57.0	10.4	33.1	11.0	26.8 20.2 15.8	66.3 61.5 58.3	14.7 13.8 13.3	41.2 37.0 24.0 16.3	74.2 71.7 63.0 57.3	18.4 17.6 16.0 15.3	55.0 54.0 50.7 41.7	78.7 78.2 76.6	16.2 17.2 16.5			
60.0 64.0 70.5 75.0 77.0										30.6 17.6	64.7 55.4	13.5 12.6	35.0 24.5 17.0	58.5 51.3 45.8	8.0 7.0 6.6