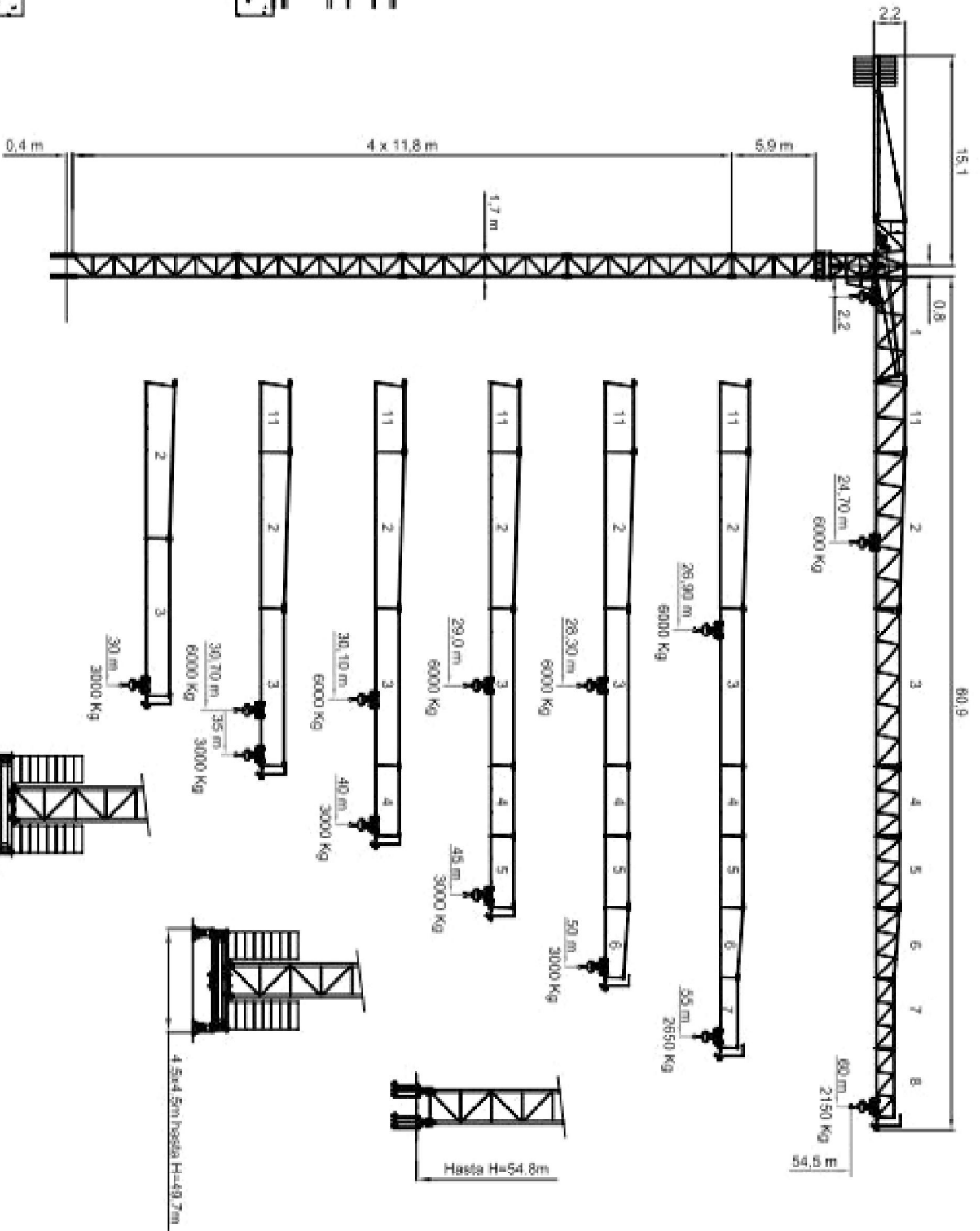
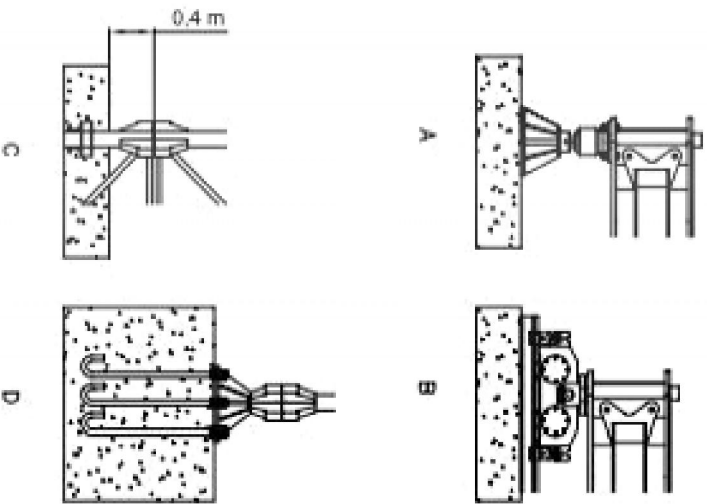


# TLS 60

## 3-6T

### 2150Kg



**DIN/FEM CE**


UNE 58-101-92 FEM 1001-87 Gr. A3 DIN 15018 Gr. B3  
According to EC 98/37 instruction

**Curvas de cargas**  
**Load diagrams**  
**Lastkurven**  
**Courbes de charges**  
**Curve di carico**

**60 m**

10	15	20	25	30	35	40	45	46,3	50	55	60
3000	3000	3000	3000	3000	3000	3000	3000	3000	2690	2400	2150
6000	6000	6000	6000	5850	4730	3940	3360	2900	2540	2250	2000


m  
Kg



**55 m**

10	15	20	25	30	35	40	45	49,5	50	55
3000	3000	3000	3000	3000	3000	3000	3000	2970	2850	
6000	6000	6000	6000	26,9	30	35	40	45	50	55
6000	6000	6000	6000	6000	5210	4350	3710	3210	2820	2500


m  
Kg



**50 m**

10	15	20	25	30	35	40	45	50		
3000	3000	3000	3000	3000	3000	3000	3000	3000		
6000	6000	6000	6000	28,3	30	35	40	45	50	
6000	6000	6000	6000	6000	5510	4610	3930	3410	3000	


m  
Kg



**45 m**

10	15	20	25	30	35	40	45			
3000	3000	3000	3000	3000	3000	3000	3000			
6000	6000	6000	6000	29	30	35	40	45		
6000	6000	6000	6000	6000	5640	4720	4030	3500		


m  
Kg



**40 m**

10	15	20	25	30	35	40				
3000	3000	3000	3000	3000	3000	3000				
6000	6000	6000	6000	29,4	30	35	40			
6000	6000	6000	6000	6000	5864	4910	4200			


m  
Kg



**35 m**

10	15	20	25	30	35					
3000	3000	3000	3000	3000	3000					
6000	6000	6000	6000	29,8	30	35				
6000	6000	6000	6000	6000	5970	5000				


m  
Kg



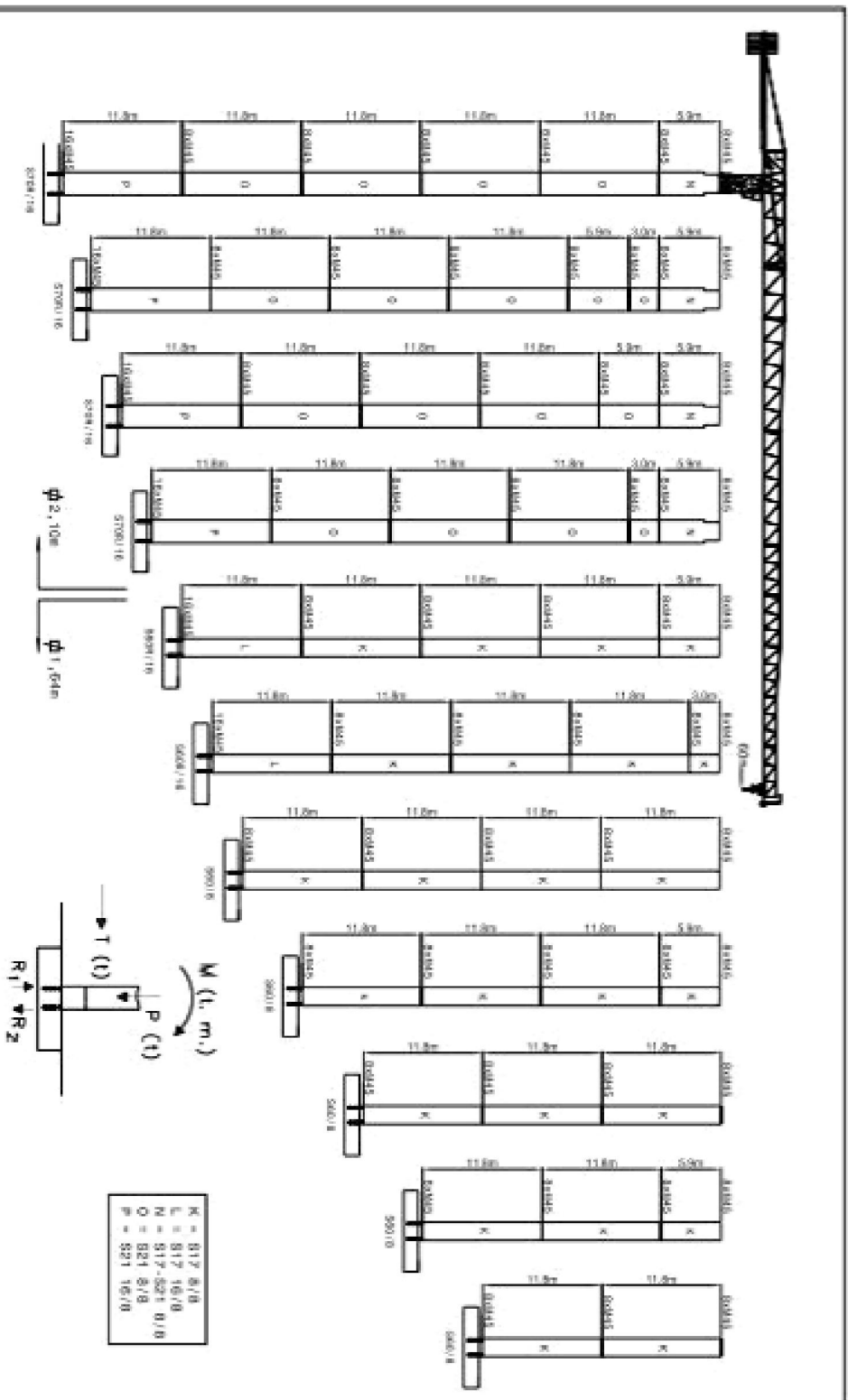
**30 m**

10	15	20	25	30						
3000	3000	3000	3000	3000						
6000	6000	6000	6000	6000						

m  
Kg



Mástil / Reacciones  
 Masts / Reactions  
 Maste / Eckdrücke  
 Mat / Réactions  
 Torre / Reazioni



H (m)	66.4	63.5	60.5	57.6	54.6	51.6	48.6	45.6	42.6	39.6	36.6	33.6	30.6	27.6
M (T°m)	576.7	530.6	485.5	443.2	397.2	321.8	293.8	278.7	264.9	252.4	241.1	230.8	221.1	211.9
T (t)	13.3	12.7	12.2	11.8	10.6	10.1	9.7	9.2	8.8	7.9	7.0	6.1	5.3	4.5
P (t)	78.5	77.5	75.9	74.4	76.2	74.9	73.2	71.2	71.2	68.5	65.5	63.8	61.8	59.8
R <sub>1</sub> (t)	192	175	159.1	144.1	151.4	135.0	120.3	113.6	107.8	102.4	97.8	93.2	88.6	84.0
R <sub>2</sub> (t)	226.7	209.7	192.9	177.2	185.4	168.4	156.7	149.1	141.9	135.5	129.6	124.1	118.6	113.1

**Curvas de cargas**  
**Load diagrams**  
**Lastkurven**  
**Courbes de charges**  
**Curve di carico**

**60 m**

10	15	20	25	30	35	40	45	46,3	50	55	60	m
3000	3000	3000	3000	3000	3000	3000	3000	3000	2690	2400	2150	Kg
10	15	20	24,7	25	30	35	40	45	50	55	60	m
6000	6000	6000	5850	4730	3940	3360	2900	2540	2250	2000	Kg	

**55 m**

10	15	20	25	30	35	40	45	49,5	50	55	m
3000	3000	3000	3000	3000	3000	3000	3000	2970	2650	Kg	
10	15	20	25	26,9	30	35	40	45	50	55	m
6000	6000	6000	6000	6000	5210	4350	3710	3210	2820	2500	Kg

**50 m**

10	15	20	25	30	35	40	45	50	m	
3000	3000	3000	3000	3000	3000	3000	3000	Kg		
10	15	20	25	28,3	30	35	40	45	50	m
6000	6000	6000	6000	6000	5510	4610	3830	3410	3000	Kg

**45 m**

10	15	20	25	30	35	40	45	m	
3000	3000	3000	3000	3000	3000	3000	Kg		
10	15	20	25	29	30	35	40	45	m
6000	6000	6000	6000	6000	5640	4720	4030	3500	Kg

**40 m**

10	15	20	25	30	35	40	m	
3000	3000	3000	3000	3000	3000	Kg		
10	15	20	25	29,4	30	35	40	m
6000	6000	6000	6000	6000	5664	4910	4200	Kg

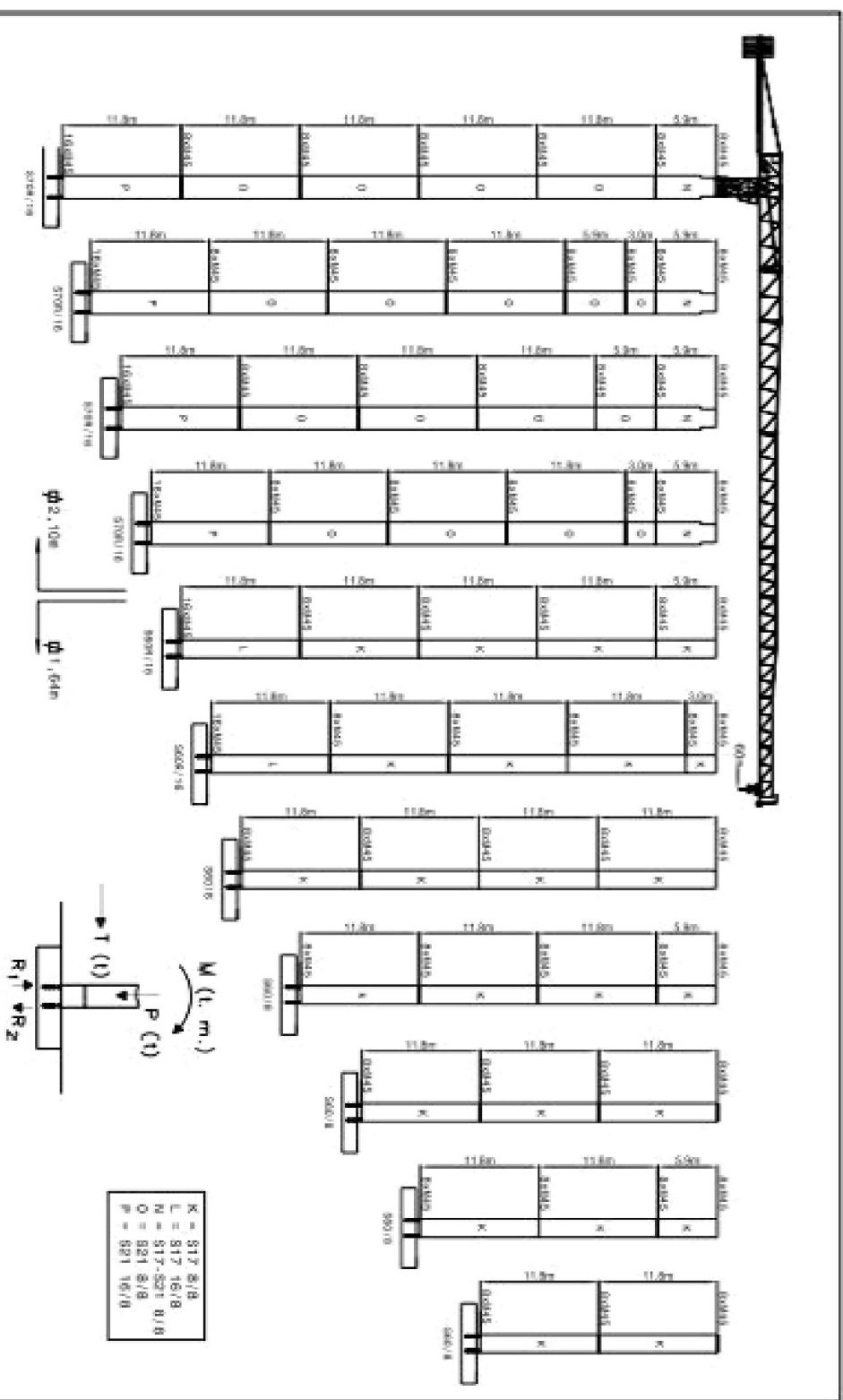
**35 m**

10	15	20	25	30	35	m	
3000	3000	3000	3000	3000	Kg		
10	15	20	25	29,8	30	35	m
6000	6000	6000	6000	6000	5970	5000	Kg

**30 m**

10	15	20	25	30	m
3000	3000	3000	3000	Kg	
10	15	20	25	30	m
6000	6000	6000	6000	Kg	

Mástil / Reacciones  
Masts / Reactions  
Maste / Eckdrücke  
Mat / Réactions  
Torre / Reazioni



H (m)	66.4	63.5	60.5	57.6	54.6	51.6	48.6	42.6	36.8	30.8	24.9
M (T.m)	576.7	530.6	485.5	440.3	387.2	331.8	293.8	278.7	264.9	252.4	241.1
T (t)	13.3	12.7	12.2	11.8	10.6	10.1	9.7	8.8	7.9	7.0	6.1
P (t)	78.5	77.5	75.9	74.4	76.2	74.9	73.2	71.2	68.5	66.5	63.8
R <sub>1</sub> (t)	192	175	159.1	144.1	151.4	135.0	120.3	113.6	107.8	102.4	97.8
R <sub>2</sub> (t)	226.7	209.7	192.9	177.2	185.4	168.4	156.7	149.1	141.9	135.5	129.6

K = S17 8/8  
L = S17 16/8  
N = S17-S21 8/8  
O = S21 8/8  
P = S21 16/8

Mecanismos  
Mechanisms  
Antriebe  
Mécanismes  
Meccanismi

33 Hp (24Kw) - 3vel.							
	m/min	8	37	74	4	18,5	37
	Kg	3000	3000	1500	6000	6000	3000
	Kw	24	24	24	24	24	24
	m/min	30 / 60			30 / 60		
	Kw	3,0			3,0		
	r.p.m	0,3	0,6	0,9	0,3	0,6	0,9
	Nm	2 x 65			2 x 65		
	m/min	12 / 24			12 / 24		
	Kw	4 x 3			4 x 3		

\* 33 Hp (24Kw) - 3V/F.

	m/min	45	50	60	100	22,5	25	30	50
	Kg	3000	2500	2000	1250	6000	5000	4000	2500
	Kw	24	24	24	24	24	24	24	24

\* 45 Hp (33Kw) - CC.

	m/min	60	80	120	30	40	60
	Kg	3000	2000	1250	6000	4000	2500
	Kw	33	33	33	33	33	33

- \* Opcional / Optional / Opzionale /  
 Elevación / Hoisting / Heben / Levage / Sollevamento  
 Distribución / Trolleying / Katzfahren / Distribution / Distribuzione  
 Orientación / Slewing / Schwenken / Orientation / Rotazione  
 Traslacion / Travelling / Schienenfahren / Translation / Traslazione



380 V  
50 Hz



55 kVA