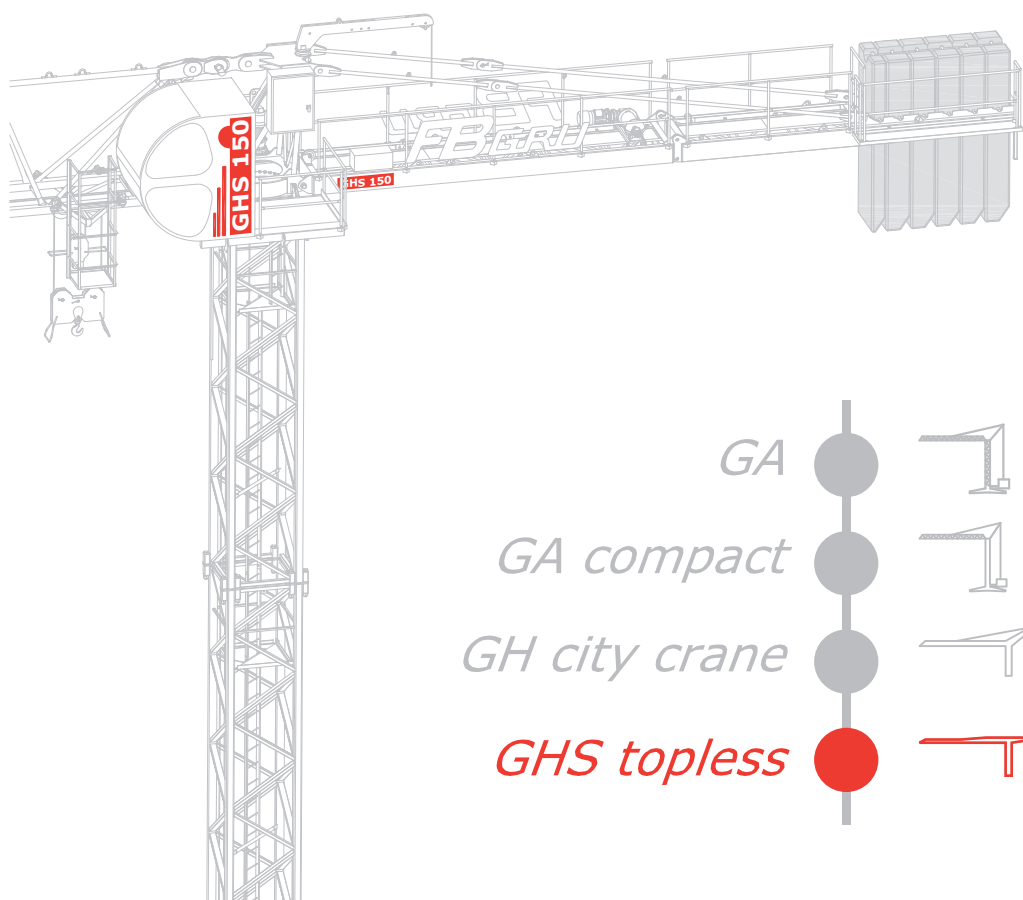


GRU A TORRE

GHS 150 | 6000



GA



GA compact



GH city crane



GHS topless



FB GRU®

FB F.lli Butti s.r.l.

Via XXV Aprile, 58

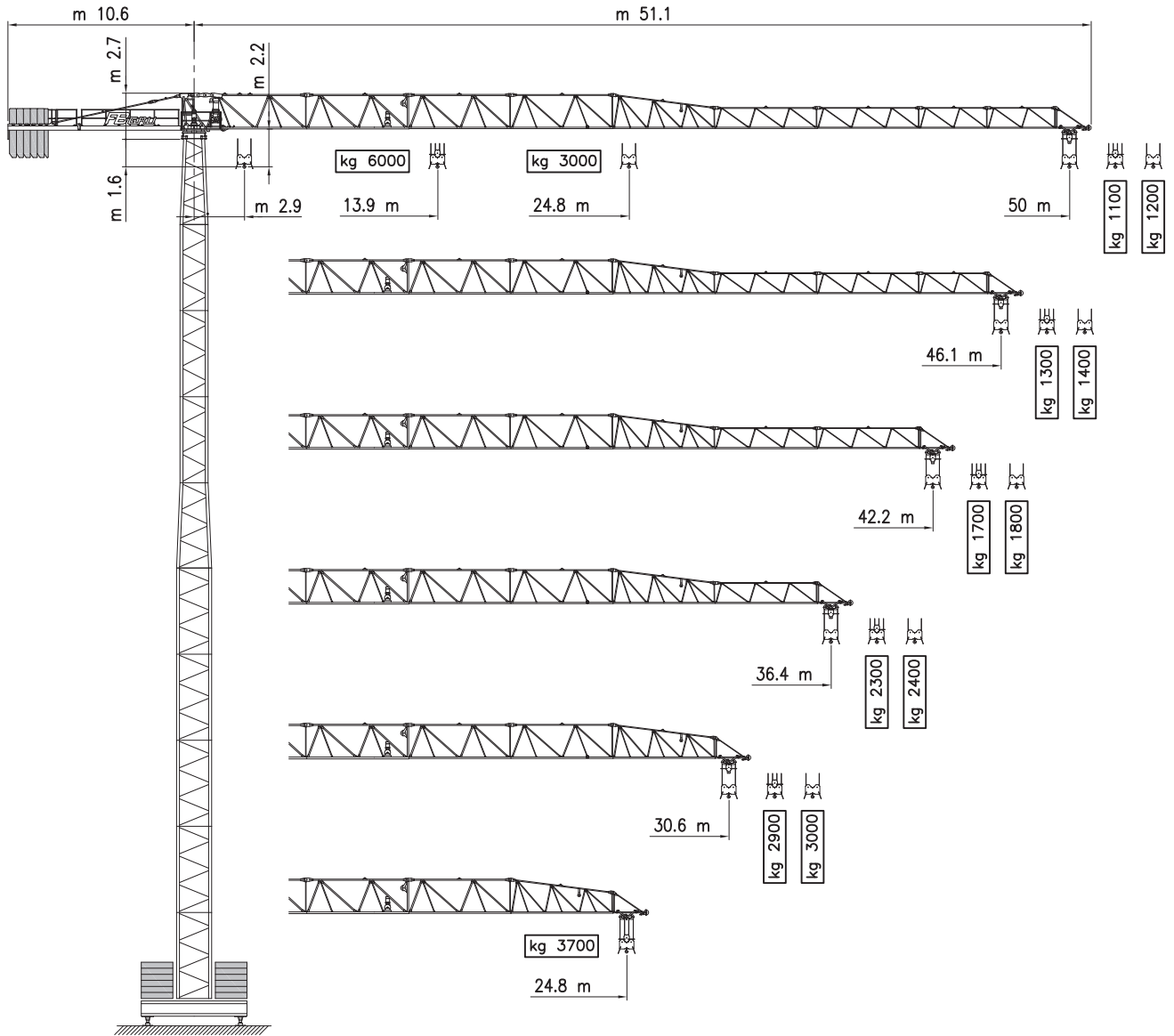
23868 Valmadrera (LC) - ITALIA

Tel. 0341.581108 - Fax 0341.200253

E-mail : fbgru@fbgru.it - <http://www.fbgru.it>

CE

FEM 1.001 - A4
EN 14439 - C25

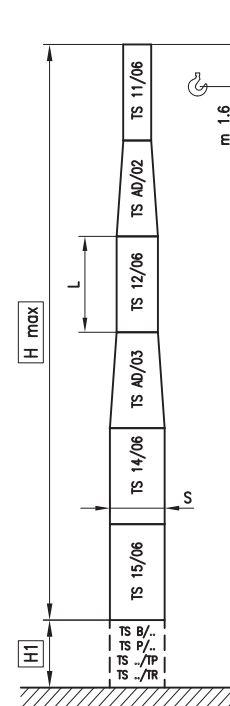


CURVE DI CARICO CURVAS DE CARGAS — LOAD DIAGRAMS LASTKURVEN — COURBES DE CHARGES

m	13.9	14.4	14.9	16.3	16.4	16.6	18	20	22	24.8	25.8	26.7	27.6	29.2	29.7	30.1	30.6	32	34	36.4	38	40	42.2	44	46.1	47	48	50		
kg	6000	5746	5523	4974	4939	4869	4427	3905	3482	3000	2859	2744	2636	2462	2411	2372	2324	2199	2038	1869	1768	1654	1541	1457	1234	1201	1167	1100		
											3000	2878	2768	2591	2539	2500	2451	2324	2160	1989	1886	1770	1655	1570	1336	1303	1267	1200		
		6000	5763	5193	5156	5084	4624	4083	3642	3148	3000	2870	2758	2577	2524	2484	2434	2304	2137	1961	1857	1738	1620	1533	1300					
											3000	2855	2742	2637	2467	2418	2380	2333	2211	2055	1890	1792	1680	1570	1488	1400				
			6000	5420	5382	5307	4829	4266	3803	3295	3140	3000	2885	2696	2642	2599	2548	2413	2239	2056	1948	1824	1700							
												3000	2805	2750	2707	2665	2519	2344	2160	2050	1925	1800								
				6000	5962	5879	5355	4738	4237	3674	3503	3361	3228	3000	2943	2897	2840	2692	2502	2300										
															3000	2944	2795	2603	2400											
					6000	5463	4835	4324	3751	3577	3432	3297	3077	3000	2957	2900														
																3000														
					6000	5913	5387	4767	4262	3700																				
											3000																			

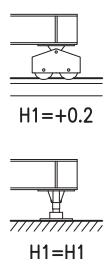
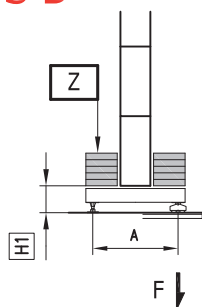
(0 - 3000 kg)
(3001 - 6000 kg)

	TS 11	TS AD/02	TS 12	TS AD/03	TS 14	TS 15	H max (m)
S	m 1.2	m 1.2 → 1.6	m 1.6	m 1.6 → 2.1	m 2.1	m 2.1	
L	m 5.92	m 5.92	m 5.97	m 5.97	m 5.97	m 5.97	
TS B/03	5	1	1				41.49 □ ■
TS B/04	5	1	2				47.46 □ ■
TS B/05	4	1	2	1	3		65.42 ■ ■
TS B/06	4	1	2	1	3		65.42 ■ ■
	3	1	2	1	4	2	77.41** ■
TS P/03	5						29.6
TS P/04	5	1					35.52
TS P/05	5	1	2				47.46
TS 11/TP	5						29.6
TS 12/TP	5	1	2				47.46
TS 14/TP	4	1	2	1	3		65.42
TS 15/TP	3	1	2	1	4	2	77.41**



** Senza cabina – Sin cabina – Whitout cabin – Ohne kabine – Sans cabine

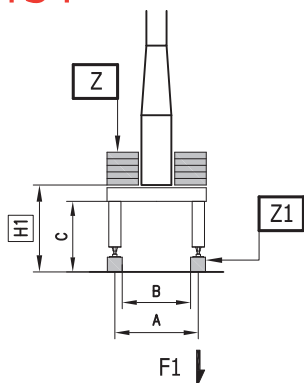
TS B



- TR 02/02
- TR 02/04
- AP/02

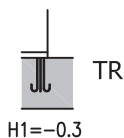
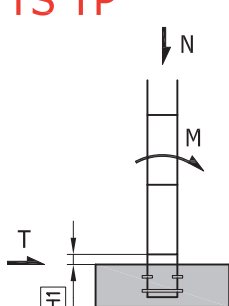
		F (kN)	Z (kg)	A (m)	H1(m)
TS B/03	●	541	72000	3.8x3.8	1
	○	583			
TS B/04	●	559	84000	4.5x4.5	1.2
	○	641			
TS B/05	●	700	126000	6x6	1.4
	○	944			
TS B/06	●	689	126000	8x8	1.6
	○	1033			

TS P



		F1 (kN)	Z (kg)	Z1 (kg)	A (m)	B (m)	C (m)	H1 (m)
TS P/03	●	463	40000	4x4000	3.8x3.8	3	4.52	5.31
	○	433						
TS P/04	●	473	48000	4x4000	4.5x4.5	3.72	4.47	5.5
	○	493						
TS P/05	●	527	70000	4x4000 4x7000	6x6	5.2 5	4.5 4.65	5.8 5.95
	○	630						

TS TP

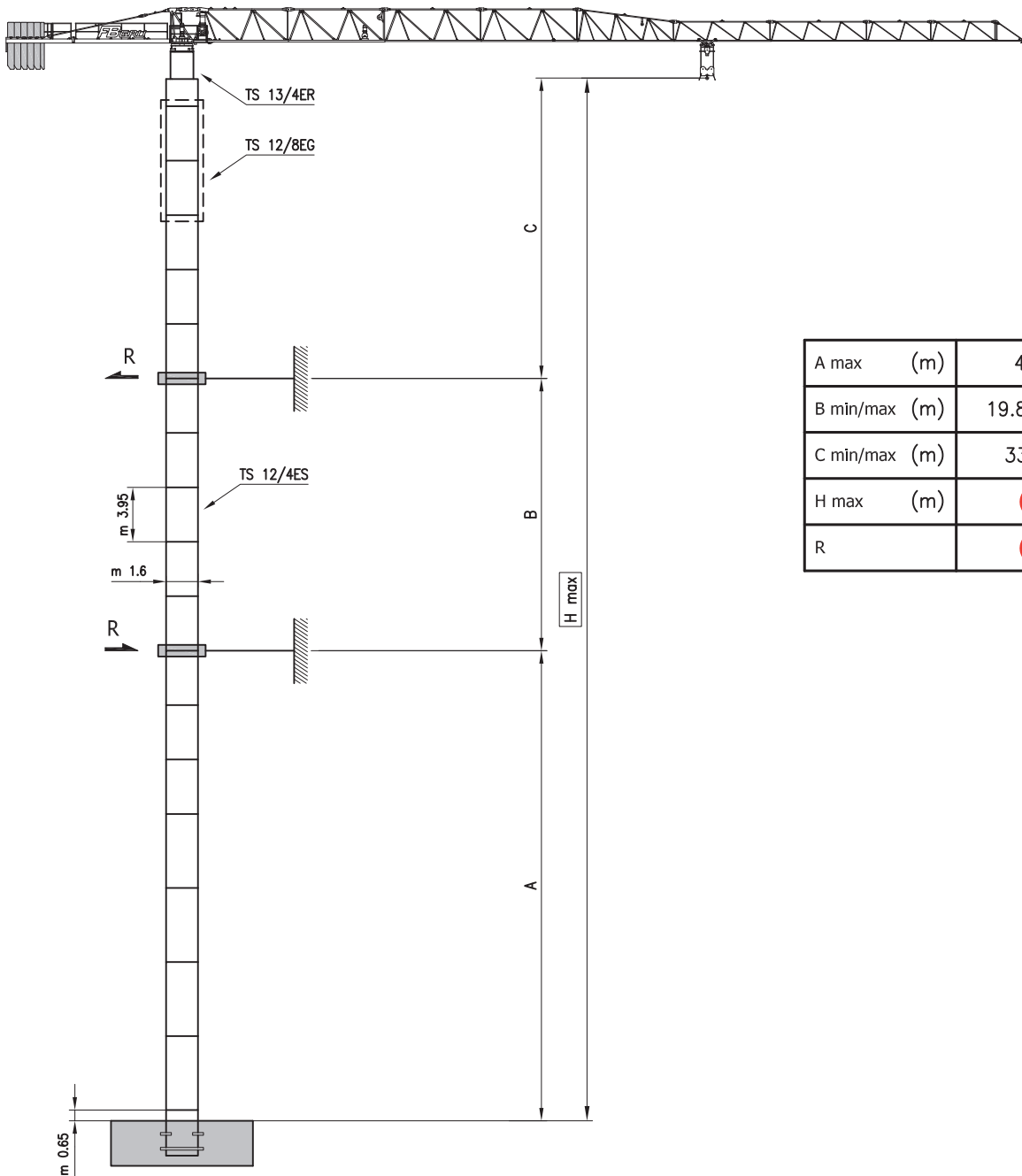


		N (kN)	T (kN)	M (kNm)	H1 (m)
TS 11/TP	●	339	16	1087	0.65
	○	297	50	824	
TS 12/TP	●	402	21	1425	0.65
	○	361	74	2166	
TS 14/TP	●	507	28	1886	0.65
	○	467	111	4227	
TS 15/TP	●	593	34	2292	0.65
	○	552	139	6208	

IN SERVIZIO EN SERVIZIO – IN SERVICE IN BETRIEB – EN SERVICE	●
FUORI SERVIZIO FUERA DE SERVICIO – OUT OF SERVICE AUSSER BETRIEB – HORS SERVICE	○
ZAVORRA di BASE LASTRE DE BASE – CENTRAL BALLAST ZENTRAL BALLASTSTEIN – LEST DE BASE	Z

*Solo per Hmax – Sólo para Hmax – Only for Hmax – Nur für Hmax – Seulement pour Hmax

TS 12/4ES



A max	(m)	40.5
B min/max	(m)	19.8/23.8
C min/max	(m)	33/37
H max	(m)	i
R		i













i Consultateci — Consultarnos — Consult us — Auf anfrage — Nous consulter


ZAVORRA DI CONTROBRACCIO LASTRE DE CONTRA FLECHA — COUNTER JIB BALLAST
 GEGENAUSLEGERBALLAST — LEST DE CONTRE-FLÈCHE


	BRACCIO (m) FLECHA — JIB AUSLEGER — FLECHE	50	46.1	42.2	36.4	30.6	24.8
	ZAVORRA (kg) LASTRE — BALLAST BALLAST — LEST	12160 (5A + 1B)	10900 (5A)	9980 (4A + 1B)	9980 (4A + 1B)	8720 (4A)	7800 (3A + 1B)


	TIPO TIPO — TYPE ART — TYPE	A	B
	PESO (kg) PESO — WEIGHT GEWICHT — POIDS	2180	1260

MOVIMENTO MOVIMIENTO MOVEMENT BEWEGUNG MOUVEMENT	ALIMENTAZIONE ALIMENTACION OPERATING VOLTAGE BETRIEBSSPANNUNG TENSION DE SERVICE	PRESTAZIONI FUNCIONAMIENTOS PERFORMANCES LEISTUNGEN EXÉCUTIONS		 (m)
---	---	---	---	--

		1 ^a m/1' - kg	2 ^a m/1' - kg	3 ^a m/1' - kg	4 ^a m/1' - kg	5 ^a m/1' - kg				
SOLLEVAMENTO ELEVACION — HOISTING HEBEN — LEVAGE  INVERTER	400 V 50 Hz	4	8	30	50		kW 11	<i>AS 11</i> 160 Hmax 36 m		
			2500	2500	2500	1300				
			2	4	15	25			kW 18	
			5000	5000	5000	2500				
			6	11	32	60	72		kW 18	<i>AS 18</i> 160 Hmax 36 m
			3000	3000	3000	1300	800			
		3	6	16	30	36	kW 25	<i>AS 18 HC</i> 280 H max 70 m		
		6000	6000	6000	2600	1600				
		7	11	35	72	88	kW 25	<i>AS 25</i> 280 Hmax 70 m		
		3000	3000	3000	1300	800				
		4	6	17	36	44	kW 25	<i>AS 25 HC</i> 520 H max 130 m		
		6000	6000	6000	2600	1600				

		1 ^a m/1'	2 ^a m/1'	3 ^a m/1'	4 ^a m/1'		
CARRELLO CARRILLO — JIB TROLLEY LAUFKATZE — DISTRIBUTION  INVERTER	400 V 50 Hz	10	30	48	62	kW 3	

		1 ^a m/1'	2 ^a m/1'	3 ^a m/1'	4 ^a m/1'		
ROTAZIONE ROTACION — SLEWING DREHEN — ORIENTATION  INVERTER	400 V 50 Hz	0 → 0.08	0.08 → 0.2	0.2 → 0.4	0.4 → 0.96	kW 5.5	

		1 ^a m/1'					
TRASLAZIONE TRASLACION — TRAVELLING SCHIENENFAHREN — TRANSLATION  INVERTER	400 V 50 Hz	0 → 20				kW N° 2 x 4 <i>TR 02/02</i> N° 4 x 4 <i>TR 02/04</i>	



Conforme alle direttive
CEE sul livello acustico
2000/14/CE

Conforme con las directivas
CEE sobre el nivel acustico

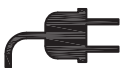






In compliance with the EEC
instructions on noise level

Gemass EWG-Richtlinien für
den Schall-Leistungspegel

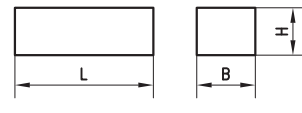

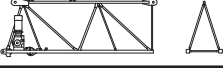
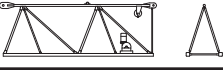
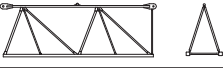
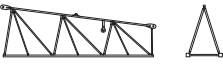
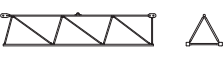
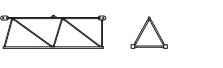

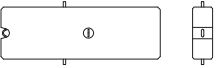

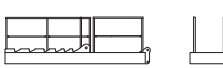
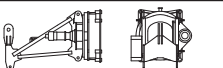
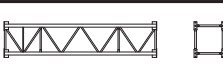
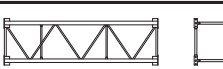
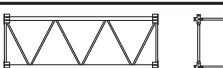
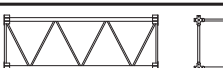
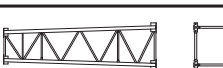

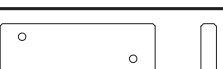
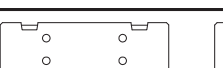
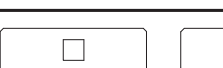
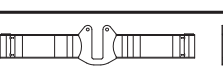
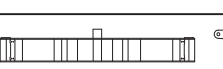
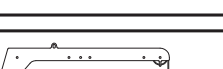

Conforme aux directives CEE
sur le niveau acoustique

POTENZA RICHIESTA

POTENCIA-ELECTRICA NECESARIA — NECESSARY ELECTRIC POWER
KRAFTBEDARF — PUISSANCE ELECTRIQUE NECESSAIRE

 400 V - 50 Hz	  <i>AS 11</i> 11 kW	  <i>AS 18</i> <i>AS 18 HC</i> 18 kW	  <i>AS 25</i> <i>AS 25 HC</i> 25 kW
		28 kVA* (22 kW)	36 kVA* (29 kW)

* Gru senza traslazione — Grúa sin traslación — Crane without travelling equipment — Krane ohne schienenfahren — Grue sans translation

Pos. Pos. Item Rep.	DENOMINAZIONE Denomination Benennung Dénomination		Q.tà Cont. Qty. Anz. Qte.	L	B	H	 (kg)		
				(m)					
1	Elemento di braccio 1 Tramo de flecha 1 – Jib element 1 Auslegerschuss 1 – Element de flèche 1		1	6.02	1.16	2.21	1670		
2	Elemento di braccio 2 Tramo de flecha 2 – Jib element 2 Auslegerschuss 2 – Element de flèche 2		1	6.05	1.16	2.05	870		
3	Elementi di braccio 3 - 4 Tramos de flecha 3-4 – Jib elements 3-4 Auslegerschuss 3-4 – Elements de flèche 3-4		1 1	6.02	1.16	2.02 2.01	535 435		
4	Elemento di braccio 5 Tramo de flecha 5 – Jib element 5 Auslegerschuss 5 – Element de flèche 5		1	6.02	1.16	2.01	410		
5	Elementi di braccio 6 - 7 Tramos de flecha 6-7 – Jib elements 6-7 Auslegerschuss 6-7 – Elements de flèche 6-7		1 1	6.02 6.01	1.16	1.26 1.25	350 290		
6	Elemento di braccio 8 - 9 Tramo de flecha 8-9 – Jib element 8-9 Auslegerschuss 8-9 – Element de flèche 8-9		2	4.08	1.16	1.25	195		
7	Elemento di braccio 10 Tramo de flecha 10 – Jib element 10 Auslegerschuss 10 – Element de flèche 10		1	2.1	1.16	1.38	100		
8	Blocco di contrappeso Lastre de contraflecha – Counter jib block Gegengewichtsballast – Contrepoids		1 5	2.83	0.87	0.23 0.395	1260 2180		
9	Controbraccio Contraflecha – Counter jib Gegenausleger – Contre-flèche		1	6.1	1.23	1.21	860		
10	Controbraccio Contraflecha – Counter jib Gegenausleger – Contre-flèche		1	4.15	1.22	1.21	800		
11	Gruppo rotazione Plataforma de giro – Slewing platform Drehbühne – Porte-flèche tournant		1	2.65	1.72	1.71	2430		
12	Elemento di torre TS 11/6 Mastil – Tower element Turmschuss – Mats			5.92	1.2	1.38	1435		
13	Elemento di torre TS 12/6 Mastil – Tower element Turmschuss – Mats			5.97	1.6	1.8	2088		
14	Elemento di torre TS 14/6 Mastil – Tower element Turmschuss – Mats			5.97	2.3	2.3	3050		
15	Elemento di torre TS 15/6 Mastil – Tower element Turmschuss – Mats			5.97	2.3	2.3	3500		
16	Adattatore TS AD/02 Adaptador – Adapter Adapter – Adaptateur			5.92	1.6	1.8	2005		
17	Adattatore TS AD/03 Adaptador – Adapter Adapter – Adaptateur			5.97	2.1	2.3	2750		
18	Blocco zavorra di base per TS B/03 Lastre de base para – Base ballast block for Zentral ballaststein für – Lest de base pour			3.8	0.38	1.18	4000		
19	Blocco zavorra di base per TS B/04 e TS B/05 Lastre de base para – Base ballast block for Zentral ballaststein für – Lest de base pour		TSB/04 TSB/05	5.0 5.7	0.34	1.6	6000 7000		
20	Blocco di appoggio Gatos – Concrete pad Fundament block – Blocs d'appui			3.0 3.2	0.8 1.0	0.74 0.95	4000 7000		
21	Crociera di base (Trave A) Cruz de base – Cruciform base Fundament kreuz – Châssis de base		TSB/03 TSB/04 TSB/05 TSB/06	1 1 1 1	5.75 6.75 8.86 11.7	0.35 0.35 0.4 0.45	1.08 1.26 1.6 1.85	1660 2315 4050 6760	
	Crociera di base (Trave B) Cruz de base – Cruciform base Fundament kreuz – Châssis de base		TSB/03 TSB/04 TSB/05 TSB/06	1 1 1 1	5.75 6.75 8.86 11.7	0.92 0.93 0.99 1.15	0.9 1.1 1.35 1.6	1515 2050 3630 6200	
	Opzionale Optional Optionale Option	Braccio ausiliario Plumin de intervencion – Auxiliary arm Hilfsgalgen – Potence d'intervention			1	2.2	0.22	0.72	110
		Argano ausiliario Mecanismo auxiliar – Auxiliary winch Hilfswinde – Treuil auxiliaire			1	0.85	0.9	0.43	170