

# Turmdrehkran

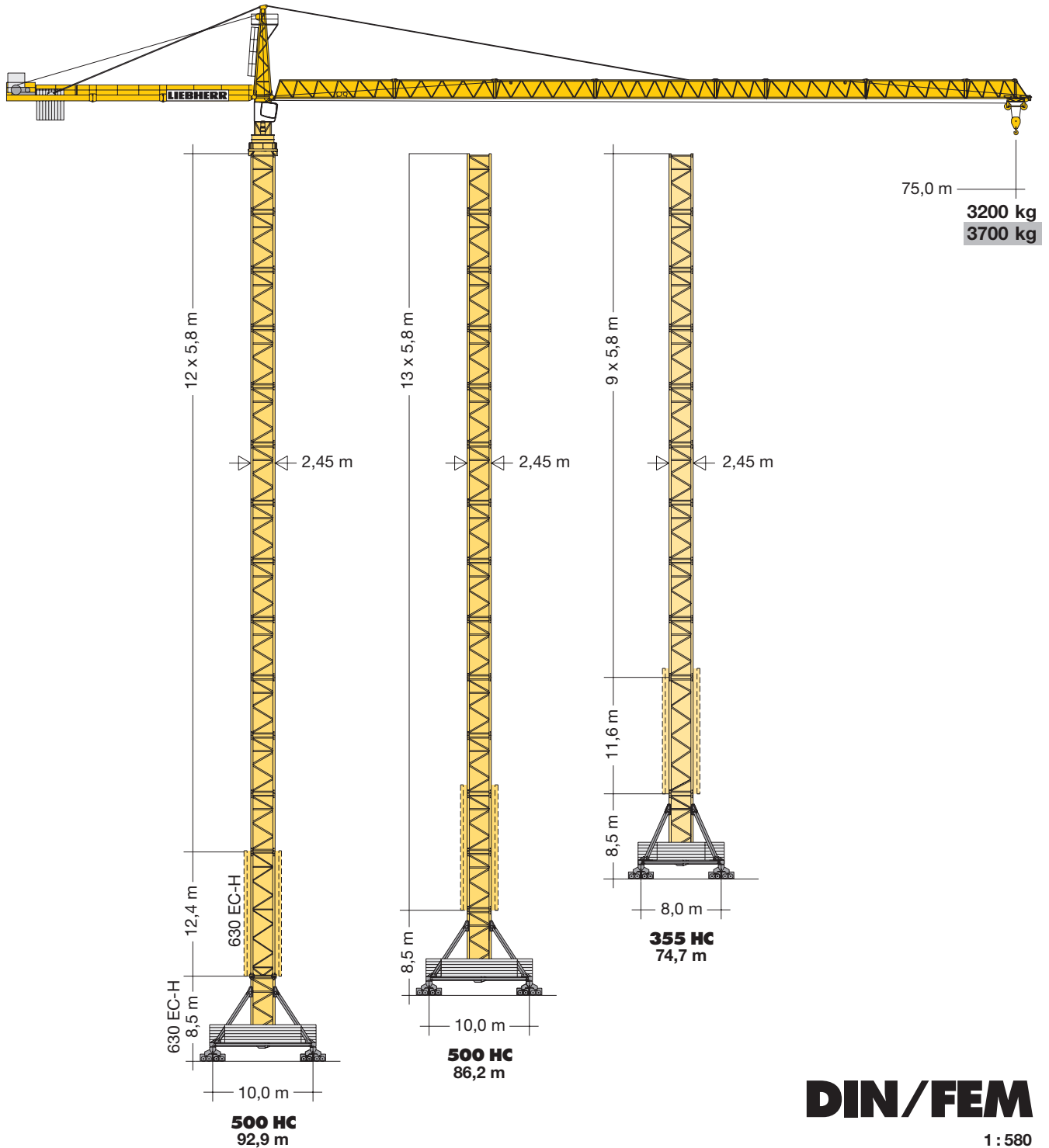
Tower Crane / Grue à tour / Gru a torre  
Grúa torre / Guindaste de torre

## 420 EC-H 16 FR.tronic®

## 420 EC-H 16 Litronic®

420 EC-H 16 FR.tronic®  
420 EC-H 16 Litronic®

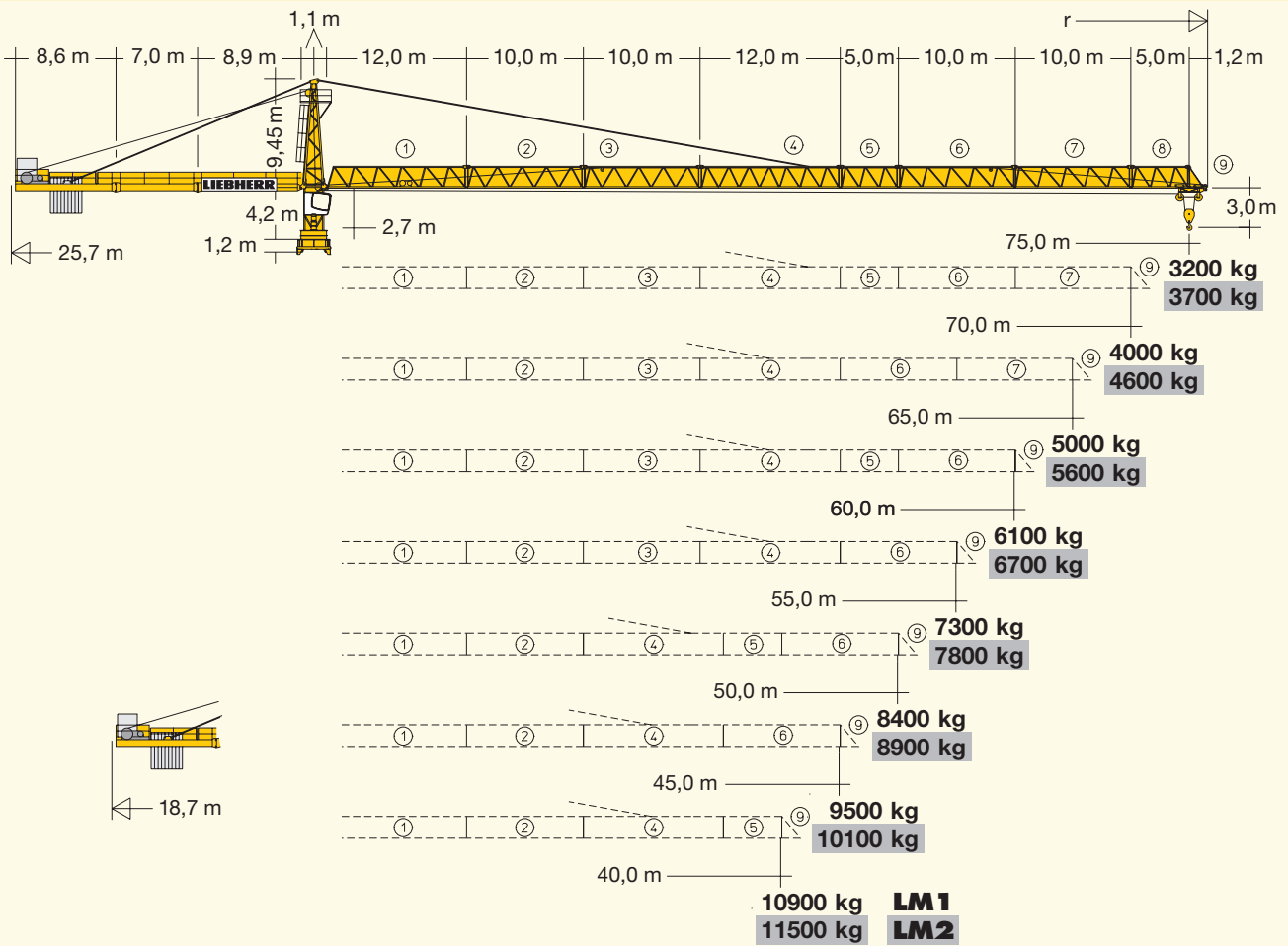
420 EC-H 20 FR.tronic®  
420 EC-H 20 Litronic®



**DIN/FEM**

1 : 580

# LIEBHERR



## Hubhöhe

Hoisting height / Hauteur sous crochet / Altezza di sollevamento / Altura bajo gancho / Altura de montagem

	355 HC		500 HC			
13	-	-	78,2*	86,2*	-	-
12	-	-	72,4	80,4	84,7*	92,9*
11	-	-	66,6	74,6	78,9	87,1
10	72,4*	-	60,8	68,8	73,1	81,3
9	66,6	74,7*	55,0	63,0	67,3	75,5
8	60,8	68,9	49,2	57,2	61,5	69,7
7	55,0	63,1	43,4	51,4	55,7	63,9
6	49,2	57,3	37,6	45,6	49,9	58,1
5	43,4	51,5	31,8	39,8	44,1	52,3
4	37,6	45,7	26,0	34,0	38,3	46,5
3	31,8	39,9	20,2	28,2	32,5	40,7
2	26,0	34,1	14,4	22,4	26,7	34,9
1	20,2	28,3	8,6	16,6	20,9	29,1
0	14,4	22,5	2,8	10,9	15,1	23,3
	m	m	m	m		

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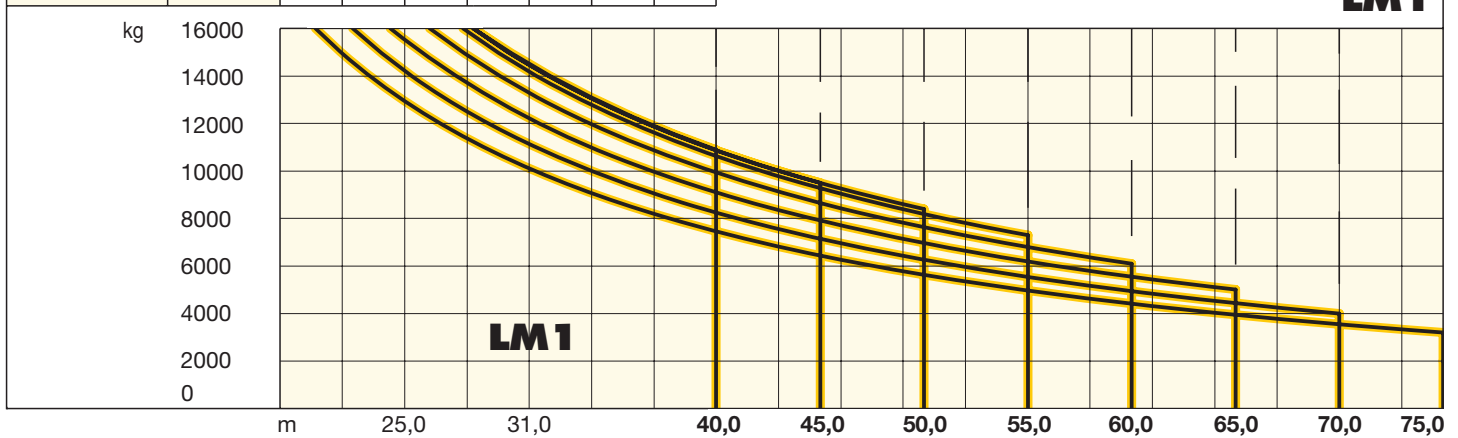
\* Weitere Hubhöhen, Auslegerlängen sowie Klettern im Gebäude auf Anfrage. / Further hoist heights and jib lengths as well as climbing inside the building on request. / Autres hauteurs sous crochet et longueurs de flèche ainsi que hissage dans le bâtiment sur demande. / Ulteriori altezze gancho, lunghezze braccio così come telescopaggio all'interno dell'edificio: su richiesta. / Para alturas bajo gancho superiores, otros alcances y trepado en el interior del edificio, consultar. / Outras alturas de elevação, comprimentos de lança e subida no edifício: sob consulta..

# Ausladung und Tragfähigkeit

Radius and capacity / Portée et charge / Sbraccio e portata / Alcances y cargas / Alcance e capacidade de carga

		<b>420 EC-H 16 FR.tronic®</b>															
m	r	m/kg	m/kg														
			22,0	25,0	28,0	31,0	34,0	37,0	40,0	45,0	50,0	55,0	60,0	65,0	70,0	75,0	
75,0	(r=76,7)	2,7-20,7 16000	14950	12940	11370	10110	9070	8200	7460	6440	5630	4970	4410	3950	3550	<b>3200</b>	
70,0	(r=71,7)	2,7-22,5 16000	16000	14220	12510	11130	10000	9050	8250	7150	6260	5540	4940	4440	<b>4000</b>		
65,0	(r=66,7)	2,7-24,3 16000	16000	15530	13690	12210	10990	9970	9110	7920	6970	6190	5550	<b>5000</b>			
60,0	(r=61,7)	2,7-26,2 16000	16000	16000	14880	13280	11970	10870	9940	8660	7630	6800	<b>6100</b>				
55,0	(r=56,7)	2,7-27,8 16000	16000	16000	15870	14180	12790	11620	10630	9270	8190	<b>7300</b>					
50,0	(r=51,7)	2,7-28,3 16000	16000	16000	16000	14460	13050	11870	10870	9500	<b>8400</b>						
45,0	(r=46,7)	2,7-28,3 16000	16000	16000	16000	14470	13060	11880	10870	<b>9500</b>							
40,0	(r=41,7)	2,7-28,3 16000	16000	16000	16000	14500	13090	11910	<b>10900</b>								

**LM1**



## Antriebe FR.tronic®/Litronic®

Driving units / Mécanismes d'entraînement / Azionamenti / Mecanismos / Mecanismos

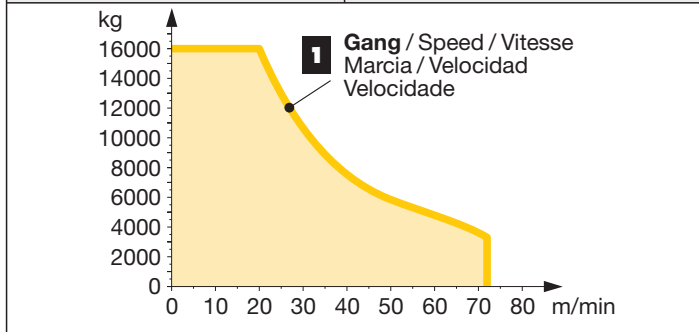
↔ **stufenlos** / stepless / régl. continu  
regl. progressiva / sin escalones / sem degraus  
kg m/min

65 kW FU  
WIW 280 MZ 404

**5 Lagen**  
Layers  
Couches  
Strati  
Camadas  
Capas

197,0 m  
max. 393,0 m\*\*

<b>1</b>	16000	0	↔	21
	3300	0	↔	72



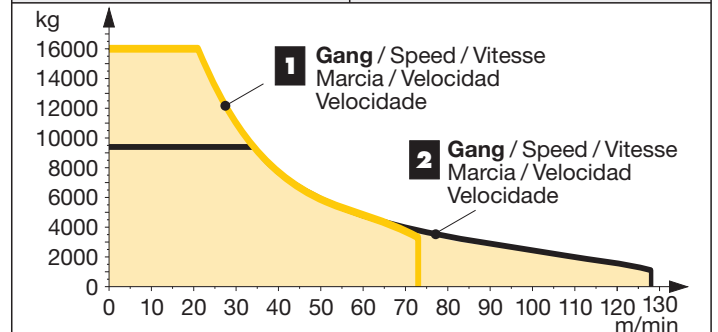
↔ **stufenlos** / stepless / régl. continu  
regl. progressiva / sin escalones / sem degraus  
kg m/min

65 kW FU  
WIW 280 VZ 405

**5 Lagen**  
Layers  
Couches  
Strati  
Camadas  
Capas

219,0 m  
max. 437,0 m\*\*

<b>1</b>	16000	0	↔	21
	3300	0	↔	73
<b>2</b>	9400	0	↔	34
	1100	0	↔	128



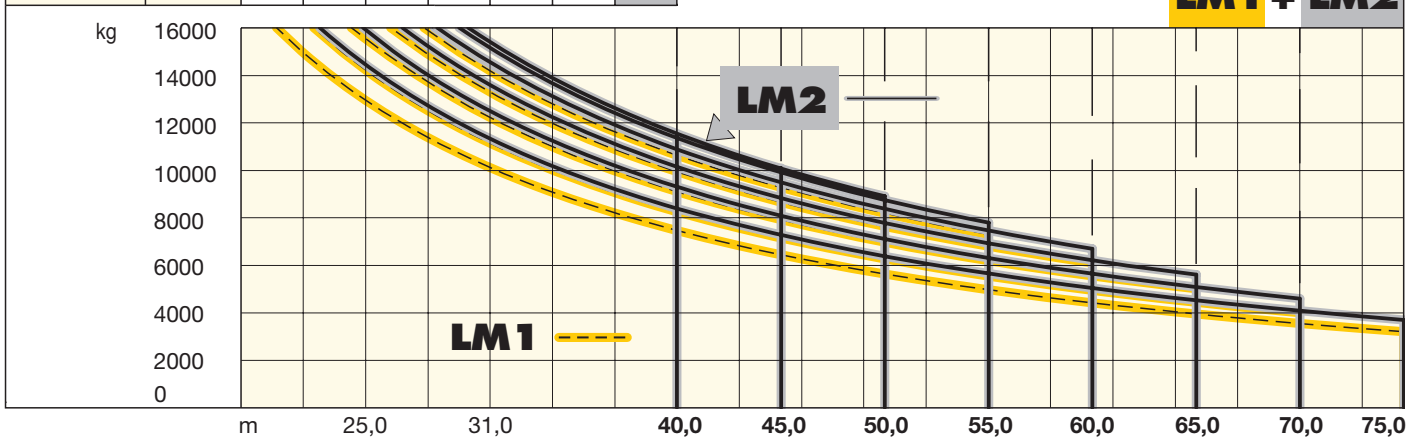
\*\* Weitere Hublastdaten: siehe Betriebsanleitung. / Further hoist load data: see instruction manual. / Autres données de la charge de levage: voir manuel d'instruction. / Altri dati sui carichi sollevati: consultare il manuale d'istruzione. / Alturas bajo grancho superiores según manual. / Outras tabelas de carga: consultar manual de instruções.

# Ausladung und Tragfähigkeit

Radius and capacity / Portée et charge / Sbraccio e portata / Alcances y cargas / Alcance e capacidade de carga

		420 EC-H 16 Litronic®														
m	r	m/kg	m/kg													
			22,0	25,0	28,0	31,0	34,0	37,0	40,0	45,0	50,0	55,0	60,0	65,0	70,0	75,0
75,0	(r=76,7)	2,7-22,8 16000	16000	14450	12720	11320	10170	9210	8390	7280	6380	5650	5040	4520	4080	3700
70,0	(r=71,7)	2,7-24,9 16000	16000	15900	14020	12490	11240	10190	9300	8080	7110	6310	5640	5080	4600	
65,0	(r=66,7)	2,7-26,8 16000	16000	16000	15220	13580	12230	11100	10140	8830	7780	6920	6210	5600		
60,0	(r=61,7)	2,7-28,4 16000	16000	16000	16000	14540	13110	11910	10890	9490	8370	7460	6700			
55,0	(r=56,7)	2,7-29,5 16000	16000	16000	16000	15150	13660	12410	11350	9910	8750	7800				
50,0	(r=51,7)	2,7-29,9 16000	16000	16000	16000	15390	13880	12620	11550	10080	8900					
45,0	(r=46,7)	2,7-30,0 16000	16000	16000	16000	15430	13920	12650	11570	10100						
40,0	(r=41,7)	2,7-29,8 16000	16000	16000	16000	15330	13830	12570	11500							

LM1 + LM2



## Antriebe FR.tronic®/Litronic®

Driving units / Mécanismes d'entraînement / Azionamenti / Mecanismos / Mecanismos

110 kW FU  
WIW 300 VZ 411

6 **Lagen**  
Layers  
Couches  
Strati  
Camadas  
Capas

270,0 m  
max. 437,0 m\*\*

↔ **stufenlos** / stepless / régl. continu  
regl. progressiva / sin escalones / sem degraus

	kg	m/min
<b>1</b>	16000	0 ↔ 35
	8000	0 ↔ 65
<b>2</b>	9400	0 ↔ 56
	4100	0 ↔ 113
<b>3</b>	5200	0 ↔ 94
	1700	0 ↔ 188

**1** Gang / Speed / Vitesse  
Marcia / Velocidad / Velocidade

**2** Gang / Speed / Vitesse  
Marcia / Velocidad / Velocidade











































**3** Gang / Speed / Vitesse  
Marcia / Velocidad / Velocidade



**LM 2** Abweichende Geschwindigkeiten und Betriebsbedingungen.  
Variant speeds and service conditions. / Vitesses et conditions de fonctionnement différentes. / Differenti velocità e condizioni di funzionamento. / Otras velocidades y características de funcionamiento. / Outras velocidades e características de funcionamento.

	U/min 0 ↔ 0,7 sl./min tr./min	2 x 7,5 kW FU
	0 ↔ 91,0 m/min	10,5 kW FU
	25,0 m/min	4 x 7,5 kW 500 HC (550 HC) 4 x 5,5 kW 355 HC (390 HC)
	<b>kVA</b>	65 kW FU 65 kW FU 110 kW FU 90,0 90,0 131,0

**Litronic:** kVA reduzierbar bei zu geringer Netz-Anschlussleistung, siehe BAL. / kVA can be reduced in case of too little power of the mains, see instruction manual. / kVA peut être réduit en cas de trop faible puissance du réseau, voir manuel d'instruction. / kVA riducibili in caso di potenza di rete ridotta (si veda manuale uso e manutenzione) / kVA variable para potencia de red demasiado pequeña, ver Manual de instrucciones. / kVA reduzível no caso de capacidade da rede elétrica muito baixa, ver manual de instruções.

Montagegewichte: siehe Betriebsanleitung. / Erection weights: see instruction manual. / Poids de montage: voir manuel de service.  
Pesi di montaggio: vedasi le istruzioni sull'uso. / Peso para el montaje: según manual. / Pesos de montagem: veja-se as instruções p. uso.

<b>Kranoberteil</b>		<b>Upper part of crane / Partie supérieure de grue / Parte superiore della gru</b>			<b>L (m)</b>	<b>B (m)</b>	<b>H (m)</b>	<b>kg*</b>
Pos. Item Rep. Voce Pos. Ref.	Anz. Qty. Qte. Qta. Cant. Cant.							
1	1	<b>Drehbühne kpl.</b> / Slewing platform cpl. Ensemble mât cabine cpl. / Piattaforma girevole compl. / Conjunto plataforma de giro Plataforma giratória compl.			6,14	2,87	3,18	15000
2	1	<b>Turmspitze</b> / Tower head section Porte-flèche / Testa porta-braccio Cabeça de torre / Cabeça de apoio de lança			9,40	1,76	1,94	3450
3	1	<b>Gegenausleger-Kopfstück</b> / Counter-jib head Pointe de contre-flèche / Testa di controbraccio Tramo punta de contrapluma / Cabeça de contra-lança			8,73	2,38	1,05	3740
4	1	<b>Gegenausleger-Anlenkstück</b> / Counter-jib heel section Pied de contre-flèche / Settore articolato di controbraccio / Tramo primero-contrapluma Base articulada da contra-lança			9,08	1,93	1,05	3210
5	1	<b>Gegenausleger-Zwischenstück</b> / Intermediate counter-jib section Elément interm. de contre-flèche Spezzone di controbraccio / Tramo intermedio de contrapluma / Peça suplementar da contra-lança			7,20	1,87	1,05	2720
6	1	<b>Ausleger-Anlenkstück</b> / Jib heel section Pied de flèche / Settore articolato di braccio Pluma tramo primero / Base articulada de lança			12,26	1,93	2,05	① 3700
7	1	<b>Ausleger-Zwischenstück</b> / Intermediate jib section Elément intermédiaire de flèche Spezzone di braccio / Tramo intermedio pluma Peça suplementar da lança			10,28 10,30 12,33 5,38 10,34 10,27 5,21	1,76 1,76 1,76 1,76 1,76 1,76 1,76	1,99 1,98 1,99 1,97 1,96 1,94 1,94	② 2075 ③ 2040 ④ 2510 ⑤ 985 ⑥ 1500 ⑦ 1000 ⑧ 485
8	1	<b>Ausleger-Kopfstück</b> / Jib head section Pointe de flèche / Punta freccia Tramo punta de pluma / Cabeça de lança			1,83	1,93	1,91	⑨ 270
9	1	<b>Laufkatze und Lasthaken</b> / Trolley and hook Chariot de distribution et crochet / Carrello con gancio Carrito y gancho / Carro de ponte e gancho			2,24	2,07	1,79	1540
10	1	<b>Hubwerkseinheit (65 kW)</b> / Hoist gear unit / Treuil de levage Gruppo meccanismo sollevamento / Mecanismo de elevación / Grupo de mecanismo elevatório			280 VZ 2,30	2,70	1,65	5850
<b>Turm</b>		<b>Tower / Mât / Torre</b>						
11	10 13	<b>Turmstück</b> / Tower section Elément de mât / Elemento di torre Tramo orre / Torre			355 HC 500 HC 6,28 6,28	2,45 2,45	2,45 2,45	5050 6480
12	1	<b>Grundturmstück</b> / Base tower section Mât de base / Elemento di torre base Tramo base / Peça de base de torre			355 HC 12,08	2,45	2,45	10050
<b>Klettereinrichtung</b>		<b>Climbing equipment / Equipement de télescopage / Attrezzatura per allungamento della gru</b>						
		<b>Equipo de trepado / Acesórios p. subida no edificio</b>						
13	1	<b>Führungsstück kpl., geteilt</b> / Guide section cpl., split Cage télescopique cpl., devisée / Gabbia de sopraelevazione compl., suddivisa / Torre de montaje, dividida Peça de guia, subdividida			355 HC 500 HC 12,39	2,75	1,58	8950
14	1	<b>Hydraulikanlage, Stütz- und Klettertraverse</b> / Hydraulic unit, supporting and climbing cross members Système hydraulique avec traverses d'appui et de télescopage / Sistema hidráulico, traversa di appoggio e allungamento gru Sistema hidráulico con traviesa de apoyo y trepado / Instalação hidráulica, travessa de apoio e subida			355 HC 500 HC 2,10	1,10	1,00	1710
<b>Unterwagen</b>		<b>Undercarriage / Châssis / Carro della gru</b>						
		<b>Carro con mástil / Carro de guindaste</b>						
15	4	<b>Ausgleichsschwinge mit Schwingenlager</b> / Pivot for wheel box Chape pour bogie / Bilanciere di equilibratura con cuscinetto bilanciere / Balancim com suporte			355 HC 500 HC 1,60	0,72	1,48	1390 1470
16	4	<b>Fahrschemel mit Antrieb</b> / Rail bogie with drive Bogie moteur / Telaio con gruppo propulsore Caja rodillo motriz / Quadro sem grupo de propulsão			355 HC 500 HC 1,40 1,45	0,75 0,82	0,65 0,72	920 1690
17	4	<b>Fahrschemel ohne Antrieb</b> / Rail bogie without drive Bogie fou / Telaio senza gruppo propulsore / Caja rodillo conducido / Quadro com grupo de propulsão			355 HC 500 HC 1,10 1,30	0,60 0,40	0,65 0,72	880 1340
18	1	<b>Tragholm lang</b> / Long support arm Longeron long / Longherone lungo Braço soporte largo / Travessa comprida			355 HC 500 HC 11,82 7,32	0,92 0,92	0,93 0,93	3515 2330
19	2	<b>Tragholm kurz</b> / Short support arm Longeron court / Longherone corto Braço soporte corto / Travessa curta			355 HC 500 HC 5,74 7,14	0,80 0,80	0,90 0,90	1600 2135
20	4	<b>Randträger</b> / Border support Traverse / Supporti base Traviesa / Apoio de bordo			355 HC 500 HC 7,30 9,30	0,14 0,14	0,14 0,14	340 510
21	4	<b>Stützholm</b> / Support strut Hauban de châssis / Correnti di appoggio Tirante vertical / Travessa de apoio			355 HC 500 HC 6,06 6,06	0,26 0,26	0,34 0,34	862 1140

Pos. Item Rep Voce Pos. Ref.	Anz. Qty. Qte. Qta. Cant. Cant.				L (m)	B (m)	H (m)	kg*	
22	1	<b>Unterwagen-Turmstück</b> / Undercarriage tower section Mât de châssis / Elemento di torre del carro Tramo de carro / Peça de torre do chassis			355 HC 500 HC	6,61 6,61	2,44 2,44	2,44 2,44	7475 7930
23	1	<b>Kiste mit Kleinteilen, Seilen</b> / Crate with small parts, ropes Caisse contenant des accessoires, câbles / Cassa con minuteria, funi Caja con piezas pequeñas, cables / Caixa com peças pequenas, cabos			355 HC 500 HC	2,00	1,00	1,00	1000

\* **Einzelgewichte.** / Single weights. / Poids individuels. / Pesì di componenti. / Pesos unitarios. / Pesos de peças componentes.

**Konstruktionsänderungen vorbehalten!**

Subject to alterations! / Sous réserves de modifications!  
Si fa riserva di modifiche! / ¡Sujeto a modificaciones!  
Salvo modificação da construçao!

**Sämtliche Angaben erfolgen ohne Gewähr.**

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