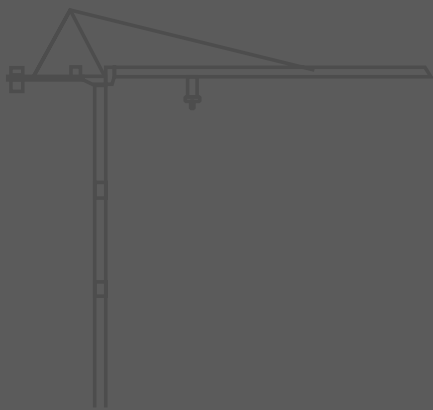


CARLO RAIMONDI



Tower Crane

City Crane MR93

Luffing Jib Crane

MR93

Raccoglie tutte le innovazioni della famiglia City Cranes che finora erano destinate alle gru di piccole dimensioni. Ha un braccio di 54 metri e un'altezza libera sottogancio di 47 metri. Come i modelli minori della stessa serie, si monta in poche ore, con autogrù oppure tramite sistema idraulico per cantieri a sviluppo verticale o per spazi con difficoltà di manovra.

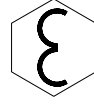
MR93

This crane collects all innovations of the City Cranes family, scheduled for cranes with reduced dimensions until now. This crane is equipped with a 54 m. jib and has a 47 m. under-hook height.

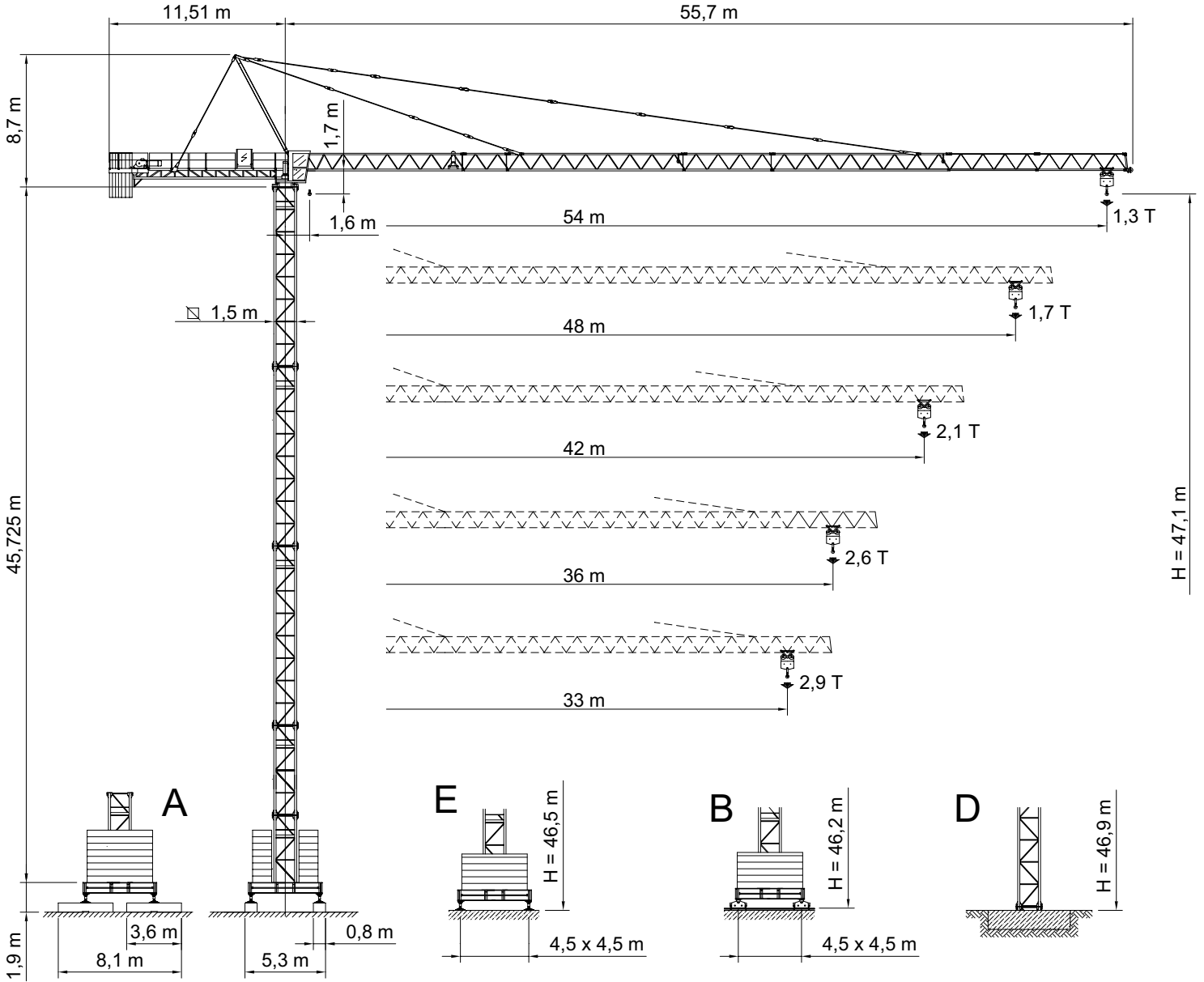
As the minor models of the same series, it can be assembled in few hours, with a mobile crane or with a hydraulic climbing system for vertical building yards or areas where the mobile cranes can manoeuvre with difficulty.

City Crane MR 93E

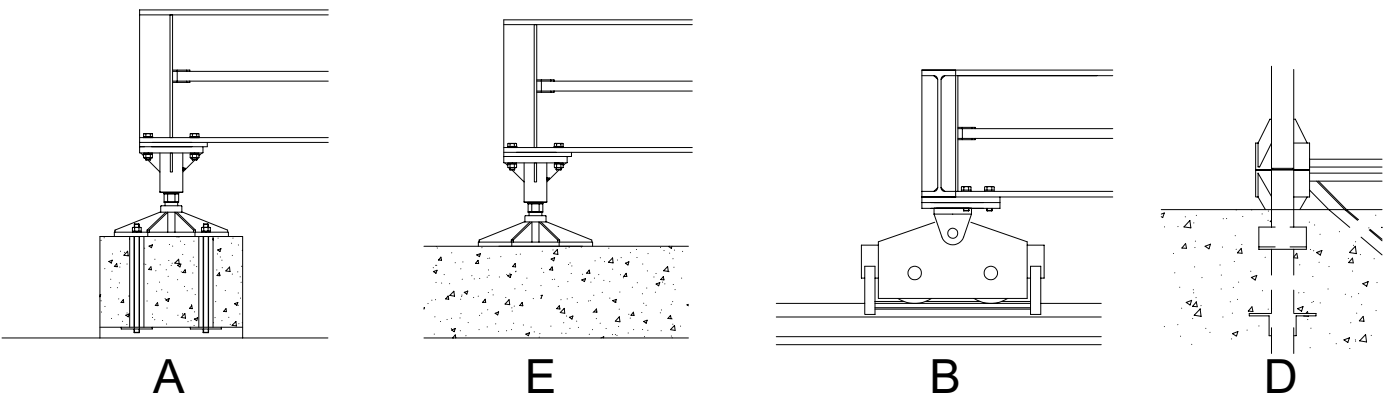
GRU A TORRE A MONTAGGIO RAPIDO
«CITY TOWER CRANE»






H1 B3 DIN151018 / A4 FEM1,001



H = 47,1 m



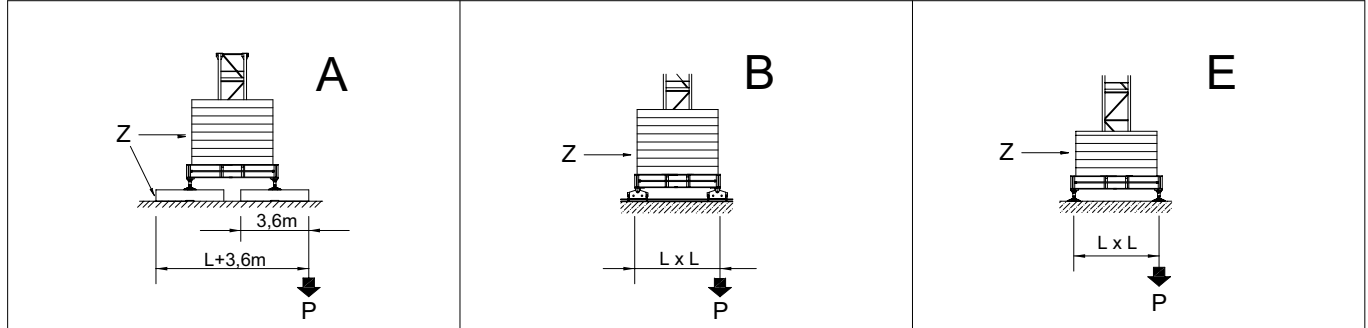
RAGGI E PORTATE
RADIUS AND S.W.L.
PORTEE ET CHARGE
AUSLADUNG UND TRAGFAHIGKEIT

Portata max / Max s.w.l. Charge maxi / Max. Tragfähigkeit		3000 kg. 					6000 kg.  / 3000 kg. 				
Sbraccio / Jib Ausladung / Portée	m.	33	36	42	48	54	33	36	42	48	54
Campo di portata max da Max s.w.l. range from Charge maxi de Max. Tragfähigkeit von	1,6 m a to à bis	32,02	31,71	30,71	29,32	26,47	16,94	16,80	16,33	15,66	14,24
Sbraccio (m.) Radius (m.) Portée (m.) Ausladung (m.)	12	3000	3000	3000	3000	3000	6000	6000	6000	6000	6000
	14	3000	3000	3000	3000	3000	6000	6000	6000	6000	6000
	16	3000	3000	3000	3000	3000	6000	6000	6000	5855	5258
	18	3000	3000	3000	3000	3000	5606	5555	5378	5127	4599
	20	3000	3000	3000	3000	3000	4980	4933	4775	4550	4077
	22	3000	3000	3000	3000	3000	4471	4429	4285	4082	3653
	24	3000	3000	3000	3000	3000	4050	4011	3880	3694	3302
	26	3000	3000	3000	3000	3000	3695	3660	3539	3368	3006
	28	3000	3000	3000	3000	2815	3392	3360	3248	3089	2754
	30	3000	3000	3000	2923	2603	3131	3101	2996	2849	2537
	32	3000	2970	2864	2718	2418	2903	2875	2777	2639	2347
	33	2900	2869	2766	2625	2334	2800	2772	2678	2544	2261
	34		2774	2675	2537	2255		2676	2584	2454	2180
	36		2600	2506	2377	2111		2500	2413	2291	2032
	38			2356	2234	1982			2261	2145	1900
	40			2222	2105	1867			2124	2014	1781
	42			2100	1989	1762			2000	1895	1674
	44				1884	1667				1788	1577
46				1788	1581				1690	1488	
48				1700	1502				1600	1407	
50					1429					1332	
52					1362					1264	
54					1300					1200	

BRACCIO E CONTRAPPESO
JIB AND COUNTERWEIGHT
FLECHE ET CONTREPOID
AUSLEGER UND GEGENGEWICHTSBALLAST

Braccio / Jib Flèche / Ausleger	(m)	33	36	42	48	54
Contrappeso / Counterweight Contrepoïd / Gegengewicht	(t)	6,557	7,321	8,772	10,987	12,690
Composizione Composition Komposition	Tipo / Type	Quantità / Quantity / Nombre / Anzahl				
	A95	3	3	3	3	4
	B95		1	1	2	2
	C95	1		1	1	1
	D95					

ALTEZZA SOTTO-GANCIO, ZAVORRA DI BASE, REAZIONI
 H.U.H., MAX. BASE BALLAST AND CORNER PRESSURE
 H.S.C., LEST DE BASE MAXI ET REACTIONS
 HAKENHOHEN, MAXIMALE ZENTRALBALLASTE UND ECKKRAFT



SU BASE / ON CROSSBASE
 SUR CHASSIS / AUF KREUZRAHME L = 4,5 m

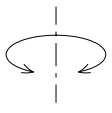

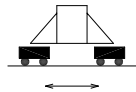
H (m)	max. Z (t)	P (kN)	H (m)	max. Z (t)	P (kN)	H (m)	max. Z (t)	P (kN)
13,2	33,40	285	12,3	35,40	278	12,6	35,40	277
19,1	33,40	304	18,2	35,40	291	18,5	35,40	290
25,0	33,40	320	24,1	35,40	306	24,4	35,40	305
30,9	33,40	339	30,0	35,40	326	30,3	35,40	323
36,8	45,20	403	35,9	47,20	399	36,2	47,20	396
42,7	62,90	533	41,8	64,90	520	42,1	64,90	516
47,1	74,70	642	46,2	70,80	597	46,5	70,80	593

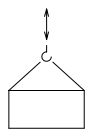


SU BASE / ON CROSSBASE
 SUR CHASSIS / AUF KREUZRAHME L = 3,8 m

H (m)	max. Z (t)	P (kN)	H (m)	max. Z (t)	P (kN)	H (m)	max. Z (t)	P (kN)
13,2	40,90	335	12,3	40,40	333	12,6	40,40	319
19,1	40,90	351	18,2	40,40	352	18,5	40,40	337
25,0	40,90	369	24,1	40,40	373	24,4	40,40	357
30,9	46,00	399	30,0	45,40	403	30,3	45,40	386
36,8	61,10	471	35,9	60,60	459	35,2	60,60	440
42,7	76,30	629	41,8	75,70	600	42,1	75,70	575

SU PLINTO / STATIONARY
 SUR PIEDS DE SCELLEMENT / STATIONAR

	H (m)	11,5	17,4	23,3	29,2	35,1	41,0	46,9		H (m)	55,7
	T (kN)	290	311	347	435	554	770	1064		T (kN)	1553
	P (kN)	412	453	504	584	735	962	1274		P (kN)	1782
	q max. (Kg/cm ²)	0,49	0,70	0,75	0,85	1,00	1,29	1,82		q max. (Kg/cm ²)	1,70

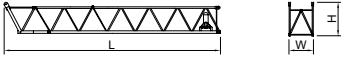

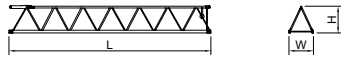
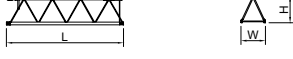
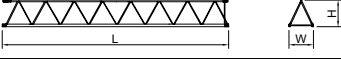
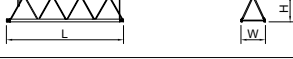

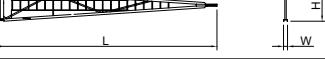
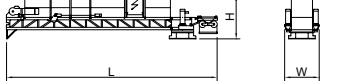
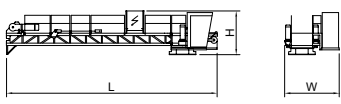
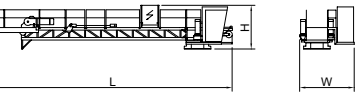
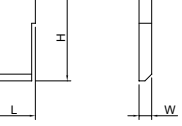
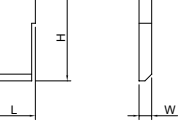
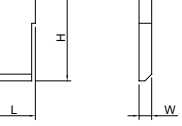
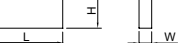
		Velocità / Speed / Vitesse / Geschwindigkeit	Potenza / Power / Puissance / Leistung
Rotazione Slewing Orientation Schwenken		0,23 / 0,47 / 0,71 min ⁻¹	2 x 3,2 Kw
Carrello Trolley Chariot Katzfahren		27 / 54 m/min	5,5 Kw
		18,8 / 35,2 / 54 m/min Progressivo - Progressive	5,5 Kw
Traslazione Rail Translation Kranfahren		18 m/min	2 x 3 Kw

Argano Winch Treuril Hubwerk		Marcia Step Vitesse Gang	Carico / velocità - Load / speed Charge / vitesse - Tragfähigkeit / Geschwindigkeit	
				
Tipo Type Type Typ	25 HP 18,4 Kw - 6	1	3000 Kg - 7,5 m/min	6000 Kg - 3,7 m/min
		2	3000 Kg - 30 m/min	6000 Kg - 15 m/min
		3	1500 Kg - 60 m/min	3000 Kg - 30 m/min
	33 HP 24,3 Kw - 6	1	3000 Kg - 9,4 m/min	6000 Kg - 4,7 m/min
		2	3000 Kg - 37,5 m/min	6000 Kg - 18,8 m/min
		3	1500 Kg - 75 m/min	3000 Kg - 37,5 m/min
	25 HP 18,4 Kw - 6VF INVERTER	1	3000 Kg - 6 m/min	6000 Kg - 3 m/min
		2	3000 Kg - 30 m/min	6000 Kg - 15 m/min
		3	1500 Kg - 60 m/min	3000 Kg - 30 m/min
			1000 Kg - 72 m/min	2000 Kg - 36 m/min
	33 HP 24,3 Kw - 6VF INVERTER	1	3000 Kg - 7,5 m/min	6000 Kg - 3,7 m/min
		2	3000 Kg - 37,5 m/min	6000 Kg - 18,8 m/min
3		1500 Kg - 75 m/min	3000 Kg - 37,5 m/min	
		1000 Kg - 90 m/min	2000 Kg - 45 m/min	

Conforme alla direttiva CEE 85/534 sul livello acustico - In compliance with the EEC 84/534 instruction on noise level - Conforme à directive CEE 84/534 sur le niveau acoustique
Gemäss EWG 84/534 über Schall - Leistungspegel - Conforme con la directive CEE 84/534 sobre el nivel acustico.

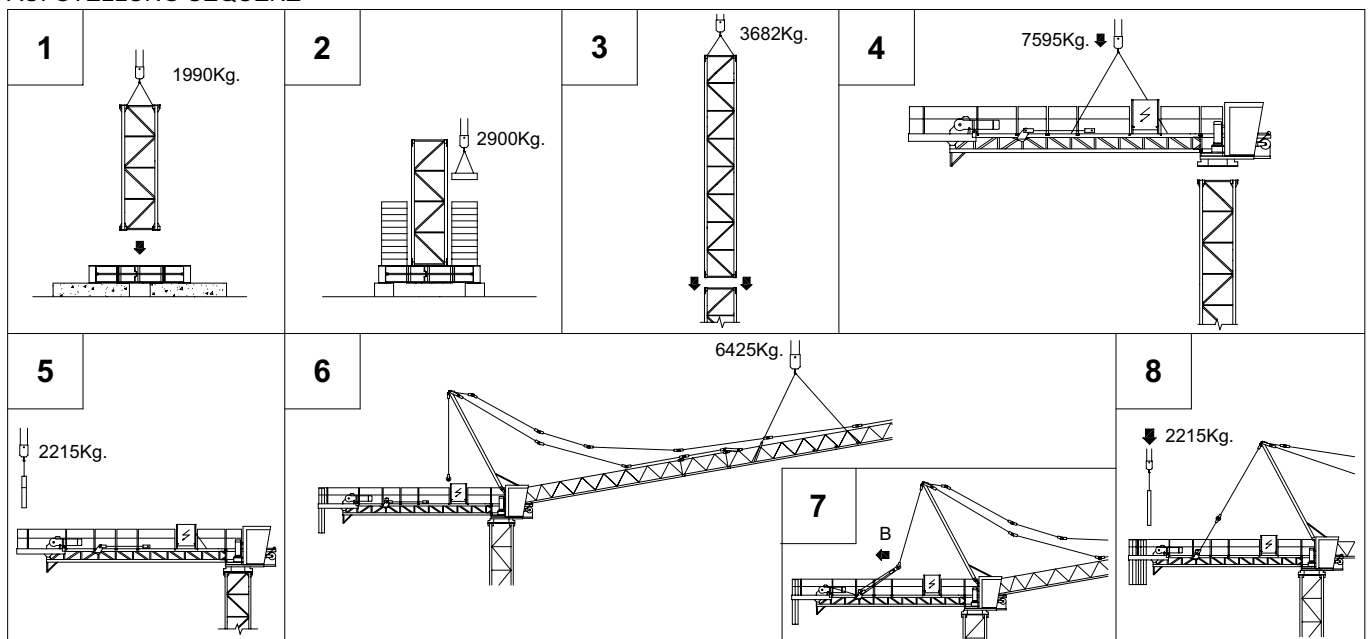
FORZA MOTRICE TOTALE TOTAL INSTALLED POWER PUISSANCE TOTALE DES MOTEURS GESAMT-MOTORENLEISTUNG	18,4 Kw (25HP)	24,3 Kw (33HP)
	37 Kw	43 Kw

LISTA DEI PESI / PACKING LIST
LISTE DE COLISAGE / KOLLI-LISTE

Pos. Item	Pezzi Pieces	Denominazione Description	Schizzo Sketch	Dimensioni Dimensions			Peso Weight (Kg)		
				L	W	H	Unit.	Total.	
1	1	Elemento di freccia Jib element Elément de flèche Ausleger	N°1		11,780	1,200	1,451	972	972
	1		N°2		3,070	1,200	1,180	233	233
	1		N°3		11,770	1,200	1,180	843	843
	1		N°4		5,970	1,200	1,180	400	400
	1		N°5		11,760	1,200	1,180	776	776
	2		N°6-7		5,960	1,200	1,180	368	736
	1	Puntale freccia Jib point Elément pointe Spitzelement		1,315	1,200	1,300	75	75	
2	1	Cuspide A frame Pointe Turmspitze		7,350	0,415	1,105	459	459	
3	1	Controfreccia girevole,organo di sollev. quadro elettrico, carrello freccia etc. Counterjib-turntable, hoisting winch, trolley jib, electrical box etc. Contreflèche tournante, treuil de levage, chariot de flèche, armoire électrique etc. Gegenausleger, Hubwinde, Drehwerk Laufkatze, Schaltschrank etc.		11,955	1,980	2,475	6635	6635	
	1	Controfreccia girevole,organo di sollev. quadro elettr., carrello freccia,cabina. Counterjib-turntable, hoisting winch, acces balcony, electrical box, trolley jib, cabin etc. Contreflèche tournante,treuil de levage, chariot de flèche, armoire électrique, cabine. Gegenausl., Drehwerk, Hubwinde, Laufkatze, Kabine, Schaltschrank, Kabinepodest.		11,955	3,150	2,475	7205	7205	
4	1	Controfreccia girevole,organo sollev., quadro elettrico, carrello freccia,cabina elemento porta-blocchi. Counterjib-turntable, hoisting winch, cabin,trolley jib, electrical box, acces balcony,terminal element. Contrefl. tournante,treuil de levage, chariot de flèche armoire électrique, cabine et element terminal. Gegenausl., Drehwerk, Hubwinde, Laufkatze, Kabine Schaltschrank, Kabinepodest, Gegengewichtelement.		13,500	3,150	2,475	7595	7595	
5	4	Blocchi di contrappeso Counterweight block Contre-poids Gegengewichtsbloecke		A95	1,430	0,200	2,945	1703	6812
	2			B95	1,430	0,260	2,945	2215	4430
	1			C95	1,430	0,170	2,945	1448	1448
	1			D95	1,450	0,290	0,900	590	590

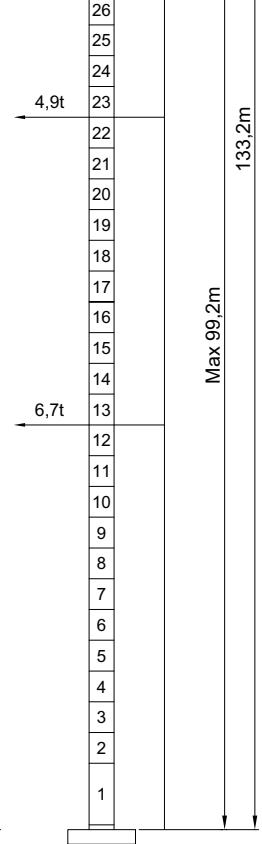
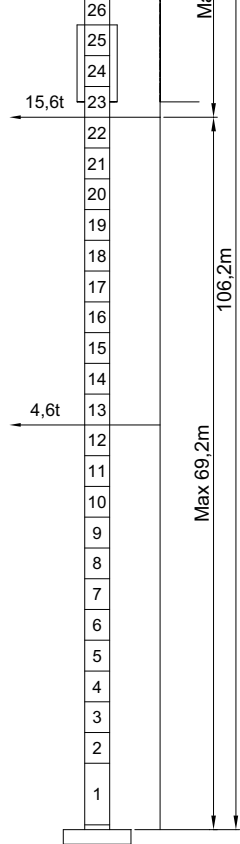
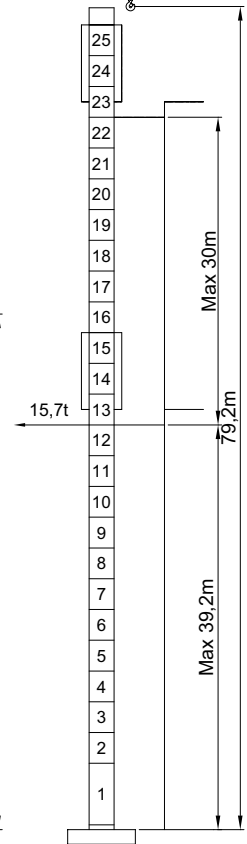
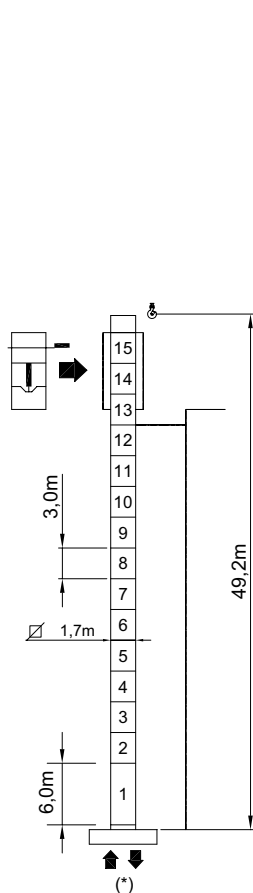
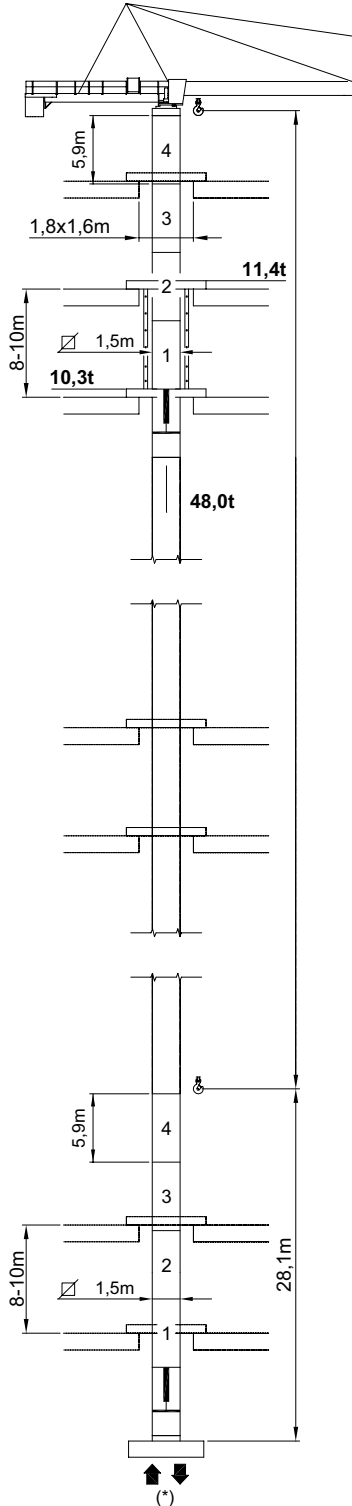
Pos. Item	Pezzi Pieces	Denominazione Description	Schizzo Sketch	Dimensioni Dimensions			Peso Weight (Kg)		
				L	W	H	Unit.	Total.	
6	-	Elemento di torre Tower element Elément de mature Turmstück		2,950	1,700	1,500	1172	1172	
7	-			4,425	1,700	1,500	1590	1590	
8	-			5,900	1,700	1,500	1990	1990	
9	-			11,800	1,700	1,500	3682	3682	
10	1	Tronchetto di fondazione Expendable foundation element Elément a sceller Fundamentanker		1,465	1,780	1,780	780	780	
11	1	Trave principale della crociera di base Base main beam Poutre de chassis de base Hauptträger für Kreuzgelenk		4,5x4,5mt	6,530	0,710	0,760	2120	2120
				3,8x3,8mt	5,535	0,710	0,760	1460	1460
12	2	Semitrave della crociera di base Half base beam Semipoutre de chassis de base Halbträger für Kreuzgelenk		4,5x4,5mt	3,200	0,590	0,770	1030	2060
				3,8x3,8mt	2,620	0,590	0,770	940	1880
13	4	Blocco di appoggio Concrete pad Sabot en béton Betonfuss (B2)		3,600	0,800	0,600	3925	15700	
14	2	Bilancino di traslazione folle Driven bogie Boggie fou Fahrschemel ohne motorantrieb		1,080	0,230	0,515	415	830	
15	2	Bilancino di traslazione motorizzato Driving bogie Boggie motorisée Fahrschemel mit motorantrieb		1,550	0,500	0,515	535	1070	
16	26	Blocco di zavorra Base ballast block Lest de base Grundballastblöcken (GB3)		3,600	1,200	0,300	2900	75400	

SEQUENZA DI MONTAGGIO
ASSEMBLING SEQUENCE
SEQUENCE DE MONTAGE
AUFSTELLUNG SEQUENZ



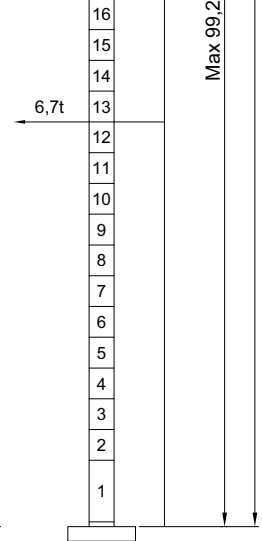
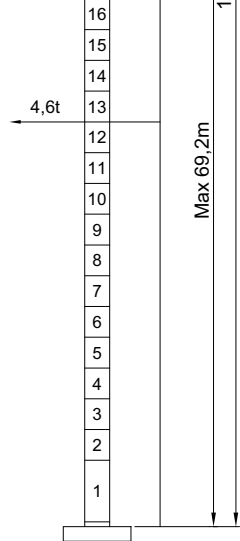
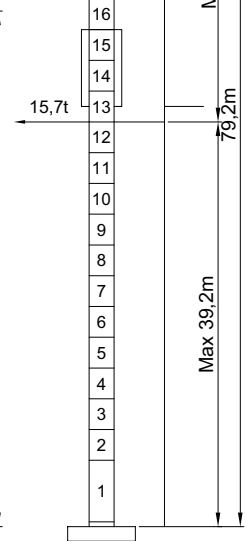
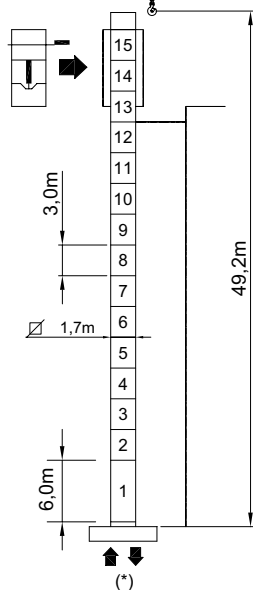
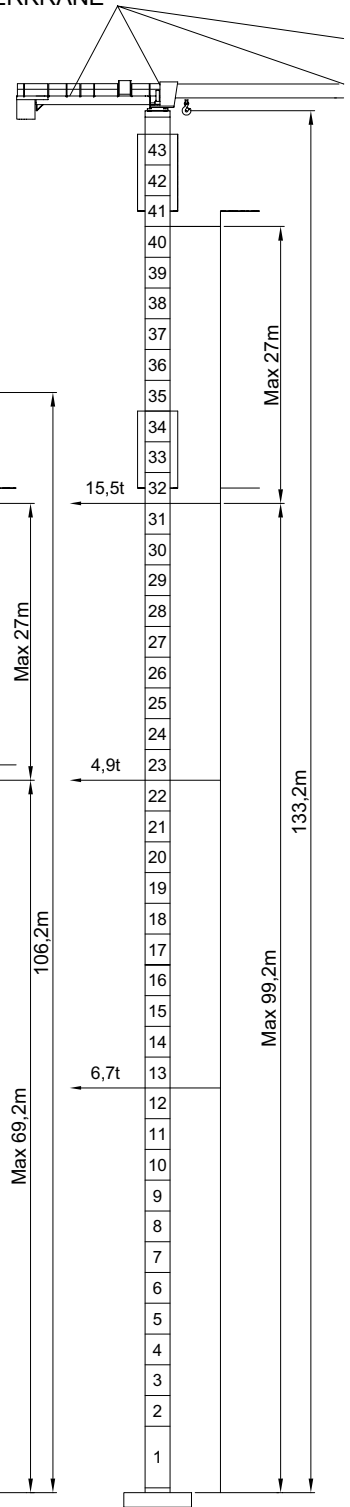
MR 93 RI

RAMPANTE
FLOOR CLIMBING
TELESCOPABLE SUR DALLES
KLETTERKRANE IM GEBAUDE



MR 93 HC

A SOPRALZO IDRAULICO
EXTERNAL CLIMBING
TELESCOPABLE
KLETTERKRANE



* Vedi tabella a pag. 4 - See table at page 4 - Voir table à la page 4 - Siehe tafel an seite 4

