

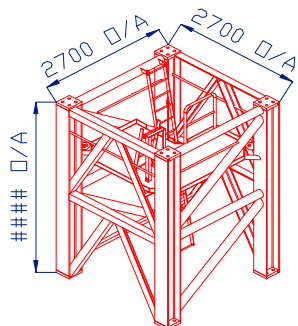
M630D TOWER CRANE

TOWER TYPE
443/443R

TYPICAL LOADS	
LOAD (T)	RADIUS (m)
50	12.5
25	17.5
9	60
4.7	71.5

TOWER TYPE
762/762R

Technical Data Sheet



TOWER TYPE
763/763R

FAVELLE
FAVCO

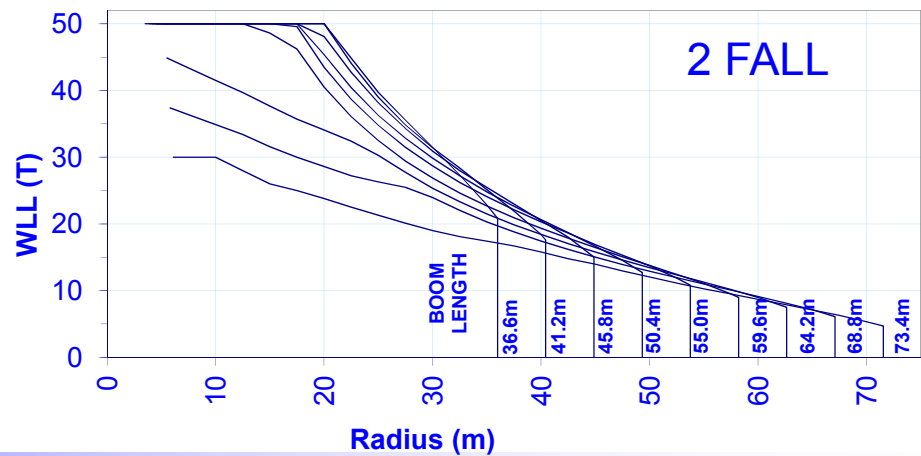
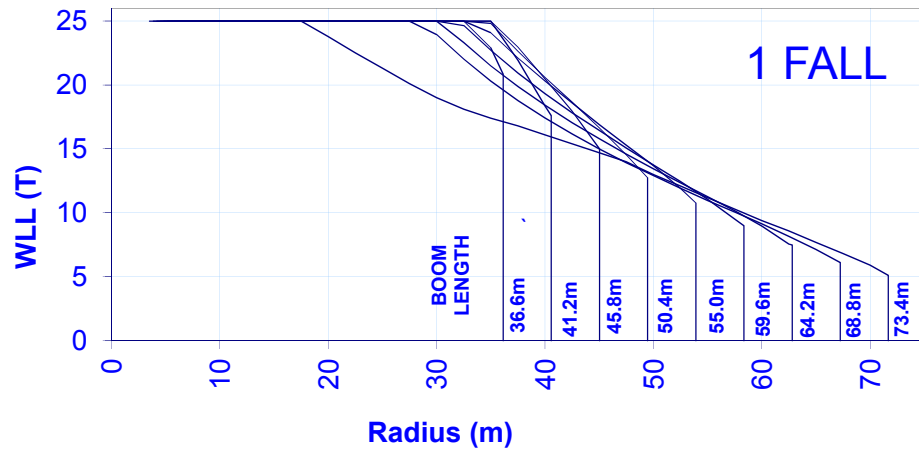
M630D RADIUS AND CAPACITY



Boom Length (m)	Max Rad. for Max WLL (m)	Min Rad. (m)	WLL at Min Rad. (T)	1 FALL																				Max Rad. (m)	WLL at Max Rad. (T)
				Radius (metres) & Capacity (tonnes)																					
73.4	17.5	6.1	25.0	7.5	10.0	15.0	20.0	25.0	30.0	32.5	35.0	37.5	40.0	42.5	45.0	47.5	50.0	52.5	55.0	57.5	60.0	65.0	70.0	71.7	5.1
68.8	27.5	5.8	25.0	25.0	25.0	25.0	25.0	25.0	23.9	22.0	20.3	18.8	17.4	16.2	15.0	13.9	12.9	11.9	11.0	10.1	9.1	7.1	-	67.2	6.1
64.2	30.0	5.5	25.0	25.0	25.0	25.0	25.0	25.0	25.0	23.3	21.5	19.9	18.4	17.1	15.8	14.6	13.5	12.4	11.3	10.2	9.0	-	-	62.8	7.5
59.6	30.0	5.2	25.0	25.0	25.0	25.0	25.0	25.0	25.0	24.6	22.7	20.9	19.3	17.8	16.4	15.1	13.8	12.5	11.1	9.5	-	-	-	58.4	9.0
55.0	32.5	4.8	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	24.1	22.1	20.3	18.6	16.9	15.3	13.7	11.9	-	-	-	-	-	53.9	10.8
50.4	32.5	4.5	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	24.8	22.6	20.6	18.7	16.7	14.6	-	-	-	-	-	-	-	49.5	12.7
45.8	35.0	4.2	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	23.0	20.5	18.0	-	-	-	-	-	-	-	-	-	45.0	15.0
41.2	35.0	3.9	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	21.9	18.4	-	-	-	-	-	-	-	-	-	-	40.6	17.6
36.6	32.5	3.5	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	22.9	-	-	-	-	-	-	-	-	-	-	-	-	36.1	20.8

Boom Length (m)	Max Rad. for Max WLL (m)	Min Rad. (m)	WLL at Min Rad. (T)	2 FALL																				Max Rad. (m)	WLL at Max Rad. (T)
				Radius (metres) & Capacity (tonnes)																					
73.4	-	6.1	30.0	7.5	10.0	15.0	20.0	25.0	30.0	32.5	35.0	37.5	40.0	42.5	45.0	47.5	50.0	52.5	55.0	57.5	60.0	65.0	70.0	71.5	4.7
68.8	-	5.8	37.4	36.4	34.9	31.6	28.6	26.3	23.9	22.0	20.3	18.8	17.4	16.2	15.0	13.9	12.9	11.9	11.0	10.1	9.1	7.1	-	67.1	6.1
64.2	-	5.5	44.9	43.4	41.5	37.7	34.1	30.3	25.4	23.3	21.5	19.9	18.4	17.1	15.8	14.6	13.5	12.4	11.3	10.2	9.0	-	-	62.7	7.5
59.6	12.5	5.2	50.0	50.0	50.0	48.6	40.5	32.5	26.9	24.6	22.7	20.9	19.3	17.8	16.4	15.1	13.8	12.5	11.1	9.5	-	-	-	58.2	9.0
55.0	15.0	4.6	50.0	50.0	50.0	50.0	43.5	34.8	28.7	26.2	24.1	22.1	20.3	18.6	16.9	15.3	13.7	11.9	-	-	-	-	-	53.8	10.8
50.4	17.5	4.5	50.0	50.0	50.0	50.0	45.4	36.3	29.9	27.2	24.8	22.6	20.6	18.7	16.7	14.6	-	-	-	-	-	-	-	49.3	12.7
45.8	17.5	4.2	50.0	50.0	50.0	50.0	48.1	38.2	30.9	28.0	25.5	23.0	20.5	18.0	-	-	-	-	-	-	-	-	-	44.9	15.0
41.2	20.0	3.9	50.0	50.0	50.0	50.0	50.0	39.0	31.4	28.3	25.1	21.9	18.4	-	-	-	-	-	-	-	-	-	-	40.4	17.6
36.6	20.0	3.5	50.0	50.0	50.0	50.0	50.0	39.7	31.5	27.3	22.9	-	-	-	-	-	-	-	-	-	-	-	-	36.0	20.8

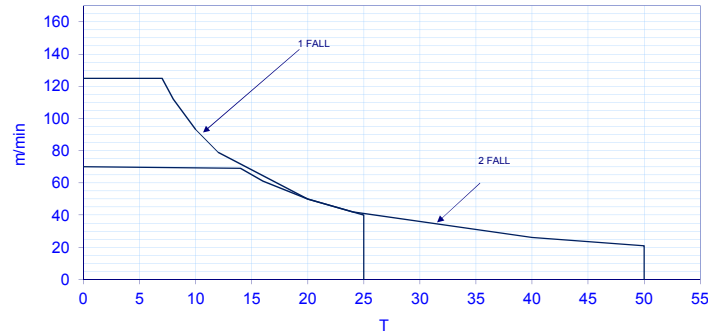
LOAD CHARTS



HOIST SPEEDS



260kW 25T WINCH



1 FALL	
TONNE	SPEED (m/min)
7	125
8	112
10	93
12	79
20	50
25	40

2 FALLS	
TONNE	SPEED (m/min)
14	69
16	61
20	50
24	42
40	26
50	21

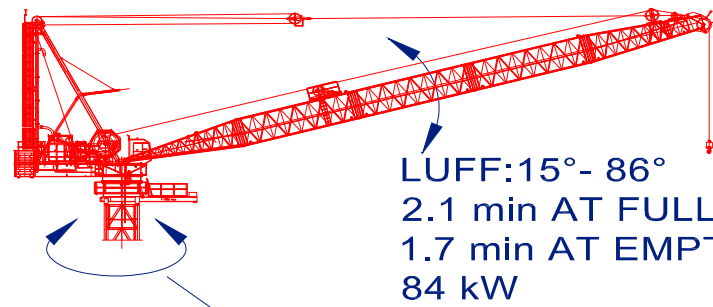
158kW 16T WINCH



1 FALL	
TONNE	SPEED (m/min)
2.9	151.2
5	96.3
8	63.8
10	52.1
12	44
16	36.6

2 FALLS	
TONNE	SPEED (m/min)
5.8	76
10	48
15	34
20	26
25	21
32	18

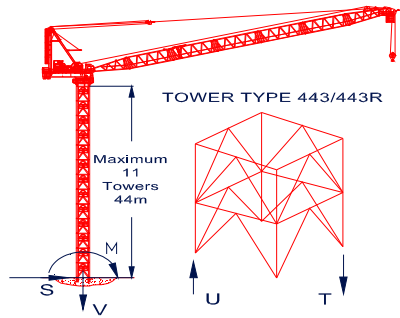
LUFF AND SLEW SPEEDS



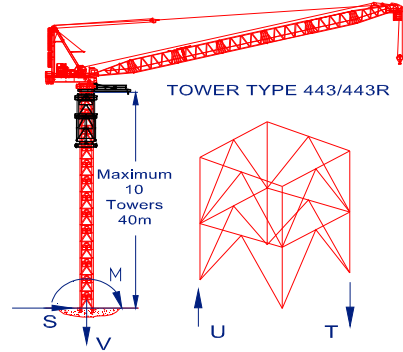
LUFF: 15° - 86°
 2.1 min AT FULL LOAD
 1.7 min AT EMPTY HOOK
 84 kW

SLEW: 0.82rpm
 74 kW

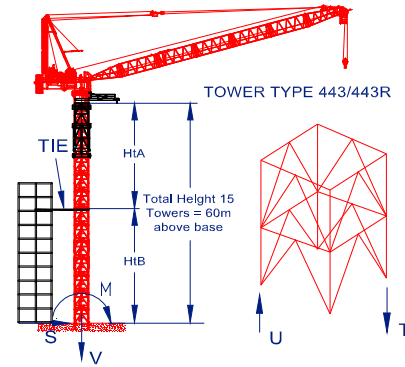
CRANE FREE-STANDING WITHOUT EXTERNAL CLIMBER



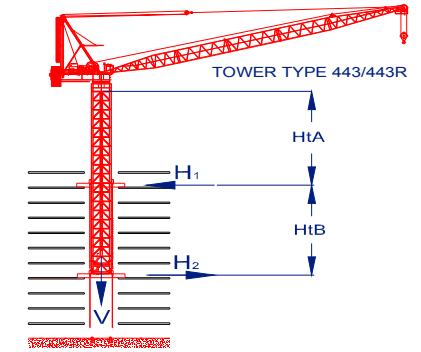
CRANE FREE-STANDING WITH EXTERNAL CLIMBER



WITH CLIMBER- ONE TIE ABOVE THE BASE



INTERNAL CLIMBER ON COLLARS



BUILDING REACTION

Design Load	I/S*	O/S‡	Unit
NO. of Towers	11	11	-
M	1177	953	mT
V	227	196	T
S	7	31	T
T	402	328	T
U	291	233	T
Ht _{Total}	44	44	m

BUILDING REACTION

Design Load	I/S*	O/S‡	Unit
NO. of Towers	10	10	-
M	1174	966	mT
V	232	201	T
S	8	34	T
T	404	335	T
U	288	235	T
Ht _{Total}	40	40	m

BUILDING REACTION

Design Load	I/S*	O/S‡	Unit
NO. of Towers	15	15	-
TIE	73	81	T
M	563	387	mT
V	259	228	T
S	64	40	T
T	231	171	T
U	101	57	T
Ht _A	34	34	m
Ht _B	26	26	m
Ht _{Total}	60	60	m

BUILDING REACTION

Design Load	I/S*	O/S‡	Unit
NO. of Towers	11	11	-
V	227	196	t
H ₁	85	69	t
H ₂	77	38	t
Ht _A	30	30	m
Ht _B	13.5	13.5	m

*:IN SERVICE WIND=20 m/s

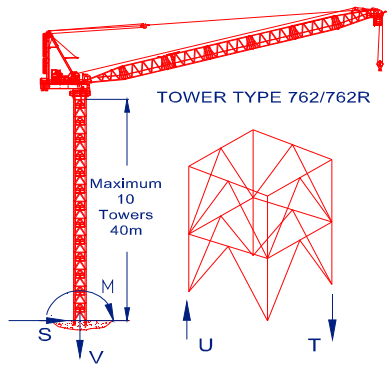
‡:OUT OF SERVICE WIND= 42 m/s

Notes:

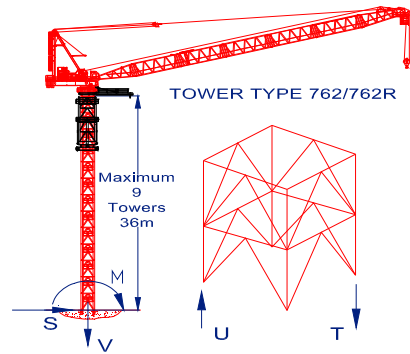
1. Structure is designed using permissible stress method. These loads will vary by change of boom length, height and type of tower, actual site wind conditions, no of falls and change of wind speed.

2. To calculate alternative options for M630D refer to Favelle Favco Design Sheet named 'Crane Weight Wind Chart'

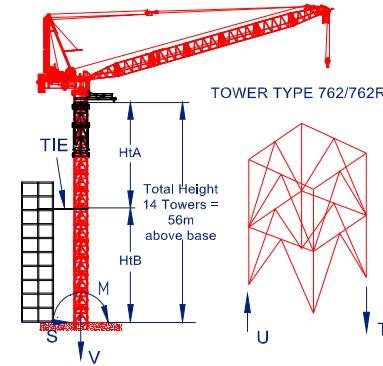
CRANE FREE-STANDING WITHOUT EXTERNAL CLIMBER



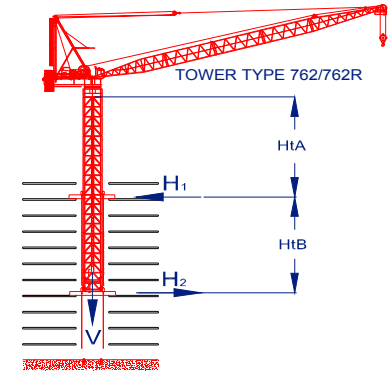
CRANE FREE-STANDING WITH EXTERNAL CLIMBER



WITH CLIMBER- ONE TIE ABOVE THE BASE



INTERNAL CLIMBER ON COLLARS



BUILDING REACTION

Design Load	I/S*	O/S‡	Unit
NO. of Towers	10	10	-
M	1135	845	mT
V	232	201	T
S	7	31	T
T	355	271	T
U	239	171	T
Ht _{Total}	40	40	m

BUILDING REACTION

Design Load	I/S*	O/S‡	Unit
NO. of Towers	9	9	-
M	1132	854	mT
V	237	206	T
S	8	34	T
T	356	275	T
U	237	172	T
Ht _{Total}	36	36	m

BUILDING REACTION

Design Load	I/S*	O/S‡	Unit
NO. of Towers	14	14	-
TIE	82	78	T
M	545	334	mT
V	250	219	T
S	73	42	T
T	205	142	T
U	80	33	T
Ht _A	34	34	m
Ht _B	22	22	m
Ht _{Total}	56	56	m

BUILDING REACTION

Design Load	I/S*	O/S‡	Unit
NO. of Towers	10	10	-
V	231	200	t
H ₁	79	59	t
H ₂	72	34	t
Ht _A	25.5	25.5	m
Ht _B	14	14	m

*:IN SERVICE WIND=20 m/s

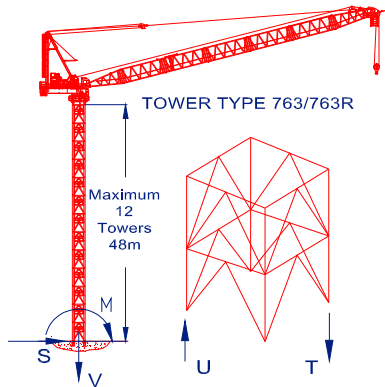
‡:OUT OF SERVICE WIND= 42 m/s

Notes:

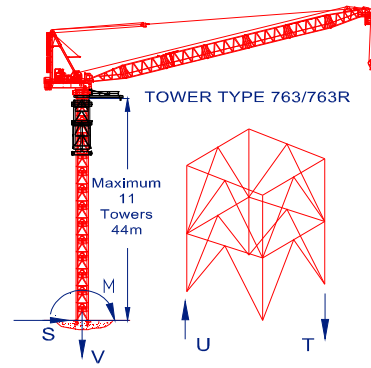
1. Structure is designed using permissible stress method. These loads will vary by change of boom length, height and type of tower, actual site wind conditions, no of falls and change of wind speed.

2. To calculate alternative options for M630D refer to Favelle Favco Design Sheet named "Crane Weight Wind Chart"

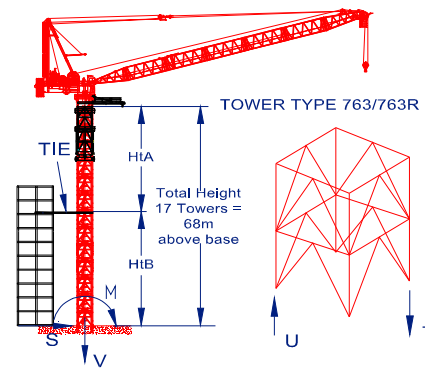
CRANE FREE-STANDING WITHOUT EXTERNAL CLIMBER



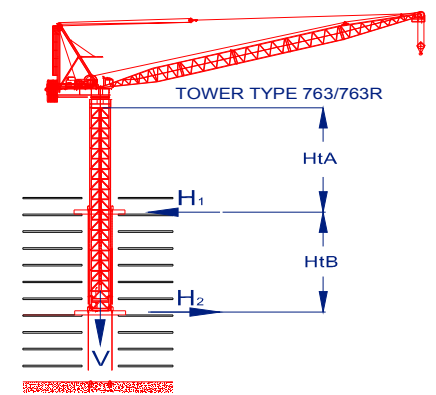
CRANE FREE-STANDING WITH EXTERNAL CLIMBER



WITH CLIMBER- ONE TIE ABOVE THE BASE



INTERNAL CLIMBER ON COLLARS



BUILDING REACTION

Design Load	I/S*	O/S†	Unit
NO. of Towers	12	12	-
M	1210	1108	mT
V	248	217	T
S	8	33	T
T	379	344	T
U	255	236	T
Ht _{Total}	48	48	m

BUILDING REACTION

Design Load	I/S*	O/S†	Unit
NO. of Towers	11	11	-
M	1213	1139	mT
V	254	223	T
S	8	36	T
T	381	354	T
U	254	242	T
Ht _{Total}	44	44	m

BUILDING REACTION

Design Load	I/S*	O/S†	Unit
NO. of Towers	17	17	-
TIE	67	86	T
M	582	467	mT
V	294	263	T
S	57	41	T
T	226	188	T
U	79	57	T
Ht _A	38	38	m
Ht _B	30	30	m
Ht _{Total}	68	68	m

BUILDING REACTION

Design Load	I/S*	O/S†	Unit
NO. of Towers	12	12	-
V	248	217	t
H ₁	91	83	t
H ₂	83	50	t
Ht _A	34.6	34.6	m
Ht _B	13	13	m

*:IN SERVICE WIND=20 m/s

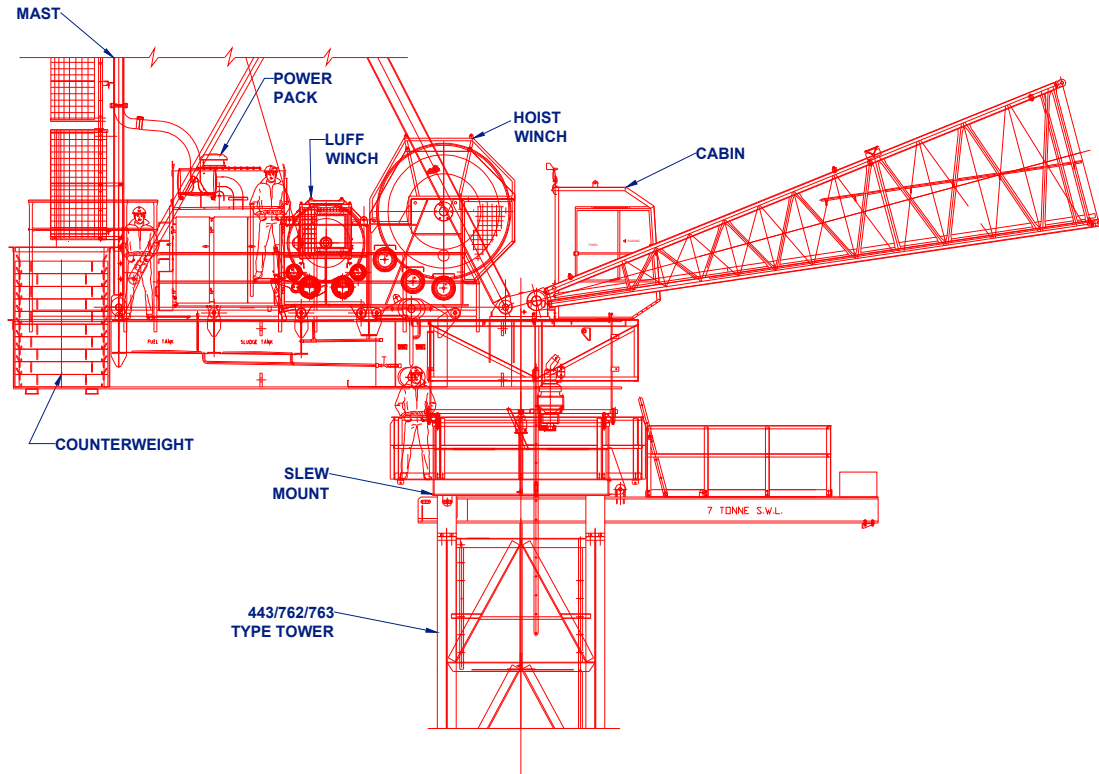
†:OUT OF SERVICE WIND= 42 m/s

Notes:

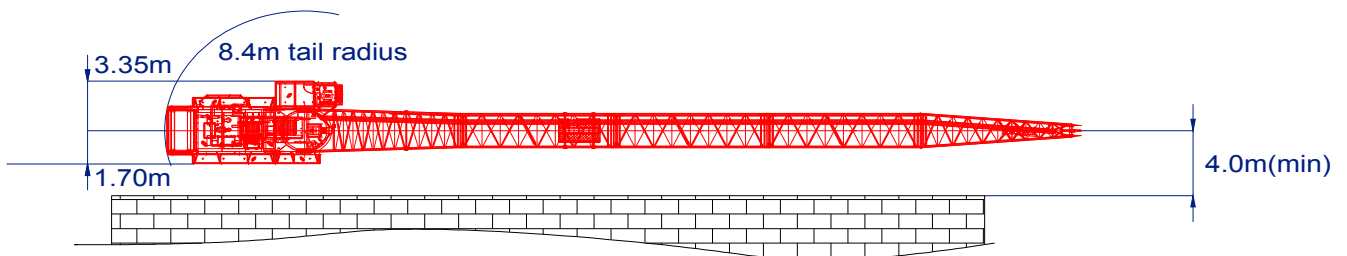
1. Structure is designed using permissible stress method. These loads will vary by change of boom length, height and type of tower, actual site wind conditions, no of falls and change of wind speed.

2. To calculate alternative options for M440D refer to Favelle Favco Design Sheet named 'Crane Weight Wind Chart'

MACHINERY DECK ASSEMBLY



EXTERNAL CLIMBING
INSTALLATION CLEARANCE



OUT OF SERVICE CONFIGURATION

Boom Length (m)	RECCOMENDED OUT OF SERVICE PARKED RADIUS	
	Radius (m)	Angle (°)
73.4	19.8	74.6
68.8	25.1	68.9
64.2	26.5	65.9
59.6	28.1	62.2
55.0	29.0	58.5
50.4	26.3	58.9
45.8	23.6	59.4
41.2	20.9	60.0
36.6	18.0	61.0

*:MAX OUT OF SERVICE WIND SPEED = 42 m/s

M630D TRANSPORTATION & ERECTION



ITEM	QTY	DESCRIPTION		LENGTH L (mm)	HEIGHT H (mm)	WIDTH W (mm)	WEIGHT PER ITEM (kg)
1	1	SPLIT DECK-FRONT (INCL. SLEW DRIVE, PINS, PLATFORMS & HANDRAILS)		3370	1970	3350	7900
2	1	SPLIT DECK-REAR (INCL. PLATFORMS & HANDRAILS)		6500	1430	3340	8700
3	2	MAST FRONT LEG		12685	520	490	1564
	1	MAST HEAD		1118	1171	904	792
	2	MAST BACK LEG		11569	247	439	512
	1	BUFFER		3596	216	2835	373
		MAST ASSEMBLY (INC. SHEAVES, HEAD PIN, LADDERS, BUFFER AND PLATFORMS)					7766
4	1	CABIN & PLATFORM ASSEMBLY		4600	2656	1965	2200
5	1	16T POWER PACK HOIST AND LUFF ASSY (NO ROPE) (INCL 900kg OF OIL)		3438	2955	2622	7710
6	1	MAIN HOIST WINCH ASSEMBLY (EMPTY DRUM) (600m ROPE CAPACITY)		1800	2050	1990	6710
7	1	BOOM BOTTOM 13.7m (INC. WALKWAY&PINS)		13913	2416	3052	2530
8	1	BOOM TOP 13.7m (INC. DEFLECTOR, SHEAVES & PINS) (PENDANT & PLATFORM)		14455	3806	2416	3030
9	5	BOOM EXTENSION 9.2m (BRIDLE PLATFORM 203 kg)		9316	2589	2416	1473 (1743)
10	1	BRIDLE		1765	1095	1160	596
11	1	SLEW MOUNT (INCL. PLATFORMS 556Kg)		3512	1817	3310	5610
	1	SLEW RING (INCL. BOLTS)		3100 DIA.	175		2301
		Total					82274
12	1	EXTERNAL CLIMBER		TBA	TBA	TBA	TBA
13	1	MONORAIL		7870	1650	650	3184
14	7	COUNTER WEIGHT		3100	2100	1410	7300
15	1	HOOK - 2/1 FALL (50/25T)		2284	400	1170	1390
16	1	TOWER SECTION 443 (INC.LADDER,HAND RAIL,PLATFORM)		2727	2711	4000	5800
17	1	TOWER SECTION 762 (INC.LADDER,HAND RAIL,PLATFORM)		2721	2709	4000	4700
18	1	TOWER SECTION 763 (INC.LADDER,HAND RAIL,PLATFORM)		3027	3011	4006	7500
19	1	HOIST ROPE 25T (36mm) @ 6.5kg/m		600m			4056
21	1	LUFF ROPE (32mm) @ 4.9kg/m		170m			870
22	1	PENDANT ROPE (45mm) @ 9.7kg/m		108m			1090