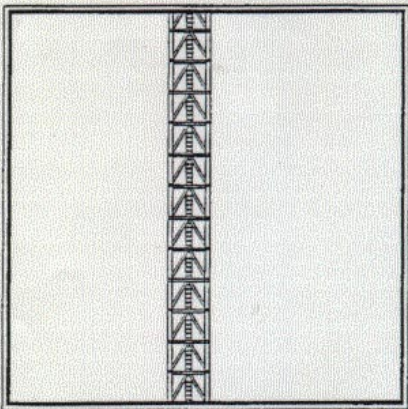


# M190D CONSTRUCTION TOWER CRANE

800



## Technical Data Sheet



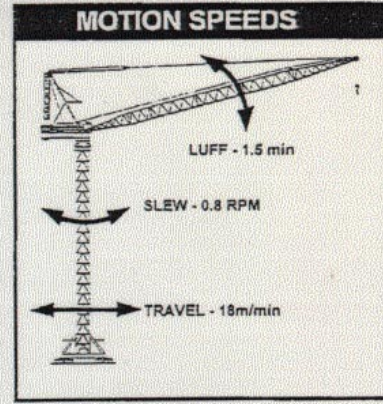
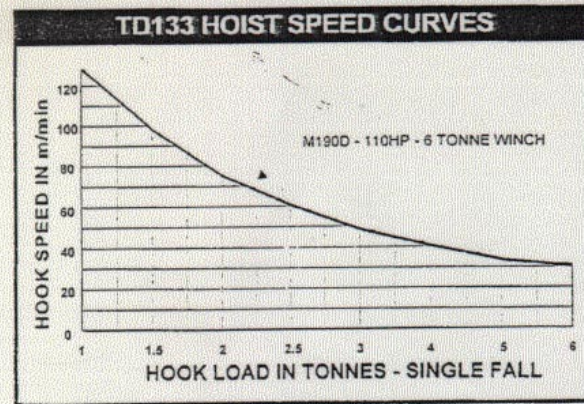
## M190D

### Radius & Capacity

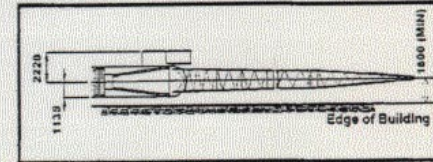
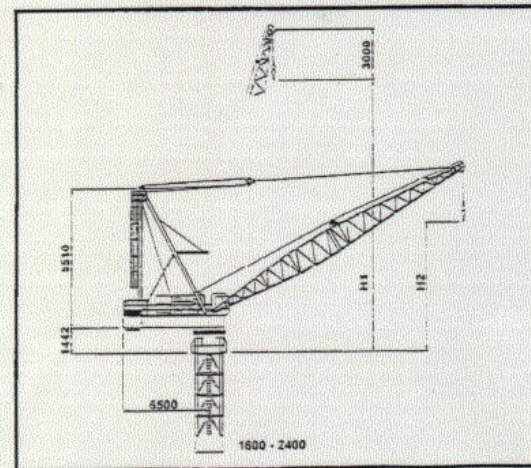
MAXIMUM RADIUS (m)	MINIMUM RADIUS (m)	MAXIMUM RADIUS FOR 12 T (m)	RADIUS & CAPACITY (TONNE) (6 TONNE WINCH & 2-FALL)																
			10.0	12.5	16.0	17.5	20.0	22.5	25.0	27.5	30.0	32.5	35.0	37.5	40.0	42.5	45.0	47.5	50.0
50.0	4.7	20.0	12.0	12.0	12.0	12.0	12.0	11.2	10.0	8.9	8.0	7.2	6.4	5.7	5.1	4.5	3.9	3.3	2.6
45.0	4.3	20.0	12.0	12.0	12.0	12.0	12.0	11.8	10.2	9.2	8.2	7.3	6.7	6.0	5.3	4.5	3.9		
40.0	3.9	22.5	12.0	12.0	12.0	12.0	12.0	12.0	10.5	9.3	8.3	7.5	6.7	6.0	5.3				
35.0	3.5	22.5	12.0	12.0	12.0	12.0	12.0	12.0	10.6	9.4	8.5	7.6	6.7						
30.0	3.3	22.5	12.0	12.0	12.0	12.0	12.0	12.0	10.9	9.6	8.6								
25.0	3.2	22.5	12.0	12.0	12.0	12.0	12.0	12.0	11.0										

### Speeds

(Alternative Speed Configurations Available on Request)



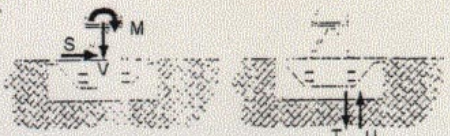
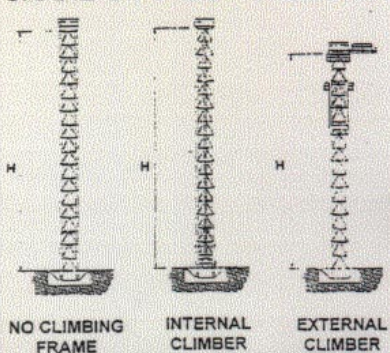
### Dimensions



MAXIMUM RADIUS (m)	BOOM LENGTH (m)	HOOK HEIGHT	
		H1 (m)	H2 (m)
50	50.6	51.0	10.3
45	46.0	46.4	11.7
40	41.4	41.8	12.6
35	36.8	37.2	13.1
30	32.2	32.6	13.3

**M190D**

**CRANE ON BASE - FREE STANDING**



MAXIMUM VALUES AT ONE CORNER

**FREESTANDING TOWER HEIGHTS AND FOUNDATION REACTIONS**

	CLIMBING FRAME TYPE									UNITS
	NO FRAME			INTERNAL			EXTERNAL			
TOWER	154	184	1000	154	184	1000	154	184	1000	
H	20	28	33	20	28	33	16	24	30	(m)
M	418	550	845	418	550	845	403	496	616	(mT)
V	64	71	74	64	71	74	60	67	71	(T)
S	17	20	21	17	20	21	17	20	21	(T)
T	192	221	210	192	221	210	185	200	200	(T)
U	160	192	179	160	192	179	155	173	171	(T)

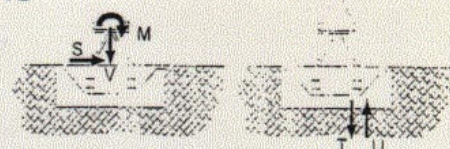
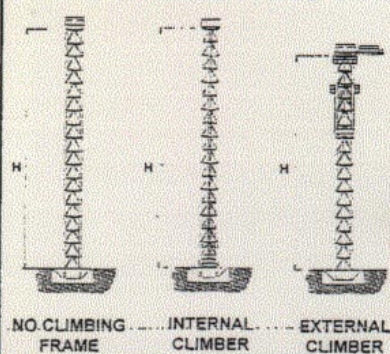
**WIND CONDITIONS**

In-service wind speeds up to 20 m/s & out-of-service wind speeds up to 42 m/s.

Alternatives available on request.

**M190D**

**CRANE ON BASE - FREE STANDING**



MAXIMUM VALUES AT ONE CORNER

**FREESTANDING TOWER HEIGHTS AND FOUNDATION REACTIONS**

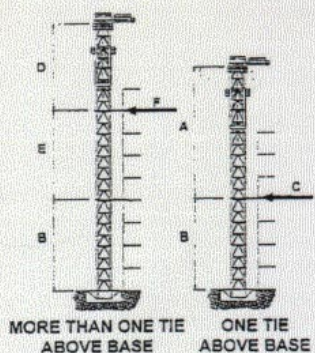
	CLIMBING FRAME TYPE									UNITS
	NO FRAME			INTERNAL			EXTERNAL			
TOWER	154	184	1000	154	184	1000	154	184	1000	
H	32	36	45	32	36	45	32	36	42	(m)
M	449	511	651	449	511	651	474	540	633	(mT)
V	72	75	81	72	75	81	72	75	79	(T)
S	15	16	17	15	16	17	16	17	17	(T)
T	204	208	214	204	208	214	215	219	208	(T)
U	173	176	179	173	176	179	184	187	174	(T)

**WIND CONDITIONS**

In-service wind speeds up to 15 m/s & out-of-service wind speeds up to 35 m/s.

Alternatives available on request.

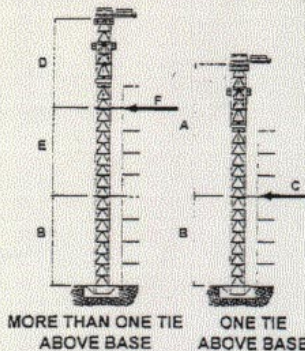
**EXTERNAL CLIMBING**



**EXTERNAL CLIMBING**

TOWER TYPES :		154	184	1000	UNITS
<b>ONE TIE ABOVE BASE</b>					
A	MAX. HEIGHT ABOVE FIRST TIE	16.0	24.0	30.0	(m)
B	MIN. HEIGHT TO FIRST TIE	6.0	7.0	10.0	(m)
C	MAX. HORIZONTAL TIE LOAD	105.0	127.0	114.0	(T)
<b>MORE THAN ONE TIE ABOVE BASE</b>					
D	MAX. HEIGHT ABOVE TOP TIE	16.0	24.0	30.0	(m)
E	MIN. HEIGHT BETWEEN TOP TIES	5.0	6.0	8.5	(m)
F	MAX. HORIZONTAL TIE LOAD	107.0	125.0	114.0	(T)

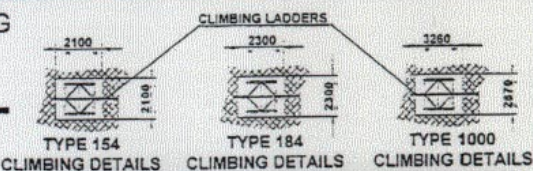
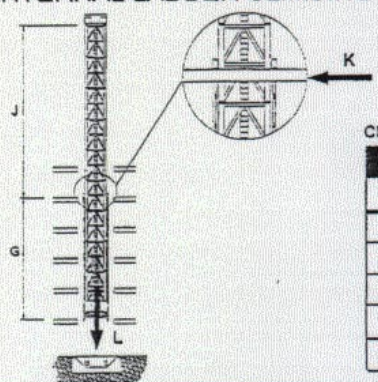
**EXTERNAL CLIMBING**



**EXTERNAL CLIMBING**

TOWER TYPES :		154	184	1000	UNITS
<b>ONE TIE ABOVE BASE</b>					
A	MAX. HEIGHT ABOVE FIRST TIE	32.0	36.0	42.0	(m)
B	MIN. HEIGHT TO FIRST TIE	6.5	7.0	10.0	(m)
C	MAX. HORIZONTAL TIE LOAD	125.0	133.0	113.0	(T)
<b>MORE THAN ONE TIE ABOVE BASE</b>					
D	MAX. HEIGHT ABOVE TOP TIE	32.0	36.0	42.0	(m)
E	MIN. HEIGHT BETWEEN TOP TIES	5.5	6.0	8.5	(m)
F	MAX. HORIZONTAL TIE LOAD	125.0	131.0	112.0	(T)

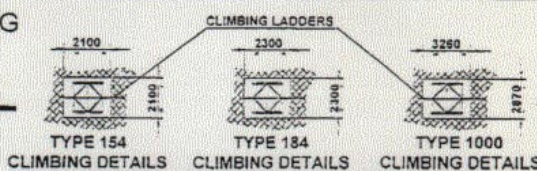
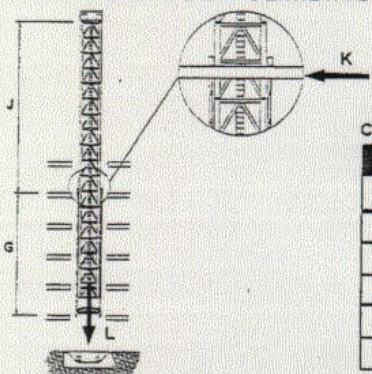
**INTERNAL LADDER CLIMBING**



**INTERNAL LADDER CLIMBING**

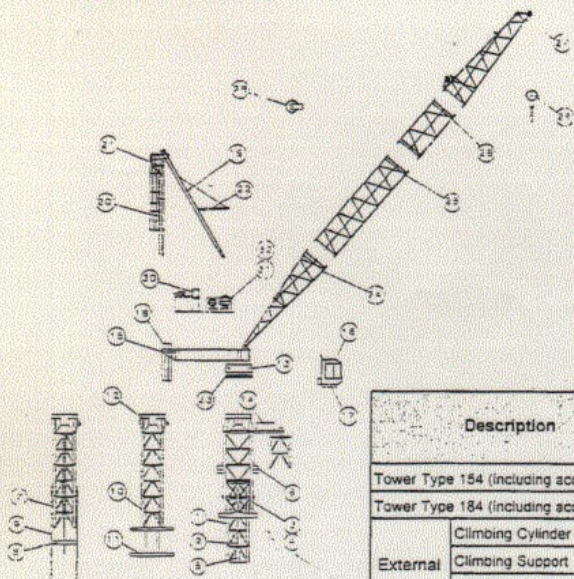
TOWER TYPES :		154	184	1000	UNITS
G	MIN. HEIGHT BETWEEN COLLARS	8.0	8.0	8.0	(m)
J	MAX. HEIGHT ABOVE TOP TIE (with G)	12.0	20.0	25.0	(m)
K	MAX. HORIZONTAL LOAD (with G + J)	52.0	87.0	79.0	(T)
L	TOTAL VERTICAL LOAD (with H)	64.0	71.0	74.0	(T)
H	MAX. FREESTANDING HEIGHT	20.0	28.0	33.0	(m)

**INTERNAL LADDER CLIMBING**



**INTERNAL LADDER CLIMBING**

TOWER TYPES :		154	184	1000	UNITS
G	MIN. HEIGHT BETWEEN COLLARS	8.0	8.0	8.0	(m)
J	MAX. HEIGHT ABOVE TOP TIE (with G)	24.0	23.0	37.0	(m)
K	MAX. HORIZONTAL LOAD (with G + J)	55.0	62.0	80.0	(T)
L	TOTAL VERTICAL LOAD (with H)	72.0	75.0	81.0	(T)
H	MAX. FREESTANDING HEIGHT	32.0	36.0	45.0	(m)



INTERNAL CLIMBING (LADDER)  
INTERNAL CLIMBING (3-BEAM)  
EXTERNAL CLIMBING



**FAVELLE FAVCO CRANES (M) SDN BHD**  
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**FAVELLE FAVCO CRANES PTE LTD**  
15C Pandan Road  
Singapore 2260  
Tel: 65 268 0095  
Fax: 65 265 2848

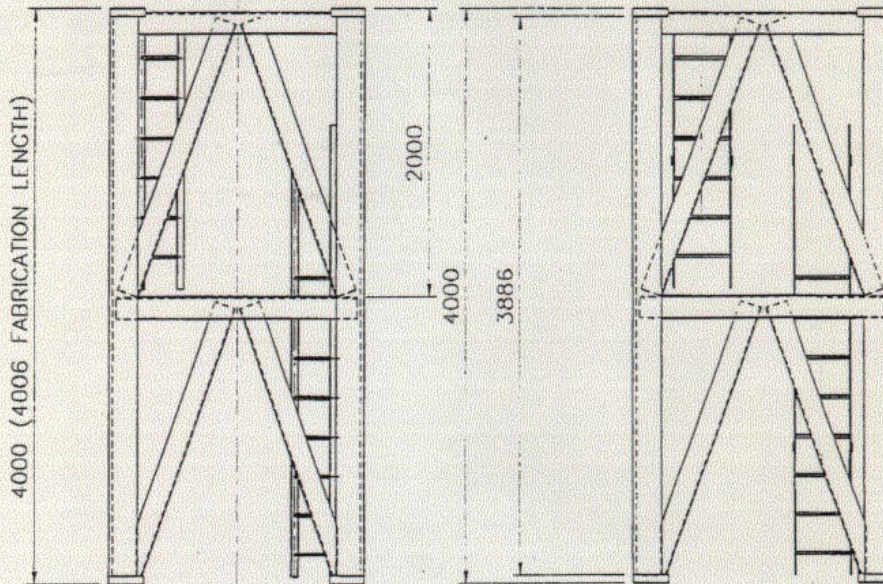
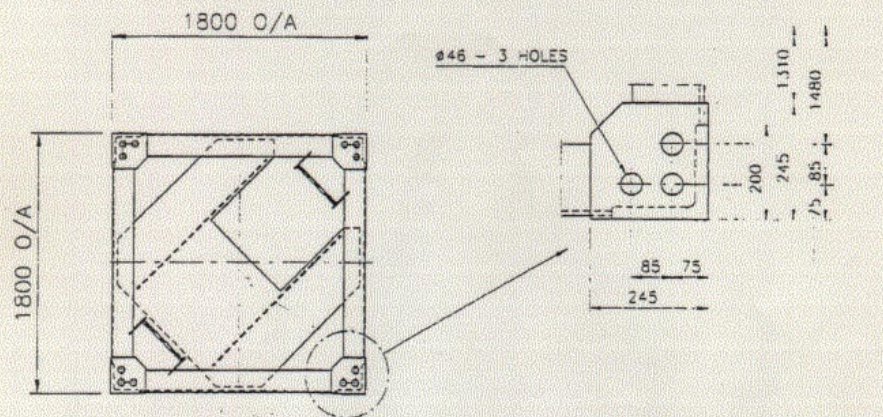
**FAVELLE FAVCO CRANES PTY LTD**  
28 Yamunga Street Prestons  
NSW 2170 Australia  
P.O. Box 456 Liverpool  
NSW 2170 Australia  
Telephone: 61 2 907 0055, 61 2 908 2000  
Fax: 61 2 907 0022

**Distributed by: ENGINEERING**  
189, JAMSIL-DONG,  
SONGPA-KU, SEOUL, KOREA  
TEL 4207791; FAX 4207790

Description	Item	Qty	L Length (m)	W Width (m)	H Height (m)	Weight (Kg)	
Tower Type 154 (including access ladders)	1	-	4000	1800	1800	3000	
Tower Type 184 (including access ladders)	1	-	4000	2000	2000	3700	
External Climber	Climbing Cylinder	2	2	4900	280	280	1630
	Climbing Support	3	2	2284	1300	330	300
	Side Panel	4	2	9650	2020	400	4500
	Tie	5	2	4404	2654	200	1550
	Access Platform	6	2	2800	800	1295	218
Internal Ladder Climber	Bottom Climbing Tower (Including Cylinders)	7	1	4000	1800	1800	5900
	Climbing Foot	8	1	1800	530	750	900
	Climbing Ladder	9	-	210	170	7985	525
3-Beam Climber	Bottom Climbing Tower	10	1	4000	1800	1800	4050
	Climbing Beams	11	2	2850	380	485	2525
Lower Slew Mount	12	1	2500	1820	1510	2810	
Upper Slew Mount	13	1	2240	2240	710	1350	
Monorail Beam & Trolley (Ext. Climbing)	14	1	8000	1680	1400	1540	
Machinery Deck (One Piece)	15	1	7160	2348	905	4260	
Cabin	16	1	1700	1100	2100	1200	
Cabin Support	17	1	3000	1245	1100	325	
Counter-weights	18	3	3315	250	3000	12000	
Mast & Sheaves	19	1	9700	2500	840	3050	
Mast Ladder	20	1	8200	812	843	206	
Mast Platform	21	1	1800	1030	950	105	
Boom Buffer	22	1	3142	215	2100	257	
Slew Ring	23	1	2090	2090	142	860	
Boom Bottom Section	24	1	9200	2160	2160	960	
Boom Extension Section	25	1	9200	2160	2160	865	
Boom Extension Section	26	1	4600	2160	2160	580	
Boom Top Section	27	1	9200	2160	2160	990	
Bridge	28	1	850	200	585	80	
2-Fail Hook Block	29	1	800	310	1015	250	
Powerpack	30	1	2050	1070	1950	700	
Winch	31	1	2210	1070	1250	2200	
Hoist Rope	32	1	300	-	-	480	



TOWER TYPE 154



TOWER WEIGHT = 2.2 TONNES (APPROX)