

General

Description	Single Mast	Twin Masts
Platform Length (m)	2.9 – 10.3	8.5 – 23.5
Platform Width (m)	1.5 – 2.5	1.5 – 2.5
Distance between mast centres (m)	---	7.3 – 13.3
Distance between anchors (m)	13 – 15	13 – 15
Max. mastheight anchored (m)	150	150
Max. mastheight above last anchor (m)	8	8
Mast type	700 x 700 x 1500	
Max. number of persons	3	6
Platform speed (m/min)	7	7
Loading capacity (kg)	see load charts	see load charts
Distance between cable guides (m) (if fitted)	6	6
Height of anchor for ground frame (m)	3	3
Height of second anchor for ground frame (m)	9	9
Height Platform incl. fence 1.1m (m)	1.95	1.95
Height platform to deck (m)	0.83	0.83
Height fence 1.1m to upper side mast cover (m)	1.36	1.36

Note: These details are based on standard applications. In special situations, it may be possible to deviate from these. This may only be done with prior written approval of the supplier.

Part	1 x b x h (mm)	Weight (Kg)	No. of bolts	Bolt dim. & quality	Torque (Nm)	Other
Mast Section 125	700 x 700 x 1256	80	4	M20 x 200 qual. 8.8	200	Module 8
Mast Section 150	700 x 700 x 1508	103	4	M20 x 200 qual. 8.8	200	Module 8
Platform Deck 80	800 x 1580 x 800	90	6	M20 x 90 qual. 8.8	200	Max. platform extension façade side 1000 mm
Platform Deck 150	1500 x 1580 x 800	140	6	M20 x 90 qual. 8.8	200	Max. platform extension façade side 1000 mm
Fence 80	780 x 40 x 1120	12	---	---	---	---
Fence 150	1480 x 40 x 1120	18	---	---	---	---
End Fence	2500 x 30 x 1120	30	---	---	---	---
Corner post	170 x 60 x 1300	6,5	---	---	---	---

Electrical Installation			
		Single Mast	Twin Mast
Number of motors		2	4
Rated power mast climbing work platform		2 x 2.1 kW	4 x 2.1 kW
Maximum starting current		± 60 A	± 120 A
Power Consumption (based on S3- 25%)		2 x 2.9 kW	4 x 2.9 kW
Supply Voltage		400 V	
Minimum Supply Voltage		360 V	
Phases		3 + N + E	
Supply frequency (depending on the national conditions regarding the power supply)		50 or 60 Hz	
Fuse at site building (slow)		16 A	25 A
Control Voltage		42 Vac	
Control Voltage Frequency		50/60 Hz	
Power supply to machine	Up to 80 m	5 x 6 mm ²	5 x 10 mm ²
	Up to 150 m	5 x 10 mm ²	
Machine Cable / weight	5 x 4 mm ² , 0.47 kg/m	Up to 30 m	---
	5 x 6 mm ² , 0.64 kg/m	Up to 105 m	Up to 60 m
	5 x 10 mm ² , 1.11 kg/m	Up to 150 m	Up to 150 m
Single Phase outlet		230 V / 16 A	

Platform Construction

Symmetrical platform construction

Drive Unit: 1.30 m = A
 Deck 80: 0.80 m = B
 Deck 150: 1.50 m = C

A-symmetrical configurations may be possible. This may only be done with prior written approval of the supplier.

Single Mast Machine

							Length Platform (m)
		B	A	B			2.9
		C	A	C			4.3
	B	C	A	C	B		5.9
	C	C	A	C	C		7.3
B	C	C	A	C	C	B	8.9
C	C	C	A	C	C	C	10.3

Twin mast machine

Mast Distance (m)*	Centre panel between the masts										Length Platform (m)
7.3	A	C	C	C	C	A					8.5
8.1	A	C	C	C	C	B	A				9.3
8.8	A	C	C	C	C	C	A				10.0
9.6	A	C	C	C	C	C	B	A			10.8
10.3	A	C	C	C	C	C	C	A			11.5
11.1	A	C	C	C	C	C	C	B	A		12.3
11.8	A	C	C	C	C	C	C	C	A		13.0
12.6	A	C	C	C	C	C	C	C	B	A	13.8
13.3	A	C	C	C	C	C	C	C	C	A	14.5

Mast Distance (m)*	B	C	B + C	C + C	B + C + C	C + C + C
7.3	10.1	11.5	13.1	14.4	**	**
8.1	10.9	12.3	13.9	15.3	**	**
8.8	11.6	13.0	14.6	16.1	17.6	**
9.6	12.4	13.8	15.4	16.8	18.4	19.8
10.3	13.1	14.4	16.1	17.5	19.1	20.5
11.1	13.9	15.3	16.9	18.3	19.9	21.3
11.8	14.6	16.0	17.6	19.0	20.6	22.1
12.6	15.4	16.8	18.4	19.8	21.4	22.8
13.3	16.1	17.5	19.1	20.5	22.1	23.5

* The mast distance and thus the platform length can be enlarged (10cm), by replacing the one deck 150 by two decks 80.

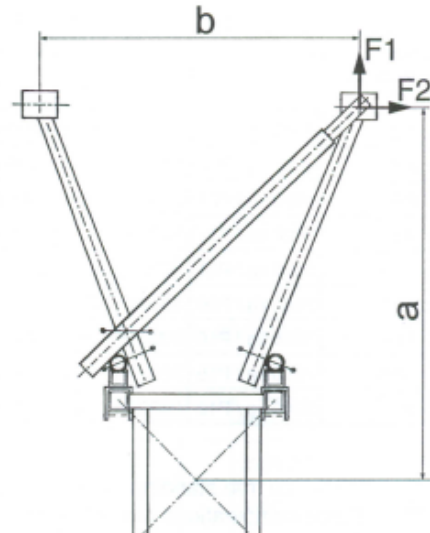
** These combinations are not allowed.

Anchorforces

Torque scaffold coupling: 50 Nm

With the calculation of the anchor forces show in the table the following demands are considered:

- Anchor distance: 13 – 15 m
- Maximum mast height above last anchor:
0.4 x anchor distance
- Loading during assembling:
Single: max. 750 kg + 2 persons
Twin: max. 1500 kg + 4 persons
- Maximum, windspeed during assembling:
6 Beaufort (12.5 m/sec).
- Distance a (mast centre façade):
0.9 – 1.63 m
- Distance b (between the anchor points on the façade): min. 0.7 m
- Ratio a/b: 0.8 – 2.0



Anchor Forces

The Anchorforces of the MS-AC4000 up to 100 meters are given in the under mentioned table.

	Ratio a/b						
	0.8	1.0	1.2	1.4	1.6	1.8	2.0
Anchorforce F1 (kN)	5.9	7.0	8.3	9.5	10.7	11.9	13.0
Anchorforce F2 (kN)	4.2	4.7	5.3	5.7	5.9	5.6	6.0

Above 100 metres the anchor forces will be 20% higher than the anchor forces in the given table.

Single Mast Machine

The payload must be equal distributed on the platform.

Drive unit: 1.30 m = A
 Deck 80: 0.80 m = B
 Deck 150: 1.50 m = C

Maximum payload single mast climbing work platform

Machine Configuration							Maximum loading capacity depending of situation in use (kg)	
							Anchored	Free standing
		B	A	B			2300	2300
		C	A	C			2200	2200
	B	C	A	C	B		2000	2000
	C	C	A	C	C		1800	1800
B	C	C	A	C	C	B	1600	1000
C	C	C	A	C	C	C	1500	750

Twin Mast Machine

The payload must be equal distributed on the platform.

Drive unit: 1.30 m = A
 Deck 80: 0.80 m = B
 Deck 150: 1.50 m = C

Maximum payload twin mast climbing work platform (free standing or anchored).

Mast Distance (m)	Centre panel between the masts										Max. payload (kg)
7.3	A	C	C	C	C	A					3500
8.1	A	C	C	C	C	B	A				3500
8.8	A	C	C	C	C	C	A				3500
9.6	A	C	C	C	C	C	B	A			3500
10.3	A	C	C	C	C	C	C	A			3500
11.1	A	C	C	C	C	C	C	B	A		3000
11.8	A	C	C	C	C	C	C	C	A		2700
12.6	A	C	C	C	C	C	C	C	B	A	2300
13.3	A	C	C	C	C	C	C	C	C	A	2000

Maximum payload twin mast climbing work platform with end decks.

Platform decks on the side of the mast						
Mast Distance (m)	B	C	B + C	C + C	B + C + C	C + C + C
7.3	4000 kg	4000 kg	3800 kg	3600 kg	**	**
8.1	4000 kg	3900 kg	3700 kg	3500 kg	**	**
8.8	4000 kg	3800 kg	3600 kg	3400 kg	3200 kg	**
9.6	3900 kg	3700 kg	3500 kg	3300 kg	3100 kg	3000 kg
10.3	3800 kg	3600 kg	3400 kg	3300 kg	3100 kg	2900 kg
11.1	3400 kg	3500 kg	3300 kg	3200 kg	3000 kg	2800 kg
11.8	3000 kg	3300 kg	3200 kg	3100 kg	2900 kg	2700 kg
12.6	2600 kg	2800 kg	3000 kg	3000 kg	2800 kg	2600 kg
13.3	2200 kg	2400 kg	2600 kg	2700 kg	2700 kg	2500 kg

** These combinations are not allowed.