CLARK MASTS™ Type 73 Mast System

CLARK MASTS™

TELESCOPIC & SECTIONAL MAST SYSTEMS

Type 73 Mast System

About us

Clark Masts Systems has been designing and manufacturing telescopic and sectional mast systems for more than 50 years and has built up an extensive range of products that are used by civil and military authorities all around the world.

Design, development and testing are fundamental to the success of our organisation. This leaflet details our sectional Type 73 Mast System which is produced to our exacting standards of quality.

The standard range is available from 10.37 to 29.89 metres.

Clark Masts are used by all of the world's largest system integrators.

Type 73 Mast System

General Description

- A range of heights up to 30 metres.
- Headload capacity up to 75 kg.
- MIL STD 810C Qualified.
- 4" diameter aircraft grade aluminium mast sections.
- Compact, man portable kit in canvas bags for transport.
- 3 legged erection gear.
- Mechanical mast lifting hoist.
- Guy winch controller system with stainless steel guy wire.
- Adjustable feet.
- Optional crane system available for heavy or bulky headloads.
- Optional anti-twist kit available for increased torsional stability.

The Type 73 mast has served military forces around the world since the 1970s and sets the standard for a modular mast system up to 30 metres in height and lifting headloads of up to 90 kg at 8 metres.

The mast sections have an outside diameter of 4 inches and are raised one at a time through the leg mounted mast guide box using the fail-safe hoist and cross-pin, giving the operator complete peace of mind.

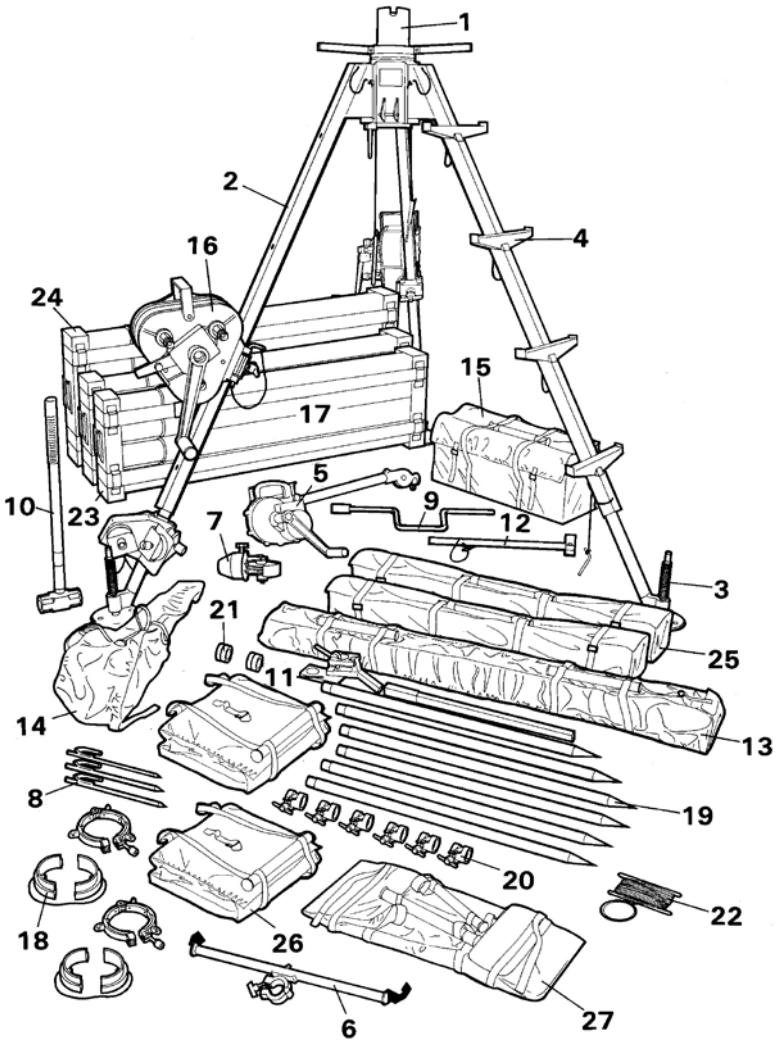
Tensioning of the guys is controlled by the guy controller which keeps the mast that is being raised vertical and under tension at all times.

Type 73 Mast System

Kit Components

Standard Type 73 Kit Components

The Type 73 Kit shown below is an 18 metre mast, Cat. No. 18133. The number of mast sections, mast section carriers, pickets, guy collars, spikes and other equipment in the kit varies according to the actual height of the mast to be erected.

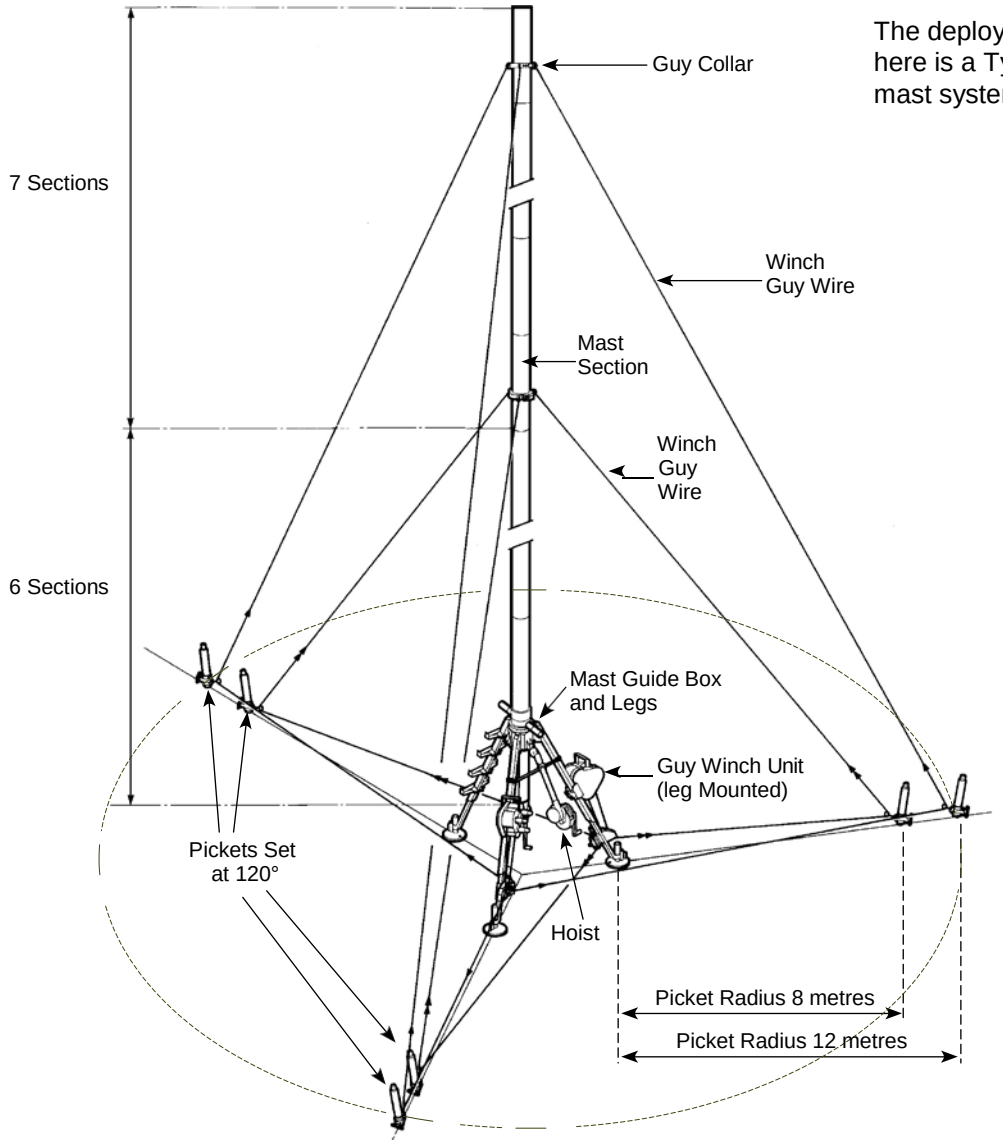


Item	Clark Part No.	Title	Qty per Kit
1	18025	Mast Guide Box	1
2	18020	Leg Assembly	3
3	18114	Foot Assembly	3
4	10772	Step Assembly	3
5	7600	Hoist	1
6	13973	Hoist Support Bar	1
7	5246	Lifting Block	1
8	6409	Spike	3
9	5373	Foot Adjustment Brace	1
10	B12173	Hammer	1
11	18033	Picket Extractor	1
12	5426	Bubble Level	1
13	18035	Leg Bag	1
14	18026	Hoist Bag	1
15	18027	Equipment Bag	1
16	18021	Guy Winch Kit (Leg Mounted)	2
17	5231	Mast Section	13
18	18022	Guy Collar Set	2
19	18037	Picket	6
20	18039	Picket Clamp	6
21	18034	Picket Driving Cap	2
22	18152	Picket Radius Line	1
23	14523	Mast Section Carrier (4 Section)	2
24	14524	Mast Section Carrier (5 Section)	1
25	18028	Picket Bag	2
26	18025	Winch Bag	2
27	18031	Accessory Bag	1
28	N/A	Handbook (Not shown)	1

Type 73 Mast System

Range Table

Type 73 Masts offer versatile heavy duty solutions for lifting headloads from 50 kg to 75 kg. Choose between a wide range of models to suit your application.



The deployment shown here is a Type 73, 18 metre mast system.

Standard Type 73 Kits

Cat. No.	Model	Extended Height	Number of Sections	Maximum Vertical Headload
18130	73-10	10.37 m	7	75.00 kg
18131	73-13	12.81 m	9	75.00 kg
18132	73-16	16.47 m	12	70.00 kg
18133	73-18	17.69 m	13	70.00 kg

Cat. No.	Model	Extended Height	Number of Sections	Maximum Vertical Headload
18134	73-20	20.13 m	15	60.00 kg
18135	73-24	23.79 m	18	55.00 kg
18136	73-30	29.89 m	23	50.00 kg

Type 73 Mast System

Specifications

Operational Information

	73-10 18130	**73-13** 18131	**73-16** 18132	**73-18** 18133	**73-20** 18134	**73-24** 18135	**73-30** 18136
Number of Winches	1	1	2	2	2	3	4
Total Weight of Mast Kit	165 kg	175 kg	190 kg	235 kg	245 kg	300 kg	347 kg
Number of operators required for normal erection	2	2	3	3	3	3	4
Typical time to erect the mast with the above team of operators	18 mins	26 mins	34 mins	36 mins	40 mins	60 mins	70 mins
Typical time to lower and pack the mast with the above team of operators	14 mins	17 mins	18 mins	20 mins	30 mins	40 mins	40 mins

Large foot assembly for levelling the mast on sloping ground. The foot has holes for ground spikes.

Tubular picket with guy pulley attached. Tubular pickets can be driven into the ground and the guy wire is attached at the best height regardless of ground conditions.

Mast hoist for raising mast sections, geared for ease of operation and only reversed by push button brake with automatic centrifugal descent control brake.

Guy winch unit (shown leg mounted but can also be ground mounted). This allows control of three guys by one person simultaneously or individually.

Materials Specifications

Mast Sections: Seamless drawn aluminium 10 SWG ENAW6082T6.

Paint: Desert Sand or NATO Green

Canvas Covers and Bags: Cloth-coated polyurethane, olive drab to MoD Spec UK/SC/3501A.

Winch Guy Cables: Stainless steel.

Castings: Aluminium alloy, gravity die cast using ingots to BS 1490 grade LM6.

Finishes: Mast sections are anodised and dyed to a choice of colours. The steel fittings are zinc plated and passivated.

Erection Site Requirements

Maximum Slope of Ground: Slope should not exceed 24°.

Operating Temperature Range: -40°C to +55°.

All Type 73 masts have been tested to MIL STD 810C and have been used around the world in service by military and civil users for over fifty years.

Type 73 Mast System

Accessories

Cat. No. 5809
FEEDER CABLE STRAP
A simple and effective way of securing feeder cables to the mast.

Weight : 0.09 kg.

Cat. No. 7631
SIDE MOUNTING ADAPTOR
A general purpose attachment. The Adaptor clamps directly round the mast section. Standard antenna spigot 40 mm diameter.

Weight : 1.70 kg.

Cat. No. 5244
MAST TOP FLANGE FITTING
Fits over the top section of the mast giving a mounting flange 152 mm Square.

Weight : 1.90 kg.

Cat. No. 5242
FLANGED ANTENNA SPIGOT
Adapts the mast top flange fitting to give a spigot for antenna attachment.

Weight : 1.70 kg.

Cat. No. 7901
ANTENNA ROTATOR
Fits on the mast top and is operated from ground by ball rope. 360° rotation.
Essential if a mast carries two antennas which need to be pointed independently.

Weight : 11.00 kg.

Cat. No. 44538
ROCK FIXING KIT
Comprising of a powerful cordless hammer drill and Ankerbolt eyes.
Used when tubular pickets cannot be hammered into rocky ground.

Weight : 9.00 kg.

Cat. No. 13438
ANTENNA TILT UNIT
A mast head fitting operated from the ground by a special ball rope to tilt antennas up or down 20°.
Weight : 9.20 kg.

LIGHTNING PROTECTION KIT
A range of solutions are available to suit customer requirements.

Cat. No. 18038
WINCH PROTECTION COVER
When fitted protects the guy winch unit from rain, snow and ice.

Weight : 0.75 kg.

Cat. No. 44533
ANTI-TWIST KIT
The optional anti-twist kit which is fitted to the mast head, greatly reduces torsional movement using additional guys and the special mast head attachment.

Weight : 27.50 kg.

CLARK MASTS™

Distributor:

All details given in this publication are approximate and may be subject to change without notice.

Clark Masts is a division of Clark Masts Systems Ltd.

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CLARK MASTS SYSTEMS LTD, 18-20 Ringwood Road, Binstead, Isle of Wight, PO33 3PA, UK
Tel: +44 (0)1983 563691/567090 Fax: +44 (0)1983 566643 E-mail: sales@clarkmasts.com
Website: www.clarkmasts.com

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