

MILITARY ELECTROMECHANICAL MECMASTS



BLUESKY
MAST

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MECMAST

Renowned for their reliability, robustness and ease of operation, the MecMast is the perfect solution for on-the-move military applications. In addition to our catalog portfolio, we also offer customized solutions able to meet even the most demanding requirements.

The range of accessories is highly diversified as well and will allow you to perfectly adapt the masts to the respective mounting sites and operating contexts.

The MecMast is tested to different MIL-standards and are available with anodizing coatings and paint finishes in different colors, e.g. military green, sand yellow, black and many more.



NEW FEATURES

- New base block with brushless motor to reduce noise, and for higher performance efficiency with a longer product lifetime
- New MecMast Compact Series is equipped with locking pins inside the pistons providing a more rigid and robust design with diminished torque
 - Standard design with New Base Block with Brushless Motor
 - Sections can be equipped with sand scraper rings
 - PIN head fully retracts into the mast
- New Remote Control is larger and more robust and is better suited for operators with gloved hands

ELECTROMECHANICAL MASTS

The MecMast offers a unique combination of impressive lifting strength, sturdiness, outstanding reliability and high precision. It is a screw-driven telescopic mast that has been designed to satisfy the specific demands of all kinds of applications in military, communication and surveillance fields.

THE MECMAST

is an excellent technical solution whenever the need to carry out heavy duties is required and precise high accuracy is a critical factor. It also requires low maintenance making it an ideal solution for military applications.

The exact position and the desired height can be displayed using various interface options such as PCs or laptops and different remote controls.





KEY FEATURES

- Supports heavy payloads up to 400kg
- Extended heights up to 25m
- Keeps the height and is operative at any intermediate position
- Great variety of “off-the-shelf” and customized solutions
- Wide range of mounting options for installations on vehicles, shelters or on open grounds
- It can be kept extended while vehicle is moving
- Performance proven rugged design guarantees for high resistance to demanding and harsh environment conditions including sand, dust, ice or snow
- Compliant with MIL-STD-810G, MIL-STD-461F, MIL-STD-1275E, MIL-STD-1686C and MIL-STD-464C
- Durable and reliable with minimum maintenance requirements
- Different communication and control protocols are available, e.g. RS422, RS485, Ethernet, Can bus

CONTROLLING THE MECMAST

The MecMast is controlled by a software loaded on a USB drive supplied together with the mast. Once installed, the operator will be able to control the MecMast from a PC or a laptop.

The control screen will display the exact extended height, the turning degrees (for MecMast with electrically turnable base), the current consumption, the working cycles and possible warning messages.

The software is available in different languages. In addition, a simple remote control for up/down movements and a complete remote control with LCD display for all functions are also available.



MECMAST TILTING SOLUTIONS

For the MecMast series is developed with special mounting solutions, which allow to move the mast assembly from the horizontal to the vertical position and vice versa. This option renders the mast in the retracted state more compact and reduces the space that is necessary for its installation. In addition, the possibility to tilt the mast down to the horizontal position facilitates the operators' access to the mast top and thus makes it easy to mount, dismount or modify.

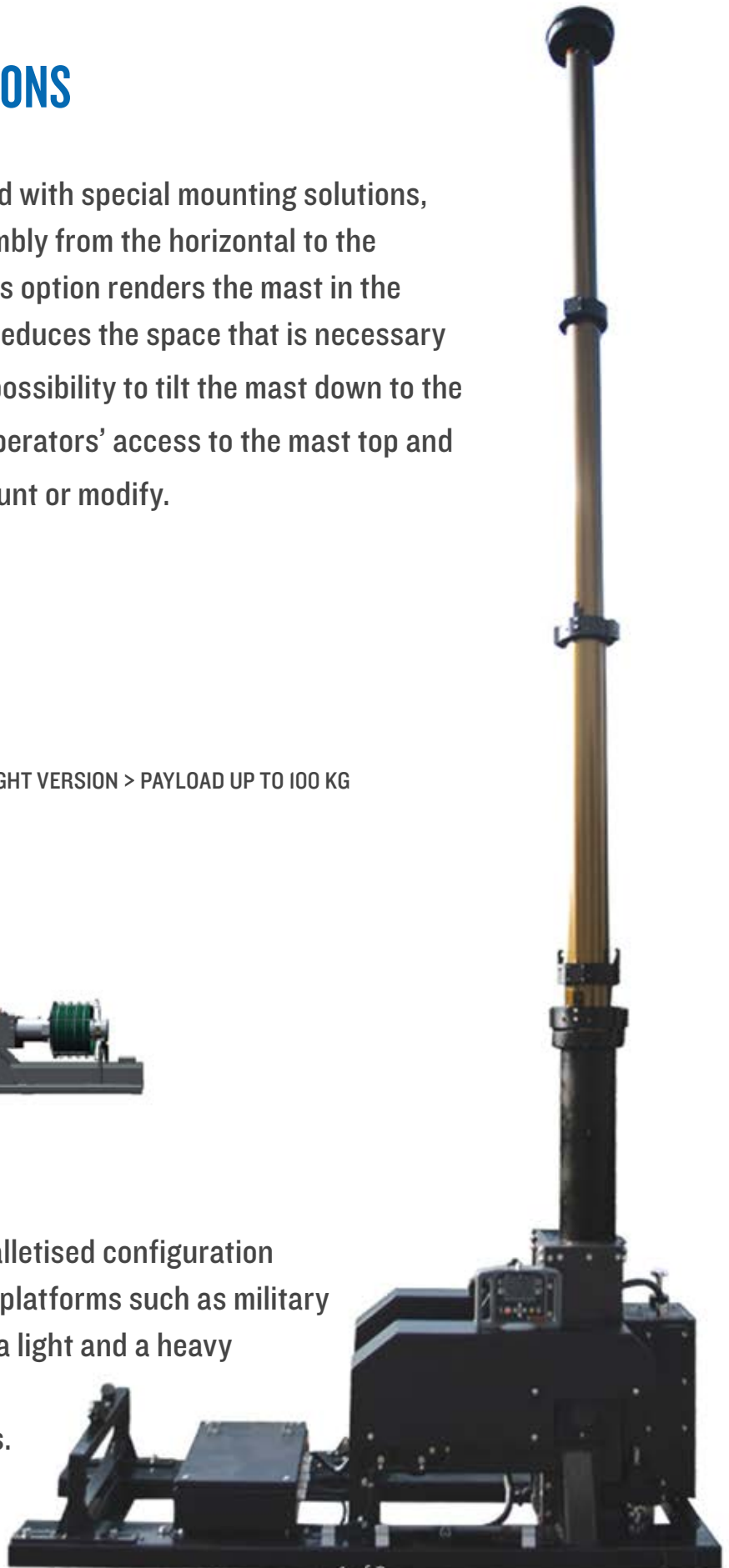


LIGHT VERSION > PAYLOAD UP TO 100 KG



HEAVY VERSION > PAYLOAD UP TO 250 KG

The **MecMast ROOF** is a compact palletised configuration suitable for installations on vehicle platforms such as military trailers or trucks. We manufacture a light and a heavy version of this product, designed to meet each customer's requirements.





The **90° TILT** mechanism is a unique device that is suitable for mounting the MecMast on the outside of a vehicle or on other structures. This mechanism allows the tilting of the mast from vertical to a position that is more accessible for the users. This permits to easily mount important payloads on the mast top without exposing the personnel to risky heights.



MANUALLY OPERATED WINCH



ELECTRICALLY OPERATED WINCH

ELECTRICALLY AND MANUALLY TURNABLE BASE

The MecMast is the only electromechanical mast on the market, that is available with a manually or an electrically turnable base. With the electrically turnable base, the position can be preset and the degree of rotation can be displayed on the remote control (with LCD) or on your laptop, with a precision of 1°. Also in case of temporary power loss, the system will always show to the operator the correct rotating angle of the mast, even if it has been manually moved during the blackout.



MANUALLY TURNABLE BASE



ELECTRICALLY TURNABLE BASE

MILITARY STANDARDS

MIL-STD-461F

CE102 - Conducted emission: Power leads, 10 kHz to 10 MHz
CS101 - Conducted susceptibility: Power leads, 30 Hz to 150 kHz
CS114 - Conducted susceptibility: Bulk cable injection, 10 kHz to 200 MHz
CS115 - Conducted susceptibility: Bulk cable injection, impulse excitation
CS116 - Conducted susceptibility: Damped sinusoidal transients, cables and power leads, 10 kHz to 100 MHz
RS101 - Radiated susceptibility: Magnetic field, 30 Hz to 100 kHz
RS103 - Radiated susceptibility: Electric field, 2 MHz to 18 GHz

MIL-STD-461F

500.5 - Altitude: Sea level up to 15,000 ft (57,18 kPa)
500.5 - Transportation Altitude: Sea level up to 15,000 ft (unpressurized)
501.5 & 502.5 - Operating Temperature Ranges: -44° C to +55° C
501.5 & 502.5 - Storage Temperature Ranges: -44° C to +70° C
506.5 - Rain
508.6 - Fungus
509.5 - Salt Fog
510.5 - Sand and Dust
516.6 - Transit Drop and Crash Hazard
521.3 - Ice and Freezing Rain

MIL-STD-810F

505.4 - Solar Radiation
507.4 - Humidity
514.5 - Vibration
516.5 - Shock

MIL-STD-1686C

Electrostatic discharge

MIL-STD-464C

5.11.3 - Mechanical Interference

MIL-STD-1275E

Steady State and Transient Voltage

AVAILABLE MODELS

MAIN TUBE Ø127mm - 4 SECTIONS - END TUBE Ø90mm

MODEL	DIMENSIONS mm		PAYLOAD	WEIGHT
	EXTENDED	RETRACTED		
MM.0404.SE	402I	1430	90kg	70kg
MM.0405.SE	50II	1700	90kg	74kg
MM.0406.SE	60II	1980	80kg	81kg
MM.0407.SE	70II	2260	80kg	86kg
MM.0408.SE	80II	2540	70kg	91kg
MM.0409.SE	90II	2820	70kg	95kg

MAIN TUBE Ø152mm - 4 SECTIONS - END TUBE Ø115mm

MODEL	DIMENSIONS mm		PAYLOAD	WEIGHT
	EXTENDED	RETRACTED		
MM.2404.SE	402I	1430	150kg	79kg
MM.2405.SE	50II	1700	150kg	87kg
MM.2406.SE	60II	1980	140kg	93kg
MM.2407.SE	70II	2260	140kg	99kg
MM.2408.SE	80II	2540	130kg	105kg
MM.2409.SE	90II	2820	130kg	111kg

MAIN TUBE Ø152mm - 5 SECTIONS - END TUBE Ø102mm

MODEL	DIMENSIONS mm		PAYLOAD	WEIGHT
	EXTENDED	RETRACTED		
MM.2504.SE	4035	1270	130kg	80kg
MM.2505.SE	5025	1500	130kg	86kg
MM.2506.SE	6045	1720	120kg	91kg
MM.2507.SE	7035	1950	120kg	98kg
MM.2508.SE	8025	2180	110kg	104kg
MM.2509.SE	9045	2400	110kg	109kg
MM.2510.SE	10035	2630	100kg	115kg

MAIN TUBE Ø152mm - 6 SECTIONS - END TUBE Ø90mm

MODEL	DIMENSIONS mm		PAYLOAD	WEIGHT
	EXTENDED	RETRACTED		
MM.2604.SE	4029	1200	110kg	82kg
MM.2605.SE	5009	1380	110kg	87kg
MM.2606.SE	6049	1570	100kg	92kg
MM.2607.SE	7049	1770	100kg	98kg
MM.2608.SE	8029	1950	90kg	104kg
MM.2609.SE	9009	2130	90kg	109kg
MM.2610.SE	10009	2330	80kg	114kg
MM.2611.SE	11049	2520	80kg	119kg
MM.2612.SE	12029	2700	70kg	124kg

DIMENSIONS OF MECMAST WITH MANUALLY TURNABLE BASE
 For MecMast Ø200 - 250mm please add 204mm to mast dimensions.
 For MecMast Ø127 - 152mm please add 175mm to mast dimensions

DIMENSIONS OF MECMAST WITH ELECTRICALLY TURNABLE BASE
 For Mast Ø200 - 250mm please add 242mm to mast dimensions.
 For MecMast Ø127 - 152mm please add 203mm to mast dimensions.

AVAILABLE MODELS

MAIN TUBE Ø200mm - 5 SECTIONS - END TUBE Ø140mm

MODEL	DIMENSIONS mm		PAYLOAD	WEIGHT
	EXTENDED	RETRACTED		
MM.3504.SE	4034	1270	210kg	99kg
MM.3505.SE	5024	1500	210kg	108kg
MM.3506.SE	6014	1730	200kg	116kg
MM.3507.SE	7004	1960	200kg	127kg
MM.3508.SE	8044	2200	190kg	136kg
MM.3509.SE	9014	2410	190kg	144kg
MM.3510.SE	10004	2640	180kg	153kg

MAIN TUBE Ø200mm - 6 SECTIONS - END TUBE Ø127mm

MODEL	DIMENSIONS mm		PAYLOAD	WEIGHT
	EXTENDED	RETRACTED		
MM.3604.SE	4006	1180	190kg	101kg
MM.36405.SE	5006	1380	190kg	109kg
MM.3606.SE	6046	1570	180kg	116kg
MM.3607.SE	7046	1770	180kg	127kg
MM.3608.SE	8026	1950	170kg	134kg
MM.3609.SE	9026	2150	170kg	142kg
MM.3610.SE	10006	2330	160kg	150kg
MM.3611.SE	11006	2530	160kg	158kg
MM.3612.SE	12046	2720	160kg	165kg

MAIN TUBE Ø200mm - 7 SECTIONS - END TUBE Ø115mm

MODEL	DIMENSIONS mm		PAYLOAD	WEIGHT
	EXTENDED	RETRACTED		
MM.3704.SE	4028	1130	170kg	102kg
MM.3705.SE	5028	1290	170kg	109kg
MM.3706.SE	6048	1470	160kg	117kg
MM.3707.SE	7048	1630	160kg	124kg
MM.3708.SE	8048	1790	150kg	133kg
MM.3709.SE	9048	1950	150kg	140kg
MM.3710.SE	10068	2130	140kg	148kg
MM.3711.SE	11068	2290	140kg	155kg
MM.3712.SE	12018	2460	130kg	163kg
MM.3713.SE	13018	2620	130kg	170kg

MAIN TUBE Ø200mm - 8 SECTIONS - END TUBE Ø102mm

MODEL	DIMENSIONS mm		PAYLOAD	WEIGHT
	EXTENDED	RETRACTED		
MM.3805.SE	5000	1250	140kg	110kg
MM.3806.SE	6060	1400	140kg	117kg
MM.3807.SE	7040	1540	130kg	124kg
MM.3808.SE	8020	1680	130kg	131kg
MM.3809.SE	9000	1820	120kg	138kg
MM.3810.SE	10060	1970	120kg	145kg
MM.3811.SE	11040	2110	110kg	152kg
MM.3812.SE	12040	2270	110kg	152kg
MM.3813.SE	13020	2410	100kg	166kg
MM.3814.SE	14000	2550	100kg	173kg

AVAILABLE MODELS

MAIN TUBE Ø200mm - 9 SECTIONS - END TUBE Ø90mm

MODEL	DIMENSIONS mm		PAYLOAD	WEIGHT
	EXTENDED	RETRACTED		
MM.3905.SE	5012	1240	120kg	112kg
MM.3906.SE	6022	1370	120kg	118kg
MM.3907.SE	7012	1480	120kg	123kg
MM.3908.SE	8022	1610	110kg	129kg
MM.3909.SE	9072	1740	110kg	137kg
MM.3910.SE	10042	1870	100kg	144kg
MM.3911.SE	11052	2000	100kg	150kg
MM.3912.SE	12062	2130	90kg	156kg
MM.3913.SE	13072	2260	90kg	163kg
MM.3914.SE	14082	2390	80kg	169kg
MM.3915.SE	15002	2510	80kg	175kg
MM.3916.SE	16012	2640	80kg	182kg

MAIN TUBE Ø250mm - 6 SECTIONS - END TUBE Ø152mm

MODEL	DIMENSIONS mm		PAYLOAD	WEIGHT
	EXTENDED	RETRACTED		
MM.4604.SE	4026	1200	240kg	127kg
MM.4605.SE	5026	1400	240kg	138kg
MM.4606.SE	6026	1600	220kg	149kg
MM.4607.SE	7026	1800	220kg	164kg
MM.4608.SE	8018	1980	200kg	175kg
MM.4609.SE	9006	2180	200kg	187kg
MM.4610.SE	10046	2370	180kg	198kg
MM.4611.SE	11046	2570	180kg	209kg
MM.4612.SE	12046	2770	180kg	222kg

MAIN TUBE Ø250mm - 7 SECTIONS - END TUBE Ø140mm

MODEL	DIMENSIONS mm		PAYLOAD	WEIGHT
	EXTENDED	RETRACTED		
MM.4704.SE	4048	1150	220kg	128kg
MM.4705.SE	5048	1310	220kg	137kg
MM.4706.SE	6068	1490	210kg	149kg
MM.4707.SE	7018	1660	210kg	159kg
MM.4708.SE	8018	1820	200kg	172kg
MM.4709.SE	9018	1980	200kg	182kg
MM.4710.SE	10038	2160	190kg	194kg
MM.4711.SE	11038	2320	190kg	204kg
MM.4712.SE	12058	2500	170kg	215kg
MM.4713.SE	13058	2660	170kg	225kg

MAIN TUBE Ø250mm - 8 SECTIONS - END TUBE Ø127mm

MODEL	DIMENSIONS mm		PAYLOAD	WEIGHT
	EXTENDED	RETRACTED		
MM.4805.SE	5020	1270	200kg	139kg
MM.4806.SE	6000	1410	200kg	148kg
MM.4807.SE	7060	1560	190kg	157kg
MM.4808.SE	8060	1720	190kg	170kg
MM.4809.SE	9040	1860	180kg	180kg
MM.4810.SE	10020	2000	180kg	189kg
MM.4811.SE	11000	2140	170kg	199kg
MM.4812.SE	12000	2300	170kg	209kg
MM.4813.SE	13060	2450	160kg	219kg
MM.4814.SE	14040	2590	160kg	229kg
MM.4815.SE	15034	2750	150kg	240kg

AVAILABLE MODELS

MAIN TUBE Ø250mm - 9 SECTIONS - END TUBE Ø115mm

MODEL	DIMENSIONS mm		PAYLOAD	WEIGHT
	EXTENDED	RETRACTED		
MM.4905.SE	5012	1240	180kg	138kg
MM.4906.SE	6022	1370	180kg	147kg
MM.4907.SE	7032	1500	180kg	156kg
MM.4908.SE	8042	1630	170kg	165kg
MM.4909.SE	9072	1780	170kg	178kg
MM.4910.SE	10082	1910	160kg	187kg
MM.4911.SE	11002	2030	160kg	195kg
MM.4912.SE	12012	2160	150kg	204kg
MM.4913.SE	13022	2290	150kg	214kg
MM.4914.SE	14032	2420	140kg	223kg
MM.4915.SE	15062	2570	140kg	234kg
MM.4916.SE	16072	2700	130kg	243kg

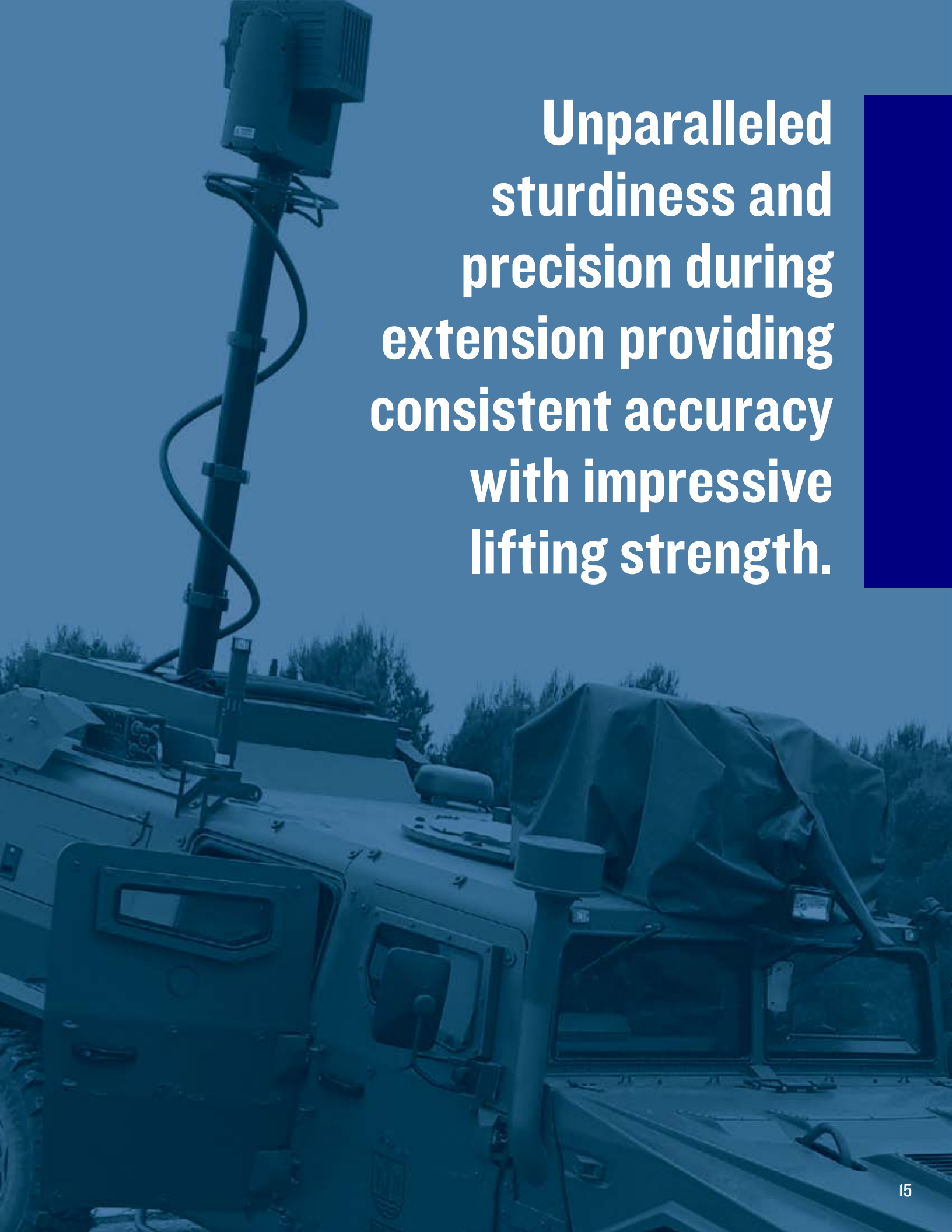
MAIN TUBE Ø250mm - 10 SECTIONS - END TUBE Ø102mm

MODEL	DIMENSIONS mm		PAYLOAD	WEIGHT
	EXTENDED	RETRACTED		
MM.5006.SE	6014	1340	160kg	146kg
MM.5007.SE	7034	1460	160kg	155kg
MM.5008.SE	8054	1580	150kg	163kg
MM.5009.SE	9074	1700	150kg	174kg
MM.5010.SE	10014	1830	140kg	184kg
MM.5011.SE	11034	1950	140kg	193kg
MM.5012.SE	12054	2070	130kg	201kg
MM.5013.SE	13074	2190	130kg	210kg
MM.5014.SE	14044	2305	120kg	219kg
MM.5015.SE	15014	2420	120kg	227kg
MM.5016.SE	16034	2540	110kg	236kg
MM.5017.SE	17054	2600	110kg	245kg

MAIN TUBE Ø250mm - 11 SECTIONS - END TUBE Ø90mm

MODEL	DIMENSIONS mm		PAYLOAD	WEIGHT
	EXTENDED	RETRACTED		
MM.5106.SE	6046	1340	140kg	146kg
MM.5107.SE	7031	1455	140kg	155kg
MM.5108.SE	8041	1565	130kg	164kg
MM.5109.SE	9051	1675	130kg	172kg
MM.5110.SE	10006	1780	120kg	181kg
MM.5111.SE	11016	1890	120kg	189kg
MM.5112.SE	12026	2000	110kg	198kg
MM.5113.SE	13036	2110	110kg	206kg
MM.5114.SE	14046	2220	100kg	215kg
MM.5115.SE	15056	2330	100kg	223kg
MM.5116.SE	16066	2440	90kg	232kg
MM.5117.SE	17021	2535	90kg	240kg
MM.5118.SE	18031	2655	80kg	248kg
MM.5120.SE	20051	2875	80kg	265kg

For special dimensions please do not hesitate to contact us. It is possible to increase the payload by reducing the extension speed slightly.



**Unparalleled
sturdiness and
precision during
extension providing
consistent accuracy
with impressive
lifting strength.**

MECMAST ACCESSORIES

The **LEVELLING SYSTEM** is a manually operated device specially designed for vehicle-mounted masts. Its purpose is to adjust the mast inclination when the vehicle is on a slope, in order to grant to the equipment mounted on the mast top a horizontal working condition.

It is composed by a lower regulating support bracket, equipped with two manual adjusting handles and an upper holding bracket equipped with an oscillating ring.

Besides the different remote controls, the MecMast can be equipped with various accessories. For example: guying set (including guying collars, ropes, pickets and carrying bag), Nycoil cable conduits, Nycoil baskets, protection bellows against dust and sand in different colors, ice spacers for using the mast at low temperatures, anti-freeze liquid for preventing the creation of ice layers on the tubes and for melting it, etc.





NYCOIL

The Nycoil is made from flexible nylon and is resistant to many chemicals and petroleum based products making its use on vehicles safe and reliable.



PROTECTION BELLOW

Protection against dust and sand, available in different colors.



ICE SPACERS

Against compressed ice and snow between the collars.



NYCOIL BASKET

Basket for the storing of an external Nycoil cable conduit.



ANEMOMETER

The anemometer is extremely accurate, has a low starting torque, a particularly robust design and is very durable.



ELECTRONIC BOX WITH CONNECTORS

The Mecmast box is available in different versions with a wide range of military connectors.



ACCESSORIES & ALTERNATIVE COATINGS

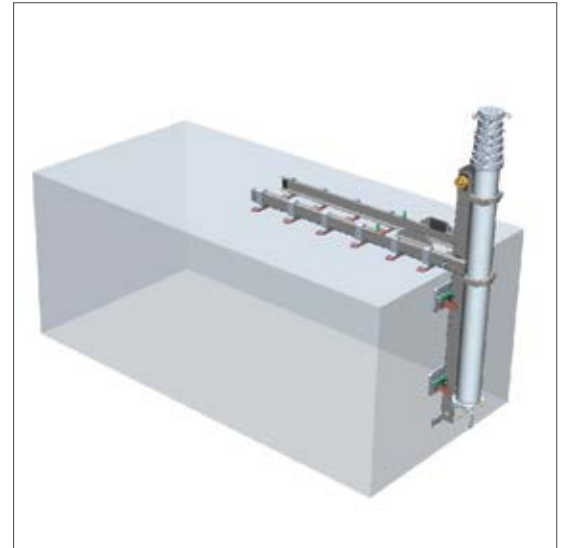
Many accessories and add-ons round off our product portfolio and give you the possibility to perfectly adapt every single mast model to the particular requirements of your specific application. In addition to that, for all our masts we offer a great variety of anodized coatings and painting finishes in different colors.



ACCESSORIES

ROOF TROLLEY

The **ROOF TROLLEY** is specially designed to securely transport the mast on any kind of vehicle roofs. When needed, the mast can be unlocked and easily slid on its special sturdy frame from the top to the back of the vehicle and slowly swivelled to the vertical position. The mast is secured with a specially designed locking system allowing a safe and fast deployment. All the operations can be easily and quickly carried out by a single operator.



CARRYING BAGS

Different carrying bags are available in black or green color



PICKETS

Pickets for guy rope anchoring to the ground



GUYING ROPES

Guying ropes of different lengths
- also available in Dyneema



SAND SCRAPER RINGS

ALTERNATIVE COATINGS

This treatment guarantees for:

- Improved corrosion resistance
- Increased surface hardness
- Increased wear and abrasion resistance
- Moderate heat insulation

Hard anodisation is also available as well as a wide variety of different anodisation and painting colors, some examples of which you will find below:



For enquiries, requests or questions of any kind, please don't hesitate to contact us. You will find our contact details on the back of this brochure.









ELEVATING SOLUTIONS

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