

ENG

HIGH PERFORMANCE MAST SOLUTIONS

- ELECTROMECHANICAL MECMASTS
- PNEUMATIC MASTS WITH LOCKING SYSTEMS
- PORTABLE FIELD SOLUTIONS













TELESCOPIC MASTS

Fireco is a global leader in the manufacture of telescopic masts made of anodized aluminium tubes and equipped with electromechanical or pneumatic driving systems. These masts will allow you to lift equipment such as antennas, radars, video cameras, and many other devices to heights of up to 40 m.

Today, Fireco offers the largest and most diversified product portfolio on the market. In addition to the great variety of catalogue solutions, customized options which are tailor made according to individual applicational requirements, are also developed on an almost daily basis. Therefore, Fireco masts will perfectly suit virtually every application in various sectors such as defence and marine, surveillance and security, or communications.

The brand Fireco stands for highest quality standards, great reliability and long experience paired with an outstanding versatility and dedication to innovative design.

We take pride in the fact that all our products are 100% made in Italy.

Fireco is present globally with several strategic branches, located in Europe, Asia, the United States, Australia and North Africa. This allows us to be reactive in responding to any type of request, information or intervention, which comes to us from our customers, acquired or potential.



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INTRODUCTION





FIRECO TELESCOPIC MASTS

Renowned for their reliability and robustness and at the same time easy to operate, Fireco masts are the perfect solution for tough environments. Thanks to the highly diversified range of different models, our masts can suit the most various applications. Our portfolio might be subdivided into three major product lines: high precision electromechanical masts, controlled by PC or remote control - pneumatic masts with mechanical section lockings for extension times - light masts with tripod for field use. In addition to our catalogue port folio we also offer customised 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 Electromechanical masts are tested to different MIL-standards and are available with anodisng coatings and paint finishes in different colours, e.g. green, sand yellow, black and many more.





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 defence, communication and surveillance fields.









THE MECMAST

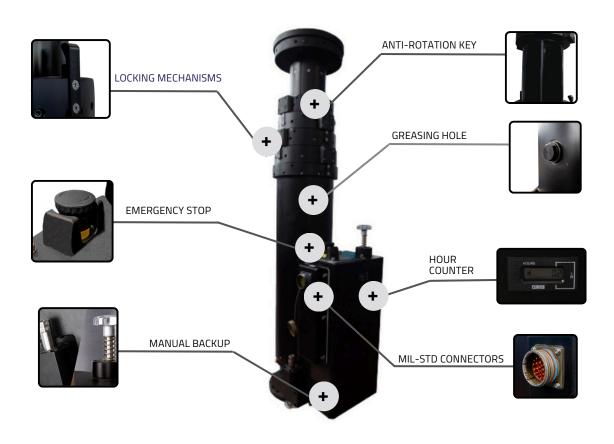
The MecMast is an excellent technical solution whenever the need to carry out heavy duties is required and precise high accuracy is a critical factor. It also requires low maintenance making it an ideal solution for any application.

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 1000 kg
- Extended heights up to 25 m
- Keeps the height and is operative at any intermediate position
- Great variety of "off-the-shelf" and customised 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 e 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. By installing it, 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 turn-able base), the actual 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 Fireco has developed 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.

The MecMast ROOF is a compact palletised configuration suitable for installations on vehicle platforms such as trailers or trucks. Fireco manufactures a light and a heavy version of this product, both designed to perfectly suit customers' needs.



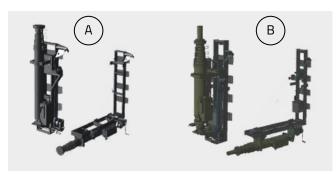
LIGHT VERSION > PAYLOAD UP TO 100 KG



HEAVY VERSION > PAYLOAD UP TO 250 KG







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 which is more accessible for the users. This permits to easily mount important payloads on the mast top without exposing the operator to risky heights.





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 black-out.







ELECTRICALLY TURNABLE BASE

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Military standards

MIL-STD-461F

| CE102 | Canducted | Lamiccian, Dawer | laada | 10 kHz to 10 MHz |
|----------|-----------|-------------------|--------|--------------------|
| LE IUZ - | Conducted | i emission: Power | reaus. | TO KHZ LO TO IVIHZ |

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-810G

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-1275E

Steady State and Transient Voltage

MIL-STD-1686C

Electrostatic discharge

MIL-STD-464C

5.11.3 - Mechanical Interference



MAIN TUBE Ø127 mm - 4 SECTIONS - END TUBE Ø90 mm

| MODEL | DIMENSIONS mm | | DAVLOAD | MEIGHT |
|------------|---------------|-----------|---------|--------|
| | EXTENDED | RETRACTED | PAYLOAD | WEIGHT |
| MM.0404.SE | 4021 | 1430 | 90 kg | 70 kg |
| MM.0405.SE | 5011 | 1700 | 90 kg | 74 kg |
| MM.0406.SE | 6011 | 1980 | 80 kg | 81 kg |
| MM.0407.SE | 7011 | 2260 | 80 kg | 86 kg |
| MM.0408.SE | 8011 | 2540 | 70 kg | 91 kg |
| MM.0409.SE | 9011 | 2820 | 70 kg | 95 kg |

MAIN TUBE Ø152 mm - 4 SECTIONS - END TUBE Ø115 mm

| MODEL | DIMENSIONS mm | | PAYLOAD | WEIGHT |
|------------|---------------|-----------|---------|--------|
| | EXTENDED | RETRACTED | PATLUAD | WEIGHT |
| MM.2404.SE | 4021 | 1430 | 150 kg | 79 kg |
| MM.2405.SE | 5011 | 1700 | 150 kg | 87 kg |
| MM.2406.SE | 6011 | 1980 | 140 kg | 93 kg |
| MM.2407.SE | 7011 | 2260 | 140 kg | 99 kg |
| MM.2408.SE | 8011 | 2540 | 130 kg | 105 kg |
| MM.2409.SE | 9011 | 2820 | 130 kg | 111 kg |
| | | | | |

MAIN TUBE Ø152 mm - 5 SECTIONS - END TUBE Ø102 mm

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

MAIN TUBE Ø152 mm - 6 SECTIONS - END TUBE Ø90 mm

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



MAIN TUBE Ø200 mm - 5 SECTIONS - END TUBE Ø140 mm

| MODEL | DIMENSIONS mm | | PAYLOAD | WEIGHT |
|------------|---------------|-----------|---------|--------|
| MODEL | EXTENDED | RETRACTED | PATLUAD | WEIGHT |
| MM.3504.SE | 4034 | 1270 | 210 kg | 99 kg |
| MM.3505.SE | 5024 | 1500 | 210 kg | 108 kg |
| MM.3506.SE | 6014 | 1730 | 200 kg | 116 kg |
| MM.3507.SE | 7004 | 1960 | 200 kg | 127 kg |
| MM.3508.SE | 8044 | 2200 | 190 kg | 136 kg |
| MM.3509.SE | 9014 | 2410 | 190 kg | 144 kg |
| MM.3510.SE | 1004 | 2640 | 180 kg | 153 kg |

MAIN TUBE Ø200 mm - 6 SECTIONS - END TUBE Ø127 mm

| MODEL | DIMENSIO | DIMENSIONS mm | | WEIGHT |
|------------|----------|---------------|---------|---------|
| | EXTENDED | RETRACTED | PAYLOAD | VVEIGHT |
| MM.3604.SE | 4006 | 1180 | 190 kg | 101 kg |
| MM.3605.SE | 5006 | 1380 | 190 kg | 109 kg |
| MM.3606.SE | 6046 | 1570 | 180 kg | 116 kg |
| MM.3607.SE | 7046 | 1770 | 180 kg | 127 kg |
| MM.3608.SE | 8026 | 1950 | 170 kg | 134 kg |
| MM.3609.SE | 9026 | 2150 | 170 kg | 142 kg |
| MM.3610.SE | 10006 | 2330 | 160 kg | 150 kg |
| MM.3611.SE | 11006 | 2530 | 160 kg | 158 kg |
| MM.3612.SE | 12046 | 2720 | 160 kg | 165 kg |

MAIN TUBE Ø200 mm - 7 SECTIONS - END TUBE Ø115 mm

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

MAIN TUBE Ø200 mm - 8 SECTIONS - END TUBE Ø102 mm

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

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MAIN TUBE Ø200 mm - 9 SECTIONS - END TUBE Ø90 mm

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

MAIN TUBE Ø250 mm - 6 SECTIONS - END TUBE Ø152 mm

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

MAIN TUBE Ø250 mm - 7 SECTIONS - END TUBE Ø140 mm

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

MAIN TUBE \emptyset 250 mm - 8 SECTIONS - END TUBE \emptyset 127 mm

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





MAIN TUBE Ø250 mm - 9 SECTIONS - END TUBE Ø115 mm

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

MAIN TUBE Ø250 mm - 10 SECTIONS - END TUBE Ø102 mm

| MODEL | DIMENS | DAVLOAD | MEIGHT | |
|------------|----------|-----------|---------|--------|
| MODEL | EXTENDED | RETRACTED | PAYLOAD | WEIGHT |
| MM.5006.SE | 6014 | 1340 | 160 kg | 146 kg |
| MM.5007.SE | 7034 | 1460 | 160 kg | 155 kg |
| MM.5008.SE | 8054 | 1580 | 150 kg | 163 kg |
| MM.5009.SE | 9074 | 1700 | 150 kg | 174 kg |
| MM.5010.SE | 10014 | 1830 | 140 kg | 184 kg |
| MM.5011.SE | 11034 | 1950 | 140 kg | 193 kg |
| MM.5012.SE | 12054 | 2070 | 130 kg | 201 kg |
| MM.5013.SE | 13074 | 2190 | 130 kg | 210 kg |
| MM.5014.SE | 14044 | 2305 | 120 kg | 219 kg |
| MM.5015.SE | 15014 | 2420 | 120 kg | 227 kg |
| MM.5016.SE | 16034 | 2540 | 110 kg | 236 kg |
| MM.5017.SE | 17054 | 2660 | 110 kg | 245 kg |

MAIN TUBE Ø250 mm - 11 SECTIONS - END TUBE Ø90 mm

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

For special dimensions please do not hesitate to contact us..

It is possible to increase the payload by reducing the extension speed slightly.















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 colours, 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

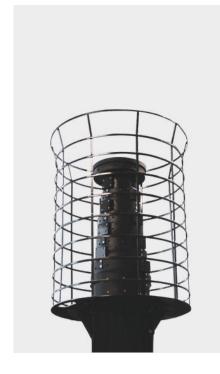
and is resistant to many chemicals available in different colours. and petroleum based products making its use on vehicles safe and reliable.

PROTECTION BELLOW

The Nycoil is made from flexible nylon Protection against dust and sand,

ICE SPACERS

Against compressed ice and snow between the collars.





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 D38999 connectors.





PNEUMATIC MASTS WITH LOCKING SYSTEMS

Whenever important payloads need to be elevated for extended periods, our pneumatic masts with locking systems are the perfect solution. Designed specifically for all kinds of industrial applications that require high lifting capacities to be combined with long-lasting deployment, Fireco's locking masts stand out for their high reliability and are easy to operate at the same time.

The pneumatic masts with locking systems can be kept extended for long periods without internal air pressure. The SUPER STEADY FULL AUTOMATIC, SUPER STEADY SEMI-AUTOMATIC, SUPER STEADY and STEADY masts meet the most demanding requirements of mobile communications, intelligence, surveillance and security systems for defence applications.









SUPER STEADY FULL AUTOMATIC



Super Steady in Full Automatic version is an innovative and patented telescopic mast with a locking system able to operate automatically and thus relieving the operator from the duty to manually unlock/lock each section. The operator can work at a safe distance and decide the height of the mast. The mechanical concept of the Full Automatic Super Steady has been paired to an electropneumatic driving system with integrated safety features, allowing operations via an electronic control box.

Depending on needs or on situations, the mast can work in two modes:

Automatic: for complete extension and retraction **Manual**: for extending and retracting the mast manually

The sections can be left in fully extended position without pressurised air inside the mast and the mast can support heavy payloads for long periods.

Backup: in the situation of a sudden power supply failure, the mast can be operated via an emergency backup mode, allowing trained personnel to retract the mast safely.

KEY FEATURES

- It removes the need to follow some of the most critical safety procedures for operating the mast, allowing faster operations in deployment and reaction
- It reduces training costs and improves the installation safety
- Maintenance can be performed by skilled personnel with minor and fast efforts as main components are easily accessible
- It can support heavy payloads up to 500 kg



CONTROL BOX

The Full Automatic mast works with a control box that drives a set of electro-pneumatic valves installed in a box nearby the mast. The control box has an intuitive and simple interface, equipped with few clear commands.



ELECTRO-PNEUMATIC BOX

The electro-pneumatic box contains the core elements to drive the air in and out of the mast both during the regular operations and during the manual mode. It houses the delivery valves, all solenoids and the connections to feed both the current and the air to cylinders of the locking keys on the outer tube.



LOCKING SYSTEM

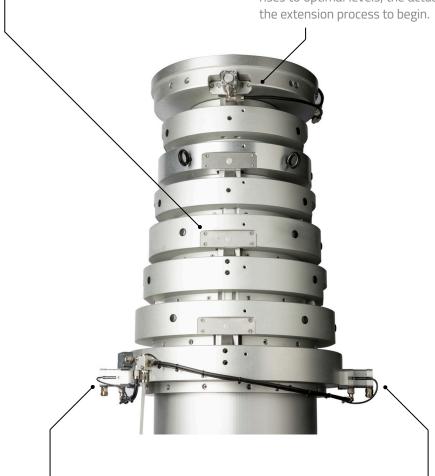


The automatic locking technology is based on a subsystem fully enclosed inside each ring, giving an external surface that is free from possible undesired catch points.

OPTIONAL HEAD LOCKING



This optional feature is designed to prevent unnecessary movements of the mast head, in the retracted position. When the mast is closed and low pressure is detected, our advanced system engages two actuators to secure the mast head. As pressure rises to optimal levels, the actuators release, allowing the extension process to begin.



PNEUMATIC FEED SPLITTER MICRO SWITCH



On the first collar, the microswitch signals mast closure/extension to the control box. The pneumatic feed splitter equally distributes air to open the locking actuators upon pressure arrival from the electropneumatic box.

ACTUATORS
SAFETY COLLAR



The bottom ring features pneumatic actuators controlled by our advanced system. They automatically lock the mast section when it is extended. During the retraction phase they remain locked, unless safety parameters are met—ensuring safe operations in both automatic and manual modes.







SUPER STEADY SEMI-AUTOMATIC

It is possible to provide the SUPER STEADY masts with a semi-automatic locking system, that allows to unlock both latches of each section by pulling a cord that moves both locking/unlocking levers.

It is not necessary for the operator to manually move the levers back into the locking position, as their movement is automatic; thus the operator can unlock the next stage more quickly.







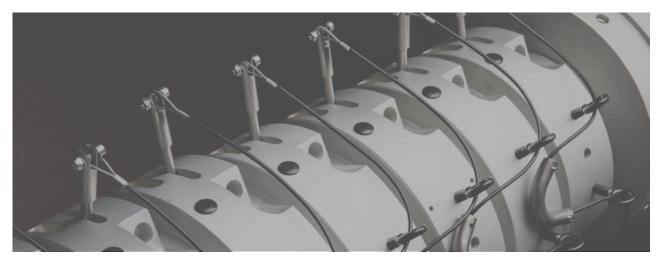


KEY FEATURES

- Operating at a safe distance
- One single operator
- Automatic locking of each section by reaching the correct position
- Can be operated from the ground, without access plattform















The SUPER STEADY series is equipped with mechanical locking devices. Each section is provided with two lever handles which will insert two bullet latches into the corresponding slots on the mast tube.

- Super Steady masts available with base diameters from 115 mm up to 340 mm
- Solutions with external cables with different types of cable guides or with internal cabling on request
- Permits to mount Dyneema ropes, which grant a better wind speed resistance
- Sturdier lockings
- The Ø 340 mm mast permits to carry particulary huge top loads





PRESSURE GAUGE

On the collar of the main tube there is a pressure gauge that allows to control the internal air pressure on the mast. In order to permit to the user, before retracting the mast, to check and restore the correct internal pressure.



OPTIONAL PNEUMATIC LEVER LOCKING KIT

Its functioning principle is to impede the accidental opening of the locking levers when the air pressure on the mast is not sufficient. In this way one can avoid the risk of a sudden vertical descent of the mast sections.

It is basically composed by two pneumatic cylinders installed in correspondence with the lowest locking ring (coupled with the last mobile tube). When there is no internal air pressure on the mast the cylinders are in an extended position thus impeding the opening of the locking levers of the last mobile tube.



KEY FEATURES FOR SUPER STEADY AND STEADY MASTS

- Extended heights available up to 40m
- Great variety of "off-the-shelf" solutions as well as Customised protection bellows customised solutions
- Wide range of available mounting and guying accessories
- Optional special sand scraper rings for dusty and/ or harsh environments
- Very low maintenance requirements
- Customised hole pattern for payload top plate

STEADY

The STEADY series is equipped with metal bands which embrace each mast section. These bands can be tightened so to keep the sections locked by friction.

- Steady masts available with base diameters from 77 mm up to 250 mm
- Solutions with internal cable or with different types of external cable guides
- Can be locked at every intermediate height









PORTABLE FIELD SOLUTIONS

Our portable masts, manual or pneumatic, and the wide range of mounting options are essential pieces of equipment for rural operation. Our portable systems are easily and quickly deployable by a single operator, with the mast that can be extended manually, with a hand pump or with a small compressor. Portable masts are usually fitted to a tripod or a 4-legs assembly and can be carried conveniently in protective bags. The masts can be equipped with guying ropes for a better wind resistance.







PORTABLE SOLUTIONS

Here some examples of our manual telescopic masts, equipped with manual lockings on each section.

This is a small extract of our complete range. Please contact us if you would like to receive more information.

LIGHTWEIGHT MASTS WITH INTERNAL CABLE

| MAST MODEL | DIMENSIONS mm | | DIAMETER mm | SECTIONS | PAYLOAD | WEIGHT | |
|-------------|---------------|-----------|-------------|----------|---------|--------|---------|
| | EXTENDED | RETRACTED | DIAMETERMIN | SECTIONS | PATLOAD | WEIGHT | |
| ENTRY | CN.5211.P | 2004 | 1200 | 66 | 2 | 23 kg | 4,5 kg |
| CN.5304.P | 3963 | 1135 | 66 | 3 | 20 kg | 7 kg | |
| SUPER ENTRY | CO.5436.P | 3499 | 1240 | 80 | 4 | 26 kg | 6 kg |
| | CO.5515.P | 6000 | 1714 | | 6 | 20 kg | 11,5 kg |

LIGHTWEIGHT MASTS WITHOUT INTERNAL CABLE

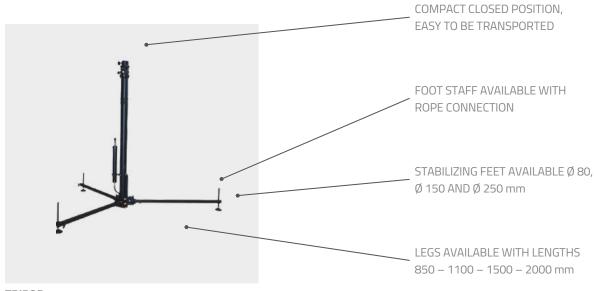
| MAST MODEL | MODEL | DIMENSION | | DIAMETED | SECTIONS | PAYLOAD | WEIGHT |
|-------------|-----------|-----------|----------|----------|----------|---------|---------|
| | EXTENDED | RETRACTED | DIAMETER | | | | |
| STAR | CA.5221.P | 1930 | 1120 | 66 | 2 | 23 kg | 4,5 kg |
| CA.5503.P | CA.5503.P | 4940 | 1370 | | 5 | 12 kg | 8 kg |
| PRIMO - | CP.5411.P | 2963 | 1070 | 66 | 4 | 16 kg | 6 kg |
| | CP.5608.P | 9080 | 1960 | | 6 | 6 kg | 11,5 kg |
| SUPER PRIMO | CO.5426.P | 4983 | 1650 | 80 | 4 | 24 kg | 10,5 kg |
| | CO.5806.P | 5799 | 1200 | | 8 | 9 kg | 18,9 kg |
| MAXI PRIMO | CM.5701.P | 7476 | 1575 | 101 | 7 | 22 kg | 19,6 kg |
| | CM.5106.P | 12455 | 1810 | | 11 | 6 kg | 25,6 kg |







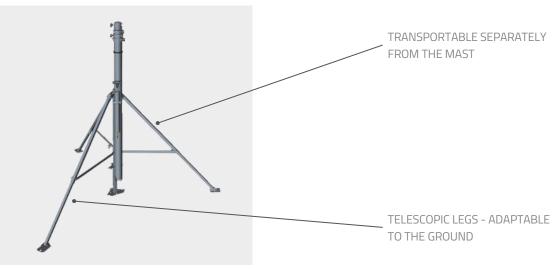




TRIPOD



4 LEGS ASSEMBLY



TRIPOD





ACCESSORIES & ALTERNATIVE COATINGS

Many accessories and add-ons round off our product porfolio 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 anodised coatings and painting finishes in different colours.









ACCESSORIES



DIFFERENT CARRYING BAGS ARE AVAILABLE IN BLACK OR GREEN COLOUR



PICKETS FOR GUY ROPE ANCHORING TO THE GROUND



GUYING ROPES OF DIFFERENT LENGTHS ALSO AVAILABLE IN DYNEEMA





SAND SCRAPER RINGS

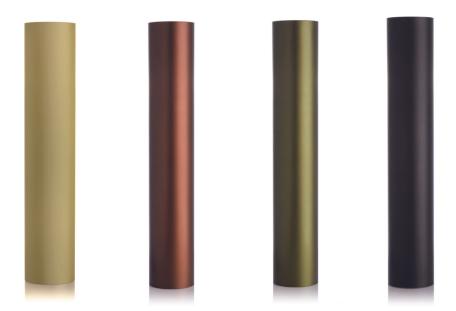


ALTERNATIVE COATING

THIS TREATMENT GUARANTEES FOR:

- improved corrosion resistance
- increased surface hardness
- increased wear and abrasion resistance
- moderate heat insulation

Hard anodization is also available as well as a wide variety of different anodization and painting colours, 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.













































Credits

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