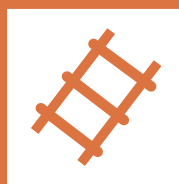


RAILWAY LINE STRINGING

MACHINES AND EQUIPMENT





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OLS - OMAC LINK SYSTEM



REMOTE
MONITORING &
DIAGNOSTICS



REMOTE
PARAMETERS
SETTING



REMOTE
MAINTENANCE &
TROUBLESHOOTING



GPS
GEOLOCATION



FEATURES

- LARGE-SIZED (9”) COLOR GRAPHIC DISPLAY, BUILT IN THE MAIN CONTROL PANEL
- RESISTIVE TYPE GLOVE-FRIENDLY TOUCH-SCREEN, INTUITIVE AS WELL AS EASY IN SETTING-UP AND BROWSING THROUGH
- HIGH CAPACITY MEMORY: OVER 200 KM OF LINE
- HIGH ACCURACY AND RELIABILITY BY MEANS OF THE LOAD CELL AND ENCODER SYSTEM
- USB PORT FOR DATA DOWNLOADING/UPLOADING
- SOFTWARE PROVIDED TO HANDLE DATA STORED



THE LATEST AND MOST POWERFUL EVOLUTION FOR REMOTE MASTERING,
MONITORING AND LOCATING YOUR FLEET OF MACHINES - **OPTIONAL 107**
OMAC MACHINES HAVE ALWAYS BEEN EQUIPPED WITH **BUILT-IN DIGITAL READ OUT** AND **RECORDER**



REMOTE MONITORING & DIAGNOSTICS

- RUN-TIME MACHINE REMOTE WORKING PARAMETERS READING
- RUN-TIME MACHINE REMOTE DIAGNOSTICS READING
- CAN PORT FOR REMOTE MONITORING OF ELECTRONIC DIESEL ENGINE PARAMETERS



REMOTE PARAMETERS SETTING

- MACHINE REMOTE PARAMETERS SETTING
- NEW FIRMWARE RELEASE UPDATE
- MACHINE REMOTE SETUP



REMOTE MAINTENANCE & TROUBLESHOOTING

- REMOTE ACCESS TO MACHINE MAINTENANCE SCHEDULES
- MAINTENANCE ALERTS
- REMOTE ENABLING OR DISABLING OF SPECIFIC FUNCTIONS
- OLS WILL BE SUPPLIED ON ALL NEW 4.0 OMAC MACHINES AS WELL AS ON THE EXISTING MACHINES (ON REQUEST)



GPS GEOLOCATION

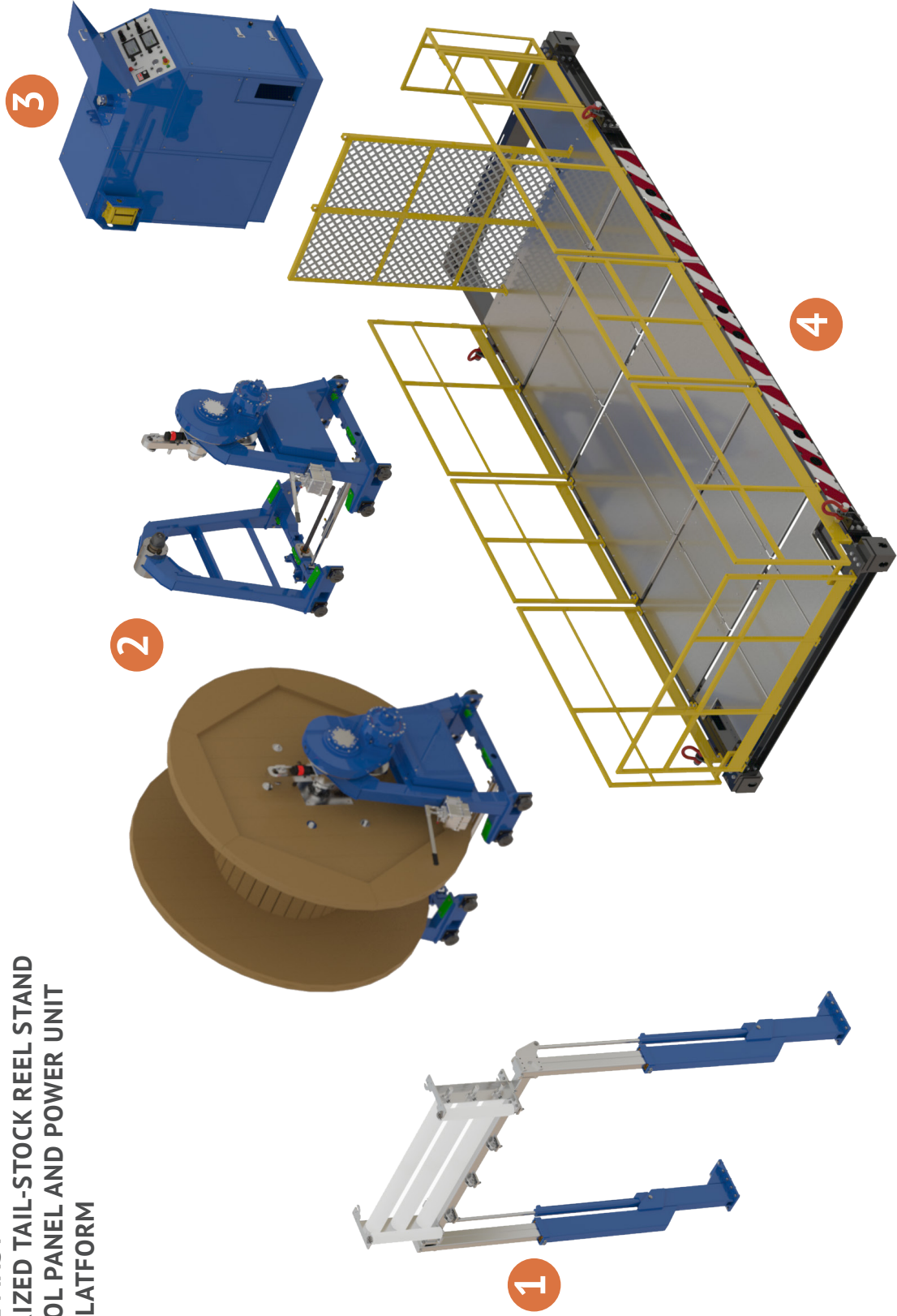
- BUILT-IN GPS ALLOWS REMOTE ACCESS TO REAL-TIME FLEET POSITION
- CUT INSURANCE COSTS
- LESS THEFT RISK



TENSIONING TAIL-STOCK REEL STAND CATENARY WIRING SYSTEM

TAIL-STOCK REEL STAND CATENARY WIRING SYSTEM

- 1 - PORTAL MAST
- 2 - MOTORIZED TAIL-STOCK REEL STAND
- 3 - CONTROL PANEL AND POWER UNIT
- 4 - BASE PLATFORM





TN

Reel-stand capacity: 5000 kg.
Fit for braking wooden or steel reels during cable/conductor stringing for railway application.
The stand is equipped with a disc brake with hand clamp suitable for speeds up to 6 km/h.



FEATURES

MAX DIAMETER	2200 mm
MAX WIDTH	1300 mm
MAX CAPACITY	5000 kg
DIMENSIONS (without reel)	2200 x 2300 x 1500 mm
WEIGHT	790 kg

CONFIGURATION

- Reel shaft Ø 75 mm
- Pair of conical bushes fit for wooden drums (reel hole Ø to be specified)
- Disk brake group with hand control. Mechanically connected to the reel. The system permits to adjust the braking force
- Spindle fitted with ball bearings, completed with accessories and locking clamp
- Drive arm fit to host one steel or wooden reel
- Galvanized electrowelded steel fixed-type frame with base prepared for anchoring and lifting the stand on the ground and on a platform

BREAKING PERFORMANCES

	TN3.050	TN6.050	TN10.050
MAX BRAKING TORQUE	300 daN. m	600 daN. m	1000 daN. m
MAX BRAKING FORCE	400 daN (*)	800 daN	1300 daN
MAX SPEED	6 km/h	6 km/h	6 km/h

*Values calculated on the average diameter of 1500 mm

OPTIONAL DEVICES

- 439** Swiveling system with full ± 360° rotation
- 410.3** Disc brakes hydraulic clamp remotely controlled by manual pump
- 444.2** Base frame for mounting two or more reel-stands. Dimensions to be defined with the customer
- 062.3** Additional shaft kit for pre-loading the reel.
Shaft diameter: Ø 75 mm

Performances of the machine without optional devices, at sea level and temperature 20°C.
Dimensions and weights are without optional devices. All data may change without notice. Images and drawings are indicative only.



TRN5.1

MAX STRINGING FORCE 5 KN

Automatic tensioning/recovering unit for 1 (one) catenary or contact wire, not autonomous (no diesel engine installed): an external hydraulic power and electrical (12/24V) sources must be supplied by the client.



MAX PULL
5 kN



MAX SPEED
5 km/h



TAIL-STOCK REEL-STAND
1 x 2000 kg

REEL DIMENSIONS

MAX REEL DIAMETER	1800 mm
MAX REEL WIDTH	1150 mm
MAX REEL WEIGHT	2000 kg

TENSION PERFORMANCES

TOTAL FORCE	5 kN
MAX SPEED	5 km/h

RECOVERY PERFORMANCES

TOTAL FORCE	5 kN
MAX SPEED	3 km/h

ENGINE

TYPE	NA
POWER	NA
COOLING	NA
VOLTAGE	12/24 V

UNIT WEIGHT

WEIGHT (without reel)	1600 kg
-----------------------	---------

UNIT DIMENSIONS

LENGTH	2450 mm
WIDTH	2450 mm
HEIGHT	1200 mm

Performances of the machine without optional devices, at sea level and temperature 20°C.
Dimensions and weights are without optional devices. All data may change without notice. Images and drawings are indicative only.

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OPTIONAL DEVICES

TAIL STOCK REEL STAND

404	Cylindrical bushes for centring the conductor drum holes and spacer bush with specific client diameter to be specified
439.1	Reel-stand rotation: mechanical device for rotating the stand ($\pm 45^\circ$) with mechanical stops on 3 (each 15°) positions

CAB AND CONTROL PANEL

069.4	Digital instrument dashboard 7 "DEG 4.0 for setting measuring and save all force parameters and download all datas via USB port (alternative to standard analogical instruments)
037.D	10 m cable remote control for managing the reel-stand (in stringing and recovering mode) and MAST, complete of display
038	Radio remote control equipped with braking force command, brake operation and emergency button, complete with back-up cable 10 meters length

TELESCOPIC MAT AND MAST

131.7.TR	Portal Mast telescopic with rollers for guiding the wire or the cable during stringing and recovering operation. Minimum height position: 2400 mm, Max height position: 3600 mm
131.1.TR	Single swinging MAST (+/- 600 mm from centre of the rail). All closed height from platform base: 2600 mm, stroke 2400 mm, max open height 5000 mm

OTHER OPTIONS

052.2	Light System fit for Night-Work
093.2	Protective barriers on machine perimeter including openable entrance. Painted (as per requested colour), barriers height 1 or 1,1 m

Performances of the machine without optional devices, at sea level and temperature 20°C.
Dimensions and weights are without optional devices. All data may change without notice. Images and drawings are indicative only.





TRN10.1

MAX STRINGING FORCE 10 KN

Automatic tensioning/recovering unit to install 1 (one) catenary or contact wire.



MAX PULL
10 kN



MAX SPEED
5 km/h



TAIL-STOCK REEL-STAND
1 x 4000 kg



REEL DIMENSIONS

MAX REEL DIAMETER	2000 mm
MAX REEL WIDTH	1100 mm
MAX REEL WEIGHT	4000 kg

RECOVERY PERFORMANCES

TOTAL FORCE	10 kN
MAX SPEED	1,5 km/h

UNIT WEIGHT

WEIGHT	2200 kg
--------	---------

TENSION PERFORMANCES

TOTAL FORCE	10 kN
MAX SPEED	5 km/h

ENGINE

TYPE	N/A
POWER	N/A
COOLING	N/A
VOLTAGE	12/24 V

UNIT DIMENSIONS

LENGTH	3300 mm
WIDTH	2000 mm
HEIGHT	2500 mm

Performances of the machine without optional devices, at sea level and temperature 20°C.
Dimensions and weights are without optional devices. All data may change without notice. Images and drawings are indicative only.





OPTIONAL DEVICES

TAIL STOCK REEL STAND

404	Cylindrical bushes for centring the conductor drum holes and spacer bush with specific client diameter to be specified
439.1	Reel-stand rotation: mechanical device for rotating the stand ($\pm 45^\circ$) with mechanical stops on 3 (each 15°) positions
439.2	Reel stand rotation: hydraulic device activated by manual pump for rotating the stand ($\pm 45^\circ$) with mechanical stops on 3 (each 15°) position

Performances of the machine without optional devices, at sea level and temperature 20°C.
Dimensions and weights are without optional devices. All data may change without notice. Images and drawings are indicative only.



TR5.1

MAX STRINGING FORCE 5 KN

Automatic tensioning/recovering unit to install 1 (one) catenary or contact wire.



MAX PULL
5 kN



MAX SPEED
5 km/h



TAIL-STOCK REEL-STAND
1 x 3500 kg



REEL DIMENSIONS

MAX REEL DIAMETER	2000 mm
MAX REEL WIDTH	1100 mm
MAX REEL WEIGHT	3500 kg

RECOVERY PERFORMANCES

TOTAL FORCE	5 kN
MAX SPEED	1,5 km/h

UNIT WEIGHT

WEIGHT (without rope)	1950 kg
-----------------------	---------

TENSION PERFORMANCES

TOTAL FORCE	5 kN
MAX SPEED	5 km/h

ENGINE

TYPE	Diesel
POWER	18 kW (24,5 HP)
COOLING	Water
VOLTAGE	12/24 V

UNIT DIMENSIONS

LENGTH	3300 mm
WIDTH	2000 mm
HEIGHT	2500 mm

Performances of the machine without optional devices, at sea level and temperature 20°C.
Dimensions and weights are without optional devices. All data may change without notice. Images and drawings are indicative only.





OPTIONAL DEVICES

TAIL STOCK REEL STAND

404	Cylindrical bushes for centring the conductor drum holes and spacer bush with specific client diameter to be specified
439.1	Reel-stand rotation: mechanical device for rotating the stand ($\pm 45^\circ$) with mechanical stops on 3 (each 15°) positions
439.2	Reel stand rotation: hydraulic device activated by manual pump device for rotating the stand ($\pm 45^\circ$) with mechanical stops on 3 (each 15°) position

CAB AND CONTROL PANEL

069.4	Digital instrument dashboard 7 "DEG 4.0 for setting measuring and save all force parameters and download all datas via USB port (alternative to standard analogical instruments)
037.D	10 m cable remote control for managing the reel-stand (in stringing and recovering mode) and MAST, complete of display
038	Radio remote control equipped with braking force command, brake operation and emergency button, complete with back-up cable 10 meters length
CAB.TR	Control Cab (including control panel) completed by door, windows, internal light, air ventilation (dimension 800 x 800 x 2000 mm)

TELESCOPIC MAT AND MAST

131.7.TR	Telescopic Portal Mast with rollers for guiding the wire or the cable during stringing and recovering operation. Minimum height position: 2400 mm, Max height position: 3600 mm
131.1.TR	Single swinging MAST (+/- 600 mm from centre of the rail). All closed height from platform base: 2600 mm, stroke 2400 mm, max open height 5000 mm

OTHER OPTIONS

052.2	Light System fit for Night-Work
093.2	Protective barriers on machine perimeter including openable entrance. Painted (as per requested colour) barriers height 1 or 1,1 m

Performances of the machine without optional devices, at sea level and temperature 20°C.
Dimensions and weights are without optional devices. All data may change without notice. Images and drawings are indicative only.



TR10.1

MAX STRINGING FORCE 10 KN

Automatic tensioning/recovering unit to install 1 (one) catenary or contact wire.



MAX PULL
10 kN



MAX SPEED
5 km/h



TAIL-STOCK REEL-STAND
1 x 4000 kg



REEL DIMENSIONS

MAX REEL DIAMETER	2000 mm
MAX REEL WIDTH	1100 mm
MAX REEL WEIGHT	4000 kg

RECOVERY PERFORMANCES

TOTAL FORCE	10 kN
MAX SPEED	1,5 km/h

UNIT WEIGHT

WEIGHT	2200 kg
--------	---------

TENSION PERFORMANCES

TOTAL FORCE	10 kN
MAX SPEED	5 km/h

ENGINE

TYPE	Diesel
POWER	18 kW (24,5 HP)
COOLING	Water
VOLTAGE	12/24 V

UNIT DIMENSIONS

LENGTH	3300 mm
WIDTH	2000 mm
HEIGHT	2500 mm

Performances of the machine without optional devices, at sea level and temperature 20°C.
Dimensions and weights are without optional devices. All data may change without notice. Images and drawings are indicative only.





OPTIONAL DEVICES

TAIL STOCK REEL STAND

404	Cylindrical bushes for centring the conductor drum holes and spacer bush with specific client diameter to be specified
439.1	Reel-stand rotation: mechanical device for rotating the stand ($\pm 45^\circ$) with mechanical stops on 3 (each 15°) positions
439.2	Reel stand rotation: hydraulic device activated by manual pump for rotating the stand ($\pm 45^\circ$) with mechanical stops on 3 (each 15°) position

Performances of the machine without optional devices, at sea level and temperature 20°C.
Dimensions and weights are without optional devices. All data may change without notice. Images and drawings are indicative only.



TR10.2

MAX STRINGING FORCE 10 KN

Automatic tensioning/recovering unit for 2 (two) catenary or contact wires simultaneously or independently.



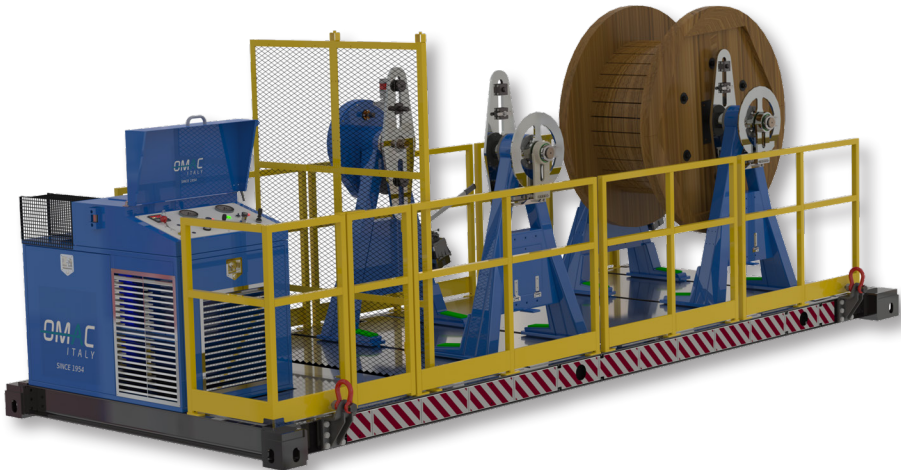
MAX PULL
10 kN



MAX SPEED
5 km/h



TAIL-STOCK REEL-STAND
2 x 3500 kg



REEL DIMENSIONS

MAX REEL DIAMETER	2200 mm
MAX REEL WIDTH	1150 mm
MAX REEL WEIGHT	4000 kg

RECOVERY PERFORMANCES

TOTAL FORCE	10 kN = 5 + 5 kN
MAX SPEED	1,5 km/h

UNIT WEIGHT

WEIGHT	3500 kg
--------	---------

TENSION PERFORMANCES

TOTAL FORCE	10 kN = 5 + 5 kN
MAX SPEED	5 km/h

ENGINE

TYPE	Diesel
POWER	26 kW (35 Hp)
COOLING	Water
VOLTAGE	24 V

UNIT DIMENSIONS

LENGTH	6000 mm
WIDTH	2250 mm
HEIGHT	2300 mm

Performances of the machine without optional devices, at sea level and temperature 20°C.
Dimensions and weights are without optional devices. All data may change without notice. Images and drawings are indicative only.





OPTIONAL DEVICES

TAIL STOCK REEL STAND (FOR EACH REEL-STAND)

404	Cylindrical bushes for centring the conductor drum holes and spacer bush with specific client diameter to be specified
410.1	Manual disk brake to control the wiring releasing in case of hydraulic failure

CAB AND CONTROL PANEL

069.4	1 x Digital instrument dashboard 7 "DEG 4.0 for setting measuring and save all force parameters and download all datas via USB port (alternative to standard analogical instruments)
037	10 m cable remote control for controlling the reel-stand (in stringing and recovering mode) and MAST, complete of display
038	Radio remote control equipped with braking force command, brake operation and emergency button, complete with back-up cable 10 meters length
CAB.TR	Control Cab (including control panel) completed by door, windows, internal light, air ventilation (dimension 800 x 800 x 2000 mm)

TELESCOPIC MAT AND MAST

131.7.TR	Telescopic Portal Mast with rollers for guiding the wire or the cable during stringing and recovering operation. Minimum height position: 2400 mm, Max height position: 3600 mm
131.1.TR	Single swinging MAST (+/- 600 mm from centre of the rail). All closed height from platform base: 2600 mm, stroke 2400 mm, max open height 5000 mm

OTHER OPTIONS

052.2	Light System fit for Night-Work
093.2	Protective barriers on machine perimeter including openable entrance. Painted (as per requested colour) barriers height 1 or 1,1 m

Performances of the machine without optional devices, at sea level and temperature 20°C.
Dimensions and weights are without optional devices. All data may change without notice. Images and drawings are indicative only.



TRN22.2

MAX STRINGING FORCE 22 KN

Automatic tensioning/recovering unit for 2 (two) catenary or contact wires simultaneously or independently, not autonomous (no diesel engine installed): external power and electrical sources supplied by the client.



MAX PULL
22 kN



MAX SPEED
5 km/h



TAIL-STOCK REEL-STAND
1 x 2000 kg



REEL DIMENSIONS

MAX REEL DIAMETER	1700 mm
MAX REEL WIDTH	1000 mm
MAX REEL WEIGHT	2000 kg

TENSION PERFORMANCES

TOTAL FORCE	22 kN = 11 + 11 kN
MAX SPEED	5 km/h

RECOVERY PERFORMANCES

TOTAL FORCE	22 kN = 11 + 11 kN
MAX SPEED	1,5 km/h

ENGINE

TYPE	NA
POWER	NA
COOLING	NA
VOLTAGE	12/24 V

UNIT WEIGHT

WEIGHT	1800 kg
--------	---------

UNIT DIMENSIONS

LENGTH	4700 mm
WIDTH	2250 mm
HEIGHT	1200 mm

Performances of the machine without optional devices, at sea level and temperature 20°C.
Dimensions and weights are without optional devices. All data may change without notice. Images and drawings are indicative only.





OPTIONAL DEVICES

TAIL STOCK REEL STAND (FOR EACH REEL-STAND)

404	Cylindrical bushes for centring the conductor drum holes and spacer bush with specific client diameter to be specified
439.1	Reel-stand rotation: mechanical device for rotating the stand ($\pm 45^\circ$) with mechanical stops on 3 (each 15°) positions
439.2	Reel stand rotation: hydraulic device activated by manual pump for rotating the stand ($\pm 45^\circ$) with mechanical stops on 3 (each 15°) positions

CAB AND CONTROL PANEL

069.4	1 x Digital instrument dashboard 7 "DEG 4.0 for setting measuring and save all force parameters and download all datas via USB port (alternative to standard analogical instruments)
037	10 m cable remote control for controlling the reel-stand (in stringing and recovering mode) and MAST, complete of display
038	Radio remote control equipped with braking force command, brake operation and emergency button, complete with back-up cable 10 meters length
CAB.TR	The Control Cab (including control panel) completed by door, windows, internal light, air ventilation (dimension 800 x 800 x 2000 mm)

TELESCOPIC MAT AND MAST

131.7.TR	Telescopic Portal Mast with rollers for guiding the wire or the cable during stringing and recovering operation. Minimum height position: 2400 mm, Max height position: 3600 mm
131.1.TR	Single swinging MAST (+/- 600 mm from centre of the rail). All closed height from platform base: 2600 mm, stroke 2400 mm, max open height 5000 mm

OTHER OPTIONS

052.2	Light System fit for Night-Work
093.2	Protective barriers on machine perimeter including openable entrance. Painted (as per requested colour), barriers height 1 or 1,1 m

Performances of the machine without optional devices, at sea level and temperature 20°C.
Dimensions and weights are without optional devices. All data may change without notice. Images and drawings are indicative only.

TR30.2

MAX STRINGING FORCE 30 KN

Automatic recovering/tensioning unit to install 2 (two) catenary or contact wires simultaneously or independently.



MAX PULL
30 kN



MAX SPEED
5 km/h



TAIL-STOCK REEL-STAND
2 x 5000 kg



REEL DIMENSIONS

MAX REEL DIAMETER	2400 - 1900 mm
MAX REEL WIDTH	1000 - 1300 mm
MAX REEL WEIGHT	5000 kg

TENSION PERFORMANCES

TOTAL FORCE	30 kN
MAX SPEED	5 km/h

RECOVERY PERFORMANCES

TOTAL FORCE	20 - 30 kN
MAX SPEED	3 km/h

ENGINE

TYPE	Diesel
POWER	42 kW (57 Hp)
COOLING	Water
VOLTAGE	24 V

UNIT WEIGHT

WEIGHT	4740 kg
--------	---------

UNIT DIMENSIONS

LENGTH	5950 mm
WIDTH	2290 mm
HEIGHT	2500 mm

Performances of the machine without optional devices, at sea level and temperature 20°C.
Dimensions and weights are without optional devices. All data may change without notice. Images and drawings are indicative only.



OPTIONAL DEVICES

TAIL STOCK REEL STAND (FOR EACH REEL-STAND)

404	Cylindrical bushes for centring the conductor drum holes and spacer bush with specific client diameter to be specified
410.1	Manual disk brake to control the wiring releasing in case of hydraulic failure
060	Conical openable side steel reel suitable for recovering different wires and fittings at the max force
060.2	Cylindrical openable side steel reel with retractable arms to facilitate the wire/cable unloading operations

CAB AND CONTROL PANEL

037	10 m cable remote control for managing the reel-stand (in stringing and recovering mode) and MAST, complete of display
038	Radio remote control equipped with braking force command, brake operation and emergency button, complete with back-up cable 10 meters length
CAB.TR	Control Cab (including control panel) completed by door, windows, internal light, air ventilation (dimension 800 x 800 x 2000 mm)

TELESCOPIC MAT AND MAST

131.7.TR	Telescopic Portal Mast with rollers for guiding the wire or the cable during stringing and recovering operation. Minimum height position: 2400 mm, Max height position: 3600 mm
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OTHER OPTIONS

052.2	Light System fit for Night-Work
093.2	Protective barriers on machine perimeter including openable entrance. Painted (as per requested colour) barriers height 1 or 1,1 m
093.3	Reticular high security perimeter protection of the reel with two sliding gates (with safety micro switches to control the closing consent) for avoiding excessive crane height lifting during the unloading of the full reel

Performances of the machine without optional devices, at sea level and temperature 20°C.
Dimensions and weights are without optional devices. All data may change without notice. Images and drawings are indicative only.





RECOVERING TAIL-STOCK REEL STAND CATENARY WIRING SYSTEM

RT20.1

MAX STRINGING FORCE 20 KN

Automatic recovering/tensioning unit of 1 (one) catenary or contact wire.



MAX PULL
20 kN



MAX SPEED
5 km/h



TAIL-STOCK REEL-STAND
1 x 5000 kg



REEL DIMENSIONS

MAX REEL DIAMETER	2250 mm
MAX REEL WIDTH	1100 mm
MAX REEL WEIGHT	5000 kg

TENSION PERFORMANCES

TOTAL FORCE	20 kN
MAX SPEED	5 km/h

RECOVERY PERFORMANCES

TOTAL FORCE	20 kN
MAX SPEED	2,5 km/h

ENGINE

TYPE	Diesel
POWER	42 kW (57 HP)
COOLING	Water
VOLTAGE	24 V

UNIT WEIGHT

WEIGHT	4800 kg
--------	---------

UNIT DIMENSIONS

LENGTH	4500 mm
WIDTH	2280 mm
HEIGHT	2500 mm

Performances of the machine without optional devices, at sea level and temperature 20°C.
Dimensions and weights are without optional devices. All data may change without notice. Images and drawings are indicative only.





OPTIONAL DEVICES

TAIL STOCK REEL STAND

060	Conical openable side steel reel suitable for recovering different wires and fittings at the max force
060.2	Cylindrical openable side steel reel with retractable arms to facilitate the wire/cable unloading operations
439R	Hydraulic 90° reel-stands rotation device actuated from the cab to facilitate reel installation and removal
446	Additional Hydraulic circuit fit for working in both running directions. It is necessary for a BI-DIRECTIONAL System (Opt. 046.4 is mandatory)

HYDRAULIC GROUP AND DIESEL ENGINE

114	Electronic device for setting and maintaining automatically the preset tension value independently from the speed. Complete with memory card. Max. Reading System Error = +/- 8% on the full scale
102	High-precision detection device of the recovery / braking force with electronic load cell to detect the real force, regardless of the winding diameter of the cable on the reel. Error of 1% in dynamic mode on the full scale

CAB AND CONTROL PANEL

037	Cable remote control with 10 m cable to command reels and mast functions
038	Radio remote control with 5 m emergency backup cable to manage reels and mast functions
046.4	Additional telescopic MAST oscillating fit for working in both running directions (Opt. 446 is mandatory. It is necessary for a BI-DIRECTIONAL System)

OTHER OPTIONS

093.2	Protection barriers around the platform, height 1.100 mm on 4 (four) sides
093.3	Reticular high security perimeter protection of the reel with two sliding gates (with safety micro switches to control the closing consent) for avoiding excessive crane lifting in height during the unloading of the full reel
136	Service hydraulic winch, 1 ton capacity, with 50 m of cable rope 10 mm dia
052.2	Lights for night work

Performances of the machine without optional devices, at sea level and temperature 20°C.
Dimensions and weights are without optional devices. All data may change without notice. Images and drawings are indicative only.



RT30.2

MAX STRINGING FORCE 30 KN

Automatic recovering/tensioning unit to install 2 (two) catenary or contact wires simultaneously or independently.



MAX PULL
30 kN



MAX SPEED
5 km/h



TAIL-STOCK REEL-STAND
2 x 5000 kg



REEL DIMENSIONS

MAX REEL DIAMETER	2400 - 1900 mm
MAX REEL WIDTH	1000 - 1300 mm
MAX REEL WEIGHT	5000 kg

TENSION PERFORMANCES

TOTAL FORCE	20 - 30 kN
MAX SPEED	5 km/h

RECOVERY PERFORMANCES

TOTAL FORCE	20 - 30 kN
MAX SPEED	3 km/h

ENGINE

TYPE	Diesel
POWER	42 kW (57 Hp)
COOLING	Water
VOLTAGE	24 V

UNIT WEIGHT

WEIGHT	4740 kg
--------	---------

UNIT DIMENSIONS

LENGTH	5950 mm
WIDTH	2290 mm
HEIGHT	2500 mm

Performances of the machine without optional devices, at sea level and temperature 20°C.
Dimensions and weights are without optional devices. All data may change without notice. Images and drawings are indicative only.





OPTIONAL DEVICES

TAIL STOCK REEL STAND (FOR EACH REEL-STAND)

404	Cylindrical bushes for centring the conductor drum holes and spacer bush with specific client diameter to be specified
410.1	Manual disk brake to control the wiring releasing in case of hydraulic failure
060	Conical openable side steel reel suitable for recovering different wires and fittings at the max force
060.2	Cylindrical openable side steel reel with retractable arms to facilitate the wire/cable unloading operations

CAB AND CONTROL PANEL

037	10 m cable remote control for managing the reel-stand (in stringing and recovering mode) and MAST, complete of display
038	Radio remote control equipped with braking force command, brake operation and emergency button, complete with back-up cable 10 meters length
CAB.TR	Control Cab (including control panel) completed by door, windows, internal light, air ventilation (dimension 800 x 800 x 2000 mm)

TELESCOPIC MAT AND MAST

131.7.RT	Telescopic Portal Mast with rollers for guiding the wire or the cable during stringing and recovering operation. Minimum height position: 2400 mm, Max height position: 3600 mm
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OTHER OPTIONS

052.2	Light System fit for Night-Work
093.2	Protective barriers on machine perimeter including openable entrance. Painted (as per requested colour) barriers height 1 or 1,1 m
093.3	Reticular high security perimeter protection of the reel with two sliding gates (with safety micro switches to control the closing consent) for avoiding excessive crane height lifting during the unloading of the full reel

Performances of the machine without optional devices, at sea level and temperature 20°C.
Dimensions and weights are without optional devices. All data may change without notice. Images and drawings are indicative only.



RT40.2

MAX STRINGING FORCE 40 KN

Automatic recovering/tensioning unit to install 2 (two) catenary or contact wires simultaneously or independently.



MAX PULL
40 kN (20 + 20 kN)



MAX TENSION SPEED
5 km/h



TAIL-STOCK REEL-STAND
2 x 5000 kg



REEL DIMENSIONS

MAX REEL DIAMETER	2400 - 1900 mm
MAX REEL WIDTH	1000 - 1300 mm
MAX REEL WEIGHT	5000 kg

TENSION PERFORMANCES

TOTAL FORCE	40 kN (20 + 20 kN)
MAX SPEED	5 km/h

RECOVERY PERFORMANCES

TOTAL FORCE	40 kN (2 x 20 kN)
MAX SPEED	1,8 km/h
TOTAL FORCE*	1 x 20 kN
MAX SPEED*	3,5 km/h

* Values for single reel-stand use

ENGINE

TYPE	Diesel
POWER	42 kW (57 Hp)
COOLING	Water
VOLTAGE	24 V

UNIT WEIGHT

WEIGHT	4900 kg
--------	---------

UNIT DIMENSIONS

LENGTH	5950 mm
WIDTH	2290 mm
HEIGHT	2500 mm

Performances of the machine without optional devices, at sea level and temperature 20°C.
Dimensions and weights are without optional devices. All data may change without notice. Images and drawings are indicative only.



OPTIONAL DEVICES

TAIL STOCK REEL STAND (FOR EACH REEL-STAND)

404	Cylindrical bushes for centring the conductor drum holes and spacer bush with specific client diameter to be specified
410.1	Manual disk brake to control the wiring releasing in case of hydraulic failure
060	Conical openable side steel reel suitable for recovering different wires and fittings at the max force
060.2	Cylindrical openable side steel reel with retractable arms to facilitate the wire/cable unloading operations

CAB AND CONTROL PANEL

037	10 m cable remote control for managing the reel-stand (in stringing and recovering mode) and MAST, complete of display
038	Radio remote control equipped with braking force command, brake operation and emergency button, complete with back-up cable 10 meters length
053.3	Control Cab (including control panel) completed by door, windows, internal light, air ventilation (dimension 800 x 800 x 2000 mm)

TELESCOPIC MAT AND MAST

131.7.RT	Telescopic Portal Mast with rollers for guiding the wire or the cable during stringing and recovering operation. Minimum height position: 2400 mm, Max height position: 3600 mm
131.1	Main guiding telescopic and swinging mast with nylon rollers for (1) wire. Closed height: 2.480 mm, open height: 5.250 mm (from the base platform). Swinging from the centre of rail +/- 500 mm
131.5	Extension 1.375 mm, for opt 131.1 with guide rollers for 1 wire/cable, height all open 6.625 mm. Swinging from the centre +/- 800 mm (applicable only with opt. 131.1)

OTHER OPTIONS

052.2	Light System fit for Night-Work
093.2	Protective barriers on machine perimeter including openable entrance. Painted (as per requested colour) barriers height 1 or 1,1 m

Performances of the machine without optional devices, at sea level and temperature 20°C.
Dimensions and weights are without optional devices. All data may change without notice. Images and drawings are indicative only.



RT60.2

MAX STRINGING FORCE 60 KN

Automatic recovering/tensioning unit to install 2 (two) catenary or contact wires simultaneously or independently.



MAX PULL
60 kN



MAX SPEED
5 km/h



TAIL-STOCK REEL-STAND
2 x 6500 kg



REEL DIMENSIONS

MAX REEL DIAMETER	2200 mm
MAX REEL WIDTH	1100 mm
MAX REEL WEIGHT	6500 kg

TENSION PERFORMANCES

TOTAL FORCE	60 kN = 30 + 30 kN
MAX SPEED	5 km/h

RECOVERY PERFORMANCES

TOTAL FORCE	60 kN = 30 + 30 kN
MAX SPEED	5 km/h

ENGINE

TYPE	Diesel
POWER	105 kW (145 Hp)
COOLING	Water
VOLTAGE	24 V

UNIT WEIGHT

WEIGHT	9000 kg
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UNIT DIMENSIONS

LENGTH	9000 mm
WIDTH	2500 mm
HEIGHT	2200 mm

Performances of the machine without optional devices, at sea level and temperature 20°C.
Dimensions and weights are without optional devices. All data may change without notice. Images and drawings are indicative only.



OPTIONAL DEVICES

TAIL STOCK REEL STAND (FOR EACH REEL-STAND)

404	Cylindrical bushes for centring the conductor drum holes and spacer bush with specific client diameter to be specified
410.1	Manual disk brake to control the wiring releasing in case of hydraulic failure
060	Conical openable side steel reel suitable for recovering different wires and fittings at the max force
060.2	Cylindrical openable side steel reel with retractable arms to facilitate the wire/cable unloading operations
439R	90° rotation device of the reel-stand, fit to facilitate the download of the reel
102	Device with load cell fit for monitoring the actual pull/tension force, independently of the diameter reached by the cable winding on the reel

CAB AND CONTROL PANEL

037	10 m cable remote control for managing the reel-stand (in stringing and recovering mode) and MAST, complete of display
038	Radio remote control equipped with braking force command, brake operation and emergency button, complete with back-up cable 10 meters length

OTHER OPTIONS

052.2	Light System fit for Night-Work
093.2	Protective barriers on machine perimeter including openable entrance. Painted (as per requested colour) barriers height 1 or 1,1 m
093.3	Reticular high security perimeter protection of the reel with two sliding gates (with safety switches to control the closing consent) for avoiding excessive crane height lifting during the unloading of the full reel

Performances of the machine without optional devices, at sea level and temperature 20°C.
Dimensions and weights are without optional devices. All data may change without notice. Images and drawings are indicative only.





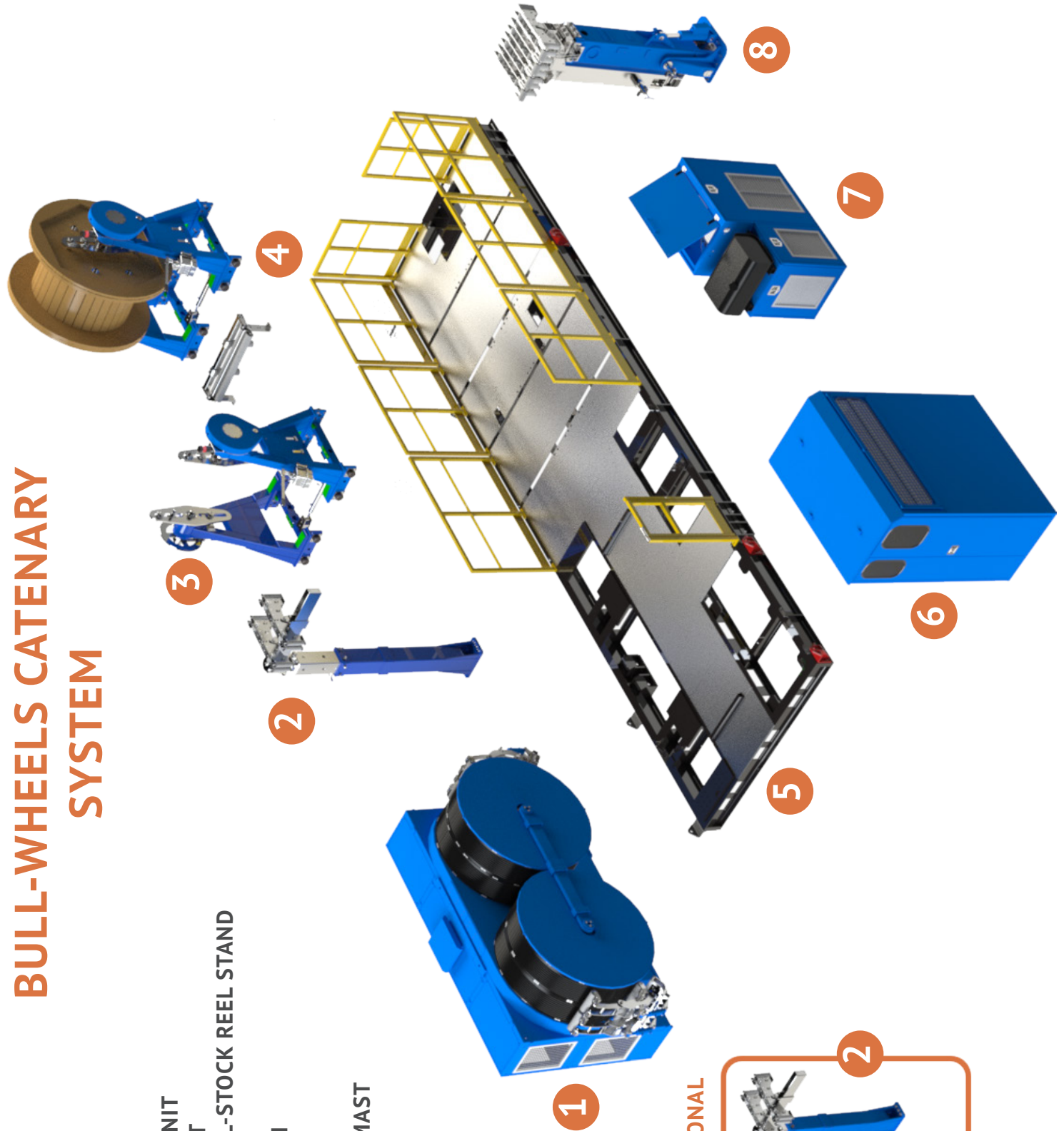
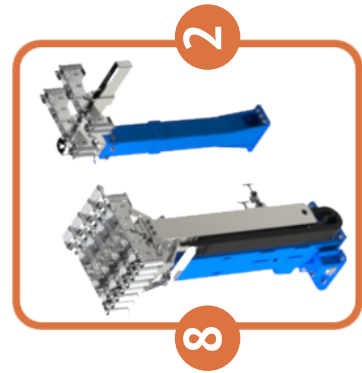
BULL-WHEELS CATENARY WIRING SYSTEM



BULL-WHEELS CATENARY SYSTEM

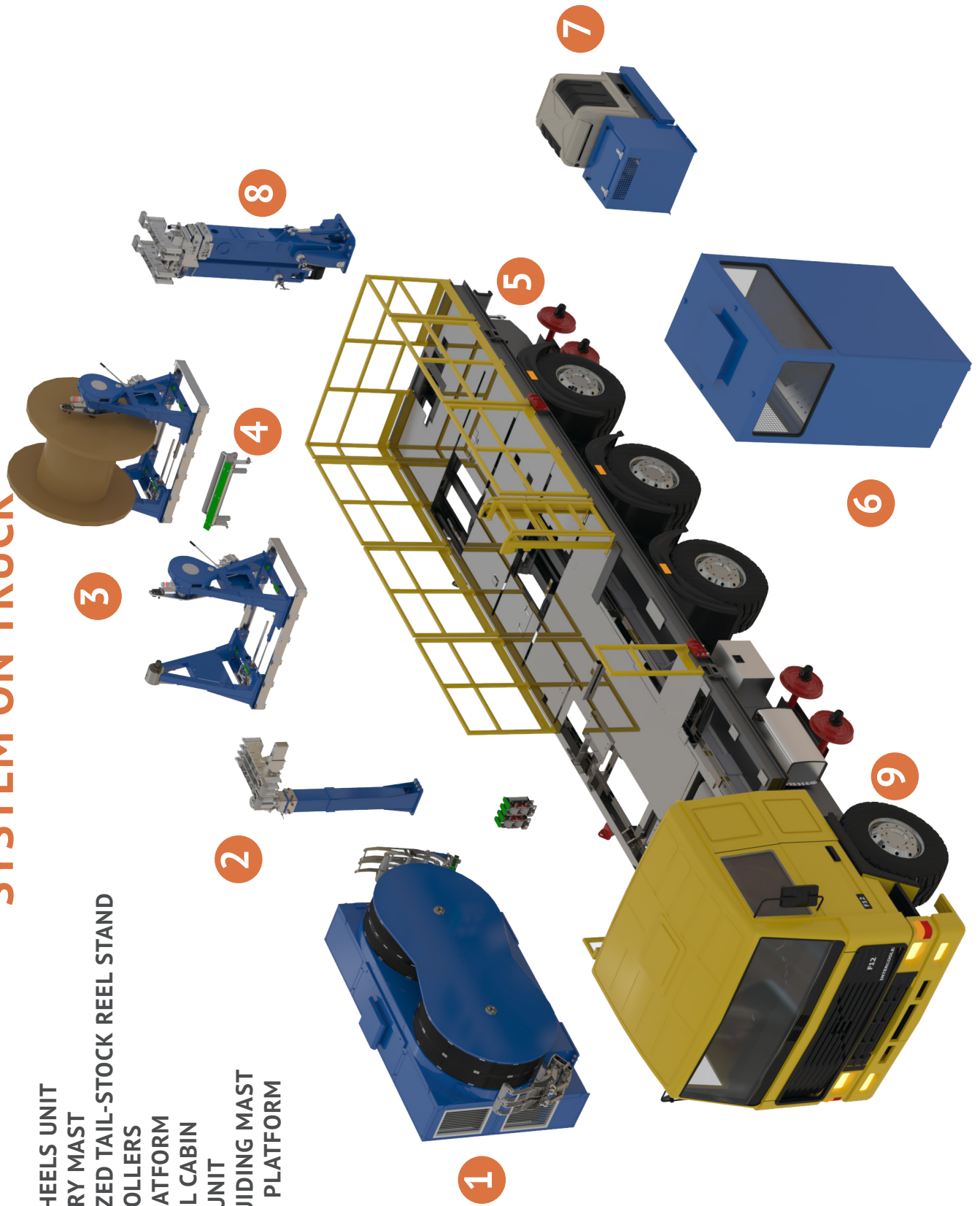
- 1 - BULL-WHEELS UNIT
- 2 - AUXILIARY MAST
- 3 - MOTORIZED TAIL-STOCK REEL STAND
- 4 - GUIDE ROLLERS
- 5 - BASE PLATFORM
- 6 - CONTROL CABIN
- 7 - POWER UNIT
- 8 - MAIN GUIDING MAST

BIDIRECTIONAL



UNIDIRECTIONAL BULL-WHEELS CATENARY SYSTEM ON TRUCK

- 1 - BULL-WHEELS UNIT
- 2 - AUXILIARY MAST
- 3 - MOTORIZED TAIL-STOCK REEL STAND
- 4 - GUIDE ROLLERS
- 5 - BASE PLATFORM
- 6 - CONTROL CABIN
- 7 - POWER UNIT
- 8 - MAIN GUIDING MAST
- 9 - VEHICLE PLATFORM



CTV15.1.11

MAX STRINGING FORCE 15 KN

Constant tensioning/recovering unit suitable to install 1 (one) suspension/contact wire with 1 (one) hydraulic circuit, equipped with 1 (one) tail stock reel stands.



MAX PULL
15 kN



MAX SPEED
5 km/h



TAIL-STOCK REEL-STAND
1 x 2500 kg



BULL-WHEELS
2 x 1100 mm



REEL DIMENSIONS

MAX REEL DIAMETER	1900 mm
MAX REEL WIDTH	1100 mm
MAX REEL WEIGHT	2500 kg

TENSION PERFORMANCES

TOTAL FORCE	15 kN
MAX SPEED	5 km/h

RECOVERY PERFORMANCES

TOTAL FORCE	15 kN
MAX SPEED	1 km/h

ENGINE

TYPE	Diesel
POWER	18,8 kW
COOLING	Water
VOLTAGE	24 V

UNIT WEIGHT

WEIGHT	4800 kg (without optionals)
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UNIT DIMENSIONS

LENGTH	5500 mm
WIDTH	2300 mm
HEIGHT	2350 mm

Performances of the machine without optional devices, at sea level and temperature 20°C.
Dimensions and weights are without optional devices. All data may change without notice. Images and drawings are indicative only.





OPTIONAL DEVICES

BULL-WHEELS GROUP

045.2.1	Automatic hydraulic presser-rollers on the bull-wheel grooves
045.3.1	Manual presser-rollers on the bull-wheel grooves
118.1	Bi-Directionality: Hydraulic tensioning circuits suitable to tension in both directions
114.1	Electronic stringing force reading system, tensioning precision $\pm 1\%$ - $\pm 5\%$ on the full-scale value
020.1	Extra numbers of grooves for the circuit (since 10 grooves)
142.1	Device to complete stringing operation also in case of diesel engine breakdown, with freewheel bull wheels
143.1	Mandatory opt. 142.1, allows to complete stringing operation with about 500 daN wire tensioning force
160	Compensator device to keep in tension the last lenght of the cable by means of winch with 60 m of cable
136	Service auxiliary large groove hydraulic winch fed by the hydraulic circuit of the machine, max pull 1,5 ton or 3 ton, capacity 80 m of rope 12 mm

TAIL STOCK REEL STAND

455	Automatic translation of the reel-stand, for reducing the angle of the cable from the reel to the bull wheels
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HYDRAULIC GROUP AND DIESEL ENGINE

A.RIG.	Engine with self-automatic regeneration of exhaust system DPF – Stage V
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CAB AND CONTROL PANEL

107 + 107.1	GPS connection system for remote check-up of the machine
108	Air conditioner in the cab
108.1	Heating system for the cab
108.2	Air condition and heating system for the cab

TELESCOPIC MAT AND MAST

207.2	Telescopic arm with guide rollers. Closed height: 2.230 mm, extension 1.200 mm from the base platform
131.1	Main guiding telescopic and swinging mast with nylon rollers for (1) wire. Closed height: 2.480 mm, open height: 5.250 mm (from the base platform). Swinging from the centre of rail +/- 500 mm
131.7	Telescopic Portal Mast with of two (2) cylinders and two (2) horizontal rollers. Height all closed 2.600 mm, height all open 4.100 mm (from the base of platform)
038.9.A1	Radio remote control for the Telescopic Mast operations with 10 meters back up cable

OTHER OPTIONS

052.2	Light System fit for Night-Work
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Performances of the machine without optional devices, at sea level and temperature 20°C.
Dimensions and weights are without optional devices. All data may change without notice. Images and drawings are indicative only.



CT20.1

MAX STRINGING FORCE 20 KN

Constant tensioning/recovering unit suitable to install 1 (one) suspension/contact wire with 1 (one) hydraulic circuit, equipped with 1 (one) tail stock reel stands.



MAX PULL
20 kN



MAX SPEED
5 km/h



TAIL-STOCK REEL-STAND
1 x 2500 kg



BULL-WHEELS
2 x 1500 mm



REEL DIMENSIONS

MAX REEL DIAMETER	1900 mm
MAX REEL WIDTH	1100 mm
MAX REEL WEIGHT	2500 kg

TENSION PERFORMANCES

TOTAL FORCE	20 kN
MAX SPEED	5 km/h

RECOVERY PERFORMANCES

TOTAL FORCE	20 kN
MAX SPEED	1,5 km/h

ENGINE

TYPE	Diesel
POWER	18 kW (24,5 Hp)
COOLING	Water
VOLTAGE	24 V

UNIT WEIGHT

WEIGHT	6900 kg
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UNIT DIMENSIONS

LENGTH	6500 mm
WIDTH	2250 mm
HEIGHT	2300 mm

Performances of the machine without optional devices, at sea level and temperature 20°C.
Dimensions and weights are without optional devices. All data may change without notice. Images and drawings are indicative only.





BULL-WHEELS CATENARY WIRING SYSTEM

OPTIONAL DEVICES

BULL-WHEELS GROUP

045.2.1	Automatic hydraulic presser-rollers on the bull-wheel grooves
045.3.1	Manual presser-rollers on the bull-wheel grooves
118.1	Bi-Directionality: Hydraulic tensioning circuits suitable to tension in both directions
114.1	Electronic stringing force reading system, tensioning precision $\pm 1\%$ - $\pm 5\%$ on the full-scale value
020.1	Extra numbers of grooves for the circuit (since 10 grooves)
142.1	Device to complete stringing operation also in case of diesel engine breakdown, with freewheel bull wheels
143.1	Mandatory opt. 142.1, allows to complete stringing operation with about 500 daN wire tensioning force
160	Compensator device to keep in tension the last lenght of the cable by means of winch with 60 m of cable
136	Service auxiliary large grove hydraulic winch fed by the hydraulic circuit of the machine, max pull 1,5 ton or 3 ton, capacity 80 m of rope 12 mm

TAIL STOCK REEL STAND

455	Automatic translation of the reel-stand, for reducing the angle of the cable from the reel to the bull wheels
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HYDRAULIC GROUP AND DIESEL ENGINE

A.RIG.	Engine with self-automatic regeneration of exhaust system DPF – Stage V
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CAB AND CONTROL PANEL

107 + 107.1	GPS connection system for remote check-up of the machine
108	Air conditioner in the cab
108.1	Heating system for the cab
108.2	Air condition and heating system for the cab

TELESCOPIC MAT AND MAST

207.2	Telescopic arm with guide rollers. Closed height: 2.230 mm, extension 1.200 mm from the base platform
131.1	Main guiding telescopic and swinging mast with nylon rollers for (1) wire. Closed height: 2.480 mm, open height: 5.250 mm (from the base platform). Swinging from the centre of rail +/- 500 mm
131.7	Telescopic Portal Mast with of two (2) cylinders and two (2) horizontal rollers. Height all closed 2.600 mm, height all open 4.100 mm (from the base of platform)
038.9.A1	Radio remote control for the Telescopic Mast operations with 10 meters back up cable

OTHER OPTIONS

052.2	Light System fit for Night-Work
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Performances of the machine without optional devices, at sea level and temperature 20°C.
Dimensions and weights are without optional devices. All data may change without notice. Images and drawings are indicative only.



CT30.1

MAX STRINGING FORCE 30 KN

Constant tensioning/recovering unit suitable to install 1 (one) suspension/contact wire with 1 (one) hydraulic circuit, equipped with 1 (one) tail stock reel stands.



MAX PULL
30 kN



MAX SPEED
5 km/h



TAIL-STOCK REEL-STAND
1 x 3500 kg



BULL-WHEELS
2 x 1500 mm



REEL DIMENSIONS

MAX REEL DIAMETER	1900 mm
MAX REEL WIDTH	1100 mm
MAX REEL WEIGHT	3500 kg

TENSION PERFORMANCES

TOTAL FORCE	30 kN
MAX SPEED	5 km/h

RECOVERY PERFORMANCES

TOTAL FORCE	30 kN
MAX SPEED	1,5 km/h

ENGINE

TYPE	Diesel
POWER	36 kW (49 Hp)
COOLING	Water
VOLTAGE	24 V

UNIT WEIGHT

WEIGHT	7500 kg
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UNIT DIMENSIONS

LENGTH	6500 mm
WIDTH	2250 mm
HEIGHT	2300 mm

Performances of the machine without optional devices, at sea level and temperature 20°C.
Dimensions and weights are without optional devices. All data may change without notice. Images and drawings are indicative only.





OPTIONAL DEVICES

BULL-WHEELS GROUP

045.2.1	Automatic hydraulic presser-rollers on the bull-wheel grooves
045.3.1	Manual presser-rollers on the bull-wheel grooves
118.1	Bi-Directionality: Hydraulic tensioning circuits suitable to tension in both directions
114.1	Electronic stringing force reading system, tensioning precision $\pm 1\%$ - $\pm 5\%$ on the full-scale value
020.1	Extra numbers of grooves for the circuit (since 10 grooves)
142.1	Device to complete stringing operation also in case of diesel engine breakdown, with freewheel bull wheels
143.1	Mandatory opt. 142.1, allows to complete stringing operation with about 500 daN wire tensioning force
160	Compensator device to keep in tension the last lenght of the cable by means of winch with 60 m of cable
136	Service auxiliary large grove hydraulic winch fed by the hydraulic circuit of the machine, max pull 1,5 ton or 3 ton, capacity 80 m of rope 12 mm

TAIL STOCK REEL STAND

455	Automatic translation of the reel-stand, for reducing the angle of the cable from the reel to the bull wheels
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HYDRAULIC GROUP AND DIESEL ENGINE

A.RIG.	Engine with self-automatic regeneration of exhaust system DPF – Stage V
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CAB AND CONTROL PANEL

107 + 107.1	GPS connection system for remote check-up of the machine
108	Air conditioner in the cab
108.1	Heating system for the cab
108.2	Air condition and heating system for the cab

TELESCOPIC MAT AND MAST

207.2	Telescopic arm with guide rollers. Closed height: 2.230 mm, extension 1.200 mm from the base platform
131.1	Main guiding telescopic and swinging mast with nylon rollers for (1) wire. Closed height: 2.480 mm, open height: 5.250 mm (from the base platform). Swinging from the centre of rail +/- 500 mm
131.7	Telescopic Portal Mast with of two (2) cylinders and two (2) horizontal rollers. Height all closed 2.600 mm, height all open 4.100 mm (from the base of platform)
038.9.A1	Radio remote control for the Telescopic Mast operations with 10 meters back up cable

OTHER OPTIONS

052.2	Light System fit for Night-Work
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Performances of the machine without optional devices, at sea level and temperature 20°C.
Dimensions and weights are without optional devices. All data may change without notice. Images and drawings are indicative only.



CTV40.2

MAX STRINGING FORCE 40 KN

Constant tensioning/recovering unit suitable to install 2 (two) suspension/contact wires simultaneously or independently with 2 (two) hydraulic circuits, equipped with 2 (two) tail stock reel stands.



MAX PULL
40 kN



MAX SPEED
5 km/h



TAIL-STOCK REEL-STAND
2 x 2200 kg



BULL-WHEELS
2 x 1300 mm



REEL DIMENSIONS

MAX REEL DIAMETER	1600 mm
MAX REEL WIDTH	1100 mm
MAX REEL WEIGHT	2200 kg

TENSION PERFORMANCES

TOTAL FORCE	40 kN = 20 + 20 kN
MAX SPEED	5 km/h

RECOVERY PERFORMANCES

TOTAL FORCE	40 kN = 20 + 20 kN
MAX SPEED	1,5 km/h

ENGINE

TYPE	Diesel
POWER	36 kW (49 Hp)
COOLING	Water
VOLTAGE	24 V

UNIT WEIGHT

WEIGHT	7400 kg
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UNIT DIMENSIONS

LENGTH	7100 mm
WIDTH	2450 mm
HEIGHT	2700 mm

Performances of the machine without optional devices, at sea level and temperature 20°C.
Dimensions and weights are without optional devices. All data may change without notice. Images and drawings are indicative only.





OPTIONAL DEVICES

BULL-WHEELS GROUP

045.2.2	Automatic hydraulic presser-rollers on the bull-wheel grooves
045.3.2	Manual presser-rollers on the bull-wheel grooves
118.2	Bi-Directionality: Hydraulic tensioning circuits suitable to tension in both directions
114.2	Electronic stringing force reading system, tensioning precision $\pm 1\%$ - $\pm 5\%$ on the full-scale value
142.2	Device to complete stringing operation also in case of diesel engine breakdown, with freewheel bull wheels
143.2	Mandatory opt. 142.1, allows to complete stringing operation with about 500 daN wire tensioning force
160.2	Compensator device to keep in tension the last lenght of the cable by means of winch with 60 m of cable

TAIL STOCK REEL STAND

455	Automatic translation of the reel-stand, for reducing the angle of the cable from the reel to the bull wheels
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HYDRAULIC GROUP AND DIESEL ENGINE

A.RIG.	Engine with self-automatic regeneration of exhaust system DPF – Stage V
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CAB AND CONTROL PANEL

107 + 107.1	GPS connection system for remote check-up of the machine
108	Air conditioner in the cab
108.1	Heating system for the cab
108.2	Air condition and heating system for the cab
038	Radio remote control for all the main function of the tensioning system (max 50 m)
CAB2	2.000 mm cab length (Alternative to standard 1.400 mm cab)
CAB3	2.400 mm cab length (Alternative to standard 1.400 mm cab)

TELESCOPIC MAT AND MAST

207.2	Telescopic arm with guide rollers. Closed height: 2.230 mm, extension 1.200 mm from the base platform
131.1	Main guiding telescopic and swinging mast with nylon rollers for (1) wire. Closed height: 2.480 mm, open height: 5.250 mm (from the base platform). Swinging from the centre of rail +/- 500 mm
131.5	Extension 1.375 mm, for opt 131.1 with guide rollers for 1 wire/cable, height all open 6.625 mm. Swinging from the centre +/- 800 mm
131.1.2	Main guiding telescopic and swinging mast with nylon rollers for (2) wires. Closed height: 2.480 mm, open height: 5.250 mm (from the base platform). Swinging from the centre of rail +/- 500 mm
131.5.2	Extension with guide roller for two (2) wire/cable, 1.375 mm for the opt. 131.1.2: total height all open 6.625 mm (mandatory 131.1.2) Swinging from the centre +/- 800 mm, suitable for two groups working
131.7	Telescopic Portal Mast with of two (2) cylinders and two (2) horizontal rollers. Height all closed 2.600 mm, height all open 4.100 mm (from the base of platform)
038.9.A1	Radio remote control for the Telescopic Mast operations with 10 meters back up cable

OTHER OPTIONS

052.2	Light System fit for Night-Work
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Performances of the machine without optional devices, at sea level and temperature 20°C.
Dimensions and weights are without optional devices. All data may change without notice. Images and drawings are indicative only.



CT40.2

MAX STRINGING FORCE 40 KN

Constant tensioning/recovering unit suitable to install 2 (two) suspension/contact wires simultaneously or independently with 2 (two) hydraulic circuits, equipped with 2 (two) tail stock reel stands.



MAX PULL
40 kN



MAX SPEED
5 km/h



TAIL-STOCK REEL-STAND
2 x 3500 kg



BULL-WHEELS
2 x 1500 mm



REEL DIMENSIONS

MAX REEL DIAMETER	1900 mm
MAX REEL WIDTH	1100 mm
MAX REEL WEIGHT	3500 kg

TENSION PERFORMANCES

TOTAL FORCE	40 kN = 20 + 20 kN
MAX SPEED	5 km/h

RECOVERY PERFORMANCES

TOTAL FORCE	40 kN = 20 + 20 kN
MAX SPEED	1,5 km/h

ENGINE

TYPE	Diesel
POWER	36 kW (49 Hp)
COOLING	Water
VOLTAGE	24 V

UNIT WEIGHT

WEIGHT	10500 kg
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UNIT DIMENSIONS

LENGTH	8550 mm
WIDTH	2450 mm
HEIGHT	2600 mm

Performances of the machine without optional devices, at sea level and temperature 20°C.
Dimensions and weights are without optional devices. All data may change without notice. Images and drawings are indicative only.





BULL-WHEELS CATENARY WIRING SYSTEM

OPTIONAL DEVICES

BULL-WHEELS GROUP

045.2.2	Automatic hydraulic presser-rollers on the bull-wheel grooves
045.3.2	Manual presser-rollers on the bull-wheel grooves
118.2	Bi-Directionality: Hydraulic tensioning circuits suitable to tension in both directions
114.2	Electronic stringing force reading system, tensioning precision $\pm 1\%$ - $\pm 5\%$ on the full-scale value
142.2	Device to complete stringing operation also in case of diesel engine breakdown, with freewheel bull wheels
143.2	Mandatory opt. 142.1, allows to complete stringing operation with about 500 daN wire tensioning force
160.2	Compensator device to keep in tension the last lenght of the cable by means of winch with 60 m of cable

TAIL STOCK REEL STAND

455	Automatic translation of the reel-stand, for reducing the angle of the cable from the reel to the bull wheels
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HYDRAULIC GROUP AND DIESEL ENGINE

A.RIG.	Engine with self-automatic regeneration of exhaust system DPF – Stage V
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CAB AND CONTROL PANEL

107 + 107.1	GPS connection system for remote check-up of the machine
108	Air conditioner in the cab
108.1	Heating system for the cab
108.2	Air condition and heating system for the cab
038	Radio remote control for all the main function of the tensioning system (max 50 m)
CAB2	2.000 mm cab length (Alternative to standard 1.400 mm cab)
CAB3	2.400 mm cab length (Alternative to standard 1.400 mm cab)

TELESCOPIC MAT AND MAST

207.2	Telescopic arm with guide rollers. Closed height: 2.230 mm, extension 1.200 mm from the base platform
131.1	Main guiding telescopic and swinging mast with nylon rollers for (1) wire. Closed height: 2.480 mm, open height: 5.250 mm (from the base platform). Swinging from the centre of rail +/- 500 mm
131.5	Extension 1.375 mm, for opt 131.1 with guide rollers for 1 wire/cable, height all open 6.625 mm. Swinging from the centre +/- 800 mm
131.1.2	Main guiding telescopic and swinging mast with nylon rollers for (2) wires. Closed height: 2.480 mm, open height: 5.250 mm (from the base platform). Swinging from the centre of rail +/- 500 mm
131.5.2	Extension with guide roller for two (2) wire/cable, 1.375 mm for the opt. 131.1.2: total height all open 6.625 mm (mandatory 131.1.2) Swinging from the centre +/- 800 mm, suitable for two groups working
131.7	Telescopic Portal Mast with of two (2) cylinders and two (2) horizontal rollers. Height all closed 2.600 mm, height all open 4.100 mm (from the base of platform)
038.9.A1	Radio remote control for the Telescopic Mast operations with 10 meters back up cable

OTHER OPTIONS

052.2	Light System fit for Night-Work
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Performances of the machine without optional devices, at sea level and temperature 20°C.
Dimensions and weights are without optional devices. All data may change without notice. Images and drawings are indicative only.



CT60.15.3

MAX STRINGING FORCE 60 kN - MAX RECOVERY FORCE 15 kN

Constant tensioning/recovering unit suitable to install 2 (two) suspension or contact wire simultaneously or independently and 1 (one) motorized reel stand for recovering simultaneously old wires.



MAX PULL
60 + 15 kN



MAX SPEED
5 km/h



TAIL-STOCK REEL-STAND
2 x 3500 kg - 1 x 5000 kg



BULL-WHEELS
2 x 1500 mm



REEL DIMENSIONS

MAX REEL DIAMETER	1900 mm
MAX REEL WIDTH	1100 mm
MAX REEL WEIGHT	3500 kg

TENSION PERFORMANCES

TOTAL FORCE	60 kN = 30 x 30 kN
MAX SPEED	5 km/h

RECOVERY PERFORMANCES

TOTAL FORCE	15 kN
MAX SPEED	3 km/h

ENGINE

TYPE	Diesel
POWER	75 kW (105 Hp)
COOLING	Water
VOLTAGE	24 V

UNIT WEIGHT

WEIGHT	18000 kg
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UNIT DIMENSIONS

LENGTH	12600 mm
WIDTH	2450 mm
HEIGHT	2600 mm

Performances of the machine without optional devices, at sea level and temperature 20°C.
Dimensions and weights are without optional devices. All data may change without notice. Images and drawings are indicative only.





OPTIONAL DEVICES

BULL-WHEELS GROUP

045.2.2	Automatic hydraulic presser-rollers on the bull-wheel grooves
045.3.2	Manual presser-rollers on the bull-wheel grooves
118.2	Bi-Directionality: Hydraulic tensioning circuits suitable to tension in both directions
114.2	Electronic stringing force reading system, tensioning precision $\pm 1\%$ - $\pm 5\%$ on the full-scale value
142.2	Device to complete stringing operation also in case of diesel engine breakdown, with freewheel bull wheels
143.2	Mandatory opt. 142.2, allows to complete stringing operation with about 500 daN wire tensioning force
160.2	Compensator device to keep in tension the last lenght of the cable by means of winch with 60 m of cable

TAIL STOCK REEL STAND

455	Automatic translation of the reel-stand, for reducing the angle of the cable from the reel to the bull wheels
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HYDRAULIC GROUP AND DIESEL ENGINE

A.RIG.	Engine with self-automatic regeneration of exhaust system DPF – Stage V
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CAB AND CONTROL PANEL

107 + 107.1	GPS transmission system for remote check-up of the machine
108	Air conditioner in the cab
108.1	Heating system for the cab
108.2	Air condition and heating system for the cab
038	Radio remote control for all the main function of the tensioning system (max 50 m)
CAB2	2.000 mm cab length (Alternative to standard 1.400 mm cab)
CAB3	2.400 mm cab length (Alternative to standard 1.400 mm cab)

TELESCOPIC MAT AND MAST

207.2	Telescopic arm with guide rollers. Closed height: 2.230 mm, extension 1.200 mm from the base platform
131.1	Main guiding telescopic and swinging mast with nylon rollers for (1) wire. Closed height: 2.480 mm, open height: 5.250 mm (from the base platform). Swinging from the centre of rail +/- 500 mm
131.1.2	Main guiding telescopic and swinging mast with nylon rollers for (2) wires. Closed height: 2.480 mm, open height: 5.250 mm (from the base platform). Swinging from the centre of rail +/- 500 mm
131.5	Extension 1.375 mm, for opt 131.1 with guide rollers for 1 wire/cable, height all open 6.625 mm. Swinging from the centre +/- 800 mm
131.5.2	Extension with guide roller for two (2) wire/cable, 1.375 mm for the opt. 131.1.2: total height all open 6.625 mm (mandatory 131.1.2) Swinging from the centre +/- 800 mm, suitable for two groups working
131.7	Telescopic Portal Mast with of two (2) cylinders and two (2) horizontal rollers. Height all closed 2.600 mm, height all open 4.100 mm (from the base of platform)
038.9.A1	Radio remote control for the Telescopic Mast operations with 10 meters back up cable

OTHER OPTIONS

052.2	Light System fit for Night-Work
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Performances of the machine without optional devices, at sea level and temperature 20°C.
Dimensions and weights are without optional devices. All data may change without notice. Images and drawings are indicative only.



CT60.2

MAX STRINGING FORCE 6 0 KN

Constant tensioning/recovering unit suitable to install 2 (two) suspension/contact wires simultaneously or independently with 2 (two) hydraulic circuits, equipped with 2 (two) tail stock-reel stands.



MAX PULL
60 kN



MAX SPEED
5 km/h



TAIL-STOCK REEL-STAND
2 x 3500 kg



BULL-WHEELS
2 x 1500 mm



REEL DIMENSIONS

MAX REEL DIAMETER	1900 mm
MAX REEL WIDTH	1100 mm
MAX REEL WEIGHT	3500 kg

TENSION PERFORMANCES

TOTAL FORCE	60 kN = 30 + 30 kN
MAX SPEED	5 km/h

RECOVERY PERFORMANCES

TOTAL FORCE	60 kN = 30 + 30 kN
MAX SPEED	1,5 km/h

ENGINE

TYPE	Diesel
POWER	55 kW (75 Hp)
COOLING	Water
VOLTAGE	24 V

UNIT WEIGHT

WEIGHT	11500 kg
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UNIT DIMENSIONS

LENGTH	8550 mm
WIDTH	2450 mm
HEIGHT	2600 mm

Performances of the machine without optional devices, at sea level and temperature 20°C.
Dimensions and weights are without optional devices. All data may change without notice. Images and drawings are indicative only.





OPTIONAL DEVICES

BULL-WHEELS GROUP

045.2.2	Automatic hydraulic presser-rollers on the bull-wheels grooves
045.3.2	Manual presser-rollers on the bull-wheels grooves
118.2	Bi-Directionality: Hydraulic tensioning circuits suitable to tension in both directions
114.2	Electronic stringing force reading system, tensioning precision $\pm 1\%$ - $\pm 5\%$ on the full-scale value
142.2	Device to complete stringing operation also in case of diesel engine breakdown, with freewheel bull wheels
143.2	Mandatory opt. 142.1, allows to complete stringing operation with about 500 daN wire tensioning force
160.2	Compensator device to keep in tension the last lenght of the cable by means of winch with 60 m of cable

TAIL STOCK REEL STAND

455	Automatic translation of the reel-stand, for reducing the angle of the cable from the reel to the bull wheels
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HYDRAULIC GROUP AND DIESEL ENGINE

A.RIG.	Engine with self-automatic regeneration of exhaust system DPF – Stage V
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CAB AND CONTROL PANEL

107 + 107.1	GPS connection system for remote check-up of the machine
108	Air conditioner in the cab
108.1	Heating system for the cab
108.2	Air condition and heating system for the cab
038	Radio remote control for all the main function of the tensioning system (max 50 m)
CAB2	2.000 mm cab length (Alternative to standard 1.400 mm cab)
CAB3	2.400 mm cab length (Alternative to standard 1.400 mm cab)

TELESCOPIC MAT AND MAST

207.2	Telescopic arm with guide rollers. Closed height: 2.230 mm, extension 1.200 mm from the base platform
131.1	Main guiding telescopic and swinging mast with nylon rollers for (1) wire. Closed height: 2.480 mm, open height: 5.250 mm (from the base platform). Swinging from the centre of rail +/- 500 mm
131.5	Extension 1.375 mm, for opt 131.1 with guide rollers for 1 wire/cable, height all open 6.625 mm. Swinging from the centre +/- 800 mm
131.1.2	Main guiding telescopic and swinging mast with nylon rollers for (2) wires. Closed height: 2.480 mm, open height: 5.250 mm (from the base platform). Swinging from the centre of rail +/- 500 mm
131.5.2	Extension with guide roller for two (2) wire/cable, 1.375 mm for the opt. 131.1.2: total height all open 6.625 mm (mandatory 131.1.2) Swinging from the centre +/- 800 mm, suitable for two groups working
131.7	Telescopic Portal Mast with of two (2) cylinders and two (2) horizontal rollers. Height all closed 2.600 mm, height all open 4.100 mm (from the base of platform)
038.9.A1	Radio remote control for the Telescopic Mast operations with 10 meters back up cable

OTHER OPTIONS

052.2	Light System fit for Night-Work
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Performances of the machine without optional devices, at sea level and temperature 20°C.
Dimensions and weights are without optional devices. All data may change without notice. Images and drawings are indicative only.



CT60.4

MAX STRINGING FORCE 6 0 KN

Constant tensioning/recovering unit suitable to install 2 (two) suspension/contact wires simultaneously or independently with 2 (two) hydraulic circuits, equipped with 4 (four) tail stock reel stands.



MAX PULL
60 kN



MAX SPEED
5 km/h



TAIL-STOCK REEL-STAND
4 x 3500 kg



BULL-WHEELS
2 x 1500 mm



REEL DIMENSIONS

MAX REEL DIAMETER	1900 mm
MAX REEL WIDTH	1100 mm
MAX REEL WEIGHT	3500 kg

TENSION PERFORMANCES

TOTAL FORCE	60 kN = 30 + 30 kN
MAX SPEED	5 km/h

RECOVERY PERFORMANCES

TOTAL FORCE	60 kN = 30 + 30 kN
MAX SPEED	1,5 km/h

ENGINE

TYPE	Diesel
POWER	55 kW (75 Hp)
COOLING	Water
VOLTAGE	24 V

UNIT WEIGHT

WEIGHT	18000 kg
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UNIT DIMENSIONS

LENGTH	13700 mm
WIDTH	2450 mm
HEIGHT	2600 mm

Performances of the machine without optional devices, at sea level and temperature 20°C.
Dimensions and weights are without optional devices. All data may change without notice. Images and drawings are indicative only.





BULL-WHEELS CATENARY WIRING SYSTEM

OPTIONAL DEVICES

BULL-WHEELS GROUP

045.2.2	Automatic hydraulic presser-rollers on the bull-wheel grooves
045.3.2	Manual presser-rollers on the bull-wheel grooves
118.2	Bi-Directionality: Hydraulic tensioning circuits suitable to tension in both directions
114.2	Electronic stringing force reading system, tensioning precision $\pm 1\%$ - $\pm 5\%$ on the full-scale value
142.2	Device to complete stringing operation also in case of diesel engine breakdown, with freewheel bull wheels
143.2	Mandatory opt. 142.2, allows to complete stringing operation with about 500 daN wire tensioning force
160.2	Compensator device to keep in tension the last length of the cable by means of a winch with 60 m of wire Rope. (bidirectionality – opt. 118.2 – possible to install two opt 160.2 for each extremity of the group)

TAIL STOCK REEL STAND

455	Automatic translation of the reel-stand, for reducing the angle of the cable from the reel to the bull wheels
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HYDRAULIC GROUP AND DIESEL ENGINE

A.RIG.	Engine with self-automatic regeneration of exhaust system DPF – Stage V
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CAB AND CONTROL PANEL

107 + 107.1	GPS connection system for remote check-up of the machine
108	Air conditioner in the cab
108.1	Heating system for the cab
108.2	Air condition and heating system for the cab
038	Radio remote control for all the main function of the tensioning system (max 50 m)
CAB2	2.000 mm cab length (Alternative to standard 1.400 mm cab)
CAB3	2.400 mm cab length (Alternative to standard 1.400 mm cab)

TELESCOPIC MAT AND MAST

207.2	Telescopic arm with guide rollers. Closed height: 2.230 mm, extension 1.200 mm from the base platform
131.1	Main guiding telescopic and swinging mast with nylon rollers for (1) wire. Closed height: 2.480 mm, open height: 5.250 mm (from the base platform). Swinging from the centre of rail +/- 500 mm
131.5	Extension 1.375 mm, for opt 131.1 with guide rollers for 1 wire/cable, height all open 6.625 mm. Swinging from the centre +/- 800 mm
131.1.2	Main guiding telescopic and swinging mast with nylon rollers for (2) wires. Closed height: 2.480 mm, open height: 5.250 mm (from the base platform). Swinging from the centre of rail +/- 500 mm
131.5.2	Extension with guide roller for two (2) wire/cable, 1.375 mm for the opt. 131.1.2: total height all open 6.625 mm (mandatory 131.1.2) Swinging from the centre +/- 800 mm, suitable for two groups working
131.7	Telescopic Portal Mast with of two (2) cylinders and two (2) horizontal rollers. Height all closed 2.600 mm, height all open 4.100 mm (from the base of platform)
038.9.A1	Radio remote control for the Telescopic Mast operations with 10 meters back up cable

OTHER OPTIONS

052.2	Light System fit for Night-Work
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Performances of the machine without optional devices, at sea level and temperature 20°C.
Dimensions and weights are without optional devices. All data may change without notice. Images and drawings are indicative only.



CT90.3

MAX STRINGING FORCE 90 KN

Constant tensioning/recovering unit suitable to install 3 (three) suspension/contact wires simultaneously or independently with 3 (three) hydraulic circuits, equipped with 3 (three) tail stock reel stands.



MAX PULL
90 kN



MAX SPEED
5 km/h



TAIL-STOCK REEL-STAND
3 x 3500 kg



BULL-WHEELS
2 x 1500 mm



REEL DIMENSIONS

MAX REEL DIAMETER	1900 mm
MAX REEL WIDTH	1100 mm
MAX REEL WEIGHT	3500 kg

TENSION PERFORMANCES

TOTAL FORCE	90 kN = 30 + 30 + 30 kN
MAX SPEED	5 km/h

RECOVERY PERFORMANCES

TOTAL FORCE	90 kN = 30 + 30 + 30 kN
MAX SPEED	1,5 km/h

ENGINE

TYPE	Diesel
POWER	75 kW (102 Hp)
COOLING	Water
VOLTAGE	24 V

UNIT WEIGHT

WEIGHT	15000 kg
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UNIT DIMENSIONS

LENGTH	14000 mm
WIDTH	2450 mm
HEIGHT	2600 mm

Performances of the machine without optional devices, at sea level and temperature 20°C.
Dimensions and weights are without optional devices. All data may change without notice. Images and drawings are indicative only.



OPTIONAL DEVICES

BULL-WHEELS GROUP

045.2.2	Automatic hydraulic presser-rollers on the bull-wheel grooves
045.3.2	Manual presser-rollers on the bull-wheel grooves
118.3	Bi-Directionality: Hydraulic tensioning circuits suitable to tension in both directions
114.3	Electronic stringing force reading system, tensioning precision $\pm 1\%$ - $\pm 5\%$ on the full-scale value
142.3	Device to complete stringing operation also in case of diesel engine breakdown, with freewheel bull wheels
143.3	Mandatory opt. 142.3, allows to complete stringing operation with about 500 daN wire tensioning force
160.3	Compensator device to keep in tension the last lenght of the cable by means of winch with 60 m of cable

TAIL STOCK REEL STAND

455	Automatic translation of the reel-stand, for reducing the angle of the cable from the reel to the bull wheels
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HYDRAULIC GROUP AND DIESEL ENGINE

A.RIG.	Engine with self-automatic regeneration of exhaust system DPF – Stage V
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CAB AND CONTROL PANEL

107 + 107.1	GPS connection system for remote check-up of the machine
108	Air conditioner in the cab
108.1	Heating system for the cab
108.2	Air condition and heating system for the cab
038	Radio remote control for all the main function of the tensioning system (max 50 m)
CAB2	2.000 mm cab length (Alternative to standard 1.400 mm cab)
CAB3	2.400 mm cab length (Alternative to standard 1.400 mm cab)

TELESCOPIC MAT AND MAST

207.2	Telescopic arm with guide rollers. Closed height: 2.230 mm, extension 1.200 mm from the base platform
131.1.2	Main guiding telescopic and swinging mast with nylon rollers for (2) wires. Closed height: 2.480 mm, open height: 5.250 mm (from the base platform). Swinging from the centre of rail +/- 500 mm
131.5	Extension with guide roller for 1 wire/cable, 1.375 mm for the opt. 131.1.2: total height all open 6.625 mm (mandatory 131.1.2) Swinging from the centre +/- 800 mm
131.7	Telescopic Portal Mast with of two (2) cylinders and two (2) horizontal rollers. Height all closed 2.600 mm, height all open 4.100 mm (from the base of platform)
038.9.A1	Radio remote control for the Telescopic Mast operations with 10 meters back up cable

OTHER OPTIONS

052.2	Light System fit for Night-Work
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Performances of the machine without optional devices, at sea level and temperature 20°C.
Dimensions and weights are without optional devices. All data may change without notice. Images and drawings are indicative only.



CT120.4

MAX STRINGING FORCE 120 KN

Constant tensioning/recovering unit suitable to install 4 (four) suspension/contact wires simultaneously or independently with 4 (four) hydraulic circuits, equipped with 4 (four) tail stock reel stands.



MAX PULL
120 kN



MAX SPEED
5 km/h



TAIL-STOCK REEL-STAND
4 x 3500 kg



BULL-WHEELS
2 x 1500 mm



REEL DIMENSIONS

MAX REEL DIAMETER	1900 mm
MAX REEL WIDTH	1100 mm
MAX REEL WEIGHT	3500 kg

TENSION PERFORMANCES

TOTAL FORCE	120 kN = 4 x 30 kN
MAX SPEED	5 km/h

RECOVERY PERFORMANCES

TOTAL FORCE	120 kN = 4 x 30 kN
MAX SPEED	1,5 km/h

ENGINE

TYPE	Diesel
POWER	105 kW (143 Hp)
COOLING	Water
VOLTAGE	24 V

UNIT WEIGHT

WEIGHT	21000 kg
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UNIT DIMENSIONS

LENGTH	18000 mm
WIDTH	2450 mm
HEIGHT	2400 mm

Performances of the machine without optional devices, at sea level and temperature 20°C.
Dimensions and weights are without optional devices. All data may change without notice. Images and drawings are indicative only.



BULL-WHEELS CATENARY WIRING SYSTEM

OPTIONAL DEVICES

BULL-WHEELS GROUP

045.2.2	Automatic hydraulic presser-rollers on the bull-wheel grooves
045.3.2	Manual presser-rollers on the bull-wheel grooves
118.4	Bi-Directionality: Hydraulic tensioning circuits suitable to tension in both directions
114.4	Electronic stringing force reading system, tensioning precision $\pm 1\%$ - $\pm 5\%$ on the full-scale value
142.4	Device to complete stringing operation also in case of diesel engine breakdown, with freewheel bull wheels
143.4	Mandatory opt. 142.4, allows to complete stringing operation with about 500 daN wire tensioning force
160.4	Compensator device to keep in tension the last lenght of the cable by means of winch with 60 m of cable

TAIL STOCK REEL STAND

455	Automatic translation of the reel-stand, for reducing the angle of the cable from the reel to the bull wheels
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HYDRAULIC GROUP AND DIESEL ENGINE

A.RIG.	Engine with self-automatic regeneration of exhaust system DPF – Stage V
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CAB AND CONTROL PANEL

107 + 107.1	GPS connection system for remote check-up of the machine
108	Air conditioner in the cab
108.1	Heating system for the cab
108.2	Air condition and heating system for the cab
038	Radio remote control for all the main function of the tensioning system (max 50 m)
CAB2	2.000 mm cab length (Alternative to standard 1.400 mm cab)
CAB3	2.400 mm cab length (Alternative to standard 1.400 mm cab)

TELESCOPIC MAT AND MAST

207.2	Telescopic arm with guide rollers. Closed height: 2.230 mm, extension 1.200 mm from the base platform
131.1.2	Main guiding telescopic and swinging mast with nylon rollers for (2) wires. Closed height: 2.480 mm, open height: 5.250 mm (from the base platform). Swinging from the centre of rail +/- 500 mm
131.5.2	Extension with guide roller for two (2) wire/cable, 1.375 mm for the opt. 131.1.2: total height all open 6.625 mm (mandatory 131.1.2) Swinging from the centre +/- 800 mm, suitable for two groups working
131.7	Telescopic Portal Mast with of two (2) cylinders and two (2) horizontal rollers. Height all closed 2.600 mm, height all open 4.100 mm (from the base of platform)
038.9.A1	Radio remote control for the Telescopic Mast operations with 10 meters back up cable

OTHER OPTIONS

052.2	Light System fit for Night-Work
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Performances of the machine without optional devices, at sea level and temperature 20°C.
Dimensions and weights are without optional devices. All data may change without notice. Images and drawings are indicative only.





COMPLEMENTARY EQUIPMENT



COMPLEMENTARY EQUIPMENT

OMAC is able to supply a wide range of accessories and complementary equipment to support the use of our railway stringing machines, helping to simplify and optimize operations during catenary installation projects.

Our range of equipment includes pulleys, self-gripping clamps, hoists, cable socks, and control instruments such as our digital dynamometer.

Additionally, we provide pantograph and mast models with extensions, designed to meet the specific needs of the job site and project requirements of all our clients.



Performances of the machine without optional devices, at sea level and temperature 20°C.
Dimensions and weights are without optional devices. All data may change without notice. Images and drawings are indicative only.

MAST 131.6

Mast for wire management during installation, equipped with 6 horizontal nylon rollers and 4 vertical nylon rollers to guide a single wire. Specifically used for recovery operations of the existing cable.



MAST DIMENSIONS

HEIGHT (closed)	2655 mm
HEIGHT (open)	3450 mm
TILTING	± 400 mm

CONFIGURATION

- Main structure made of galvanized steel complete with base-frame for the attachments for the mast
- Mast equipped with sensors to ensure the correct tilting and the correct deployment of the mast during the transport to increase safety onsite and during the transport
- Mast supplied also as a stand-alone machine complete with its own electrical panel, hydraulic system, control valves, and base frame
- Mast equipped with nylon guide rollers to ensure smooth sliding of the cable/contact wire

OPTIONAL DEVICES

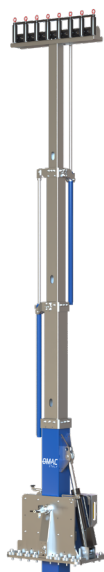
- QE** Electric power supply (12 or 24 Vdc), supplied by the customer. (please confirm 12 or 24 Vdc)
- MO** Electro-Hydraulic control valve complete with hoses. Feeding Pump and Electric Control Unit - Not included
- 131.4** Base frame for MAST Dimensions to be specify .
Max Width 2000/2300 mm
Max Length 1300/1500 mm
- 093.2** Protective barriers
- 038.9.A.1** Radio remote control for telescopic mast operations with 10 meters back up cable
- 037** Remote control by cable, with 10 m of cable

Performances of the machine without optional devices, at sea level and temperature 20°C.
Dimensions and weights are without optional devices. All data may change without notice. Images and drawings are indicative only.



MAST 131.7

Mast to manage wires during installation operation, equipped with “T” bar guiding rollers (n.1 horizontal nylon roller and n.8 vertical nylon rollers) to manage up to 7 wires.



MAST DIMENSIONS

HEIGHT

min 2055 - max 5661 mm

CONFIGURATION

- Tilting range from ± 400 mm to ± 2000 mm
- The unit can cover a tilting angle of $\pm 30^\circ$
- Main structure made of galvanized steel complete with base-frame for the attachments for the mast
- Mast equipped with sensors to ensure the correct tilting and the correct deployment of the mast during the transport to increase safety onsite
- Mast supplied also as a stand-alone machine complete with its own electrical panel, hydraulic system, control valves, and base frame
- Mast equipped with nylon rollers to ensure smooth sliding of the cable/contact wire

OPTIONAL DEVICES

- QE** Electric power supply (12 or 24 Vdc), supplied by the customer. (please confirm 12 or 24 Vdc)
- MO** Electro-Hydraulic control valve complete with hoses. Feeding Pump and Electric Control Unit - Not included
- 131.4** Base frame for MAST Dimensions to be specify .
Max Width 2000/2300 mm
Max Length 1300/1500 mm
- 093.2** Protective barriers
- 038.9.A.1** Radio remote control for telescopic mast operations with 10 meters back up cable
- 037** Remote control by cable, with 10 m of cable

Performances of the machine without optional devices, at sea level and temperature 20°C.
Dimensions and weights are without optional devices. All data may change without notice. Images and drawings are indicative only.

MAST 131.1.X - 131.5.X

Mast for the installation of contact wires, with an extension for installing the catenary wire to help reach the desired height during setup. Available in different heights.



MAST DIMENSIONS

	HEIGHT*
131.1.X	4900 - 5300 - 6000 - 7000 mm
131.5.X	1200 - 1500 - 1800 mm

* From the height of our platform/machine

CONFIGURATION

- Tilting range from ± 400 mm to ± 2000 mm
- Main structure made of galvanized steel complete with base-frame for the attachments for the mast
- Mast equipped with sensors to ensure the correct tilting and the correct deployment of the mast during the transport to increase safety onsite
- The Mast can be supplied as a stand-alone machine complete with its own electrical panel, hydraulic system, control valves, and base frame
- Mast equipped with nylon rollers to ensure smooth sliding of the cable/contact wire

OPTIONAL DEVICES

- QE** Electric power supply (12 or 24 Vdc), supplied by the customer. (please confirm 12 or 24 Vdc)
- MO** Electro-Hydraulic control valve complete with hoses. Feeding Pump and Electric Control Unit - Not included
- 131.4** Base frame for MAST Dimensions to be specify .
Max Width 2000/2300 mm
Max Length 1300/1500 mm
- 093.2** Protective barriers
- 038.9.A.1** Radio remote control for telescopic mast operations with 10 meters back up cable
- 037** Remote control by cable, with 10 m of cable

Performances of the machine without optional devices, at sea level and temperature 20°C.
Dimensions and weights are without optional devices. All data may change without notice. Images and drawings are indicative only.

PANT.195.E

The measuring pantograph is designed to provide the measurement of the interaction forces and vertical accelerations while constantly monitoring height and stagger of the catenary wire. The pantograph can also work in sync with other catenary measurement systems.



PANTOGRAPH DIMENSIONS

LENGTH	410 mm
HEIGHT	320 mm
TOTAL WIDTH	1950 mm
CARBON PADS WIDTH	1020 mm
WEIGHT	20 kg
PITCH OR SPACING OF CARBON PADS	330 mm

CONFIGURATION

- Main structure made of aluminum, complete with sensors and support for attachments of the mast
- Contact wire/cable sliding areas equipped with white or black polyamide pads
- Includes pantograph support with mounting bracket for fastening on the mast crossbar, model F195.15.140.EP, suitable for installing zig-zag wire control sensors
- Electro-hydraulically operated and powered by the customer's vehicle
- Main fixed structure made of 150 mm section tube, height 1800 mm, equipped with a 690x160 mm base plate with holes suitable for fastening to the customer's vehicle platform
- First shaft: 125 mm section, 1400 mm stroke
- Second shaft: 50 mm section, 1025 mm stroke, equipped with a crossbar suitable for pantograph attachment



MAST DIMENSIONS

MAX HEIGHT FROM RAIL LEVEL (FULLY EXTENDED)	5800 mm*
MIN HEIGHT FROM RAIL LEVEL (FULLY RETRACTED)	3375 mm*
FLOOR HEIGHT FROM RAIL	1200 mm
COUNTERWEIGHT CONTACT FORCE ON PANTOGRAPH	da 5 a 20 daN
CYLINDER PUSHING FORCE	100 kg

* (5800 - 1200 = 4600 mm from vehicle floor; reaches 4700 mm)
* (3375 - 1200 = 2175 mm from vehicle floor)

OPTIONAL DEVICES

- CARB.P** Carbon plate pair designed to enhance linear sliding velocity over the contact wire, allowing operation at speeds greater than 20 km/h
- DY.EN** Contact wire height display device, equipped with a large-size display for easy reading even from a distance. The system integrates an SIPI SE 308-G series electronic weighing unit and a socket for remote connection of function buttons, which can also be operated via infrared remote control. Supplied complete with wire-actuated linear encoder
- SENS.ZIG** Device with linear sensors designed to detect the stagger (zig-zag) of the contact wire as it slides over the nylon or carbon (Carbon Plate) collector strips of the pantograph. The system consists of 8 Balluff sensors, pre-wired to a connector that allows the customer to connect a cable for data transmission to a PC or other acquisition and recording systems
- DEG.PANT** Display unit for visualization, recording, and storage of the measurements acquired by the previously described sensors, with data downloadable to a removable SD card. The device is designed for direct installation into the customer's machine panel or, upon request, can be supplied in a stainless steel enclosure with door, equipped with a socket for connection to a 10-meter cable

Performances of the machine without optional devices, at sea level and temperature 20°C.
Dimensions and weights are without optional devices. All data may change without notice. Images and drawings are indicative only.



F183.2.12.I

Running out block fit for stringing aluminium conductors on railways insulators. Galvanised steel frame with fittings suitable for the heads of insulators. Anti-fleeting device with nylon rollers.

- Sheave diameter: 120 mm at bottom groove
- Groove width: 30 mm
- Fitting for insulator: Ø 60 mm
- Working load: 300 daN
- Weight: 3,3 kg



F182.2.15.C

Running out block fit for stringing aluminium conductors on railways insulators. Galvanised steel frame with eyes for suspension. Nylon pulleys fitted with ball bearings.

- Sheave diameter: 150 mm at bottom groove
- Groove width: 30 mm
- Working load: 200 daN
- Weight: 4,5 kg
- On demand: adjustable anti-fleeting lateral plate



F182.2.15V

Running out block fit for stringing conductors of railway lines. Galvanised steel frame with hook for suspension. Height (hook/sheaves) adjustment. Nylon sheaves fitted with ball bearings.

- Sheaves diameter: 150 mm at bottom groove
- Groove width: 30 mm
- Working load: 100 daN
- Weight: 4,3 kg



Performances of the machine without optional devices, at sea level and temperature 20°C.
Dimensions and weights are without optional devices. All data may change without notice. Images and drawings are indicative only.

F182.1.15

Running out block fit for stringing conductors of railway lines. Galvanised steel frame with opening side. Nylon pulleys fitted with ball bearings.

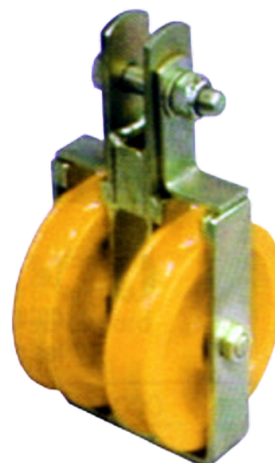
- Sheave diameter: 150 mm
- Groove width: 25 mm
- Working load: 500 daN
- Weight: 1,6 kg



F182.2.15

Running out block fit for stringing conductors of railway lines. Galvanised steel frame with opening top. Nylon pulleys fitted with ball bearings.

- Sheave diameter: 150 mm
- Groove width: 25 mm
- Working load: 500 daN
- Weight: 3,6 kg



F182.2.15R

Running out block fit for stringing conductors of railway lines. Galvanised steel frame with a suspension attaching hole.

- Sheave diameter: 150 mm
- Groove width: 18 mm
- Weight: 2 kg



Performances of the machine without optional devices, at sea level and temperature 20°C.
Dimensions and weights are without optional devices. All data may change without notice. Images and drawings are indicative only.



NOTES

This image shows a single sheet of white paper with horizontal blue ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.



Handwriting practice lines consisting of 20 horizontal orange lines.

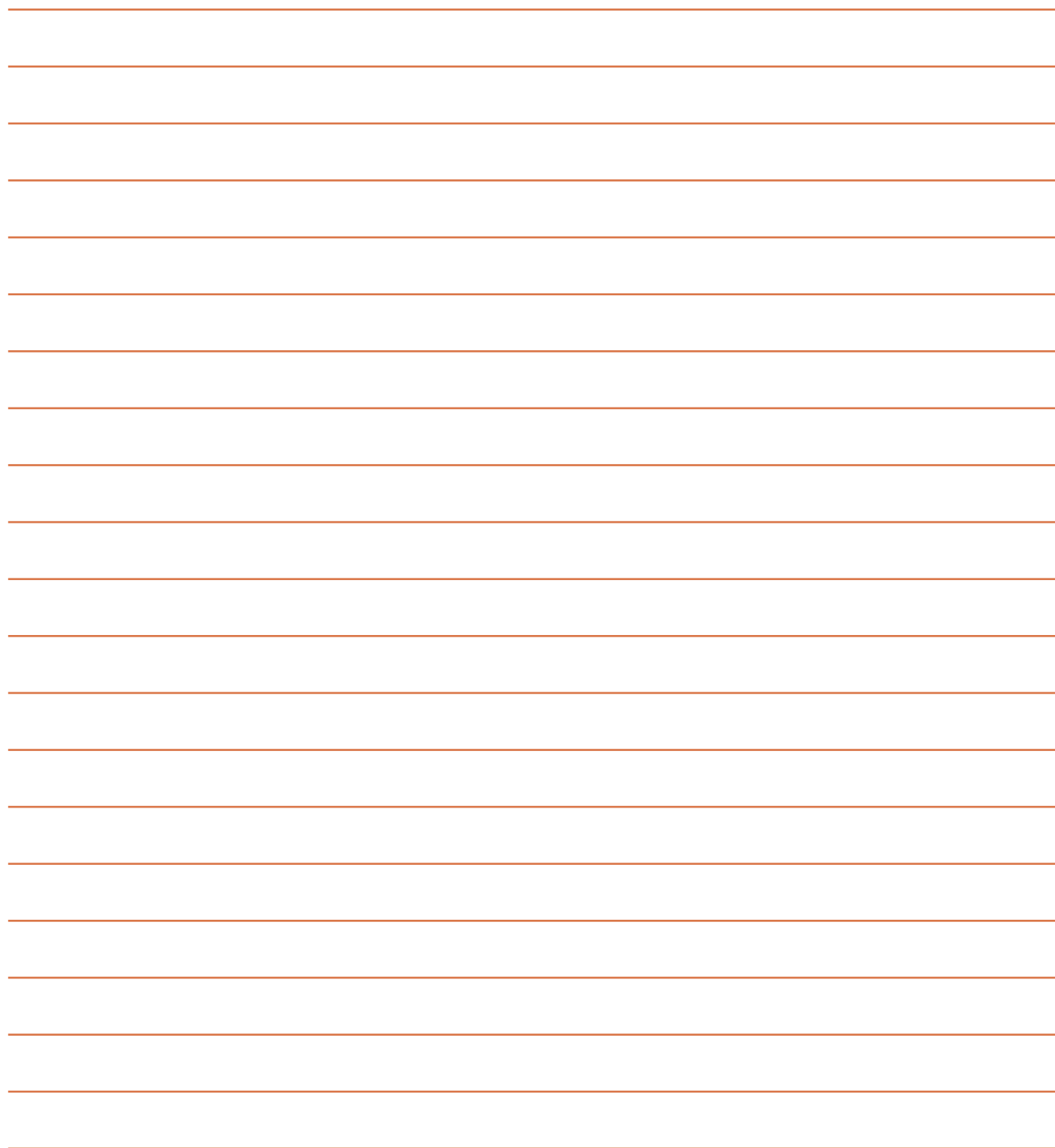


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Handwriting practice area with 20 horizontal orange lines.







Handwriting practice lines consisting of 20 horizontal orange lines.





Handwriting practice lines consisting of 20 horizontal orange lines.



Handwriting practice area with 20 horizontal orange lines.





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