

- **Tensioner with engine aggregate for regulation (sagging).**
For 1 or 2 conductor up to Ø 45 mm (optional for 60 mm) and a tension force of max. 11 to
- **Optional for 3 conductors available**
- **In tensioning mode, automatic control of the machine via ATS (Automatic Tensioning System)**
- **Pulling mode to regulate the conductor with a max. pull force of 8 to and to install the conductors into the machine**
- **Optional with higher pulling speed for pilot wire installation**
- **Integrated diesel hydraulic aggregate to control the ATS and activate the pulling mode, the oil cooling system and the optional additional hydraulic system for drum stands or press**
- **Integrated conductor clamping with integrated grounding device => no need of separate grounding unit**
- **Robust machine constructed for highest reliability, easy operation and minimal maintenance**

Technical data in tensioning mode:

- Max. tension force: 11.000 daN
- Continuous tension force: 10.000 daN
- Continuously adjustable speed: 0 - 5,1 km/h (85 m/min)
- Minimal tension force: approx. 400 daN (with ATS)

Technical data in regulating mode (pulling mode):

- Max. pull force: 11.000 daN
- Continuously adjustable speed: 0- approx. 0,8 km/h (13m/min)

Control of the machine:

- In tensioning mode, the tension force can be continuously regulated at the control panel (optional also with cable remote control); the machine then functions independently via the Automatic Tensioning System (ATS). This system guarantees a constant sag of the conductor and an automatic stopping and restarting without manual intervention
- In regulating mode (pulling mode), the rope can be indefinitely controlled in/out via a joystick located on the control panel
- Control panel with display of the pull force and all instruments to control engine, hydraulic and electrical systems
- With digital meter counter

Cover:

- Lockable cover made of thick-walled aluminium sheet, protects the diesel engine, the hydraulic and the electrical systems => increases the reliability of the machine and is noise reducing



Bull wheels:

- 2 bull wheels with a diameter of 1.500 mm
- 8 grooves per bull wheel for up to 2 conductors simultaneously (optional for 3 conductors)
- Designed for max. conductor Ø 45 mm / max. connector Ø 60 mm
- High tensile elastic groove linings for all steel ropes and conductors (easily and quickly replaceable)
- Automatic conductor clamping with integrated grounding device => conductor anchoring not necessary during change of drum

Hydraulic drive system:

- In both bull wheels a complete driving unit consisting of planetary gear, brake and hydraulic motor is integrated => fully enclosed and therefore requiring minimal maintenance
- 2 emergency multiple-disc brakes, automatically activated
- High quality control technique enables inching even under maximum load
- Highly effective oil cooling system, electrically activated and controlled via thermostat, designed for extreme operating conditions
- Optional with 2 independent additional hydraulic systems to operate up to 2 hydraulically activated drum stands
- Hydraulic hoses and screw connections with a special sealing system for a long service life without leakage
- Hydraulic differential system for the bull wheel drives => low stress for ropes and planetary gears

Engine:

- Water-cooled DEUTZ diesel engine with 48 kW (65 HP) in models equipped with additional hydraulic system
- Low speed => long life cycle and low noise level
- 12 V system with high capacity battery for a safe start also at cold temperatures

Weight, dimensions and noise level:

- Weight: approx. 4.900 kg
- Length x width x height: approx. 5.000 x 2.100 x 2.570 mm (dimensions can be reduced for shipment)
- Low noise level: approx. 80 dB (A)

Frame and support:

- Stable steel frame with anchoring eyes
- Central lifting ring for easy loading by crane
- Back support via hydraulic backstay for high stability and a fast and easy anchoring; with integrated eyes for anchoring of ropes
- Front support via robust mechanical supporting winch (with load and idle speed)

Standard chassis:

- 1 axle chassis with rigid axle and parking brake
Optional: lighting system, mudguards and registration
- Stable towing bar with height-adjustable towing eye with \varnothing 40 mm (optional: \varnothing of towing eye according to customer requirement)

Optional chassis:

- 2 axle chassis with rigid axle
Optional: lighting system, mudguards and registration
- 1 or 2 axle chassis with spring-mounted axles, pneumatic-hydraulic brake system (with integrated brake cylinders), parking brake, lighting system, mudguards
Optional: registration as high-speed trailer (in Germany up to 80 km/h)

Optional equipment:

- Special maintenance-free precleaner for the air filter; prevent engine overheating and reduce maintenance work at the diesel engine
- Cable remote control with 10 m cable to regulate the tension force for the Automatic Tensioning System (ATS)
- Digital tachometer
- Large, lockable tool box
- Grounding plate with holding device
- Noise reduction kit for cover
- 2 additional hydraulic systems to operate the drum stands
- Hose set with quick coupling to operate drum stands (standard length 15 m; or according to customer requirements)
- Front support via hydraulic supporting cylinder
- Biodegradable hydraulic oil
- Hydraulic press to operate 700 or 1.000 bar press units
- Spare wheel with lockable holding device
- Crawler chains to reduce the ground pressure (only by 2 axle chassis)
- Suitable for 3 conductors => special bull wheels, third additional hydraulic system and special rope guiding devices
- Bull wheels and rope guiding devices with regulating possibilities for „right“ and „left“ conductors
- Special equipment and special models on request



Modifications and errors excepted. Illustrations show in part optional equipment. Technical data varied according to model. Machine performance is calculated at sea level at 20°C.