

- **Tensioner with engine aggregate for regulation (sagging).**  
For up to 2 conductors (1+1) up to Ø 45 mm (optional up to Ø 60 mm) and a tension force of max. 2 x 5 to
- Each conductor can be controlled independently
- 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 2 x 5 to and to install the conductors into the machine
- 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:

- Continuous tension force: 2 x 5.000 daN
- Continuously adjustable speed: 0 - 5 km/h (83 m/min)
- Minimal tensioning force: approx. 300 daN (with ATS)

#### Technical data in regulating mode (pulling mode):

- Max. pull force: 2 x 5.000 daN
- Continuously adjustable speed: 0 - approx. 1 km/h (17 m/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 at 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 x 2 bull wheels with a diameter of 1.500 mm
- 4 grooves per bull wheel unit; 2 bull wheel units for 1 + 1 conductors
- Designed for a 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
- 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) at 1800 rpm
- 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. 5.400 kg
- Length x width x height: approx. 5.400 x 2.100 x 2.590 mm (dimensions can be reduced for shipment)
- Low noise level: approx. 78 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: pneumatic brake system, lighting system, mudguards and registration
- Stable towing bar with height-adjustable towing eye Ø 40 mm (optional: Ø of towing eye according to customer requirement)

#### Optional chassis:

- 2 axle chassis with rigid axles and parking brake  
Optional: pneumatic brake system, lighting system, mudguards and registration
- 2 axle chassis with spring-mounted axles, pneumatic-hydraulic brake system (with integrated brake cylinders), parking brake, lighting system and 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
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- Grounding plate with holding device
- 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)
- Biodegradable hydraulic oil
- Hydraulic connection to operate 700 or 1.000 bar press units
- Crawler chains to reduce the ground pressure (only by 2 axle chassis)
- 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.