

- Double drum winch each with a pull force of 5 to for various usages (regulating, tower equipping, tower erection ...)
- Other pull forces are possible according to customer requirements => upper puller is e.g. often limited to 2,5 to (for gin-pole drive)
- Compact machine due to superimposed winches; with hydraulic backstay for highest stability during operation
- Optional with inductive slack-rope safety system
- Robust machine designed for highest reliability, simple operation and minimal maintenance
- Operation of the machine via cable remote control (optional also via radio remote control) from a safe distance => good overview, low noise level and safe position for the operator
- High quality control technique enables inching even under maximum load



Technical data of both drum winches:

- Max. pull force and speed:
 - Middle rope layer: 5.000 daN with 33 m/min
 - Inner rope layer: 6.500 daN with 26 m/min
 - Speed continuously adjustable: 0 - 63 m/min
- With free wheel device to pull out ropes by hand (without engine)
- Stable rope guiding device with hardened rope rollers
- Optional with no contact slack-rope safety system (functions only with steel ropes) => prevents rope from getting loose and crossed over
- Large rope drums (=> few rope layers => rope preserving) with stable pressure roller for fixing the rope
- Rope capacity: K=80946 => e.g. 410 m with rope Ø 14 mm

Control of the machine:

- Cable remote control with 10 m cable (functions: indefinite control of rope in/out; winch up/down; emergency stop)
- Optional with radio remote control (additional functions: ignition; engine starting)
- Emergency operation for driving the machine manually in pulling/and in tensioning mode
- Control panel with all instruments to control engine, hydraulic and electrical systems
- Both drum winches cannot be operated simultaneously (only possible as special model)

Cover:

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

Hydraulic driving system:

- A complete driving unit consisting of planetary gear, brakes and hydraulic motor is integrated in each rope drum => fully enclosed and therefore requiring minimal maintenance
- 2 automatically activated safety-disc brakes
- 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
- Hydraulic hoses and screw connections with special sealing system for a long service life without leakage

Engine:

- Water-cooled diesel engine with 41 kW (56 HP) at 1.400 rpm
- Low speed => long service life and low noise level
- 12 V system with high capacity battery for safe starting also at cold temperatures

Weight, dimensions and noise level:

- Weight: approx. 3.250 kg (without rope)
- Length x width x height: approx. 4.200 x 2.200 x 1.900 mm
- Low noise level: approx. 67 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 highest stability and fast and easy anchoring; with integrated eyes for anchoring of ropes
- Front support via hydraulic support cylinder

Standard chassis:

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

Optional chassis:

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

Ropes (optional):

- For drum winch in standard pull force:
High quality steel hoisting rope Ø 14 mm; breaking load: 19.000 daN; anti-twist, galvanized, pressed with a thimble; length: 400 m
- For upper drum winch with lower pull force:
High quality steel hoisting rope Ø 12 mm; breaking load: 14.000 daN; anti-twist, galvanized, pressed with a thimble; max. length: 560 m
standard length: 250 or 400 m
High quality steel hoisting rope Ø 10 mm; breaking load: 10.300 daN; anti-twist, galvanized, pressed with a thimble; max. length: 810 m
standard length: 250 or 400 m
- Other steel or also synthetic fibre ropes on request

Optional equipment:

- Radio remote control
- No contact slack-rope safety system
- Display device of the pull forces (for inner/middle/outer rope layers)
- Large, lockable tool box
- Grounding plate with holding device
- Noise reduction kit for cover
- Biodegradable hydraulic oil
- Spare wheel with lockable holding device
- Crawler chains to reduce the ground pressure (only for 2 axle chassis)
- Special equipment or special models (with different pull forces or bigger rope lengths) 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.