

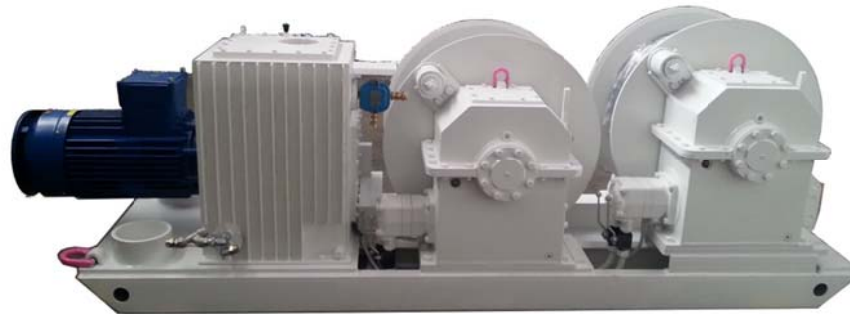


MACKINA - WESTFALIA



Product description

ELECTROHYDRAULIC WINCH PULL+RETENTION CEHTR20





1.- DESCRIPTION OF THE WINCH

To work on long pits with wall shearers, it is necessary to use a double-drum safety winch located in the pit head gallery. This winch pulls the machine by means of two cables, one of which is used for traction, and the other as a safety cable.

The CEHTR20 winch is a winch specifically designed for this use and prepared to work in subway workings classified as "Dangerous Condition 2" (potentially explosive atmosphere), with the requirements for use set out in the General Regulations on Basic Mine Safety Standards and certified in accordance with the following directives:

- 94/9/CE ATEX
- 2006/42/CE Máquinas

It is designed on the basis of a single supporting frame on which the two cable drums are arranged with their corresponding worm drive, freewheel mechanism and hydraulic motor, a hydraulic power unit with the corresponding regulation and control systems, guide rollers for both pulling and safety cables and the precise anchors for efficient bracing of the unit.

The braking and blocking of the shearer is done by irreversibility of the worm/crown transmission. The ratchet and freewheel mechanism integrated into the transmission prevents the phenomenon of "slack rope" by preventing the unwinding of the rope if there is no effective pull with the shearer downwards. To this end, it also has friction shoes on the drums to compensate for the cable's own weight.

On this transmission there is also an overriding mechanism of the freewheel system that allows cable laying, maintenance or any other auxiliary maneuver that needs to unwind the cable..

The power transmission to both drums is done by a parallel distribution of a closed type hydraulic circuit between a piston pump and an orbital type motor. It has the possibility of total speed regulation between "0 and MAX" and the rotation inversion is made by controlling the pump inclination by means of a local manual control, or through a pull/push cable that makes possible the control at a distance of up to 30 mts.

The size of the tank ensures that the natural heat dissipation is sufficient for normal winch use. However, the tank is equipped with an oil/water exchanger to reinforce the cooling in severe use conditions.



2.- GENERAL SPECIFICATIONS:

Values in the intermediate layer of the winding

- Traction force on the working drum.....8.800 daN.
- Traction force on the safety drum.....4.400 daN.
- Retention force on each drum8.800 daN.
- Maximum speed with shearer working 5,15 m/min.
- Cable diameter 25 mm.
- Drum diameter 410/920 mm.
- Width of drums 320 mm.
- Winding capacity on each drum:220 mts.
- Dimensions length/width/height: 3000/850/1100
- Approximate weight: 3000 Kg.
- Electric motor power: 18 Kw.
- Supply voltage: 3 x 500 V
- Maximum working pressure..... 160 bar

