## LIFTING & PULLING MACHINES







More than 30 years of manufacturing experience is behind the TU-TIRFOR range of lifting and pulling machines. Available in four sizes -  $800 \, \text{kg}$  to  $4000 \, \text{kg}$  - they offer portability, safety and precision.

The unique rectilinear operation enables the machines to operate in any direction and for any height of lift or length of pull. Lifting and pulling power can also be increased with the use of sheave blocks.

- Tirfor hoists have two 'U' shaped jaw blocks which preserve the cylindrical form of the wire rope to ensure there is no deformation and very little wear of the rope
- The Tirfor system provides high mechanical efficiency which ensures ease of operation and longer services life
- Accidental release is precluded and the self-gripping action of the jaws is maximised

Tirfors are used in applications across industry, including civil engineering, construction, mining, pipe laying, shipbuilding, agriculture and forestry.

- Universal It is a hoist, winch, tensioner, binder, ratchet and much more
- Portable It has the lowest weight to capacity ratio of any hoist or winch with comparable capacities
- Unique It's unique wire rope gripping system provides unlimited pulling length or lifting height and pinpoint accuracy in positioning any work load
- Unmatched safety It is simply designed and ruggedly constructed with the finest alloy heat-treated steel. The load is automatically held securely, with a large overload margin of safety
- Indispensable for all construction and maintenance jobs. It is used daily by millions of people all over the world

| TECHNICAL SPECIFICA-<br>TIONS | NOMINAL<br>LIFTING<br>CAPACITY (kg) | MAXIMUM<br>TRACTION<br>CAPACITY (kg) | WEIGHT<br>(kg) | OVERALL DIM. (mm) | WIRE ROPE DIA<br>(mm) | SPEED OF ROPE<br>MOVEMENT PER<br>MINUTE | AGGREGATE WIRE<br>BREAKING LOAD<br>(kg) | SAFETY FACTOR |
|-------------------------------|-------------------------------------|--------------------------------------|----------------|-------------------|-----------------------|---|---|---------------|
| TU-8                          | 800                                 | 1 250                                | 8.4            | 527 x 247 x 113   | 8.3                   | 2 to 2.5 meters                         | 5 200                                   | 5 to 1        |
| TU-16                         | 1 600                               | 2 500                                | 18.5           | 660 x 330 x 145   | 11.5                  | 2 to 3 meters                           | 10 000                                  | 5 to 1        |
| TU-40                         | 4 000                               | 6 000                                | 27             | 676 x 330 x 157   | 16.3                  | 2.8 meters                              | 19 100                                  | 4 to 1        |

## TIRFOR ROPES ARE MANUFACTURED TO SUIT YOUR APPLICATION, SPECIFY LENGTH & END FITTING REQUIRED.

## INCREASE OF LIFTING AND PULLING POWER

TIRFOR machine, used in conjunction with sheave blocks, will efficiently solve most of your pulling and lifting problems.

By using sheave blocks on the hauling rope, the nominal capacity of TIRFOR machines can be multiplied two, three or even four times as shown in the diagram.

As a rule it is not difficult to figure the number of line parts to be used for given load. It is, however, important especially when there is no greater number of line parts to take into account the friction in the sheaves, which can have a non-negligible influence on the strain exerted on the hoist and the top anchoring hook of the block.

