Yale*trac ST*

Cable puller

Pulling force 500 - 3200 daN

The portable Yale*trac ST* cable puller is a versatile tool for pulling, lifting, lowering, tensioning and securing loads over long distances. It has been specially designed for applications in industry, building construction, civil engineering, power line construction, ship building and oil refineries etc. The Yaletrac ST cable puller is almost service free – easy to use and safe.

Cable pullers model Yale*trac ST* feature a housing of dimensionally stable deep-drawn steel plates ensuring a compact and robust design. The hand operating forces have been noticeably optimised for the user by the application of axial ball bearings.

Features

- Stable upright positioning of the unit due to the combination of handle and foot.
- Space-saving telescopic hand lever that can be safely attached to the unit by means of a hook-and-pile fastener. Short handle lever for Y 05 ST not telescopic.
- Overload protection is provided by a shearing pin. Spare shear pins are conveniently located in the carrying handle. A broken pin can be replaced without removing the load.
- Yale*trac ST* uses a special flexible rope. It has six strands with a steel core and is identified by an orange strand. The rope is tapered at one end for easy threading and is fitted with an eye sling hook with safety latch on the other end.
- The parallel arrangement of the clamping system protects the rope by distributing the clamping forces evenly. A long rope advance per each lever stroke increases the working speed.
- Increased service life of the unit due to the use of rubber sleeves which prevent dirt and dust from penetrating into the mechanical equipment of the unit.
- Positioning of the forward and reversing levers in tandem provides a slim design and ensures optimal power transfer.
- A lever disengages the rope clamp system allowing easy and smooth installation of the rope.
- The large opening in the top of the unit allows easy cleaning: simply flush the unit with water and apply motor oil for lubrication and the Yaletrac ST is again ready for use.

Y 10 ST up to Y 32 ST

Optional

- Eye sling hook with safety latch
- Longer ropes
- Drum reel

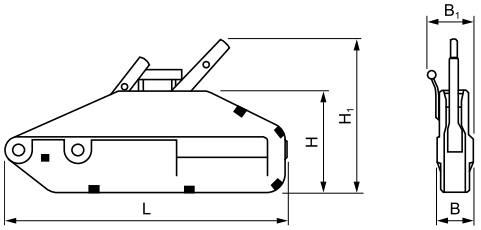
Technical data Yaletrac ST

Model	Art.-No.	Capacity (WLL) kg	Rope advance per double stroke mm	Lever pull at WLL daN	Lever length mm	Rope diameter mm	Weight without rope kg	Rope weight kg/m
Y 05 ST [1]	192043685	500	20	30	260	6.0	2.8	0.10
Y 10 ST	N02400009	1000	60	23	800	8.4	8.5	0.29
Y 16 ST	N02400010	1600	60	28	790/1190	11.2	15.8	0.53
Y 32 ST	N02400011	3200	40	46	790/1190	16.0	27.2	1.00

[1]see complete scope of delivery

Dimensions Yaletrac ST

Model	Y 05 ST	Y 10 ST	Y 16 ST	Y 32 ST
L, mm	285	435	560	664
H, mm	116	178	205	240
H1, mm	164	235	280	350
B, mm	48	61	86	96
B1, mm	70	94	125	123



MODEL UPRATING

NOW ALSO AVAILABLE:
500 daN PULLING FORCE!
FOR MOBILE USE

Optional for Yale*trac 05 ST*
Useful shoulder bag

Yale*trac 05 ST*
Assembled and ready for operation (installed)

Y 05 ST

Scope of delivery

- Assembled and ready for operation (installed
- Hand lever
- Wire rope Ø 6 mm, 10 m
- Eye sling hook with safety latch
- Webbing sling HSE 00500

Optional

- Shoulder bag

Yaletrac Cable puller

Pulling force 800 - 3200 daN

It has a light weight, compact, high tensile aluminium alloy housing with a large flat bottom surface for increased stability in horizontal as well as vertical working position.

Features

- Forward and reversing levers in tandem provide slim design and assure power transfer along the centre line.
- Overload protection is by a shearing pin in the forward lever. Spare shear pins are conveniently located in the carrying handle or operating lever. A broken pin can be replaced without removing the load.
- A lever disengages the rope clamp system allowing easy, smooth installation of the rope.
- Yaletrac uses a special flexible rope. It has six strands with a steel core and is identified by an orange strand. The rope is tapered at one end for easy threading and fitted with an eye sling hook with safety latch on the other end.
- The parallel arrangement of the clamping system protects the rope by distributing the clamping forces evenly. A long rope advance per each lever stroke increases the working speed.
- The large opening in the top of the unit allows easy cleaning: simply flush the unit with water, apply motor oil for lubrication and the Yaletrac is again ready for use.

Optional

- Eye sling hook with safety latch
- Longer ropes
- Drum reel

INFO

Yale hoists and trolleys are not designed for passenger elevation applications and must not be used for this purpose.

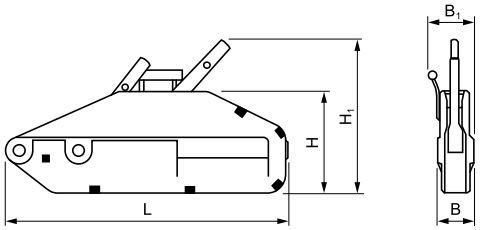
Complementary products available like cable grips (page 111), pulley blocks (page 110) and textile slings (pages 248 - 253).

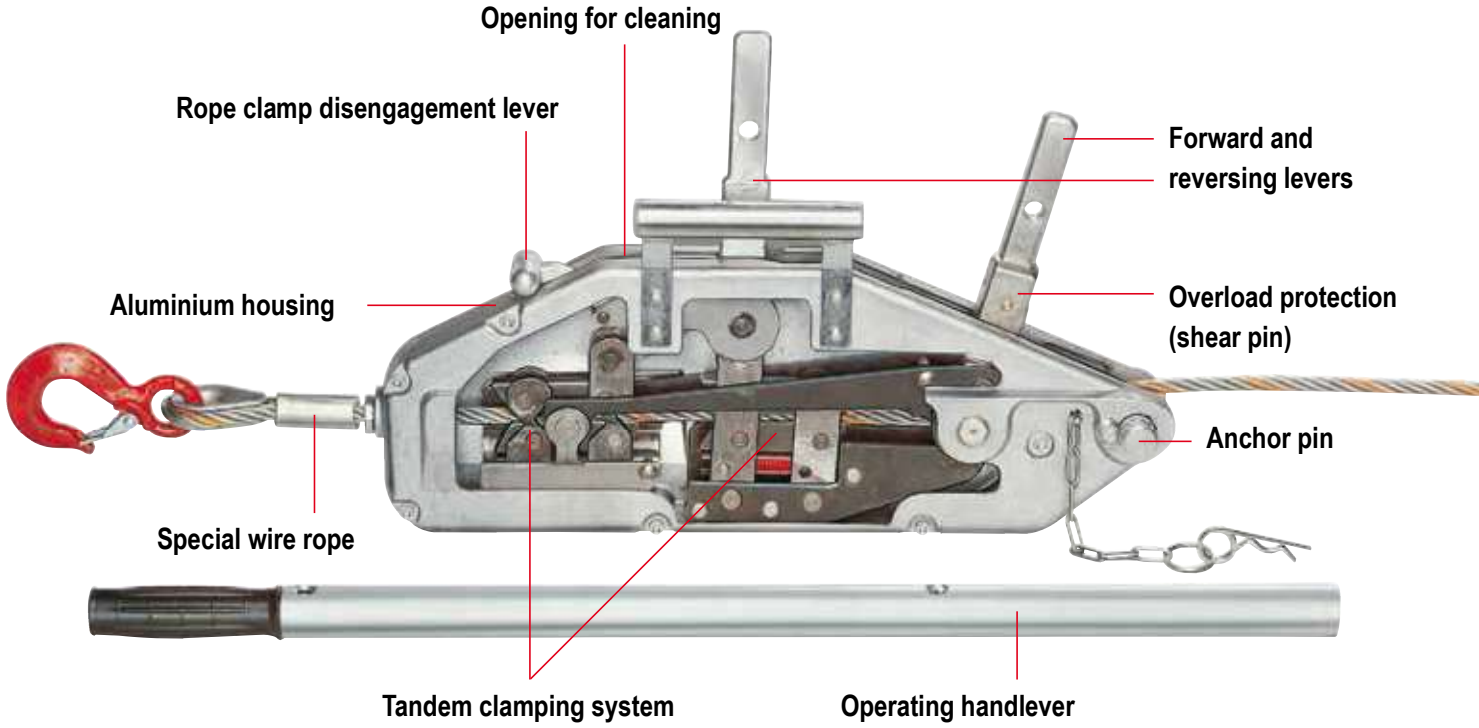
Technical data Yaletrac

Model	Art.-No.	Capacity (WLL) kg	Rope advance per double stroke mm	Lever pull at WLL daN	Lever length mm	Rope diameter mm	Weight without rope kg	Rope weight kg/m
Y 08	N02409053	800	60	24	800	8.4	7	0.29
Y 16	N02409054	1600	60	30	790/1190	11.2	14	0.53
Y 32	N02409055	3200	40	50	790/1190	16.0	21	1.00

Dimensions Yaletrac

Model	Y 08	Y 16	Y 32
L, mm	430	545	680
H, mm	168	190	230
H1, mm	240	270	330
B, mm	60	72	91
B1, mm	–	97	110





Pulley blocks, hinged, with single steel sheave

Capacity 1000 - 6400 kg

One side of the Yale pulley blocks is hinged and can be opened for easy and quick positioning of the wire rope on the sheave. It can also provide a quick and versatile rigging point or redirect a wire rope.

Features

- Swinging the hook in the direction of pull securely locks the pulley block.
- The high quality cast steel sheaves have machined grooves and are fitted with Permaglide® bushes.

INFO

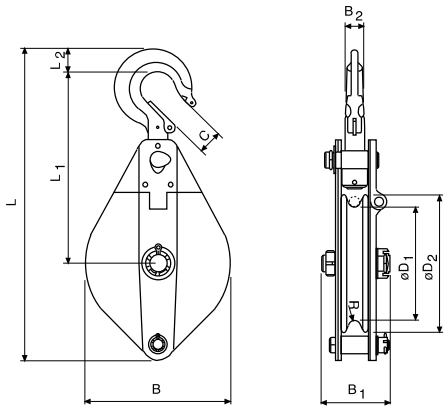
When choosing and classifying pulley blocks, take the "Grundsätze für Seiltriebe" DIN 15020 into consideration.

Technical data pulley blocks

Model	Art.-No.	Capacity kg	Roller diameter mm	Rope diameter mm	Weight kg
Pulley blocks 1000	N46000005	1000	85	7	3.3
Pulley blocks 2000	N46000003	2000	150	13	8.9
Pulley blocks 3200	N46000004	3200	180	15	15.5
Pulley blocks 6400	N46000006	6400	210	18	26.5

Dimensions pulley blocks

Model	Pulley blocks 1000	Pulley blocks 2000	Pulley blocks 3200	Pulley blocks 6400
B, mm	118	199	230	270
B1, mm	76	92	108	116
B2, mm	17	24	28	35
C, mm	23	27	31	42
Ø D1, mm	85	150	180	210
Ø D2, mm	105	190	220	260
L, mm	305	425	496	655
L1, mm	200	263	295	375
L2, mm	23	30	40	47
R, mm	4	7	9	10



INFO

Yale hoists and trolleys are not designed for passenger elevation applications and must not be used for this purpose.

LMG Cable grip

Pulling force 2000 - 5000 daN

The LITTLE MULE® cable grip is a device for gripping, pulling and tensioning uncoated wire ropes, cables and metal rods in all forms up to a tensile strength of 1770 N/mm^2 but is dependant on the diameter and surface condition.

The parallel jaws provide a firm, non-slip grip without causing damage to the wire rope. A special spring-loaded guide prevents the grip from dropping off the wire rope and allows instant release without jamming.

LMG I-X und LMG II-X are supplied with grooved jaws and are suitable for wire ropes with a tensile strength of up to 1960 N/mm^2, but is dependant on the rope diameter and surface condition.

Technical data LMG

Model	Art.-No.	Pulling force daN	For rope diameter Ø mm	Eye opening mm	Weight kg
LMG I	N02606516	2000	4.5 - 15	31 x 44	1.6
LMG I-X	N02608042	2000	5 - 15	31 x 44	1.6
LMG II	N02606517	3000	8 - 20	31 x 44	2.9
LMG II-X	N02608043	3000	8 - 20	31 x 44	2.9
LMG III	N02607609	5000	18 - 32	66 x 93	9.5

INFO

Yale hoists and trolleys are not designed for passenger elevation applications and must not be used for this purpose.

Steel rope for manual and electric winches

All electric winches are supplied without load bearing mechanisms as standard. To ensure safe operation an optimum rope design, optimum length and associated fastening elements (hooks, shackles) are selected.

We recommend to choose wire ropes on the basis of design, type of construction and strength to suit the intended use and frequency of use. The features of the different types of rope design are as follows:

Breaking load
→ Load bearing capacity, strength of the rope

Bending fatigue + flexibility
→ Service life

External wear
→ Stability of the outer strands

Torsion characteristics
→ Lifting of guided or unguided loads

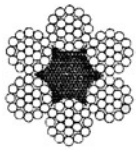
INFO

The use of plastic-coated steel wire ropes with lifting equipment is not permitted.

To meet individual requirements we can provide assistance for the selection of length, diameter and type of the rope, as well as a fastening equipment (thimbles, hooks, rope clips, etc.).

Handling

Our product range includes winches for lifting, pulling and moving of loads. In combination to our winches the following rope types apply:

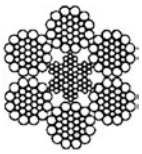


Standard design
6 x 19 + FE 1770 N/mm²

Manual winch rope with fiber inlay 3 - 12 mm Ø

Galvanized or stainless steel in mat. 1.4401
Nominal strength 1570 N/mm² (low breaking load)

- not non-twisting
- crosslay type of construction
- low-tension
- lifting rope for infrequent actuation
- rugged and widely resistant

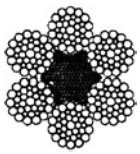


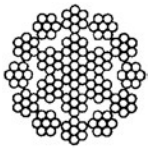
Warrington-Seale
6 x 36 WS + SES (FE) 1770 N/mm²

Manual and electric winch rope in parallel type of construction 10 - 28 mm Ø

Galvanized, with fiber or steel inlays as options

- highly flexible
- high breaking load
- average number of reversed bending stresses



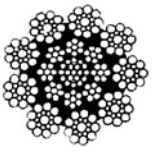


Non-rotating special rope
SE-znk - 1960 N/mm²

Standard rope for electric winches, non-rotating spiral strand rope 3 - 13 mm Ø

Galvanized

- balanced characteristics
- lifting rope for unguided single rope suspension elements
- lifting rope for large lifting heights with multiple rope suspension elements
- not to be used with a swivel
- high strength
- high bending fatigue characteristics



Heavy duty winch rope

Electric winch rope with plastic-coated steel core in double-parallel type of construction 6 - 30 mm Ø

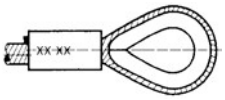
Bright and greased, not non-twisting

- special rope for frequent bending stress reversals and long use
- to be used only with matching rope sheaves and drums
- optimized break loads due to higher fill factor

Rope fasteners/rope connections

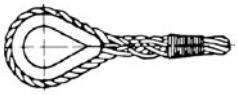
The safe functioning of the rope drive depends to a large extent on the rope fastenings on the winch and on the load. Rope connections and ropes themselves have to be checked at regular intervals by competent persons.
The following rope connections are permissible for use with lifting equipment:

Non-releasable rope connections



Aluminium press-on connection with thimbles

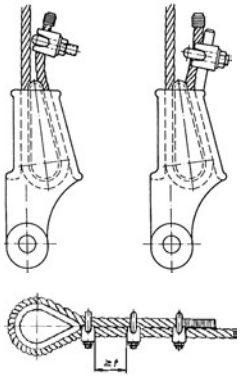
in combination with safety eye hooks or screw shackles provide a simple and safe means of suspending loads.



Splice connections (uncoated)
in combination with thimbles, hooks, etc.

In the most unfavourable situation, splice connections can lead to a reduction in the breaking load of the rope line of up to 40 %.

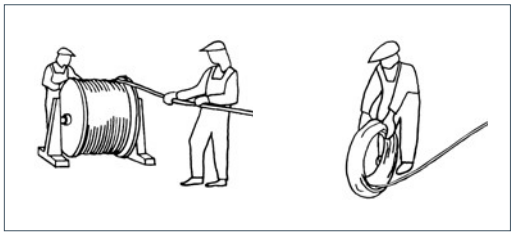
Releasable rope connections



Rope clips

- The end which is not under load must never be fastened to the load-bearing line.
- The length of the unloaded rope end should be at least 20 times the diameter of the rope and not less than 150 mm.
- Clips may no longer be used once the rope has worn by more than 10 %.
- **Wire rope clamps may not be used for rope connections for lifting equipment, with the exception of fastening equipment which is manufactured for none-recuring, special purposes**!

Handling of ropes – Unwinding



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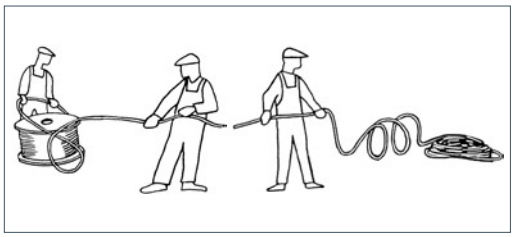


WRONG

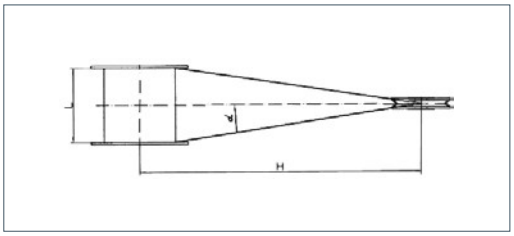
Care of ropes

”Running ropes” in particular will only offer optimum service lives if they are well lubricated. The use of steel ropes without grease will cause them to wear quickly and the load bearing mechanism will have to be replaced early.

INFO

Pressed and splice connections may only be produced by specialist firms or rope manufacturers.

Notes on the installation of winches



The distance between rope drum and sheave must be selected in a way that the maximum deflection angle for the type of rope used is not exceeded:

Standard rope - Deflection angle < 3°
(Minimum distance = Drum width x 10)

Special rope - Deflection angle < 1,5°
(Minimum distance = Drum width x 20)

- To prevent the wire rope from becoming slack when unloaded it should always have an additional rope weight when used with lifting equipment
- Guided loads must be monitored with a slack rope cut-out.
- To prevent the rope from becoming damaged, steel wire ropes must never be guided
  - over edges
  - over deflection radii which are too small or
  - over rope sheaves with grooves which are too small.
- High dynamic forces can lead to sudden breaks or crashes of the load. It is therefore imperative that loads are never brought to a dead stop (“on block”) and that loads are never allowed to drop into the rope.