

# WINCHES AND LIFTING GEAR

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## TRUCK WINCHES

HIRE



**Truck Winch** Designed for moving medium to heavy weight stage trucks. The winch drum is capable of 25m of travel. There is a choice of handle positions providing a 1:1 or 1:3 ratio. The lower sheaves are adjustable to maintain cable tension. It can be operated by one or two crew. Fitted with a simple but effective pin brake. The winch is supplied with a Truometer trip meter for the accurate positioning of trucks even in blackouts. The finish is black powder coated. Truck winch handles are also sold separately.

Width: 550mm. Height: 1090mm.  
Cable: 5mm. Fixings: 6 off M10 bolts or coach screws.

Truck Winch	code	each	Tradeline per 5 each
Truck Winch with one handle and Trip meter [25m travel]	FHS510T	£1990.00	£1930.00
Extra Handle for all winches	FHS505	£155.00	



**Winch Meter** This unit shows 0-999999 on 10:1 ratio They are used on our truck winches but it can be used for many other applications. Axle Ø 6mm.

Truometer	code	each
Type CRSRLCB10:1J2010	FHS5011	£98.00

## TIRFORS



new size

Jockey J3



Jockey J5



**Tirfors** These hand operated units are useful for dragging or hoisting heavy items of scenery or equipment and are also often used for creating tension

wires. They have neither wheels or gears but two jaws alternately pull on the wire just like hauling a rope by hand. The range starts with the Jockey, then the 500 series and finally the TU for unrivalled sturdiness. The special wires are supplied separately and are fitted with a safety hook on one end. Flints can supply the whole range of Tirfor equipment. A selection is listed below.



Tirfor 500



Tirfor TU

Tirfor Model	WLL	wire rope Ø	unit wt	code	each
Jockey J3	300kg	4.7mm	1.75kg	WIRJ3	£242.00
Jockey J5	500kg	6.5mm	3.75kg	WIRJ5	£416.00
Tirfor 500	800kg	8.3mm	6.6kg	WIRT508D	£364.00
Tirfor TU	1600kg	11.5mm	20kg	WIRTU16	£685.00



**Maxiflex Wire Ropes** Special wire ropes for use in the Tirfors. Supplied with a hook on one end.

Maxiflex Wire Ropes	code	10m	15m	20m	30m	40m
To suit Jockey J3	WIRJ3XX	£42.60	£50.40	£58.30	£74.10	£89.80
To suit Jockey J5	WIRJ5XX	£42.60	£50.40	£58.30	£74.10	£89.80
To suit Tirfor 500	WIRT500XX	£67.80	£87.70	£108.00	£148.00	188.00
To suit Tirfor TU	WIRTUXX	£84.00	£111.00	£137.00	£163.00	£242.00
		(10)	(15)	(20)	(30)	(40)

## CHAIN HOISTS



**Tralift Chain Hoists** Hand operated, triple spur geared, automatic brake and double pawl system, all steel construction, steel alloy chain, high carbon hooks. Simple to install and to use. Prices include both the lifting chain and hand chain. The hand chain is one metre shorter than the height of lift.

For hire details see page 3.76

Tralift Chain Hoist	code	price
model SWL length chain falls		
63011 1t 3m 1	LIF63011	£130.00
63014 1t 6m 1	LIF63014	£173.10
63017 1t 9m 1	LIF63017	£214.30
63018 1t 10m 1	LIF63018	£227.90
63031 2t 3m 2	LIF63030	£215.00
63034 2t 6m 2	LIF63034	£268.70
63037 2t 9m 2	LIF63037	£322.40

HIRE

**TRADELINE Buy 2 = less 20%**

Other ratings and lifting heights are available. Please ask for details.

## LEVER HOISTS

new



**Bravo Lever Hoists** Ideal for lifting, pulling, positioning and adjusting heavy weights. Available in sizes up to 6000kg [please phone for details of larger sizes].

- ✓ Can be used in any position.
- ✓ Rotates around 360° on swivel hooks with overload indicators.
- ✓ Automatic double pawl brake.
- ✓ Self lubricating chain to EN818.
- ✓ Standard lifting heights can be increased to 6m as an option.

Bravo Lever Hoist	code	price
model SWL lifting height chain falls/type		
250 250kg 1.5m 1 [4x12]	LIFBV250	£67.20
500 500kg 1.5m 1 [5x15]	LIFBV500	£86.10
750 750kg 1.5m 1 [6x18]	LIFBV750	£126.00
1500 1500kg 1.5m 1 [7x21]	LIFBV1500	£147.00

## BEAM CLAMPS AND TROLLEYS



new



**Beam Clamps and Trolleys**

Ideal for securing chain hoists to a wide range of beams [other sizes available please phone for details]. Push trolleys are fitted with steel wheels with bearings. Longer traverse bars are available to fit wider beams.

Beam Clamps and Trolleys	code	price
type model SWL wt beam widths		
Clamp LT-1B 1000kg 4.8kg 75-235mm	LIFLT1B	£53.60
Clamp LT-2B 2000kg 5.6kg 75-240mm	LIFLT2B	£63.00
Trolley 500 500kg 8.5kg 50-220mm	LIF23309	£67.10
Trolley 1000 1000kg 10.5kg 58-220mm	LIF23319	£85.70
Trolley 2000 2000kg 18kg 66-220mm	LIF23329	£133.00

## HAND WINCHES AND LINE DRIVERS

### Choosing a hand winch

Hand winches are economical to purchase and very reliable. Some of the winches that we list in this catalogue are quiet in operation but others will make a slight clicking noise. Apart from the truck winches, they are all self-sustaining so if the handle slips from your hand they will hold the load. When choosing a winch try to choose one with plenty of spare capacity. As a rule of thumb, the working load should be reduced by 10% for each extra layer of rope so if you are lifting weights near the winch load capacity try to keep the wire to a single layer on the drum. There should always remain three full turns of wire on the drum in its maximum out dead. Please be aware that the speed of hand winches may make them an unsuitable choice for items which need to move in front of an audience.



### AG Hand Winch (45kg)

A small winch designed for raising blinds, shutters and small chandeliers [see also Line Driver below]. It is a die cast construction with corrosion resistant internal parts and a powder coated paint finish. Suitable for wall mounting.

The baseplate dimensions are 142x103mm. The distance out from the wall to the end of the crank handle is 170mm. This winch is not supplied with test certs.

Working Load Limit [1st layer]	45kgs	Wire rope size	2mm
Total Wire Capacity	12m	Lift per crank	45mm
Effort on crank	15kgs	Weight	1kgs

Type AG Hand Winch	code	price
	LIF0241000	£76.00



### Type SG Hand Winch (125kg)

This small aluminium spur gear hand winch is suited for scenic applications such as raising shutters or small drawbridges. Also handy for stowing light but bulky items in roof voids. They are silent in operation and have a self locking spring operated load pressure brake. The handle is removable. Size 130x130x121mm out. Other sizes are available, please phone our rigging manager for more details.

Working Load Limit [1st layer]	125kgs	[last layer]	92kgs
Wire rope size	4mm	Capacity 1st layer	2m
Total Capacity	12m	Lift per crank	138mm
Effort on crank	13kgs	Weight	3kgs

Type SG Hand Winch	code	price
	LIF0271008	£145.00



**Line Driver** This very well designed neat unit will drive 10mm braided ropes in either direction. It can be used to raise and lower shutters and heavy blinds. Its smart appearance and compact size allow it to be used in public environments such as auditoriums and schools. This winch does make a soft clicking noise when being used. Black anodized aluminium and 316 grade stainless steel. 8:1 ratio. Length 128mm Width 90mm Height 58mm. Fixings 3 off 8mm Ø. Please

ensure the top bolt does not expose sharp threads to the rope.

Line Driver	code	each
Driver	PUL240010	£330.87
Winch handle 250mm Ali.	PUL2021	£50.14



**Wall Mounted Hand Winch A** A worm gear winch of cast iron construction with the gears enclosed in an oil bath for smooth operation. It will make a clicking noise when hauling but is silent lowering. Features a self locking friction type brake, hardened worm shaft, and adjustable crank radius. A good choice for bars which need occasional access for maintenance but it is normally too slow for use during performance. For

transport reasons these winches are supplied dry. You will need SAE80 oil to fill the oil bath. Also available with grooved drums, please phone our rigging manager for more details.

Types	250kg	500kg	750kg
Lifting capacity 1st layer	250kg	500kg	750kg
Lifting capacity final layer	210kg	425kg	624kg
Rope diameter	5mm	6mm	8mm
1st layer rope capacity	4.8m	7.2m	9.2m
Total capacity	17.9m	29.1m	49
Number of layers	3	3	4
Ratio	16:1	16:1	25:1
Lift per crank turn	20mm	26mm	20mm
Effort on crank	9.2kg	14.5kg	16kg
Weight	12.5	21	42

Wall Mounted Hand Winch	code	price
250kg	LIF02422004	£338.17
500kg	LIF0243000	£506.99
750kg	LIF0244007	£761.57

### Can't find what you want?

There is almost certainly a winch available to suit your needs, we just don't have the space to list them all here. Flints can supply Loadstars, Tiraks, Pilewinds, capstans and multiple wire grooved drums. If we can't supply what you need we can probably advise on a company that can. Why not tap into our knowledge and give us a ring?

## WEIGHING BEAMS

HIRE



**Load Beams** It is now a prerequisite to mark the weight of scenery before it is flown. These beam scales are ideal for weighing large pieces of scenery up to 2t. The beams are 1.2m long and supplied with 4m long cables to a remote digital indicator unit.

Load Beams [for hire details see page 3.79]	code	price
	WB2000KG	£795.00

New lower price! With free delivery. See flints.co.uk for load cells.

## SWIVEL CLEWS

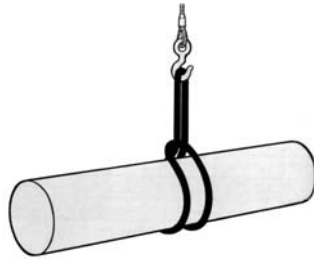


**Swivel Clews** To convert one wire from a winch or cradle to several drops for hauling bars. Swivel clews can tend to twist under load despite the swivel fitting. Flints are able to arrange for guide tubes or track runners to be fitted to the clew to help prevent this. Please ask for details. Spot the deliberate mistake in the picture [answers on a postcard to Doughty Engineering]. See also Delta Rings on page 2.31.

Swivel Clews	code	SWL	code	SWL
type		500kg		1000kg
Three Way Swivel	LIFT41300	£42.75	LIFT41600	£46.65
Four Way Swivel	LIFT41400	£44.58	LIFT41700	£49.00
Five Way Swivel	LIFT41500	£46.56	LIFT41800	£51.61

Phone for information on electric chain hoists

## ROUND SLINGS



**Round Slings** Also known as **Strops** and **Span Sets** A continuous loop of polyester yarn encased in a double thickness polyester fabric sleeve. This easy to use lifting sling is extremely light weight and versatile. Higher ratings and longer circumferences are also available. Only to be used for temporary installations. Please take care when ordering, as we sell the slings by their effective working length which is half the circumference. Very competitively priced. Now with 4m sizes. Never use a sling with damaged stitching or with a tear in the cover which exposes the core.

ROUND SLING CHART	straight pull	choke hitch	basket hitch	
			parallel	90°
colour coding	1t	0.8t	2t	1.4t
violet	1t	0.8t	2t	1.4t
green	2t	1.6t	4t	2.8t

**SAFETY** The safety factor on round slings is 7:1

Round Slings	code	1t	code	2t
Effective Working Length	Circum.	Violet	Green	2t
500mm	1m	SAF609 £3.72	SAF610 £4.97	
1m	2m	SAF612 £4.74	SAF622 £5.80	
1.5m	3m	SAF613 £6.23	SAF623 £7.33	
2m	4m	SAF614 £7.44	SAF624 £8.56	
2.5m	5m	SAF615 £8.54	SAF625 £10.42	
3m	6m	SAF616 £9.90	SAF626 £11.80	
4m	8m	SAF617 £10.58	SAF628 £16.02	

**Black Theatre Slings** The sizes below are supplied in theatre black for inconspicuous rigs.

Black Slings	code	1t	price	code	2t	price
Effective Working Length	Circum.	Black 1t	Black 1t	Black 2t	Black 2t	
500mm	1m	SAF609B	£4.09	SAF610B	£5.46	
1m	2m	SAF612B	£5.22	SAF622B	£6.39	
2m	4m	SAF614B	£8.21	SAF624B	£9.43	
3m	6m	SAF616B	£10.89	SAF626B	£13.00	

## SLINGSAVER SHACKLES



**Slingsaver Shackle (S-281)** Designed to eliminate bunching of slings caused by conventional shackles allowing 100% of the slings rated WLL to be achieved.

**SAFETY** Min Breaking Load 14,750kg Safety factor 5 to 1 Working load limit 2950kg

Webbing width	WLL	code	price
50mm	2950kg	CROS281	£11.90

## SEWN SLINGS [EN566] NYLON



**Round Sewn Slings** These 18mm and 25mm wide sewn nylon slings provide an economical quick and strong temporary fixing for pulleys etc. to trusswork or flying bars. Rated to 25kN and 30kN BL [when new]. The 18mm wide slings are black with red stitching and the 25mm wide ones have yellow stitching. Supplied with user instruction sheet. CE marked.

Sewn Slings	width	code	price
200mm (Circumference 400mm)	18mm	PETLSL18020	£2.34
300mm (Circumference 600mm)	18mm	PETLSL18030	£2.55
600mm (Circumference 1200mm)	18mm	PETLSL18060	£3.16

The 18mm wide slings conform to EN566.

Minimum breaking load 25kN when new.

300mm (Circumference 600mm)	25mm	PETLSL25030	£2.77
600mm (Circumference 1200mm)	25mm	PETLSL25060	£3.44
1200mm (Circumference 2400mm)	25mm	PETLSL25120	£4.74

The 25mm wide slings conform to EN566, EN795 type B.

Minimum breaking load 30kN when new.

**SAFETY** Sewn slings are marked with the minimum strength as per EN566. This is NOT the SWL.

## SEWN SLINGS [EN566] DYNEEMA



**Sewn Slings Dyneema** Comforms to EN566. Minimum breaking strength 22kN.

Dyneema Sewn Slings	width	code	price
600mm [Circumference 1200mm]	15mm	PETLSD060	£4.37

## WEB LINKS



**Seddon Link** A quick method of slinging pulleys etc from flying bars. Made from 25mm wide blue webbing with stainless steel fittings.

Seddon Link	SWL	code	price
	500kg	ROP0806	£15.81



**Black Web Link** A special link designed for theatre use in black webbing. These links are marked with the year of manufacture and SWL. Fits up to 60mm Ø barrel.

**SAFETY** Breaking Load 1500kg Safety factor 6 to 1 Safe working load 250kg

Black Web Link	SWL	code	each	per 10
	250kg	ROPOT25300	£13.22	£112.20

### A Note on Newtons

Technically a Newton is the SI unit of force (symbol: N). It is defined as the amount of force required to accelerate a mass of one kilogram at a rate of one metre per second squared. The Newton is also the unit of weight. A mass of one kilogram near the Earth's surface has a weight of approximately 9.81 newtons. One Newton has the mass of a small apple! Throughout this catalogue reference is made to "kN" or kiloNewtons. To convert kN to kgs, firstly multiply by 1,000 to get Newtons then divide by 9.81. Therefore a sling tested to 25kN could be converted to kgs by the following method: 25 x 1,000 = 25,000. Then divide by 9.81 = 2,548kgs.

For books on rigging see pages 3.71-3.72.