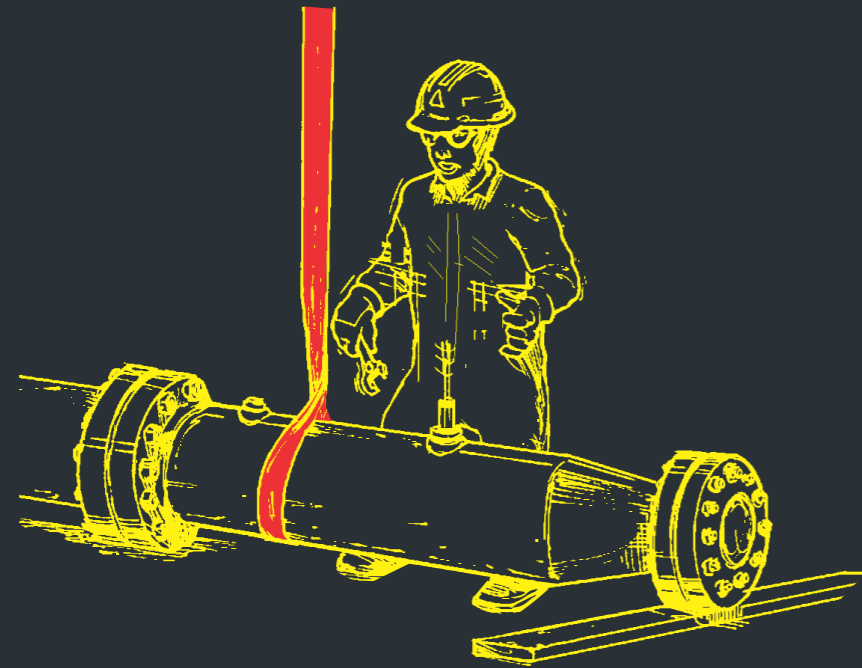




LEADING MANUFACTURER OF  
LOAD RESTRAINT & LIFTING SYSTEMS



FERRETERRO PRODUCT CATALOG 2018



**FERRETERRO INDIA PVT. LTD.**

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PRODUCT CATALOG 2018



***Ferretero India specializes in lifting and load securing. We manufacture lifting equipments upto 700 tons SWL , lashing systems for safe transit of goods and fall protection equipment with stringent quality measures . We manufacture systems with latest technology and computer aided machines, Embedded softwares , Product design expertise, state of art manufacturing, rich experience and most importantly, continuous drive to innovate & simplify things.***

***Keeping Safety as our utmost priority we believe in SAFETY SIMPLIFIED***





वीर तुम बढे चलो, धीर तुम बढे चलो,  
साथ में ध्वजा रहे, बाल दल सजा रहे,  
ध्वज कभी झुके नहीं, दल कभी रुके नहीं,  
सामने पहाड़ हो, सिंह की दहाड़ हो,  
तुम निडर हटो नहीं, तुम निडर उटो वही,  
वीर तुम बढे चलो, धीर तुम बढे चलो,  
प्रात हो कि रात हो, संग हो ना साथ हो,  
सूर्य से बढे चलो, चन्द्र से बढे चलो,  
वीर तुम बढे चलो, धीर तुम बढे चलो

द्वारिका प्रसाद माहेशवरी

Difficult we do immediately,  
Impossible takes a bit more time.



We are pleased to introduce ourselves as leading manufacturers of Lifting Products, Slings, Cargo restraint system, car lashing system and end fittings located in India.

#### Our Background

Our company belongs to Jhalani family of Delhi, Who are in Industry for the last 100 years, The group had a collaboration with Gedore Germany to manufacture hand tools in India in 1961. Over a period of time it became one of largest producers of flat wrenches in the world exporting to over 45 countries and had a work force of over 7000 persons.

#### Our Cargo Lashing / Fittings Business

A few years back we have launched a new factory to produce the hardware of lashing system. Over the period the company has grown into producing almost all the items required in the lashing and lifting slings with in-house facilities of producing all the required hardware, webbing, stretching, fabrication, assembly, rubber etc. at five strategically located manufacturing units. At present we are the ones who are producing most of the lashing & lifting assemblies & system in India, we are One stop destination for most of your requirements. We at present manufacture extensive range of products meeting EN 12195-2 standards for lashings and EN 1492-1 for slings.

**Work Force:** 250-300

**Production Units:** Noida-I, Roorkee, Pune, Noida-II, Chennai, Noida-III, Noida-IV, Jaipur, Noida-V, DUBAI

**In house processes:** Yarn Manufacturing, Spinning, Twisting, Wire drawing, Wire forming, Heat treatment, Forging, Tool room, Electroplating, Foundry, Webbing Manufacturing, Dyeing and finishing, Assembly line, stitching section, Profile cutting, Welding, Gear Manufacturing, Chain Manufacturing, Heat treatment, Printing section, Packaging.

**India Sales offices:** Delhi, Mumbai, Chennai, Pune, Gurgaon, Noida, Ahmedabad and Kolkata

We also develop as per customer's requirements and specifications. We can send samples and catalogues as per request and arrange for demo and technical assistance if required.





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## Services

We specialize in providing custom made services as

1. Solutions for Lifting and transportation of Heavy machineries and goods
2. Designing and developing lashing systems as per typical needs.
3. Designing and developing transport systems and lashing points for vehicles.
4. Solutions for lashing of various cargo
5. Production of all types of special Hardware goods, Steel Fabrication and Castings.
6. Research and development facilities for constant development and improvement of systems for customers.
7. Safety inspections, seminar and workshop for Lashing and lifting solutions.

## Quality Policy

FERRETERRO INDIA PVT. LTD. is committed to manufacture and timely provide cost effective and quality products to customers for customer satisfaction through ethical working, skill enhancement and continuous improvement in quality management systems by total employee involvement

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LIFTING



HOIST



CARGO CONTROL & LASHING



SAFETY



Defence and Misc

## Equipment

### **Yarn Manufacturing:**

Buhler SSP's , Barmag and Reiter Extrusion and Spinning system, Barmag Winders, Zwick Testing , Oerlikon Twisters, Salmoiraghi packaging

### **Wire Drawing Plant**

Over head Cranes, Cleaning Tanks, Shaving machine, Draw bench upto 20mm, Straightening and Cutting Machine .

### **Wire Forming Machines.**

High speed rotary stamping machine, Multiple heads of Forming Machines, Computer controlled fully automatic forming machine. Bending machines.

### **Manual and Robotic Welding.**

Multiple Welding machines with Jigs and fixtures. Robotic Welding fixtures, Precision High tensile welding machines, Crack Detection system.

### **Heat Treatment:**

Pre heating furnaces, Salt Bath Electrical Furnaces and Stress relieving Furnace.

### **Forging Plant:**

Drop forge Hammers, Press shop for Machining, Cleaning Machines, Multiple Grinding Machines, Line of Barrels for stone polishing, Shot blast machines, In house Tool room for Forging Dies.

### **Press shop for Metal stamping parts:**

We have a battery of eccentric Power presses from 5 tons to 200 tons with automatic feeders

### **Castings:**

Shell Core shooters for Precision Metal Castings.

Induction Furnace for Alloy steel Casting, Grinding Machines and Shot Blasting Machines.

### **Webbing:**

Warping Machines, High speed Needle looms, Automatic Tape measuring and cutting Machines, Continous Multi color Printing Machines, Continuous Dyeing and finishing Machines, Heavy duty sewing machines, CNC sewing machines, Round Sling manufacturing machines.

### **Automatic Roto Electroplating plants with zero polluting passivations.**

### **Printing Machines for labels as per EN standards.**

### **Injection Moulding**

**Injection Molding machines for Plastic, PVC, PP, LD and HDPE parts.**

### **Rubber:**

Mixing Plant, Sheet Formers, Hydraulic Rubber Curing Machines.

### **Tool Room:**

Surface Grinders, Precision Drill machines, Shaper, Lathe machines, Milling machine, Pedestal grinders etc.

### **Laboratory**

Hardness testers, Lab Ovens, Computer controlled Tensile testing machines, Digital high capacity tensile testing Machine, pH meters, Digitally controlled temperature sensors and all types of continuous process based testing instruments, chemicals testing lab, Colour matching Machine, Flammability Tester.

**Chain Manufacturing Plant -** Bending Machines, Heat treatment, Robotic Welding, Finishings.

**Dunnage Bag Plant -** P.P. and Paper dunnage bags.



## LIFTING SLINGS

1	Webbing Slings	Up to 110 Tons
2	Multiple Ply Slings	Up to 110 Tons
3	Flat Endless Slings	Up to 36 Tons
4	Endless Round Slings	Up to 150 Tons
5	Eye & Eye Round Slings	Up to 150 Tons
6	Extreem Round Sling (Dyneema Slings)	Up to 700 Tons
7	Twin Path Round Slings	Up to 500 Tons
8	Polyester Multileg Slings	2, 3 & 4 Legged / Upto 100 Tons
9	Black Belt Slings	Up to 700 Tons
10	FIRST Slings	Worlds only Transparent Slings/ Upto 300 Tons
11	ROTTOMAXX Slings	Chassis rotation Slings, Cut Resistant
12	Marshall Slings	Cut Resistant Slings
13	Glass Lifting Sling	
14	Adjustable Bridle Slings	Auto Adjustable of Centre of gravity
15	Ferreterro Ultra Slings	Extreme cover protection 1+1+1 construction- HMPE
16	FERRETEXX Coated Slings	Cut Resistant Moulded Slings
17	Coil Lifting with FERRETEXX Sleeves	
18	One Way Slings	Export Goods Slings
19	Bag Slings/ Slings Mats	Wider Slings upto 1200 mm
20	Pipe Line Lifters (IRON HEAD)	Upto 100 Tons
21	Reeving Slings	Choker Steel Fitting Slings
22	Anti Static Slings	Anti Static for Electronics, Missile & Explosives
23	Heat Resistance Slings	Upto 250° C Protection
24	Premium Slings	RFID
25	Clover Leaf Slings	For bags lifting
26	Drum Lifters	Upto 3 Tons
27	chain Slings	All types of Chaing Slings & Fittings





## Webbing Slings

We manufacture Webbing Slings upto 115 tons capacity as per EN 1492-1:2000 standards and ASME B30.9 standards.

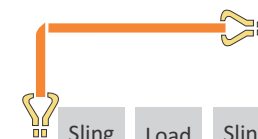
Flat Webbing Lifting Slings are made from high tenacity polyester webbing, colour coded for ease of identification for lifting. They are available in four basic types: Simplex, Duplex, Triplex and Endless.

Simplex Slings are manufactured from single thickness webbing, whereas Duplex slings are manufactured from double thickness webbing and Triplex of Three layers upto 10 layers. All are either terminated in a metal end fitting or, more popularly, sewn back upon themselves with a high tenacity Polyester fabric to form a reinforced Eye, which provides greater durability than the traditional leather eye.

The webbing is stitched close to the eyes which are upto 45" long bearing to bearing. Endless slings, however, are manufactured from single thickness webbing sewn in a continuous loop with an overlap. These slings are mainly used when needing a wide grip on large equipment, e.g. for lifting pipes. In order to protect the webbing from unnecessary wear and tear, various sleeveings are available, in any length, which can also protect both the sling and any fragile loads.

## Advantages of Webbing Slings

- Polyester Slings are much lighter & flexible therefore, easy to rig and handle.
- Do not damage sensitive or delicate surface resulting in lower industrial wastage.
- Problem free agreeable handling.
- Grips load tightly along the contours of the load.
- Minimizes the shock loading, can absorb heavy shocks without damage.
- Are colour coded for ease of identifications thus less chances of misuse.
- Easy visual inspection, saving frequent inspection and proof load testing.
- Do not rust or corrode and therefore does not weaken the edge.
- Improves productivity and employee's morale, therefore better labour relationships.
- Saves storage cost as they are flexible and lighter in weight, easy to store.
- Polyester slings have low initial cost and a long serving life, cost effective.
- Eliminates need of consumables like grease or hand gloves reducing recurring cost.
- Reduced machine downtime.
- No electrical conductivity.

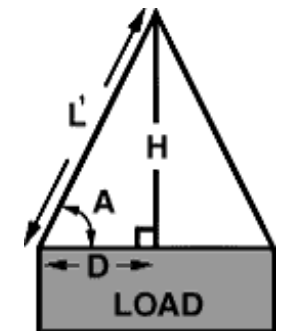


## Determining the Load on Each Leg of a Sling with Equal Legs

Sling Angle (A)	Load Angle Factor	Sling Angle (A)	Load Angle Factor
90°	1.000	55°	1.221
85°	1.004	50°	1.305
80°	1.015	45°	1.414
75°	1.035	40°	1.555
70°	1.064	35°	1.742
65°	1.104	30°	2.000
60°	1.155		

Load On Each Leg of a Sling (L1) =

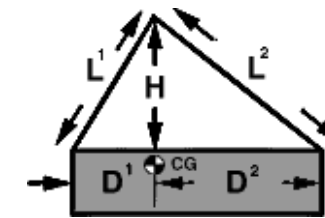
$$\frac{\text{Load (lbs.)} \times \text{Load Angle Factor}}{\text{Number of Legs}^*}$$



\*See also three and four leg slings below

### Unequal Legs

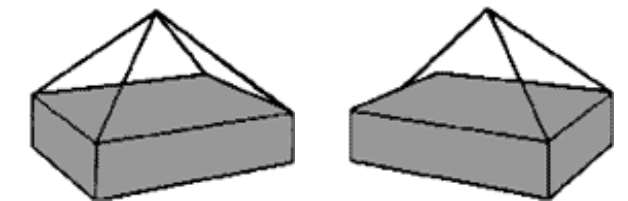
To calculate the load on each leg of a sling with unequal legs:



$$\text{Load on Leg L1} = \frac{\text{Load (lbs)} \times \text{D1} \times \text{L1}}{\text{H} \times (\text{D1} + \text{D2})}$$

$$\text{Load on Leg L2} = \frac{\text{Load (lbs)} \times \text{D2} \times \text{L2}}{\text{H} \times (\text{D1} + \text{D2})}$$

### Three & Four Legs



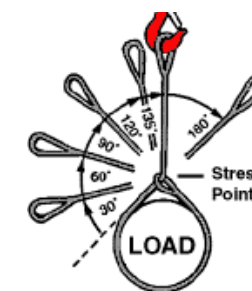
Triple leg slings have 50% more capacity than double legs only if the center of gravity is in the center of the connection point and the legs are adjusted to share the load equally.

Rigging a Quad leg sling so that all legs share the load equally is very difficult. Therefore, when adjusting the working load limit of four leg chain slings, the number of legs in the calculation must be 3 not 4. Many riggers follow this model for quad leg slings of any material, relying on the fourth leg for stability only.

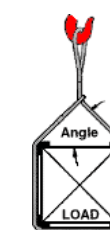
### Choker Hitch

**Choke Angle** - When lifting or turning a load rigged with a choker hitch, the angle at which a sling is turned back on itself can reduce its capacity below what is listed for its choker hitch, if the angle is too severe. When a load is allowed to hang free, the natural choke angle is about 135°.

Choke Angle	Choke Factor
120° +	1.00
90° - 120°	0.87
60° - 89°	0.74
30° - 59°	0.62
0° - 29°	0.49



**Choker Hitch Rated Capacity** - A choker hitch will have 75% of the capacity of a single leg vertical hitch only if the corners are softened and the horizontal angle is greater than 30°.



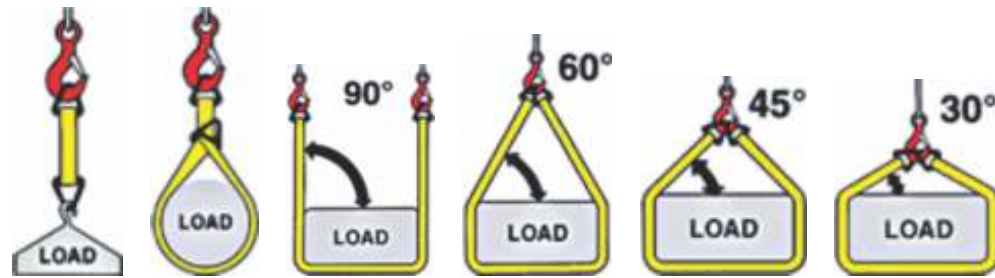
Use blocks to prevent angles less than 30°.



## Ringling with Slings

### Basic Slings Hitches and their effect on Working Load Limits

This illustration shows the basic sling hitches. It also shows capacities for a single sample sling, rigged with each hitch. The sample sling's Working Load Limit in a vertical hitch is 500 lbs.



**Sample Sling WLL (lbs.):**

500      375      1,000      866      707      500

This sling has a Working Load Limit of 500 lbs. in a vertical hitch. Used in a choker hitch, it would have a capacity of 375 lbs. Used in a basket hitch with the legs at a 90° angle to the load, it would have a working load limit of 1,000 lbs. Used in a basket hitch with the legs at a 60° angle to the load, it would have a working load limit of 866 lbs., etc. - Why? The angle at which a sling is used, and the number of legs lifting the load can significantly effect its capacity. The formula for this calculation is shown below.

**Vertical** - When a sling is used in a vertical hitch, the full lifting capacity of the sling material can be utilized.

**Choker** - Due to the stress created at the choke point, slings rigged with this hitch achieve only about 75% of their potential capacity. Always pull a choker hitch tight before a lift is made - never during the lift.

**Basket Hitch (90°)** - The cradle configuration of this hitch allows the two extending ends (legs) of the sling to function as if they were two separate slings. The capacity of the sling in this hitch is twice that of the same sling in a vertical hitch, but only if the sling angle of each leg is 90° (see right). Lifting with both legs at 90° would normally require two lifting devices or a spreader bar.

**Basket Hitch (less than 90°)** - When slings or sling legs are used at an angle during a lift, the sling capacity is reduced. How much it is reduced depends on the sling angle (see above and table, right).

Note that the rated capacity of a 30° Basket is only one half that of a 90° Basket. Sling angles below 30° are strongly discouraged. A sling angle of 60° or more is preferred.

**Sling Specification Tables** - Sling tables throughout our site contain the Working Load Limits of slings rigged with these hitches at certain specified angles.

Sling Angle	Sling Angle Factor
90°	1.000
85°	0.996
80°	0.985
75°	0.966
70°	0.940
65°	0.906
60	0.866
55°	0.819
50	0.766
45°	0.707
40	0.643
35°	0.574
30	0.500

### Formula for adjusting the Working Load Limit of a sling or sling leg used at an angle:

**Vertical Hitch Working Load Limit X Number of Legs\* X Sling Angle Factor = WLL at specified angle.**

The Working Load Limit for the sample sling above, in a 60° basket hitch would be calculated as follows:

500 lbs. (Vertical WLL) x 2 (num. of legs) x .866 (sling angle factor from table) = 866 lbs.

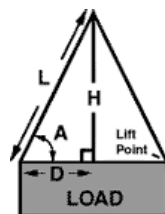
*\*Chain Slings: When adjusting the working load limit of four-legged chain slings, the number of legs entered in the formula must be 3 not 4. This is due to the difficulty of rigging a quad leg chain sling so that all legs share the load equally.*

### Determining Sling Angle

Use the formula below and the Sling Angle Table to estimate the lift angle.

**H / L = Sling Angle Factor**

Sling Angle (A)	Load Angle Factor	Sling Angle (A)	Load Angle Factor
90°	1.000	55°	0.819
85°	0.996	50°	0.766
80°	0.985	45°	0.707
75°	0.965	40°	0.643
70°	0.940	35°	0.574
65°	0.906	30°	0.500
60°	0.866		



### Determining Reach

To calculate the reach for equal legs needed to rig at a 45° or 60° angle.

**Reach at 60 degrees: L = 2 x D**

**Reach at 45 degrees: L = 1.4 x D**

On Multi-Leg Slings:

**Reach = L**

**Reach = 2 L + the distance around the load ( from lift point to lift point.)**



## Construction of Slings

Synthetic Slings are available in Flat Webbing, Flat endless, Round Endless and Round Eye to Eye type. These slings are available in capacity range 500 kg to 500 ton. All our polyester slings are manufactured as per EN 1492-1:2000 standards and ASME B30.9 standards.

### FLAT WEBBING SLINGS

Our Polyester flat slings are made from high tenacity polyester webbing, colour coded for ease of identification for lifting. These slings are available in two basic types:

#### Eye and Eye Type



Eye and eye slings are made with a flat loop eye on each end with a loop eye opening on the same plane as the sling body. This type of sling is generally called Flat eye and eye, eye & eye or double eye sling, Versatile and flexible, this sling can be used in all three hitches (Vertical Basket or Choker)

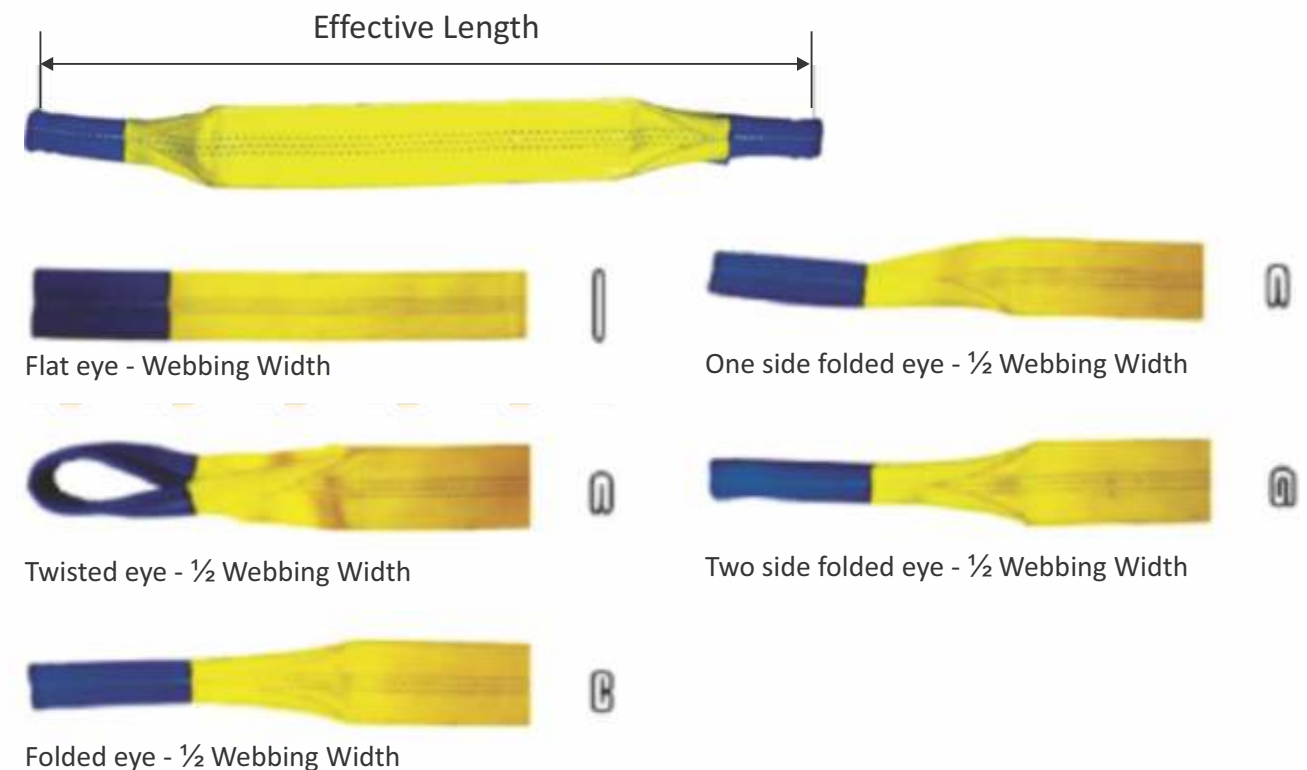
#### Endless type



Endless slings are made with a continuous loop formed by joining ends of the webbing together with a load bearing splice. Extremely versatile as the design allows rotating the bearing points, avoiding single constant bearing point thereby increase the life of sling. Can be used in all three hitches (Vertical Basket or Choker)

### WEB SLING EYE TYPES

The eye of a web sling is subject to wear and tear on every lift. Sling life can be extended by selecting the most appropriate style of eye, adding additional protective layer on to the loop area and tapering wider widths to better fit and sit on the hook.







## Construction Web of Slings

### SLING WIDTH & THICKNESS

Web Slings in regard of their width, should meet the demands of practical applications. They should have the required thickness to prevent wear. Narrow web slings of the same capacity are usually thicker than wide ones. Decreasing width of the sling naturally decreases stability of the edges and traverses. This effect reverses with increasing thickness. Wide web slings are useful for hanging load and especially in combination with traverses. Narrow web slings have advantages for diagonal tension due to their compact construction design. Wider slings offer a good support area.

Our slings therefore developed in ideal fabric design for sensible and practical sling width. Following types of flat slings are available:-

- 1) Simplex Slings
- 2) Duplex Slings
- 3) Quadriplex Slings



Simplex (1 ply)



Simplex (2 ply)



Quadriplex (4 ply)



Multy-ply Extreme Slings



## Simplex Webbing Slings



100% High Tenacity Polyester.  
 Made of Single thickness of Webbing  
 Flat & Wide Load Bearing surface.  
 According to EN 1492-1:2000 or  
 ASME B 30.9.  
 Safety Factor 7:1 and 5:1.  
 Low Elongation 3-7%.  
 High strength to weight ratio.  
 Available upto 300 mm width &  
 6 Ton Capacity.  
 Colour coded for easy identification.



			SIMPLEX WEBBING SLINGS CAPACITY IN KGS								
			WLL kg with one webbing sling				WLL kg with two webbing sling				
			Straight lift	Choke Hitch	Basket Hitch			Straight Inclination		Choke Inclination	
					up to 7°	7° - 45°	45° - 60°	7° - 45°	45° - 60°	7° - 45°	45° - 60°
ITEM CODE	WIDTH	COLOUR CODE									
MODE FACTOR			M=1.0	M=0.8	M=2	M=1.4	M=1.0	M=1.4	M=1.0	M=1.12	M=0.8
FSP-500	25	VIOLET	500	400	1000	700	500	700	500	560	400
FSP-1000	50	GREEN	1000	800	2000	1400	1000	1400	1000	1120	800
FSP-1500	75	YELLOW	1500	1200	3000	2100	1500	2100	1500	1680	1200
FSP-2000	100	GREY	2000	1600	4000	2800	2000	2800	2000	2240	1600
FSP-2500	125	RED	2500	2000	5000	3500	2500	3500	2500	2800	2000
FSP-3000	150	BROWN	3000	2400	6000	4200	3000	4200	3000	3360	2400
FSP-4000	200	BLUE	4000	3200	8000	5600	4000	5600	4000	4480	3200
FSP5000	250	ORANGE	5000	4000	10000	7000	5000	7000	5000	5600	4000
FSP-6000	300	ORANGE	6000	4800	12000	8400	6000	8400	6000	6720	4800



**PROTECTION AGAINST SHARP EDGES**  
 Synthetic slings can only be used for sharp edged loads with rough surfaces if the area in danger is protected. A sharp edge means that the radius of the edge  $r$  is smaller than the depth of the lifting device.



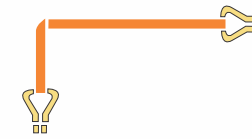


## Duplex Webbing Slings

100% High Tenacity Polyester.  
 Made of Double thickness of Webbing.  
 Flat & Wide Load Bearing surface.  
 According to EN 1492-1:2000 or  
 ASME B 30.9, Safety Factor 7:1 and 5:1  
 Low Stretch Factor : Elongation 3-7%  
 High strength to weight ratio : Weight 80%  
 less than Equivalent Wire or Chain Slings.  
 Available upto 600 mm width &  
 12 Ton Capacity.  
 Colour coded for easy identification.  
 Maximum working temperature 90°C.  
 Anti-abrasion sleeves and anti-cutting  
 sleeves protection (optional).



			DUPLEX WEBBING SLINGS CAPACITY IN KGS								
			WLL kg with one Webbing Sling				WLL kg with two Webbing Sling				
ITEM CODE	WIDTH	COLOUR CODE	Straight lift	Choke Hitch	Basket Hitch		Straight Inclination		Choke Inclination		
					up to 7°	7° - 45°	45° - 60°	7° - 45°	45° - 60°	7° - 45°	45° - 60°
<b>MODE FACTOR</b>			M=1.0	M=0.8	M=2	M=1.4	M=1.0	M=1.4	M=1.0	M=1.12	M=0.8
FDP-1000	25	VIOLET	1000	800	2000	1400	1000	1400	1000	1120	800
FDP-2000	50	GREEN	2000	1600	4000	2800	2000	2800	2000	2240	1600
FDP-3000	75	YELLOW	3000	2400	6000	4200	3000	4200	3000	3360	2400
FDP-4000	100	GREY	4000	3200	8000	5600	4000	5600	4000	4480	3200
FDP-5000	125	RED	5000	4000	10000	7000	5000	7000	5000	5600	4000
FDP-6000	150	BROWN	6000	4800	12000	8400	6000	8400	6000	6720	4800
FDP-8000	200	BLUE	8000	6400	16000	11200	8000	11200	8000	8960	6400
FDP-10000	250	ORANGE	10000	8000	20000	14000	10000	14000	10000	11200	8000
FDP-12000	300	ORANGE	12000	9600	24000	16800	12000	16800	12000	13440	9600



## Quadruplex Flat Slings



100% High Tenacity Polyester.  
 Made of 3 & 4 thickness of Webbing.  
 Flat & Wide Load Bearing surface.  
 According to EN 1492-1:2000 or  
 ASME B 30.9. Safety Factor 7:1 and 5:1.  
 Low Stretch Factor : Elongation 3-7%.  
 High strength to weight ratio : Weight 80%  
 less than Equivalent Wire or Chain Slings.  
 Available upto 300 mm width &  
 24 Ton Capacity.  
 Colour coded for easy identification.  
 Maximum working temperature 90°C.  
 Anti-abrasion sleeves and anti-cutting  
 sleeves protection (optional).

			QUADRUPLEX WEBBING SLINGS CAPACITY IN KGS								
			WLL kg with one webbing sling				WLL kg with two webbing sling				
ITEM CODE	WIDTH	COLOUR CODE	Straight lift	Choke Hitch	Basket Hitch		Straight Inclination		Choke Inclination		
					up to 7°	7° - 45°	45° - 60°	7° - 45°	45° - 60°	7° - 45°	45° - 60°
<b>MODE FACTOR</b>			M=1.0	M=0.8	M=2	M=1.4	M=1.0	M=1.4	M=1.0	M=1.12	M=0.8
FQP-2000	25	VIOLET	2000	1600	4000	2800	2000	2800	2000	2240	1600
FQP-4000	50	GREEN	4000	3200	8000	5600	4000	5600	4000	4480	3200
FQP-6000	75	YELLOW	6000	4800	12000	8400	6000	8400	6000	6720	4800
FQP-8000	100	GREY	8000	6400	16000	11200	8000	11200	8000	8960	6400
FQP-10000	125	RED	10000	8000	20000	14000	10000	14000	10000	11200	8000
FQP-12000	150	BROWN	12000	9600	24000	16800	12000	16800	12000	13440	9600
FQP-16000	200	BLUE	16000	12800	32000	22400	16000	22400	16000	17920	12800
FQP-20000	250	ORANGE	20000	16000	40000	28000	20000	28000	20000	22400	16000
FQP-24000	300	ORANGE	24000	19200	48000	33600	24000	33600	24000	26880	19200

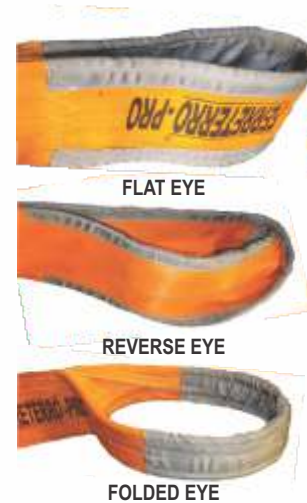




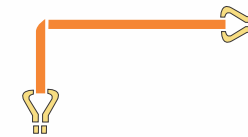
## Multilayer Polyester Slings



100% High Tenacity Polyester  
 Made of 6-8 ply of Webbing  
 Flat & Wide Load Bearing surface.  
 According to EN 1492-1:2000 or ASME B 30.9  
 Safety Factor 7:1 and 5:1  
 Low Stretch Factor : Elongation 3-7%  
 High strength to weight ratio.  
 Available up to 300 mm width & 110 Ton Capacity.  
 Colour coded for easy identification.  
 Maximum working temperature 90°C.



FLAT MULTIPLY WEBBING SLINGS CAPACITY IN KGS											
ITEM CODE	WIDTH	COLOUR CODE	WLL kg with one Webbing Sling					WLL kg with two Webbing Sling			
			Straight lift	Choke Hitch	up to 7°	Basket Hitch 7° - 45° 45° - 60°	Straight Inclination 7° - 45° 45° - 60°	Choke Inclination 7° - 45° 45° - 60°			
MODE FACTOR			M=1.0	M=0.8	M=2	M=1.4	M=1.0	M=1.4	M=1.0	M=1.12	M=0.8
FMP-36	300	ORANGE	36000	28800	72000	50400	36000	50400	36000	40320	28800
FMP-48	300	ORANGE	48000	38400	96000	67200	48000	67200	48000	53760	38400
FMP-50	300	ORANGE	50000	40000	100000	70000	50000	70000	50000	56000	40000
FMP-60	300	ORANGE	60000	48000	120000	84000	60000	84000	60000	67200	48000
FMP-72	300	ORANGE	72000	57600	144000	100800	72000	100800	72000	80640	57600
FMP-84	300	ORANGE	84000	67200	168000	117600	84000	117600	84000	94080	67200
FMP-100	300	ORANGE	100000	80000	200000	140000	100000	140000	100000	112000	80000
FMP-110	300	ORANGE	110000	88000	220000	154000	110000	154000	110000	123200	88000



## Flat Endless Slings

Endless Flat Slings are the most versatile of the entire web sling configuration. Endless Web slings can be used in all 3 types of hitches and perfectly suited for use with traverses in lifting or choking use. The wear points can be adjusted around the circumference of the sling to increase sling life. Compared to eye to eye slings, endless web slings are much simpler to sew and thus are highly economical lifting devices.

### FEATURES

100% High Tenacity Polyester.  
 Made of Double thickness of Webbing.  
 Flat & Wide Load Bearing surface.  
 According to EN 1492-1-2000 or ASME B 30.9, Safety Factor 7:1 and 5:1  
 Low Stretch Factor : Elongation 3-7%  
 High strength to weight ratio.  
 Available upto 300 mm width & 24 Ton Capacity.  
 Colour coded for easy identification.  
 Maximum working temperature 90°C.



### ADVANTAGES

- Easy handling in choking use.
- Loads are always carried by two strands.
- Higher load capacity compare to web slings of equal width.
- Highly cost efficient.
- Ideal for Pre-sling techniques.
- Available in simplex or duplex configuration.
- Best uses in lifting pipe bundles and in exports .

FLAT ENDLESS SINGLE PLY SLINGS CAPACITY IN KGS											
ITEM CODE	WIDTH	COLOUR CODE	WLL kg with one Endless Sling					WLL kg with two Endless Sling			
			Straight lift	Choke Hitch	up to 7°	Basket Hitch 7° - 45° 45° - 60°	Straight Inclination 7° - 45° 45° - 60°	Choke Inclination 7° - 45° 45° - 60°			
MODE FACTOR			M=1.0	M=0.8	M=2	M=1.4	M=1.0	M=1.4	M=1.0	M=1.12	M=0.8
FRFS-1	25	VIOLET	1000	800	2000	1400	1000	1400	1000	1120	800
FRFS-2	50	GREEN	2000	1600	4000	2800	2000	2800	2000	2240	1600
FRFS-3	75	YELLOW	3000	2400	6000	4200	3000	4200	3000	3360	2400
FRFS-4	100	GREY	4000	3200	8000	5600	4000	5600	4000	4480	3200
FRFS-5	125	RED	5000	4000	10000	7000	5000	7000	5000	5600	4000
FRFS-6	150	BROWN	6000	4800	12000	8400	6000	8400	6000	6720	4800
FRFS-8	200	BLUE	8000	6400	16000	11200	8000	11200	8000	8960	6400
FRFS-10	250	ORANGE	10000	8000	20000	14000	10000	14000	10000	11200	8000
FRFS-12	300	ORANGE	12000	9600	24000	16800	12000	16800	12000	13440	9600

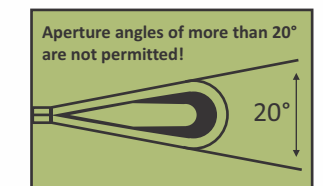
FLAT ENDLESS DOUBLE PLY SLINGS CAPACITY IN KGS											
ITEM CODE	WIDTH	COLOUR CODE	WLL kg with one Endless Sling					WLL kg with two Endless Sling			
			Straight lift	Choke Hitch	up to 7°	Basket Hitch 7° - 45° 45° - 60°	Straight Inclination 7° - 45° 45° - 60°	Choke Inclination 7° - 45° 45° - 60°			
MODE FACTOR			M=1.0	M=0.8	M=2	M=1.4	M=1.0	M=1.4	M=1.0	M=1.12	M=0.8
FRFD-2	25	VIOLET	2000	1600	4000	2800	2000	2800	2000	2240	1600
FRFD-4	50	GREEN	4000	3200	8000	5600	4000	5600	4000	4480	3200
FRFD-6	75	YELLOW	6000	4800	12000	8400	6000	8400	6000	6720	4800
FRFD-8	100	GREY	8000	6400	16000	11200	8000	11200	8000	8960	6400
FRFD-10	125	RED	10000	8000	20000	14000	10000	14000	10000	11200	8000
FRFD-12	150	BROWN	12000	9600	24000	16800	12000	16800	12000	13440	9600
FRFD-16	200	BLUE	16000	12800	32000	22400	16000	22400	16000	17920	12800
FRFD-20	250	ORANGE	20000	16000	40000	28000	20000	28000	20000	22400	16000
FRFD-24	300	ORANGE	24000	19200	48000	33600	24000	33600	24000	26880	19200



FLAT ENDLESS SINGLE PLY SLINGS



FLAT ENDLESS DOUBLE PLY SLINGS



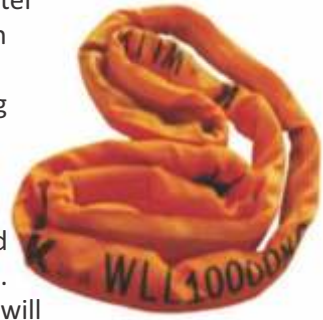




## Endless Round Slings

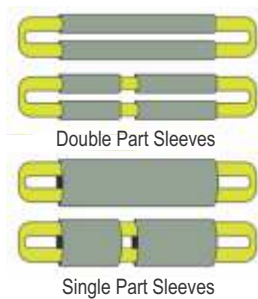


We manufacture round slings in accordance to EN 1492-2:2000 and ASME B 30.9 from 100% polyester. The outer cover is a seamless polyester sleeve of double thickness construction and has an excellent abrasion resistance. Soft, Supple & light weight, easy to handle. The most flexible sling available conforms to the load extremely well and provides choker hold. Being endless, wears evenly as load & hook contact points can be continually rotated to extend sling life. Load bearing fibers never come in contact with the load. Seamless cover, no edge to wear out. Cover abrasion will not reduce the capacity. Adapts to all sizes, types and load configurations. Lightweight, easy to rig, store & clean. Colour coded for easy identification. Available upto 180mm width



and 50 Tons capacity. (insert before the line " available in safety factor....") Available in safety factor 7:1 and 5:1 Free overload tail indicator yarn and optical fiber.

			ROUND ENDLESS SLINGS CAPACITY IN KGS								
			WLL kg with one Round Endless Sling				WLL kg with two Round Endless Sling				
ITEM CODE	APPROX. DIA	COLOUR CODE	Straight lift	Choke Hitch	Basket Hitch			Straight Inclination		Choke Inclination	
					up to 7°	7° - 45°	45° - 60°	7° - 45°	45° - 60°	7° - 45°	45° - 60°
MODE FACTOR			M=1.0	M=0.8	M=2	M=1.4	M=1.0	M=1.4	M=1.0	M=1.12	M=0.8
FRE-1	18	VIOLET	1000	800	2000	1400	1000	1400	1000	1120	800
FRE-2	20	GREEN	2000	1600	4000	2800	2000	2800	2000	2240	1600
FRE-3	22	YELLOW	3000	2400	6000	4200	3000	4200	3000	3360	2400
FRE-4	25	GREY	4000	3200	8000	5600	4000	5600	4000	4480	3200
FRE-5	28	RED	5000	4000	10000	7000	5000	7000	5000	5600	4000
FRE-6	32	BROWN	6000	4800	12000	8400	6000	8400	6000	6720	4800
FRE-8	38	BLUE	8000	6400	16000	11200	8000	11200	8000	8960	6400
FRE-10	46	ORANGE	10000	8000	20000	14000	10000	14000	10000	11200	8000
FRE-12	58	ORANGE	12000	9600	24000	16800	12000	16800	12000	13440	9600
FRE-15	70	ORANGE	15000	12000	30000	21000	15000	21000	15000	16800	12000
FRE-20	78	ORANGE	20000	16000	40000	28000	20000	28000	20000	22400	16000
FRE-25	90	ORANGE	25000	20000	50000	35000	25000	35000	25000	28000	20000
FRE-30	100	ORANGE	30000	24000	60000	42000	30000	42000	30000	33600	24000
FRE-36	115	ORANGE	36000	28800	72000	50400	36000	50400	36000	40320	28800
FRE-50	180	ORANGE	50000	40000	100000	70000	50000	70000	50000	56000	40000
FRE-75	200	ORANGE	75000	60000	150000	105000	75000	105000	75000	84000	60000
FRE-100	250	ORANGE	100000	80000	200000	140000	100000	140000	100000	112000	80000



To protect the round slings from cut while using on sharp edges Anti-Abrasive and Anti-cut sleeves must be used. There are basically 2 types of sleeves available for round slings

1. Movable type sleeves- slide freely on sling but cannot be removed
2. Quick Sleeve – Slide freely on sling and removable have Velcro



All these slings are available in different types of material i.e. Polyester, Kevlar, High Molecular Polyethylene (HMPE), Polyester with PU impregnated, Polyurethane blended Polymer and Polyurethane. (See Sling Protection)



## Eye & Eye Round Slings



Soft, Supple & light weight, easy to use. Super flexible, conforms to shape of load, flattered and lift the load securely. Works well for confined spaces. All advantages of Flat Web slings & Round slings. Extra Sleeves cab be added to body easily. Adapts to all sizes, types and load configurations. Light weight and pliable for easy lifting and storage. Colour coded for easy identification. Available in safety factor 7:1 and 5:1 Free overload tail indicator yarn and optical fiber.



			EYE TO EYE ROUND SLINGS CAPACITY IN KGS								
			WLL kg with one Round Sling				WLL kg with two Round Sling				
ITEM CODE	APPROX. DIA	COLOUR CODE	Straight lift	Choke Hitch	Basket Hitch			Straight Inclination		Choke Inclination	
					up to 7°	7° - 45°	45° - 60°	7° - 45°	45° - 60°	7° - 45°	45° - 60°
MODE FACTOR			M=1.0	M=0.8	M=2	M=1.4	M=1.0	M=1.4	M=1.0	M=1.12	M=0.8
FREE-1	36	VIOLET	1000	800	2000	1400	1000	1400	1000	1120	800
FREE-2	40	GREEN	2000	1600	4000	2800	2000	2800	2000	2240	1600
FREE-3	44	YELLOW	3000	2400	6000	4200	3000	4200	3000	3360	2400
FREE-4	50	GREY	4000	3200	8000	5600	4000	5600	4000	4480	3200
FREE-5	56	RED	5000	4000	10000	7000	5000	7000	5000	5600	4000
FREE-6	64	BROWN	6000	4800	12000	8400	6000	8400	6000	6720	4800
FREE-8	76	BLUE	8000	6400	16000	11200	8000	11200	8000	8960	6400
FREE-10	92	ORANGE	10000	8000	20000	14000	10000	14000	10000	11200	8000
FREE-12	116	ORANGE	12000	9600	24000	16800	12000	16800	12000	13440	9600
FREE-15	140	ORANGE	15000	12000	30000	21000	15000	21000	15000	16800	12000
FREE-20	156	ORANGE	20000	16000	40000	28000	20000	28000	20000	22400	16000
FREE-25	180	ORANGE	25000	20000	50000	35000	25000	35000	25000	28000	20000
FREE-30	200	ORANGE	30000	24000	60000	42000	30000	42000	30000	33600	24000
FREE-36	230	ORANGE	36000	28800	72000	50400	36000	50400	36000	40320	28800
LREE-50	360	ORANGE	50000	40000	100000	70000	50000	70000	50000	56000	40000
FREE-75	400	ORANGE	75000	60000	150000	105000	75000	105000	75000	84000	60000
FREE-100	500	ORANGE	100000	80000	200000	140000	100000	140000	100000	112000	80000



Uses Anti-Abrasive, Anti-cut sleeves to protect round slings from damage by sharp edges, we have wide range of protection sleeves. (See Sling Protection).

Aperture angle of eyes should not be more than 20. It means length of the eye equals or exceeds four times the area of support of the lifting hook.





## Extreme Round Slings

FERRETERRO manufacture the Extreme Round Slings with UHMPE fiber manufactured by DSM Dyneema®. Dyneema® World's strongest yarn is enclosed in double covers, inner being polyester and outer being heavy duty abrasion resistance polyurethane impregnated cover, which acts as anti abrasive sleeves also. The sling is fitted with optic fiber overload tell Tail indicating tail for overloading at any point of time and optic fiber for detection of any cover damage through process of reflection. Available in capacity 36 Tons to 500 Tons. Ferreterro also manufactures Cut protection systems for extreme slings upto 500 tons capacity.



ITEM CODE		COLOUR CODE		EXTREME ROUND ENDLESS SLINGS CAPACITY IN KGS									
				WLL kg with one Round Endless Sling					WLL kg with two Round Endless Sling				
				Straight lift	Choke Hitch	Basket Hitch			Straight Inclination		Choke Inclination		
up to 7°	7° - 45°	45° - 60°	7° - 45°			45° - 60°	7° - 45°	45° - 60°	7° - 45°	45° - 60°			
MODE FACTOR		M=1.0	M=0.8	M=2	M=1.4	M=1.0	M=1.4	M=1.0	M=1.12	M=0.8			
FREX-36	ORANGE	36000	28800	72000	50400	36000	50400	36000	40320	28800			
FREX-40	ORANGE	40000	32000	80000	56000	40000	56000	40000	44800	32000			
FREX-48	ORANGE	48000	38400	96000	67200	48000	67200	48000	53760	38400			
FREX-50	ORANGE	50000	40000	100000	70000	50000	70000	50000	56000	40000			
FREX-70	ORANGE	70000	56000	140000	98000	70000	98000	70000	78400	56000			
FREX-75	ORANGE	75000	60000	150000	105000	75000	105000	75000	84000	60000			
FREX-80	ORANGE	80000	64000	160000	112000	80000	112000	80000	89600	64000			
FREX-100	ORANGE	100000	80000	200000	140000	100000	140000	100000	112000	80000			
FREX-125	ORANGE	125000	100000	250000	175000	125000	175000	125000	140000	100000			
FREX-150	ORANGE	150000	120000	300000	210000	150000	210000	150000	168000	120000			
FREX-200	ORANGE	200000	160000	400000	280000	200000	280000	200000	224000	160000			
FREX-250	ORANGE	250000	200000	500000	350000	250000	350000	250000	280000	200000			
FREX-300	ORANGE	300000	240000	600000	420000	300000	420000	300000	336000	240000			

Up to 500 Tons details on request



## ADVANTAGES OF DYNEEMA OVER ANY OTHER FIBER. STRONGEST IN WORLD FOR SAFER APPLICATIONS.



### Lightness

Dyneema® floats, it is the lightest super fiber around. Thanks to its low density, it is ideally suited for floating ropes and innovative, lighter-than-air structures. Density = 970 kg/m<sup>3</sup>, 5% less than sea water.



### Strength

Dyneema®, the world's strongest yarn™ is 15 times stronger than steel fiber of the same weight. Tenacity ranging from 2.7 to 4 N/tex.



### Rigidity

Because of its low elasticity, anglers feel the slightest nibble at the end of their lines. They can respond instantly for better action and powerful hook sets. E = Up to 140 N/tex.



### Flexibility

Dyneema® is the only super-fiber that doesn't break if you bend it or fold it, even millions of times. Relative Flexlife: Dyneema® 100, Vectran 55, Aramid 8.



### Low temperature stability

Dyneema® does not freeze, it is tough and does not have a ductile to brittle transition, even at cryogenic temperatures. Dyneema® survives the liquid nitrogen test.



### Chemical resistance

Dyneema® is acid and alkali-resistant. There is no strength loss whatever the pH, making the fiber highly suitable for demanding filtration applications in the chemical and food industries. No strength loss between 0 and 14 pH.



### Low thermal expansion

The thermal expansion of Dyneema® coefficient is both very low and negative, which means that Dyneema® is stable during extreme temperature fluctuations (as in a cooling container, where there is a wide differential between inside and outside temperatures). Thermal expansion coefficient: -12 10<sup>-6</sup> per K.



### Abrasion resistance

UHMWPE boasts a very high abrasion resistance. Dyneema® combines this property with its other unique aspects to create the most enduring ropes around. 2.5 to 8 times lower dry abrasion and 1.5 to 40 times lower wet abrasion than all other fibers.



### Impact resistance

The tremendous amount of energy that Dyneema® can absorb means it is ideal for use in composites that require high impact-resistance. Twice as much energy required for penetration as in comparable Aramid construction.



### Cut resistance

The cut-protective properties of Dyneema® make it suitable for use not only in protective clothing like gloves and shin guards, but also in a wide range of industrial applications like lifting slings.



### Tear resistance

Fabrics containing Dyneema® are extremely tear-resistant. Minor damage does not propagate easily.



### UV stability

For a strong polymeric fiber, Dyneema® is exceptionally resistant to UV radiation.





## Properties of Dyneema

Dyneema

- Dyneema, World Strongest Yarn, is approximately 20% of the weight of polyester and approximately 5% of the weight of the wire rope of its equivalent tonnage.
- Its elongation is 1% of rated capacity also equivalent to steel and elongation of 3% at break also and ideal for all applications where low elasticity is required.



	NYLON	POLYESTER	ARAMID	DYNEEMA
<b>STRENGTH in GPD(GRAMS PER DENIER)</b>	8.0 - 9.0	6.5 - 9.0 G	23	42
<b>SPECIFIC GRAVITY</b>	1.14	1.38	1.44	0.97
<b>WEIGHT</b>	1	1.21	1.26	0.85
<b>ELASTICITY</b>	16%	10- 12%	3.60%	3.60%
<b>MOISTURE ABSORBENCY</b>	9% of Weight	1% of Weight	5% of Weight	None
<b>MELTING POINT</b>	460° F	480° F	800° F	297° F
<b>CO-EFFICIENT OF FRICTION</b>	.10 to .12	.12 to .15	.10 to .12	0.04
<b>ABILITY TO FLOAT</b>	SINKS	SINKS	SINKS	FLOATS



## Twin Path Round Slings



FERRETERRO Twin slings are available in Polyester/HMPE fibers made by DSM Dyneema® BV.

### BACKUP PROTECTION

Twin slings are actually two complete and separate slings in one. Each path makes its own separate connection between the hook and the load and account for 50% of the total slings work load. The design we manufacture is non patented and is cost effective than other sling makers.

### DOUBLE CORE (ON REQUEST)

The twin sling design provides the sling user with an early warning and inspection system. Also available in double core for extra abrasion resistance and long life. The load carrying yarn never comes in contact with the load. When the protection outer cover is damaged, the inner cover provides extra protective sleeve for usage.

### ELONGATION STRING (FREE)

We provide all our round slings, and TWIN slings with Elongation string to know whether the sling has elongated. When the string disappears sling should be discarded.

### FIBER-OPTIC INSPECTION (FREE)

Fiber optic inspection cables assist the sling user and inspector to evaluate the condition of the load carrying yarns. The condition of internal load carrying yarn can be inspected by checking the conductivity of the fiber optic cable. If the load carrying yarn have suffered chemical, heat or crushing damage, the fiber optic will lose its ability to transmit light from one end to the other, giving the inspector a reason to remove the sling from service and return it for repair evaluation







## Polyester Multileg Slings

Multileg Polyester slings are made of using either Flat Webbing Slings Straps or Endless type round slings as per specific requirements depending upon uses and safe working loads. A set of multi leg slings includes Master link, Auxiliary links and different end fittings like Eye hooks, Swivel hooks, D-Shackles or Bow- Shackles, Rings as required. All these fittings are made of quenched and tempered alloy steel grade-80 material. Flat slings are stitched directly to the metal ring while Endless round slings are attached with connecting links. Anti-abrasive and Anti-cutting protection sleeves can be fitted as per specific requirements.



### FEATURES

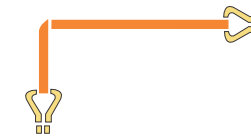
- SELECTION OF FLAT WEBBING OR ROUND SLINGS
- CHOICE OF 2 LEG, 3 LEG AND 4 LEG TYPES
- AVAILABLE IN CUSTOMISED LENGTHS
- HIGH STRENGTH TO WEIGHT RATIO
- COLOUR CODED FOR IDENTIFICATION
- DIFFERENT END FITTINGS AVAILABLE
- END FITTING METAL COMPONENTS FORGED ALLOY STEEL
- ANTI-ABRASION SLEEVES AND ANTI CUTTING SLEEVES PROTECTION

### ADVANTAGE

- Better load control and balance. Bridle slings give fixed lifting points and choice of multiple legs.
- Hardwares avoid wearing & cuts of slings at load bearing points.



MULTILEG SLING CAPACITY AT 90°		
SWL	SWL	SWL
2 LEG SLING	3 LEG SLING	4 LEG SLING
TON	TON	TON
1.4	2.1	2.8
2.8	4.2	5.6
4.2	6.3	8.4
5.6	8.4	11.2
7.0	10.5	14.0
8.4	12.6	16.8
11.2	16.8	22.4
14.0	21.0	28.0
16.8	25.2	33.6



## Ferretero Black Belt Slings

HIGH STRENGTH, LOW WEIGHT, HEAVY LIFT



EVER SEEN BLACK BELT COME WHITE IN COLOR!  
The top most degree of perfection BLACK BELT has been introduced in lifting slings!  
These slings work in hostile environment, extremely cut resistant and amazingly light weight. Abrasion is no problem and are stronger than steel.  
Available in HMPE fibers made by DSM Dyneema® BV



We are manufacturer of round endless slings by using HMPE yarn in higher capacity upto 500 Ton round endless slings, manufactured by using HMPE yarn in higher capacities up to 500 Ton. These slings have top most degree of perfection. These are suitable to specialized extreme heavy lifting requirements. These slings are available in Round Endless, Eye and Eye type and TWO PATH Sling type.



### LIGHTNESS

These slings are very light weight yet stronger than polyester and steel wire slings of same capacity. The weight factor of these slings is approx. 2.4 in comparison to polyester and 8-9 in comparison to steel.



### STRENGTH

Due to their super-strength, very light weight and abrasion resistance, they are widely used to lift heavy objects, steel coils etc.



### CUT RESISTANT

These slings are very good abrasion and cut resistant. Ferretero brand slings made of HMPE yarn floats on water and are extremely durable and resistant to moisture, ultraviolet sunlight and chemicals.







## FIRST SLINGS


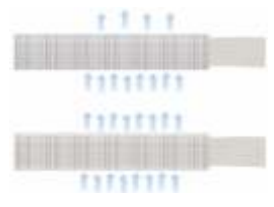
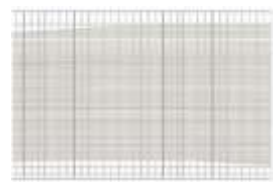
The round slings are the only slings wherein the actual load bearing material is hidden from the sling user for visual inspection. The inspection criteria of round slings are only relied on appearance and condition of its outer cover. Even if round sling have overload indicator there is no predictable way to determine when the failure indicator will be triggered. Even a perfect looking round sling on outside could have worn bearing yarn at inside.



TAILS, OPTICS etc don't work !!  
But are only an eye wash !!!

### Full Inspection Round Sling Technology

First Slings made by Ferretero have full transparent cover, which Embodies and protects without prohibiting a visual inspection of the working round sling, the core, the lifting sling. Ferretero First Slings are available with Polyester/ HMPE fibers made by DSM Dyneema® BV.

	<b>Weight Less</b> Weight less than half of an opaque sling of the same rated capacity
	<b>Dries Faster</b> Breathable cover with improved resistance to mildew & rotting
	<b>Snag Resistant</b> Snag resistant weave with coefficient of friction better



1. It is easy to clean, finished with PTFE, a treatment similar to Teflon that promotes the removal of dirt, grease, and grime as necessary for field inspection.
2. Despite of inspectable transparent cover it provides equal UV Protection to core yarn compare to other jackets of Polyester and Nylon.
3. Highly abrasion resistant.
4. Can be provided with international colour coding in tag area
5. FIRST sling cover has opening of only 0.004 sq inches while opaque round slings have immeasurable and continuous opening. Contaminated particles like sand or small metal shaving remains unseen in opaque round slings, risking hidden damage to the rated core yarns.
6. Can be supplied with Sliding Anti Abrasive sleeves as per customer's requirements.
7. Available in Capacity up to 300 ton



## Rotomaxx Slings



Now all your turning devices for turning automobiles, chassis, Marble Blocks, Machines, Moulds infact, rather anything can be secured on our range of Ferretero ROTOMAXX slings. These are heavy duty slings impregnated with Polyurethane and plasticized coating to grip the load and are almost Anti-cut. These silngs can be made up to 30 ton load turning.

### QUALITIES OF ROTOMAXX SLINGS

1. Damage free rotation, cost effective.
2. Enhance safety due to jerk-free smooth rotation
3. Increased work efficiency.
4. Available up to 30 ton load rotating capacity
5. Available both single side and both side coating
6. Coating thickness can be customised

Rotomaxx are the special belts of universal sizes which fit all machines like Vetter, Load Turner, Pal Turner, Posi Turn, wimag, EZ Turn or rather fit on to every machine.

These belts are made in-house on special state of art equipment to give maximum life to the product. The structure is controlled so that the load remains perfectly horizontal to the load turning device. Corner protector, sleeves and coatings together provide abrasive resistance.



### Instruction for usages of ROTOMAXX slings

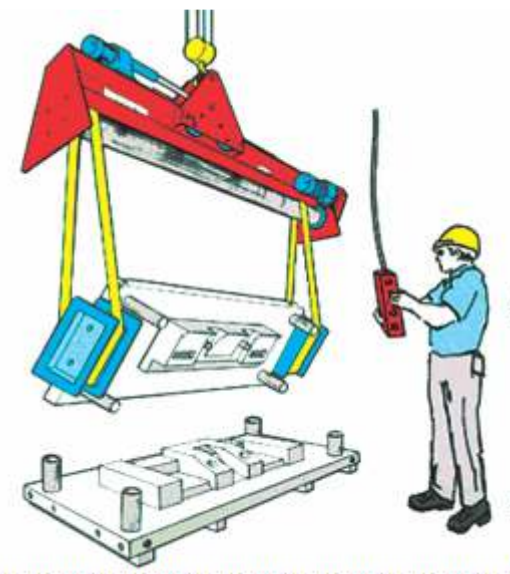
Although the ROTOMAXX slings are extremely heavy duty with cut resistant coating there are a few precautions to be taken as under




- Sharp edges of load should be covered with protection sleeves.
- The padding of sharp edges is a good job and recommended for longer life of slings.
- The end fitting grab should be free of burrs or abrasive surface so that the sling eye remains intact.
- The padding should be regularly checked to prevent slippage.
- Regular safety instructions should be followed while lifting.
- Check the slings before each lifting for any misuse of lifting safety threat.
- Check for manufacturer certificate, Conformity to standards certificate prior to use.





## Rotomaxx Slings



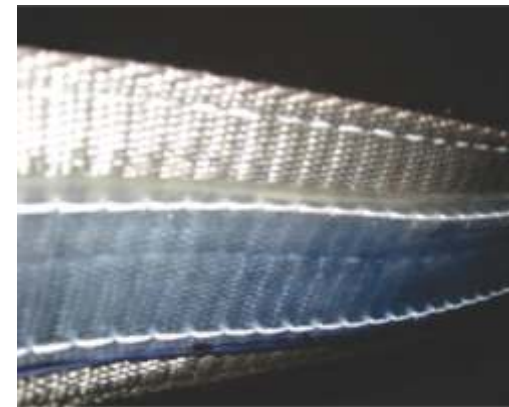
-  PU impregnated belt
-  Single side coated
-  Double Side Coated



## Marshall Slings

**FOR EXTREME USAGE - EXTREME INNOVATION AT THE LOWEST COST**

FERRETERRO CRANELOVER® SERIES + DYNAFLEXX® (Patent Applied) = **MARSHALL**



The newly innovated MARSHALL slings are the best slings to use with sharp edged loads. MARSHALL slings have Dynaflexx protection sleeves fixed with heavy duty polyester slings. Dynaflexx are the most unique protection sleeves engineered in a manner that they provide advantages of both Anti-cut and Anti-abrasive properties. MARSHALL slings have proven their superb efficiency and longer service life at extreme usage. MARSHALL slings are most economic slings due to their longer service life and comparatively low cost than any other Anti-cut protection available.

### FEATURES

- Made of high tenacity polyester webbing.
- Equipped with Dynaflexx Protection sleeves.
- Single or double side Dynaflexx type.
- Available in capacity up to 50 Ton.
- Safety factor 7:1 & 5:1
- Confirms to EN 1492-1:2000 & ASME B 30.9

### ADVANTAGE

- Extreme cut protection & abrasive resistance.
- Heavy duty slings, ideal for steel industry.
- Low cost, high efficiency.
- Light weight, easy to handle.
- All properties of Anti-cut & Anti Abrasive in-built.
- Longer service life due to Dynaflexx.
- Marking to identify side of use in single Marshall.
- Marking available in English & Regional languages.
- Gives approx. 7-8 time life than ordinary slings.
- Customised for specific requirements.



SINGLE MARSHALL



DOUBLE MARSHALL



MULTI-PLY MARSHALL



MULTI-PLY MARSHALL

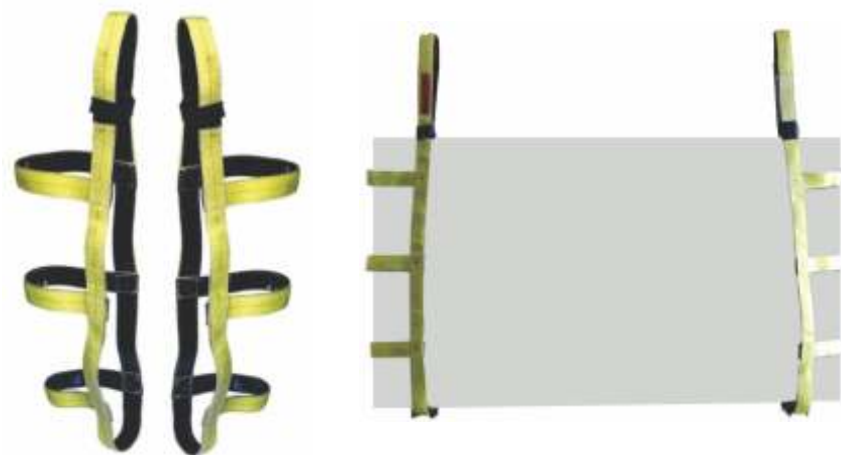






## Glass Lifting Slings

We supply customized Glass handling systems to handle up to 15 Ton of float glass sheet stacks/bundles. Glass handling systems consist of special sleeves which can be detachable and are cut resistant. We also supply systems to bundle the glass sheets which can be repetitively used instead of steel strapping.

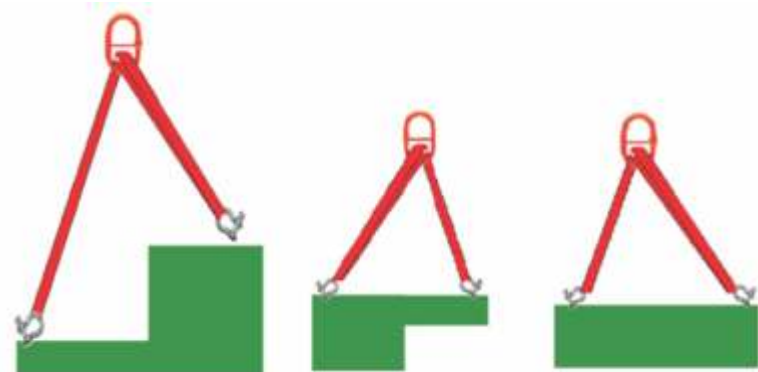


### FEATURES

- Safely handle large cases of glass.
- Load capacity up to 15 ton
- Abrasive sleeves on eyes.
- 500 mm long PU Sleeves.
- AA Sleeve PU impregnated at bottom.
- Can be customized as needed

## Adjustable Bridle Slings

Adjustable Bridle Sling self adjust the center of gravity for lifting non uniform loads. When the load is lifted the ring moves over the centre of gravity and level the load. All specifications are as of round slings. The heavy end should have double end.



CODE	CAPACITY	DIA	BOW-SHACKLE
FAB3	3.0 Tons	16.mm	3.2 Ton
FAB5	5.5 Tons	22 mm	6.3 Ton
FAB10	9.1 Tons	28 mm	12 Ton
FAB20	18.2 Tons	40 mm	25 Ton
FAB30	28.0 Tons	45 mm	35 Ton
FAB45	41.0 Tons	57 mm	55 Ton



## Ferretero Ultra Slings



FERRETERRO ULTRA SLINGS are made of HMPE fibers manufactured by DSM Dyneema BV. It is a super strong High Modulus Polyethylene (HMPE) fiber and give maximum strength but is light weight. It is 8-10 times lighter than comparable steel wire rope slings and almost 40% stronger than Aramid fibers on a weight for weight basis. FERRETERRO ULTRA SLINGS float on water and are extremely durable and resistant to moisture, UV Light and Chemical. Due to the fact that it is a very light and soft sling, it results in less damage to the steel coil edges and less work related injuries. As a result there will be big reduction in utilization cost. Ferretero specifically developed round slings for Steel coils handling or other sharp and heavy loads using the fibers from DSM Dyneema. This round sling is made with 100%

HMPE Yarn has an engineered outer cover which is designed with special Anti-cut Weave using fiber from DSM Dyneema. Anti-Cut Sleeves can be in full length of sling or a movable type for use at sharp corners of load.

### FEATURES

- | Very High Strength and Less Weight.
- | Easy handling, higher efficiency.
- | If the sleeve is damaged simply it can be changed no need to replace the whole slings.
- | The sleeve size is small and easy to slide to fit proper place.
- | Remarkably thin sling offers advantages in situations with lower clearance between two coils.
- | Elongation approx. 0.5% just similar to steel wire rope slings.
- | Low elongation of sling ensures precision lifting of coils.
- | Very long service life due to HMPE outer cover and Sleeves
- | Sleeves can be movable or Velcro type removable.
- | Ferretero Ultra slings are suitable to use in very low temperature can be used at -50° temperature.
- | Resistant to chemical such as Acids and Alkalis.

### ANTI-CUT SLEEVES

- | Very light weight.
- | Engineered weave using fibre from DSM.
- | Dyneema resulting in extreme resistance to abrasion & cut.
- | Protect the strength of the sling thereby resulting in maintenance free long service life.
- | Resistant to almost every Acid & Alkalis.
- | Available in Movable or Velcro type or Corner Edge Guard type.
- | White in colour, slides smoothly over the body of sling.
- | Suitable to use with any round or flat sling.







## Ferretexx Coated Sling

FERRETERRO molded slings have permanent coating of specially formulated Polymer material with very resistant characteristic. It becomes harder and more resistant against cuts when laid around a sharp edge due to compression in its molecular structure by a stressed surface. These slings are ideal for lifting of sharp edge loads like steel coils etc.

### FEATURES

- | Available in medium and strong coating variant
- | Polyurethane coating from 2 mm to 25 mm thickness
- | Coating thickness can be chosen as required
- | Available in one side or both side coating.
- | Integrates abrasion protection for long service life, even in rough usages.
- | Extremely abrasion resistant sling yet flexibility and more durability than ordinary slings.
- | Coating as per requirement, possible upto full length
- | Available up to 30 ton capacity.



## Coil Lifting with Ferretexx Sleeves

### FERRETEXX THE ANTI CUT SLEEVE FOR COIL HANDLING

FERRETEXX is an Extreme condition sleeve which can lift almost anything. Ultra sharp edges are now the easiest job for synthetic slings. Available for both Round slings and Flat Webbing Slings for load up to 300 Ton. These sleeves stick to the job and are extremely cut resistant to be used for super sharp cut jobs. These are ideal for Steel coils which have very sharp edges, now with FERRETEXX Anti Cut Sleeves coils lifting is very easy job with Polyester Slings.

It enhances the life of polyester slings. Damage of inner layers of sheets coils can be prevented now by replacing wire rope slings with our Ferretero Slings fitted with FERRETEXX The ultimate anti cut sleeve.



### FEATURES

- MADE OF POLYMER
- EXTREME CUT RESISTANT
- WEAR & ABRASION RESISTANT
- SMOOTH GOODS HANDLING
- LIGHT WEIGHT FOR EXCELLENT HANDLING
- OPTIMUM WORK SAFETY
- IDEAL FOR LIFTING OD STEEL COILS
- LONG LIFE NO AGING
- AVAILABLE IN ROUND & FLAT TYPE



When the load is lifted FERRETEXX Sleeve remains in contact of load whereas the sling slides smoothly through it thus, allowing for elongation and free positioning under the load.







## One Way Slings

We supply one way slings for different usage and capacity range. Common application for these one way slings are lifting, positioning and transportation of various items mainly pipes etc for export cargo. These slings are inserted in the pipe bundles/Loads prior to dispatch at the designated load balance points so that no additional slinging is required while loading in the cargo, thus save the time and efforts. After the load reaches its destination it is unloaded by these one way slings. And these slings must not & should not be used again instead they should be disposed off. These one way slings can be designed for capacity range few kilos to 24 tons. Slings can also be designed for 6-7 lifting usage with **Pre-Sling techniques**. Higher capacity Pre-Slung slings are also available as per specific requirements. All these slings are engineered and tested at the point of manufacture and labelled accordingly. These slings are endless types but can be made in eye to eye type also.



### FEATURES

Designed for single use- One way and Pre-Sling techniques  
 Pre-slung as per EN 1492-1 and One Way slings as per ASME B30.9 & DIN 60005  
 Low cost with simple design  
 Stronger and more compact than synthetic rope slings or other alternates.  
 Easy to use and can be pre-inserted in the bundles of pipe.  
 Save the time as well as cost on-site slinging & re-slinging loads.



			ONE WAY SLINGS CAPACITY IN KGS					
			WLL kg with one Endless Sling		WLL kg with two Endless Sling			
			Straight lift	Choke Hitch	Straight Inclination 7° - 45°		Choke Inclination 45° - 60°	
ITEM CODE	WIDTH	COLOUR CODE						
MODE FACTOR			M=1.0	M=0.8	M=1.4	M=1.0	M=1.12	M=0.8
1W-1	25	VIOLET	1000	800	1400	1000	1120	800
1W-2	50	GREEN	2000	1600	2800	2000	2240	1600
1W-3	75	YELLOW	3000	2400	4200	3000	3360	2400
1W-4	100	GREY	4000	3200	5600	4000	4480	3200
1W-5	125	RED	5000	4000	7000	5000	5600	4000
1W-6	150	BROWN	6000	4800	8400	6000	6720	4800
1W-8	200	BLUE	8000	6400	11200	8000	8960	6400
1W-10	250	ORANGE	10000	8000	14000	10000	11200	8000
1W-12	300	ORANGE	12000	9600	16800	12000	13440	8000

Pre-Slung lifting slings are used for the transportation of goods which have been slung in advance (pre-slung), it means that endless web slings remain slung permanently around the load during whole transportation  
 One way slings should not be confused with Pre-Slung Slings which are used for a longer transportation period and can be used on same transportation route more than one. These have safety Factor 7:1 as per EN-1492-1



## Bag Slings/Sling Mats

### BAG SLINGS/SLING MAT Pipeline hebebander

An economical solution for lowering pipeline where the weight and repetition is low. These belts are wide up to 36" and can be made up to 100 Tons capacity of any length required. These belts are strongly bonded and strengthened for lifting. These slings can be polyurethane impregnated or vinyl coated for extra strength and abrasive resistance.



### ADVANTAGE

Higher load carrying capacity than web slings, with a wider contact area. These sling bags offer the best support for sensitive loads like Cylinders etc. Available in standard width up to 900 mm

CODE	WLL Single	WLL Double	MAT Width
FSB2	2000	4000	200
FSB3	3000	6000	200
FSB4	4000	8000	300
FSB5	5000	10000	300
FSB6	6000	12000	400
FSB8	8000	16000	400
FSB10	10000	20000	500
FSB12	12000	24000	600
FSB15	15000	30000	600
FSB20	20000	40000	750
FSB25	25000	50000	750
FSB30	30000	60000	900
FSB40	60000	80000	900







## Pipe Line Lifters

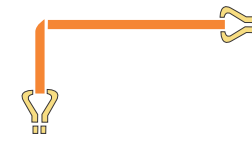
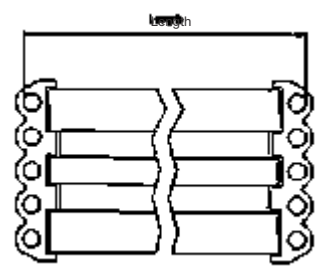
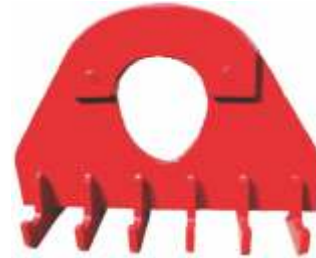
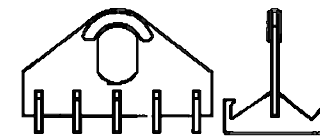
FERRETERRO pipe line lifter lowering belts are ideal device for laying of pipe lines whenever high load carrying capacity is required with great supporting area. They are made of polyester lifting mats with two sewn-in eye traverses each and a corresponding traverse with hook.



1. Heavy duty PES webbing for durability & strength
2. Alloy steel end irons for greater strength with less weight
3. Web coated with heavy duty PU coating
4. Blue vinyl tag with clear protective cover to protect data
5. End irons painted/Epoxy coated.
6. Custom belts available for pipe diameter not listed.
7. Belts used around the world, in all types of climates, in sizes up to 60" diameter pipe.
8. Lowering-in belt and head iron sold separately.



PART	Maximum Pipe Diameter		Belt Width	Belt Length		Belt Weight	Working Capacity
	Inch	MM		Ft-Inch	Meter		
FPL-0512	12	305	12	4' 9"	1.45	12.7	21700
FPL-0518	18	457	18	7' 0"	2.13	20.5	33100
FPL-0520	20	508	18	7' 6"	2.29	22.7	33100
FPL-0524	24	610	24	8' 6"	2.59	29.5	44000
FPL-0530	30	762	30	10' 0"	3.05	40.9	55300
FPL-0536	36	914	36	11' 6"	3.51	54.5	66200
FPL-0542	42	1067	36	13' 6"	4.11	61.4	66200
FPL-0548	48	1219	36	15' 0"	4.57	70.5	66200
FPL-0552	42	1067	42	13' 6"	4.11	68.2	77500
FPL-0552A	48	1219	42	15' 0"	4.57	77.3	77500
FPL-0554	48	1219	48	15' 0"	4.57	86.4	88400
FPL-0556	56	1422	48	17' 0"	5.18	93.2	88400
FPL-0556A	56	1422	56	17' 0"	5.18	104.5	103400
FPL-0560	60	1524	56	18' 0"	5.49	118.2	103400



## Reeving Slings



Our product range include Reeving Choker Slings with alloy steel hardened fittings. All hardware are made in-house. These slings are the ideal for choker lift.

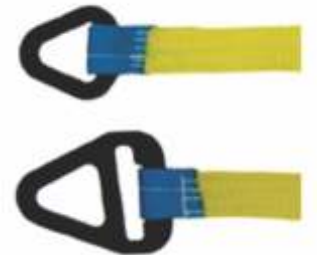
These slings available in two types; Choker Hardware type & Basket hardware type.

### Choker Fitting type

These slings are made with a triangle fitting on one end and a slotted triangle choker fitting at other end. This type of arrangement provides very efficient and effective method of choker lift. These slings can also be used in Vertical hitch and Basket hitch.



Available up to 30 ton capacity  
Alloy steel end fittings  
3-7% Elongation with Polyester  
Available in Safety Factor 7:1 & 5:1  
Confirms EN 1492-1 and ASME B 30.9



### Basket Fitting type

These slings are made with a triangle fitting at both ends. This sling can be used in Vertical or Basket hitch but cannot be used in Choker hitch.



Available up to 30 ton capacity  
Alloy steel end fittings  
3-7% elongation with Polyester  
Available in Safety Factor 7:1 & 5:1  
Confirms EN-1492-1 & ASME B 30.9



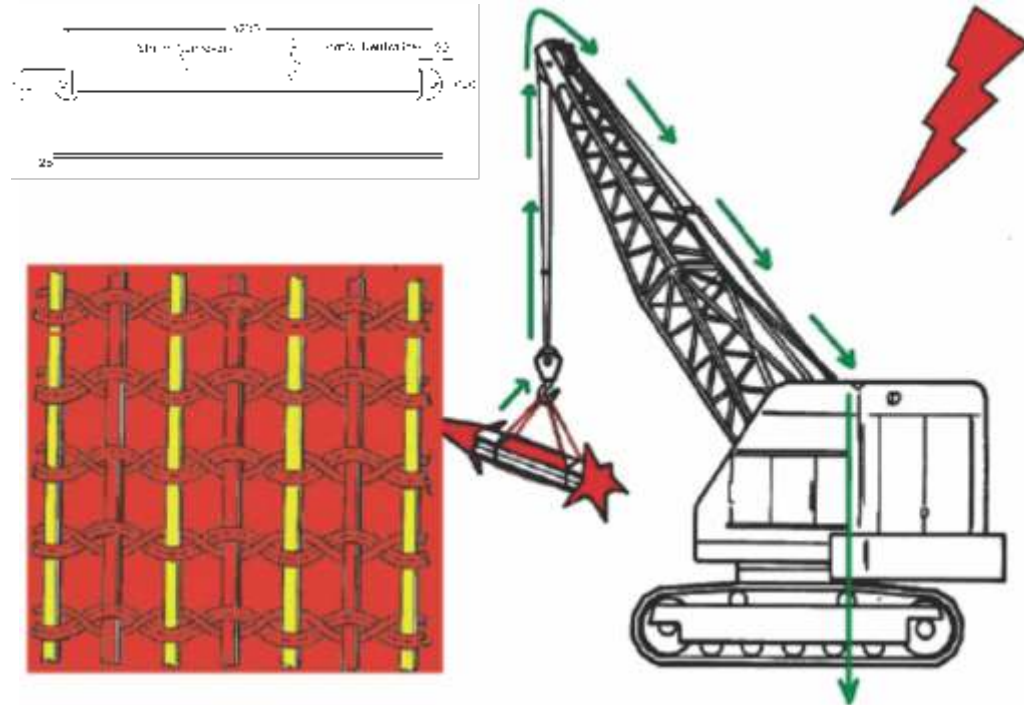




## Anti-Static Slings

The normal polyester slings are non-conductive against electricity. Our Anti-static slings are actually Static transfer where delicate electronic equipment can be lifted and static electricity can prove hazardous. These patented slings are manufactured with zero resistance electric current transfer woven in straps. These slings are ideal for lifting of:

- Rotors, Missiles
- Nuclear Warheads
- Atomic Waste
- Nuclear Waste
- Explosives
- Electronic devices



### FEATURES

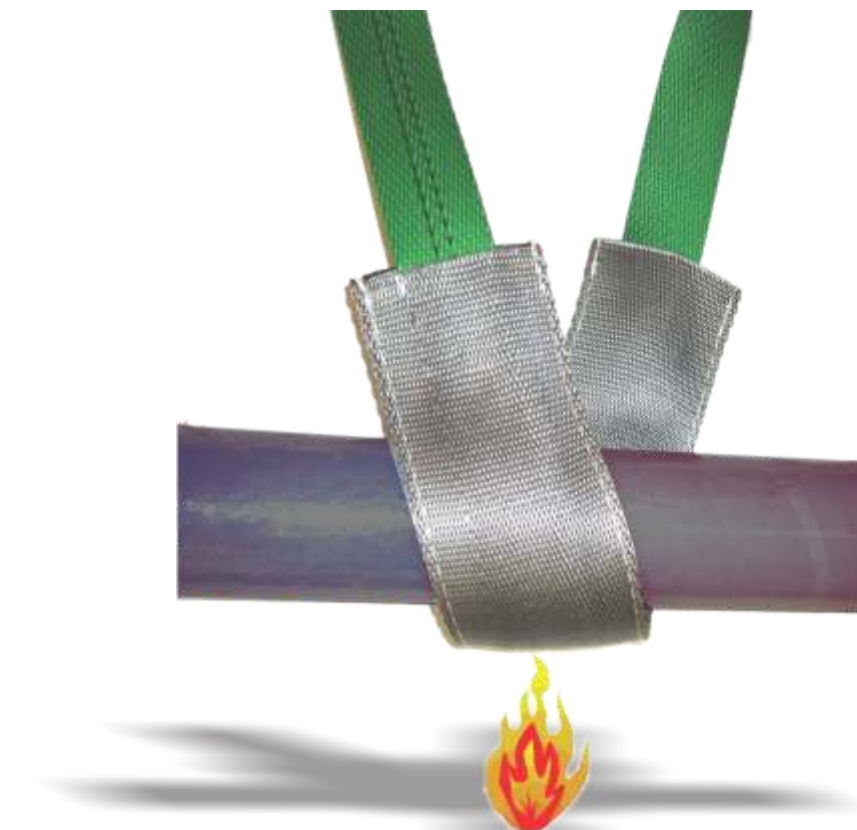
1. Our Anti-static sling has zero resistance wires on the webbing which transfer any static current.
2. We have them strategically placed so that the lifted product always remains earthed. (About 6 wires protruded fully running through the length of belt)
3. The end fitting is in contact with wires running through the same to transfer static to hook.
4. An added security feature we put a 1 meg ohm static neutralizer on the sling so it can be clipped to the product been lifted



## Heat Resistant Slings



For Many applications we need Synthetic slings where the temperature of the product goes upto 180 degrees or more. We manufacture slings with triplet heat resistance, load bearing sleeves which hug the product and bear most of the heat. The sleeves are designed so as to minimize the heat transfer to the inner core sling. These slings work safely till 160 degrees of temperature and to be used with strict guidelines laid by Ferreterro.





## Premium Slings



ALL FERRRETERRO PREMIUM® Slings are polyurethane impregnated which has remarkable anti abrasive and cut resistant properties.

Slings life increases significantly and works easily in harsh conditions providing excellent resistance to abrasion and minor cuts.



FERRRETERRO - PREMIUM® lifting slings are a brand new innovation from FERRETERRO. The fully reinforced loop offers all-round protection in the region of the crane hook. The optimised woven construction of the belt and edge ensures that long service-life is achieved in the face of abrasion, pressure and edge wear.



In contrast to the standardised safety factor (SF) 7, the special construction achieves an increased SF.

In practice this means that when abrasion, soiling or weathering reduce the SF in the course of use by a factor or perhaps two, the FERRETERRO - PREMIUM slings are still the safest. It therefore optimally satisfies your safety requirements for its entire life. The FERRETERRO® slings are therefore altogether capable of accepting more stress, are more robust and less

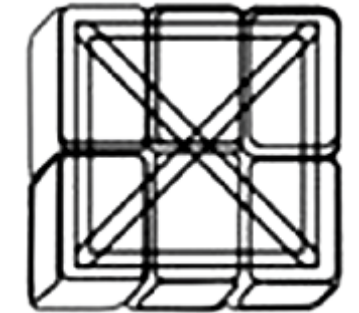
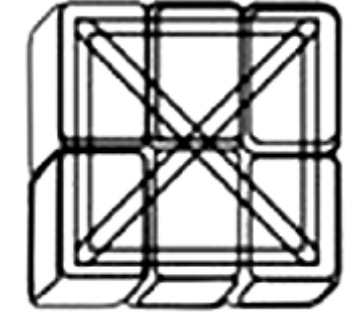
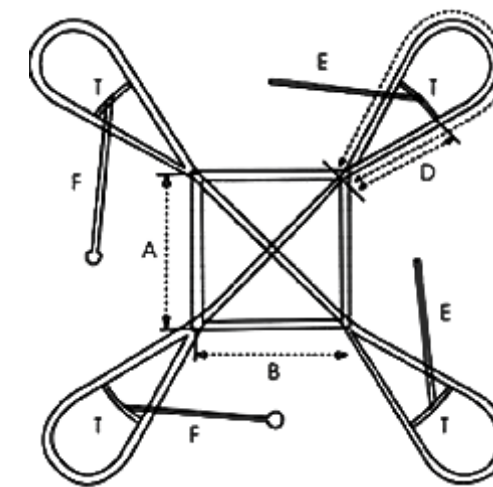
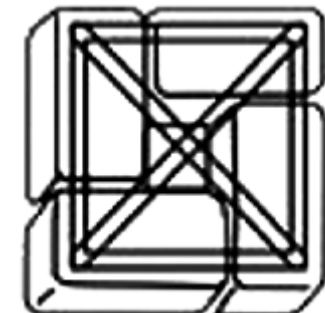
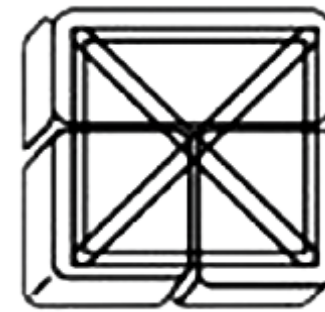


ALL FERRRETERRO PREMIUM® Sling comes with strategically placed microchip inside layers of slings which is water and chemical resistant. The chip contains a Unique no. in digits which gives the no. and details of sling, manufacturing date, dispatch details and vital information of the sling. The transponder works within 10" range and is a great boon for safety and auditing purpose. For personalized details fed in chips kindly contact our sales.



FERRRETERRO has also introduced special weaving and SUPEREDGE. The durable Super Edge Zone webbing has a dense pack of extra fibers creating a edge profile. This unique weave design provides extra protection to abrasions and scuffing which maximizes the service life of the Ratchet assembly.

## Clover Leaf Slings



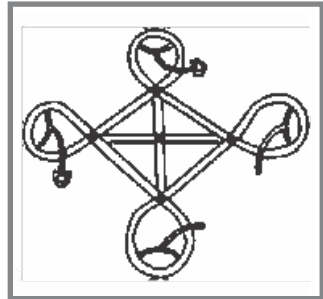
Sling Types		C	I	E	S	P	A	L	F	B	M	R
Loading (Capacity)	Width	100 *	100 *	100 *	120 *	145 *	115 *	120 *	165 *	140 *	130 *	170 *
	*	120	120	100	120	115	115	120	165	140	95	120
Dimensions	Length											
	Height	85	105	105	115	120	100	90	95	120	105	130
Sling Measure	Basis A* B											
	Sling (description)	65 * 85	70 * 90	65 * 65	85 * 85	115 * 85	70 * 70	75 * 75	135 * 135	110 * 110	100 * 65	140 * 90
	C	255	275	280	340	350	280	260	295	350	316	370
	Tail 'D'	80	90	90	120	135	85	80	100	135	107	140



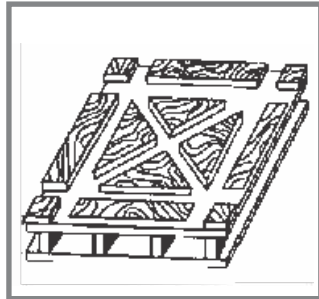
## Clover Leaf Slings

### Usage Instructions and Handling precautions

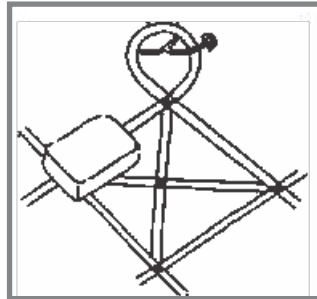
- Unfold the sling on the ground or on a guide pallet.
- Begin to place the bags on the slings ensuring that they lie close together and centrally over the base of slings.
- Fasten the narrow lashing straps diagonally across the top of the unit.
- With the unit lifted just off the ground, tighten the lashing again .
- For lifting extra height, invert the fork of the truck.



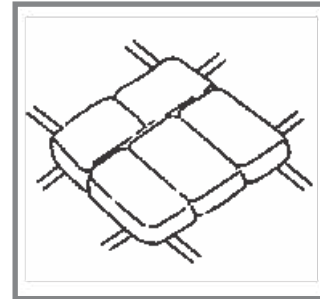
First



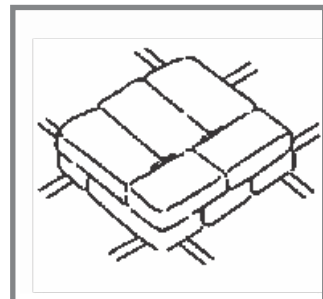
Second



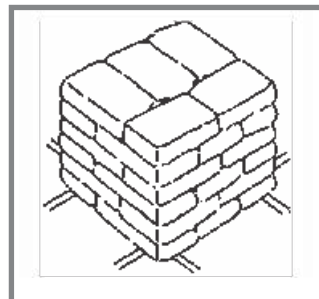
Third



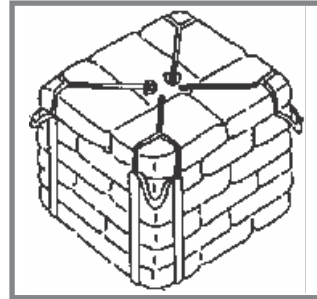
Fourth



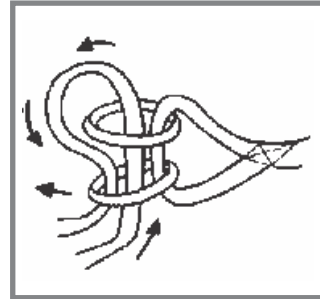
Fifth



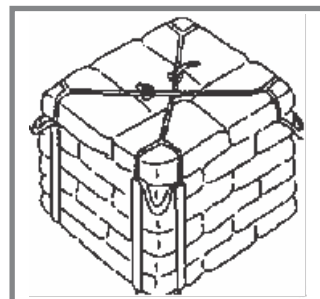
Sixth



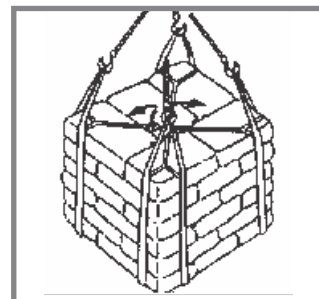
Seven



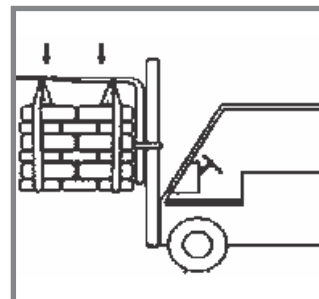
Eight



Nine



Tenth



Eleven



## Drum Lifters



Vertical



Horizontal



Heavy Duty Drum Lifters for lifting drums of :

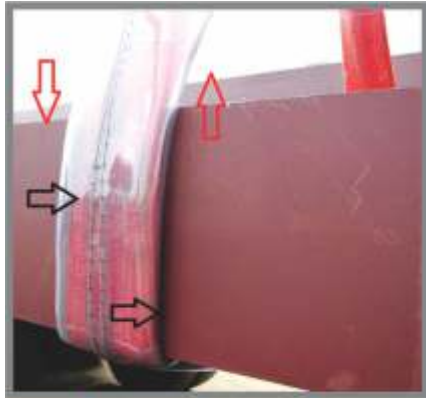
- Chemicals
- Glue
- Welding wire
- Food material
- Paints
- Sugar industry

Lifting drums upto 3 tons is now as easy as normal operations. No need of bulky drum lifters, Fork attachments and tilters as a single person can handle and tilt the drums.





## Sleeves for Lifting Slings



Sleeves are used on lifting slings to provide safety from cutting. Due to sleeves, the slings can be used to lift extremely cut prone products and also these not damage the edges of product. Sleeves are made to lift Glass, steel blades, girders, slit coils, wooden logs and give extra long life to slings. Usage of sleeves at workplace is a must. We, at Ferretero, give free anti-abrasive sleeves for slings above 50 tons and occasionally in smaller slings for the user to know the advantages of sleeves. We have a large variety of sleeves as per requirement of job. The sleeves stick to the job and sling moves in freely to adjust itself and resist abrasion or cutting giving extra life and safety.



Anti abrasive sleeves increase life of slings upto 10 times. Made of HTPY and strongly constructed are available in PU impregnated and regular features



Polyurethane blended sleeve upto 30 tons capacity. Clear construction to view damages to webbing. Side stitches with triple AA on stitches for extra long life.



INNOVATION : Anti Cut Polyurethane blend sheet sandwiched in Abrasive resistant sleeves for extremely heavy duty applications where both anticut and anti abrasive properties are required, made at high temperature to maintain properties. Available in loop design slip on and Velcro type. PATENT PENDING.



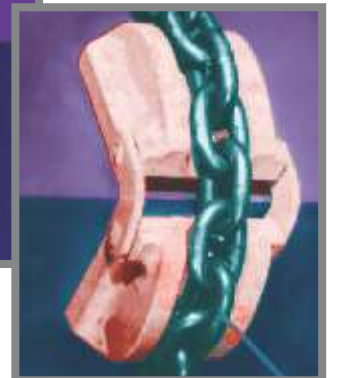
## Sleeves for Lifting Slings



FERRETEXX is Extreme condition sleeve to lift almost anything. Sharp coils, Ultra sharp edges are now easiest job for synthetic slings. Available in both Round slings and Flat webbing slings for loads upto 300 tons. These sleeves stick to the job and are extremely cut resistant. To be used for super sharp cut edges.



Also available in Heavy duty steel corners with magnets. Saves your chains, Wire rope and webbing from damages. Also saves edges getting damaged from lifting as an empty cavity is created while lifting.







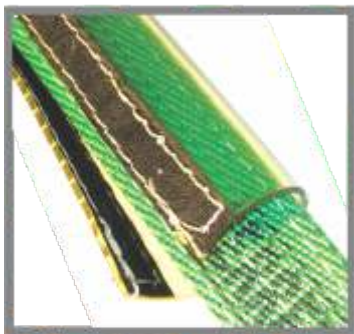
## Sleeves for Lifting Slings



Another Innovation from Ferreteria. HMPE Dyneema/ Kevlar sleeves now made in India, for lightweight and larger sleeves are same as woven ones. Tested for abrasive resistance and cut resistance more than steel in minimal thickness and extremely long life. Perfect for steel industry as handling coils was never better.



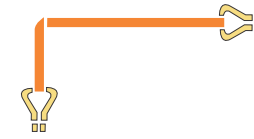
The description of Dynaflex sleeves need to come under - Another Innovation is Dynaflex. Cut resistant Kevlar/HMPE sheet stitched with Velcro. Most efficient in low temperatures and can lift products with protruding sharp points, weld spats. This sleeve provides cushion and protection both. The sleeve allows sling to slide in freely providing maximum wear resistance.



Fully velcro Anti cut sleeve which can be put on and removed from service whenever required. High molecular aramid velcro to be stable at 300 ton load. Perfect for round slings if one leg or two legs are to be secured.



Fully velcro Anti Abrasive sleeve which can be put on and removed from service whenever required. High molecular aramid velcro to be stable at 300 ton load.



## ZX Sleeve Certificate



- Heavy Duty Anti cut Zx sleeve suitable for 5 tons to 300 tons.
- Purpose of sleeve is to save the sling and take the damage on itself.
- Sleeves prevent damages on load bearing belt. If sleeves gets damaged, they should be replaced immediately.
- These sleeves are 8 layered with 5 layered Bullet Resistant KEVLAR. If 6 layers get damaged after continuous use the sleeves need to be replaced.
- Polyurethane layered for load distribution and keep multiple layers intact.

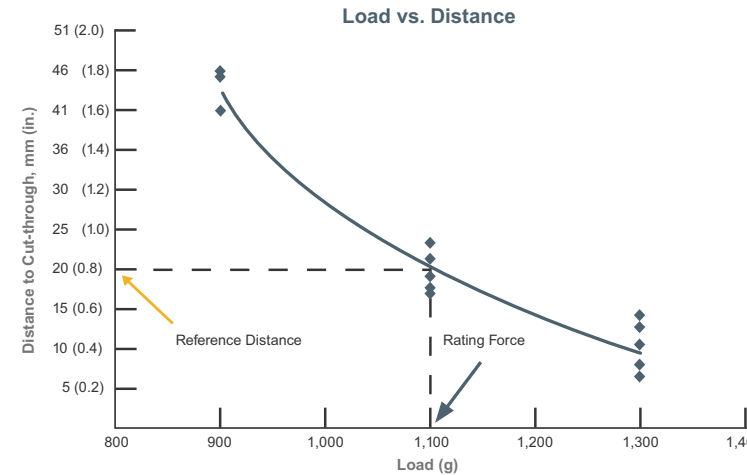
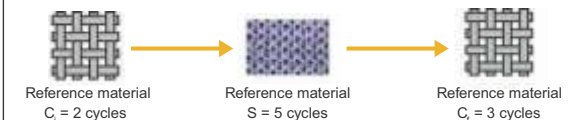
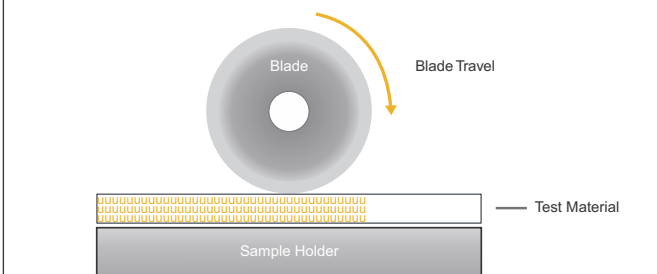
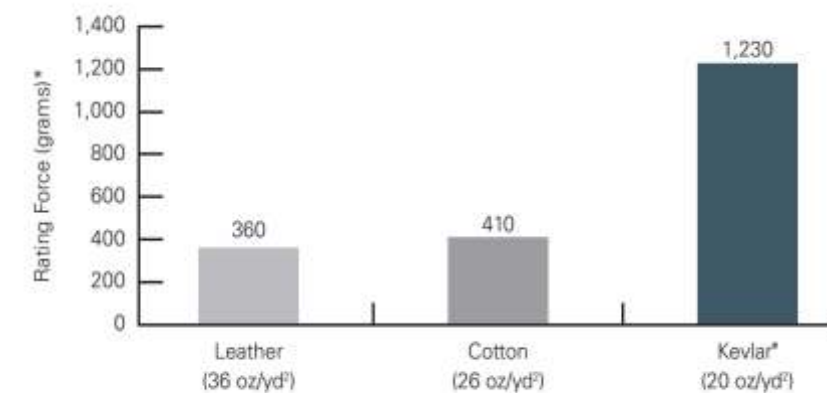


Figure 2. EN 388 test method



Reference material average =  $C_1 + C_2 = 2.5$   
 Cut Index =  $(C_{avg} + S)/C_{avg} = (2.5+5)/2.5 = 1.5$   
 Average of 5 results per sample



\*Cut resistance measured in accordance with ASTM F1790-05





## Sling Protection

The main cause of damage on a synthetic sling is cutting and excessive abrasion due to sharp edges. Using protection sleeves, wear pads can help in reducing the problem. Protection sleeves act like a buffer between the sling and load. Sleeves are made to lift Glass, Steel Blades, Girders, Slit Coils, Wooden logs and other sharp edged loads to give extra long life to slings. Our product range includes various types of Protection Sleeves, Wear Pads and Corner Guards.

### WEAR PADS

Wear pads are stitched on the slings at the fixed points of possible wear areas. Wear Pads give extra protection to a sling where it wears the most. There are a various types of wear pad available in numerous materials like, Polyester, Felt, PVC, PU Blended Polymers, Buffer pads, Leather pads etc. They can be used as per the required level of protection for the slings.



BUFFER WEAR PAD



FELT WEAR PAD



WEBBING WEAR PAD

### STITCHED PROTECTION SLEEVES

These are protection sleeves which are permanently stitched on the body of sling. These are ideal in application where wear points are fixed or sling has to be passed through narrow openings where movable sleeves can displace from the wear points. These sleeves also available in different material like movable sleeves. These can be also stitched over edges of webbing and eye loops of webbing.



STITCHED PAD



FULL COVERED EYE



PAD ON LOAD POINT

### DYNAFLEXX SLEEVES

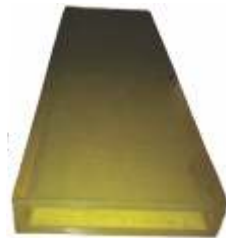


Anti-cut Polyurethane blended sheet sandwiched in Abrasive resistant sleeves for extremely heavy duty applications where both anti-cut and anti-abrasive properties are required. Made at

high temperature to maintain properties. Available in loop design slips on and Velcro type. Ideal for Slit coil handling and other sharp edged loads.



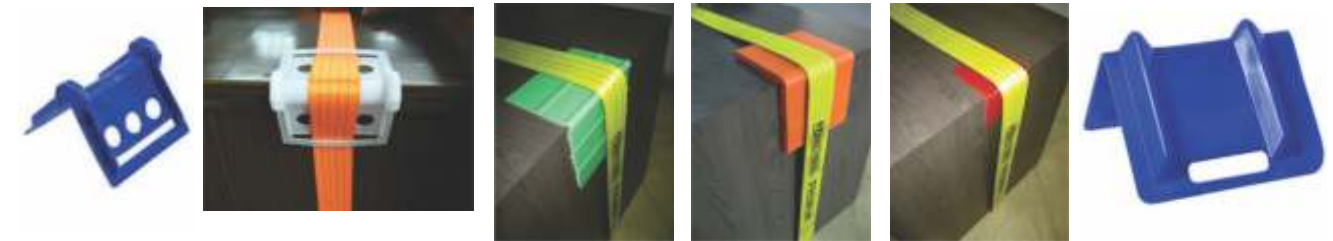
### FERRETEX POLYURETHANE SLEEVES



FERRETEX is Extreme condition sleeve to lift almost anything. Ultra sharp edges are now easiest job for synthetic slings. Available for both Round sling and Flat Webbing Slings for load up to 300 Ton. These sleeves stick to the job and are extremely cut resistant to be used for super sharp cut jobs.



We provide different types of corner protectors made of PP, ABS, PE and Polyurethane material for protection of cargo from strap damage. They also protect straps from damage and provide extra service life. Available in different types and colours.

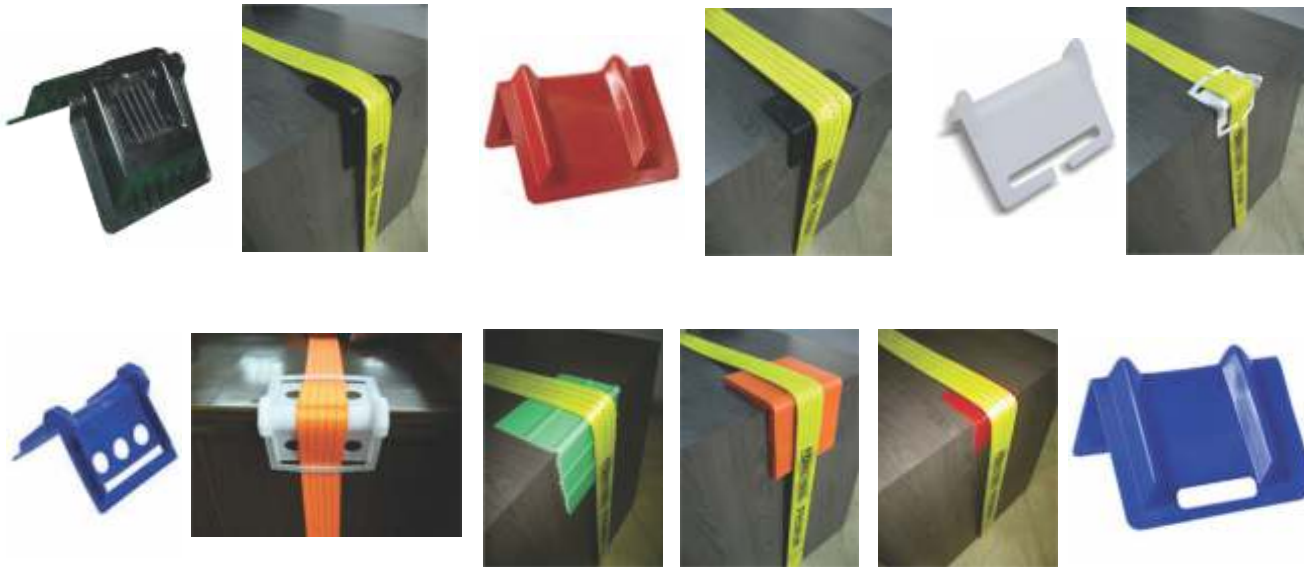






## Corner Guards

We provide different types of corner protectors made of PP, ABS, PE and Polyurethane material for protection of cargo from strap damage. They also protect straps from damage and provide extra service life. Available in different types and colours.



## Sling Removal Criteria

It is always better to visually inspect all slings before each lift. OSHA specifies, "Each day before being used, the sling and all fastenings and attachments shall be inspected for damage or defects by a competent person designated by the employer. Additional inspections shall be performed during sling use, where service conditions warrant." In other words, you should visually inspect your sling before each lift.

### REMOVAL CRITERIA FOR WEBBING SLINGS

- | Acid or caustic burns.
- | Missing or illegible tag
- | Melting or charring of any part of the sling.
- | Holes, tears, cuts or snags.
- | Broken or worn stitching in load-bearing splices.
- | Excessive abrasive wear.
- | Knots in any part of the sling.
- | Distortion of the sling.
- | Excessive pitting or corrosion, or cracked, distorted or broken fittings.
- | Other visible damage that causes doubt as to the strength of the sling.

Damaged or Pitted Fittings



Sling Knot



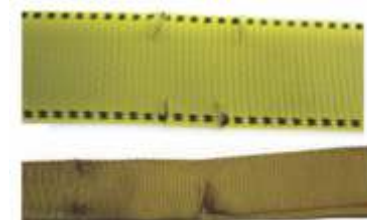
Sling Weld Splatters and Charring/Melting



Sling Acid Burns



Sling Cuts



Sling Abrasion



Sling Frays & Pulls



Discoloration and brittle or Stiff area due to Chemical or Ultraviolet sunlight damage



Missing Tag



Broken or Worn Stitches in Load Bearing Spliced Area



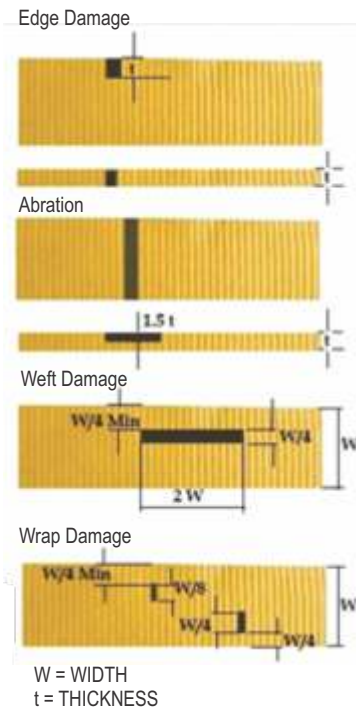




## Sling Removal Criteria

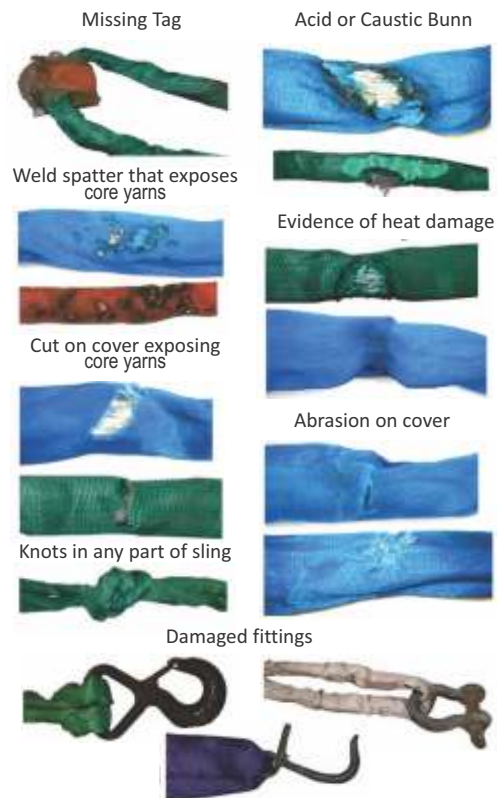
A synthetic fibre web sling must be removed from service when any of the following circumstances occurs:

- | The length of an edge cut exceeds the web thickness;
- | The penetration of abrasion exceeds 15% of the webbing thickness taken as a proportion of all plies;
- | Abrasion occurs on both sides of the webbing and the sum of the abrasion on both sides exceeds 15% of the webbing thickness taken as a proportion of all plies;
- | Warp thread damage up to 50% of the sling thickness extends to within 1/4 of the sling width of the edge or exceeds 1/4 the width of the sling;
- | Warp thread damage to the full depth of the sling thickness extends to within 1/4 of the sling width of the edge or the width of damage exceeds 1/8 the width of the sling;
- | Weft thread damage allows warp thread separation exceeding 1/4 the width of the sling and extends in length more than twice the sling width;
- | A combination of the above types of damage or approximately equal total effects are present.



## REMOVAL CRITERIA FOR ROUND SLINGS

- | Acid or caustic burns.
- | Missing or illegible tag
- | Evidence of heat damage, Melting or charring of any part of the sling.
- | Holes, tears, cuts, snag or embedded articles.
- | Broken or worn stitching in cover exposing core yarn
- | Excessive abrasive wear, broken or damaged core yarns.
- | Knots in any part of the sling.
- | Distortion, brittle or stiff area on any part of the sling which may indicate chemical, heat or ultraviolet/sunlight damages.
- | Excessive pitting or corrosion, or cracked, distorted or broken fittings.
- | Other visible damage that causes doubt as to the strength of the sling.



## Bridles



SINGLE LEG BRIDLE



DOUBLE LEG BRIDLE



3 - LEG BRIDLE



4 - LEG BRIDLE

## END FITTINGS WITH BRIDLES







## Pipe Bundling

### COMPLETE SOLUTION FOR PIPE INDUSTRY

Domestic → Shop Floor Handling

Transportation → Load Restraint Devices i.e. Cargo Lashing Ratchets

Pipe Bundling → Dynaflexx

Exports → Container Lashing → Cargo Restraint

Bundle Lifting → One Way Slings

Pipe Line Handling → Iron Heads Lowering Belts & Bag Slings

Coil Lifting Slings  
Slings for Pickling Pipes  
Slings for Shop Floor Movements  
Pipe Lifting Clamps



We, at FERRETERRO manufacture complete solutions for lifting and lashing related to pipe industry. Right from your shop floor to export cargo to pipe laying project, we provide lifting and lashing solutions tailored to your customized needs.

### BARE/COATED PIPE BUNDLING

We manufacture all lifting & lashing solutions for the bare pipes as well as coated pipes. We supply Pipe Lifting Slings, Pipe Lashing Systems, pre-slung slings and One Way Slings etc. By using our products, pipe handling becomes an easy job. FERRETERRO Polyester lashing systems have many advantages than conventional lashing systems.

By using polyester lashing, damage to the pipes can be prevented, that too cost effectively.

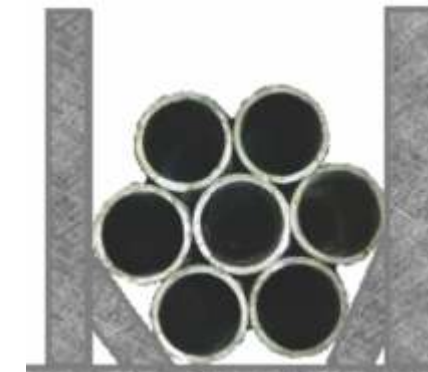
### ADVANTAGES OF POLYESTER LASHING

Handling bundle is easier, Faster and Safer  
Cost effective  
Re-tensionable and Shock Absorbent  
Weather resistant  
Light weight and portable yet high system strength  
No steel strapping means no Scratches  
Best option for Coated & Saw pipes  
Endless sling to be sent along with pipe bundles.  
Fast to handle and time saving  
No need of wooden lugs in vessels  
Material as per EN1492-1:2000 & ASME B 30.9 Standards

We provide customised solutions for coated pipe bundling and pre slinging. Bundling is done with the help of high tenacity polyester straps and specially made Coated Buckles with the help of tensioner. The bundling process is very easy and even factory labourers can bundle the pipes once trained by our technical assistance and product demo. The coated pipes are prone to get scratches when tied with iron steel strap, but with Dynaflexx Lashing System coating remains safe. We also supply pre-slung endless loops and One Way Slings for lifting of pipe bundles. These endless slings are available in various capacities and lengths.



## Pipe Bundling



The pipes have to be stacked in fixtures/ steel frames so that initial shape is made by the pipes in form of hexagonal bundles. As shown in pictures above, single stand or multiple stands near packing/exit area will facilitate the bundling. These frames can be fabricated considering diameter of pipe and number of pipes in one bundle. For coated pipe the frames should be properly coated /covered by PU Elastomer/ foam/Rubber Sheet or any suitable material to avoid scratches.

### Pipe Bundling Process by DYNAFLEXX

Once pipes have taken their position as a hex shaped bundle, they will be tightened at 5 places by Dynaflexx Lashing with minimum 3 ton break capacity which would be more than three times stronger than conventional steel straps. Lashing is done by a specially provided strainer ratchet.



For coated pipe, buckles will also be coated so that no scratches will be on pipes. Process of lashing is illustrated as below







## Pipe Bundling



Pre-slung endless slings/One Way Slings are inserted in pipe bundles, which are now ready to dispatch.

**These are used to restrain pipes on trailers and inside containers.**

We provide customized solutions for pipe lashing on trailers while in transit by road as well as lashing in containers for export cargo.

Most of the countries now keep safety as top priority to avoid damages by accidents like shown in pictures are therefore want pipes to be restrained on trailers and inside containers as well.

### Restrain Solution

FERRETRRO provides customised solutions with wide range of products like Cargo Lashing Ratchets, Lashing Straps, Hardwares to restrain the pipes.



## D Shackles Nut Bolt Type

### Features:

- Designed for easy Frequent Application
- Enhanced safety with bolt, nut and cotter split pin
- Reduces the need to tighten pin before each application
- For use on direct lifting or single load systems
- Traceability code, capacity, FERRETERRO and WLL embossed

**Material:** Grade 80 steel with Alloy pin.

**Construction:** Heat treated and stress relieved.

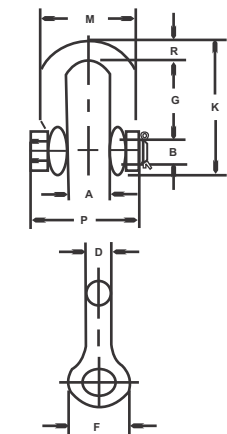
**Finish:** Galvanised and coated.

**Proof load:** Tested at 2 times the working load.

**Safety factor:** 6 to 1.

**Fatigue :** Fatigue tested at 1.5 times of WLL.

**Standard:** As per US federal specification RR-C-271-D.



## D Shackles Screw Pin Type

### Features:

- Designed for easy Frequent Application
- For use on direct lifting or single load systems.
- Traceability code, capacity, FERRETERRO and WLL embossed.

**Material:** Grade 80 steel with Alloy pin.

**Construction:** Heat treated and stress relieved.

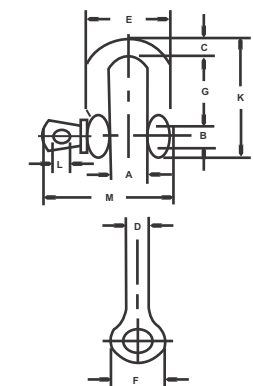
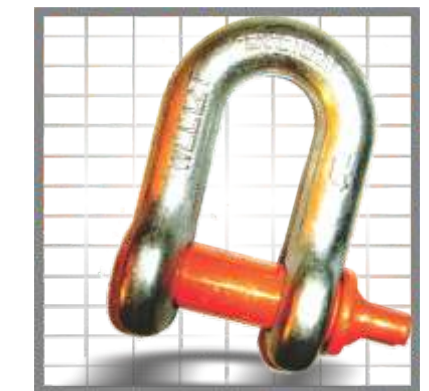
**Finish:** Galvanised and coated.

**Proof load:** Tested at 2 times the working load.

**Safety factor:** 6 to 1.

**Fatigue:** Fatigue tested at 1.5 times of WLL.

**Standard:** As per US federal specification RR-C-271-D.







## Anchor BOW Shackle Nut Bolt Type

### Features:

- Designed for easy Frequent Application.
- Enhanced safety with bolt, nut and cotter split pin.
- Reduces the need to tighten pin before each application.
- For use on direct lifting or single load systems.
- Traceability code, capacity, FERRETERRO and WLL embossed.

**Material:** Grade 80 steel with Alloy pin.

**Construction:** Heat treated and stress relieved.

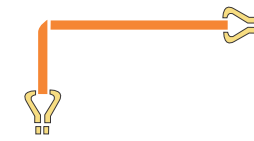
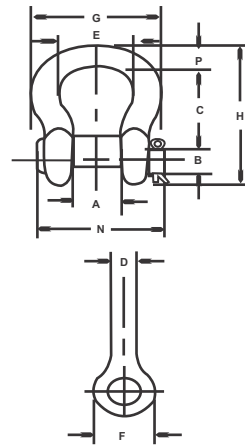
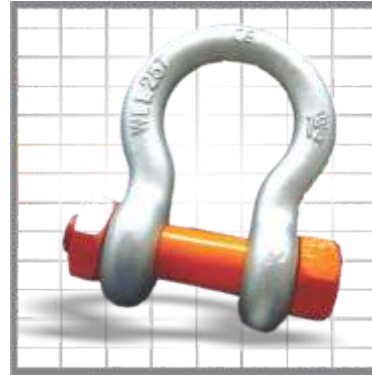
**Finish:** Galvanised and coated.

**Proof load:** Tested at 2 times the working load.

**Safety factor:** 6 to 1.

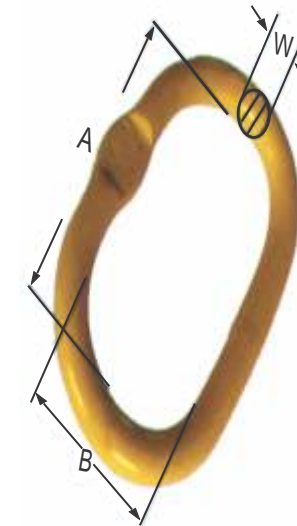
**Fatigue:** Fatigue tested at 1.5 times of WLL.

**Standard:** as per US federal specification RR-C-271-D.



## Master Link (OBLONG RING)

Tons	Dia Rod (W) (in mm)	Width inner (B) (in mm)	Inner length (A) (in mm)
1.6	12	54	95
3.2	16	54	95
4	20	75	135
6.3	22	75	135
8	25	75	135
10	28	90	150
12.5	32	90	160
17	40	110	200
21.2	45	125	250
31.5	50	125	250
45	56	140	275



## BOW Shackles Screw Pin Type

### Features:

- Designed for easy Frequent Application
- For use on direct lifting or single load systems
- Traceability code, capacity, FERRETERRO and WLL embossed

**Material:** Grade 80 steel with Alloy pin

**Construction:** Heat treated and stress relieved

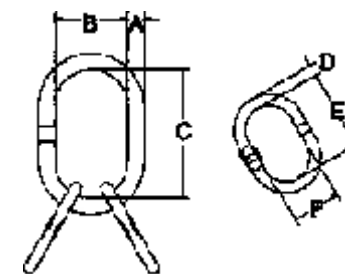
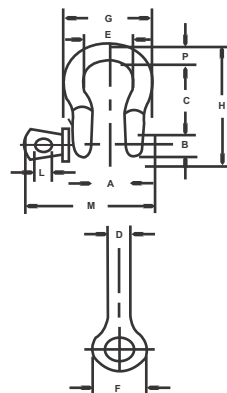
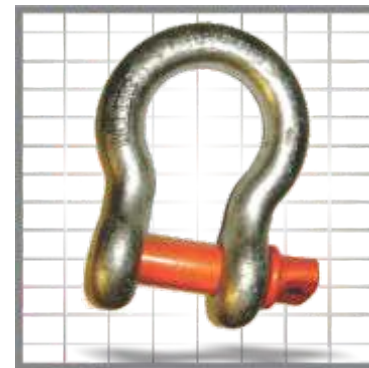
**Finish:** Galvanised and coated

**Proof load:** Tested at 2 times the working load

**Safety factor:** 6 to 1

**Fatigue:** Fatigue tested at 1.5 times of WLL

**Standard:** As per US federal specification RR-C-271-D



## Master Link Assembly

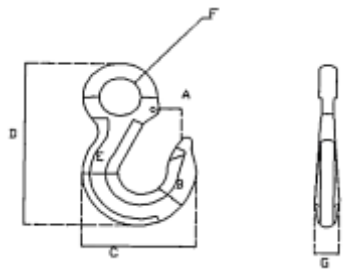
Size (mm)	Working Load Limit (t)*	Dimensions (mm)					
		A	B	C	D	E	F
13/12	2.4	13	60	120	12	85	45
17/13	3.2	17	90	160	13	120	60
19/13	4.2	19	90	160	13	120	60
22/17	8	22	100	180	17	160	90
28/22	12	28	145	275	22	180	100
31/25	17	31	145	275	25	210	115
40/31	25	40	160	300	31	270	140
45/36	31.5	45	180	340	36	285	155
51/45	45	51	190	350	45	340	180

Also available in 4 times Break strength on request





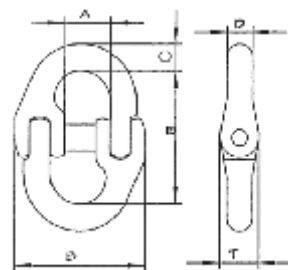
## Eye-Hook



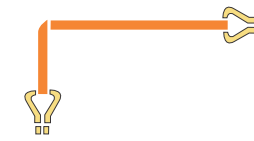
Made of Grade-80 Alloy Steel

WLL (Tons)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)
1.12	30±0.5	17.6±0.5	67±2	109.7±2	25±0.5	10	15.5±0.5
2	31.5±0.5	23.3±0.5	77±2	134.2±2	25.5±0.5	13	18.5±0.5
3.15	34.5±0.5	27.9±0.5	105.2±2	165±2	33±0.5	19	23±0.5
5.3	50±0.5	43.3±0.5	129±2	219±2	40.5±0.5	21	30±0.5

## Chain Link Connector



Size mm chain	Ton	Dimensions in mm					
		A	B	C	D	E	T
8	2	18	53	9	9	57	15
10	3.2	25	73	12	12	68	19
13	5.5	30	88	16	16	91	24
16	8.2	36	89	19	16	100	27
20	12.5	42	125	22	22	122	35



## Plate Lifting Clamps

### Horizontal Plate Lifting Clamp

- ▶ Are made with Medium carbon steel of high strength. Extra hard material is used wherever required. Individual clamp is proof tested with 2 times the load of working load limit.
- ▶ Company name with logo (FERRETERRO), working load limit (WLL) and jaw opening are all mentioned on the clamps.
- ▶ Individual serial no. and test certificate of proof load is provided with the clamps.
- ▶ Maintenance replacements parts are available.
- ▶ ISO 9001 certification.

### Vertical Plate Lifting Clamp

- ▶ Are made with M.S and high strength steel wherever required.
- ▶ Individual clamp is proof tested with 2 times the load of working load limit.
- ▶ Company name with logo (FERRETERRO), working load limit (WLL) and jaw opening all are mentioned in the clamps.
- ▶ Individual serial no. and test certificate of proof load is provided with the clamps.
- ▶ The spring loaded tightening lock mechanism assures a positive initial clamping force.
- ▶ Maintenance replacements parts are available.
- ▶ ISO 9001 certification.

### Pipe Lifting Clamp

- ▶ Are the safest, most cost-effective way to move concrete, metal, or plastic pipes.
- ▶ Are available with protection pads to save the bevel of pipes. Also available in rubberized coating to prevent scratching of pipes when released from lifting.
- ▶ Available in ergonomic small area hold design . Also in long large area hold pattern.
- ▶ Individual serial no. and test certificate of proof load is provided with the clamps.
- ▶ Are made with M.S and high strength steel wherever required.
- ▶ Individual clamp is proof tested with 2 times the load of working load limit.
- ▶ Company name with logo (FERRETERRO), working load limit (WLL) and jaw opening all are mentioned in the clamps.
- ▶ Individual serial no. and test certificate of proof load is provided with the clamps.
- ▶ Maintenance replacements parts are available.
- ▶ ISO 9001 certification.

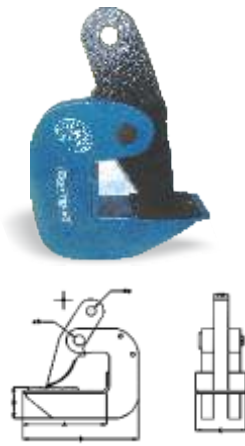




**Plate Lifting Clamp without Spring**

Available in capacities of 2,3,5,6,10,12 and 15 metric tons pair wise.  
Available jaw opening from (0 - 120 )mm for different sizes

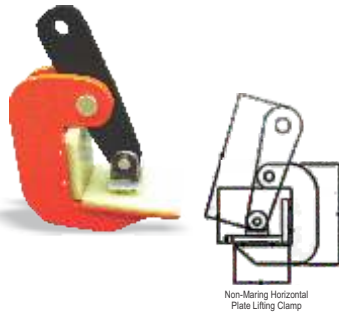
<http://plateliftingclamps.com/plate-lifting-clamp.html>



Model	WLL (ton)	Plate (mm)	A	B	C	D	F D	F d	t	Weight(kg)
HPLC-2	1	0-20	90	155	65	42	20	20	16	4.22
HPLC-3	1.5	0-30	92	168	65	52	20	20	20	5.94
HPLC-5	2.5	10-48	104	185	75	54	25	23	20	8.25
HPLC-10	5	50-100	200	315	100	99	30	30	25	26.43
HPLC-12	6	60-120	200	315	100	99	30	30	25	29.33
HPLC-15	7.5	60-120	208	335	100	109	33	33	25	33.03

**Horizontal plate lifting clamp**

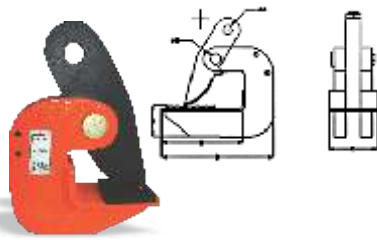
Available in capacities of 4,5 & 6 metric tons pair wise.  
Available jaw opening from (0 - 120 )mm for different sizes



PART NO.	Capacity (ton)	Jaw Opening	A	B	C	D	E	F	G
HPLNMC-4	8 Ton Pair	0-70	443	330	130	85	182	30	25
HPLNMC-5	10 Ton Pair	0-70	443	330	130	85	182	30	25
HPLNMC-6	12 Ton Pair	50-100	490	350	130	87	215	30	25

**Spring loaded plate lifting clamp**

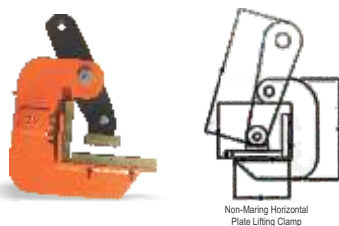
Available in capacities of 2,3,5,10 and 15 metric tons pair wise.  
Available jaw opening from (0 - 120 )mm for different sizes



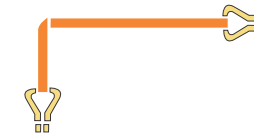
Model	WLL (ton)	Plate (mm)	A	B	C	D	F D	F d	t	Weight (kg)
HPLC-2	1	0-20	90	155	65	42	20	20	16	4.22
HPLC-3	1.5	0-30	92	168	65	52	20	20	20	5.94
HPLC-5	2.5	10-48	104	185	75	54	25	23	20	8.25
HPLC-10	5	50-100	200	315	100	99	30	30	25	26.43
HPLC-15	7.5	60-120	208	335	100	109	33	33	25	33.03

**Non marring with Spring Locked plate lifting clamp**

Available in capacities of 2,3,5,6,10,12 and 15 metric tons pair wise.  
Available jaw opening from (0 - 120 )mm for different sizes

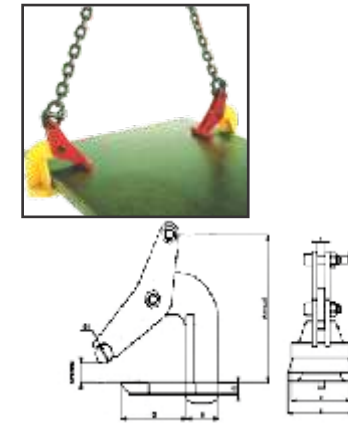


PART NO.	Capacity (ton)	Jaw Opening	A	B	C	D	E	F	G
HPLNMC-4	8 Ton Pair	0-70	443	330	130	85	182	30	25
HPLNMC-5	10 Ton Pair	0-70	443	330	130	85	182	30	25
HPLNMC-6	12 Ton Pair	50-100	490	350	130	87	215	30	25



**Rod weld plate lifting clamp**

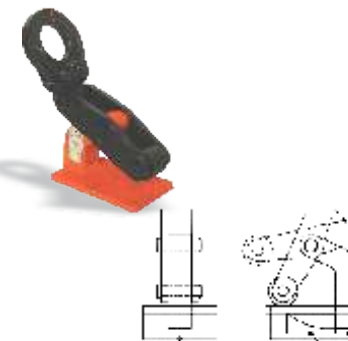
Available in capacities of 2,3,5,10 metric tons pair wise.  
Available jaw opening from (0 - 120 )mm for different sizes



Model	WLL (ton)	Plate (mm)	A	B	C	D	E	F	G	I	J	Weight (kg)
HRWLC-2	1	0-60	155	40	12	80	90	12	10	20	80	5
HRWLC-3	1.5	0-60	182	60	20	100	125	16	12	20	100	11.5
HRWLC-5	2.5	0-150	357	80	25	150	200	22	20	30	160	42.5
HRWLC-10	5	0-150	368	100	30	160	240	35	24	30	180	60

**Roller plate lifting clamp**

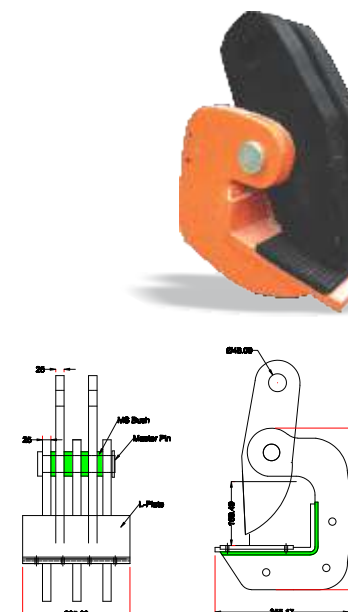
Available in capacities of 2,3,5,6,10,12 and 15 metric tons pair wise.  
Available jaw opening from (0 - 120 )mm for different sizes



Model	WLL (ton)	Plate (mm)	A	B	C	D	E	F	G
HRPL-2	1	0-20	100	60	30	30	160	10	100
HRPL-3	1.5	0-30	100	60	30	30	160	10	100
HRPL-5	2.5	10-48	120	65	36	30	175	10	100

**Double arm with teeth plate lifting clamp**

Available in capacities of 2,3,5,6,10,12 and 15 metric tons pair wise.  
Available jaw opening from (0 - 120 )mm for different sizes



Model	WLL (ton)	Plate (mm)	A	B	C	D	F D	F d	t
HPLCD-2	1	0-20	90	155	65	42	20	20	16
HPLCD-3	1.5	0-30	92	168	65	52	20	20	20
HPLCD-5	2.5	10-48	104	185	75	54	25	23	20
HPLCD-10	5	50-100	200	315	100	99	30	30	25
HPLCD-12	6	60-120	200	315	100	99	30	30	25
HPLCD-15	7.5	60-120	208	335	100	109	33	33	25
HPLCD-20	10	60-170	260	340	285	116	44	48	22
HPLCD-30	15	60-170	260	340	285	116	44	48	22



**Plate lifting clamp with lock**

Available in capacities of 2,3,5,6,10,12 and 15 metric tons pair wise.  
Available jaw opening from (0 - 120 )mm for different sizes



DIMENSIONS ARE AVAILBLE ON REQUEST.

**Plate lifting clamp or extra hard sheet**

Available in capacities of 2,3,5,6,10,12 and 15 metric tons pair wise.  
Available jaw opening from (0 - 120 )mm for different sizes

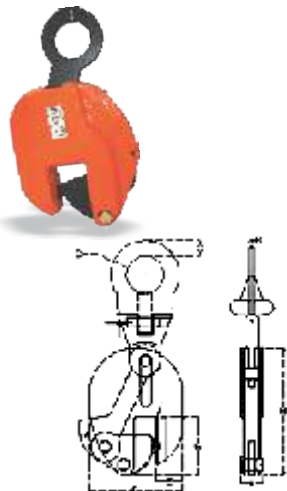


DIMENSIONS ARE AVAILBLE ON REQUEST.

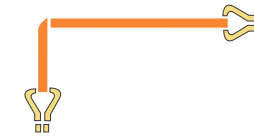
Model	WLL (ton)	Plate (mm)	A	B	C	D	F D	F d	t
HPLC-2	1	0-20	90	155	65	42	20	20	16
HPLC-3	1.5	0-30	92	168	65	52	20	20	20
HPLC-5	2.5	10-48	104	185	75	54	25	23	20
HPLC-10	5	50-100	200	315	100	99	30	30	25
HPLC-12	6	60-120	200	315	100	99	30	30	25
HPLC-15	7.5	60-120	208	335	100	109	33	33	25
HPLC-20	10	60-170	260	340	285	116	44	48	20
HPLC-30	15	60-170	260	340	285	116	44	48	22

**VPLC without lock, self gripping**

Available in capacities of 1, 2, 3, 5, 8, 10 and 12 tons.  
Jaw opening ranges from 0 to 90 mm.

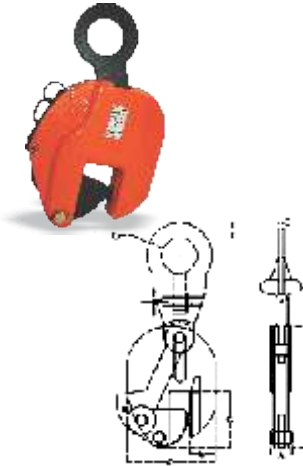


Model	WLL/Pair (ton)	Shell Plate	A	B	C	D	E	F	G	H	Weight (kg)
VPLC-1	1	0-16	55	12	16	45	40	140	60	155	4.54Kg
VPLC-2	2	0-22	54	16	23	55	55	180	80	190	7.19Kg
VPLC-3	3	5-30	72	20	25	60	58	190	100	230	9.34Kg
VPLC-5	5	16-50	82	20	80	65	58	212	117	255	12.36Kg
VPLC-8	8	40-80	118	20	40	80	80	295	145	355	32.12Kg
VPLC-10	10	45-85	120	20	42	85	80	300	168	385	36.50Kg
VPLC-12	12	50-90	120	20	45	90	80	325	180	400	39.90Kg



**VPLC with remote releasing clamp**

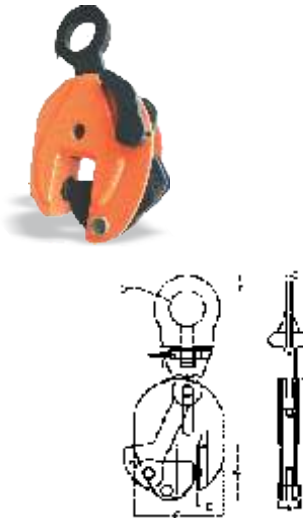
Available in capacities of 1, 2, 3, 5, 8, 10 and 12 tons.  
Jaw opening ranges from 0 to 90 mm.



Model	WLL/Pair (ton)	Shell Plate	A	B	C	D	E	F	G	H	Weight (kg)
VPLC-1	1	0-16	55	12	16	45	40	140	60	155	4.54Kg
VPLC-2	2	0-22	54	16	23	55	55	180	80	190	7.19Kg
VPLC-3	3	5-30	72	20	25	60	58	190	100	230	9.34Kg
VPLC-5	5	16-50	82	20	80	65	58	212	117	255	12.36Kg
VPLC-8	8	40-80	118	20	40	80	80	295	145	355	32.12Kg
VPLC-10	10	45-85	120	20	42	85	80	300	168	385	36.50Kg
VPLC-12	12	50-90	120	20	45	90	80	325	180	400	39.90Kg

**VPLC with lever**

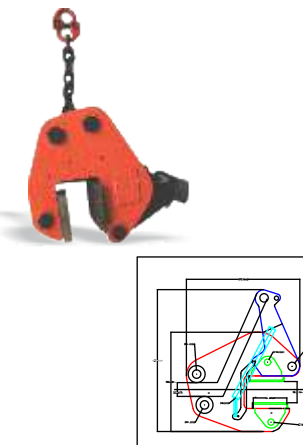
Available in capacities of 1, 2, 3, 5, 8, 10 and 12 tons.  
Jaw opening ranges from 0 to 90 mm.



Model	WLL/Pair (ton)	Shell Plate	A	B	C	D	E	F	G	H	Weight (kg)
VPLC-1	1	0-16	55	12	16	45	40	140	60	155	4.54Kg
VPLC-2	2	0-22	54	16	23	55	55	180	80	190	7.19Kg
VPLC-3	3	5-30	72	20	25	60	58	190	100	230	9.34Kg
VPLC-5	5	16-50	82	20	80	65	58	212	117	255	12.36Kg
VPLC-8	8	40-80	118	20	40	80	80	295	145	355	32.12Kg
VPLC-10	10	45-85	120	20	42	85	80	300	168	385	36.50Kg
VPLC-12	12	50-90	120	20	45	90	80	325	180	400	39.90Kg

**VPLC non-marring**

Available in capacities of 3, 5 and 8 tons.  
Jaw opening ranges from 0 to 90 mm.  
Full 180 deg. Turning range for material transfer, turning and moving



Model	WLL (ton)	JAW Opening	A	B	C	D	E
VPLMNC-3	3	0-60	401	281	321	92	244
VPLMNC-5	5	16-75	420	310	353	125	260
VPLMNC-8	8	40-90	460	350	382	140	260





**VPLC universal with remote release & swivel handle**



Available in capacities of 1, 2, 3, 5, 8, 10 and 12 tons.  
Jaw opening ranges from 0 to 90 mm.  
Full 180 deg. Turning range for material transfer, turning and moving

Model	WLL/Pair (ton)	Shell Plate	A	B	C	D	E	F	G	H	Weight (Kg)
VPLC-1	1	0-16	55	12	16	45	40	140	60	155	4.54kg
VPLC-2	2	0-22	64	16	23	55	55	180	80	190	7.19kg
VPLC-3	3	5-30	72	20	25	60	58	190	100	230	9.34kg
VPLC-5	5	16-50	82	20	28	65	58	212	117	255	12.36kg
VPLC-8	8	40-80	118	20	40	80	80	295	145	355	32.12kg
VPLC-10	10	45-85	120	20	42	85	80	300	165	385	36.50kg
VPLC-12	12	50-90	120	20	45	90	80	325	180	400	39.90kg

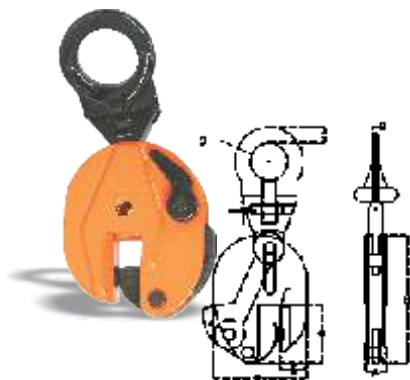
**VPLC universal with remote release & lever**



Available in capacities of 1, 2, 3, 5, 8, 10 and 12 tons.  
Jaw opening ranges from 0 to 80 mm.  
Full 180 deg. Turning range for material transfer, turning and moving.

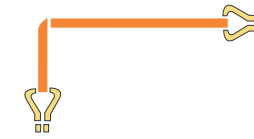
Model	WLL/Pair (ton)	Shell Plate	S	T	U	V	W	X	Y
VPLC-1	1	0-18	55	48	300	130	38	35	18
VPLC-2	2	0-35	80	70	380	180	58	43	18
VPLC-3	3	0-25	80	70	385	185	55	42	15
VPLC-5	5	0-45	85	68	425	235	54	70	25
VPLC-8	8	0-55	110	80	560	285	70	73	32
VPLC-10	10	0-76	120	80	635	310	110	75	45
VPLC-12	12	0-80	170	100	830	495	140	115	75

**VPLC for turning and tilting**

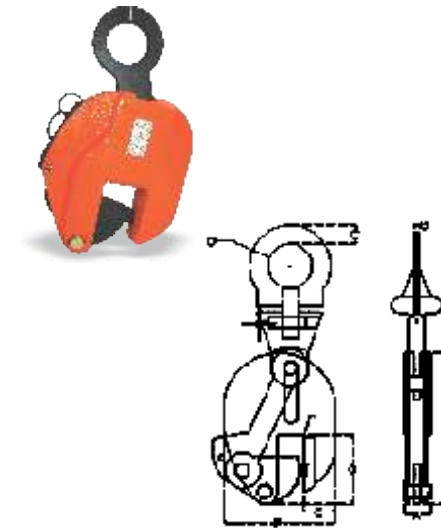


Available in capacities of 1, 2, 3, 5, 8, 10 and 12 tons.  
Jaw opening ranges from 0 to 90 mm.

Model	WLL/Pair (ton)	Shell Plate	S	T	U	V	W	X	Y
VPLC-1	1	0-18	55	48	300	130	38	35	18
VPLC-2	2	0-35	80	70	380	180	58	43	18
VPLC-3	3	0-25	80	70	385	185	55	42	15
VPLC-5	5	0-45	85	68	425	235	54	70	25
VPLC-8	8	0-55	110	80	560	285	70	73	32
VPLC-10	10	0-76	120	80	635	310	110	75	45
VPLC-12	12	0-80	170	100	830	495	140	115	75



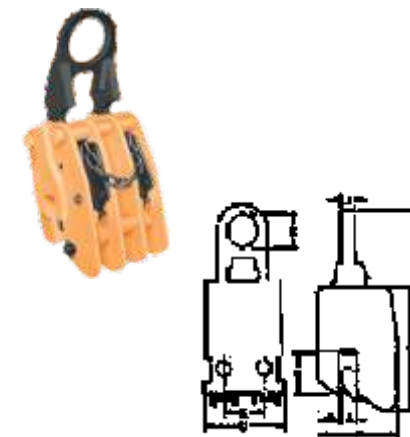
**VPLC stainless steel**



Available in capacities of 1, 2, 3, 5, 8, 10 and 12 tons.  
Jaw opening ranges from 0 to 90 mm.

Model	WLL/Pair (ton)	Shell Plate	A	B	C	D	E	F	G	H	Weight (kg)
VPLC-1	1	0-16	55	12	16	45	40	140	60	155	4.54Kg
VPLC-2	2	0-22	54	16	23	55	55	180	80	190	7.19Kg
VPLC-3	3	5-30	72	20	25	60	58	190	100	230	9.34Kg
VPLC-5	5	16-50	82	20	28	65	58	212	117	255	12.36Kg
VPLC-8	8	40-80	118	20	40	80	80	295	145	355	32.12Kg
VPLC-10	10	45-85	120	20	42	85	80	300	168	385	36.50Kg
VPLC-12	12	50-90	120	20	45	90	80	325	180	400	39.90Kg

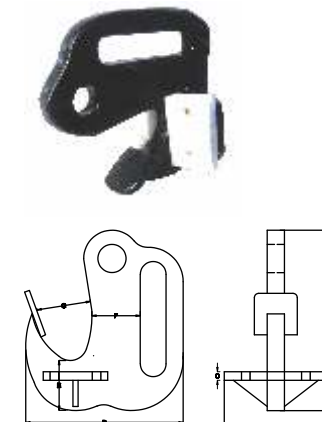
**VPLC of extra heavy duty**



Available in capacities of 1, 2, 3, 5, 8, 10 and 12 tons.  
Jaw opening ranges from 0 to 90 mm.

Model	WLL/Pair (ton)	JAW OPENING A	B	C	D	E	F	G	H	I	J
VPLC-1	1	0-30	65	196	355	60	142	140	38	16	76
VPLC-2	2	0-30	77	230	390	64	178	166	40	19	80
VPLC-3	4	30-62	88	240	450	73	200	170	54	19	92
VPLC-5	6	62-90	104	290	520	80	235	230	54	35	104

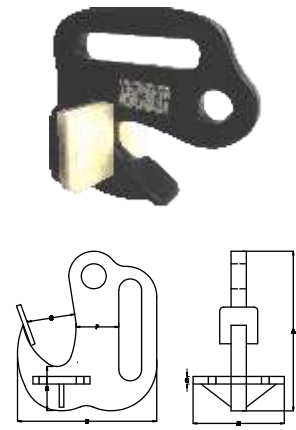
**Pipe lifting without peel resistant coating**



Model	WLL (Kg.)	Wall thickness (mm)	A (MM)	B (MM)	C (MM)	D (MM)	E (MM)	F (MM)	G (MM)	Weight (kg)
PLC-2.5	2500	0-40	210	120	10	185	58	56	62	4.6
PLC-5	5000	0-55	208	205	145	60	20	20	240	6.8
PLC-10	50000	0-60	208	205	145	70	20	60	240	13.650

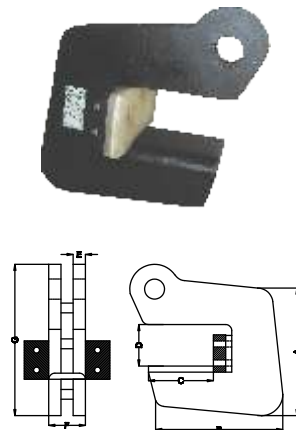


Pipe lifting with peel resistant coating



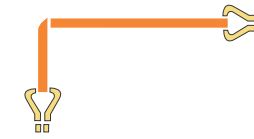
Model	WLL (Kg.)	Wall thickness (mm)	A (MM)	B (MM)	C (MM)	D (MM)	E (MM)	F (MM)	G (MM)	Weight (kg)
PLC-2.5	2500	0-40	210	120	10	185	58	56	62	4.6
PLC-5	5000	0-55	208	205	145	60	20	20	240	6.8
PLC-10	50000	0-60	208	205	145	70	20	60	240	13.650

Scratch Resistant Extra Heavy Duty PLC



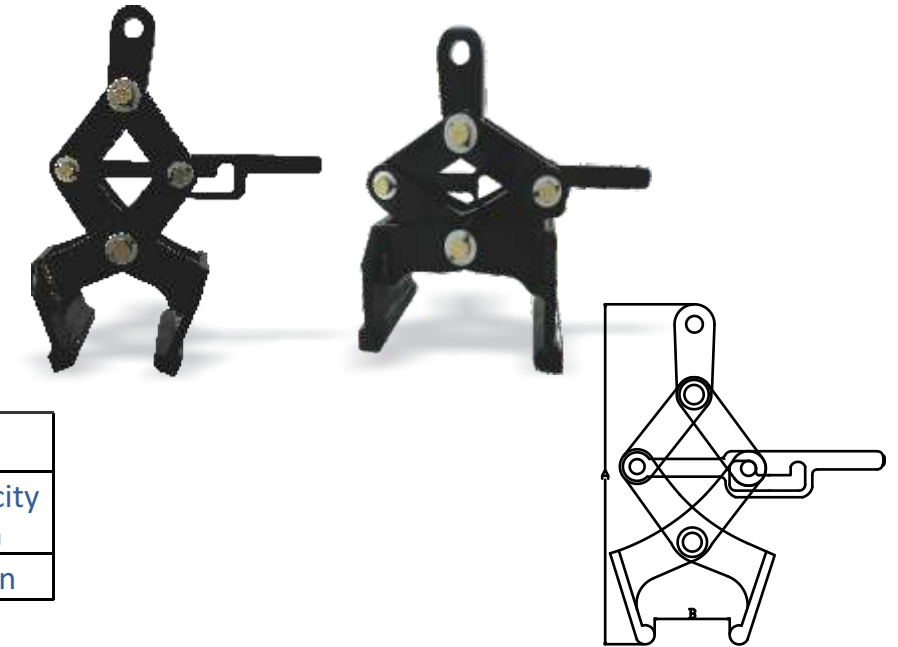
For horizontal and transporting of steel and concrete pipes  
 Compact shape and relatively low self weight with a high lifting capacity  
 The surface bearing are fitted with a special material  
 Delivered in pairs  
 Teflon coating is easy to change

Model	WLL (Kg.)	Wall thickness (mm)	A (MM)	B (MM)	C (MM)	D (MM)	E (MM)	F (MM)	G (MM)	Weight (kg)
PLC-2.5	2500	0-40	210	120	10	185	58	56	62	
PLC-5	5000	0-55	208	205	145	60	20	20	240	
PLC-10	10000	0-60	208	205	145	70	20	60	240	



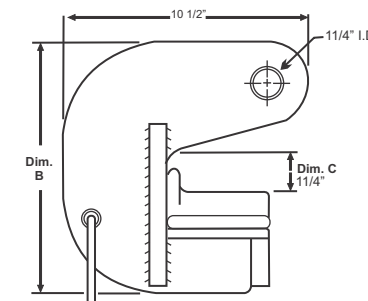
## Rail Lifting Clamp

- Designed to lift all standard Rail.
- Lightweight and versatile adjustability
- No tools required.
- Ideal for lifting.
- Locking attachment inbuilt.



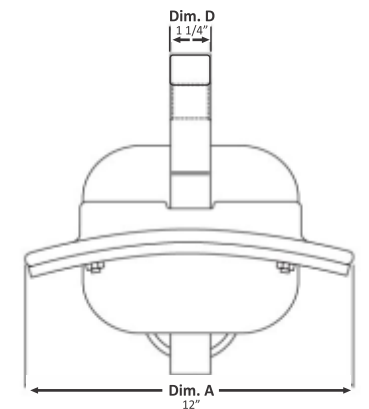
Specification			
Model	Dim (A) mm	Dim (B) mm	Capacity ton
RLC-3	585	131	3 ton

## Aluminum Lined Pipe Hook



- For horizontal and transporting of steel and concrete pipes.
- Compact shape and relatively low self weight with a high lifting capacity.
- Delivered in pairs.
- Interchangeable cast aluminum inserts.
- Unique wide mouth body available for extra clearance.
- Available up to 20 ton pair capacity.

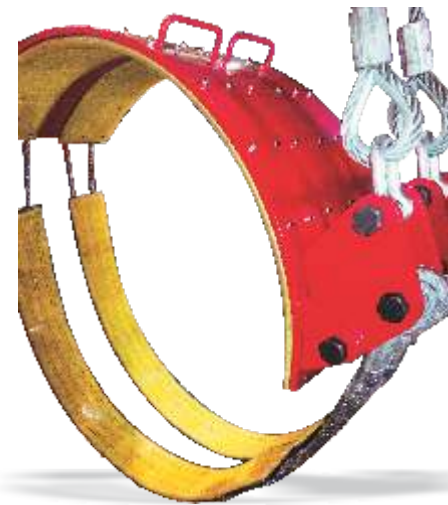
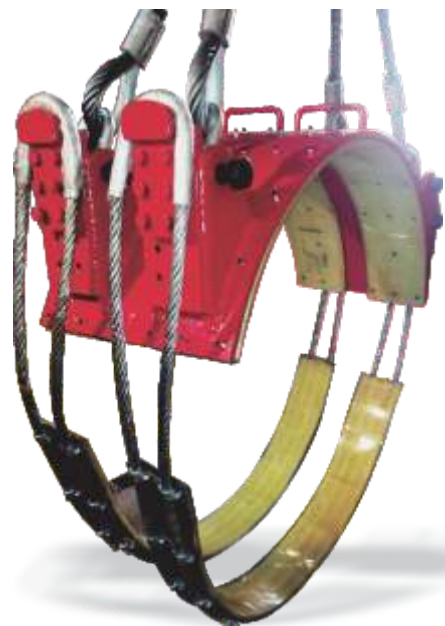
Specification					
Model	Size (in.)	Dim (A)	Dim (B)	Dim (B)	Dim (D)
PLH-20	44-55	12"	10 3/4"	1 1/4"	1 1/4"
PLH-21	55-76	12"	10 3/4"	1 1/4"	1 1/4"



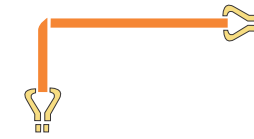




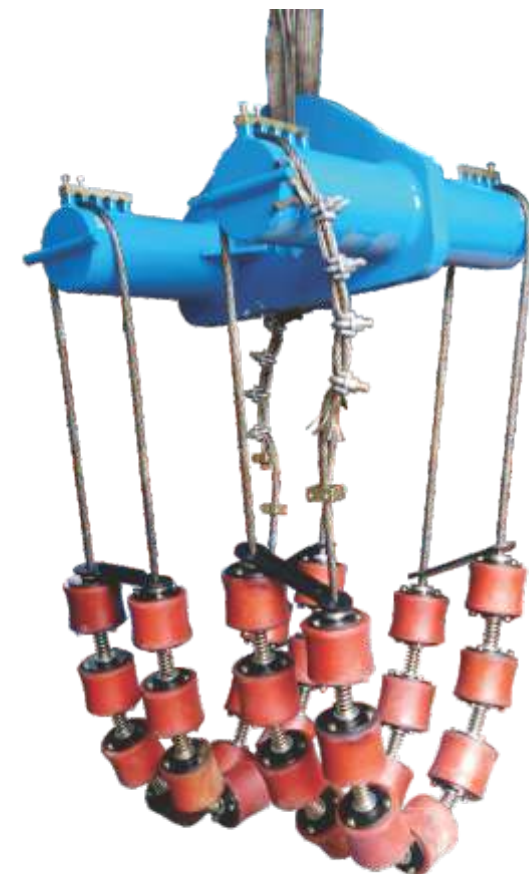
## Steel Lined Choker Belts



- Aligns pipe exactly without slippage for bending, welding, etc.
- Roll pipe, pull pipe, secure extreme bends-all without damage
  - Fastest tool available for positioning and handling pipe
    - Fully adjustable for coating thickness
- Super Heavy Duty Barrier webbing for increased life and gripping efficiency.
  - Easily repairable in field for longer life.
    - Replacement Parts Available.
- Available up to 70" pipe diameter and up to 25 ton capacity.



## Pipeline Roller Cradle Assembly Pipe sizes 6" to 60"



- Ferreteria cradle is the ideal cradle for all line travel operations.
- Pipe damage caused by steel wheel cradles is eliminated.
- Even Load distribution
- Polyurethane rollers ride easily over weld seams and do not hang up.
- Easily disassembled for storage and transit.
- Ample capacity ensures safe handling of heavy wall pipe.
- Suitable also for use as a lowering-in or liftout cradle.
- Available in five ranges to accommodate pipe sizes 6" (168mm) through 60" (1524mm). Safety Factor 5:1
- Replacement Parts Available

SIZE		NUMBER OF ROLLERS PER ROLLER ASSEMBLY (4 ROLLER ASSEMBLIES)	MAXIMUM RECOMMENDED WORKING LOAD	
IN	MM		LB	KG
6"-12"	152-305	5	16,923	7,676
12"-24"	305-610	6	28,662	13,000
24"-36"	610-914	7	56,500	25,328
36"-48"	914-1219	8	69,390	31,475
48"-60"	1219-1524	9	105,380	47,800

SIZE		LENGTH		WIDTH		HEIGHT		WEIGHT	
IN	MM	IN	MM	IN	MM	IN	MM	LB	KG
6"-12"	152-305	42"	1067	22"	559	30"	760	1135	515
12"-24"	305-610	42"	1067	36"	914	36"	914	1500	680
24"-36"	610-914	56"	1422	60"	1524	36"	914	4960	2250
36"-48"	914-1219	56"	1422	72"	1829	42"	1067	6425	2914
48"-60"	1219-1524	56"	1422	84"	2134	48"	1219	7240	3284



## Chain Slings

FERRETERRO manufacture the Grade 80 Chain Slings for industrial application in the environment where flexibility, abrasion, resistance and long life are required. All parts are made by Ferreteria, Oblong Rings, Master link assemblies, Connecting links, Shortening hooks and in house manufacturing of load chains make the product reliable and all products are manufactured by strict process level based quality control systems. All slings are fully coated against rust prevention and available with permanent metal tags ( RFID tags available).

Chain Size (mm)	WLL Straight Lift (Tons)	WLL Double Leg Chain Slings (Tons)		WLL Triple & Quad Chain Slings (Tons)	
		0°-45°	45°-60°	0°-45°	45°-60°
6	1.2	2.1	1.5	3.1	2.2
8	2	2.8	2	2	4.2
10	3.3	4.25	3.15	6.7	4.75
12	5.4	7.5	5.3	11.2	8
16	8.2	11.2	8	17	11.8



Ferretero Chain Slings are available in the chain size of 6 mm to 16 mm with capacity (WLL) upto 12 tons (Approx.)

### Different Available fittings

#### Advantages & Characteristics

##### Durability:

- Resists impact, cuts and abrasions
- Resistant to chemicals and UV radiation
- Can be used in oily or dirty environments
- Can be used at higher temperatures up to 200o C.
- Minimum elongation when lifting or tensioning
- Long service life compared to synthetic slings

##### Versatility:

- Easily adjustable
- Can be constructed in the field

##### Inspection & Maintenance:

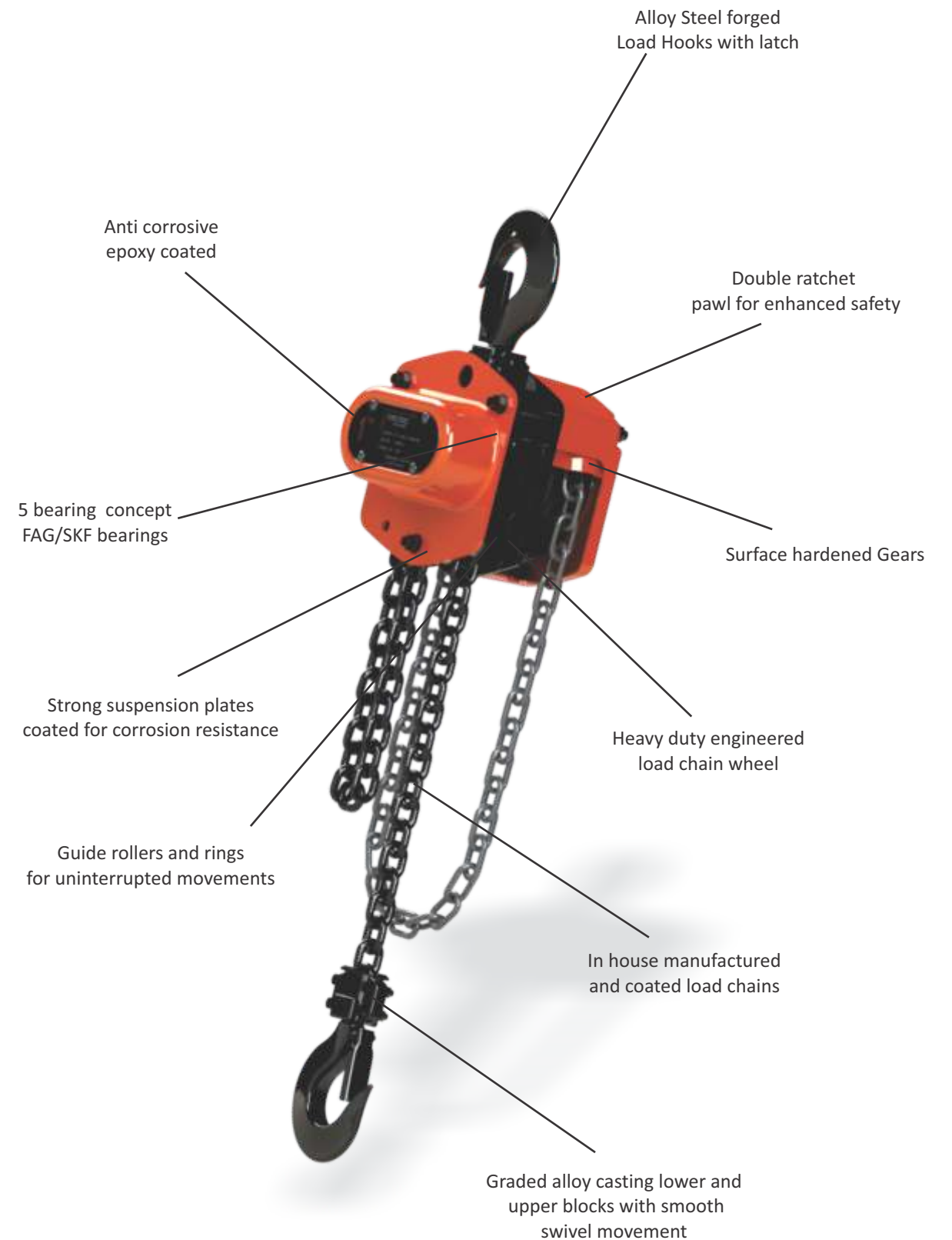
- Easy to inspect
- Completely repairable.



Chain Sleeve are also available.



## Chain Pulley Block







## Chain Pulley Block Model-Gold

**Compact & Light weight:** Designed for portability and ease of handling.

**Spur Alloy steel gears with case hardening:** Precision cut spur gears ensure smooth and efficient operation with minimal effort.

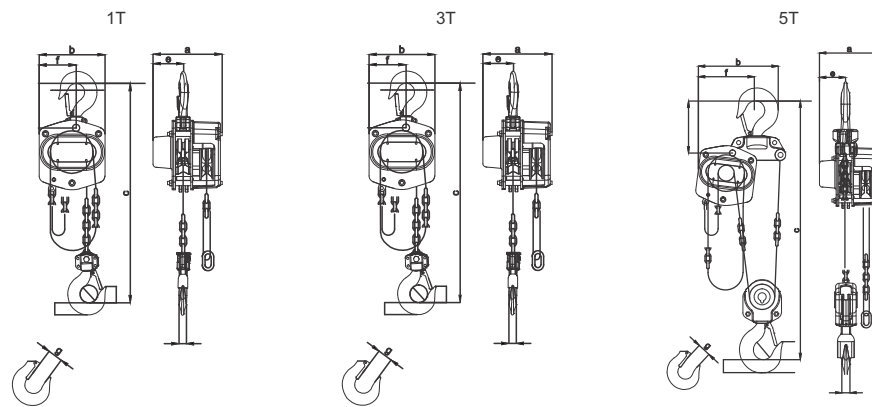
**Fully pocketed S. G. Iron casting load chain wheel mounted on double ball bearing:** Ensures accurate and smooth operation.

**Alloy Steel Load Chain:** Provides added strength, wear resistance, longer chain life.

**Hand chain wheel cover:** Minimizes jamming & slipping.

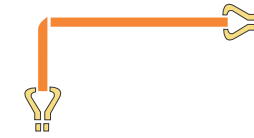
**Brakes:** Mechanical screw friction self actuating disc load brake engages instantly for load holding. Two Ratchet Pawls for extra safety.

**Load and suspension hook with Safety Latches:** Prevents unintentional unhooking of load.



CAPACITY(T)	0.5T	1T	2T(DF)	3T(SF)	3T(DF)	5T(DF)	7.5T(TF)	10T(FF)
NO.OF FALLS	1	1	2	1	2	2	3	4
MODEL CODE	HH005	HH010	HHM20	HHS30	HH030	HH050	HH075	HH100
EFFORT(KG)	30	30	37	41	37	37	38	39
Weight at 3MTR lift (approx)KG	12.5	13	24	29	25	42	69	87
Extra weight per additional metre lift (Kgs.)	0.85	0.85	2.2	2.2	2.2	3.7	5.55	8.8

CAPACITY(T)	a(mm)	b(mm)	c(mm)	e(mm)	f(mm)	g(mm)
0.5T	158	156	346	69	96	29
1T	158	156	346	69	96	29
2T(DF)	168	176	500	80	144	40
3T(SF)	189	228	423	100	131	46
3T(DF)	168	176	515	80	148	46
5T(DF)	189	219	605	100	182	51
7.5T(TF)	189	410	775	121	318	80.5
10T(FF)	189	430	790	121	318	80.5



## Chain Pulley Block Model-Silver

**Compact & Light weight:** Designed for portability and ease of handling.

**All major Forging, Casting, Gears components and**

**Chains produced in-house:** Assured quality and reliability.

**Spur Alloy steel gears with case hardening:** Precision cut spur gears ensure smooth and efficient operation with minimal effort.

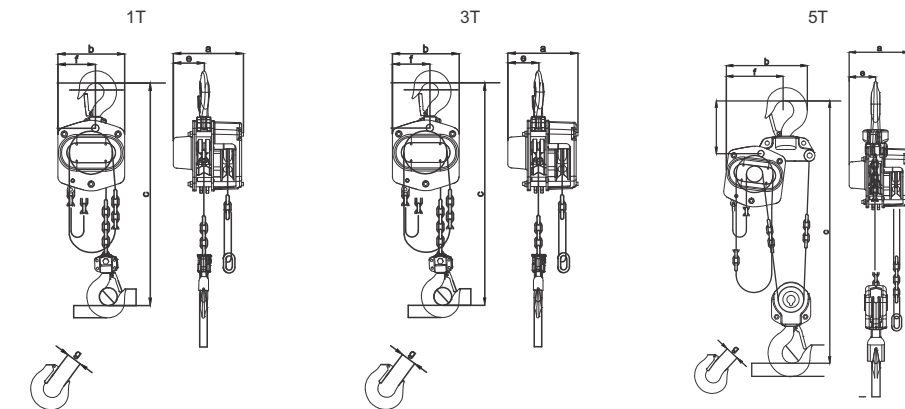
**Fully pocketed S. G. Iron casting load chain wheel mounted on double ball bearing:** Ensures accurate and smooth operation.

**Alloy Steel Load Chain:** Provides added strength, wear resistance, longer chain life.

**E-Coated/ Zinc Plated load/hand chain:** Offers better aesthetic looks, increased rust protection and longer chain life.

**Hand chain wheel cover:** Minimizes jamming & slipping.

**Brakes:** Mechanical screw friction self actuating disc load brake engages instantly for load holding. Two Ratchet Pawls for extra safety.



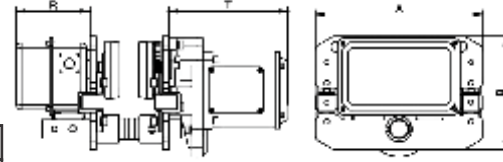
CAPACITY(T)	0.5T	1T	2T(DF)	2T(SF)	3T(SF)	3T(DF)	5T(DF)
NO.OF FALLS	1	1	2	1	1	2	2
MODEL CODE	LL005	LL010	LLD020	LL020	LL030	LLD030	LLD050
EFFORT(KG)	30	30	33	36	41	37	37
Weight at 3MTR lift (approx)KG	12.3	12.5	14	20	28.5	24.5	41
Extra weight per additional metre lift (kgs.)	0.85	0.85	1.7	1.35	2.2	2.2	3.7

CAPACITY(T)	a(mm)	b(mm)	c(mm)	e(mm)	f(mm)	g(mm)
0.5T	158	156	346	69	96	29
1T	158	156	346	69	96	29
2T(DF)	158	156	475	72	132	40
2T(SF)	180	196	510	94	112	40
3T(SF)	189	228	423	100	131	46
3T(DF)	168	176	515	80	148	46
5T(DF)	189	219	605	100	182	51



## Electric Trolley

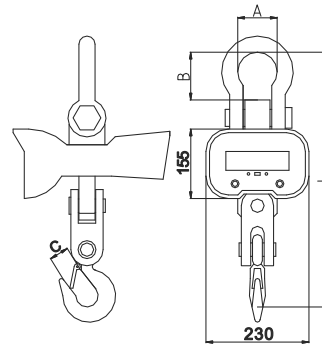
- **Design:** Compact and adjustable design to suit different beam sizes.
- **Lateral wheel ( 1T onwards):** Ensures smooth operation.
- **Operation:** From Pendant.
- **Trolley wheels:** Accurately machined precision cut on anti friction bearing.
- **Powder Coated finish:** For added rust protection and better aesthetic look.



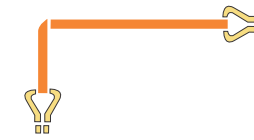
DESCRIPTION	FHET-05	FHET-10	FHET-20	FHET-30	FHET-50
CAPACITY(Kgs.)	500	1000	2000	3000	5000
SPEED (MPM)	10				
MOTOR ( kw )	0.2	0.4	0.4	0.4	0.75
MINIMUM RADIUS ( M )	1.0				1.8
DIMENSIONS ( mm )					
A	196	315	325	340	400
B	248	212	220	250	291
R	142	142	142	142	142
T	159	231	231	231	231
BEAM SIZE ( mm )	70-130	80-160	80-160	100-180	110-180

## Crane Load Cell

- High-quality Alloy Steel Receptor.
- Aluminium die-casting enclosure.
- 38mm LED & LCD display with backlight.
- Heavy-duty bow shackle.
- Heavy-duty eye hook.
- High capacity rechargeable battery.
- Water-proof panel button.
- Infrared remote controlling.
- Capacity: 1000kg. - 20000kg.



DESCRIPTION	FHCLC-01	FHCLC-02	FHCLC-03	FHCLC-05	FHCLC-10	FHCLC-15	FHCLC-20
CAPACITY(Kgs.)	1000	2000	3000	5000	10000	15000	20000
DIMENSIONS ( mm )							
A	58	58	73	92	94	128	135
B	83	83	107	135	145	178	250
C	30	30	33	45	60	75	75
L	420	420	480	585	770	860	950
NET WEIGHT ( Kgs)	12	13	15	24	43	61	64

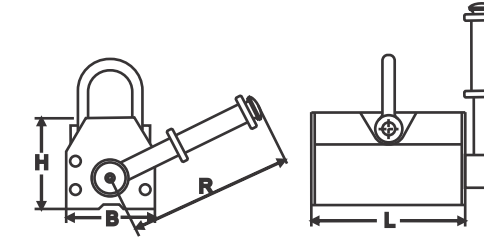


## Permanent Magnet Lifter

Maximum pulling force is greater than 3.5 times rated lifting capacity.

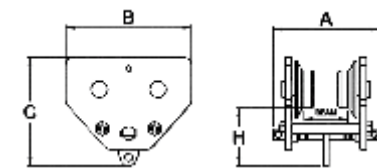
Largest available capacity is 5,000 Kg.

Simple switch and safety button design allows for one handed operation.

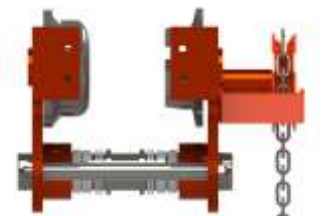


DESCRIPTION	FHPML-01	FHPML-03	FHPML-05	FHPML-06	FHPML-10	FHPML-15	FHPML-20	FHPML-30	FHPML-50
CAPACITY(Kgs.)	100	300	500	600	1000	1500	2000	3000	5000
DIMENSIONS ( mm )									
L	92	165	216	236	264	352	378	453	647
B	64	88	118	118	168	168	226	290	290
H	70	96	118	120	168	168	216	265	265
R	145	176	219	219	285	380	462	567	707
NET WEIGHT ( Kgs)	3	10	20	24	50	70	125	220	355
MAX. PULL OFF									
STRENGTH (Kgs)	350	1050	1750	2100	3500	5200	7000	10500	17500
OPERATION TEMP.( C)	<80	<80	<80	<80	<80	<80	<80	<80	<80

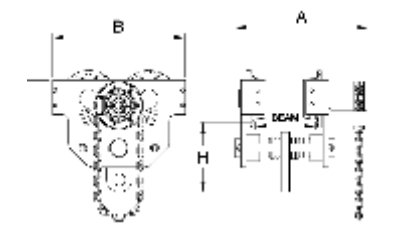
## Beam Trolley



Model	Capacity (Tons)	I-Beam width (mm)	Net Weight (kg)	A (mm)	B (mm)	C (mm)	H (mm)
MPT-1	1	60-150	10	250	242	220	129
MPT-2	2	90-160	13	300	242	220	129
MPT-3	3	90-160	13	300	242	220	129



Model	Capacity (Tons)	I-Beam width (mm)	Net Weight (kg)	A (mm)	B (mm)	C (mm)	H (mm)
GT-1	1	60-150	13	314	242	220	129
GT-2	2	90-160	16	364	242	220	129
GT-3	3	90-160	16	364	242	220	129
GT-5	5	110-150	47	400	400	143.5	171







## Chain Electric Hoist

**Aluminium Die Cast Body:** Compact, tough body.

**Alloy steel gears:** Precision cut spur gears ensure smooth and efficient operation with reduced noise.

**Grade 80 load chain:** Provides added strength, wear resistance, longer chain life.

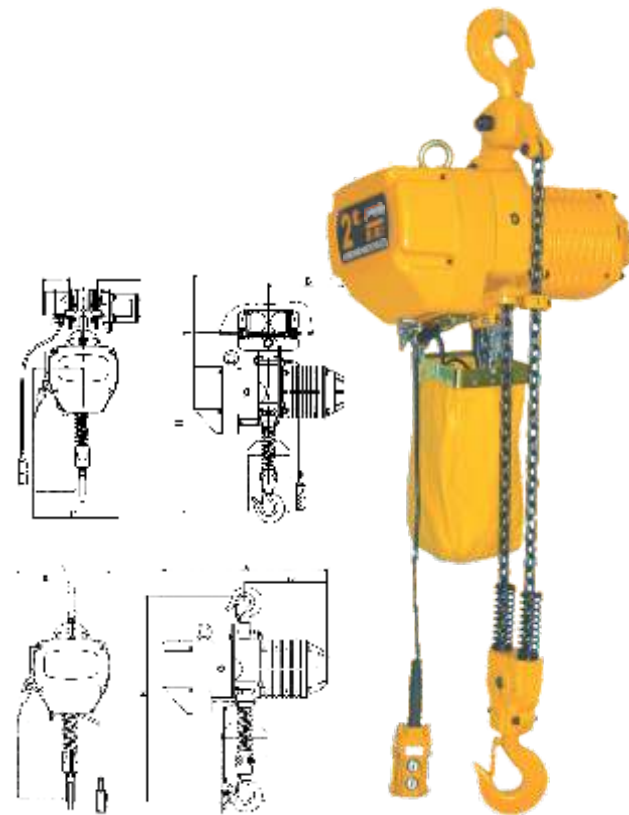
**Hooks:** Forged hook, free swivelling with safety latch. Bottom hook with thrust bearing.

**Wrong Phase Protector:** Wrong Phase Protector protects the motor in case of wrong phase position.

**Limit Switches:** Stop hoist at both ends of hook path.

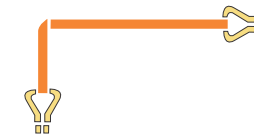
**Motor:** Squirrel cage induction motor with 40% CDF and IP-55 protection.

**Panel:** Built in panel with IP-55 protection.



Specification & Dimension							
Hoists Model	Capacity (Ton)	Lifting Speed (m/min)	Lifting Motor (kw)	Traversing Speed (m/min)	Traversing Motor (kw)	Load Chain (mm)	N.W. (kg)
FHEH 0.5 - 01S	0.5	7.8	0.75	10	0.2	6.3	45
FHEH 0.5 - 01 D		7.8/2.6	0.75/0.25		0.2	6.3	56
FHEH 01 - 01 S	1	6.8	1.5		0.4	7.1	65
FHEH 01 - 01 D		7.2/2.4	1.5/0.5		0.4	7.1	78
FHEH 02 - 01 S	2	6.8	3		0.4	10	121
FHEH 02 - 01 D		6.8/2.3	4.0/1.5		0.4	10	152
FHEH 03 - 02 S	3	4.4	3		0.4	10	138
FHEH 03 - 02 D		4.4/1.5	4.0/1.5		0.4	10	174
FHEH 05-02 S	5	2.7	3		0.75	11.2	154

Capacity (Ton)	Product Code	Headroom (mm)		Dimensions (mm)				beam (mm)
		Hook Sus.	ET	A	B	D	E	
0.5	FHEH 0.5-01S	550	630	460	230	280	160	70-130
	FHEH 0.5 - 01 D	550	630	545	260	280	160	
1	FHEH 01 - 01 S	600	650	520	260	300	176	80-160
	FHEH 01 - 01 D	600	650	582	280	300	176	
2	FHEH 02 - 01 S	800	770	620	310	430	265	80-160
	FHEH 02 - 01 D	800	770	675	328	430	265	
3	FHEH 03 - 02 S	950	930	620	310	430	320	100-180
	FHEH 03 - 02 D	950	930	675	328	430	320	
5	FHEH 05 - 02 S	1030	1015	620	310	430	325	110-180



## Chain

We manufacture wide range of Alloy/M.S. link chains using state of the art chain making machines.

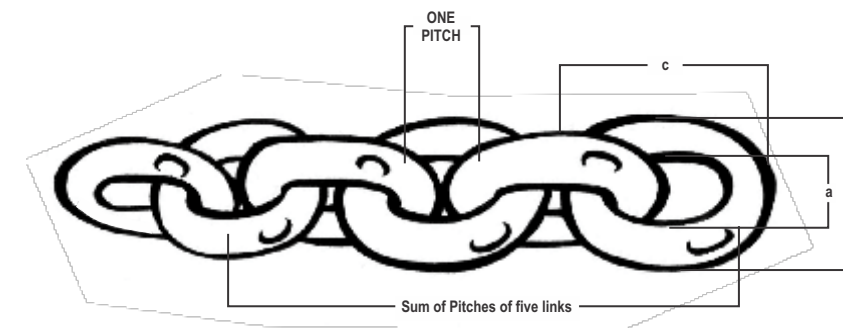
Our chains have high accuracy and tight tolerance to ensure smooth running.

A sophisticated continuous heat treatment process gives even hardness and strength to each link.

Our E-coated chains provide high corrosion resistance for longer life.

In-house manufacturing allows flexibility for customized production.

All links marked as per required standards for easy identification.

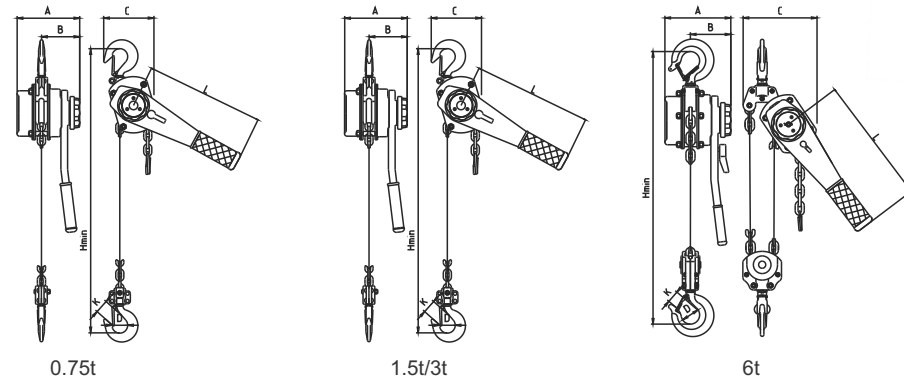


LINK CHAIN RANGE TECHNICAL SPECIFICATION SHEET										
Type	Dia of chain(mm)	Pitch (mm)	Sum of pitches of 5 links(mm)	Discard limit(mm)	a (mm)	b(mm)	c(mm)	SWL(t)	PL(t)	BL(t)
alloy steel load chain G-80	6	18	90	91	6	20	30	1	2.7	4.5
alloy steel load chain G-80	6.3	19	95	96.3	8.4	21	31.6	1.2	3.2	5
alloy steel load chain G-80	7.1	21	105	109.1	8.8	23	35.2	1.5	4	6.5
alloy steel load chain G-80	8	23	115	117	10.5	26.5	39	2	5	8.05
alloy steel load chain G-80	8	24	120	122.5	11	27	40	2	5	8.05
alloy steel load chain G-80	9	27	135	140	12.5	30.5	45	2.5	6.3	10.2
alloy steel load chain G-80	10	30	150	155	13.2	33.2	50	3.2	7.8	12.2
alloy steel load chain G-80	12	33	165	170	15.5	39.5	57	4.5	11	18
alloy steel load chain G-80	12	36	180	185	18	42	60	4.5	11	18
alloy steel load chain G-80	14	42	210	215	18	46	70	6.2	15	24.6
alloy steel load chain G-80	16	48	240	245	19.5	51.5	80	8.05	19.3	32.2
mild steel load chain G-40	9.5	24.5	122.5	203	11.5	30.5	43.5	1.4	2.85	5.7
mild steel load chain G-40	11	30	150	153	13.5	35.5	52	1.9	3.8	7.6
mild steel load chain G-40	12.5	35.25	176.25	180	15	40	60.25	2.45	4.9	9.8
mild steel hand chain G-30	5	25	125	127	7.5	17.5	35	290	590	1180
mild steel hand chain G-30	5	22.5	112.5	115	7.5	17.5	32.5	290	590	1180
mild steel hand chain G-30	6	19	95	97	8.5	20.5	31	425	850	1700
mild steel hand chain G-30	6	26.5	132.5	135	8	20	38.5	425	850	1700
			0		0		0			

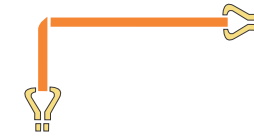


## Ratchet Lever Hoist Link Chain Type

- **Compact & Light weight:** Designed for portability and ease of handling.
- **Designed to EN 13157 with CE certification:** Assured quality and reliability.
- **Grade 100 load chain:** Added strength, wear resistance, longer chain life.
- **Easy to Operate:** Requires minimum effort.
- **Brakes:** Mechanical load brake engages instantly for load holding. Two Ratchet Pawls for extra safety.



Description	MODEL			
	FHRL-75	FHRL-150	FHRL-300	FHRL-600
<b>CAPACITY (T)</b>	0.75	1.5	3	6
<b>STANDARD LIFT (M)</b>	1.5	1.5	1.5	1.5
<b>LOAD CHAIN</b>	LINK TYPE ALLOY STEEL GRADE 100			
<b>NO. OF FALL</b>	1	1	1	2
<b>CHAIN DIA.( mm)</b>	5	8	10	10
<b>DIMENSIONS(mm)</b>				
A	148	176	195	195
B	88	102	109	109
C	135	162	211	254
D	40	45	58	64
H	320	380	480	620
L	290	420	420	420
K	34	38	48	52
<b>EFFORT REQUIRED FOR RATED LOAD (N)</b>	140	220	320	340
<b>WEIGHT WITH STD. LIFT ( Kg)</b>	7.7	11.8	21	32
<b>EXTRA WEIGHT PER METER OF EXTRA LIFT (Kg)</b>	0.8	2.15	2.2	4.3



## Beam Clamp

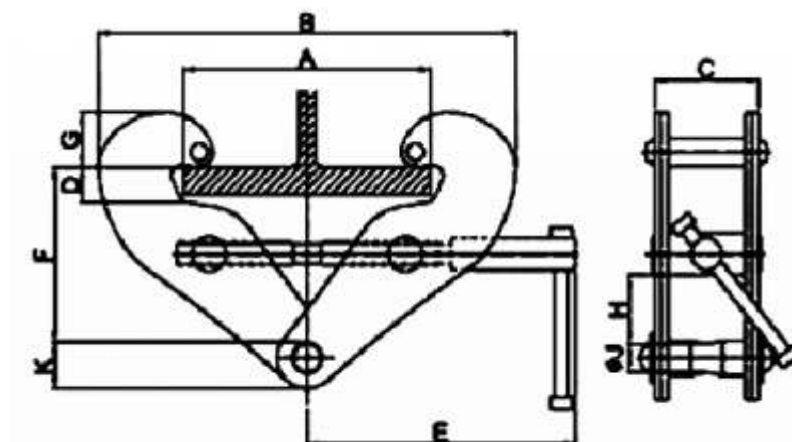
### FERRETERRO BEAM CLAMPS

- ▶ are made with High strength Alloy steel .
- ▶ Individual clamp is proof tested with 2 times the load of working load limit.
- ▶ Company name with logo (FERRETERRO), working load limit (WLL) and jaw opening all are mentioned in the clamps.
- ▶ Individual serial no. and test certificate of proof load is provided with the clamps.
- ▶ Maintenance replacements parts are available.
- ▶ ISO 9001 certification.



Versatile jaws designed to mount on a wide range of tapered or flat beams. Built-in suspension bar allows for low headroom. Easily installed and adjusted by hand. Provides temporary or permanent mounting point for hook mounted hoists or lever pullers. Designed to minimize stress applied to beam. Range from 1 Tons to 5 Tons. Large Capacities available on request.

MODEL	WLL (ton)	Dimensions (mm)								Weight (kg.)
		Beam Width A	B	C	D	E	F	G	Ø J	
BC-1	1	76-228	182-333	77	26	190	144-117	52-38	Ø 20	4.0
BC-2	2	76-228	182-333	85	26	190	144-117	52-38	Ø 20	5.1
BC-3	3	70-320	214-460	107	35	240	224-175	58-40	Ø 22	9.9
BC-5	5	70-320	214-460	121	35	240	220-175	58-40	Ø 28	11
BC-10	10	90-320	320-505	121	35	280	235-175	58-40	Ø 40	18







## Pulling & Lifting Machine

**Design:** Compact and robust design.

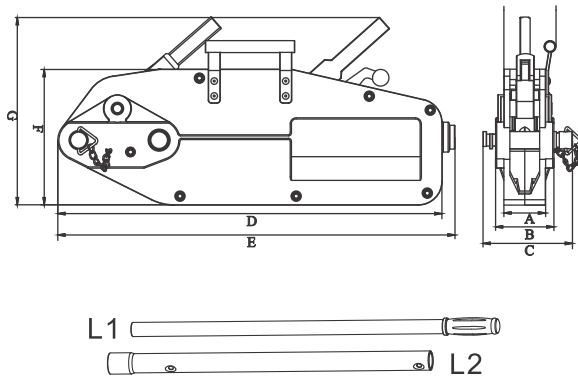
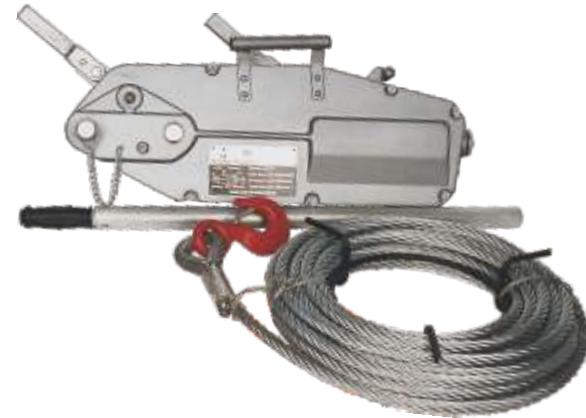
**Construction:** Die casting, light weight, durable.

**Operation:** Simple lever operation.

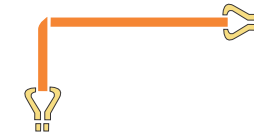
**Application:** For Pulling and Lifting. Can be used at any working angle with sheaves.

**Capacity:** Available in three capacities. Capacity can be enhanced with sheave pulley.

**Safety:** Two safety devices guarantee safe operation.



Description	MODEL			
	FHPL-08	FHPL-16	FHPL-32	FHPL-54
CAPACITY				
a. LIFTING	0.8T	1.6T	3.2T	5.4T
b. PULLING	1.2 T	2.4T	4.8T	8.0T
ROPE DIA. (mm)	8.3	11	16	20
ROPE SAFETY FACTOR	5	5	5	5
LENGTH OF HANDLE ( mm)	800	800/1200	800/1200	880/1350
DIMENSIONS(mm):				
A	44	56	70	90
B	60	68	98	160
C	101	120	150	200
D	420	545	645	935
E	430	556	666	940
F	172	200	227	300
G	240	270	320	410
RATED FORWARD HANDPOWER (n)	343	400	441	745
RATED FORWARD TRAVEL (mm)	>=52	>=55	>=28	>=30



## E.O.T. Cranes

### Ferretero EOT Crane Features

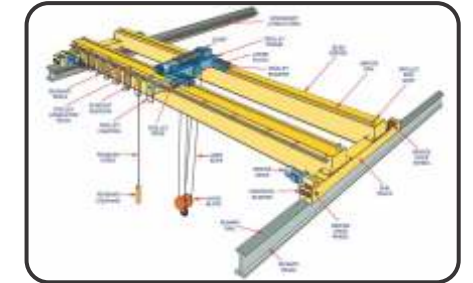
**Type:** Single Girder/ Double Girder/ Underslung type.

**Capacity:** 0.5T to 25T.

**Code:** IS 807, 3177, 800 .

**Operation:** All electrical .

**Main girder:** Rolled ISMB/ Plate fabricated as per design.



### Ferretero GANTRY Crane Features

**Type:** Single Girder/ Double Girder. Portable with castors.

**Capacity:** 0.5T to 20T.

**Code:** IS 807, 3177, 800 .

**Operation:** Manual/electrical.

**Main girder:** Rolled ISMB/ Plate fabricated as per design.



### Ferretero HOT Crane Features

**Type:** Single Girder/ Double Girder/ Underslung type.

**Capacity:** 0.5T to 20T.

**Code:** IS 807, 3177 & 3832

**Operation:** All motion manual by means of endless H. Chain.

**Main girder:** Rolled ISMB/ Plate fabricated as per design.



### Ferretero JIB Crane Features

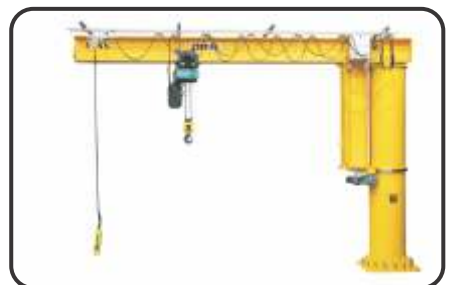
**Type:** Self supporting Pillar mounted or Wall mounted

**Capacity:** 0.5T to 3T.

**Swivel :** 180/360 Degree.

**Swivelling :** Manual/Electrical.

**Main girder:** Rolled ISMB/ Plate fabricated as per design.





## Ratchet Lashing

The Ratchet Lashing system is used for securing cargo while transporting, shifting or storage. It is a modern, light weight and thoroughly reliable method of securing all types of load across an entire spectrum of requirements. It offers significant advantages over any other securing system. Ratchet Lashing is a Reusable, Cost effective tie-down using Polyester webbing & Ratchet Buckle and has replaced ropes, chains and wires used for transportation.. The Ratchet Buckle provides the tensioning force. The tension is uniform and locking mechanism ensures that the tension is retained till it is unlocked. This ensures complete locking of strap in position and also provides unlocking mechanism which is safe and fast. Polyester Webbing has the least of elongation (less than 7 %) and is soft and safe to use with high shock.

### Advantages of Webbing Lashing Systems

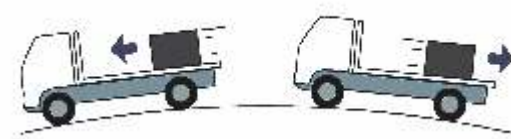
- All lashings are individually and uniquely numbered for traceability and safety.
- High Tenacity Polyester webbing has a high resistance to abrasion - much higher than its Polypropylene/Nylon equivalent.
- Webbing does not weaken with age.
- Ability to absorb shocks.
- No hidden corrosion - can be easily checked by eye for damage.
- Less risk of damage to the load or to painted/Coated Surfaces.
- Easy and quick to use, saving time and thus saving costs.



### Care and Use of Webbing Lashings



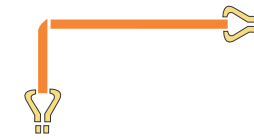
Only use webbing lashings manufactured to EN 12195-2:2001  
 Only use lashings which are clearly marked with a rated assembly strength and minimum break strength.  
 Regularly check the system for cuts and frays in the  
 Never use a bar or lever to tighten the ratchet tensi  
 Protect the system from sharp edges.  
 Keep away from alkalis and strong acids.  
 Do not use for lifting.  
 Do not tie knots in the webbing to shorten it.  
 When the tensioner is a ratchet, ensure that there have been at least 2 complete turns of the spreader bars after threading.



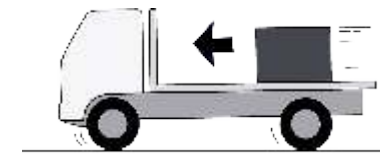
### Removal criteria for Ratchets

Polyester webbing lashing ratchet system shall immediately be removed from service if any of following:

1. Holes, tears, cuts, snags or embedded particles which cause doubts as to the strength of ratchet.
2. Broken or worn stitching in load bearing stitch pattern.
3. Excessive abrasion, wear of strap.
4. Knot in any part of strap.
5. Excessive pitting, corrosion, distorted or broken end fittings.
6. Any other visible damage which cause doubt to strength of system.

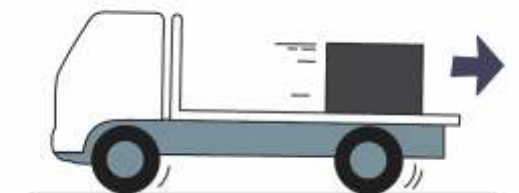


## Load is applied to counter following forces applied as under:



BRAKING

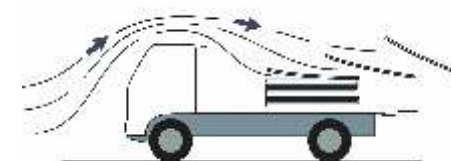
BRAKING IN REVERSE



CORNERING



HILLS

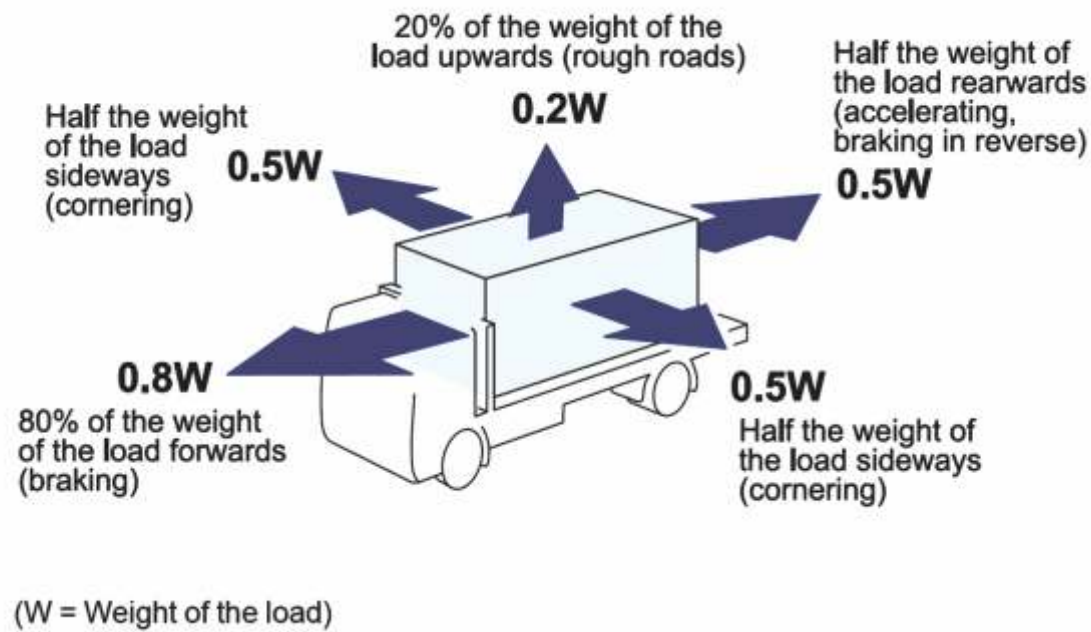


AIR FLOW

ROUGH ROADS







## Ratchet Lashing

### 25 mm Ratchet Strap Assembly

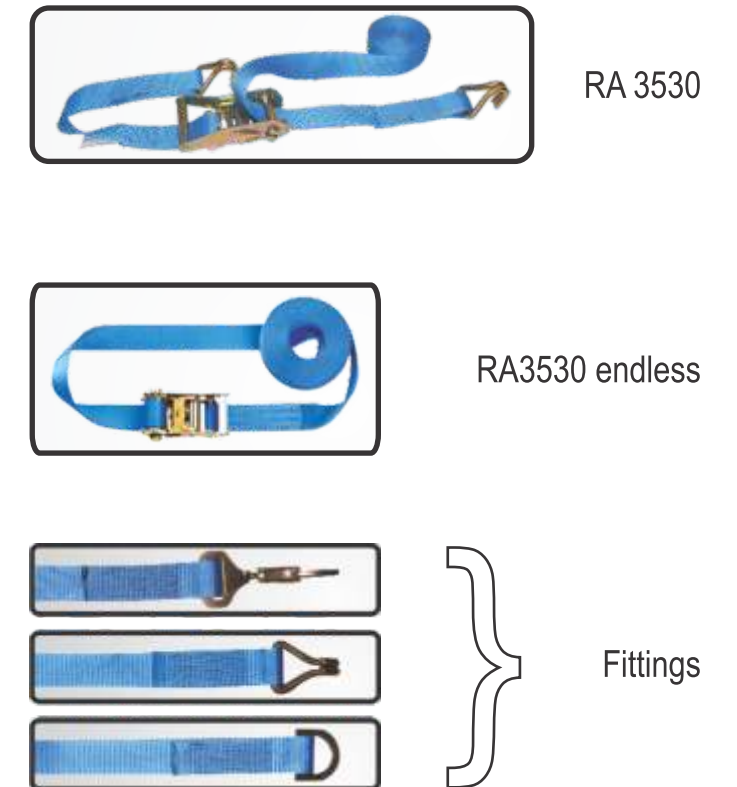


The RA 2508 ratchet strap are used for lightweight applications. FERRETERRO RA25 ratchet strap is manufactured by the European standard EN 12195-2. The load capacity (Safe Working Load) of the ratchet varies depending on what end fitting is used. 25 mm systems are used for lightweight applications i.e restraining loads on pallets or car roof racks and unitizing light loads. They are available with a range of fittings- all designed to integrate the system with particular applications. They can also be supplied as endless systems if no anchorage points are available. These assemblies are stitched with High Tenacity Thread equivalent to break load and High Tensile alloy steel fittings.



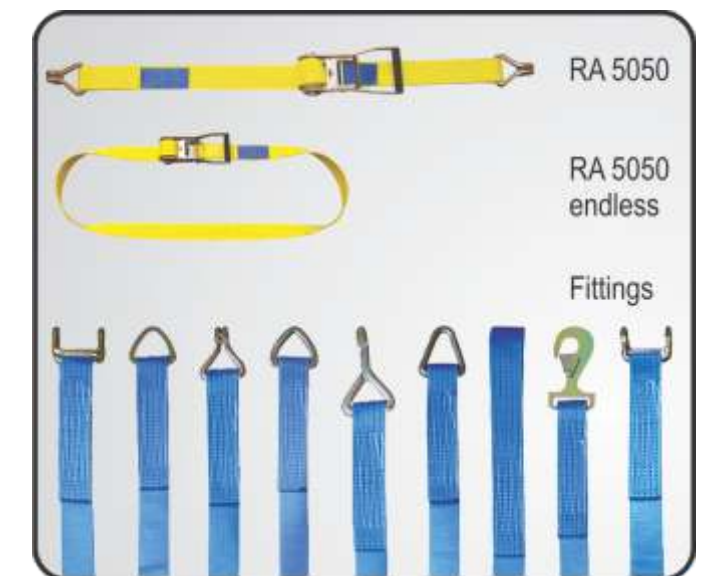
### 35 MM RATCHET ASSEMBLY

The RA 3530 range of ratchet straps are used for medium weight applications. Our ratchet strap is manufactured by the European standard EN12195-2. The Load Capacity (Safe Working Load) of the ratchet varies depending on what end fitting is used. We offer end fittings and endless assemblies for different applications. 35mm Systems are used for specific areas where it is important to have a high minimum break strength, but a small system is required, two sizes of ratchet are available, known commonly as Mini and Midi. Both these systems are very popular in oil related industries where equipment could be damaged if the system is over tightened. Again, a wide range of fittings is available, or they can be supplied as endless systems if required. These assemblies are stitched with High Tenacity threads of equivalent break load.



### RATCHET LASHING 50MM

50mm Systems, by far the most popular system, have a minimum break strength of 5 Tonnes. This system has the most varied range of fittings available - from twisted snap hooks to 'D' rings. Each fitting is designed to suit particular usage, but because of the wide range of fittings available, every application is catered for. Because of the durability and reliability of this system, the most popular use is for lashing loads on vehicles.



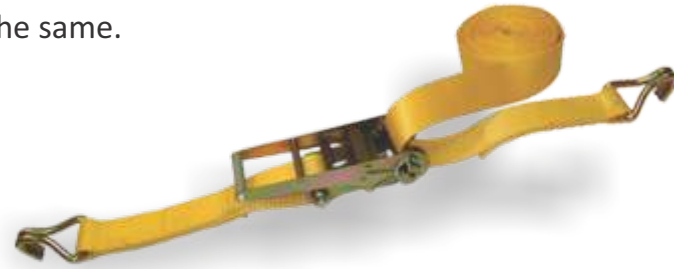
Webbing width mm	BREAK STRENGTH	
	DaN	DaN
25	1000	2000
35	3000	6000
50	5000	10000
75	10000	20000




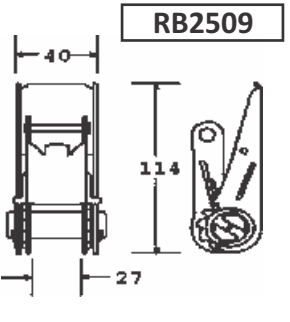

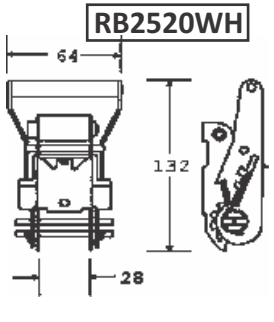

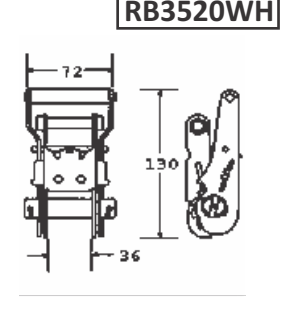

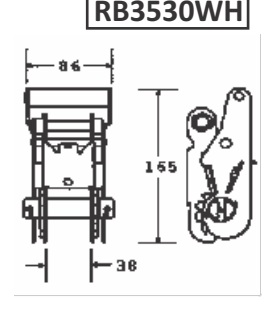

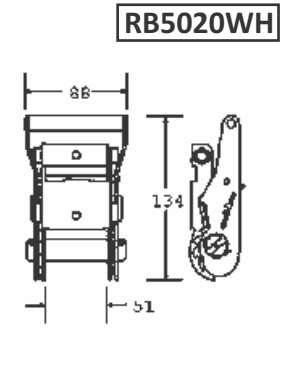

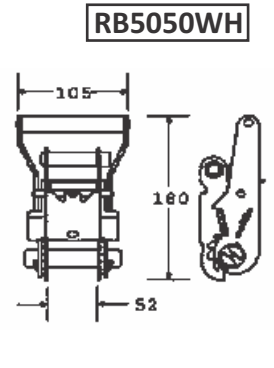

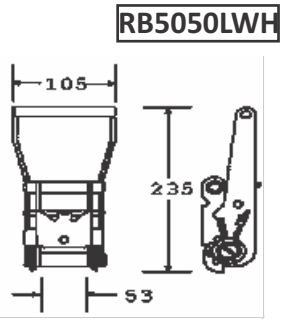

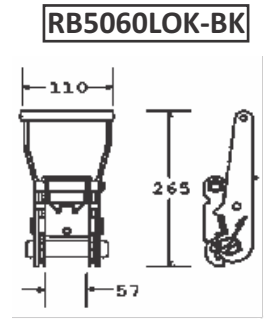

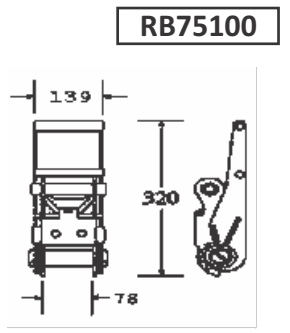

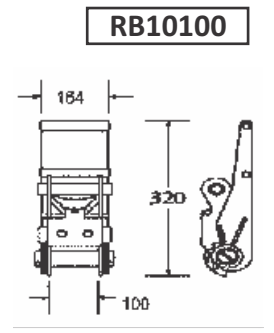
### 75mm and 100mm ratchet assembly

75mm and 100mm Systems are used for heavyweight applications, mainly by the Ministry of Defence and companies transporting heavy plant vehicles. The system has a minimum break strength of 10 Tonnes and as it is predominately used for specialist requirements and therefore has only a small range of fittings available. Single hooks, 'D' rings or shackles can be fitted to this system if preferred. 100mm assemblies are preferred by those who need heavy capacity as well as more surface area to be covered in single lashing system.

Endless Ratchet assembly are also available for the same.



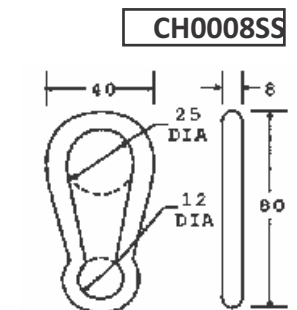
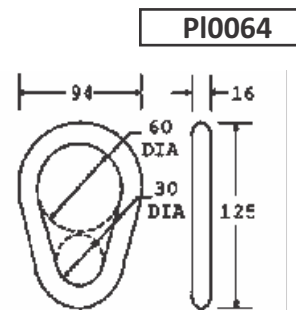
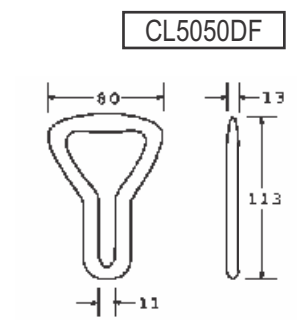
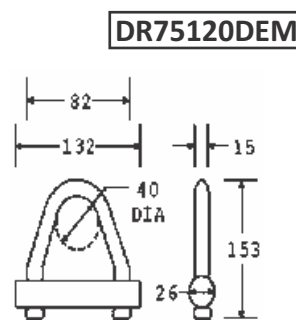
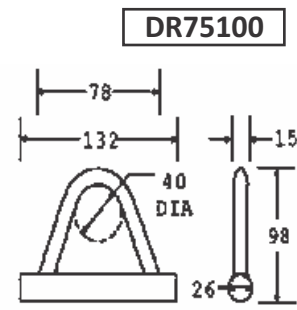
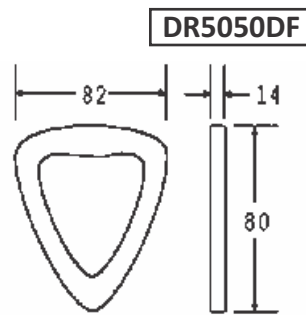
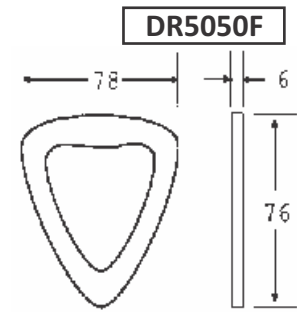
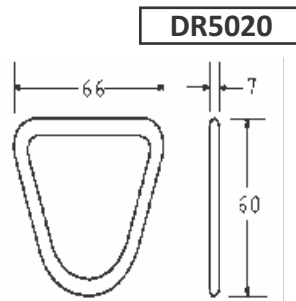
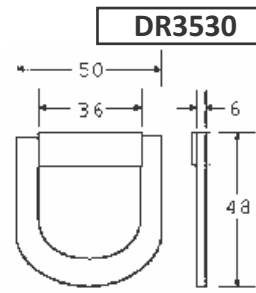
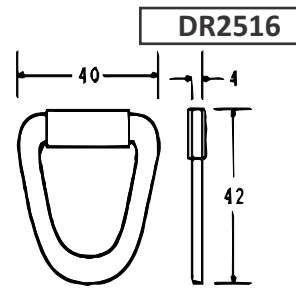
### Ratchet Buckles

		<b>RB2509</b>			<b>RB2520WH</b>
		<b>RB3520WH</b>			<b>RB3530WH</b>
		<b>RB5020WH</b>			<b>RB5050WH</b>
		<b>RB5050LWH</b>			<b>RB5060LOK-BK</b>
		<b>RB75100</b>			<b>RB10100</b>



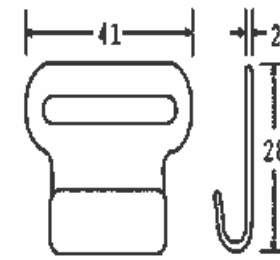


## End Fittings

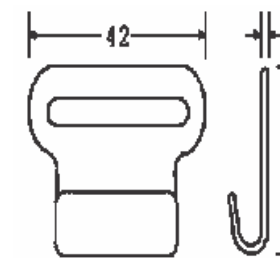


## Pressed steel Hooks

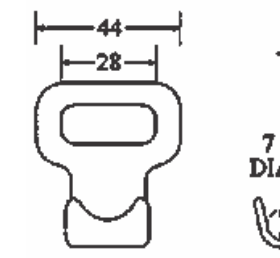
FH2505



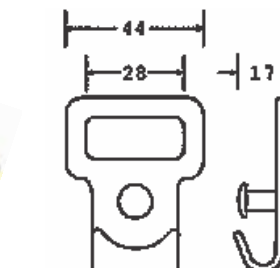
FH2505P



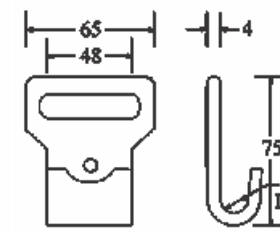
FH2511



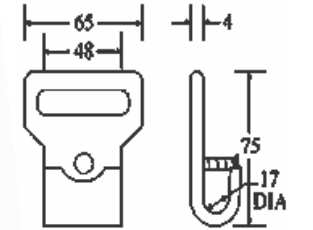
FH2511K



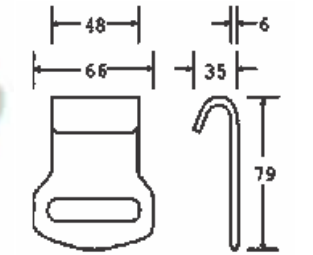
FH5030



FH5030



HDR5050F

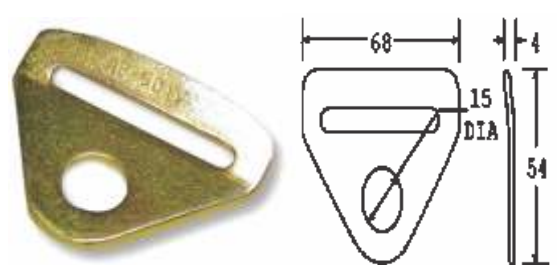


## Anchor Plates

AP2510

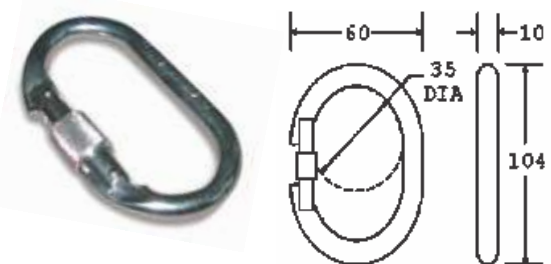


AP5015



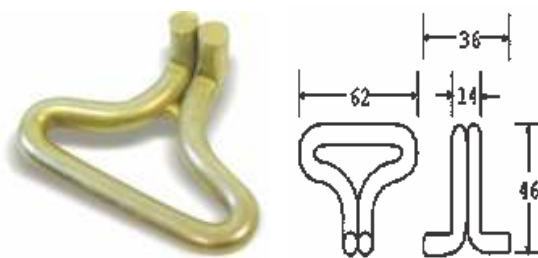
## Safety Hooks

AP2510

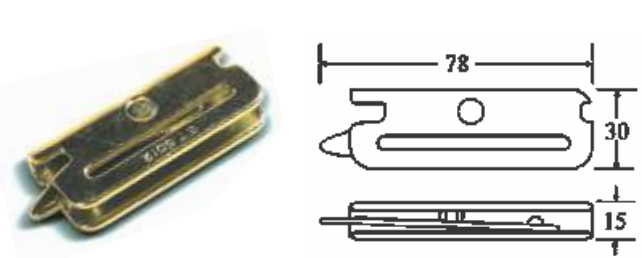


## Tracking Hooks

WH5015BH

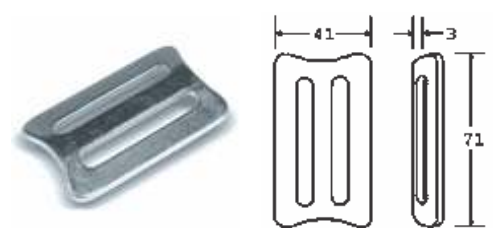


ET5020

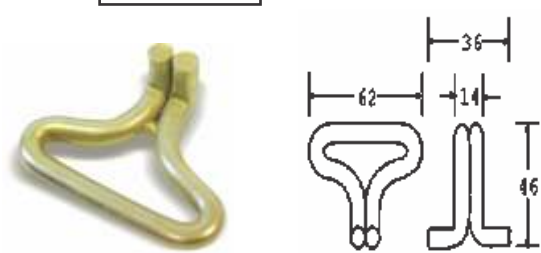


## End Fitting For Side Curtains

TBS5010



WH5015BH

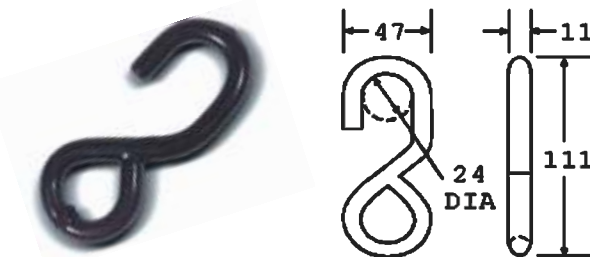


FSH5015

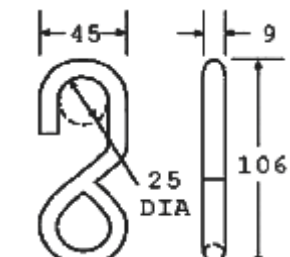


## 5 Hooks

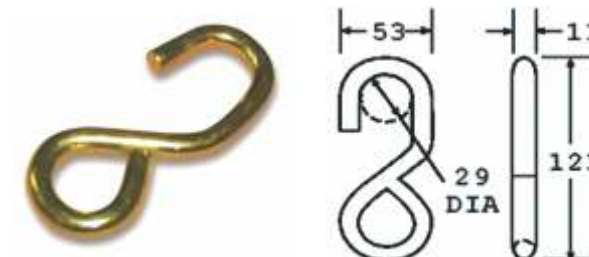
SHOOK2508



SHOOK2509

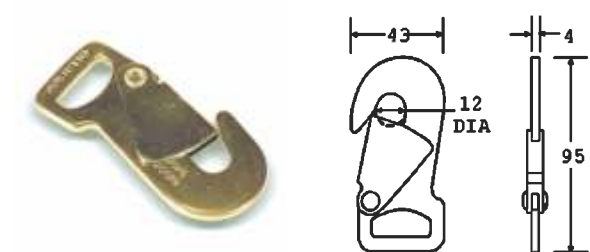


SHOOK2515

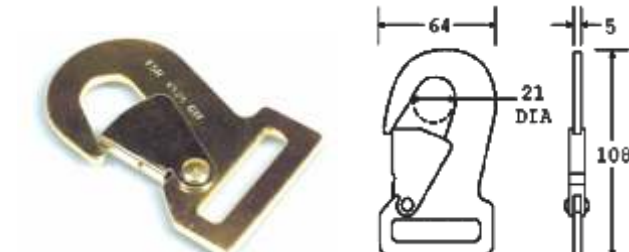


## Snap Hooks

FSH2525



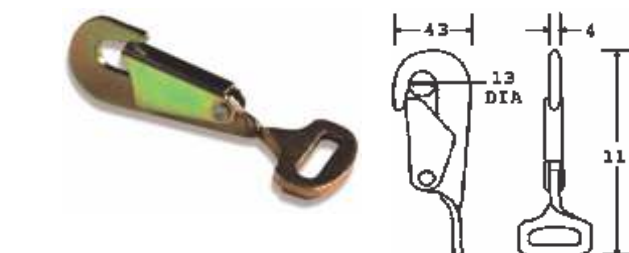
FSH4525



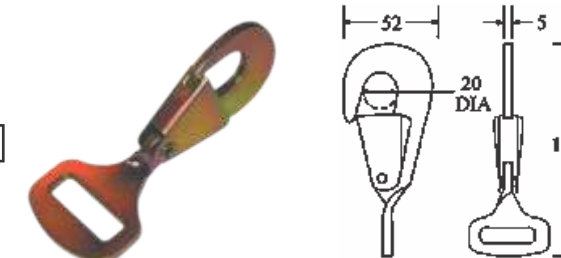
SSH2505



TSH2515



SSH2505

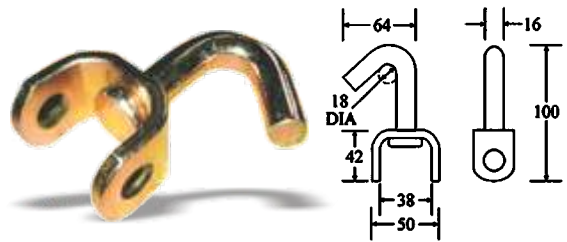




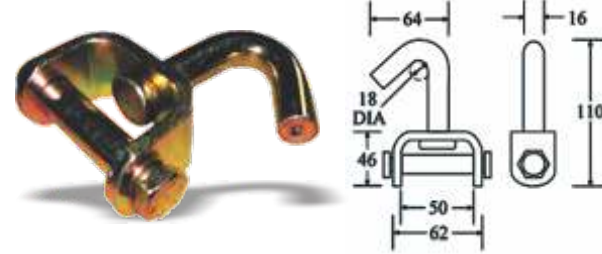


## Car Transporter Fittings

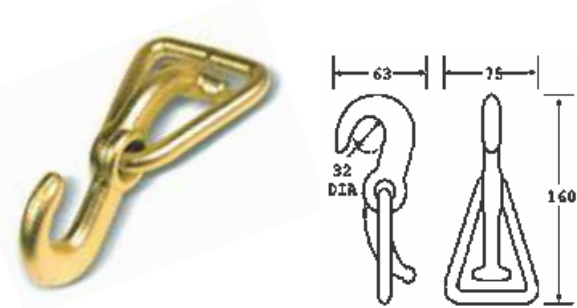
CTH5050



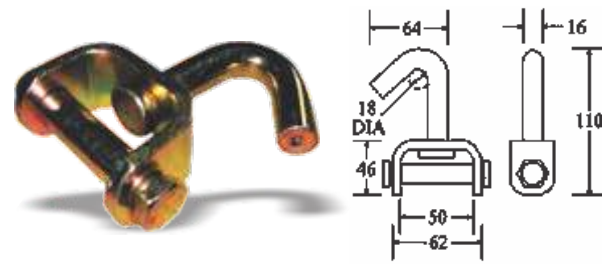
CTH5050B



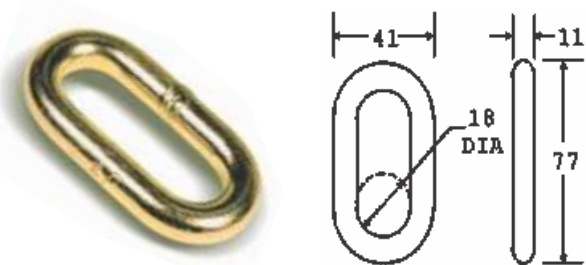
HD5030



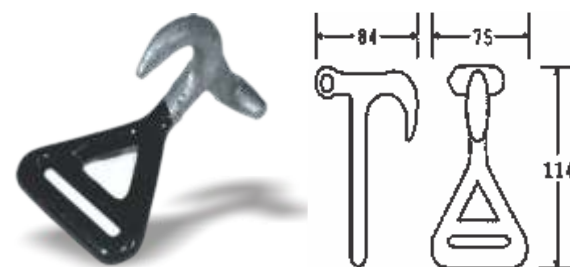
CTH5050B



OL5030

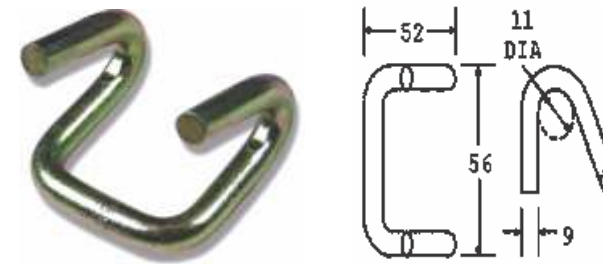


TTH5024

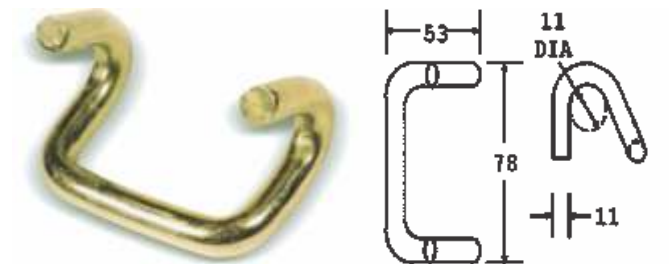


## Rave Hooks

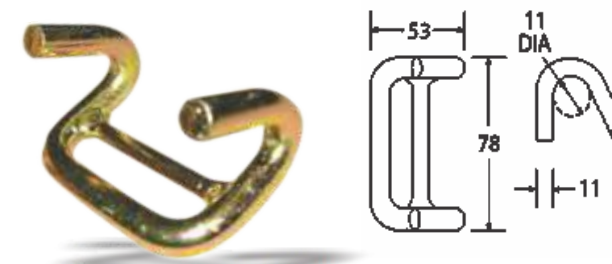
HDR3530



HDR5050



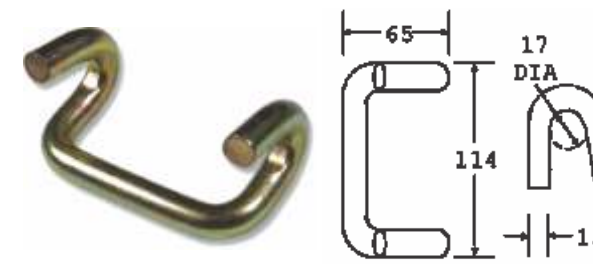
HDR5050B



HDR3530



HDR75100

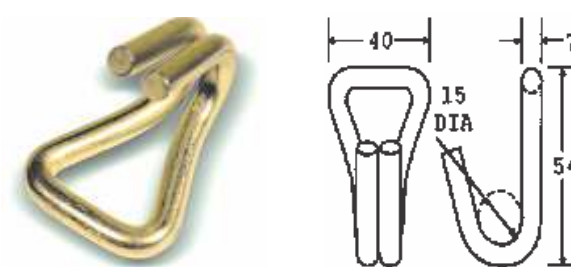


RH5015C

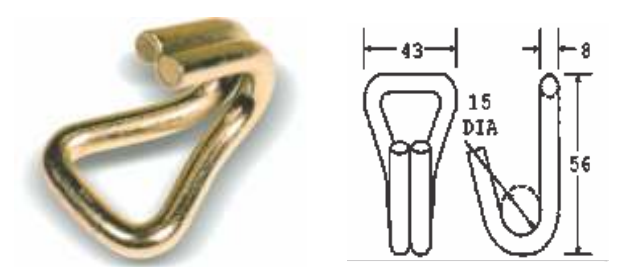


## Wire Hooks

WH2516



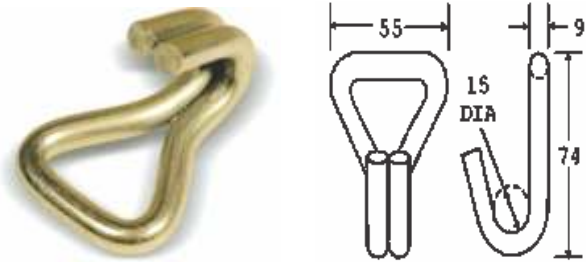
WH2520



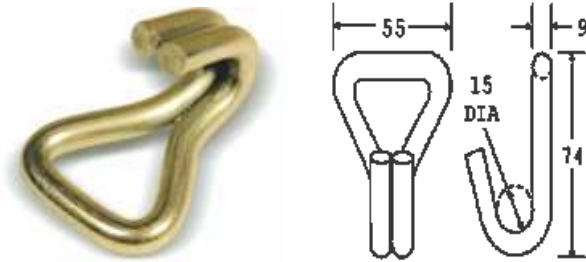


## Wire Hooks

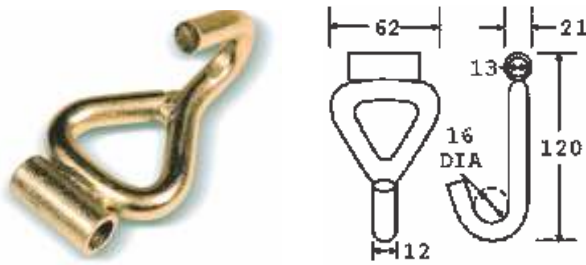
WH3520



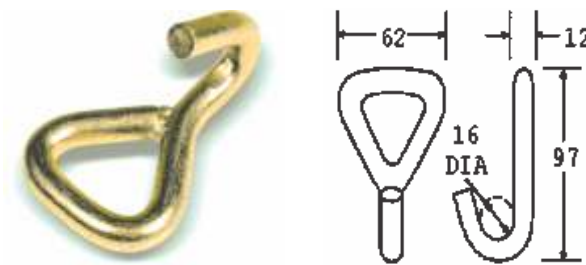
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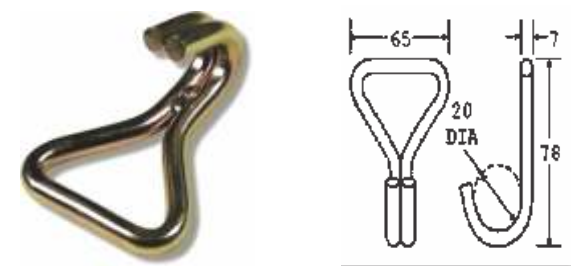
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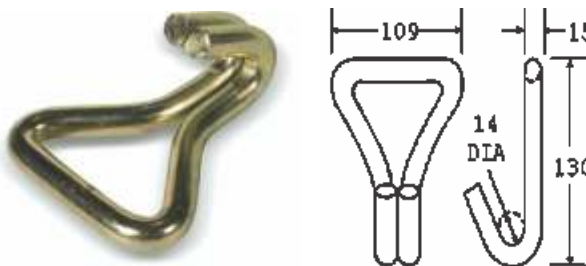
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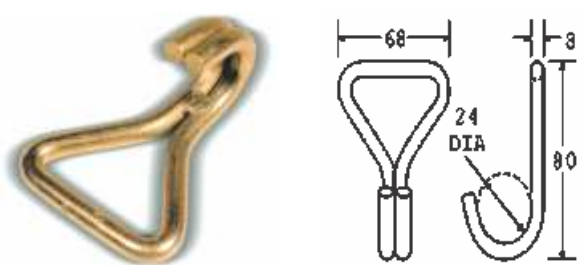
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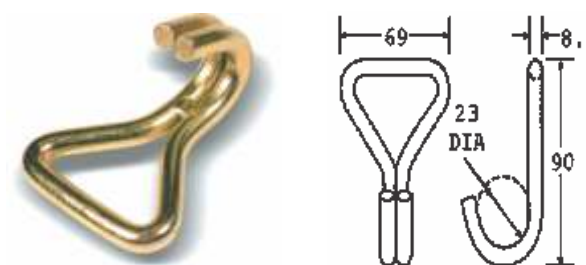
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WH5018-8

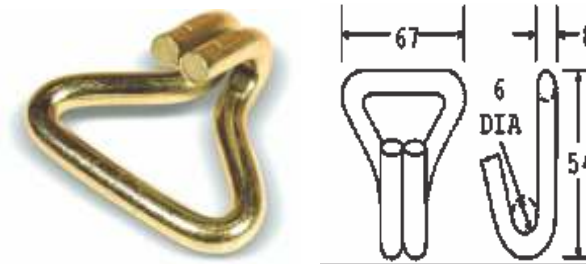


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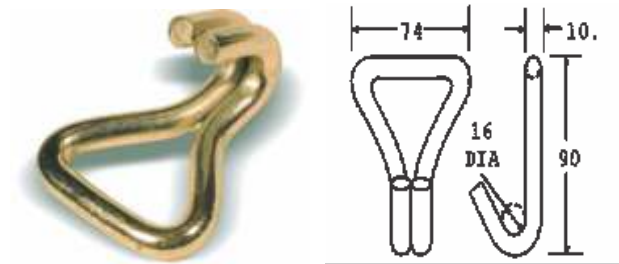


## Wire Hooks

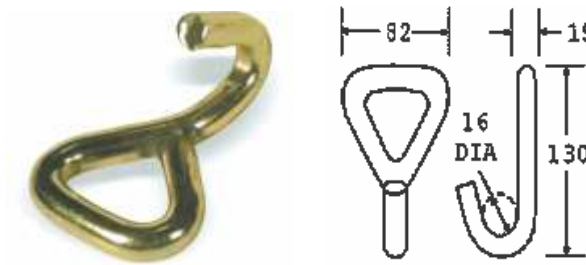
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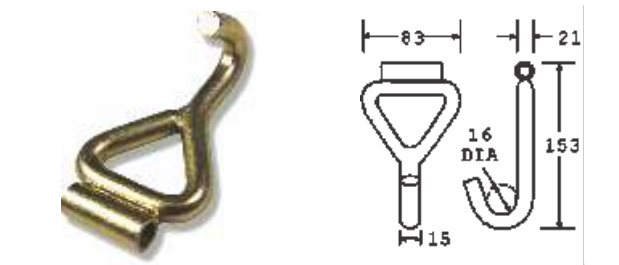
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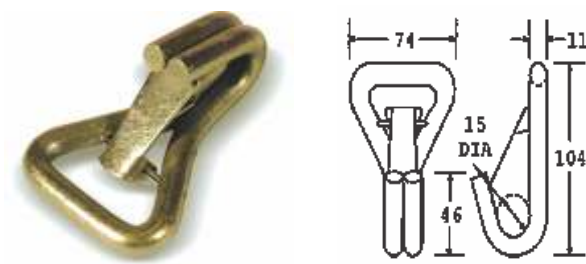
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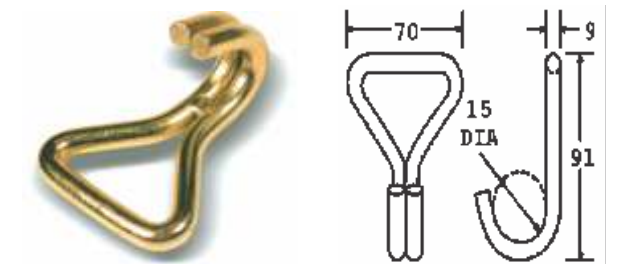
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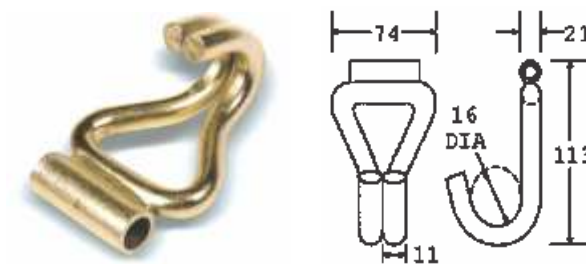
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WH50309



WH5050T

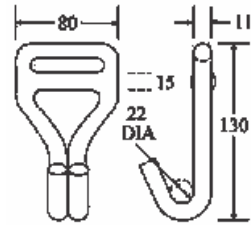




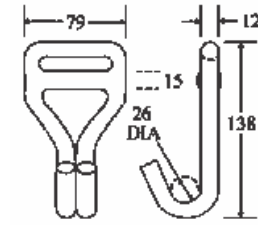


## Wire Hooks

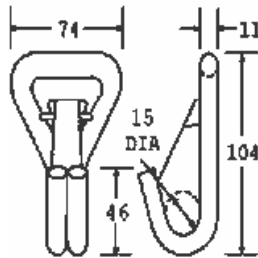
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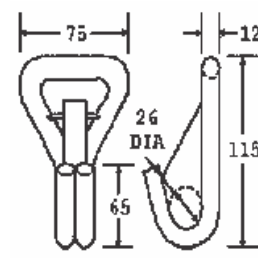
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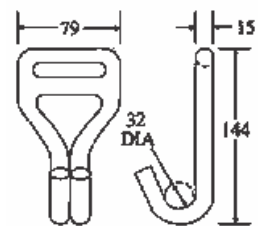
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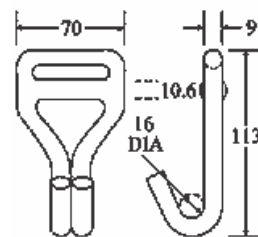
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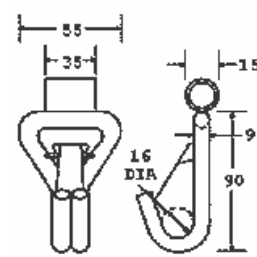
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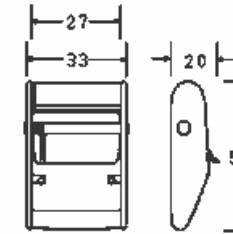
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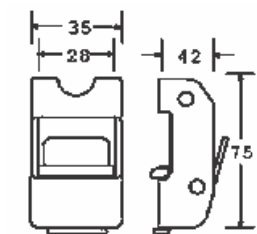
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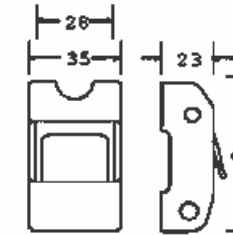
## Cam Buckles



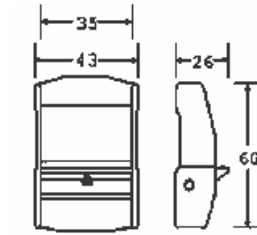
CB2504



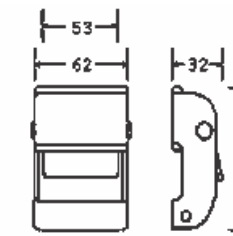
CB2508



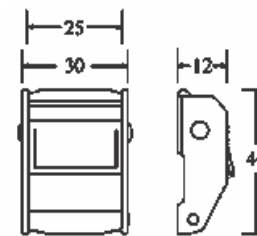
CB2507



CB3506



CB5014



CB3506

### 25 MM CAM BUCKLE STRAPS

The CB25 range of ratchet straps are used for lightweight applications. Our CB25 ratchet strap is manufactured by the European standard EN12195-2. The Load Capacity (Safe Working Load) of the ratchet varies depending on what end fitting is used.



WE OFFER A WIDE CHOICE OF END FITTINGS AND A VARIETY OF COLOURED WEBBINGS. THESE CAN ALSO BE USED WITH OUR POPULAR CB2504 CAM BUCKLE.



## Aviation Fittings

We manufacture wide range of fittings and straps for aviation sector with double stud fittings, E Track fittings and Ring stud fittings.

All aviation fittings are available in Cam and Over centre buckles

*We also manufacture Cargo nets for Defence and domestic aviation applications with E track and pearlink single/double stud end fittings*

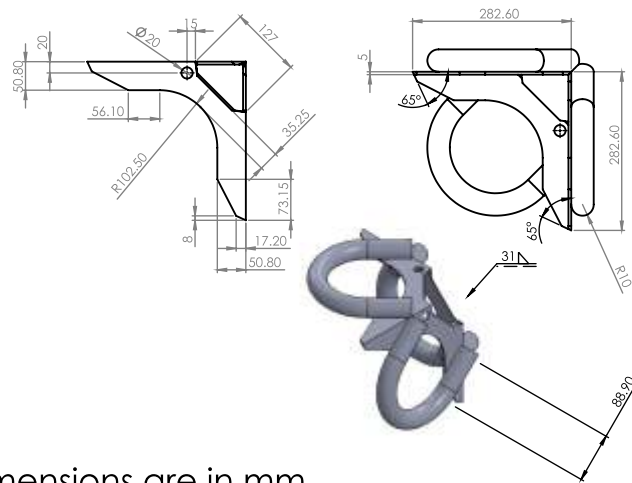
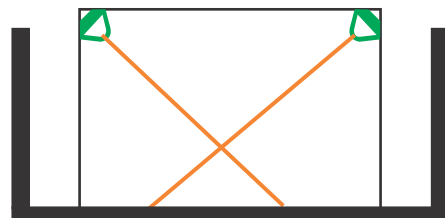


## CORNER BRACE



Now Just don't put Vertical pressure on Cargo. Restrain Front and Backward movement by easily installable Corner Braces.

Easily fits with Ratchet lashing hooks and One way lashing straps.



Dimensions are in mm



## ONE WAY LASHING BUCKLE & HOOKS

**Suitable for 25 mm Webbing**



OWB 2515 W



OWB 2515 P

**Suitable for 32 mm & 35 mm Webbing**



OWB 3030 W



OWB 3020 W



OWB 3030 Forged O



OWB 3030 Forged



OWB 3515 P



OWB 3515 Forged



OWJ 3530



OWJ 35302 (Short)





## **ONE WAY LASHING BUCKLE & HOOKS**

**Suitable for 40 mm Webbing**



OWB 4040 W



OWB 4050 W



OWB 4040 Forged O



OWB 4040 Forged



OWB 4040 Forged E



OWB 4050 D



OWB 4020 P



OWJ 4040



OWJ 4040 (Short)



OWJ 4050



OWJ 4040 Snap



OWJ 4040 D Snap



## **ONE WAY LASHING BUCKLE & HOOKS**

**Suitable for 40 mm Webbing**



Star Buckle- 10 Tons

**Suitable for 50 mm Webbing**



OWB 5050 W



OWB 5050 Forged



OWJ 5050



OWJ 50502 (Short)



OWB 5020 P

**Suitable for 75 mm Webbing**



OWB 75100 W



RBONS 5050



## Dunnage Bag

### Introducing Dunnage Bags

Dunnage Bags, also known as airbags are convenient, fast and cost effective alternative to secure and stabilize cargo in ISO sea-containers, closed railcars, trucks and (ocean going-) vessels. The use of dunnage bags can have a positive impact on road safety. According to the European Commission Transportation Department "it has been estimated that up to 25% of accidents involving trucks can be attributable to inadequate cargo securing.

Dunnage bags are very easy to work with. They inflate rapidly with the use of an inflator using compressed air. Dunnage bags are very safe to use for both the shipping and receiving end of the transportation. Dunnage bags are waterproof. The cushions are easy to install and are inflated by compressed air often by means of an outlet in the truck's compressed air system or compressors.



### Types of Dunnage Bags

- **PAPER DUNNAGE BAG:-** The paper used on the outside of the bag is laminated on the inside with a woven polypropylene layer, which allows higher resistance to punctures and moisture. These inflatable dunnage air bags are designed for securing cargo in trucks & containers.
- **WOVEN POLYPROPYLENE DUNNAGE BAG:-** Woven polypropylene bags are made from inside LDPE liner and woven polypropylene outside. These inflatable dunnage air bags can be used in trucks, containers, railcars & ships.
- **POLYPROPYLENE LAMINATED DUNNAGE BAG:-** PP Laminated bags are made from inside LDPE liner and woven polypropylene coated with polyethylene outside.

### Types of Valves



Any Exporter, exporting goods, needs to hold the goods inside container as no packaging can stuff the container tight enough to restrain movement in all directions.

### SPECIFICATIONS

- Dunnage bag (Ferreterro Brand)
- In PP Laminated Dunnage Bags, Top layer with Polyethylene coated, Inner layer LDPE Thickness 125 micron.
- Reinforced 6-layer structure (inner high barrier high strength LDPE) with excellent air tightness in PAPER Dunnage Bags.
- Load Bearing Capacity of Paper Dunnage Bag is Upto 7 Tons. (For Any Size)
- Load Bearing Capacity of PP Dunnage Bag is Upto 5 Tons. (For Any Size)

### SPECIFICATIONS

Bag Width in MM	Max Gap Fill in MM
400	150
600	250
800	350
900	400
1000	450

### PROBLEMS



### SOLUTIONS



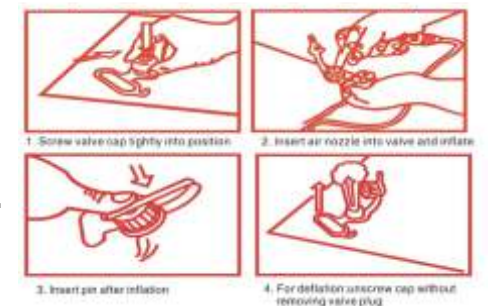
[www.dunnagebags.in](http://www.dunnagebags.in)

- Variable sizes in PP as well as Paper also.
- In PAPER Dunnage Bags, Top layer with PP coated, Inner layer LDPE Thickness 125 micron.
- Reinforced 4-layer structure (inner high barrier high strength LDPE) with excellent air tightness in PP Dunnage Bags.
- Reinforced 6-layer structure (inner high barrier high strength LDPE) with excellent air tightness in PP Laminated Dunnage Bags.
- Reusable and recyclable to save resources.
- In PP Dunnage Bags, Top layer PP Level 1, Inner layer LDPE Thickness 125 micron.
- It remains flat before inflation, requiring minimal storage and transportation space.
- Fast inflation process to save loading time and reduce transportation cost.



### CAUTION!

Do not exceed 20kPa/0.2 bar/2.8P.S.I.



### Why only Ferreterro ?

- Every process in-house.
- Continuous Research and development of products.
- ISO 9001 company and following EN 12195-2 and 1492-1
- Standards for manufacturing for several years.
- 100% indigenous products.
- Stock carrying capacity.
- Vigorous inspection at every level of production.
- Ability to give After Sales Service with Technical support.
- Ample machinery and infrastructure for product development of Steel, Rubber, Plastic, Paper, Fabric, Forgings, Castings of various capacities and finishes.
- Online quality inspection on process level basis.





## ONE WAY LASHING



### WOVEN STRAPS

Width (mm)	MBS Lashing (daN)	Packing (plastic bags)	System Strength (daN)- Buckle
32	2300	250 mtr	4000 - B3030
40	3500	200 mtr	6000 - B4040
40	5000	200 mtr	7500 - B4040
50	2300	300 mtr	3000 - B5020
50	5000	200 mtr	9000 - B5050
50	6000	150 mtr	9500 - B5050
50	7500	150 mtr	10000 - B5050

\*13mm,16mm, 9mm & 25 mm straps also available



### COMPOSITE STRAPS

#### Corded Strap Price List

S/N	Item Code	Width (mm)	Linear Breaking Strength (KG)	System Breaking Strength (KG)	Meter/Roll	Roll/Box
1	FCS-16E	16	425	720	850	2
2	FCS-16H	16	550	935	850	2
3	FCS-19E	19	450	765	700	2
4	FCS-19H	19	650	1105	700	2
5	FCS-25E	25	790	1340	500	2
6	FCS-25H	25	950	1615	500	2
7	FCS-32	32	1600	2720	300	2



## Container Lashing System



Faster, Effective and Cost efficient. Where goods are of fixed dimensions and where criss- cross lashing not exerts full load on goods, Pre made container lashing systems with flexible legs and fixed are available in different specifications. Ideal for Drums, jumbo bags, chemical bags which are 2,3 and 4 high in containers.

	Height (mm)	No. of legs	Fixed/ Flexible
L1	2600	4	Fixed
L2	2400	4	Fixed
L3	2400	4	Flexible
L4	2700	4	Flexible
L5	2400	2	Flexible
L6	2700	2	Flexible
L7	2400	3	Fixed
L8	2400	3	Flexible

Customized Container Lashing with Ratchet buckles also available





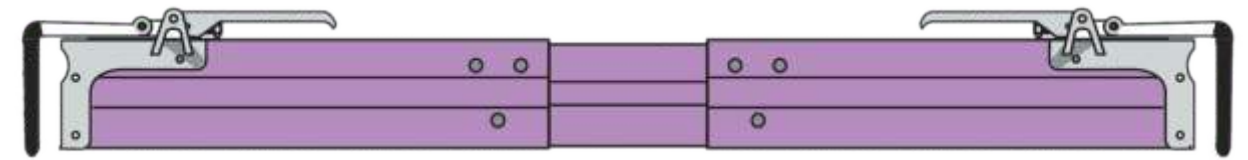
## Car / Automobile Lashings

We manufacture extensive range of Automobile lashing systems for all Cars, Mini Trucks, Trailers and heavy earthmovers for safe transit. We manufacture the same in accordance with EN 12195 standards and do quick deliveries. Automobile lashing systems come with internationally approved sleeves, tyre protectors and low elongation for longest haulage. We manufacture the same for Car carrying containers, Trailers, shipping containers and RORO ships.



## Parting Wall Lock/Cargo Planks

The Cargo Plank is suited for use in tilt trailer and curtain siders where side boards are fitted. Cargo Plank slips easily on the side boards of vehicles and offer quick and efficient cargo shoring.

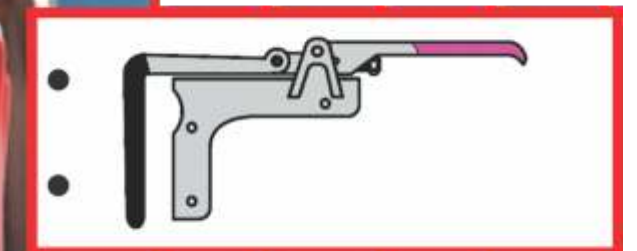
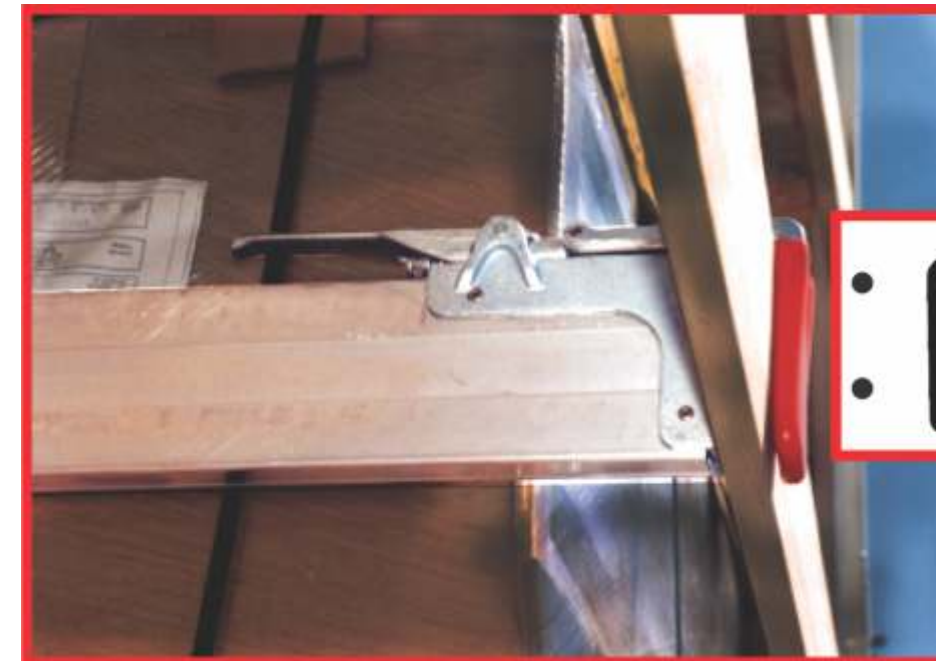


### **Cargo Plank/ Parting Wall lock**

Product No.	Length*	Dimension	Material**
CPL ADJ	2400 -2700 mm	125 X 30 mm	Aluminum
CPL FIX	As required	125 X 30 mm	Aluminum

\* Other Length Ranges available on request

\*\* Alternative material on special request







## Cargo Bars



### Cargo Bar CBPTS/CBPTA

Product No.	Length	Diameter	Material
CBPTS	89-104"	38 mm	Steel
CBPTA	89-104"	38mm	Aluminum



### Cargo- Bar CBPTA Spring Loaded

Product No.	Length	Diameter	Material
CBPTA -SL	90 - 105 "	38 mm	Aluminum
CBPTA-SL	90 - 105 "	42 mm	Aluminum

- Quickly secure large, heavy loads in your vehicle with the ratcheting Cargo Bar from Core .
- The Cargo Bar easily mounts in the bed or cargo area of your pickup, Container or closed body—no tools needed.
- Precision ratchet mechanism extends the Cargo Bar to variable sizes.
- The Cargo Bar uses your vehicle's natural rigidity to form a super-secure cargo restraint.
- "Easy-Grip" handle and exclusive ratchet-lock deliver massive holding power.
- The Cargo Bar is constructed of heavy-duty steel and features a durable finish.



## Tow Straps

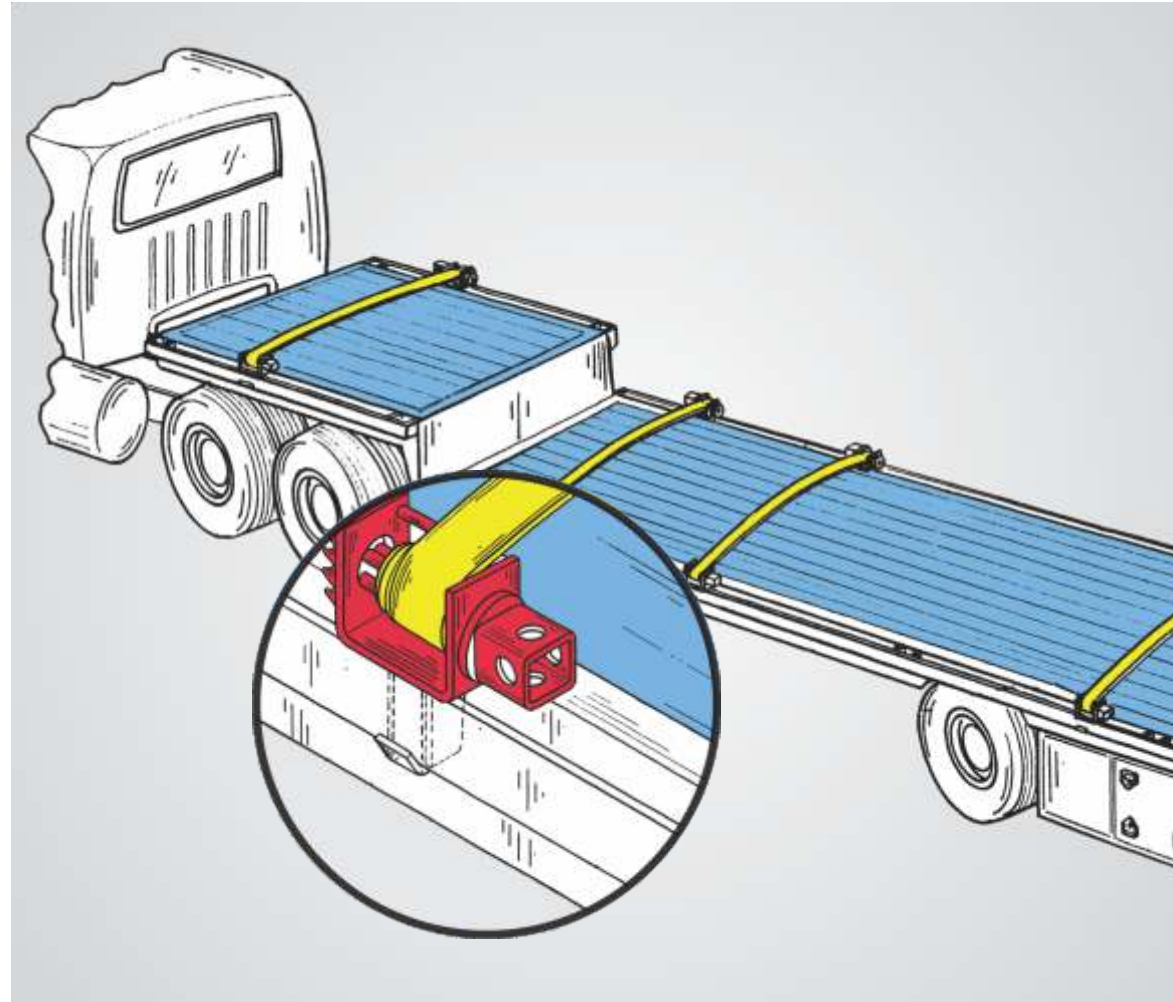
- Very small in size. Can be kept easily anywhere.
- Does not damage vehicle like chain or wire ropes do.
- Helps removing vehicle immediately.
- Very low on cost as compared to tow charges.
- Peace of mind as backup is always there.
- Anyone stuck is always ready to pull the vehicle to the side of the road.
- Manufactured as per strict EN standards.
- Good solution for vehicles stuck in Traffic jams.
- No need to wait for crane or recovery vehicle.
- Easy to carry in glove box.
- Can be used to tow any vehicle like Cars, Autos, Buses, Trucks, Tempos, Motor cycle, Even heavy trailers.
- Special size and length for Rally vehicles and Earthmovers also made on special request.







## Winch Straps



We manufacture Winches from 2" – 4" with 27'- 30' winch strap. Winch straps are stitched with heavy duty alloy steel hooks and the webbing is FERRETERRO INNOVATION 'SUPEREDGE' for Cut resistance and extra long life. Customized printing can be done on the same.



## Cargo Nets

We manufacture a wide array of Cargo nets of different capacities. Container Cargo Nets, Defence Nets, Aviation Nets, And lifting nets with different types of End fittings are manufactured in accordance with stringent standards. We also customize the nets as per requirement and job.







## Full Body Harness

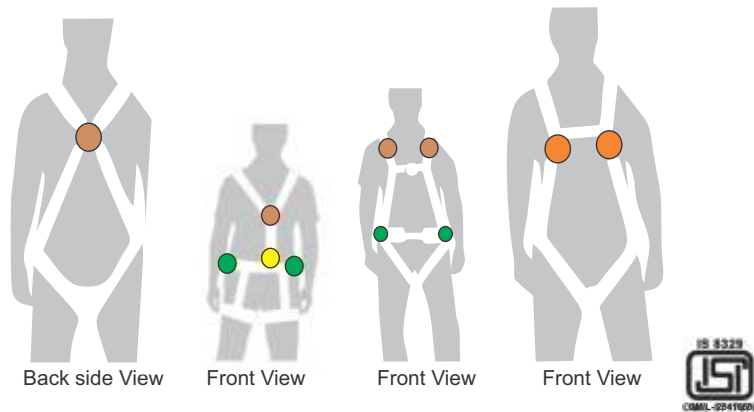
A Full Body Harness must support the user in a comfortable working without restricting functions of other devices in the systems and in case of fall from height it should be distribute the impact force incurred on the body. Harness is designed to minimize the risk of/ provide protection against the danger of falling from heights. However, always remember that no item of PPE can provide full protection and care must always be taken while carrying out the risk relation activity. The Full Body Harness should only be used in conjunction with a fall arrest system. The Lanyard should connect with Dorsal D-Ring of Full Body Harness and the other end should be connected to the anchorage point which should be situated above the user. The anchorage point should have strength greater than 15 kn.

FERRETERRO uses Polyester Material for the construction of webbing for safety Harness and Lanyards. The user does not have the risk of Slipping out of Harness when fall from Height because our Harness does not elongate dangerously due to Least elongation properties of Polyester as compared to the other material or synthetic Fiber.

### Choose the Right Harness

You should choose your harness/ equipment which suits according to your work.

The Dorsal D-Ring is the point to attachment to use for Fall Prevention/ Fall Arresting .The anchorage point on the front of the Safety Harness are used as Fall arrest measures during access (Ascent using a glider on a rope, or with a system fixed to a cable or a rail) or during work on such features as inclined roof. Less often, the anchorage points on the frontof the harness may be used for rescue, or when work is carried out in confined spaces. Work on rope is undertaken using the D-Ring or specially designed Sternal D-Ring located on the abdominal area. If the work to be carried out requires the use of a positioning Lanyard, You should choose a Harness that include a positioning belt as well as the anchorage point that are vital for fall arrest .



- D-Ring for Fall Arrest
- Chest D-Rings  
(To be used in the Combination Only)
- Sternal D-Rings
- Positioning D-Rings  
(To be used in the Combination Only)

### Essentials

#### INSPECTION

Before using the products, a throughout visual inspection should be must. This visual inspection should be:

**Webbing:** Check the webbing of safety belt for signs of any cut, any abrasions, tears, burns, fraying, any chemical reaction or colour fading of webbing.

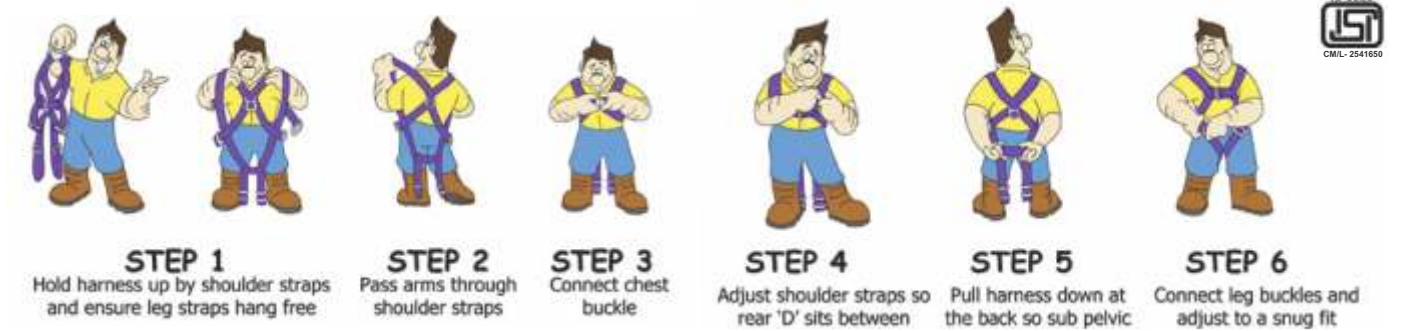
**Thread:** Check all the stitching for signs of any loose threads, cut or pulling of threads. Stitching pattern must be identical on both sides. DO NOT USE the full body harness/ Connecting Lanyard, if due to any reasons the stitching pattern is not clearly visualize.

**Metal Parts:** All the metal parts (i.e D-Ring, Hooks, Buckles etc.) must be free from any rusting, distortion, excessive wear or cracks.

**DO NOT USE & DESTROY** the product, if during the inspection any part of the Fall Protection Systems is faulty.



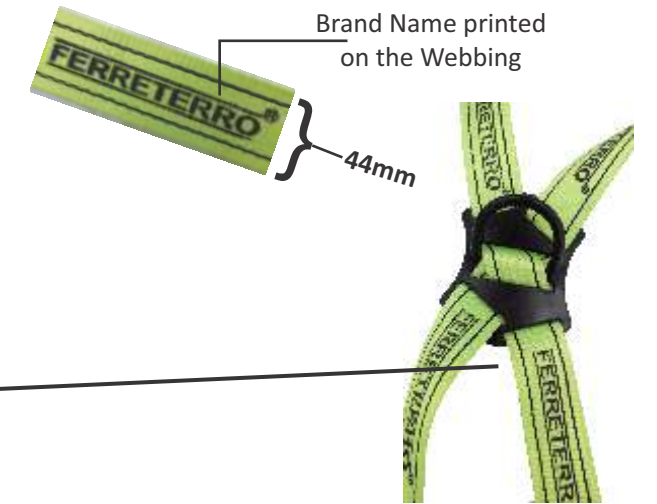
## How to Wear



## FULL BODY HARNESS

Protecting workers at Height requires a holistic approach that extends beyond standards and regulations. Meeting new or established standards for safety requirements and product performance provides a starting points for safety on Job Site.

**FERRETERRO** assure a safe environment when working at height because we understand Human Life. FERRETERRO Brand is a name more than just a word. FERRETERRO is committed to provide best quality products and services. Safety with simplicity is our main motto. We offer all class of safety Belts & Harness confirming to Indian Standard ( ) IS 3521:1999 which covers all the safety features to avoid any fatality of such events.



Special Design and High resistant back Plate made of Nylon 66 for best gripping of D-ring and webbing even after fall.



FL-FBH-03

### FULL BODY HARNESS: For Basic Fall Arrest (Class-A)

**Adaptability:** Adjustable Chest & Thigh Straps.

**Convenience:** Shoulder & Thigh Straps differentiated by a dual color scheme.

**Ergonomics:** Ideally positioned sit strap to provide extended comfort

**Anchor Element:** One dorsal attachment D-ring of forged alloy steel for Fall Arrest.

**Size / Breaking Strength:** Universal / 25 kN (Min.)



FL-FBH-01

### FULL BODY HARNESS: For Controlled Descent(Class-D)

**Anchor Element:** One dorsal attachment D-ring of forged alloy steel for Fall Arrest. One Sternal D-Ring at Front (For use in the event of **Controlled Descent** from a height).

**Convenience:** Shoulder & Thigh Straps differentiated by a dual color scheme.

**Adaptability:** Adjustable thigh strap.

**Ergonomics:** Ideally positioned sit strap to provide extended comfort .

**Size / Breaking Strength:** Universal / 25 kN (Min.)  
**Strength:**



FL-FBH-06

**FULL BODY HARNESS: For Safe Entry & Exit in Confined Space (Class-E)**

**Anchor Element:** One dorsal attachment D-ring of forged alloy steel for Fall Arrest. Two D-Rings, one on each shoulder strap for easy entry & exit into confined spaces.

**Convenience:** Shoulder & Thigh Straps differentiated by a dual color scheme.

**Adaptability:** Adjustable Chest & thigh strap.

**Ergonomics:** Ideally positioned sit strap to provide extended comfort

**Size / Breaking:** Universal / 25 kN (Min.)

**Strength:**



FL-FBH-05

**FULL BODY HARNESS: For Ladder/ Tower Climbing (Class-L)**

**Anchor Element:** One dorsal attachment D-ring of forged alloy steel for Fall Arrest. Two chest attachment D-Rings for Ladder/ tower climbing.

**Convenience:** Shoulder & Thigh Straps differentiated by a dual color scheme.

**Adaptability:** Adjustable thigh strap.

**Ergonomics:** Ideally positioned sit strap to provide extended comfort .

**Size / Breaking:** Universal / 25 kN (Min.)

**Strength:**



FL-FBH-04

**FULL BODY HARNESS: For Positioning (Class-P)**

**Anchor Element:** One dorsal attachment D-ring of forged alloy steel for Fall Arrest. Two Lateral D-Rings at the waist level, one at each side (Help in positioning the worker so that he can work with both hands free.

**Convenience:** Shoulder & Thigh Straps differentiated by a dual color scheme.

**Adaptability:** Adjustable Chest & thigh strap.

**Ergonomics:** Ideally positioned sit strap to provide extended comfort

**Size / Breaking:** Universal / 25 kN (Min.)

**Strength**

**WEBBING LANYARDS**



**FERRETERRO Brand Webbing Lanyard** are made of High Tenacity Polyester yarn in 44 mm width. The loops at the ends are protected with abrasion resistant cover to prevent the webbing from any cutting or damage due to direct contact of metal parts. Our Webbing Lanyards have a min. breaking strength of 23 kN.

We offers webbing Lanyards with different combination of connectors in different Length i.e 1 mtr., 1.5 mtr., 1.8 mtr and 2 mtr.



Brand Name printed on the Webbing



FL-WL-103

One Side Loop  
Other side Snap Hook



FL-WL-1042

One Side Scaffolding  
Hook  
Other side Karabiner



FL-WL-101

Both Side Loop



FL-WL-104

One Side Loop  
Other side Scaffolding  
Hook



FL-WL-1043

One Side Scaffolding  
Hook other Side Snap  
Hook



FL-WL-102

One Side Loop  
Other side Karabiner



FL-WL-1032

One Side Snap Hook  
Other side Karabiner



FL-WL-1022

Both Side Karabiner



FL-WL-1033

Both Side Snap Hook

**PP ROPE LANYARDS**



**FERRETERRO Brand Rope Lanyard** range have the following features:

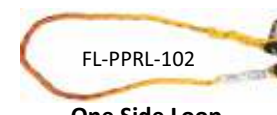
- They are made of 12 mm dia 3 strands Poly-Propylene (PP) Rope with black tracer which loses its colour due course of time, to show that Lanyard is now unfit for further use.
- The spliced end is protected with a heavy duty/ Strong transparent covering sheet. This sheet is not only gripping tightly the splicing but also protect it and makes the splicing visible for easy inspection before use.
- In Our PP Rope Lanyards, the loops at the end are protected by an abrasion resistant thimble which are made of Nylon 66 material. This prevent the rope from being damaged by the direct contact of metal parts.
- Our Webbing Lanyards have a min. breaking strength of 23 kN.

We offers webbing Lanyards with different combination of connectors in different length i.e 1 mtr., 1.5 mtr., 1.8 mtr and 2 mtr.



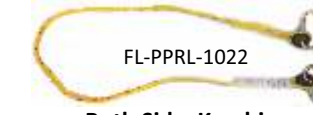
FL-PPRL-101

Both Side Loop



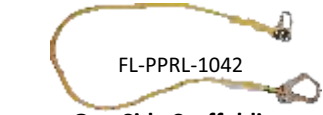
FL-PPRL-102

One Side Loop  
Other side Karabiner



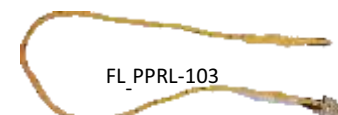
FL-PPRL-1022

Both Side Karabiner



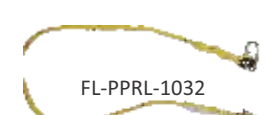
FL-PPRL-1042

One Side Scaffolding  
Hook Other side Karabiner



FL-PPRL-103

One Side Loop  
Other side Snap Hook



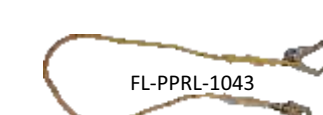
FL-PPRL-1032

One Side Snap Hook  
Other side Karabiner



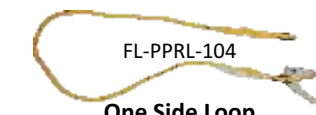
FL-PPRL-1033

Both Side Snap Hook



FL-PPRL-1043

One Side Scaffolding  
Hook other Side Snap  
Hook



FL-PPRL-104

One Side Loop  
Other side Scaffolding  
Hook

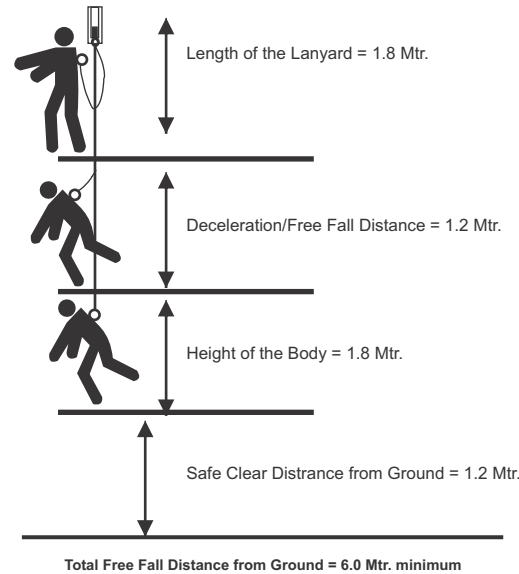




## ENERGY ABSORBER



**FERRETERRO Brand Energy Absorber** made with white inner Polyamide core called TEAR WEBBING which absorbs the arresting forces or impact forces which comes on body or on Full Body Harness in the event of a Fall. Tear Webbing is sticched with our coloured 44 mm webbing which serves as a back up. The entire unit is covered with a transparent protective cover which helps in fast and easy visual inspection of energy absorber as well as the Lable. The ENERGY ABSORBER reduce the impact of the Fall to < 6kN.



The well known facts that impact force are proportional to Free Fall Distance i.e in the event of fall, A high impact force will occurs on the Human Body due to sudden stop caused by Fall Arrest systems/ Lanyards.

(Higher Free Fall Distance=Higher impact Force ).

In the event of fall, the energy absorber fritter away the kinetic energy and control the deceleration. The tear webbing elongate through on its webbing and stitching. Due to this action, The impact force will be in control and will be , 6kN.



**Ferreterro** also offers the best quality Safety Net solution for the construction industries to enable the worker to work in safe environment and effectively at height. In construction area, Safety Nets prevents serious accident, even the fatalities when working at height when providing a collective level of protection.



**FERRETERRO Brand Safety Nets** made from High Strength ISI Polypropylene Rope which withstands the required Load. Due to our special knotting of the meshes, our safety nets have effective shock absorption and hence minimizing any impact related injury on to the worker.

We also offer overlay net along with other sizes as required.

We offer safety nets with the mesh size 25 mm, 50 mm and 100 mm.

We use 12 mm Polypropylene Rope as a cord rope with the length of 2 Mtr. @ every 1.5 Mtr. Level.



## Web Ladders



We manufacture web ladders upto 300 meters long with connectors to make the ladder flexible to go upto any length required. Different variety of rungs of Aluminum alloy or Carbon fiber makes them upto 3 times lighter in weight compared to pp rope ladders. The non slip and load bearing pattern makes it best product to be used in confined spaces, mine access, scaffolding roofing, oil and gas and lowering purpose. The weight carrying capacities can go upto 2 tons so it is most ideal ladder for rescue operations, paramilitary forces and mountaineering usages. We manufacture the same in bright colors for distant locations and camouflage prints for army applications.

### Advantages:

- Lightweight
- Staggered rungs
- Rigid and reinforced
- Easy anchorage
- Easy installation
- Water and acid proof
- Spark resistant for gas chambers available on request.





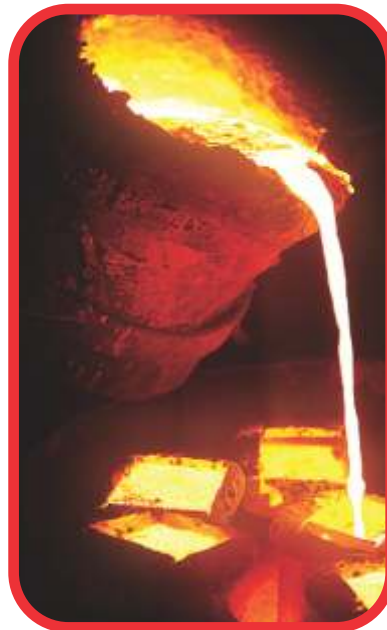
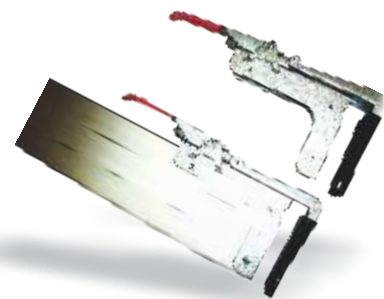
## Forging and Precision Castings



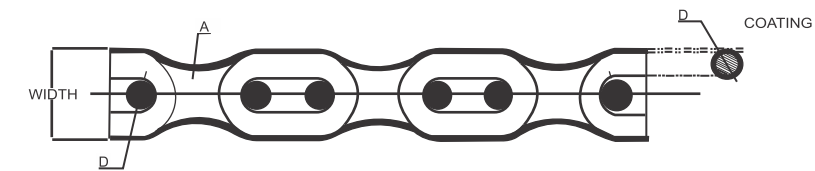
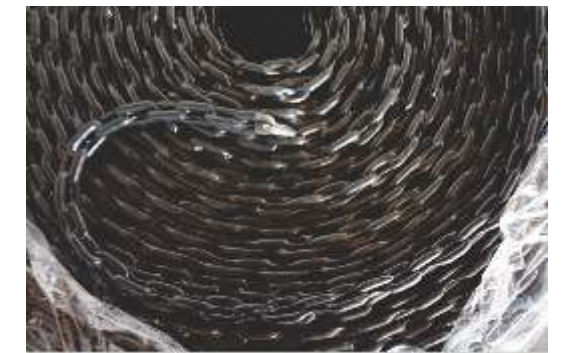
Our Association with Forging goes back ages before our inception. We manufacture Hand tools, Shackles, Buckles, Hooks, Chain links and other different precision alloy steel forgings. We have in-house tool room and finishing machines to make the best forged products required. We have drop forge hammers, Pneumatic hammers, Battery of press machines and polishing and cleaning machines with Heat treatment and coating processes available on a single floor.



We have shell core shooters and induction furnaces for Precision castings parts used in Cargo restraint assemblies and Internal Cargo parts.



## Compensation Chain



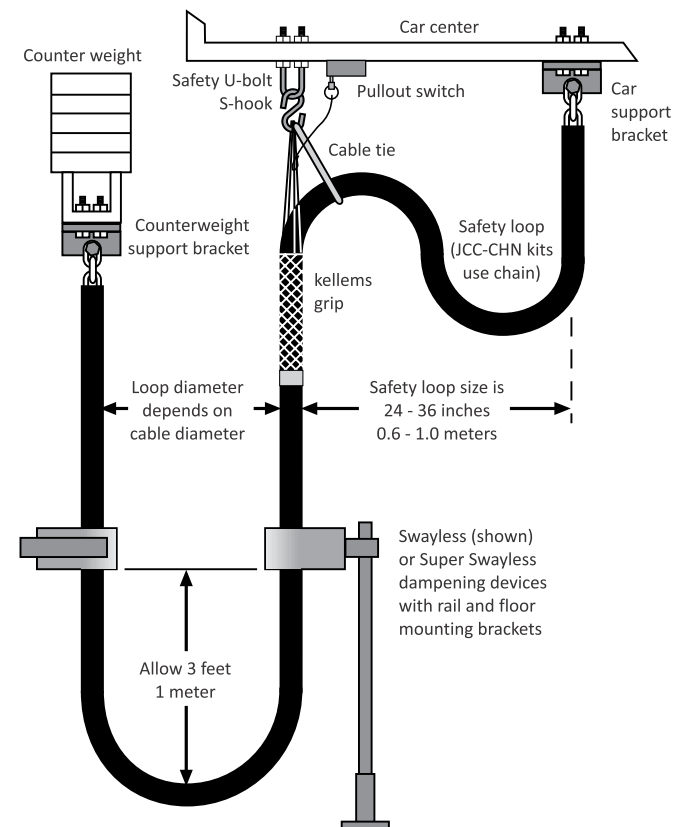
S. No.	WEIGHT PER	WIDTH	LOOP DIA	LINK DIA	BURST FORCE
	METER(Kg/m)	(mm)	(mm)	D(mm)	(KN)
1.	0.80±0.20	21±1	280 ±20	6.0±0.1	>13.32
2.	1.12±0.20	26±1	280 ±20	7.0±0.1	>18.13
3.	1.49±0.20	29±1	300 ±20	8.0±0.1	>23.68
4.	2.24±0.20	36±1	300±20	10.0±0.1	>37.00
5.	2.98±0.20	39±1	300±20	11.0±0.1	>44.70

- Tubular-extruded, low carbon, electrically welded proof coil chain.
- High strength chain
- Every link calliberated , Uniform chain Minimal twists.
- 60 °C fire-retardant polyvinyl chloride that resists oxidation, weathering, solvents and chemicals.
- Temperature Range: -15 °C to +60 °C
- Rated Speed: ≤ 1,75 m/s
- Installation Material: 2 U-Bolts.
- As per Standards EN81-1 , ASME A 17.2-2007 and IS 14665 Part 4 section 8.
- Flammability tests as per IS 10810 ( Part 53)- 1984

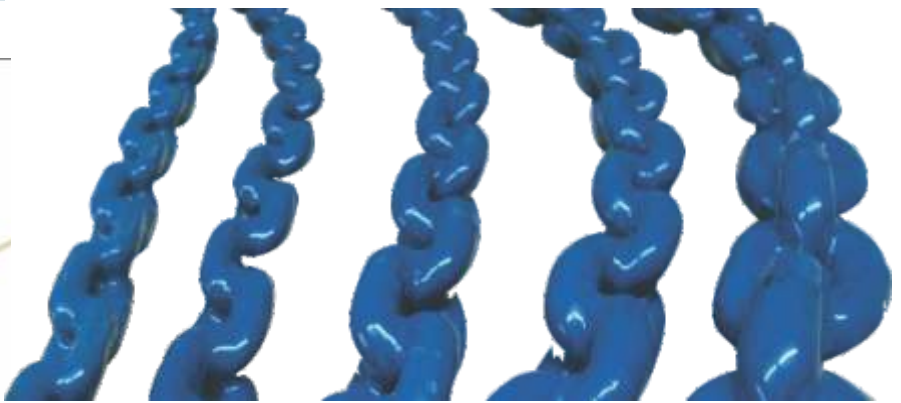




## Compensation Chain



1. The suitable temperature range of the product is -25°C - 50°C.
2. When you are ready to install the compensation chain, it is necessary to straighten out the chain first, or it will affect the running effect and service life.
3. The center line of the damping device and the suspension point should be in the same perpendicular line in order to reduce the friction between the compensation chain and the damping device.
4. The minimum distance is one meter between the installation point of the damping device and the curve bottom of the compensation chain. Otherwise it may cause accidents.



## elebia - The Automatic Hook

FERRETERRO present elebia®, the crane hook of the future, only crane hook in the world which does not need any manual labour.

1. Magnet attracts the Ring, shackle, eye of sling etc.
2. Adjust the Lifting hook.
3. Rotate if required
4. And elevate the road.

- No need to move up and down the truck bed or climb to elevated and dangerous places.
- The user can choose the most convenient slinging method for each application: metal rings, cable slings, textile slings, etc.
- Elebia system brings productivity, safety and comfort to your company.

### Increased productivity:

- By saving time
- By reducing injuries
- By staff savings
- By saving machinery (basket lift, forklift ,...)

### Security enhancements:

- Altitude operations, eliminating the risk of a fatal accident
- Reducing injuries and chronic ailments by eliminating repetitive movements and displacements
- Eliminates the risk of hand injuries (cuts, crushing, etc.). by not having to touch slings and other lifting accessories
- In handling toxic materials, prevents operator contact with the same
- In areas with high temperatures or presence of toxic gases, prevents exposing workers

### Comfort:

- This increases user comfort in the workplace, reducing the effort needed
- Improve working conditions, while productivity and safety



AIRCRAFT ARRESTER  
MADE IN INDIA







## AIRCRAFT ARRESTER

Through use of superior design, quality materials and attention to details, we at FERRETERRO have raised product performance to a new level. We work closely with customers to learn their operating conditions and prerequisites to solve lifting challenges and diverse cargo handling needs. We offer complete solutions tailored to individual customer needs, including inspections, education, certifications and maintenance services.

Today we are working round the clock and FERRETERRO products are hard at work on Land, in Air and on Sea serving all phases of handling industry, keeping safety as first priority.



## Fork Lift Protection

"Made to fit the customer's forklift blades," FERRETERRO's Forklift Protection Pads "are coated with thick durable polyurethane." In other words, these protective products are available in a variety of sizes and styles and can be made to customer specification. The main advantages are as under:

- 1. Economic** – Polyurethane pads are more cost effective than repairs and replacement.
- 2. Durability** – Even with heavy use, polyurethane pads offer cushioning without wear. The rubber itself from which the forklift pad is made is long-lasting and bounces back load after load.
- 3. Flexibility** – Forklift bumpers made of polyurethane are flexible, which helps to evenly distribute a load, which increases the stability of transport.
- 4. Customizable** – Polyurethane forklift bumpers can be custom fitted to the tines of a forklift as a permanent attachment. They can also be temporarily attached and secured with chains.
- 5. Preventative** – Fitting polyurethane pads to a forklift helps protect the tines from scratches and dents that might eventually lead to rust and decay. In addition to protecting the machine itself, " FERRETERRO's Forklift Protection Pads prevent damage to coated pipe or any painted material being lifted by forklifts. This can save you time and money on costly repairs.
- 6. Replaceable** – When installed, permanent polyurethane forklift pads are fitted to steel shoes. Worn out polyurethane can be stripped off of the steel and new pads fitted in their place.







In our Drive to innovate , 100% customer satisfaction, growing demands and consumption, We started manufacturing own High Tenacity Polyester Yarn.

Aiming towards self consumption we acquired state of art plant from Germany. Solid state Polymerization system from Buhler, Spinning, Drawing and Winding from Barmag with capacity of 7200 tons opens new possibilities, control on product modifications and innovative products.





## FERRETERRO SLING SAVERS

Another Innovation from Ferretero. Introducing Sling savers

- Made of Extremely heavy duty Polyurethane
- Can be used on shackles
- Can be used on closed links
- No chance of slippage
- Rotates freely so no internal abrasion on sling eyes
- Collared so edges also protected
- 3 year warrantee
- Upto 50 ton Available



Ratchet protector sleeve



- Ratchet protector sheets, to prevent delicate cargo getting damaged by Ratchet buckle.
- Double slot keeps its location fixed while transit or movement

This introductory, 2-inch wide starter slackline kit is designed specifically for beginner and intermediate users. The custom weave creates a stable surface ideal for learning to slackline and the simple design makes it easy to set up. Two-piece slackline is fully adjustable and easily installed between trees or other sturdy anchor points. Improve balance skills, core strength, and coordination while having fun.

LENGTH: 42 foot (12.8 meter) or 77 foot (23.4 meter)  
 main line, 8 foot (2.4 meter)  
 WEBBING STRENGTH: 4 tons MAX WEIGHT: 300 pounds (136 kilogram)  
 AGES: 5 and up

## Slackline



## PIPELINE RESTRAINER



Temporary Pipe Restraint (TPR) system is used on high pressure temporary flowlines. Properly applied, this system will provide an additional level of protection for personnel and physical assets by minimizing the amount of sudden movement in the event of an iron failure. The TPR system comes in two models: Standard and Premium.

TPR system is easier and faster to use and service than competitive restraints. It can be rigged up and down concurrently with pipework rigging, rather than the sequential rigging required by competitive systems. This means if you have a piece of iron that needs to be replaced, you can break the TPR and replace the iron without removing all the

TPR. TPRsystem can be untied anywhere along the flowline and quickly re-installed after a leaking connection is addressed. This allows the operator to resume operations faster and negates the need to completely dismantle the system to correct a problem.

The Standard TPR system offers a competitive price and utilizes the same installation method as the Premium system. The lightweight material, combined with higher break loads than competitive systems, increases safety at the job site.

Premium system offers several additional features that further increase job site safety and efficiency on the well pad. The links in this system are engineered with a unique combination of inspection features and can be quickly inspected before and after each job. The construction and materials used in the Premium system are such that they outlast and have better chemical resistance than any competitive offering.

The TPR system should never be considered as a substitute for due diligence with respect to proper selection of pressure containing equipment and execution of a regular inspection and maintenance program. The TPR system can significantly reduce, but never eliminate, damage in cases of flowline separation under pressure.





## Refrigerated Container lashing system

In all Refrigerated container, there is a need to hold the goods inside container as no packaging can stuff the container tight enough to restrain movement in all directions. Since refrigerated containers don't have lashing points/hooks it was a challenge for Pharma products and food stuff exporters who had to face losses due to transit damages.

Ferretero developed first time a method to restrain goods inside refrigerated containers.



REEFER STOPPER AND REEFER LASHING POINTS AVAILABLE