



Navi Mumbai



Dubai



CRANE SOLUTIONS



Silverline

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www.silverlineintl.com | www.silverlineindia.com | www.dslysystemindia.com | www.silverlinecranes.com | www.cranecomponents.net

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Silverline

**JIB CRANE • LIGHT CRANE SYSTEMS • DSL SYSTEMS • FESTOON SYSTEMS
RAIL & RAIL CLAMPS • TROLLEYS • CABLES • OVERLOAD LIMITER • END CARRIAGE**

CORE PURPOSE

To Turn Aspirations Into Reality

CORE VALUES

Commitment to Quality:

We strive to give the best quality to our customers at all time.

Innovation:

We keep on innovating to give new, defect free products to our customers and work towards betterment of the existing product. Our motive is to introduce new, user friendly & efficient products for the advantage of the industry.

Integrity:

We instill strong ethical and moral values in our team. Honesty, discipline, hard work and endurance are strong pillars of our work environment.

Humanity:

Be humble at all times. We believe in 'We' and not 'I'. Have high inspirations but never compromise on human values. We at Silverline strongly believe in giving back to the society and growing as a TEAM in the process of building our own organization. We want to help people grow along with us.

MANIFESTO

I firmly believe in building a business on sustainable ideas and not flow with the competition and never play safe. 'Be yourself' everyone else is taken.

'Think big and Dare' - I dare to the unexpected even if it means friction from some ends. Step out of the comfort zone and dare to be different is my motto. Do one thing that scares you every day and take over all the fears. To think big is the first step to do something big.

'Be Curious' - Curiosity is the mother of all inventions. Learn each day from your peers and from your employees. Keep an open mind and cater to curiosity of everyone around you. This opens new avenues to innovation.

'Team Spirit' - build high team spirit and high camaraderie and provide a positive and productive work environment at Silverline.

AUDACIOUS GOAL

To be most renowned and #1 in our industry worldwide and achieve a turnover of in **INR 1000 CR** by year 2033

JIB CRANE & LIGHT CRANE

TYPES OF JIB CRANES WE PROVIDE

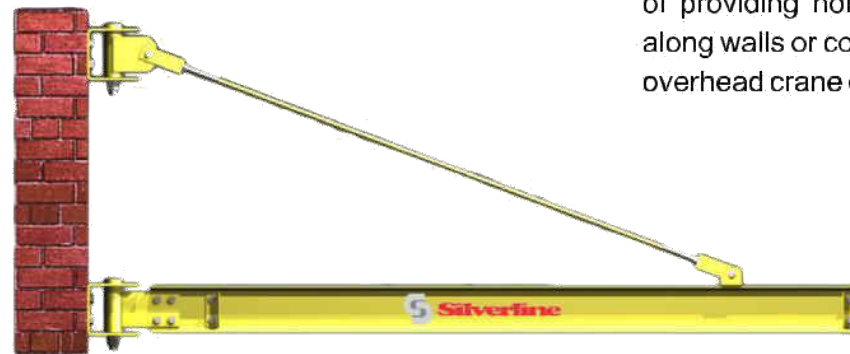
- Freestanding Jib crane
- Wall Bracket Jib crane
- Wall Cantilever Jib crane
- Work Station Jib crane
- Tool Support Jib crane

Free Standing Jib Crane



Free Standing Jib Cranes install almost anywhere including outside. These foundation-mounted, freestanding jibs offer higher capacities, longer spans, and greater rotation than our wall-mounted jib cranes

Wall Bracket Jib Crane



Wall Bracket Jib Cranes are the most economical means of providing hoist coverage for individual use in bays, along walls or columns of plants, or as a supplement to an overhead crane or monorail system.

JIB CRANES

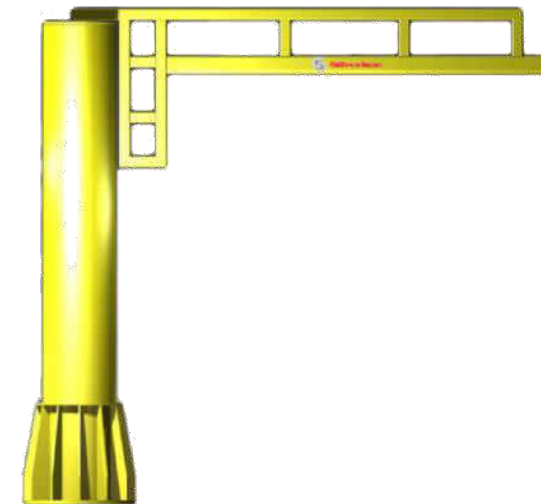
Wall Cantilever Jib Crane



The Wall Cantilever jib crane provides hoist coverage and 200° rotation for individual use, or as a supplement to an overhead crane or monorail system. This jib crane has the advantage of providing maximum lift for the hoist, since it can be installed very close to the underside of the lowest ceiling obstruction.

Capacity: 250 Kgs to 5 Ton

Work Station Jib Crane

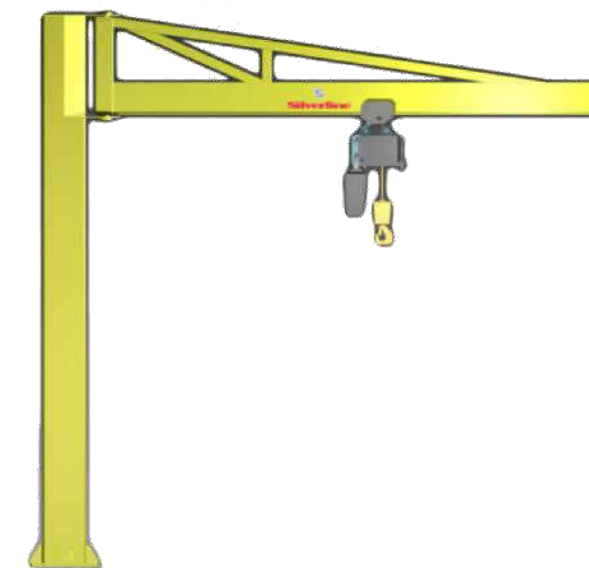


Work Station Jib cranes provide excellent coverage in circular areas.

They're ideal for supporting tool balancers, air balancers, hoists, vacuum lifters and welding wire feeders. And they can handle up to 200° rotation when column or wall mounted, and up to 360° rotation when floor mounted.

Capacity : 150 Kgs to 1Ton

Tool Support Jib Crane



This low capacity tool jib easy to operate as either a free standing or a column/wall mounted style.

Its style ensures easy movement and high performance . This avoids use of overhead crane for low capacity applications. Best suited for assembly shop

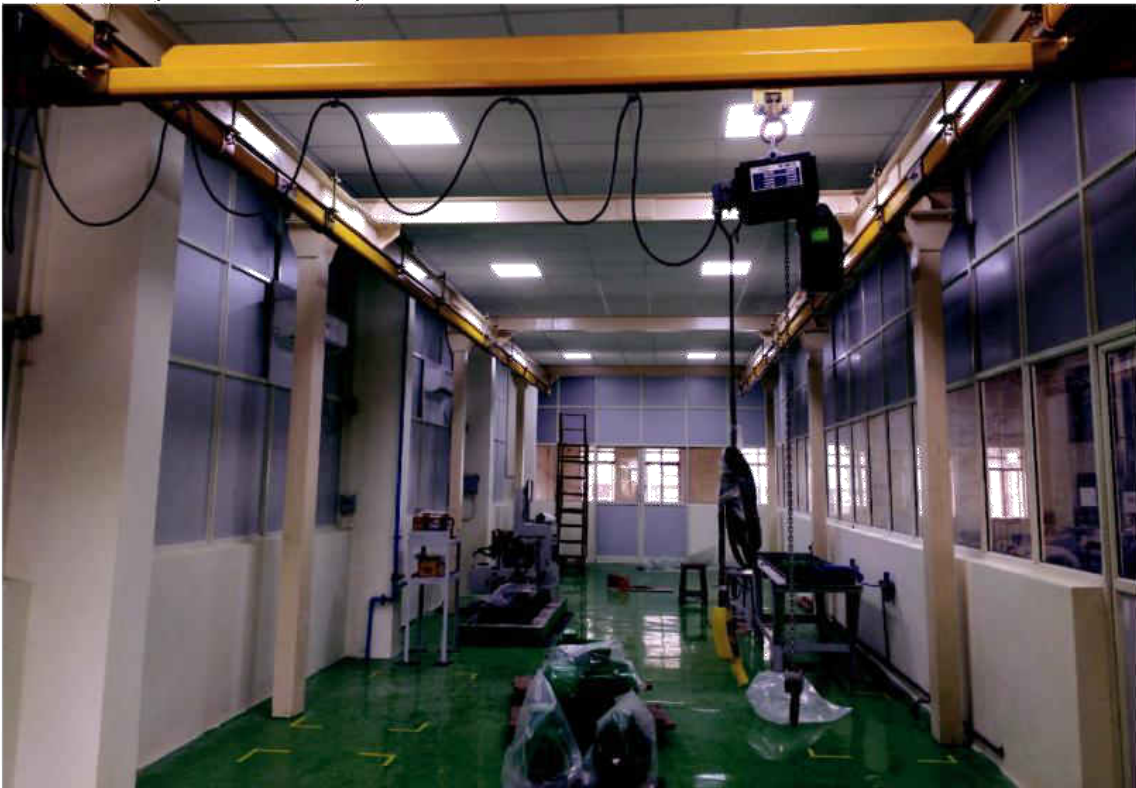
Capacity : Upto 1 Ton

LIGHT CRANE SYSTEMS



Silverline Light Crane Systems - Light Duty Sheet Metal Crane
Designed Profile is strong enough to carry load upto 2000 Kgs .The Structure can be designed to suit the Shop Or Standard Design can be from Silverline . These Profiles can be Bolted in position and no Welding is required on site. This section can be bend to Achieve Small Turning Radius.

These Profile can be supplied in High Quality Antirust Painting/Hot Dip Galvanized Steel. Long & Cross Travel movements are push pull type which reduces Power Consumption & avoids Complicated control panels.



LIGHT CRANE SYSTEMS

SAME TRACK PROFILE CAN BE USED FOR

Monorail Jib Crane Heavy Duty Festoon System for high Tonnage Cranes / Heavy Cables.

BEST USED FOR FOLLOWING APPLICATIONS

- Small Workshops or Machine Shops
- Assembly Lines
- Production Lines
- CNC Machine Shops
- Auto Repair & Maintenance Shops.

Profile No.	Dimensions			
	h (mm)	b (mm)	d (mm)	s (mm)
24.000	43,50	48,50	15,00	3,20
24.050 stainless steel	43,50	48,50	15,00	3,20
25.000	60,00	65,00	18,00	3,60
25.050 stainless steel	60,00	65,00	18,00	3,60
26.000	75,00	80,00	22,00	4,50
27.000	110,00	90,00	25,00	6,50

LIGHT CRANE TRACK



TRACK COUPLER



LIGHT CRANE END CARRIAGE

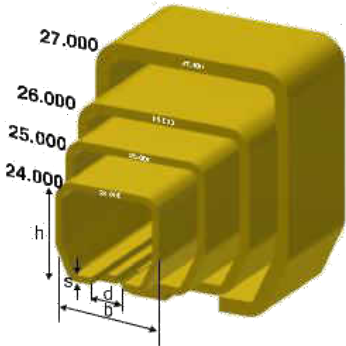


TRACK SUPPORT



SALIENT FEATURES

- High strength profile does not require heavy building structure
- Can be installed on self standing structure
- Needs minimum head room
- Smooth silent & easy traveling trolley needs no effort to move the load
- Minimum power required as long & cross travels are manually moved
- No complicated control panel boards
- Easy modification & expandable
- Adoptable to hoist or chain block of any make
- Retractable balancers can be used in place of hoist making these system totally manually operated crane without power
- Low cost design best suitable alternate for conventional high cost or high maintenance crane.



DSL SYSTEMS

V TYPE DSL SYSTEM

V TYPE DSL BUS BARS ARE USED FOR HEAVY POWER TRANSMISSION
GENERALLY USED FOR EOT CRANES & TRACK GUIDED MOBILE MACHINERY.

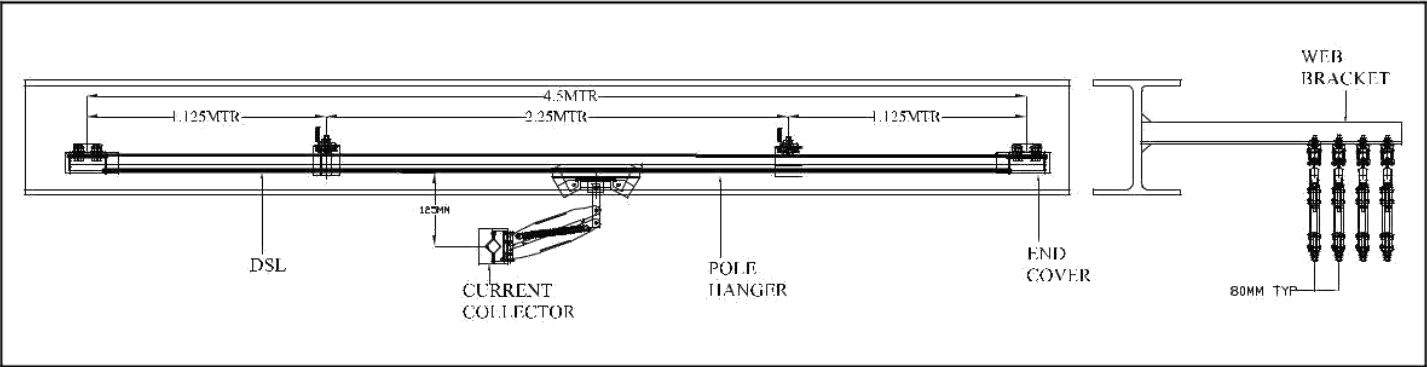
Features:

- Excellent conductor to supply electrical power, you can save power consumption 15-20% as against angle iron DSL.
- Insulated conductor are touch proof, no exposed live parts to human contact.
- Track configuration straight or curved.
- Quick and easy installation.
- Canopy can be provided to outdoor application, it can be designed to provide shed from water & dust.
- Suitable for indoor & out door installation.

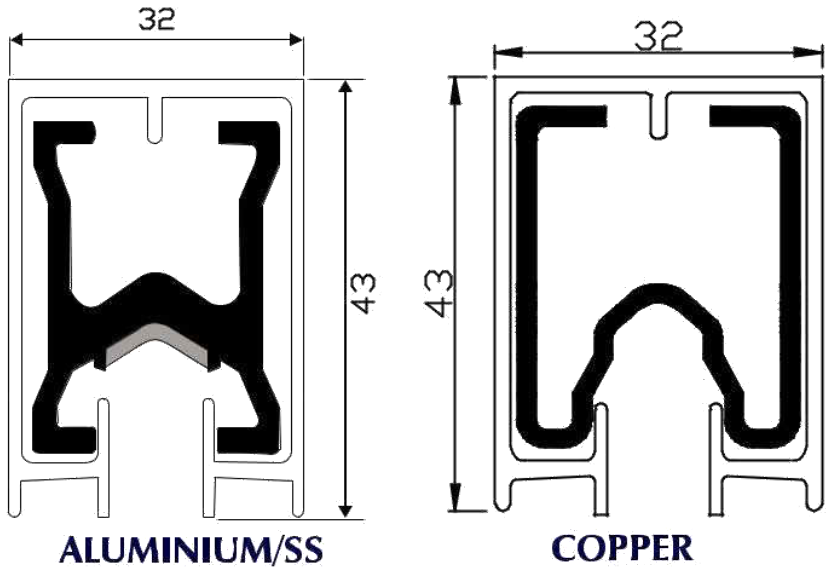
Available Range:

- 500, 800, 1000, 1250, 2000 Amps. Copper, Aluminium
- Bolt Type Conductor Bar Length 4.5 Mtr.

GENERAL ARRANGEMENT OF V TYPE DSL SYSTEM



V TYPE DSL SYSTEM



ALUMINIUM/SS	COPPER
800 amp	500 amp
1000 amp	800 amp
1250 amp	1000 amp
-	1250 amp
-	2000 amp



TECHNICAL DATA FOR V TYPE HEAVY CONDUCTOR BAR SYSTEM

Conductor Bar System	Copper					Aluminium/SS		
	CRD20C10CG	CRD20D10CG	CRD20E17CG	CRD20F18CG	CRD20G20CG	CRD18C	CRD18E	CRD18F
"Nominal Current (A) At 100% Duty and 35° C"	500	800	1000	1250	2000	800 amp	1000 amp	1250 amp
DC resistance (O/M) At + 35° C	0.000104	0.000057	0.000033	0.000022	0.000011	0.000074	0.000051	0.000028
"Impedence (O/M) At 80 mm bar spacing And + 35° C"	0.000161	0.000136	0.000127	0.000094	0.000061	0.000144	0.000137	0.000099
Voltage Grade [V]	600							
Support Spacing [mm]	2250							
Bar Length [mm]	4500							
Outside Dimensions [mm]	43 x 32							
Permissible Ambient Tempreature	-30° C + 55° C (Standard Insulation) -30° C + 90° C (High Temperature Insulation)							

W TYPE DSL SYSTEM

Shrouded Bus Bar System:

Our expertise in this domain has enabled us to offer an wide ranges of Shrouded Bus Bar System. Extensively used in various industrial applications, these products are manufactured strictly in accordance to international quality standards. Owing to the efficiency, robust construction and longer service life, these products are highly appreciated and demanded among the customers. 4 Bolt joints are provided as additional feature for secured joints

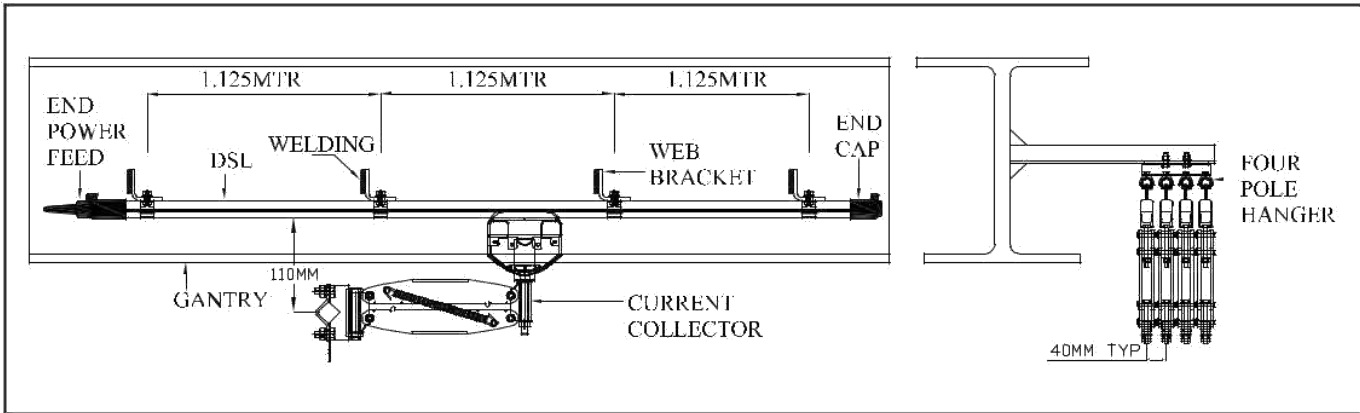
Features:

- Touch proof, no exposed live part
- Quick & easy Installation
- Insulating cover shaped to shed from water and dust
- Single Pole individual Conductors
- Suitable for Indoor / Outdoor Installation

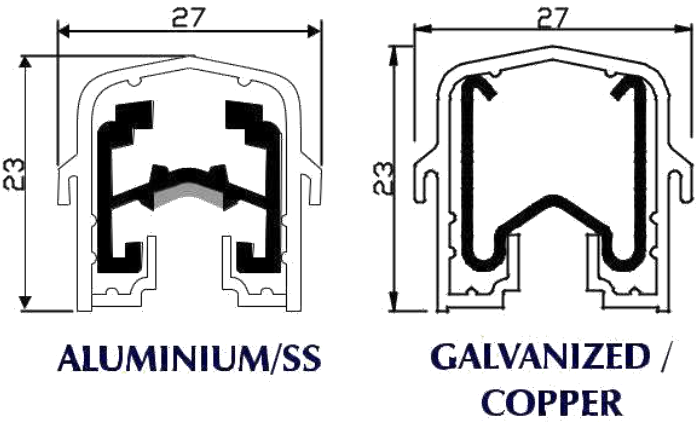
Available Range:

- Bolt Joint for Single Pole / Four Pole.
- 100 AMP to 125 AMP Galvanized Iron.
- 200 AMP to 315 AMP Aluminium/ SS
- 160, 250, 400 Amps. Copper.
- Bolt Type Conductor Bar Length 4.5 Mtr.
- Expansion joint can be provided above 80 meter length

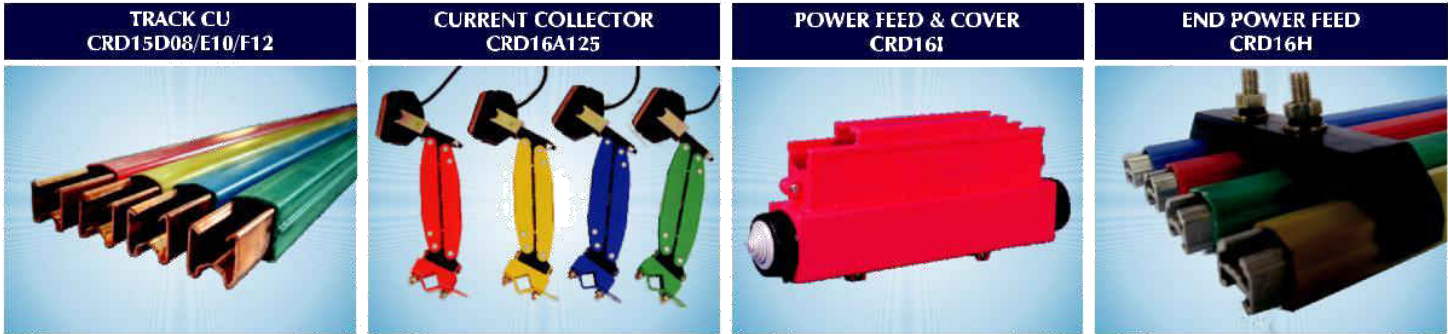
GENERAL ARRANGEMENT OF W TYPE DSL SYSTEM



W TYPE DSL SYSTEM



Aluminium /SS	Galvanized	Copper
200 amp	60 amp	160 amp
315 amp	100 amp	250 amp
—	125 amp	400 amp



TECHNICAL DATA FOR W TYPE BOLTED JOINT CONDUCTOR SYSTEM

Conductor Bar System	Galvanised Steel			Copper			Aluminium /SS	
Type	CRD15A08	CRD15B10	CRD15C12	CRD15D08	CRD15E10	CRD15G12	CRD 18A	CRD 18B
"Nominal Current (A) At 100% Duty and 35° C"	60	100	125	160	250	400	200	315
DC resistance (Ω/M) At + 35° C	0.003584	0.002867	0.001933	0.000342	0.000274	0.000184	0.000301	0.000261
Impedence (Ω/M) At + 35° C	0.003604	0.002891	0.001968	0.000364	0.000300	0.000221	0.000325	0.000288
Voltage Grade [V]	600							
Support Spacing [mm]	1125							
Bar Length [mm]	4500							
Outside Dimensions [mm]	23 x 27							
Permissible Ambient Temperature	-30° C + 55° C (Standard Insulation) -30° C + 85° C (High Temperature Insulation)							

PIN TYPE DSL SYSTEM

Conductor rails provide a safe and economical supply of electric power for track guided Mobile Machinery. Single Pole individually insulated conductors. Ideally used for EOT Cranes & Hoists Available in 80-315 amps ratings.

The special quality of our pin type dsl system is that it can withstand extreme pressure providing High performance.

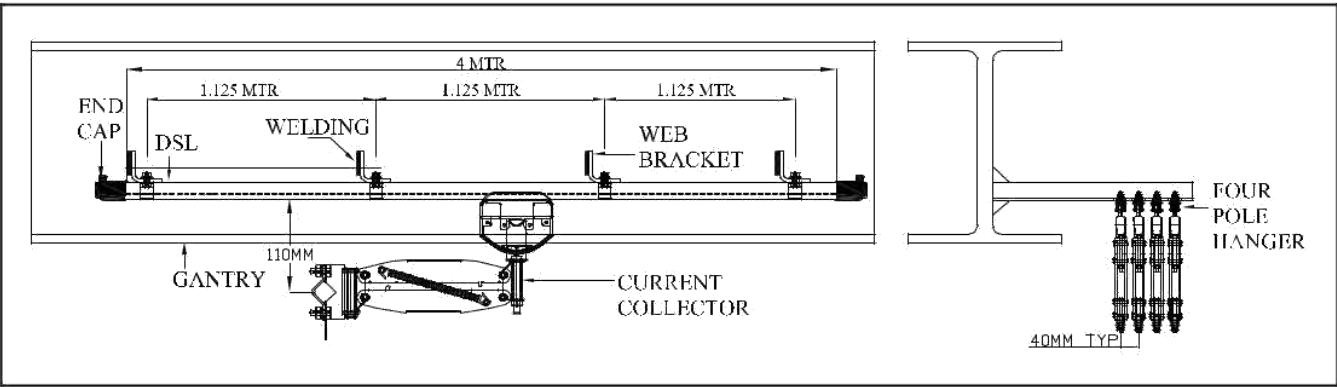
Features:

- Single Pole individual Conductors.
- Quick & easy Installation.
- Pin Joint for Proper Alignment.
- Finger safe / Touch Proof.

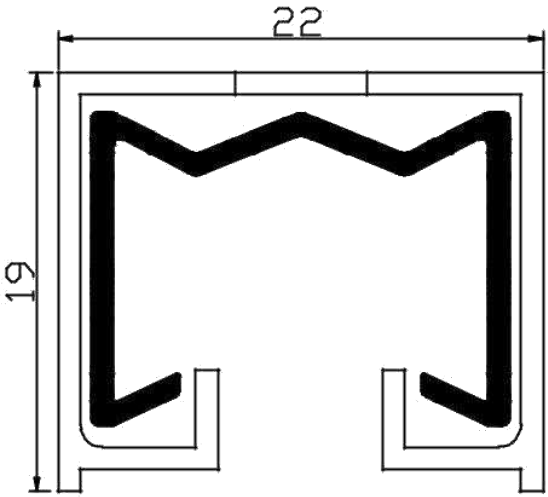
Available Range:

- Single Pole / Four Pole Hangers.
- 80, 100, 125 Amps. Galvanized Iron conductors.
- 160, 250, 315 Amps. Copper conductors.
- Bar Length 4.0 Meter
- Expansion joint can be provided on request.

GENERAL ARRANGEMENT OF PIN TYPE DSL SYSTEM



PIN TYPE DSL SYSTEM



Galvanized	Copper
80 amp	160 amp
100 amp	250 amp
125 amp	315 amp



TECHNICAL DATA FOR - PIN TYPE JOINT

Conductor Bar System		Galvanized Steel			Copper		
Type	CRD19A08	CRD19B10	CRD19C12	CRDACU08	CRD19CG10	CRD19CG12	
"Nominal Current (A) At 100% Duty and 35° C"	80	100	125	160	250	315	
DC resistance (O/M) At + 35° C	0.003584	0.002867	0.001933	0.000342	0.000274	0.000209	
Impedence (O/M) At + 35° C	0.003804	0.002891	0.001968	0.000364	0.000300	0.000224	
Voltage Grade [V]	600						
Support Spacing [mm]	1125						
Bar Length [mm]	4000						
Outside Dimensions [mm]	19 x 22						
Permissible Ambient Tempreature	-30° C + 55° C (Standard Insulation)						

JOINTLESS DSL

Jointless Dsl System:

This is newly developed DSL System by SILVERLINE. This is a single pole system. Copper strips of high conductivity are used as conductors for high performance. We recommend this for medium size factories installing smaller capacity cranes requiring not more than 140amps. This system is very easy to install and being joint less has less failure rate. Wear and tare is also less which improves life of current collectors' at least by 50%. Smooth running of the DSL ensures best performance of control panels with VVF drives.

Features:

- Quick and easy installation.
- Tape form copper conductor.
- Minimum voltage drop due to continuous copper conductor.
- No expansion problems.
- Touch proof design.

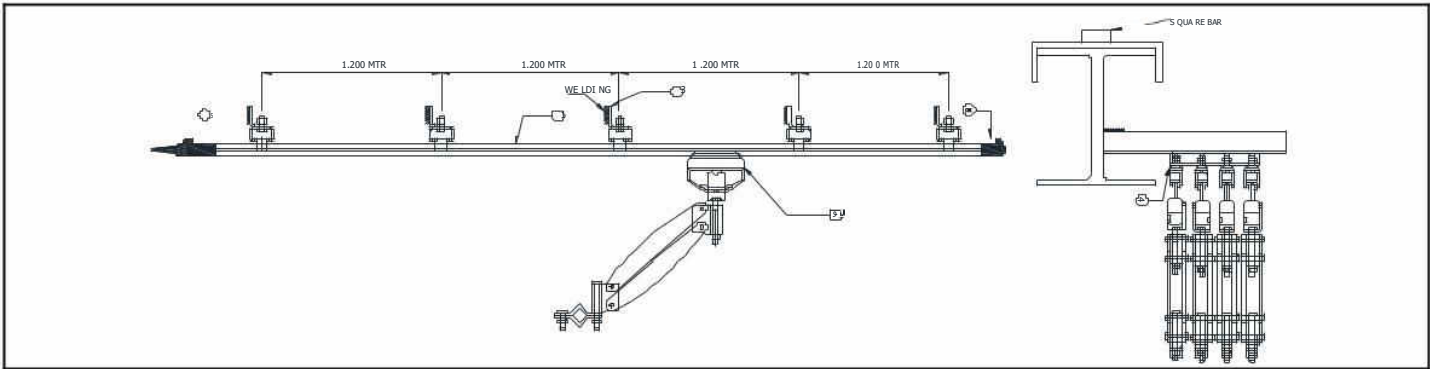
Application of Jointless DSL System :

- JIB Cranes
- EOT Cranes
- Other material handling equipments .

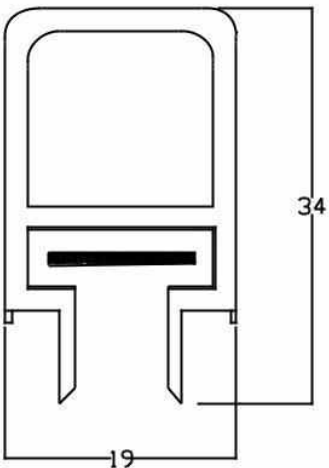
Jointless DSL Available in :

- Copper : 40 to 140 amps

GENERAL ARRANGEMENT OF JOINTLESS TYPE DSL SYSTEM



JOINTLESS DSL



Copper
40 amp
60 amp
80 amp
100 amp
140 amp



TECHNICAL DATA FOR JOINTLESS DSL SYSTEM

Conductor Bar System	Copper				
Type	CRD25A4	CRD25B6	CRD25C8	CRD25D10	CRD25E14
"Nominal Current (A)At 100% Duty and 35° C"	40	60	80	100	140
DC resistance (O/M) At + 35° C	0.0019	0.0012	0.0008	0.0005	0.0003
Impedence (O/M) At + 35° C	0.0021	0.0013	0.00009	0.0006	0.0004
Voltage Grade [V]	600				
Support Spacing [mm]	1200				
Bar Length [mm]	4500				
Outside Dimensions [mm]	19 x 34				
Permissible Ambient Tempreature	-30OC + 5o C (Standard Insulation)				

BOX TYPE DSL SYSTEM

BOX TYPE DSL (ENCLOSED DUCT)

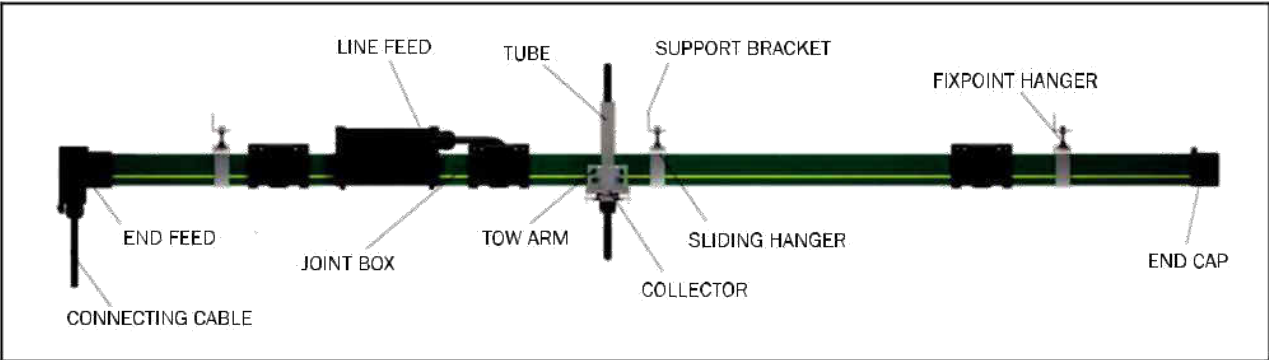
Features:

- Small overall dimensions (compact design).
- Extend an existing line is very easy just adding new tracks.
- The electric feed can be done at the beginning of the line.
- Degree of protection:IP20(without rubber sealing),IP23(with rubber sealing).
- Multi conductor.
- Common housing.
- Working temperature :from -30 to 55(degree centigrade).
- It is very easy to change a track already assembled without moving the rest of them.
- Quick mounting in one passing the line is ready to work.
- These bus bars systems are very compact and efficient in power distribution

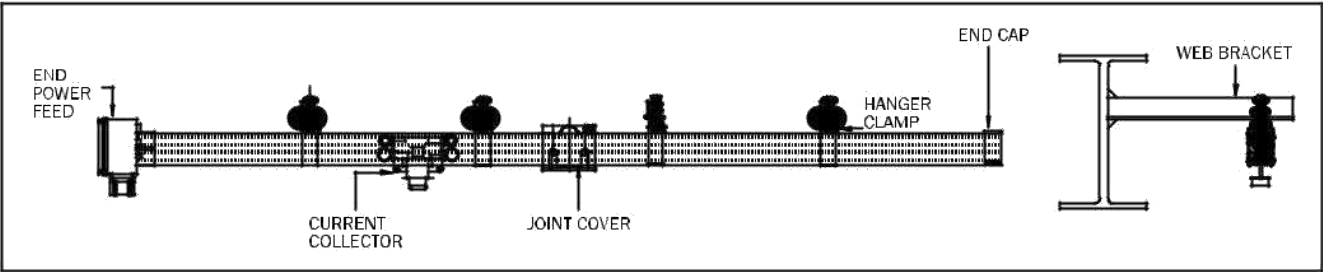
Available Range:

- 40,60,80,100,140, amps are available.
- Working voltage up to 600v.

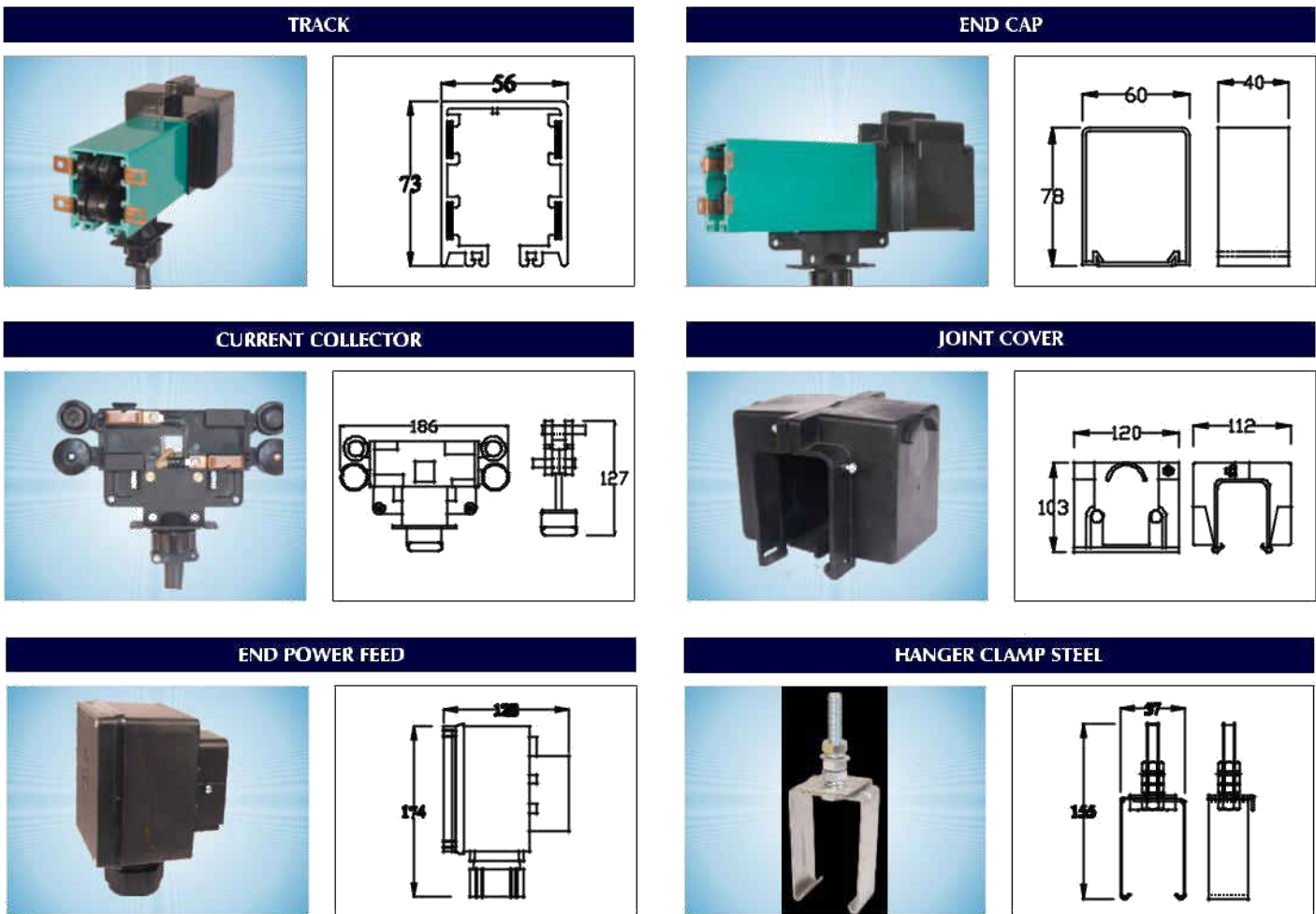
BOX TYPE DSL GENERAL ARRANGEMENT



BOX TYPE DSL SYSTEM LINE DIAGRAM



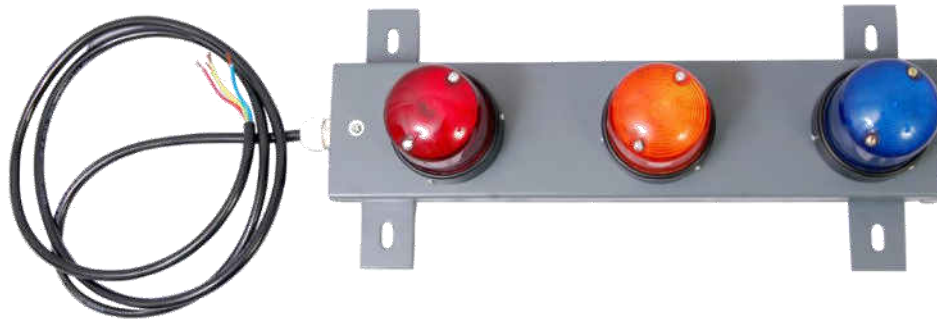
BOX TYPE DSL SYSTEM



TECHNICAL DATA FOR BOX TYPE ENCLOSED CONDUCTOR BAR SYSTEM

Conductor Bar System	Duct Box Type Range				
	Bolted in Type				
Type					
"Nominal Current (A)At 100% Duty and 35° C"	40	60	80	100	140
DC resistance (O/M) At + 35° C	0.0034	0.0030	0.0020	0.0017	0.0012
Impedance (O/M) At + 35° C	0.002	0.0017	0.00118	0.0011	0.0007
Voltage Grade [V]	600				
Support Spacing [mm]	1333				
Bar Length [mm]	4000				
Outside Dimensions [mm]	73 x 56				
Permissible Ambient Tempreature	-30OC + 55o C (Standard Insulation)				

DSL INDICATOR (PHASE INDICATOR)



LED INDICATION LAMPS AS PER THE FOLLOWING SPECIFICATION

DSL Indicator is the simple indicator device which is exclusively Designed & Developed by Silverline. It consists of LED lamps (Red Yellow, Blue) Which is connected to opposite end of supply to the shrouded bus bar systems using suitable fixing brackets. The Main Purpose for connecting it to the opposite end of supply is as follows:

- To detect the intermittent power fluctuation (if Any)
- To detect the gap in joint (If Any)
- To detect loose contact and break

SPECIFICATIONS FOR LED INDICATION LAMPS

- Light source : Light Emitting Diode LED_s
- Indication colour : RED /YELLOW / BLUE
- Colour Rendering Index : 100
- Luminous : Each LED 800 to 10000 MCD
- LED Size : 5mm Round Axial
- No of LED _s per indicator :3Nos
- Working Voltage & Current : 250V AC & 350MA
- Max input Power : 2W to 3W of Each Indicator
- Inputs Volts : 85V to 265V of each phase @ 50 C/s
- Type of Power Supply : CCD switch mode power supply
- Life Expectancy : 30000 burning hours at 90 degree Celsius
- Operating Temperature : 45 degrees Celsius
- Indication Light Assembly : 440mm × 40mm × 200mm (LxHxW)

FESTOON SYSTEMS

FESTOON SYSTEM FOR ROUND & FLAT CABLE

FESTOON SYSTEM FOR ROUND & FLAT CABLE

FESTOON SYSTEM ARE GENERALLY USED ON OVER HEAD CRANES FOR THE TRANSMISSION OF POWER & CONTROL CABLES FOR CROSS BRIDGE TROLLEY TRAVEL.

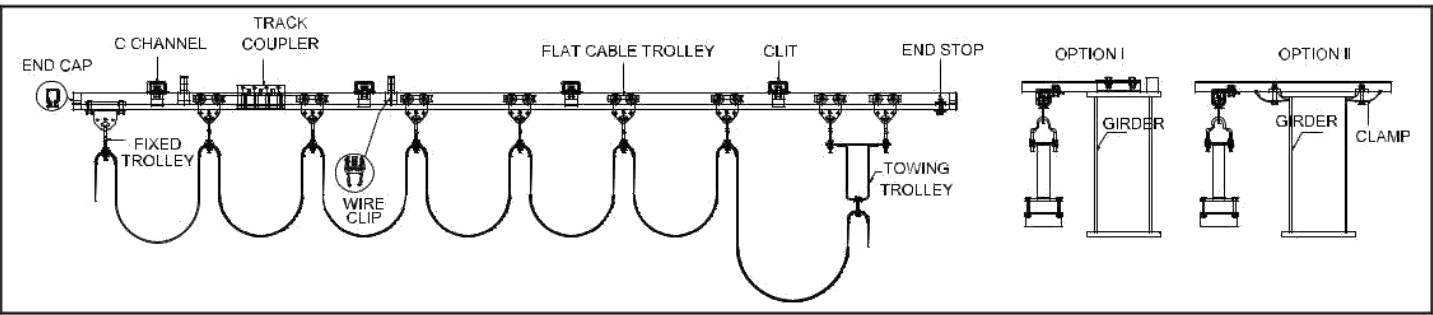
Presenting an unmatched variety of Festoons System that is offered by Silverline in optimum quality. Offering excellent features like high tensile strength, robust construction and high capacity.

We are engaged in catering an exclusive range of systems that are usually used as a moving support for heavy power cables, cross bridge trolley, etc. Our Festoon Systems are available in various sizes and specifications for handling flat cables & hoses. Clients can also order our products in customized range as we have well settled customization unit where our products are made according to their preferences.

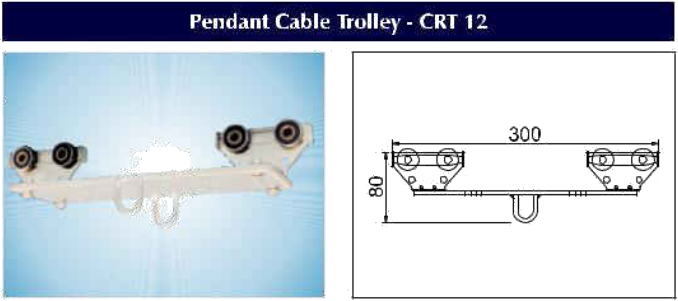
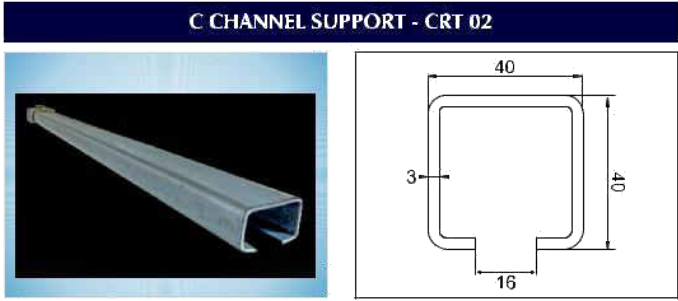
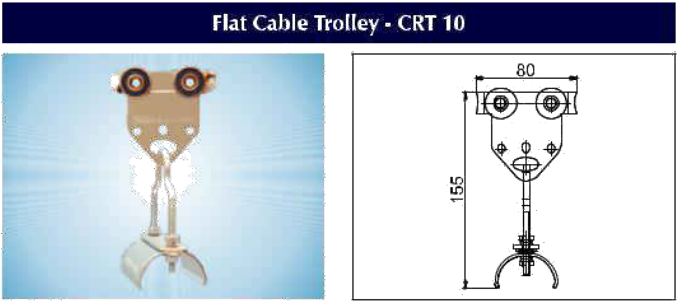
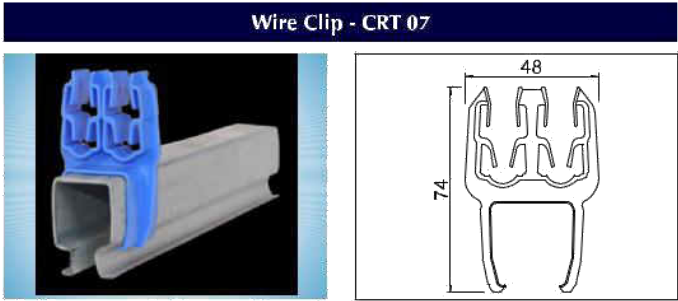
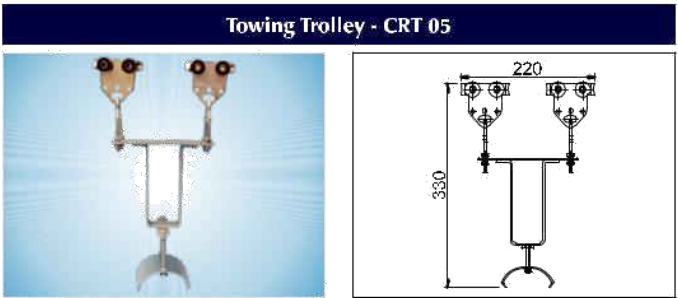
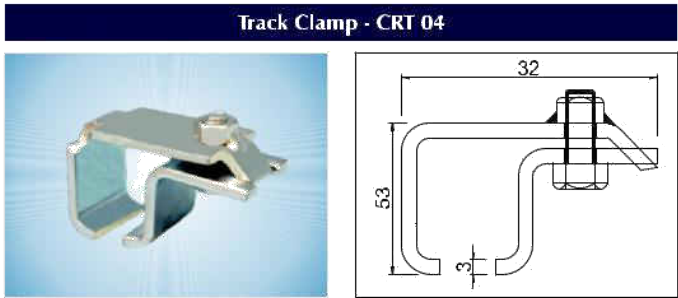
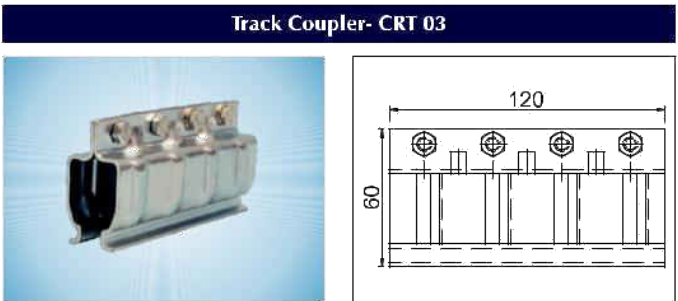
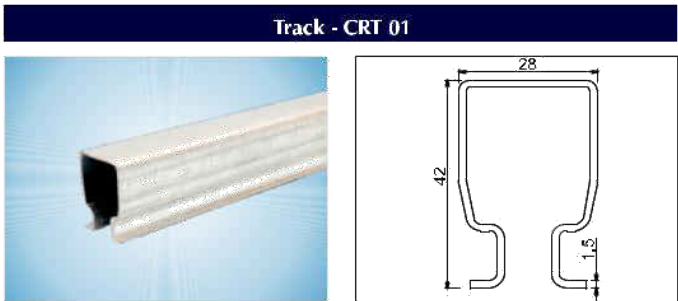
However, the system is completely enclosed from all the sides that help to protect from dust or any dirt particles. Owing to its high capacity and excellent performance, we are enlisted as one of the trustworthy Manufacturers and Exporters of Festoons Cable Systems.

Features:

- Easy to install, No welding, smooth movement less friction, Light weight.
- Life of cable increases as no unwanted twist turns practically reduces load on cable.
- In case of bearing failure trolley will never fall down.
- Welded clit & clamped channel type options are available as shown in the line diagram.



FESTOON SYSTEM FOR ROUND & FLAT CABLE



C TRACK FESTOON SYSTEM

C TRACK FESTOON SYSTEM

Silverline introduces distinctive range of C Rail Festoon System that is mainly used for electrifying various kinds of mobile equipment. Designed using latest technology and tools, it assists movement of flat and round cables and also water and air hoses.

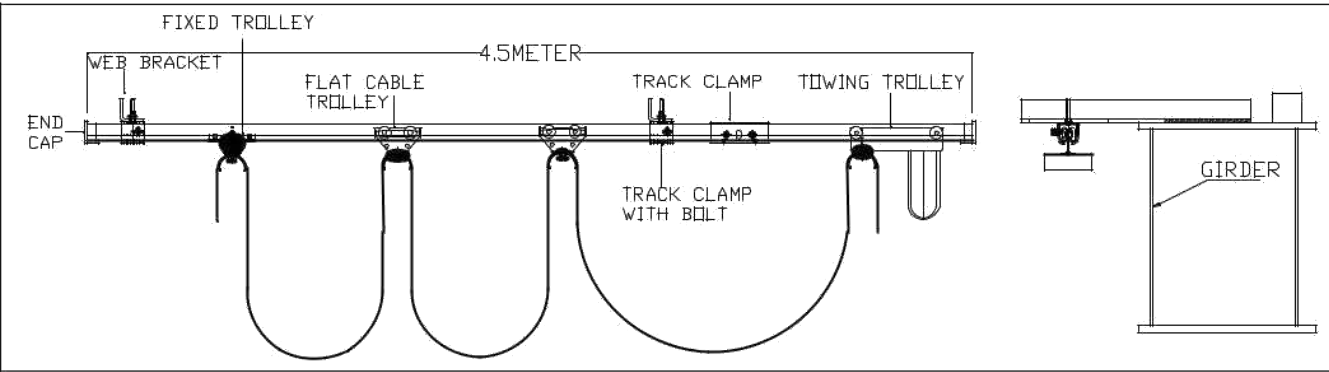
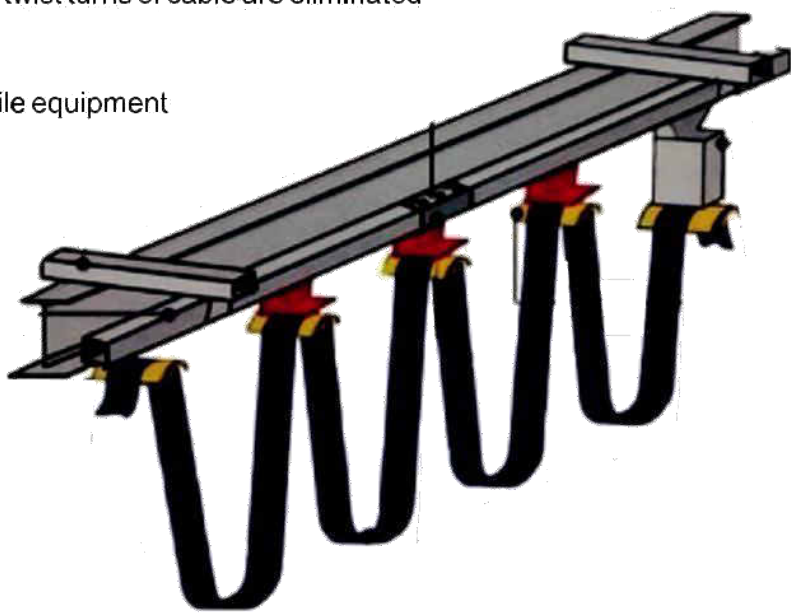
Supported by experienced professionals and vast manufacturing unit, you get ultimate range of Festoon Systems that are highlighted due to its comprehensive features like acid-proof, non-corrosive, sea water-repellent, easy installation, light weighted, and much more. Being a pioneer name in manufacturing and supplying wide array of Festoon System, clients can easily buy our products at the competitive prices from us.

Features Of C Rail Festoon System:

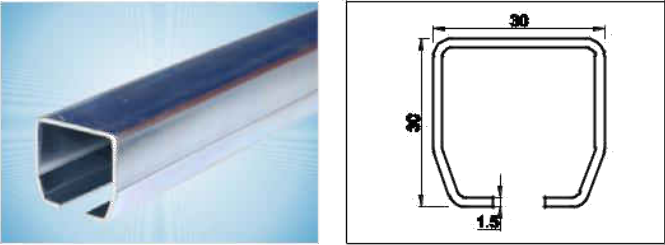
- Light weighted
- Easy & quick installation
- Smooth motion
- Less friction
- Less weight of trolley
- Cable life enhances because useless twist turns of cable are eliminated

Applications of C Rail Festoon System:

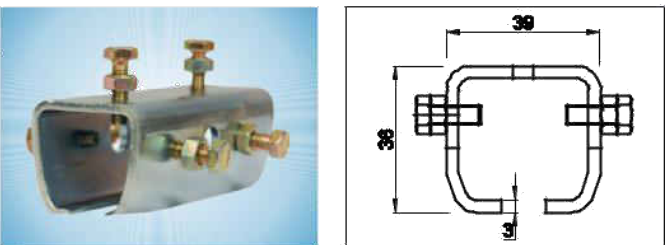
- Electrification of several types of mobile equipment
- Port cranes
- Refuse cranes
- Overhead cranes
- Electrification of moving machineries
- Other material handling applications



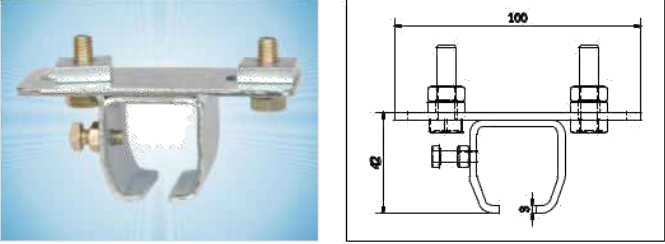
TRACK MCRT01



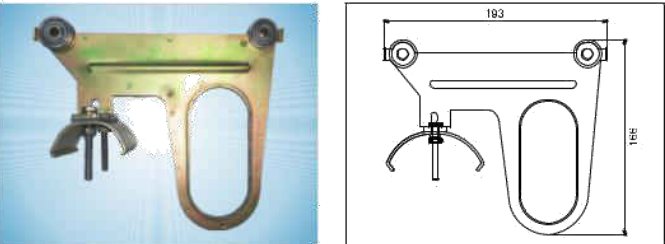
TRACK COUPLER MCRT03



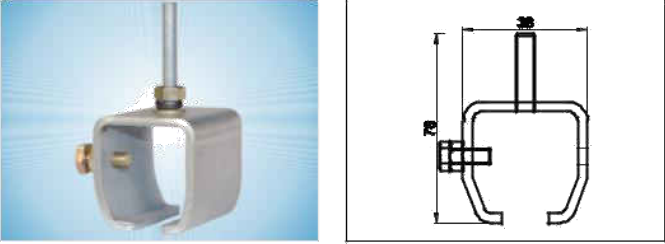
TRACK CLAMP WITH PLATE MCRT04P



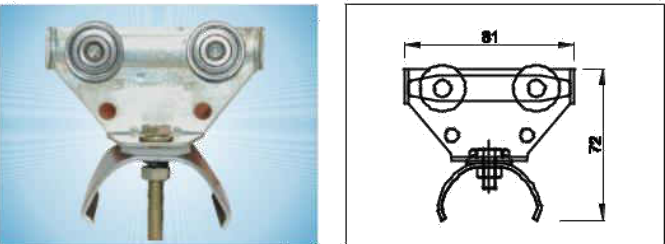
TOWING TROLLEY MCRT05



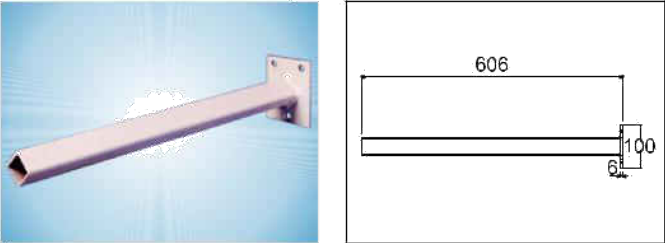
TRACK CLAMP WITH BOLT MCRT04B



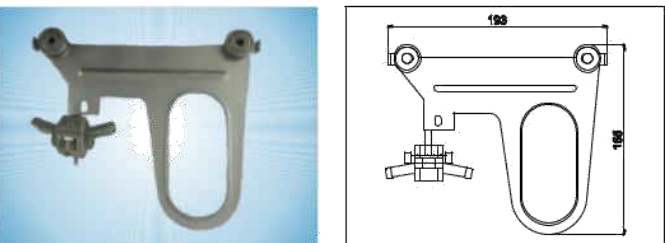
FLAT CABLE TROLLEY MCRT10A



TOWING ARM MCRT06



PENDANT TROLLEY MCRT12



WIRE ROPE FESTOON SYSTEM

WIRE ROPE FESTOON SYSTEM

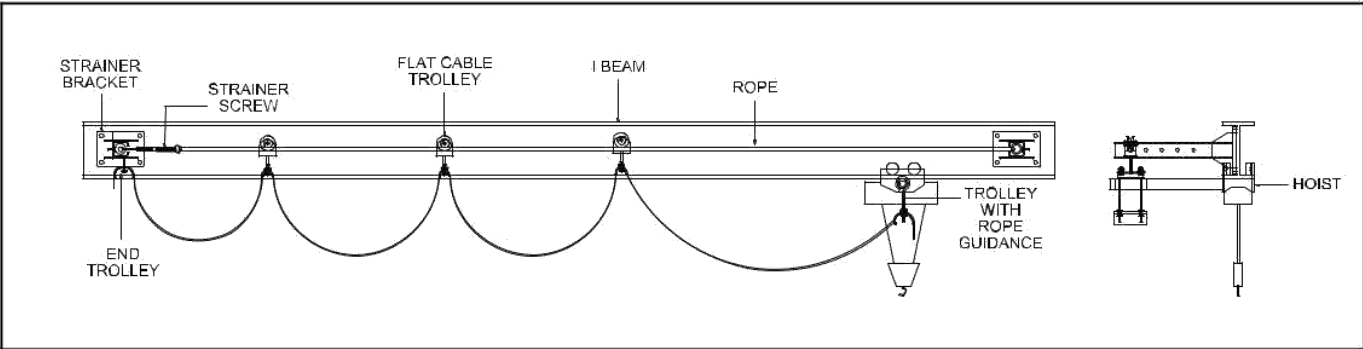
Silverline is engaged in manufacturing and supplying Stretched Wire Rope Festoon System that is extremely appreciated for excellent performance, vast usages, low maintenance, long service life and light weighted features. It is extensively used on EOT cranes and other light duty handling applications.

Features Of Stretched Wire Rope Festoon System:

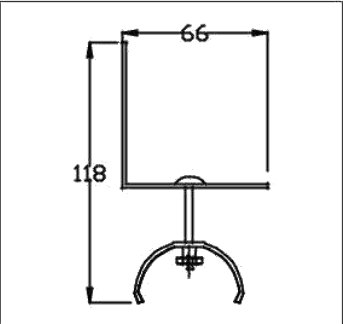
- Easy & quick installation
- Light weight
- Less friction
- Smooth motion
- Less weight of trolley
- Cable life enhances as necessary twist turns are avoided.
- Most economical solution of festooning.

Applications of Stretched wire rope festoon system:

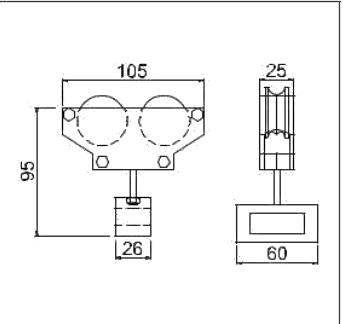
- Refuse cranes
- Port cranes
- Electrification of moving machineries
- Overhead cranes
- Other material handling applications



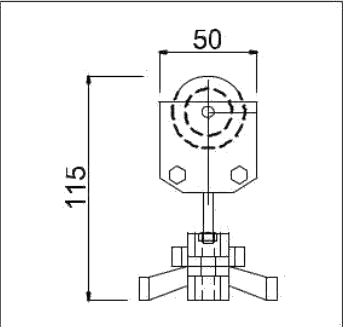
END TROLLEY



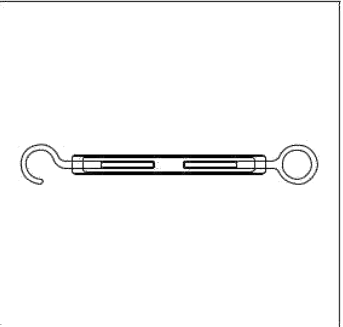
TOWING TROLLEY



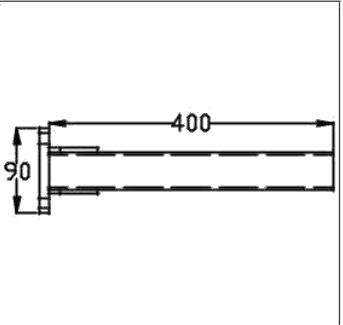
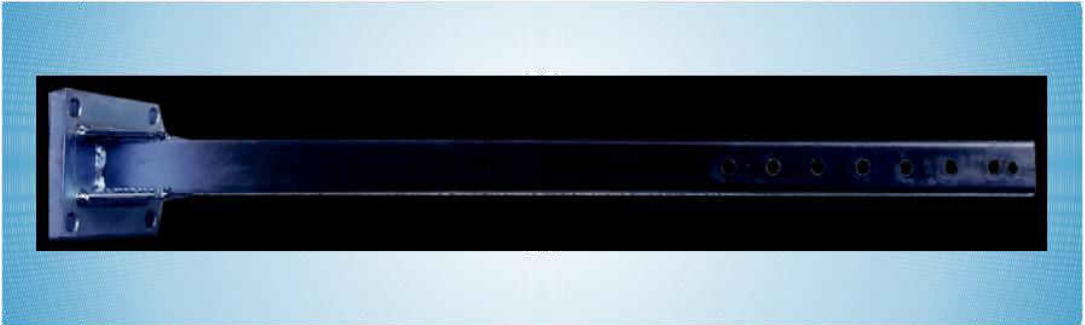
SINGLE WIRE ROPE TROLLEY



STRAINER SCREW



STRAINER BRACKET



CABLES

FEATURES OF FLAT, EPR & ROUND CABLES

- Extensively Oil resistant Chemical Resistance
- Extremely small bending radius
- High flexibility
- Minimum waste of space
- Packeting Possibility
- PVC self-extinguishing and flame retardant according to VDE 0482-332-1-2, DIN EN 60332-1-2/IEC 60332-0 (equivalent DIN VDE 0472 part 804 test method B)
- The materials used in manufacture are cadmium-free and contain no silicon and free from substances harmful to the wetting properties of lacquers

CONSTRUCTION:

H07VVH6-F

- H - Harmonized cable
- 05 - Nominal tension U0/U : 300/500 V or
- 07 - Nominal tension U0/U : 450/750 V
- V - Insulation with Ti1 PVC
- V - Outer sheath with TM2 PVC
- H6 - Platform cable with more than 4 conductors
- F - Flexible conductors



Sr. No.	No. of Conductors x mm ²	Size mm x mm	Weight g/m	Max. capacity amp.
1	Flat cable - 4core x 1.5mm	5 x 13.70	133	20
2	Flat cable - 8core x 1.5mm	5 x 29.00	265	20
3	Flat cable- 12core x 1.5mm	5 x 40.00	421	20
4	Flat cable- 16core x 1.5mm	5 x 52.50	600	20
5	Flat cable- 20core x 1.5mm	5.5 x 68.00	708	20
6	Flat cable- 24core x 1.5mm	5 x 77.00	800	20
7	Flat cable - 4core x 2.5mm	5.70 x 17.50	205	27
8	Flat cable- 16core x 2.5mm	5.70 x 52.00	800	27
9	Flat cable - 4core x 4mm	6.5 x 20.00	344	36
10	Flat cable- 4core x 6mm	7 x 23.00	424	48
11	Flat cable- 4core x 10mm	9 x 28.40	710	63

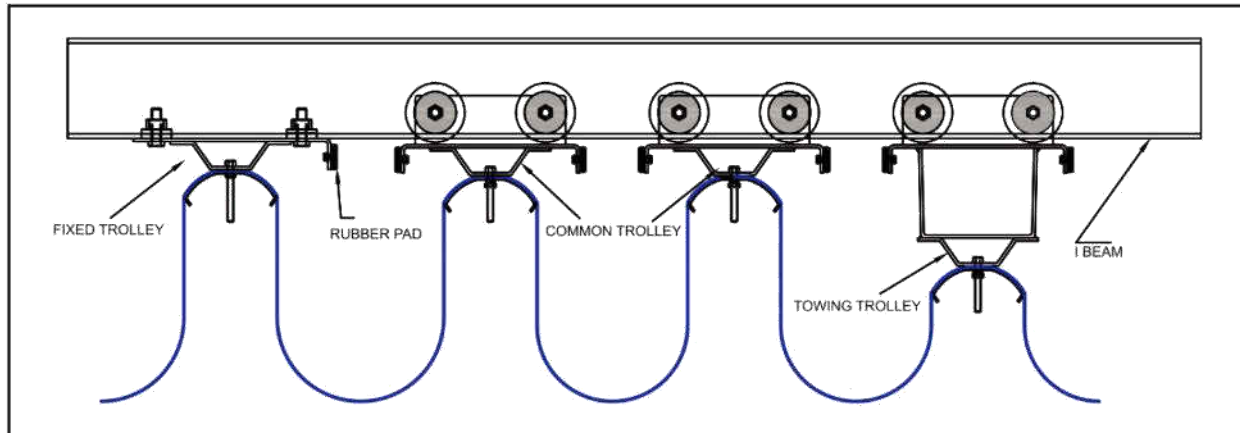
Sr. No.	No. of Conductors x mm ²	Across	Diameter	Weight g/m
1	Pendant cable 12core x 1.5mm	22.9	12.8	390
2	Pendant cable 16core x 1.5mm	24.3	16	410
3	Pendant cable 20core x 1.5mm	26.5	18	590
4	Pendant cable 24core x 1.5mm	28.5	19.4	600
5	Pendant cable 5core x 1mm	19	9.5	200



Nominal Outer Diameter - Tolerance +/- 0.5 mm

TROLLEY FOR I BEAM

I beam trolleys are used for carrying Heavy Cables in industries like Foundry, Rolling Mills, Storage containers, Steel Mills. All types of I beam trolleys ranging up to 400 mm flange width are available. We can also offer specially designed trolley for heavy cables.



I-BEAM DOUBLE DECKER TROLLEY



I-BEAM CABLE TROLLEY



ROUND CABLE TROLLEY



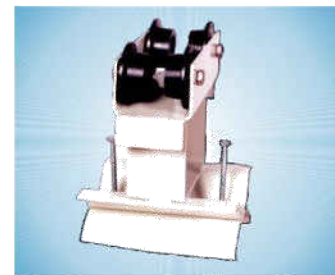
TROLLEY WITH WHEEL SLOT



MEGA TROLLEY



TOWING TROLLEY



HEAVY DUTY TROLLEY



I-BEAM CABLE DOUBLE DECKER TROLLEY



CABLE TROLLEY

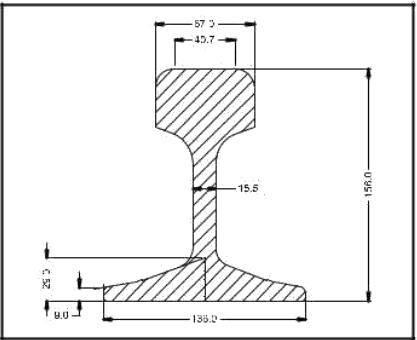


RAIL & RAIL CLAMPS

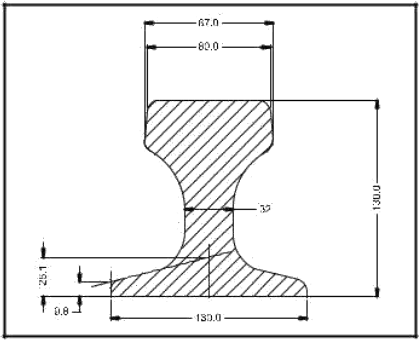
RAIL FIXING & RAIL ALIGNMENT

RAIL FIXING & RAIL ALIGNMENT

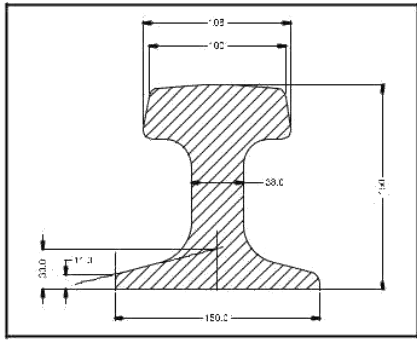
Installation of a crane rail system will have significant implications throughout the life of any project.
Ensuring that a system is installed with the very highest levels of planning & analysis
As we are experts in our field, we have the experience to deliver the most professional programme.



105lbs/IRS-52
Weight 51.89 kg per meter



CR80
Weight 64.2 kg per meter



CR100
Weight 89.0 kg per meter

We supply crane rail track products for all industrial applications namely portal cranes to steel slab cranes, grab ship unloaders , continuous ship unloaders , stacker reclaimers , goliath cranes, EOT, etc.
Our products are subjected to all types of demanding conditions or any type of demanding conditions or any type of severe conditions (heat, cold, humidity, dusty or corrosive environment).

INNOVATION IN WORK:

Our team of employees are very technological & practical so that the installation techniques which are selected will be fully aligned with the project.
With the proper training and development of our installation team, we ensure that we can apply the very latest procedure to each project.



OUR COMMITMENT

“As per the projects, we align ourselves with the requirements of the projects”
With this we are building our reputation on quality & service to all with whom we come into contact

RAIL CLAMPS

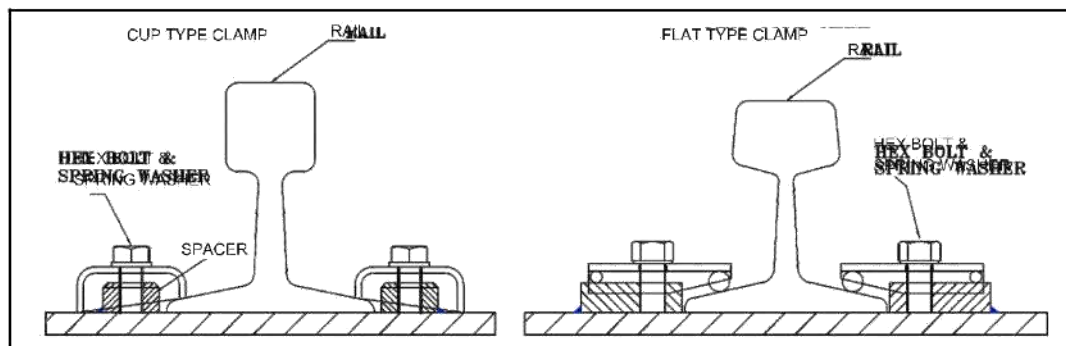
Rails clamps with flat type single bolt & double bolt are available.

It is used for fixing of rails for overhead cranes

- EOT cranes long travel
- Goliath cranes
- Transfer trolleys

Silverline rail clamps are manufactured by using one expertise of sheet metal and tooling.

- Clamps are manufactured from H.R.P.O material of Indian origin. No cracks are allowed during bending.
- Rail clamping rod is knurled to give anti skid grip on rail.
- All the clamps are CO2 welded.
- Zinc plating is done for all the clamps to prevent rusting.
- Forged clamps are made from EN8 material.



Technical specifications

CRC-01		
Flat Type Rail Clamp 40 LBS	Bolt M16*25	No of Bolt 1 No

CRC-02		
Flat Type Rail Clamp 60 LBS	Bolt M16*30	No of Bolt 1 No

CRC-03		
Flat Type Rail Clamp 90 LBS	Bolt M16*35	No of Bolt 1 No

CRC-04		
Flat Type Rail Clamp 105 LBS	Bolt M16*35	No of Bolt 1 No

Welded CRC-05 G		
Forged Type Rail Clamp CR 100	Bolt M20*50	No of Bolt 2 Nos

CRC-06		
Forged Type Rail Clamp CR 120	Bolt M20*50	No of Bolt 2 Nos

CRC-07		
Cup Type Rail Clamp 60/90 LBS	Bolt M20*35	No of Bolt 1 No

CRC-01/04



CRC-07



CRC- 05G



MACHINED RAIL CLAMP



CRANE RAILS



CRC-05 E



CRC-06

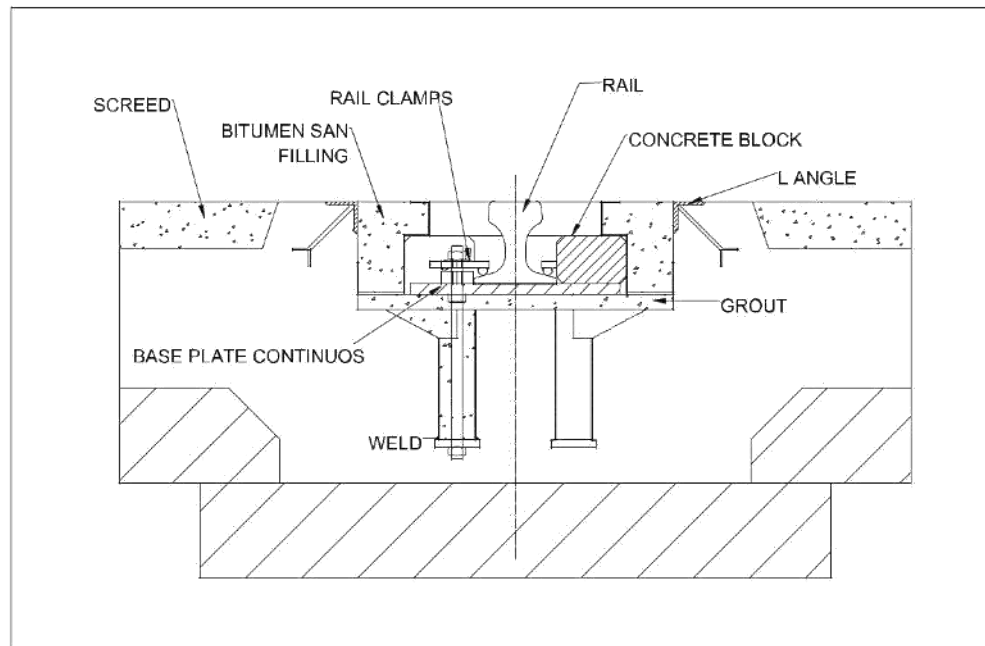


ANGLE TYPE RAIL CLAMP

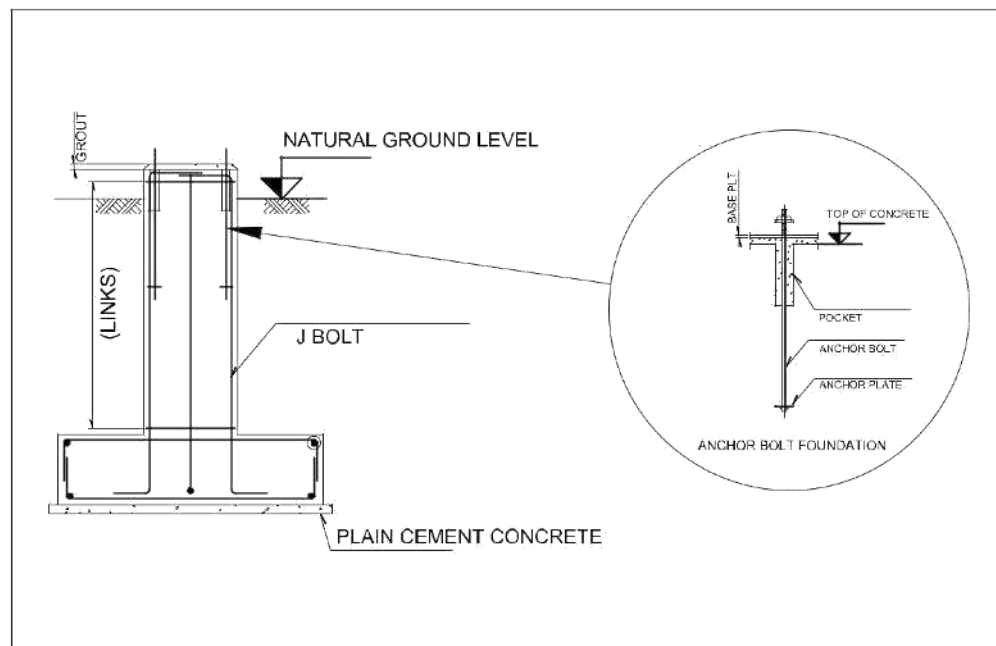


FOUNDATION

FOUNDATION FOR CRANE RAIL



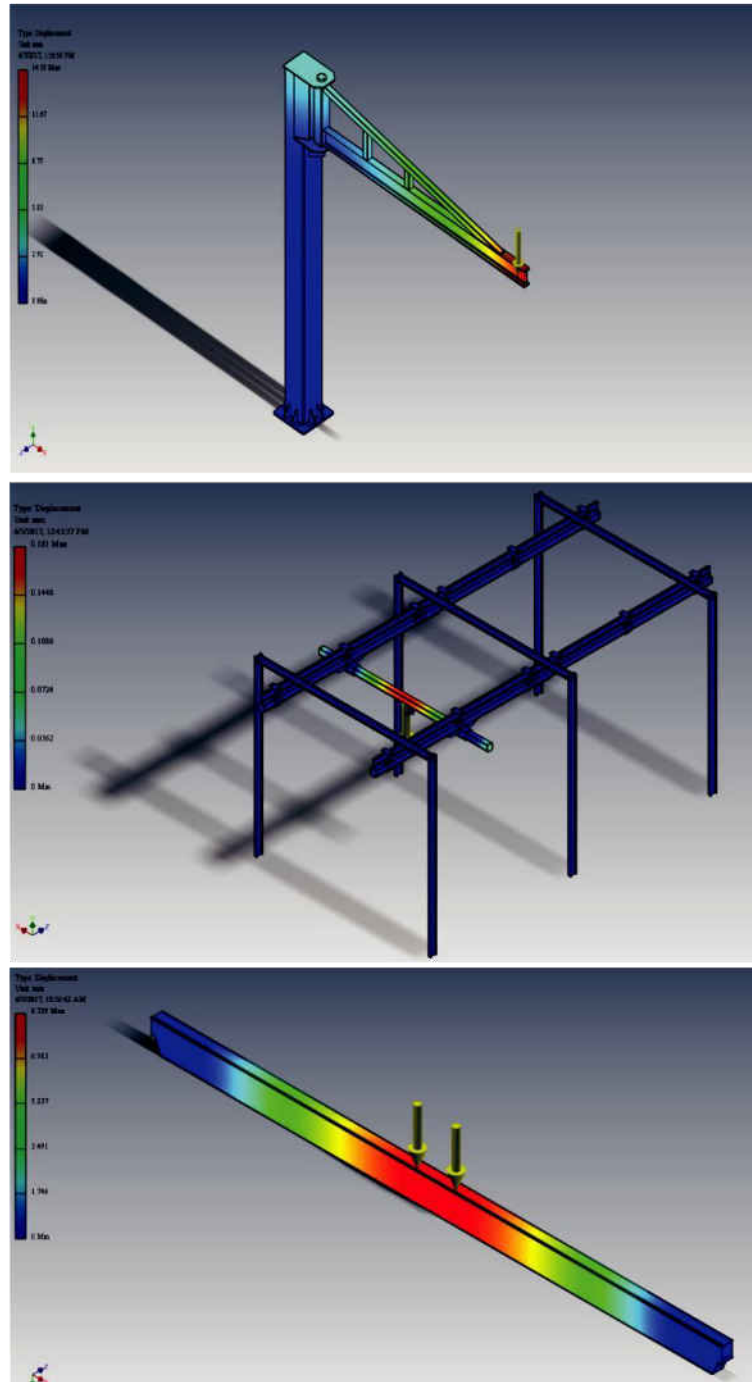
FOUNDATION FOR JIB CRANE



OTHER CRANE COMPONENTS

CRANE DESIGN AND ANALYSIS

Silverline has in house facility of crane designing. We have qualified engineers working OF optimisation of crane girder design. We have facility for calculating Deflection & stress analysis if the customer demands. We are also capable of manufacture girder for you. Our capacity at Sharjah is enough to make any girder up to 40 m long and 15 tonnes single pc. We have past 12 yrs experience in manufacturing of girder for all reputed crane manufacturer. We can manufacture girder for any structural applications like bridges or supports etc.



MAINTAINANCE

Crane Maintenance



Silverline is in to the maintenance of all type of cranes & its components, our service is available on a call basis or the "AMC" i.e. Annual Maintenance Contract which helps your crane to have an easy & hassle free operation. Silverline have a team of highly skilled technicians who have an experience of more than 15 years in crane industry which makes our team strong than others.

Silverline service includes

- Breakdown Maintenance
- Periodic Preventive Maintenance
- Annual Maintenance Contract

Silverline also give solutions such as modification of old cranes, replacement of worn out parts, Long travel wheel alignment or replacement. Alignment of drive, breakdrum & brake liner replacement service & repair of gearbox & motor, replacement of wire rope, hook, Gantry rail alignment & replacement. Silverline's plus point is that we have both strong Mechanical & Electrical team ready on field.

In Electrical system includes the service of Motor, Carbon brushes, panel replacement of worn out parts such as contractors etc. Cleaning of panel & resistance box, maintenance & replacement of damaged cables & cable dressing replacement of damaged cables & cable dressing replacement of current collector shoe, setting of overload relay & limit switches.

Silverline's target is to increase the safety & productivity of our client, for which we give the training how to handle the crane safety & what measures, should be taken care of due to which we 'Silverline' are the best in the Maintenance.

INSTALLATION

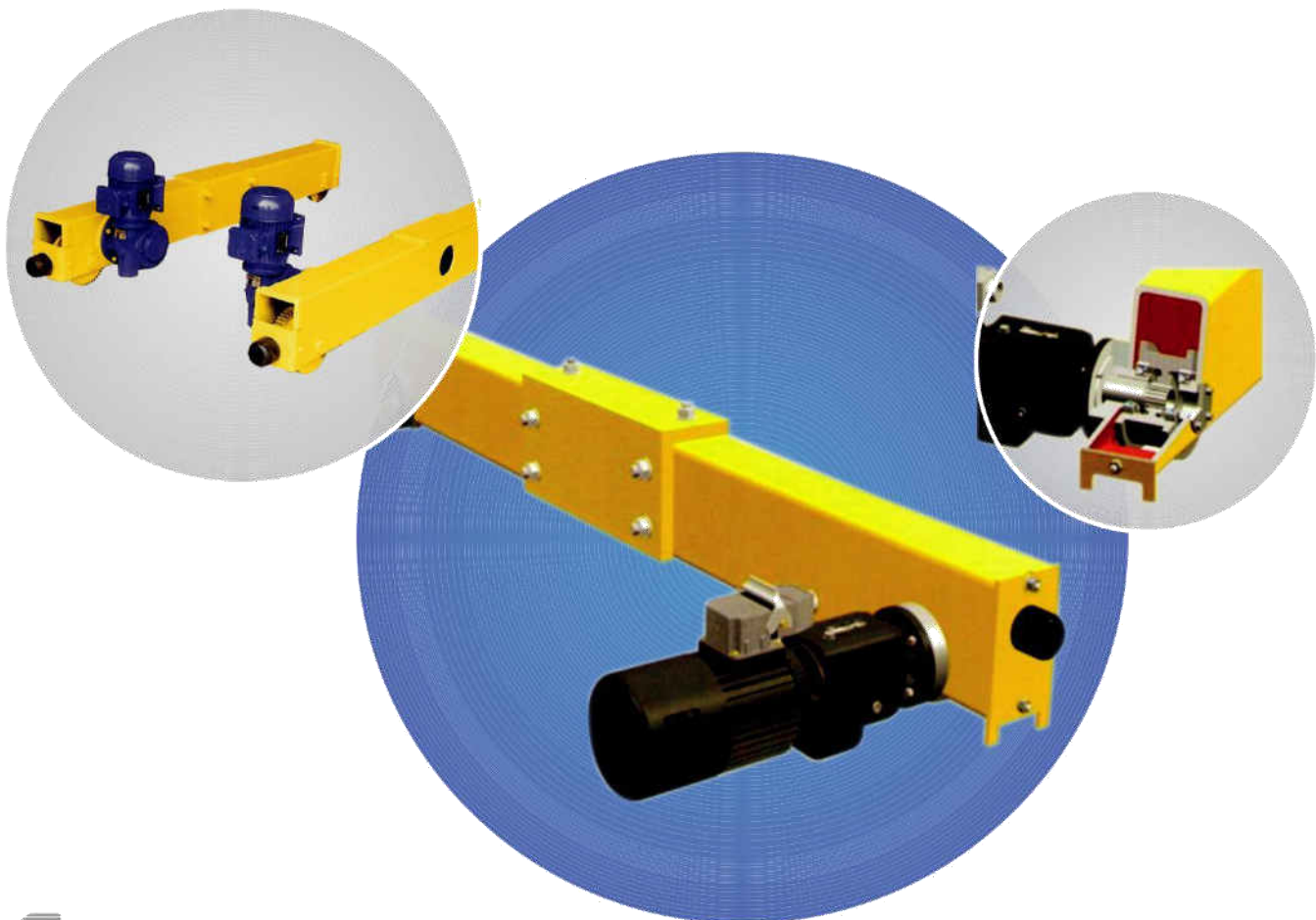
Crane Installation



The main thing after purchasing the crane is to install it properly & safely. Silverline are the most experienced & expert in installation & erection of all material handling equipments. Silverline's first moto is safety then is the efficiency due to which Silverline make your crane fully operational in short time, then is professionally Silverline have solution for all the problems and the last is innovation where Silverline R & D team gives the solution due to which your crane starts working in shortest time with lowest installation cost.

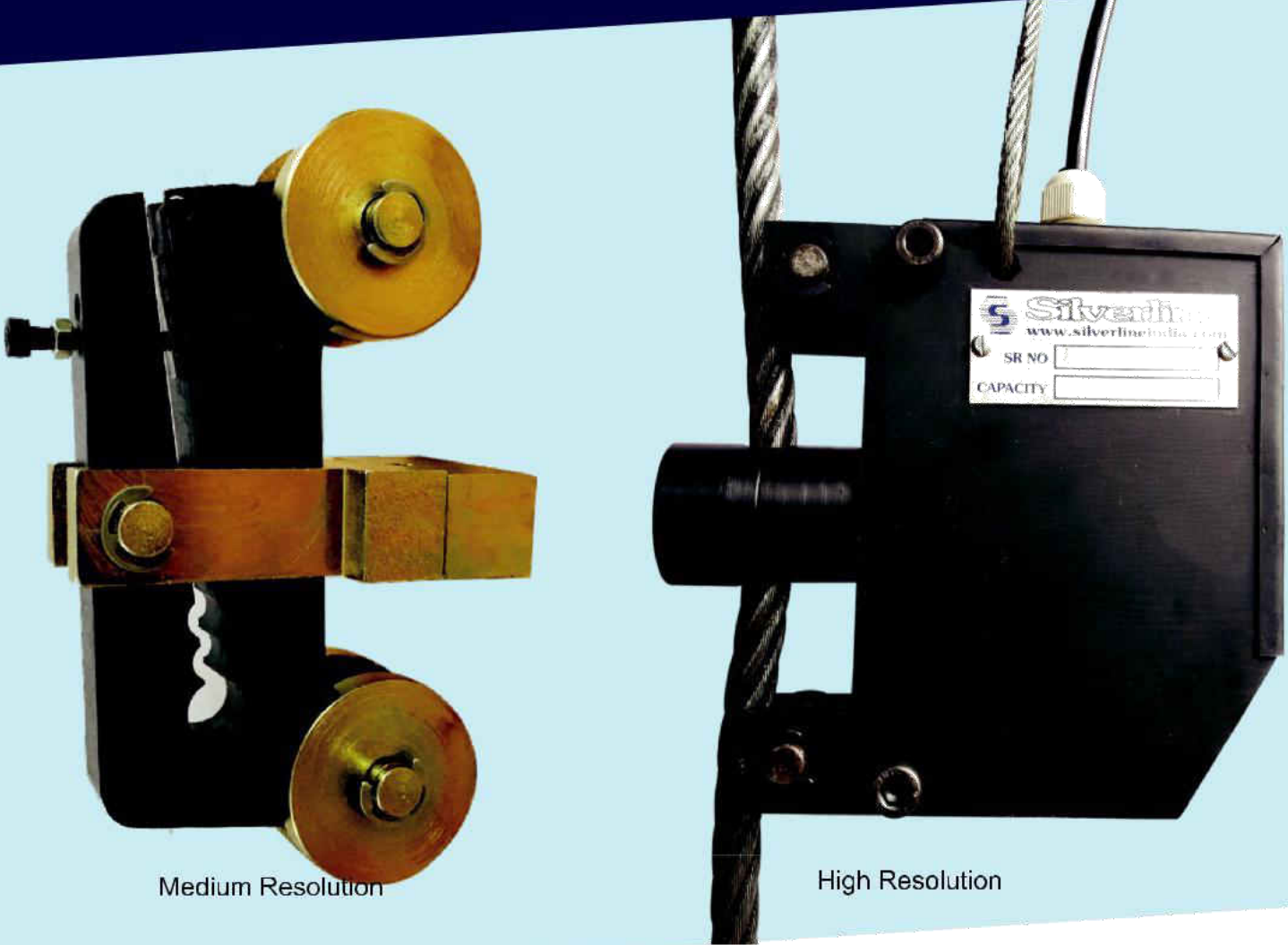
END CARRIAGE

- Fully enclosed box section construction build by rectangular drawn tube
- S. G. Iron cast wheels, self lubricating, minimum wear on rails, hardened to 300 BHN
- Key less wheel & shaft assembly gives concentric maintained, free wheel movement
- Machine bored flanges after welding assures perfect alignment of bearing, shaft & wheel
- Std gear box brake motor of SEW/Nord/Rossi/IC BAUER make gives high level of reliability with maintenance free working
- Available for single & double girder cranes.
- Modular box type construction
- AC disc brakes are fitted as standard
- Forged wheels in CK 45 material or SG IRON 800/2.
- Stop start / stop feature is standard



OVERLOAD LIMITER

OVERLOAD LIMITER FOR OVERLOAD SAFETY OF CRANE

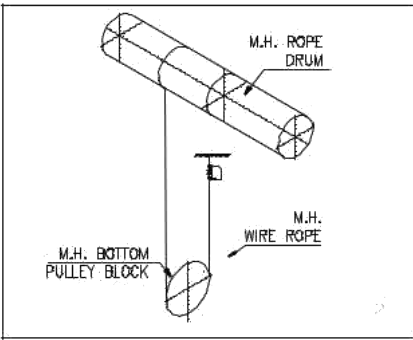


SALIENT FEATURES OF OVERLOAD LIMITER

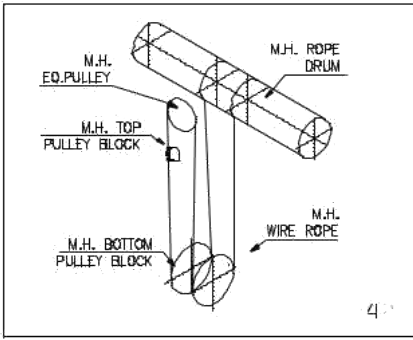
- Load limiter for overhead cranes and hoists
- Top Limit Switch can be used as service limit switch or installation of load limiter
- Quick and Easy Installation
- Does not require External Power
- Available for all Capacity Cranes
- Specialized limiters available for heavy duty Applications
- Can be supplied for slack Rope or Overload or Combination of both
- Available preset or easily calibrated on site
- Automatic reset after reduction of load
- Available with load Measuring and display unit as extra feature
- Protects against overloading of crane, supporting structure and protects against bottom block over winding and breakage of ropes.
- Prevents accidents ensuring safer working conditions & reduces maintenance costs
- Wire rope is provided as an additional safety from preventing fall of load limiter
- Overload limiter can be made available for a unit to be installed on a moving rope on request.

WHILE SELECTION OF OVERLOAD LIMITER

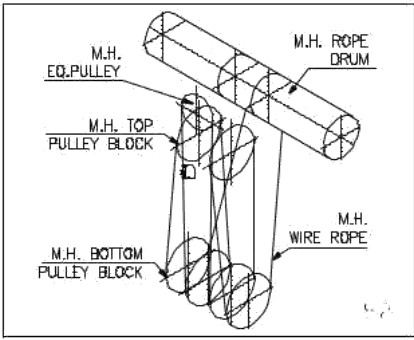
- Maximum crane load capacity in Tonnes
- Total Number of falls of wire rope
- Wire rope diameter in mm



M. H. Rope Reeving Diagram
2 Fall



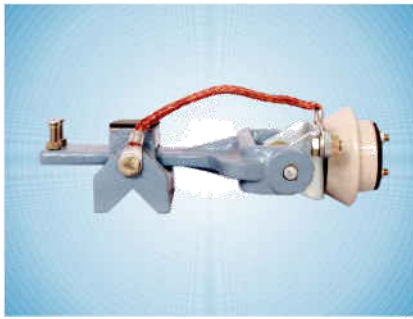
M. H. Rope Reeving Diagram
4 Fall



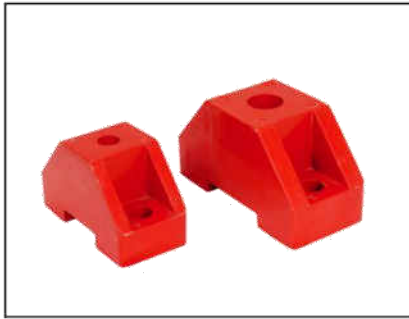
M. H. Rope Reeving Diagram
8 Fall

CRANE COMPONENTS

CURRENT COLLECTOR - ANGLE IRON



CRANE INSULATOR



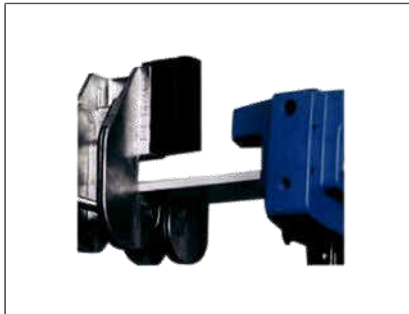
MOTORISED I BEAM TROLLEY



HYDRAULIC-RAIL-GRIPPER



I-BEAM-STOPPER



COPPER HEAD RAIL



HOOK PULLEY BLOCK



LIFTING CHAIN



GEAR BOX OIL PUMP



NOTES

- 1 HP = 0.746 KW

$$1 \text{ KW} = 1.34 \text{ HP}$$

- Current Calculation for Motors:

$$\text{For three phase drive: } I_{NK} = \frac{PK (kw) \times 1000}{\sqrt{3} \times v \times \cos \phi_n \times \eta}$$

PK = power in kilowatt

v = voltage in volt

η = efficiency (0.85)

$\cos \phi_n$ = power factor = 0.8

- Voltage Drop Calculation: Voltage Drop (Δu) = $\sqrt{3} \times IAA \times z \times l \times f_i$

$$\sqrt{3} = 1.73$$

IAA = Current in amp

l = Effective Length

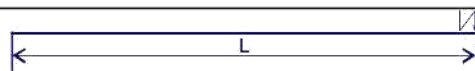
z = Impedance

f_i = Correction Factor (1.1 for 50° temp)

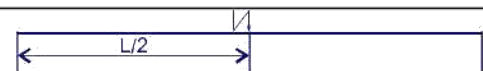
- Voltage drop in % = $\frac{(\Delta u \times 100)}{v}$ v = operating voltage

- Power Supply Position & Effective Length

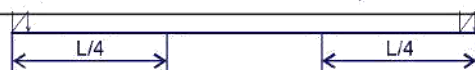
1) With End Feeder Clamp - $l = L$



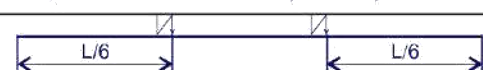
2) With Middle Feeder Clamp - $l = L/2$



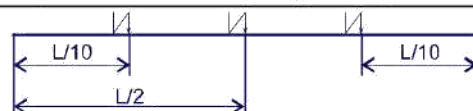
3) With Feed at both Ends - $l = L/4$



4) With Two Feeder Clamp - $l = L/6$



5) With Three Feeder Clamp - $l = L/10$



NOTES

<i>Kilowatt</i>	0.75	1.1	1.5	2.2	3	4	5.5	7.5	11	15	18.5
<i>Amperes</i>	1.8	2.5	3.3	4.7	6.4	8.4	11.3	14.8	21.2	29	35

<i>Kilowatt</i>	22	30	37	45	55	75	90	110	132	160
<i>Amperes</i>	41	55	68	81	99	135	160	196	235	282

Rail Selection

$$H = \frac{KW}{D}$$

D= Wheel diameter in mm

W= Wheel load in Kgs

H= Rail width in mm

K=Constant

- K=2 for Heavy duty crane.*
- K=1.75 for Medium duty crane.*
- K=1.58 for Light duty crane.*

OUR PRESTIGIOUS CUSTOMERS



SHREE CEMENT LIMITED



EISENMANN



WORLDWIDE

