



Transmission line Stringing Tools  
& Equipment Division

HIND GOLD AUTOMOTIVE COMPONENTS



# CLIENT LIST



**VISION** - Our Mission is **SAFETY FIRST**. Safety of Workmen , Conductors, OPGW, Working Items and Equipments and to enhance excellence in Product design as per Application and attain Cost Competitiveness through continual improvements in Production methods, Design and Quality Systems.

## INDEX

### Overhead transmission line construction equipments

Self Gripping Clamp	–	1
Bolted Come-along Clamp	–	3
Aerial roller	–	4
Head Board	–	10
Pilot Wire Stand & Bobbin	–	12
Reel Elevator	–	13
Snatch Block	–	14
Hanging pulley	–	16
Turn Table	–	17
Joint Protector	–	18
Suspension Platform	–	19
Swivel Joint	–	20
Pilot Wire Connector	–	20
Die Sets	–	21
Pulling Grips	–	22
Turn Buckle	–	23
Kitto Clamp	–	23
Flat/Patta Clamp	–	23
Spacer Trolley	–	24
Running Earth	–	25
Testing Facility	–	26
Automatic Clamp Usage Procedures	–	27

Continuous improvement and Compliance of revised safety and other Guidelines by conductor manufactures and other quality guidelines like IEEE etc. may result in change in product specifications for Longevity and Performance.

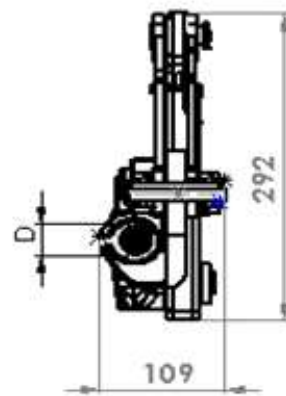
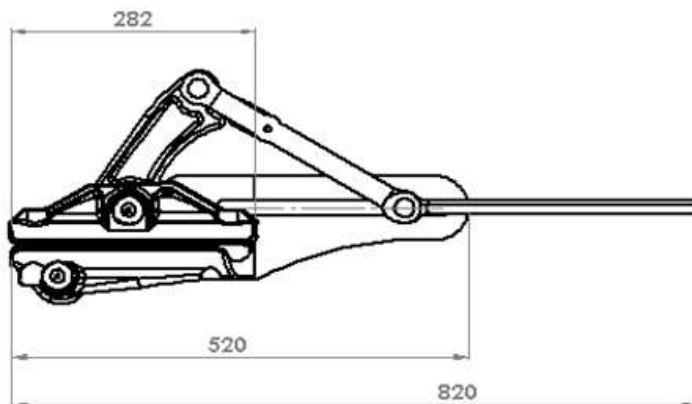
## SELF GRIPPING CLAMP

### HG.AC.1041

The self gripping clamps are made up of high tensile special alloy steel and are hot forged, heat treated, precision machined and zinc plated. They have a balanced ratio between weight and working load.

A complete range of interchangeable liners suitable for ACSR, AAAC, HTLS, anti-twisting rope, earthwire, copper conductors are available for all types of gripping applications. The liners are available in aluminium for aluminium/steel conductors and in bronze for copper conductors, pilot wire rope and steel earthwire from  $\varnothing$  10 mm-41 mm (special model up to  $\varnothing$  46 mm on request).

Our range of self-gripping clamps promise of high quality and comply with all international standards.



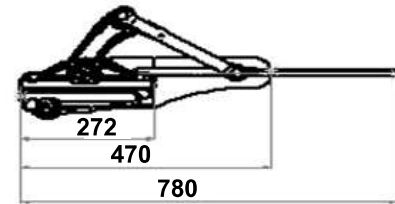
Maximum safety load	106 kN
Minimum breaking load	320 kN
Weight	17 kg



## SELF GRIPPING CLAMP

### HGAC 0832

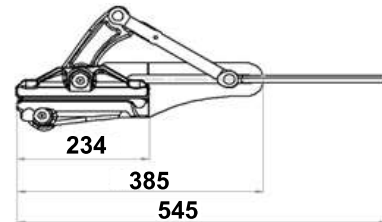
Maximum safety load	90 kN
Minimum breaking load	290 kN
Weight	13.5 kg



### HGAC 0623

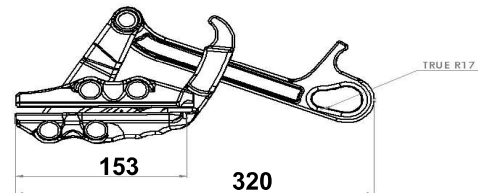
Clamp has Long jaw suitable for OPGW & conductors.

Maximum safety load	50 kN
Minimum breaking load	180 kN
Weight	7 kg



### HGAC 0718

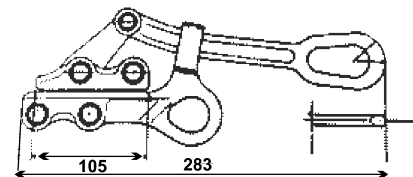
Maximum safety load	22 kN
Minimum breaking load	66 kN
Weight	2.5 kg



### \*HGAC 2.5-16

Clamps suitable for steel rope & copper conductors.

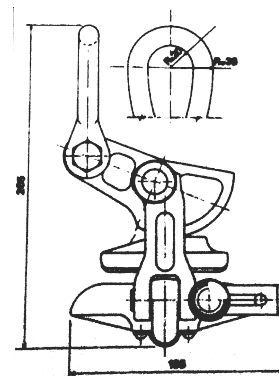
Maximum safety load	20 kN
Minimum breaking load	60 kN
Weight	1.5 kg



### HGAC 0738

Clamps suitable for lifting conductors in suspension.

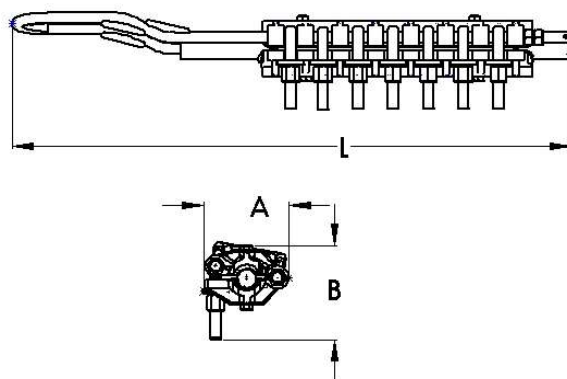
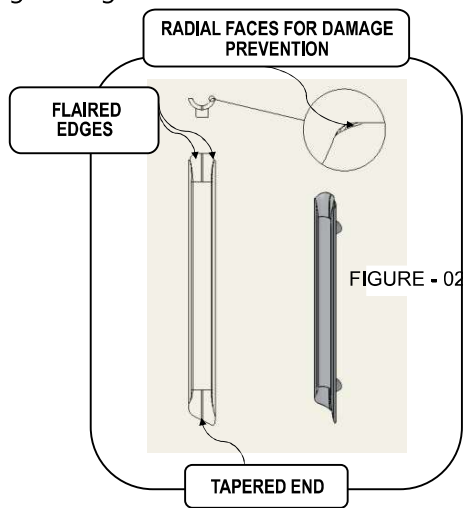
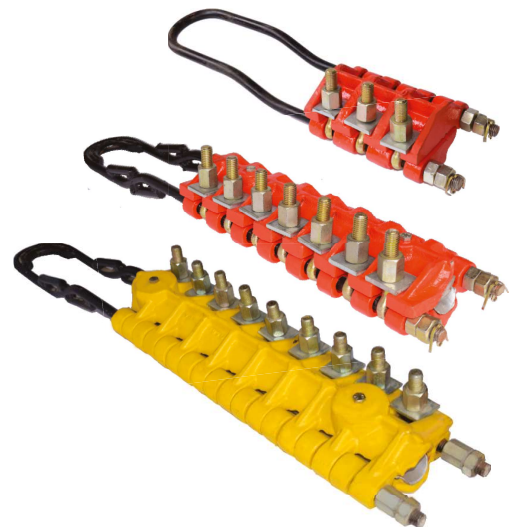
Maximum safety load	40 kN
Minimum breaking load	120 kN
Weight	5.5 kg



## BOLTED COME-ALONG CLAMPS

The bolted come-along clamps are fit for pulling and anchoring overhead conductors, earthwire and steel wire ropes. The clamps are assembled by various cast and forged alloy steel parts.

The grooves are fitted with gravity die casted aluminium alloy liners which are interchangeable according to the actual diameter of the conductor. A 2-3 mm side radius on liners is given to allow conductor expansion while tightening to avoid scratches on conductors.



Model No.	Eye Bolts	Dimensions A X B X L (mm)	For Steel Wire Rope Up To Diameter* (mm)	For Conductor Up To Diameter* (mm)	Working Load (kN)	Breaking Load (kN)	Weight (Kg)
HG.BC.03	03	130X120X508	10-16	-	15	45	8
HG.BC.04	04	130X120X558	12-20	-	17	50	9
HG.BC.07	07	130X146X861	-	20-33	27	80	17
HG.BC.08	08	140X149X910	-	31-36	33	100	20
HG.BC.09	09	150X150X920	-	35-41	40	120	23

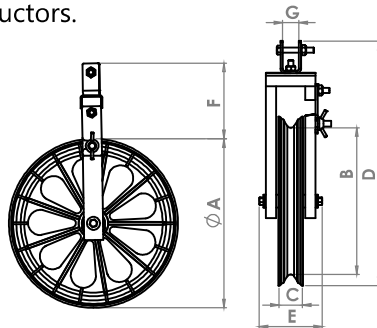
\*Note:

1. Please specify the diameter and the type of conductor/earthwire/steel rope, while placing an order.
2. Other liners apart from those compatible with the diameters of standard conductors and earthwires are also available upon request.

## AERIAL ROLLERS

### SINGLE SHEAVE AERIAL ROLLERS

The single sheave aerial roller is a gravity die casted aluminium alloy sheave, which is mounted on sealed ball bearings and groove lined with neoprene / natural rubber compound flap (Shore hardness 60-70 shore A with minimum thickness at bottom of the groove of 6.5 mm & tensile strength of 130-200 kg/cm<sup>2</sup>) for conductor protection. It is mounted on a fixed steel frame with standard plate attachment. It is fit for stringing overhead conductors.



MODEL NO.	DIMENSIONS(mm)							WORKING LOAD (kN)	BREAKING LOAD (kN)	WEIGHT (Kg)
	A	B	C	D	E	F	G			
HG.S.1.300	300	226	46	565	125	230	54	60	180	7
HG.S.1.300B	300	234	62	560	145	230	64	60	180	9
HG.S.1.400	400	300	65	710	149	310	64	60	180	11
HG.S.1.450	450	350	70	760	150	310	64	70	210	15
HG.S.1.612	612	512	68	927	240	355	64	90	270	21.5
HG.S.1.660	660	573	77	1015	246	355	64	90	270	34
HG.S.1.612	660	512	71	927	240	355	64	90	270	21.5
HG.S.1.710	710	610	68	1065	240	355	64	90	270	31
HG.S.1.760	760	650	95	1115	246	355	64	90	270	39
HG.S.1.775	775	650	82.5	1125	246	355	64	90	270	42
HG.S.1.800	800	657	98	1150	250	355	64	90	270	44
HG.S.1.820	820	710	90	1150	250	355	64	90	270	48
HG.S.1.915	915	800	95	1265	260	350	64	90	270	47
HG.S.1.1110	1110	1000	100	1460	300	350	64	90	270	51
HG.S.1.1350	1350	1200	130	1700	330	350	64	90	270	110

NOTE : Any special rollers of any diameters can be made on specific request.

#### Attachment Type :

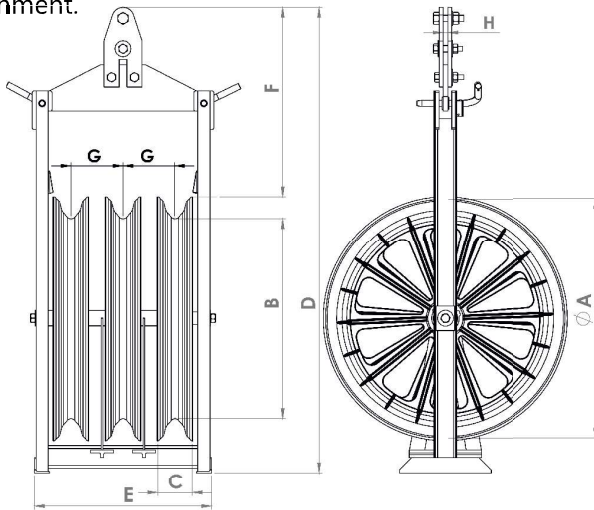
- ◆ Fix clevis
- ◆ Turn-able clevis
- ◆ Turn-able hook

#### On Request :

- ◆ Swivelling hook attachment .
- ◆ Interchangeable Aluminium / Nylon lining sectors for bottom groove .
- ◆ Protective case for transport and stocking.
- ◆ Special frame like stand mounted sheave.

### THREE SHEAVES AERIAL ROLLERS

The three sheave aerial rollers are gravity die casted aluminium alloy sheaves, which are mounted on sealed ball bearings and groove lined with neoprene/natural rubber flaps (Shore hardness 60-70 shore A with minimum thickness at bottom of the groove of 6.5 mm & tensile strength of 130-200 kg/cm<sup>2</sup>) for conductor protection. They are mounted on fixed steel frames with standard plate attachment.



MODEL NO.	DIMENSIONS(mm)								WORKING LOAD (kN)	BREAKING LOAD (kN)	WEIGHT (Kg)
	A	B	C	D	E	F	G	H			
HG.S.3.612	612	512	68	1330	500	625	175	30	50	155	112
HG.S.3.660	660	573	77	1400	580	625	175	30	50	155	112
HG.S.3.710	710	610	68	1430	580	625	175	30	55	165	122
HG.S.3.760	760	650	95	1430	580	625	175	30	55	165	122
HG.S.3.775	775	650	82.5	1430	580	625	175	30	55	165	122
HG.S.3.800	800	657	98	1450	580	625	175	30	60	180	135
HG.S.3.820	820	710	90	1430	580	625	175	30	60	180	155
HG.S.3.915	915	800	95	1540	580	625	175	30	60	180	165
HG.S.3.1110	1110	1000	100	1740	580	625	175	30	70	210	198
HG.S.3.1350	1350	1200	130	1830	620	625	175	30	70	210	220

NOTE : Any special rollers of any diameters can be made on specific request.

#### Attachment Type :

- ◆ Fix clevis
- ◆ Turn able clevis

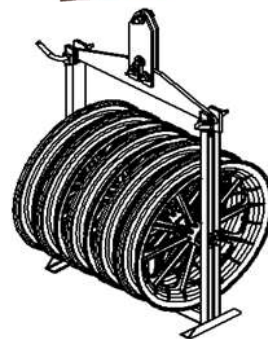
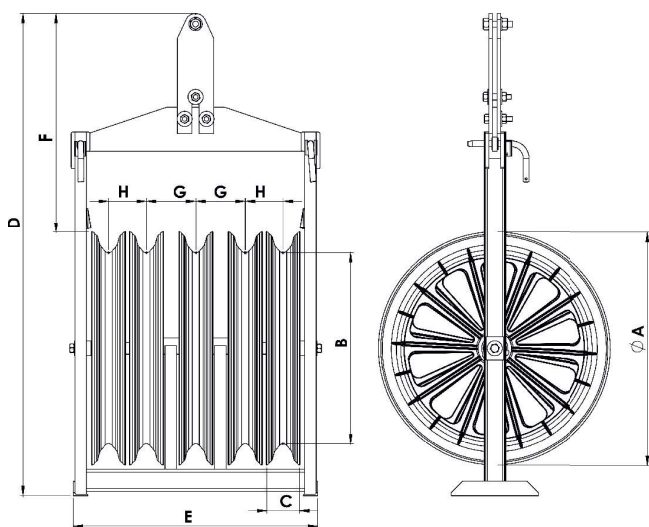
#### On Request :

- ◆ Swivelling hook attachment .
- ◆ Interchangeable Aluminium / Nylon lining sectors for bottom grooves .
- ◆ Protective case for transport and stocking.



## FIVE SHEAVES AERIAL ROLLERS

The five sheave aerial rollers are gravity die casted aluminium alloy sheaves, which are mounted on sealed ball bearings and groove lined with neoprene/natural rubber flaps (Shore hardness 60-70 shore A with minimum thickness at bottom of the groove of 6.5 mm & tensile strength of 130-200 kg/cm<sup>2</sup>) for conductor protection. They are mounted on fixed steel frames with standard plate attachment.



MODEL NO.	DIMENSIONS(mm)								WORKING LOAD (kN)	BREAKING LOAD (kN)	WEIGHT (Kg)
	A	B	C	D	E	F	G	H			
HG.S.5.612	612	512	68	1330	720	645	140	100	50	155	155
HG.S.5.660	660	573	77	1400	720	645	140	100	50	155	160
HG.S.5.710	710	610	68	1430	800	645	145	130	55	165	165
HG.S.5.760	760	650	95	1430	800	645	145	130	55	165	170
HG.S.5.775	775	650	82.5	1430	800	645	145	130	55	165	190
HG.S.5.800	800	657	98	1450	800	645	170	130	60	180	225
HG.S.5.915	915	800	95	1540	878	645	175	130	60	180	250
HG.S.5.1110	1110	1000	100	1740	878	645	180	130	70	210	300
HG.S.5.1350	1350	1200	130	1830	890	645	180	130	70	210	350

NOTE : Any special rollers of any diameters can be made on specific request.

### Attachment Type :

- ◆ Fix clevis
- ◆ Turn able clevis

### On Request :

- ◆ Swivelling Hook Attachment .
- ◆ Interchangeable Aluminium / Nylon lining sectors for bottom groove.
- ◆ Protective case for transport and stocking.



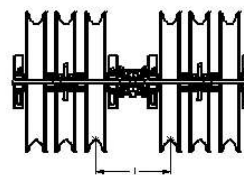
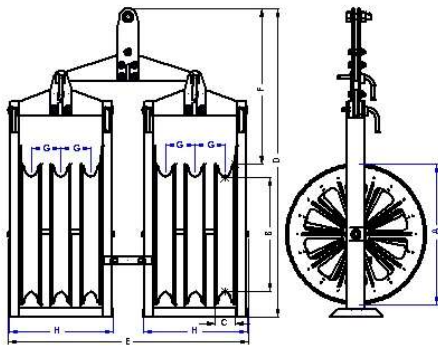
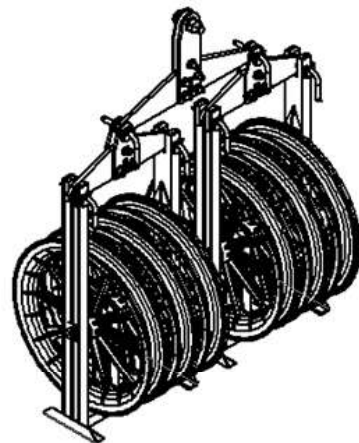
### AERIAL ROLLER FOR HELICOPTER APPLICATION

For Helicopter and aerial Application special CAM arrangement makes it easy to insert the pulling rope automatically into the pulling rope sheave. Other customized arrangement like the ball bearing hinge mechanism can be provided.

AVAILABLE IN ALL DIAMETERS AND MOUNTING ARRANGEMENTS AS PER CUSTOMERS/CONDUCTOR PAYING OUT REQUIREMENTS.

### SIX SHEAVE AERIAL ROLLER

The six sheave aerial rollers are gravity die casted aluminium alloy sheaves, which are mounted on sealed ball bearings and groove lined with neoprene/natural rubber flaps (Shore hardness 60-70 shore A with minimum thickness at bottom of the groove of 6.5 mm & tensile strength of 130-200 kg/cm<sup>2</sup>) for conductor protection. They are mounted on fixed steel frames (3+3) with standard plate attachment. They are fit for stringing 6 bundled conductors using 2 pilot



Attachment Type :  
Fix clevis  
Turn able clevis

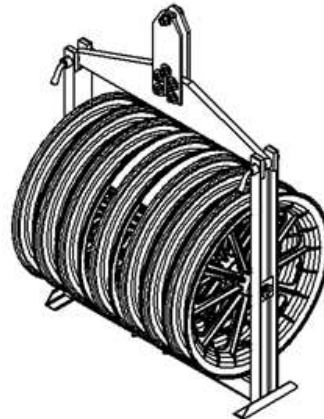
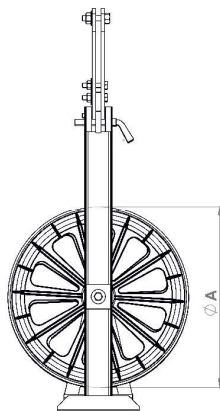
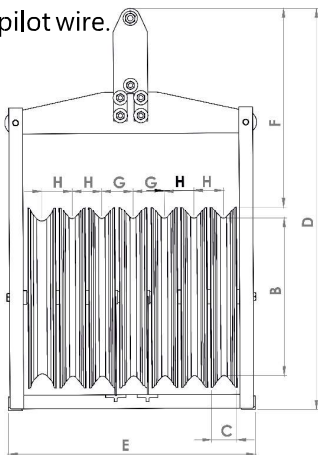
MODEL NO.	DIMENSIONS(mm)									WORKING LOAD (kN)	BREAKING LOAD (kN)	WEIGHT (Kg)
	A	B	C	D	E	F	G	H	I			
HG.S.6.66	660	573	77	1520	1200	800	170	500	400	40	120	225
HG.S.6.76	760	600	97	1530	1250	850	170	500	410	55	165	245
HG.S.6.80	800	657	98	1766	1369	891	170	590	424	60	180	290
HG.S.6.89	890	766	117	1630	1410	920	190	620	440	65	195	310

NOTE : Any special rollers of any diameters can be made on specific request.

## SEVEN SHEAVE AERIAL ROLLER

The seven sheave aerial rollers are gravity die casted aluminium alloy sheaves, which are mounted on sealed ball bearings and groove lined with neoprene/natural rubber flaps (Shore hardness 60-70 shore A with minimum thickness at bottom of the groove of 6.5 mm & tensile strength of 130-200 kg/cm<sup>2</sup>) for conductor protection. They are mounted on fixed steel frames with standard plate attachment.

They are fit for stringing 6 bundled conductors, having a central roller made of reinforced aluminium with 12 ribs, to increase the strength of the roller for carrying the load of the conductors and pilot wire.



MODEL NO.	DIMENSIONS(mm)								WORKING LOAD (kN)	BREAKING LOAD (kN)	WEIGHT (Kg)
	A	B	C	D	E	F	G	H			
HG.S.7.612	612	512	68	1330	895	645	114	100	50	155	170
HG.S.7.660	660	573	77	1400	895	45	114	108	50	155	170
HG.S.7.710	710	610	68	1430	1060	645	145	130	55	165	165
HG.S.7.760	760	650	95	1430	1060	645	145	130	55	165	170
HG.S.7.775	775	650	82.5	1430	1060	645	145	130	55	165	190
HG.S.7.800	800	657	98	1450	1100	645	170	130	60	180	250
HG.S.7.915	915	800	95	1540	1100	645	175	130	60	180	260
HG.S.7.1110	1110	1000	100	1740	1100	645	180	130	70	210	330
HG.S.7.1350	1350	1200	130	1830	1200	645	180	130	70	210	400

NOTE : Any special rollers of any diameters can be made on specific request.

### Attachment Type :

- ◆ Fix clevis
- ◆ Turn-able clevis

### On Request :

- ◆ Swivelling Hook Attachment .
- ◆ Interchangeable Aluminium / Nylon lining sectors for bottom groove.

## TANDEM ROLLER

Special Tandem Rollers are built with a steel frame, connecting two standard sheaves. Tandem placement of sheaves increases the working load of the frame and bending arc of conductors, distributing the weight on both the sheaves.



MODEL NO.	REFER SINGLE SHEAVE MODELS	SHEAVE DIA(mm) A & Ø	SHEAVE GROOVE(mm) C	WORKING LOAD (kN)	BREAKING LOAD (kN)	WEIGHT (Kg)
HG.S.T.15	HG.S.1.15	150	49	12	36	16
HG.S.T.30	HG.S.1.30	300	46	36	108	21
HG.S.T.30.B	HG.S.1.30.B	300	62	36	108	22
HG.S.T.45	HG.S.1.45	450	70	52	156	33
HG.S.T.66	HG.S.1.66	660	77	70	210	98
HG.S.T.76	HG.S.1.76	760	95	70	210	102
HG.S.T.80	HG.S.1.80	800	98	80	240	114
HG.S.T.89	G.SH.89	890	98	90	270	120

NOTE : Any special rollers of any diameters can be made on specific request.

### Attachment Type :

- ◆ Fix clevis
- ◆ Turn-able clevis

### On Request :

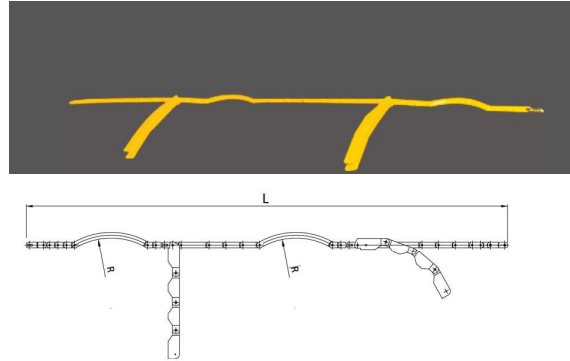
- ◆ Swivelling Hook Attachment .
- ◆ Interchangeable Aluminium / Nylon lining sectors for bottom groove.
- ◆ Protective case for transport and stocking.



## HEAD BOARDS

### OPTICAL GROUND-WIRE (OPGW) ANTI-TWISTING DEVICE

This device is specially designed to connect the pulling rope with an OPGW. It is composed of several jointed rods and two arched rods (to facilitate the passage on pulley) with counter weight in order to prevent torsion of OPGW



DIMENSIONS (mm)	WORKING LOAD (kN)	BREAKING LOAD (kN)	WEIGHT (Kg)	OPGW DIA. (mm)
A (Length)				
3900	10	30	60	9-17
4300	10	30	63	17-24

\* R = radius requires to be changed as per the roller dia.

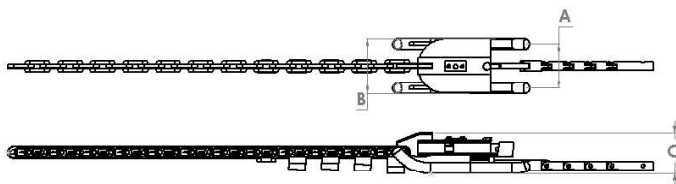
NOTE :Please specify the dia. of OPGW, groove diameter and the width of pulley block to be used, while placing an order.

### HEADBOARDS FOR SHEAVES

The headboards are designed in such a way that they can self-adjust to a correct position while passing over aerial rollers, enabling the conductors to pass through the grooves of the sheaves. The hinged tail assembly, made up of forged links (UT tested), stabilizes the headboard against lateral lifting due to wind pressure. The load carrying members like balancing pulleys, having roller bearings for high load bearing capacity, are made of heat treated alloy steel, which makes

### 2-3 BUNDLED CONDUCTOR HEADBOARDS

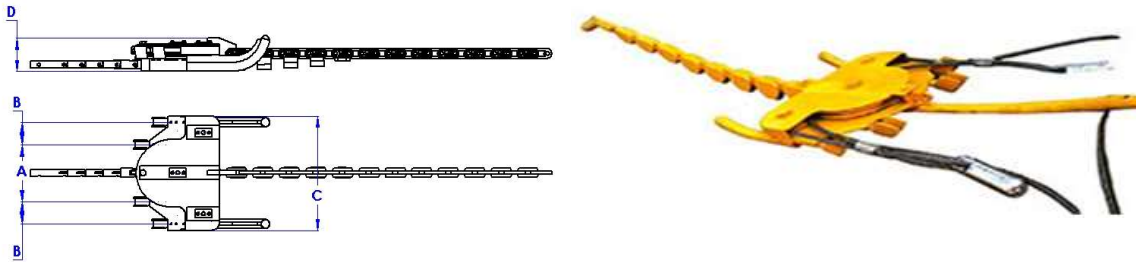
It is specially designed to connect the pulling rope with 2 or 3 bundled conductors.



MODEL NO.	DIMENSIONS (mm)			WORKING LOAD (kN)	BREAKING LOAD (kN)	WEIGHT (Kg)
	A	B	C			
HG.HB	216	261	193	93	279	89

### 4-5 BUNDLED CONDUCTOR HEADBOARDS

It is specially designed to connect the pulling rope with 4 or 5 bundled conductors.



MODEL NO.	DIMENSIONS (mm)				WORKING LOAD (kN)	BREAKING LOAD (kN)	WEIGHT (Kg)
	A	B	C	D			
HG.HB.05	340	130	675	194	93	279	118

### 6-7 BUNDLED CONDUCTOR HEADBOARD

It is specially designed to connect the pulling rope with 6 or 7 bundled conductors.



MODEL NO.	DIMENSIONS (mm)				WORKING LOAD (kN)	BREAKING LOAD (kN)	WEIGHT (Kg)
	A	B	C	D			
HG.HB.07	340	130	930	200	150	450	156

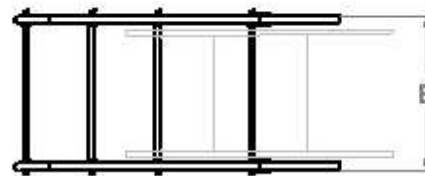
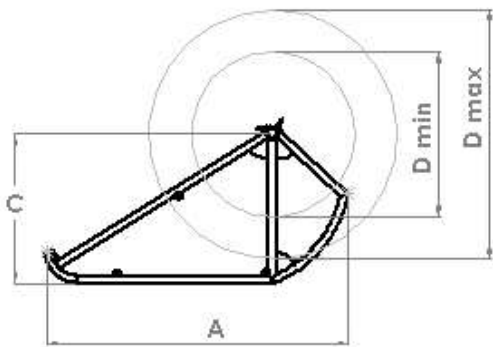
## PILOT WIRE REEL STAND & BOBBIN

### PILOT WIRE REEL STAND

It is made of welded steel with a protective coating.

Options:

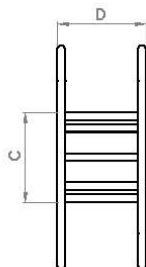
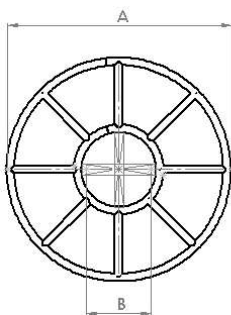
- Detachable frame
- Disc brakes



MODEL NO.	DIMENSIONS (mm)					WORKING LOAD (kN)	BREAKING LOAD (kN)	WEIGHT (Kg)
	A	B	C	D Min.	D Min.			
HG.RS	1980	950	980	700	1400	20	60	72

### PILOT WIRE BOBBIN

The reels are made of welded steel with a protective coating. Each reel is provided with two cross supports and connecting bolts.



MODEL NO.	DIMENSIONS (mm)				WEIGHT (Kg)
	A	B	C	D	
HG.WR.11	1100	420	570	550	60
HG.WR.14	1400	420	570	550	80

## REEL ELEVATOR

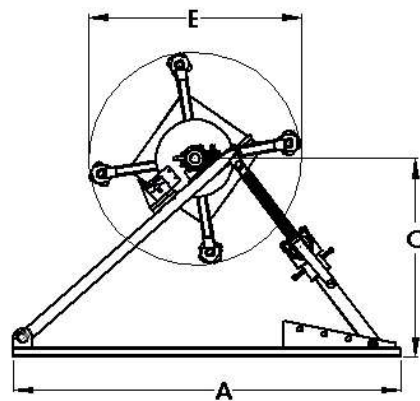
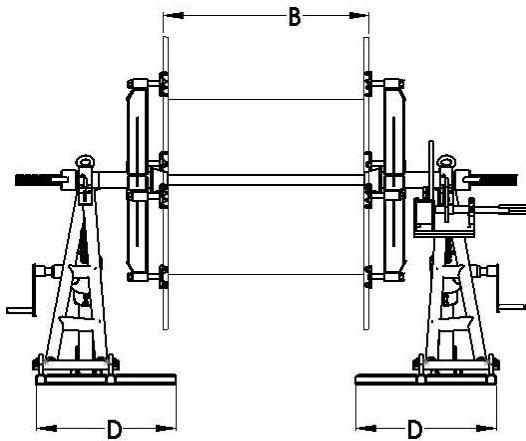
They are suitable for paying out conductor/earth wire/OPGW cables.

They are made up of welded steel with a protective coating. Each reel elevator is provided with supports like fixed wedges for clamping the wooden/steel conductor drum and mechanical disk braking system for controlling the rotational speed of the drum while paying out the conductor. The frame is completely detachable, enabling easy transportation.



### Optional devices

- Additional disc brake (2 brakes in total)
- Hydraulic Jack could be provided in lieu of



MODEL NO.	DIMENSIONS (mm)					WORKING LOAD (kN)	BREAKING LOAD (kN)	WEIGHT (Kg)	
	A	B	C (min.)	C (max.)	D				
HG.RE.05T	1800	1186	677	1087	647	1194	49	147	340
HG.RE.08T	1800	1350	720	1180	716	1200	79	237	410
HG.RE.15T	2000	1350	720	1180	716	2200	98	294	483

\* Note: Reel Elevator, suitable for conductor drum with a larger diameter can also be made on specific request.

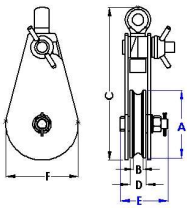
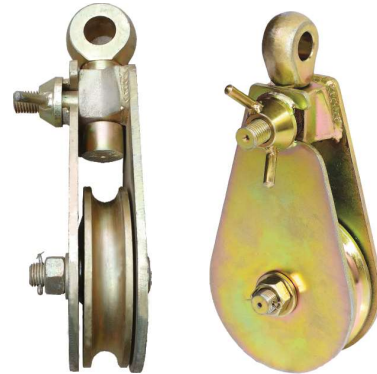


## SNATCH BLOCKS

### OPEN TYPE

The service snatch block is made of a galvanized steel sheave mounted on double ball bearings. The sheave is flame hardened to 35 HRC, which protects the groove from erosion due to a regular usage of wire ropes, considerably extending the life of the pulley. The sheave is mounted on a galvanized steel frame with an openable side and a standard eye hook attachment.

Note : Special models are available upon request.

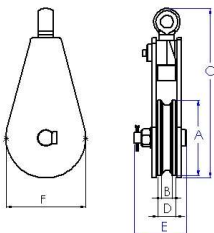


MODEL NO.	DIMENSIONS (mm)						WORKING LOAD (kN)	BREAKING LOAD (kN)	WEIGHT (Kg)
	A	B	C	D	E	F			
*HG.P.O.5T	127	24	294	32	91	137	49	196	6
HG.P.O.5T	150	24	339	36	105	160	49	196	8
HG.P.O.10T	165	25	364	39	105	175	98	392	11

### CLOSE TYPE

The service snatch block is made of a galvanized steel sheave mounted on double ball bearings. The sheave is flame hardened to 35 HRC, which protects the groove from erosion due to a regular usage of wire ropes, considerably extending the life of the pulley. The sheave is mounted on a galvanized steel frame with a standard eye hook attachment.

Note : Special models are available upon request.

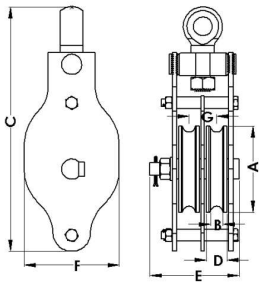
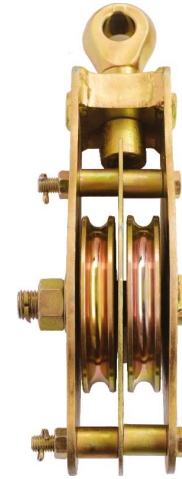


MODEL NO.	DIMENSIONS (mm)						WORKING LOAD (kN)	BREAKING LOAD (kN)	WEIGHT (Kg)
	A	B	C	D	E	F			
*HG.P.C.5T	127	24	294	32	91	137	49	196	6
HG.P.C.5T	150	21	339	36	105	160	49	196	8.2
HG.P.C.10T	165	25	364	39	105	175	98	392	10.8

## DOUBLE SHEAVE

The service snatch blocks are made of galvanized steel sheaves mounted on double ball bearings. The sheaves are flame hardened to 35 HRC, which protects the groove from erosion due to a regular usage of wire ropes, considerably extending the life of the pulley. The sheaves are mounted on a galvanized steel frame with a standard eye hook attachment.

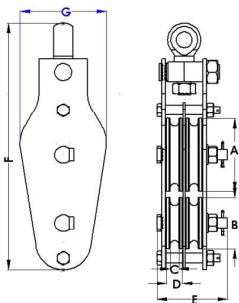
Note: Special models are available upon request.



MODEL NO.	DIMENSIONS (mm)							WORKING LOAD (kN)	BREAKING LOAD (kN)	WEIGHT (Kg)
	A	B	C	D	E	F	G			
HG.P.D.5T.	127	14	375	23	127	144	33	49	196	09
HG.P.D.9.5T.	150	22	425	36	155	165	48	98	392	16

## FOUR SHEAVE

The service snatch blocks are made of galvanized steel sheaves mounted on double ball bearings. The sheaves are flame hardened to 35 HRC, which protects the groove from erosion due to a regular usage of wire ropes, considerably extending the life of the pulley. The sheaves are mounted on a galvanized steel frame with a standard eye hook attachment.



MODEL NO.	DIMENSIONS (mm)							WORKING LOAD (kN)	BREAKING LOAD (kN)	WEIGHT (Kg)
	A	B	C	D	E	F	G			
*HG.P.F.LW.5T	127	96	16	23	116	463	142	49	196	12.6
HG.P.F.9.5T	150	106	14	20	103	508	177	98	392	22

\*light weight pulley on single ball bearings

NOTE : Application of Eye attachment with D Shackle available for all snatch blocks mentioned above.

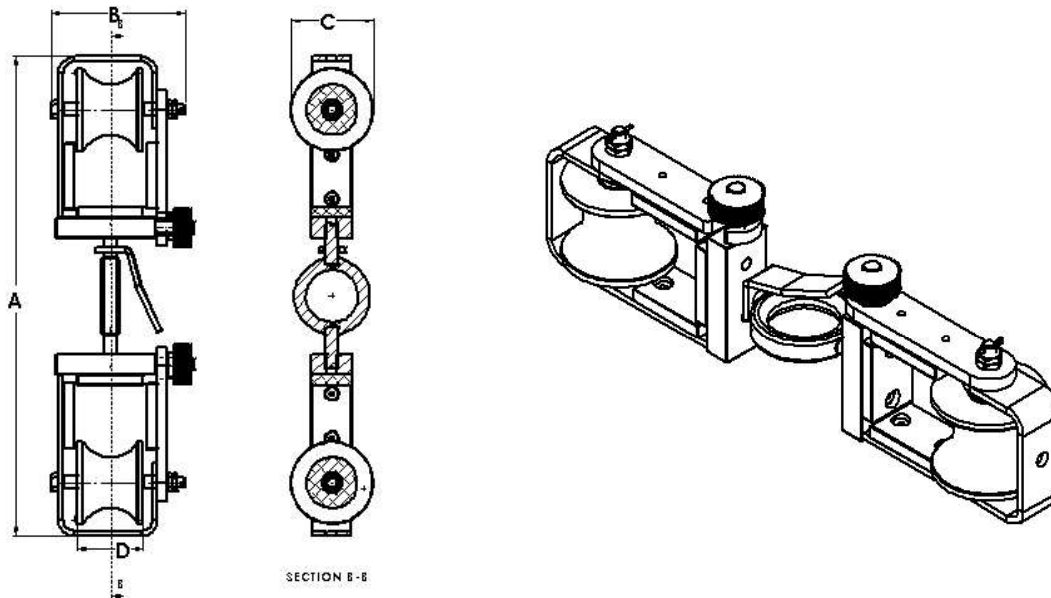


## HANGING PULLEY

The cradle block is specially designed for replacing the existing ground wire (GW) with optical grounding wire (OPGW) cables.

It is made of two galvanized steel half-frames linked by a ring with a swivel plate.

Each half frame consist of one grooved aluminium wheel mounted on ball bearings, three nylon plates to protect the OPGW cables, and easy to open sides.

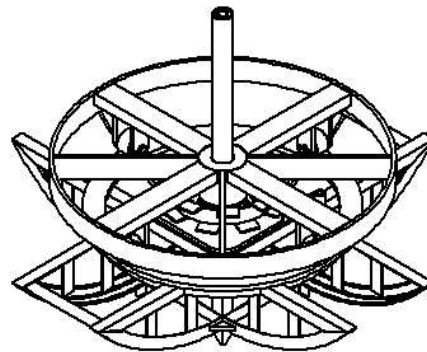
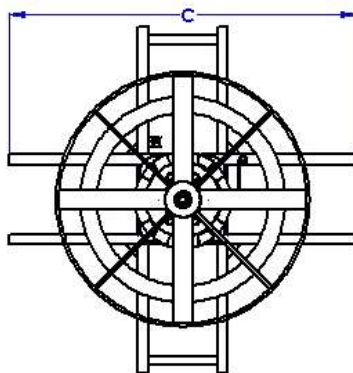
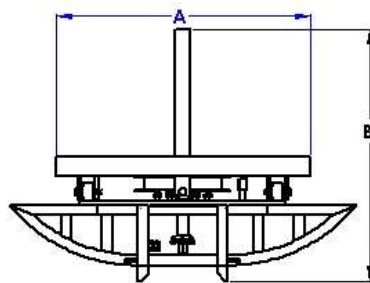


MODEL NO.	DIMENSIONS (mm)			WORKING LOAD (kN)	BREAKING LOAD (kN)	WEIGHT (Kg)
	A	B	C			
HG.HP.0AL	377	106	65	02	06	2.4

## TURN TABLE

Turn Tables are made up of welded steel with a protective coating. They are suitable for placing the conductor drum in an upright position for a smooth release of the conductor, while paying out.

Turn Table braking arrangement is provided.



MODEL NO.	DIMENSIONS (mm)			WORKING LOAD (kN)	BREAKING LOAD (kN)	WEIGHT (Kg)
	A	B	C			
HG.TT.05T	990	982	193	49	147	190
HG.TT.07T	1011	261	193	74	222	260
HG.TT.10T	1046	261	193	98	294	410