



Load Carrier Pipe Conveyor Roller Idlers

Technical Specifications

Conforming IS 8598, 9295



Move Load Without Halt!

Protección contra el polvo Ruedas guía rodillos del Acero

الارول ال صلب ال معاط لون المحممة ال غ بار

Protégé contre la poussière Rouleaux en acier à roulettes

HIC
UNIVERSAL
True Performance Rubbers





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Specification of Steel Roller Idlers

Classified under HS Code 8431



HIC Universal Conveyor roller idlers ensures achievement of operational success of belt conveyors, in a way, the shell is made from Mild Steel ERW black steel tube superseding IS: 9295 & IS : 1239, pressed steel housing from CRCA sheet, shaft of bright steel bar, sealing system consisting of (back-seal, double labyrinth, moulded dust cover, a rain cap), single piece fabricated steel idler frame and rollers fitted with seize resistant ball bearings and supersedes IS 8598, IS 9295, BS 970- En3B, CEMA- B, CEMA - C series quality standards.

About HIC

HIC International Co Inc, formed in 1988 manufacturing industrial **steel and rubber** products **ISO 9001** certified producer of **Conveyor belt roller idler, Power Transmission belts coupling pulley, Hydraulic hose valve, Safety rubber sheet mat** quality exporters of **HIC Universal brand** to industrial traders distributors of USA, Australia, UAE, Singapore, China, South Africa, UK, Germany, Taiwan having manufacturing factories in Delhi and Ghaziabad UP of India.

Total Quality Management principles are followed and True Performance is thus assured.

Why HIC Universal Conveyor Roller Idlers?



Dust Proof

Multi-Labyrinth Seals Ensures High Bearing Life

Corrosion Resistant

CRCA Housing Ensures Top Durability

Accurate Rotating

MIG Welded Shell

CNC Machined

Slotted Shaft

Minimises Bearing Misalignment

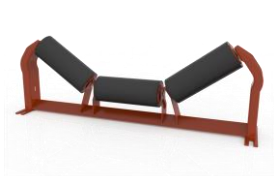
& Lowest Maintenance

Belt conveying system load carrying movement gets fulfilled using conveyor idler rollers made in India by HIC Universal.

HIC Universal pipe conveyor rollers and conveyor idlers with frame are Original Choice by consultants and conveyor system bulk materials handling in India, USA, China, Turkey, Germany, Argentina, Australia, Poland, Romania, Spain, Guatemala, Kazakhstan, Russia, South Africa, Namibia, Libya, Antigua, Panama, Taiwan, Myanmar, Philippines and other Asian countries.

RANGE of Idlers

Belt Conveyor Load Carrier HIC Pipe Roller



Carrying Idler with frame



Impact Idler with Rubber Rings



Return Idler



Self-Aligning Idler

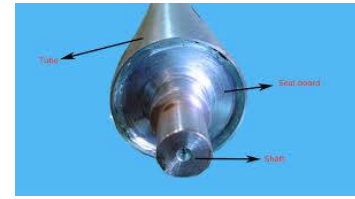


Transition Idler

- ❖ Carrying Idler (3/5 rolls) Belt Troughing up to 2400mm BW
- ❖ Impact Idler with rubber rings Flat Belt Conveyor
- ❖ Return Idler (1 roll) for Belt Returning
- ❖ Self-Aligning Idler Carrying and Return
- ❖ Transition Idler
- ❖ Tracking Idler Roller as per specific requirements
- ❖ Roller Idler Frame Bracket

Sizes of Roller Idler Manufactured

HIC Conveyor Carrying Pipe Diameter



Pipe roller conveyor idlers outer diameter is selected based on [conveyor carrying capacity](#) Tons per hour and corresponding belt width used.

Conveyor rollers standard pipe diameters MM of 76, 89, 101, 114, 127, 139, 152, 159, 165 mm sizes manufactured out of steel tube Class C, B, A of different thicknesses.

Idler [diameter of 76, 89 mm sizes](#) are used for conveyor-belt width up to 500 mm breadth belting

Idler [diameter of 89, 114 mm sizes](#) are used for conveyor-belt width up to 750 mm breadth belting

Idler [diameter of 114, 139 mm sizes](#) are used for conveyor-belt width up to 1000 mm breadth belting

Idler [diameter of 139, 152 mm sizes](#) are used for conveyor-belt width up to 1200 mm breadth belting

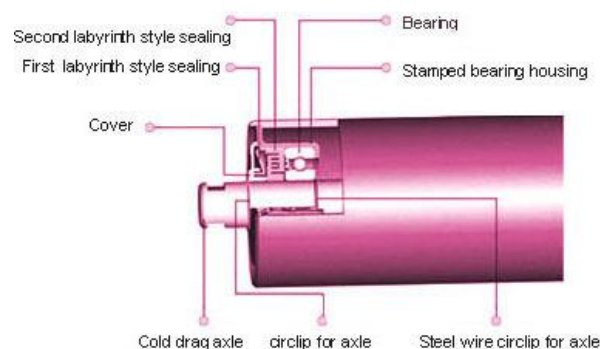
Idler [diameter of 152, 165, 195 mm sizes](#) are used for conveyor-belt width 1400 mm and above belt width

Impact roller conveyor rubber-rings or discs of 32 or 50 mm thick diameter OD sizes MM of 114, 140, 165, 190 with idler shell size of 76, 89, 114, 139 mm respectively used at loading point.

However, idlers diameter selection has to be made on overall conveyor-system design calculating various other load and operational speed factors as well.

Idlers manufacturing in other diameter size also undertaken provided quantities are substantial, as pipe have to be drawn out that may take 4 weeks extra more delivery time than regular sizes.

Pipe conveyor-idlers also manufactured [as per Drawings](#) specifications.



Roller Length

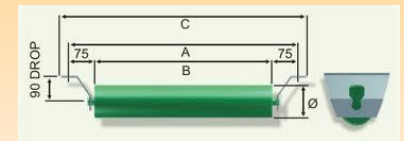
Single and Three Roll Produced by HIC



Single roll flat carry idler produced for conveyor-belt width MM of 500, 600, 650, 800, 1000, 1200, 1400, 1600, 1800, 2000 mm BW in idler shell length MM of 600, 700, 750, 950, 1150, 1400, 1600, 1800, 2000, 2200 mm L long roller length respectively.

3 roll off set trough idler shell length MM of 200, 235, 250, 315, 380, 465, 530, 600, 670, 750 mm L for belting width MM of 500, 600, 650, 800, 1000, 1200, 1400, 1600, 1800, 2000 mm BW.

Conveyor carrying roller with frame also produced made out of quality MS Angle, Flat and Channel.



Single roll flat return idler length MM of 600, 700, 750, 950, 1150, 1400, 1600, 1800, 2000, 2200 mm for conveyor-belt width as stated.

Rubber disc return idlers length as stated for reliable conveying ensuring tight package in the outer areas of conveyors rubber-belt.

Return idlers with rubber lagging of 5mm or 10mm thickness in length as desired, functions as a counter idler for belt cleaner. Idler rollers in [non-standard sizes](#) also [produced](#).

Bearing Size and Shaft Diameter

Seize Resistant, Spindle, Notching Ends of Idlers Produced by HIC

Bearing sizes in idlers of 6204zz, 6205, 6206 or 6306, 6207, 6208 or 6308 seize resistant type respectively of reputed company SKF or FAG or equivalent as per EN8 steel spindle diameter or shaft thickness 20, 25, 30, 35, 40 MM used in conveyor-idler with nylon bushing sealed to prevent dust.



Idler [shaft diameter sizes](#) MM of 20, 25, 30, 35, 40 mm steel spindle selected based on bearing life-time calculated on basis of idler load and idler speed.

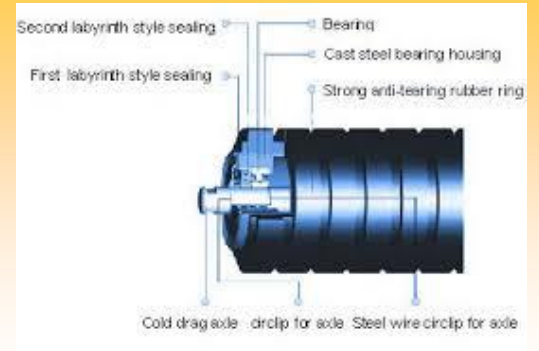


Notching dimensions on idler spindle for 20mm, 25, 30, 40mm of 9 x 14 mm, 12 x 18, 12 x 22, 12 x 32 mm sizes respectively are kept as standard shaft end dimensions for roller idlers. Idlers shaft end dimensions any specific, needs to be stated while rollers idlers ordering.

Sealing System

Multi-labyrinth Type HIC Conveyor Idler Rollers Made

Brilliant sealing system to keep idler rollers **fully dust protected** that are packed with high lithium grease having 0.025 friction factor multi-labyrinth type **nyloplast** seals with moulded dust cover or adpoter and back seal cup to prevent from rain-water.



Surface Treatment

Primer, Epoxy, Rubber Coating on HIC Rollers Applied

Primer paint as standard finishing on idler rollers, good resistant to corrosion, wear and sticking.

Epoxy coating on idlers as surface treatment also carried used in conveyor-installations demanding much higher resistance to corrosion and excess wear than primer like monsoon areas, dusty locations.

Rubber coating on idlers that are excellent corrosion resistant, wear resistant, chemicals resistant, sticking resistant thereby increasing life span of conveyors rollers giving trouble-free performance.



Order Quantity Minimums

Numbers of Carrying, Return and Impact Rollers with Rubber Rings of HIC Conveyor Idlers Supplied

Conveyor rollers **Minimum** order quantity of **50 numbers** in one lot.

Packed in sea-worthy jute or HDPE bags. Also, packed in wooden cases on specific orders.



Carrying and Off Set Troughing Idlers

Conveyor System Roller

Carrying idlers are used by conveyor-system manufacturers to carry materials and that conveys load of bulk material on conveyor-belt successfully.



Off set troughing idlers are used by material handling equipment manufacturers, used on reversing conveyors to support the belt along the conveyors structure.

Troughing idler manufactured types include :

Single Roll flat carrying idler, Picking idlers, Conveyors carrying roller with frame, Tapered rollers, 3 roll off set troughing idler, Rubber-coating idlers.

Impact and Garland Idlers

Tunnel Conveyor Roller

Impact idlers fitted with concentric rubber rings are used by bulk material handling companies conveyor manufacturers at bottom of impact point of troughed belt over full loading length at spacing of 350 mm gap to give cushioning effect to prevent belting damage.



Garland rollers used by tunnel conveyors manufacturers for using at very high speed conveying belt speeds up to 60 m/min and high capacities installed onto a roller frame in tunneling, rock excavation, continuous mining bulk materials handling flow-formed roller design without welding being lighter in weight and energy efficient.

Impact idler manufactured types include:

Impact picking idler, Feeding idler, Frames for roller mounting, Garland idlers.

Flat and V Return Idlers

Mining Conveyor Equipment Roller

Flat Return idlers are used by conveyor equipment manufacturers for advantageous reason of keeping conveyor belt centered, always reacting to overcome spillage of materials conveyed and to help reducing belt edge damage.



V-Return idler are used by underground mining equipment manufacturers for advantageous reason of facilitating excessive force accommodation faced with high belt widths and heavy loads in mining conveyor application where two separate tapered rolls are mounted onto the pivot mechanism that can be replaced individually at the time of wear.



Needle thrust and tapered roller bearings are used in vee-return conveyor belt tracking idler for high speed operations and extended bearing life.

Return idlers manufactured types include: Rubber disc return idler, Single roll flat return idler, Vee return idlers.

Retractable Idlers

Quarry Crusher Equipment Roller

Retractable idlers are used by quarry crusher equipment manufacturers *for advantageous* feature of easy replacement of the closely-spaced idlers under loading and skirt areas safely.



Self-Aligning Idlers

Metallurgy Conveyor Machinery Roller

Self-Aligning idlers are used by metallurgy conveyor machinery manufacturers *that helps* adjust the conveyor belt of its own in the right position when it runs to one side during conveying operation in metallurgy and steel thus re-aligns the belt in event of misalignment automatically.



Self-align idlers manufactured *types* include :

Friction self-aligning idler, self-aligning rollers, self centring conveyor idler roller.

Training Idlers

Power Generation Conveyor Equipment Roller

Training idlers are used by power generation equipment manufacturers that helps keep conveyor belt centripetal automatically and for side-support the load of belt conveyor in power plant, cement and mines materials handling so as to adjust the belt when it gets pulled to one side.



Training idler should be used at least 1 number on every conveyor under 10 m in length, but, should not be mounted in belt transitions area.

Self-Aligning Training idler are used by conveyor equipment manufacturers that helps overcome persistent creep problem that easily replace troughing or return idlers, which should be used up to say 15 meter from any terminal or bend pulley.

Training idlers manufactured types include:

3 Roll trough training idler, 2 roll v return training idler.

Transition Idlers

Conveyor Component System Rollers

Transition idlers are used by conveyor system component manufacturers that helps overcome belt edges damage due to quick transition from a flat to a trough shape installed at either end of conveyor adjacent to head drum and tail pulley on 35 and 45 degree troughing idlers, and, strictly not used with 20 degree picking idlers.



Transition idler roller manufactured types include:

Adjustable in-line transition idler, Guide rollers.

Pipe Diameter of Roller Idler

Size Choice as per Belt Width and Speed: Technical Data

Belt Width mm	Pipe Diameter		
	For speed < 2 m/s φ roller mm	2-4 m/s φ roller mm	>4 m/s φ roller mm
500	89	89	
650	89	89	114
800	89 114	89 114 139	139
1000	114 139	114 139	139 168
1200	114 139	114 139 168	139 168
1400	139 168	139 168	139 168
1600	139 168	139 168 194	139 168 194
1800	168	168 194	168 194
2000	168 194	168 194	168 194
2200	194	194	194



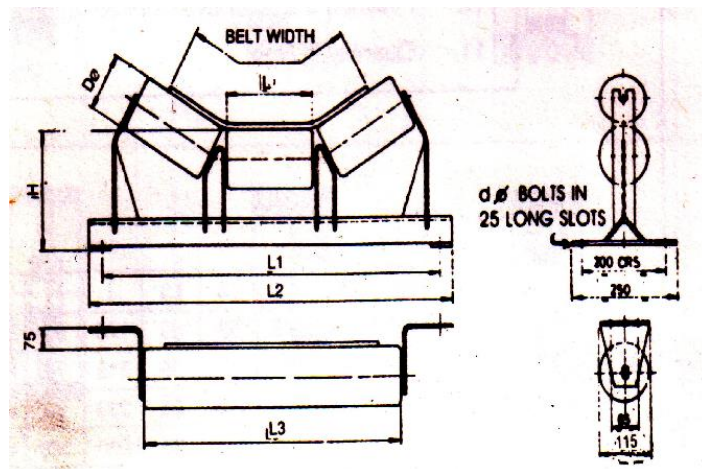
Nomenclature of Roller Idler

Diameter, Length for Conveyor Belt Width to Carry Load: Technical Data



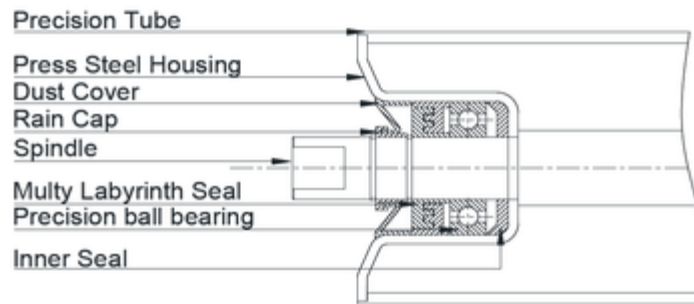
BELT WIDTH	ROLLER LENGTH		MOUNTING DIMENSIONS		HEIGHT DIMENSION "H"									
	L	L3	L1	L2	ROLLER DIA "D"									
W	L	L3	L1	L2	M-d	76.1	88.98	101.6	114.3	127	139.7	152.4	159	165
400	160	500	690	755	M12	200	200	200	225	225	-	-	-	-
450	190	550	740	805	M12	200	200	200	225	225	-	-	-	-
500	200	600	790	855	M12	200	200	200	225	225	-	-	-	-
600	235	700	890	950	M12	-	-	-	225	225	-	-	-	-
650	250	750	940	1000	M12	-	-	-	225	225	275	-	-	-
750	290	850	1040	1100	M12	-	-	-	225	225	275	-	-	-
800	315	950	1090	1150	M12	-	-	-	225	225	275	275	275	-
900	350	1050	1190	1250	M12	-	-	-	225	225	275	275	275	-
1000	380	1150	1290	1350	M12	-	-	-	225	225	275	275	275	-
1200	465	1400	1490	1560	M16	-	-	-	240	240	275	275	275	290
1400	530	1600	1690	1750	M16	-	-	-	240	240	275	275	275	290
1600	600	1800	1900	1950	M16	-	-	-	240	240	275	275	275	290
1800	670	2000	2100	2150	M20	-	-	-	240	240	275	275	275	290
2000	750	2200	2300	2350	M20	-	-	-	240	240	275	275	275	290

* Weight of 1 no. Idler roller of 114mm dia x 380 long = 6 kgs approx.



P.no.	DESCRIPTION	QTN	MATERIAL
1	ROLLER PIPE	1	MS-ERW
2	BEARING HOUSING	2	CRCA STEEL
3	REAR SEAL	1	NYLON-6
4	BEARING	1	ZZ or TAPERED
5	SHAFT	1	BRIGHT BAR/EN8
6	RUBBER SEAL	2	NEOPRENE
7	CIRCLIP	1	HEAVY DUTY
8	SEALS	1	NYLONPLAST

Construction of Roller Idler



Constructional Features

Idler rollers are manufactured as per IS 8598 to suit existing conveyor frames and to suit belt widths as per IS 4776 by welding bearing housings with the tube simultaneously from both sides to form a rigid mono box design imparting greater strength to the rollers. HIC Universal idlers are manufactured with precision bearing housings, accurate non-rubbing type of sealing arrangement, friction-factor at the lowest and long maintenance-free life warranted for 25,000 working hours running.

Shell :

The shell is made of ERW tubes as per IS 9295. Smooth surface of tubes ensures low friction between belt and roller. Close tolerances on concentricity and thickness of the shell enable the conveyors to run smooth without any vibrations which can damage the conveyor structures.

Bearing Housings:

Special extra-deep drawing quality CRCA strips are used which are extremely lightweight, thus reducing HP consumption and starting torque. Since the bearing housings have close tolerances on eccentricity and surface finish at the bearing seating region equivalent to those specified for outer races of the bearings as per bearing manufacturers, the life of bearings and bearing assemblies is much longer.

Bearings:

Single row deep groove ball bearings with C-3 clearance are used as per International Standards. Ball bearings are preferred for conveyor idler applications due to varying load and temperature conditions as also to provide for wide deflections in the shaft.

Sealing Arrangements:

Non-rubbings type multi-stage labyrinth sealing arrangement ensures perfect sealing of bearings from ingress of dust, water, slurry and other contaminations. Negligible friction due to non-rubbing type of sealing arrangement permits rollers for co-efficient of friction as low as 0.0165.



Spindles:

Spindles are manufactured from cold drawn bright bars of adequate capacity with perfect tolerances on concentricity and surface finish at bearing seating region to impart concentricity to roller and to ensure perfect fit between bearings and shaft.

Grease:

Rollers are grease-packed and sealed for-life. Hi-lithium based grease is filled in measured quantity machines in bearings and sealing cavities. Due to this, rollers are not required to be lubricated for the entire designed rated life.

Testing:

Following In House testing facility for conducting quality tests of each roller idler produced priori to despatch :-

Water penetration Test

Dust penetration Test

Friction Test

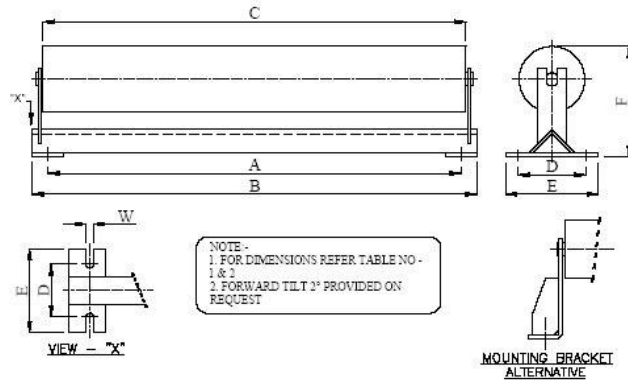
Hardness testing for rubber

Vibration test



GA Drawing of Carrying Idler Roller

Single Piece Flat Carrying Idler Roller



DIMENSIONS FOR SINGLE PIECE CARRYING IDLER SET

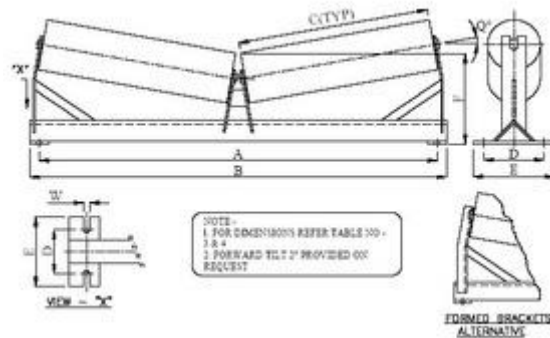
TABLE - 1							HIC-SERIES	
FOR IDLER DIA – ϕ 63.5, ϕ 76.1, ϕ 88.9								
FOR SHAFT DIA – 20 mm								
SR NO	B.W	A	B	C	D	E	F	W
1	300	590	650	400	200	250	175 (ϕ 63.5 & ϕ 76.1) 200 (ϕ 88.9)	14
2	400	690	750	500	200	250		14
3	500	790	850	600	200	250		14
4	600	890	950	700	200	250		14
5	650	940	1000	750	200	250		14
6	800	1090	1150	950	200	250		14

TABLE - 2							HIC-SERIES	
FOR IDLER DIA – ϕ 88.9, ϕ 101.6, ϕ 114.3, ϕ 127, ϕ 139.7								
FOR SHAFT DIA – 25 mm								
SR NO	B.W	A	B	C	D	E	F	W
1	400	690	750	500	200	250	225 (ϕ 88.9 & ϕ 101.6) 250 (ϕ 114 & ϕ 127) 275 (ϕ 139.7)	14
2	500	790	850	600	200	250		14
3	600	890	950	700	200	250		14
4	650	940	1000	750	200	250		14
5	800	1090	1150	950	200	250		14
6	1000	1290	1350	1150	200	250		14
7	1200	1490	1550	1400	200	250		18

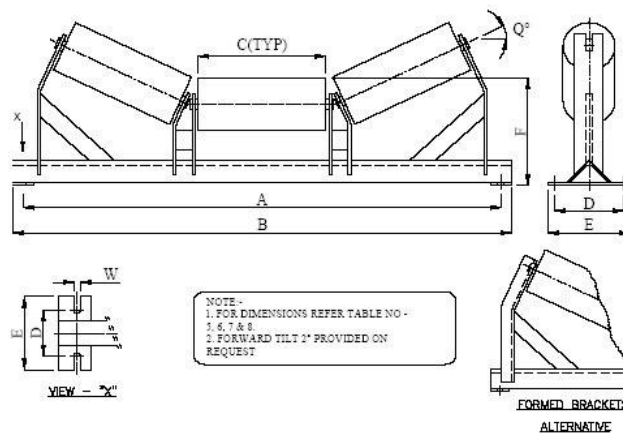
Note: On Request, HIC Universal Can Supply up to 80 mm Shaft Dia. OR any Customize

Vendor Data: www.hic-india.com | Customers List: www.universaldelhi.org | Catalogue: www.rubber-steel-industrial-products.com

2 Pcs. V-Type Carrying Idler Roller



3 Pcs. Troughing Idler Roller



DIMENSIONS FOR THREE PIECE CARRYING IDLER SET

TABLE - 3							HIC-SERIES	
FOR IDLER DIA – ϕ 63.5, ϕ 76.1, ϕ 88.9								
FOR SHAFT DIA – 20 mm								
$Q^0 = 5^0, 10^0, 15^0, 20^0, 25^0, 30^0, 35^0, 40^0$ & 45^0								
SR NO	B.W	A	B(~)	C	D	E	F	W
1	300	590	650	125	200	250	175 (ϕ 63.5 & ϕ 76.1) 200 (ϕ 88.9)	14
2	400	690	750	160	200	250		14
3	500	790	850	200	200	250		14
4	600	890	950	235	200	250		14
5	650	940	1000	250	200	250		14
6	800	1090	1150	315	200	250		14

DIMENSIONS FOR THREE PIECE CARRYING IDLER SET

TABLE - 4							HIC-SERIES	
FOR IDLER DIA – ϕ 88.9, ϕ 101.6, ϕ 114.3, ϕ 127, ϕ 139.7								
FOR SHAFT DIA – 25 mm								
$Q^\circ = 5^\circ, 10^\circ, 15^\circ, 20^\circ, 25^\circ, 30^\circ, 35^\circ, 40^\circ$ & 45°								
SR NO	B.W	A	B(~)	C	D	E	F	W
1	400	690	750	160	200	250	225 (ϕ 88.9 & ϕ 101.6) 250 (ϕ 114 & ϕ 127) 275 (ϕ 139.7)	14
2	500	790	850	200	200	250		14
3	600	890	950	235	200	250		14
4	650	940	1000	250	200	250		14
5	800	1090	1150	315	200	250		14
6	1000	1290	1350	380	200	250		14
7	1200	1490	1550	465	200	250		18

DIMENSIONS FOR THREE PIECE CARRYING IDLER SET

TABLE - 5							HIC-SERIES	
FOR IDLER DIA – ϕ 114.3, ϕ 127, ϕ 139.7, ϕ 152.4, ϕ 159, ϕ 165.1, ϕ 168.3								
FOR SHAFT DIA – 30 mm								
$Q^\circ = 5^\circ, 10^\circ, 15^\circ, 20^\circ, 25^\circ, 30^\circ, 35^\circ, 40^\circ$ & 45°								
SR NO	B.W	A	B(~)	C	D	E	F	W
1	500	790	850	200	200	250	250 (ϕ 114.3) 275 (ϕ 127) 300 (ϕ 139.7, ϕ 152.4, ϕ 159) 310 (ϕ 165.1, ϕ 168.3)	14
2	600	890	950	235	200	250		14
3	650	940	1000	250	200	250		14
4	800	1090	1150	315	200	250		14
5	1000	1290	1350	380	200	250		14
6	1200	1490	1550	465	200	250		18
7	1400	1690	1750	530	200	250		18
8	1600	1890	1950	600	200	250		18

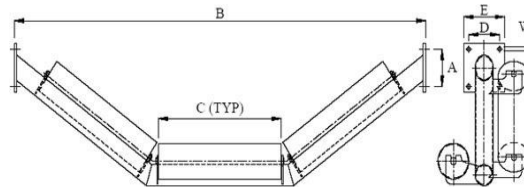
DIMENSIONS FOR THREE PIECE CARRYING IDLER SET

TABLE - 6							HIC-SERIES	
FOR IDLER DIA – ϕ 152.4, ϕ 159, ϕ 165.1, ϕ 168.3, ϕ 193.7, ϕ 219.1								
FOR SHAFT DIA – 35 mm								
$Q^\circ = 5^\circ, 10^\circ, 15^\circ, 20^\circ, 25^\circ, 30^\circ, 35^\circ, 40^\circ \text{ \& } 45^\circ$								
SR NO	B.W	A	B(~)	C	D	E	F	W
1	1200	1490	1550	465	200	250	300 (ϕ 152.4 & ϕ 159) 310 (ϕ 165.1 & ϕ 168.3) 350 (ϕ 193.7) 400 (ϕ 219.1)	18
2	1400	1690	1750	530	200	250		18
3	1600	1890	1950	600	200	250		18
4	1800	2090	2150	670	200	250		22
5	2000	2290	2350	730	200	250		22
6	2400	2690	2750	870	200	250		22

Note: On Request, HIC Universal Can Supply up to 80 mm Shaft Dia. OR any Customize

3 Pcs. Carrying Idler With Pipe Frame

WITH SIDE PLATE SUPPORT FRAME PIPE TYPE



NOTE:-
1. FOR DIMENSIONS REFER TABLE NO. 74 & 75

DIMENSIONS FOR THREE PIECE PIPE TYRE CARRYING IDLER SET - SIDE PLATE SUPPORT

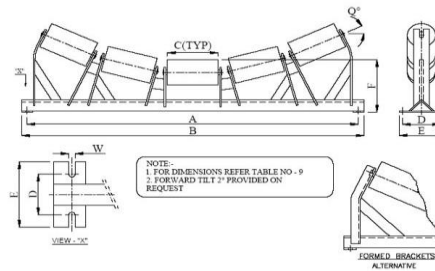
TABLE - 7							HIC-SERIES
FOR IDLER DIA – ϕ 114.3, ϕ 127, ϕ 139.7, ϕ 152.4, ϕ 159, ϕ 165.1, ϕ 168.3							
FOR SHAFT DIA – 30 mm							
$Q^\circ = 5^\circ, 10^\circ, 15^\circ, 20^\circ, 25^\circ, 30^\circ, 35^\circ, 40^\circ \text{ \& } 45^\circ$							
SR NO	B.W	A	B(~)	C	D	E	W
1	500	175	950	200	100	150	14
2	600	175	1050	235	100	150	14
3	650	175	1100	250	100	150	14
4	800	175	1250	315	100	150	14
5	1000	225	1450	380	150	200	14
6	1200	225	1650	465	150	200	18
7	1400	250	1850	530	150	200	18
8	1600	250	2050	600	150	200	18

DIMENSIONS FOR THREE PIECE PIPE TYRE CARRYING IDLER SET - SIDE PLATE SUPPORT

TABLE - 8							HIC-SERIES
FOR IDLER DIA – ϕ 152.4, ϕ 159, ϕ 165.1, ϕ 168.3, ϕ 193.7, ϕ 219.1							
FOR SHAFT DIA – 35 mm							
$Q^\circ = 5^\circ, 10^\circ, 15^\circ, 20^\circ, 25^\circ, 30^\circ, 35^\circ, 40^\circ \text{ \& } 45^\circ$							
SR NO	B.W	A	B(~)	C	D	E	W
1	1200	225	1560	465	200	250	18
2	1400	250	1750	530	200	250	18
3	1600	250	1950	600	200	250	18
4	1800	250	2150	670	200	250	22
5	2000	250	2350	740	200	250	22
6	2400	250	2750	870	200	250	22

Note: On Request, HIC Universal Can Supply up to 80 mm Shaft Dia. OR any Customize

5 Pcs. carrying Idler With Frame



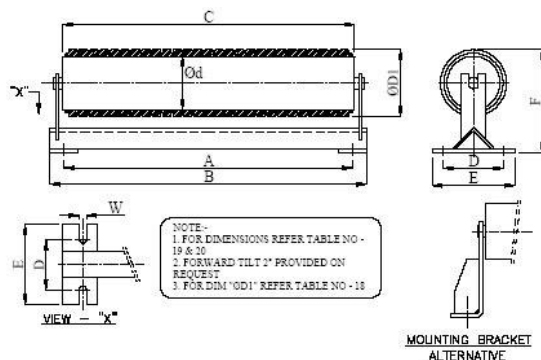
DIMENSIONS FOR FIVE PIECE CARRYING IDLER SET

TABLE - 9							HIC-SERIES	
FOR IDLER DIA – ϕ 152.4, ϕ 159, ϕ 165.1, ϕ 168.3, ϕ 193.7, ϕ 219.1								
FOR SHAFT DIA – 30 mm								
$Q^\circ = 5^\circ, 10^\circ, 15^\circ, 20^\circ, 25^\circ, 30^\circ, 35^\circ, 40^\circ, 45^\circ \text{ \& } 55^\circ$								
SR NO	B.W	A	B	C	D	E	F	W
1	1200	1490	1550	280	200	250	300 (ϕ 152.4 & ϕ 159) 310 (ϕ 165.1 & ϕ 168.3) 350 (ϕ 193.7) 400 (ϕ 219.1)	18
2	1400	1690	1750	320	200	250		18
3	1600	1890	1950	360	200	250		18
4	1800	2090	2150	400	200	250		22
5	2000	2290	2350	440	200	250		22
6	2200	2490	2550	480	200	250		22
7	2400	2690	2750	520	200	250		22

Note: On Request, HIC Universal Can Supply up to 80 mm Shaft Dia. OR any Customize

GA Drawing of Impact Idler Roller

Single Pcs. Impact Idler Rollers With Frame



DIMENSIONS FOR SINGLE PIECE IMPACT IDLER SET

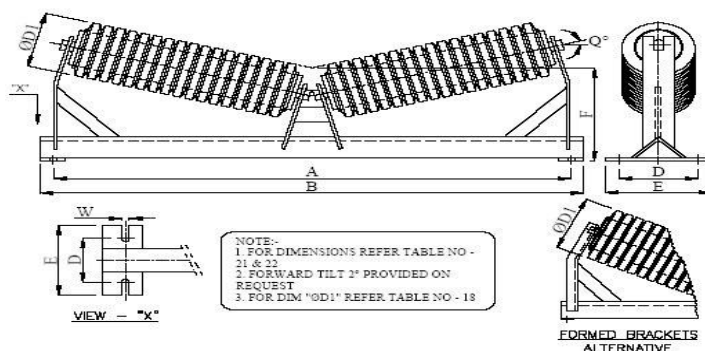
TABLE - 10							HIC-SERIES	
FOR IDLER DIA – ϕ 63.5, ϕ 76.1, ϕ 88.9								
FOR SHAFT DIA – 20 mm								
SR NO	B.W	A	B	C	D	E	F	W
1	300	590	650	400	200	250	225 (ϕ 63.5 & ϕ 76.1) 250 (ϕ 88.9)	14
2	400	690	750	500	200	250		14
3	500	790	850	600	200	250		14
4	600	890	950	700	200	250		14
5	650	940	1000	750	200	250		14
6	800	1090	1150	950	200	250		14

DIMENSIONS FOR SINGLE PIECE IMPACT IDLER SET

TABLE - 11							HIC-SERIES	
FOR IDLER DIA – ϕ 88.9, ϕ 101.6, ϕ 114.3, ϕ 127, ϕ 139.7								
FOR SHAFT DIA – 25 mm								
SR NO	B.W	A	B	C	D	E	F	W
1	400	690	750	500	200	250	275 (ϕ 88.9 & ϕ 101.6) 300 (ϕ 114.3, ϕ 127) 325 (ϕ 139.7)	14
2	500	790	850	600	200	250		14
3	600	890	950	700	200	250		14
4	650	940	1000	750	200	250		14
5	800	1090	1150	950	200	250		14
6	1000	1290	1350	1150	200	250		14
7	1200	1490	1550	1400	200	250		18

Note: On Request, HIC Universal Can Supply up to 80 mm Shaft Dia. OR any Customize

2 Pcs. / V-type Impact Idler Rollers With Frame



DIMENSIONS FOR TWO PIECE IMPACT IDLER SET

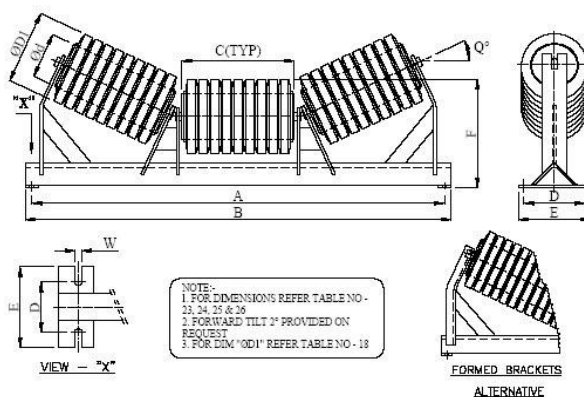
TABLE - 12							HIC-SERIES	
FOR IDLER DIA – ϕ 63.5, ϕ 76.1, ϕ 88.9								
FOR SHAFT DIA – 20 mm								
SR NO	B.W	A	B	C	D	E	F	W
1	300	590	650	190	200	250	225 (ϕ 63.5 & ϕ 76.1) 250 (ϕ 88.9)	14
2	400	690	750	240	200	250		14
3	500	790	850	290	200	250		14
4	600	890	950	350	200	250		14
5	650	940	1000	380	200	250		14
6	800	1090	1150	465	200	250		14

DIMENSIONS FOR TWO PIECE IMPACT IDLER SET

TABLE - 13							HIC-SERIES	
FOR IDLER DIA – ϕ 88.9, ϕ 101.6, ϕ 114.3, ϕ 127, ϕ 139.7								
FOR SHAFT DIA – 25 mm								
SR NO	B.W	A	B	C	D	E	F	W
1	400	690	750	240	200	250	275 (ϕ 88.9 & ϕ 101.6) 300 (ϕ 114.3, ϕ 127) 325 (ϕ 139.7)	14
2	500	790	850	290	200	250		14
3	600	890	950	350	200	250		14
4	650	940	1000	380	200	250		14
5	800	1090	1150	465	200	250		14
6	1000	1290	1350	575	200	250		14
7	1200	1490	1550	700	200	250		18

Note: On Request, HIC Universal Can Supply up to 80 mm Shaft Dia. OR any Customize

3 Pcs. Impact Idler Rollers With Frame



DIMENSIONS FOR THREE PIECE IMPACT IDLER SET								
TABLE - 14							HIC-SERIES	
FOR IDLER DIA – ϕ 63.5, ϕ 76.1, ϕ 88.9								
FOR SHAFT DIA – 20 mm								
$Q^\circ = 5^\circ, 10^\circ, 15^\circ, 20^\circ, 25^\circ, 30^\circ, 35^\circ, 40^\circ$ & 45°								
SR NO	B.W	A	B	C	D	E	F	W
1	300	590	650	125	200	250	225 (ϕ 63.5 & ϕ 76.1) 250 (ϕ 88.9)	14
2	400	690	750	160	200	250		14
3	500	790	850	200	200	250		14
4	600	890	950	235	200	250		14
5	650	940	1000	250	200	250		14
6	800	1090	1150	315	200	250		14

DIMENSIONS FOR THREE PIECE IMPACT IDLER SET								
TABLE - 15							HIC-SERIES	
FOR IDLER DIA – ϕ 88.9, ϕ 101.6, ϕ 114.3, ϕ 127, ϕ 139.7								
FOR SHAFT DIA – 25 mm								
$Q^\circ = 5^\circ, 10^\circ, 15^\circ, 20^\circ, 25^\circ, 30^\circ, 35^\circ, 40^\circ$ & 45°								
SR NO	B.W	A	B	C	D	E	F	W
1	400	690	750	160	200	250	275 (ϕ 88.9 & ϕ 101.6) 300 (ϕ 114.3, ϕ 127) 325 (ϕ 139.7)	14
2	500	790	850	200	200	250		14
3	600	890	950	235	200	250		14
4	650	940	1000	250	200	250		14
5	800	1090	1150	315	200	250		14
6	1000	1290	1350	380	200	250		14
7	1200	1490	1550	465	200	250		18

DIMENSIONS FOR THREE PIECE IMPACT IDLER SET

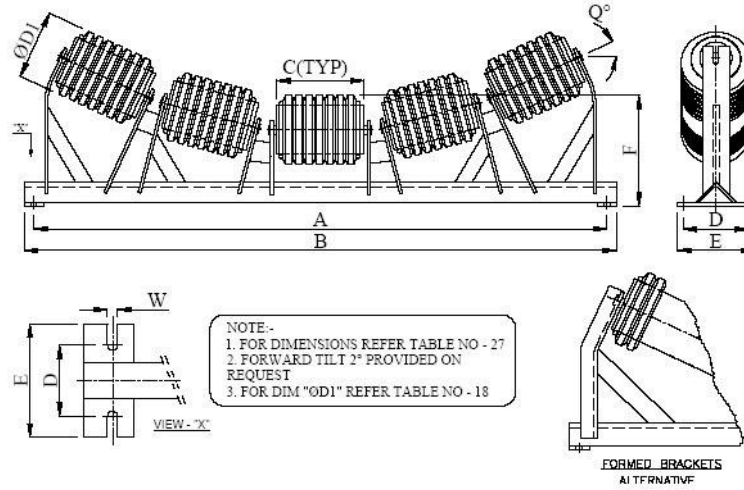
TABLE - 16							HIC-SERIES	
FOR IDLER DIA – ϕ 114.3, ϕ 127, ϕ 139.7, ϕ 152.4, ϕ 159, ϕ 165.1, ϕ 168.3								
FOR SHAFT DIA – 30 mm								
$Q^\circ = 5^\circ, 10^\circ, 15^\circ, 20^\circ, 25^\circ, 30^\circ, 35^\circ, 40^\circ \text{ \& } 45^\circ$								
SR NO	B.W	A	B	C	D	E	F	W
1	500	790	850	200	200	250	300 (ϕ 114.3) 325 (ϕ 127) 350 (ϕ 139.7, ϕ 152.4, ϕ 159) 360 (ϕ 165.1, ϕ 168.3)	14
2	600	890	950	235	200	250		14
3	650	940	1000	250	200	250		14
4	800	1090	1150	315	200	250		14
5	1000	1290	1350	380	200	250		14
6	1200	1490	1550	465	200	250		18
7	1400	1690	1750	530	200	250		18
8	1600	1890	1950	600	200	250		18

DIMENSIONS FOR THREE PIECE IMPACT IDLER SET

TABLE - 17							HIC-SERIES	
FOR IDLER DIA – ϕ 152.4, ϕ 159, ϕ 165.1, ϕ 168.3, ϕ 193.7, ϕ 219.1								
FOR SHAFT DIA – 35 mm								
$Q^\circ = 5^\circ, 10^\circ, 15^\circ, 20^\circ, 25^\circ, 30^\circ, 35^\circ, 40^\circ \text{ \& } 45^\circ$								
SR NO	B.W	A	B	C	D	E	F	W
1	1200	1490	1550	465	200	250	300 (ϕ 152.4, ϕ 159) 310 (ϕ 165.1 & ϕ 168.3) 350 (ϕ 193.7) 400 (ϕ 219.1)	18
2	1400	1690	1750	530	200	250		18
3	1600	1890	1950	600	200	250		18
4	1800	2090	2150	670	200	250		22
5	2000	2290	2350	730	200	250		22
6	2400	2690	2750	870	200	250		22

Note: On Request, HIC Universal Can Supply up to 80 mm Shaft Dia. OR any Customize

5 Pcs. Impact Idler Rollers Roller



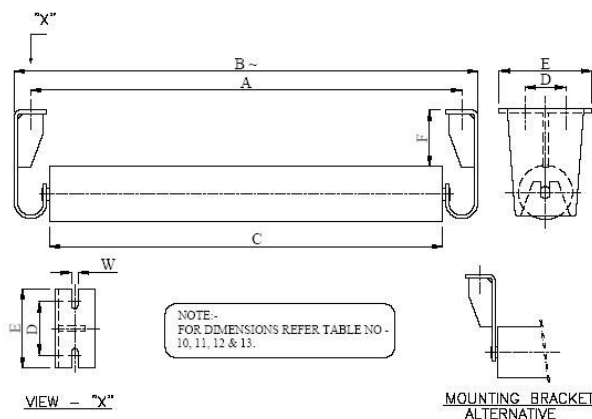
DIMENSIONS FOR 5 PIECE IMPACT IDLER SET

TABLE - 18							HIC-SERIES	
FOR IDLER DIA – ϕ 88.9, ϕ 101.6, ϕ 114.3, ϕ 127, ϕ 139.7								
FOR SHAFT DIA – 30 mm								
$Q^\circ = 5^\circ, 10^\circ, 15^\circ, 20^\circ, 25^\circ, 30^\circ, 35^\circ, 40^\circ$ & 45°								
SR NO	B.W	A	B	C	D	E	F	W
1	1200	1490	1550	280	200	250	300 (ϕ 152.4, ϕ 159) 310 (ϕ 165.1 & ϕ 168.3) 350 (ϕ 193.7) 400 (ϕ 219.1)	18
2	1400	1690	1750	320	200	250		18
3	1600	1890	1950	360	200	250		18
4	1800	2090	2150	400	200	250		22
5	2000	2290	2350	440	200	250		22
6	2400	2690	2750	520	200	250		22

Note: On Request, HIC Universal Can Supply up to 80 mm Shaft Dia. OR any Customize

GA Drawing of Return Idler Roller

Single Piece Return Idler Rollers



DIMENSIONS FOR SINGLE PIECE RETURN IDLER SET

TABLE - 19		HIC-SERIES						
FOR IDLER DIA – ϕ 63.5, ϕ 76.1, ϕ 88.9								
FOR SHAFT DIA – 20 mm								
SR NO	B.W	A	B(~)	C	D	E	F	W
1	300	590	650	400	65	150	75	14
2	400	690	750	500	65	150	75	14
3	500	790	850	600	65	150	75	14
4	600	890	950	700	65	150	75	14
5	650	940	1000	750	65	150	75	14
6	800	1090	1150	950	65	150	75	14

DIMENSIONS FOR SINGLE PIECE RETURN IDLER SET

TABLE - 20		HIC-SERIES						
FOR IDLER DIA – ϕ 88.9, ϕ 101.6, ϕ 114.3, ϕ 127, ϕ 139.7								
FOR SHAFT DIA – 25 mm								
SR NO	B.W	A	B(~)	C	D	E	F	W
1	400	690	750	500	65	150	75	14
2	500	790	850	600	65	150	75	14
3	600	890	950	700	65	150	75	14
4	650	940	1000	750	65	150	75	14
5	800	1090	1150	950	65	150	75	14
6	1000	1290	1350	1150	65	150	75	14
7	1200	1490	1550	1400	65	150	75	18

DIMENSIONS FOR SINGLE PIECE RETURN IDLER SET

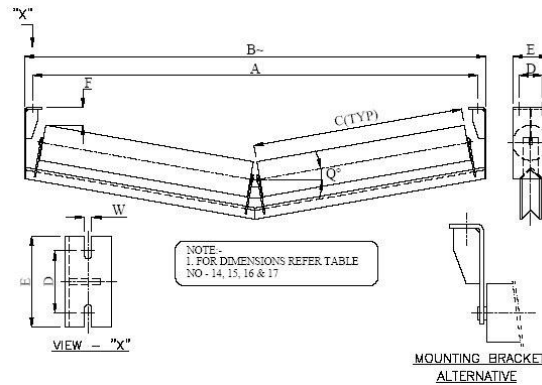
TABLE - 21						HIC-SERIES		
FOR IDLER DIA – ϕ 114.3, ϕ 127, ϕ 139.7, ϕ 152.4, ϕ 159, ϕ 165.1, ϕ 168.3								
FOR SHAFT DIA – 30 mm								
SR NO	B.W	A	B(~)	C	D	E	F	W
1	500	790	850	600	65	150	75	14
2	600	890	950	700	65	150	75	14
3	650	940	1000	750	65	150	75	14
4	800	1090	1150	950	65	150	75	14
5	1000	1290	1350	1150	65	150	75	14
6	1200	1490	1550	1400	65	150	75	18
7	1400	1690	1750	1600	65	150	75	18
8	1600	1890	1950	1800	65	150	75	18

DIMENSIONS FOR SINGLE PIECE RETURN IDLER SET

TABLE - 22						HIC-SERIES		
FOR IDLER DIA – ϕ 152.4, ϕ 159, ϕ 165.1, ϕ 168.3, ϕ 193.7, ϕ 219.1								
FOR SHAFT DIA – 35 mm								
SR NO	B.W	A	B(~)	C	D	E	F	W
1	1200	1490	1550	1400	65	150	75	18
2	1400	1690	1750	1600	65	150	75	18
3	1600	1890	1950	1800	65	150	75	18
4	1800	2090	2150	2000	65	150	75	22
5	2000	2290	2350	2200	65	150	75	22

Note: On Request, HIC Universal Can Supply up to 80 mm Shaft Dia. OR any Customize

2 Pcs. V-type Return Idler Rollers



DIMENSIONS FOR TWO PIECE "V" RETURN IDLER SET

TABLE - 23		HIC-SERIES						
FOR IDLER DIA – ϕ 63.5, ϕ 76.1, ϕ 88.9								
FOR SHAFT DIA – 20 mm								
$Q^\circ = 5^\circ, 10^\circ, 15^\circ \text{ \& } 20^\circ$								
SR NO	B.W	A	B(~)	C	D	E	F	W
1	300	590	650	190	100	180	75	14
2	400	690	750	240	100	180	75	14
3	500	790	850	290	100	180	75	14
4	600	890	950	350	100	180	75	14
5	650	940	1000	380	100	180	75	14
6	800	1090	1150	465	100	180	75	14

DIMENSIONS FOR TWO PIECE "V" RETURN IDLER SET

TABLE - 24		HIC-SERIES						
FOR IDLER DIA – ϕ 88.9, ϕ 101.6, ϕ 114.3, ϕ 127, ϕ 139.7								
FOR SHAFT DIA – 25 mm								
$Q^\circ = 5^\circ, 10^\circ, 15^\circ \text{ \& } 20^\circ$								
SR NO	B.W	A	B(~)	C	D	E	F	W
1	400	690	750	240	100	180	75	14
2	500	790	850	290	100	180	75	14
3	600	890	950	350	100	180	75	14
4	650	940	1000	380	100	180	75	14
5	800	1090	1150	465	100	180	75	14
6	1000	1290	1350	575	100	180	75	14
7	1200	1490	1550	700	100	180	75	18

DIMENSIONS FOR TWO PIECE "V" RETURN IDLER SET

TABLE - 25						HIC-SERIES		
FOR IDLER DIA – ϕ 114.3, ϕ 127, ϕ 139.7, ϕ 152.4, ϕ 159, ϕ 165.1, ϕ 168.3								
FOR SHAFT DIA – 30 mm								
Q ^o = 5 ^o , 10 ^o , 15 ^o & 20 ^o								
SR NO	B.W	A	B(~)	C	D	E	F	W
1	500	790	850	290	100	180	75	14
2	600	890	950	350	100	180	75	14
3	650	940	1000	380	100	180	75	14
4	800	1090	1150	465	100	180	75	14
5	1000	1290	1350	575	100	180	75	14
6	1200	1490	1550	700	100	180	75	18
7	1400	1690	1750	800	100	180	75	18
8	1600	1890	1950	900	100	180	75	18

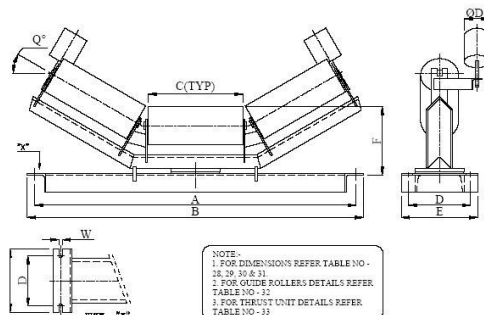
DIMENSIONS FOR TWO PIECE "V" RETURN IDLER SET

TABLE - 26						HIC-SERIES		
FOR IDLER DIA – ϕ 152.4, ϕ 159, ϕ 165.1, ϕ 168.3, ϕ 193.7, ϕ 219.1								
FOR SHAFT DIA – 35 mm								
Q ^o = 5 ^o , 10 ^o , 15 ^o & 20 ^o								
SR NO	B.W	A	B(~)	C	D	E	F	W
1	1200	1490	1550	700	100	180	75	18
2	1400	1690	1750	800	100	180	75	18
3	1600	1890	1950	900	100	180	75	18
4	1800	2090	2150	1000	100	180	75	22
5	2000	2290	2350	1100	100	180	75	22

Note: On Request, HIC Universal Can Supply up to 80 mm Shaft Dia. OR any Customize

GA Drawing of Self Aligning Carrying Idler Roller

3 Pcs. Self Aligning Carrying Idler



DIMENSIONS FOR THREE PIECE S.A CARRYING IDLER SET

TABLE - 27							HIC-SERIES	
FOR IDLER DIA – ϕ 63.5, ϕ 76.1, ϕ 88.9								
FOR SHAFT DIA – 20 mm								
$Q^{\circ} = 5^{\circ}, 10^{\circ}, 15^{\circ}, 20^{\circ}, 25^{\circ}, 30^{\circ}, 35^{\circ}, 40^{\circ} \text{ \& } 45^{\circ}$								
SR NO	B.W	A	B	C	D	E	F	W
1	300	590	650	125	200	250	175 (ϕ 63.5) 200 (ϕ 76.1 & ϕ 88.9)	14
2	400	690	750	160	200	250		14
3	500	790	850	200	200	250		14
4	600	890	950	235	200	250		14
5	650	940	1000	250	200	250		14
6	800	1090	1150	315	200	250		14

DIMENSIONS FOR THREE PIECE S.A CARRYING IDLER SET

TABLE - 28							HIC-SERIES	
FOR IDLER DIA – ϕ 88.9, ϕ 101.6, ϕ 114.3, ϕ 127, ϕ 139.7								
FOR SHAFT DIA – 25 mm								
$Q^{\circ} = 5^{\circ}, 10^{\circ}, 15^{\circ}, 20^{\circ}, 25^{\circ}, 30^{\circ}, 35^{\circ}, 40^{\circ} \text{ \& } 45^{\circ}$								
SR NO	B.W	A	B	C	D	E	F	W
1	400	690	750	160	200	250	225 (ϕ 88.9) 250 (ϕ 101.6 & ϕ 114.3) 275 (ϕ 127 & ϕ 139.7)	14
2	500	790	850	200	200	250		14
3	600	890	950	235	200	250		14
4	650	940	1000	250	200	250		14
5	800	1090	1150	315	200	250		14
6	1000	1290	1350	380	200	250		14
7	1200	1490	1550	465	200	250		18

DIMENSIONS FOR THREE PIECE S.A CARRYING IDLER SET

TABLE - 29							HIC-SERIES	
FOR IDLER DIA – ϕ 114.3, ϕ 127, ϕ 139.7, ϕ 152.4, ϕ 159, ϕ 165.1, ϕ 168.3								
FOR SHAFT DIA – 30 mm								
Q ^o = 5 ^o , 10 ^o , 15 ^o , 20 ^o , 25 ^o , 30 ^o , 35 ^o , 40 ^o & 45 ^o								
SR NO	B.W	A	B	C	D	E	F	W
1	500	790	850	200	200	250	275 (ϕ 114.3 & ϕ 127) 300 (ϕ 139.7 & ϕ 152.4) 310 (ϕ 159) 325 (ϕ 165.1 & ϕ 168.3)	14
2	600	890	950	235	200	250		14
3	650	940	1000	250	200	250		14
4	800	1090	1150	315	200	250		14
5	1000	1290	1350	380	200	250		14
6	1200	1490	1550	465	200	250		18
7	1400	1690	1750	530	200	250		18
8	1600	1890	1950	600	200	250		18

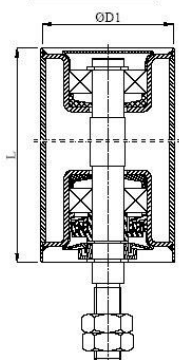
DIMENSIONS FOR THREE PIECE S.A CARRYING IDLER SET

TABLE - 30							HIC-SERIES	
FOR IDLER DIA – ϕ 152.4, ϕ 159, ϕ 165.1, ϕ 168.3, ϕ 193.7, ϕ 219.1								
FOR SHAFT DIA – 35 mm								
Q ^o = 5 ^o , 10 ^o , 15 ^o , 20 ^o , 25 ^o , 30 ^o , 35 ^o , 40 ^o & 45 ^o								
SR NO	B.W	A	B	C	D	E	F	W
1	1200	1490	1550	465	200	250	310 (ϕ 152.4) 325 (ϕ 159, ϕ 165.1 & ϕ 168.3) 350 (ϕ 193.7) 400 (ϕ 219.1)	18
2	1400	1690	1750	530	200	250		18
3	1600	1890	1950	600	200	250		18
4	1800	2090	2150	670	200	250		22
5	2000	2290	2350	730	200	250		22
6	2400	2690	2750	870	200	250		22

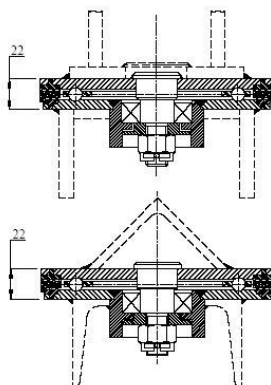
Note: On Request, HIC Universal Can Supply up to 80 mm Shaft Dia. OR any Customize

Guide Roller & Thrust bearing.

GA. OF GUIDE ROLLER
TABLE NO 32



THRUST UNIT DETAILS - TABLE NO 33



GUIDE ROLLERS

TABLE - 31

SR NO	B.W	BEARING NUMBER	ϕ D2	L
1	300	6204	63.5	100
2	400	6204	63.5	100
3	500	6204	63.5	100
4	600	6204	63.5	100
5	650	6204	63.5	100
6	800	6204	76.1	125
7	1000	6204	76.1	125
8	1200	6204	76.1	125
9	1400	6204	76.1	125
10	1600	6204	76.1	125
11	1800	6204	88.9	165
12	2000	6204	88.9	165
13	2400	6204	88.9	165

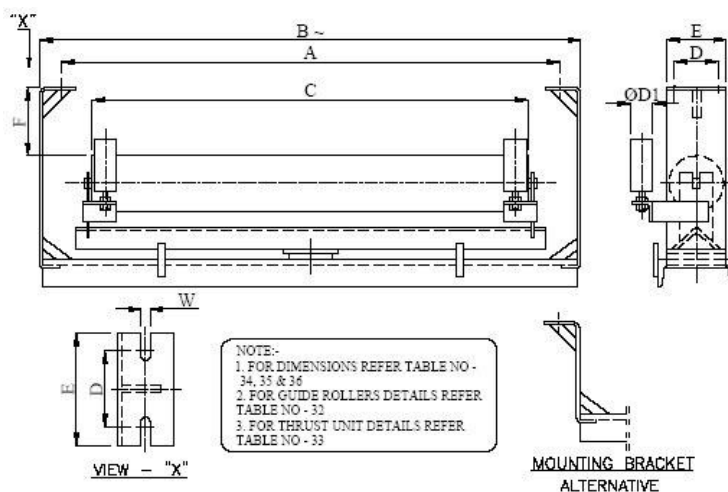
THRUST UNIT

TABLE - 32

SR NO	B.W	BEARING NUMBER
1	300	6205
2	400	6205
3	500	6205
4	600	6205
5	650	6205
6	800	6205
7	1000	6205
8	1200	6205
9	1400	6205
10	1600	6206
11	1800	6206
FOR OTHER BELT WIDTH		
"BEARING NUMBER"		
BASED ON CONVEYOR DETAILS		

GA Drawing of Self Aligning Return Idler

Single Piece Self Aligning Return Idler



DIMENSIONS FOR SINGLE PIECE S.A.R.I SET

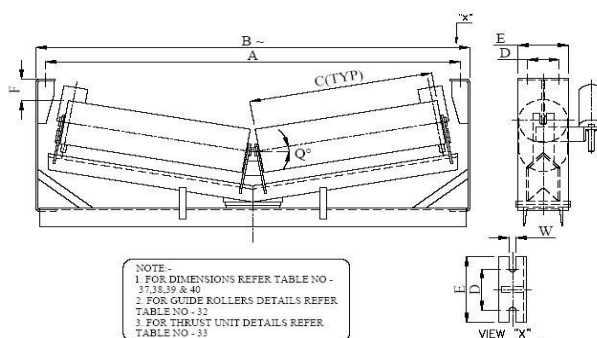
TABLE - 33							HIC-SERIES	
FOR IDLER DIA – ϕ 63.5, ϕ 76.1, ϕ 88.9								
FOR SHAFT DIA – 20 mm								
SR NO	B.W	A	B	C	D	E	F	W
1	300	590	650	400	40	75	75	14
2	400	690	750	500	40	75	75	14
3	500	790	850	600	40	75	75	14
4	600	890	950	700	40	75	75	14
5	650	940	1000	750	40	75	75	14
6	800	1090	1150	950	40	75	75	14

TABLE - 34							HIC-SERIES	
FOR IDLER DIA – ϕ 88.9, ϕ 101.6, ϕ 114.3, ϕ 127, ϕ 139.7								
FOR SHAFT DIA – 25 mm								
SR NO	B.W	A	B	C	D	E	F	W
1	400	690	750	500	65	100	75	14
2	500	790	850	600	65	100	75	14
3	600	890	950	700	65	100	75	14
4	650	940	1000	750	65	100	75	14
5	800	1090	1150	950	65	100	75	14
6	1000	1290	1350	1150	65	100	75	14
7	1200	1490	1550	1400	65	100	75	18

TABLE - 35						HIC-SERIES		
FOR IDLER DIA – ϕ 114.3, ϕ 127, ϕ 139.7, ϕ 152.4, ϕ 159, ϕ 168.3								
FOR SHAFT DIA – 30 mm								
SR NO	B.W	A	B	C	D	E	F	W
1	500	790	850	600	65	150	75	14
2	600	890	950	700	65	150	75	14
3	650	940	1000	750	65	150	75	14
4	800	1090	1150	950	65	150	75	14
5	1000	1290	1350	1150	65	150	75	14
6	1200	1490	1550	1400	65	150	75	18
7	1400	1690	1750	1600	65	150	75	18
8	1600	1890	1950	1800	65	150	75	18

Note: On Request, HIC Universal Can Supply up to 80 mm Shaft Dia. OR any Customize

Two Piece Self Aligning Return Idler



DIMENSIONS FOR TWO PIECE S.A.R.I SETS

TABLE - 36						HIC-SERIES		
FOR IDLER DIA – ϕ 63.5, ϕ 76.1, ϕ 88.9								
FOR SHAFT DIA – 20 mm								
$Q^\circ = 5^\circ, 10^\circ, 15^\circ, 20^\circ, 25^\circ, 30^\circ$								
SR NO	B.W	A	B(~)	C	D	E	F	W
1	300	590	650	190	40	75	75	14
2	400	690	750	240	40	75	75	14
3	500	790	850	290	40	75	75	14
4	600	890	950	350	40	75	75	14
5	650	940	1000	380	40	75	75	14
6	800	1090	1150	465	40	75	75	14

TABLE - 37							HIC-SERIES	
FOR IDLER DIA – ϕ 88.9, ϕ 101.6, ϕ 114.3, ϕ 127, ϕ 139.7								
FOR SHAFT DIA – 25 mm								
$Q^{\circ} = 5^{\circ}, 10^{\circ}, 15^{\circ}, 20^{\circ}, 25^{\circ}, 30^{\circ}$								
SR NO	B.W	A	B(~)	C	D	E	F	W
1	400	690	750	240	65	100	75	14
2	500	790	850	290	65	100	75	14
3	600	890	950	350	65	100	75	14
4	650	940	1000	380	65	100	75	14
5	800	1090	1150	465	65	100	75	14
6	1000	1290	1350	575	65	100	75	14
7	1200	1490	1550	700	65	100	75	18

DIMENSIONS FOR TWO PIECE S.A.R.I SETS

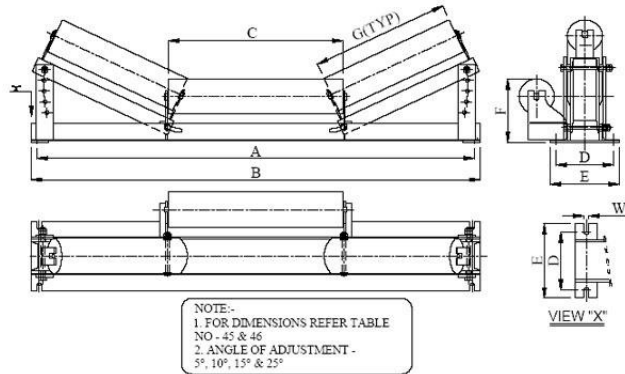
TABLE - 38							HIC-SERIES	
FOR IDLER DIA – ϕ 114.3, ϕ 127, ϕ 139.7, ϕ 152.4, ϕ 159, ϕ 165.1, ϕ 168.3								
FOR SHAFT DIA – 30 mm								
$Q^{\circ} = 5^{\circ}, 10^{\circ}, 15^{\circ}, 20^{\circ}, 25^{\circ}, 30^{\circ}$								
SR NO	B.W	A	B(~)	C	D	E	F	W
1	500	790	855	290	65	150	75	14
2	600	890	950	350	65	150	75	14
3	650	940	1000	380	65	150	75	14
4	800	1090	1150	465	65	150	75	14
5	1000	1290	1350	575	65	150	75	14
6	1200	1490	1560	700	65	150	75	18
7	1400	1690	1750	800	65	150	75	18
8	1600	1890	1950	900	65	150	75	18

TABLE - 39							HIC-SERIES	
FOR IDLER DIA – ϕ 152.4, ϕ 159, ϕ 165.1, ϕ 168.3, ϕ 193.7, ϕ 219.1								
FOR SHAFT DIA – 35 mm								
$Q^{\circ} = 5^{\circ}, 10^{\circ}, 15^{\circ}, 20^{\circ}, 25^{\circ}, 30^{\circ}$								
SR NO	B.W	A	B(~)	C	D	E	F	W
1	1200	1490	1560	700	65	150	75	18
2	1400	1690	1750	800	65	150	75	18
3	1600	1900	1950	900	65	150	75	18
4	1800	2100	2150	1000	65	150	75	22
5	2000	2300	2350	1100	65	150	75	22

Note: On Request, HIC Universal Can Supply up to 80 mm Shaft Dia. OR any Customize

GA Drawing of Transition/Adjustable Idler roller

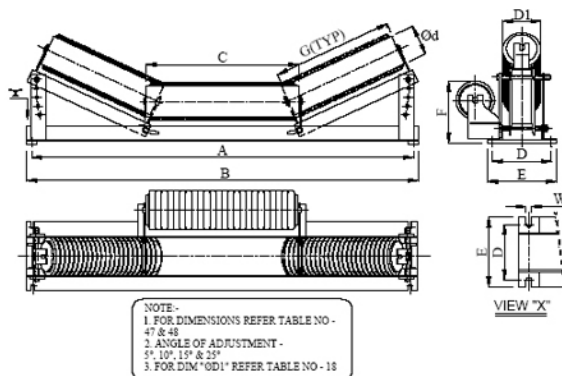
Transition carrying Idler



DIMENSIONS FOR THREE PIECE ADJUSTABLE CARRYING IDLER SET								
TABLE - 40						HIC-SERIES		
FOR IDLER DIA – ϕ 114.3, ϕ 127, ϕ 139.7, ϕ 152.4, ϕ 159, ϕ 165.1, ϕ 168.3								
FOR SHAFT DIA – 25 mm								
$Q^{\circ} = 5^{\circ}, 10^{\circ}, 15^{\circ}, 20^{\circ}, 25^{\circ}, 30^{\circ}, 35^{\circ}$								
SR NO	B.W	A	B(~)	C=G	D	E	F	W
1	500	790	850	200	200	250	250 (ϕ 114.3) 275 (ϕ 127 & ϕ 139.7) 300 (ϕ 152.4, ϕ 159) (ϕ 165.1, ϕ 168.3)	14
2	600	890	950	235	200	250		14
3	650	940	1000	250	200	250		14
4	800	1090	1150	315	200	250		14
5	1000	1290	1350	380	200	250		14
6	1200	1490	1550	465	200	250		18
7	1400	1690	1750	530	200	250		18
8	1600	1890	1950	600	200	250		18
TABLE - 41						HIC-SERIES		
FOR IDLER DIA – ϕ 152.4, ϕ 159, ϕ 165.1, ϕ 168.3, ϕ 193.7, ϕ 219.1								
FOR SHAFT DIA – 30 mm								
$Q^{\circ} = 5^{\circ}, 10^{\circ}, 15^{\circ}, 20^{\circ}, 25^{\circ}, 30^{\circ}, 35^{\circ}$								
SR NO	B.W	A	B(~)	C=G	D	E	F	W
1	1200	1490	1550	465	200	250	300 (ϕ 152.4 & ϕ 159) 310 (ϕ 165.1 & ϕ 168.3) 350 (ϕ 193.7) 375 (ϕ 219.1)	18
2	1400	1690	1750	530	200	250		18
3	1600	1890	1950	600	200	250		18
4	1800	2090	2150	670	200	250		22
5	2000	2290	2350	740	200	250		22
6	2200	2690	2750	870	200	250		22

Note: On Request, HIC Universal Can Supply up to 80 mm Shaft Dia. OR any Customize

Transition Impact Idler

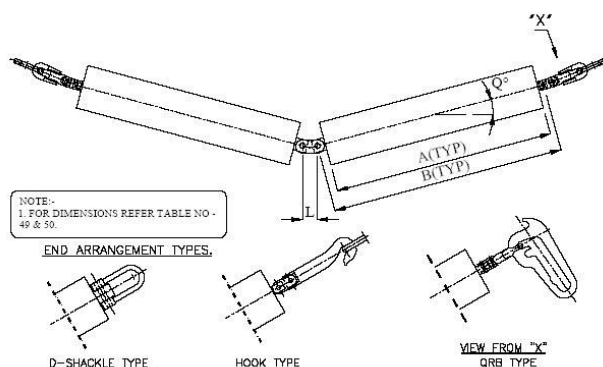


DIMENSIONS FOR THREE PIECE ADJUSTABLE IMPACT IDLER SET								
TABLE - 42						HIC-SERIES		
FOR IDLER DIA – ϕ 114.3, ϕ 127, ϕ 139.7, ϕ 152.4, ϕ 159, ϕ 165.1, ϕ 168.3								
FOR SHAFT DIA – 25 mm								
$Q^{\circ} = 5^{\circ}, 10^{\circ}, 15^{\circ}, 20^{\circ}, 25^{\circ}, 30^{\circ}, 35^{\circ}$								
SR NO	B.W	A	B(~)	C=G	D	E	F	W
1	500	790	850	200	200	250	300 (ϕ 114.3) 325 (ϕ 127 & ϕ 139.7) 350 (ϕ 152.4, ϕ 159) (ϕ 165.1, ϕ 168.3)	14
2	600	890	950	235	200	250		14
3	650	940	1000	250	200	250		14
4	800	1090	1150	315	200	250		14
5	1000	1290	1350	380	200	250		14
6	1200	1490	1550	465	200	250		18
7	1400	1690	1750	530	200	250		18
8	1600	1890	1950	600	200	250		18
TABLE - 43						HIC-SERIES		
FOR IDLER DIA – ϕ 152.4, ϕ 159, ϕ 165.1, ϕ 168.3, ϕ 193.7								
FOR SHAFT DIA – 30 mm								
$Q^{\circ} = 5^{\circ}, 10^{\circ}, 15^{\circ}, 20^{\circ}, 25^{\circ}, 30^{\circ}, 35^{\circ}$								
SR NO	B.W	A	B(~)	C=G	D	E	F	W
1	1200	1490	1550	465	200	250	350 (ϕ 152.4 & ϕ 159) 375 (ϕ 165.1 & ϕ 168.3) 400 (ϕ 193.7)	18
2	1400	1690	1750	530	200	250		18
3	1600	1890	1950	600	200	250		18
4	1800	2090	2150	670	200	250		22
5	2000	2290	2350	740	200	250		22
6	2200	2690	2750	870	200	250		22

Note: On Request, HIC Universal Can Supply up to 80 mm Shaft Dia. OR any Customize

GA Drawing of Garland carrying Idler Roller

2 Pcs. Garland Carrying Idler

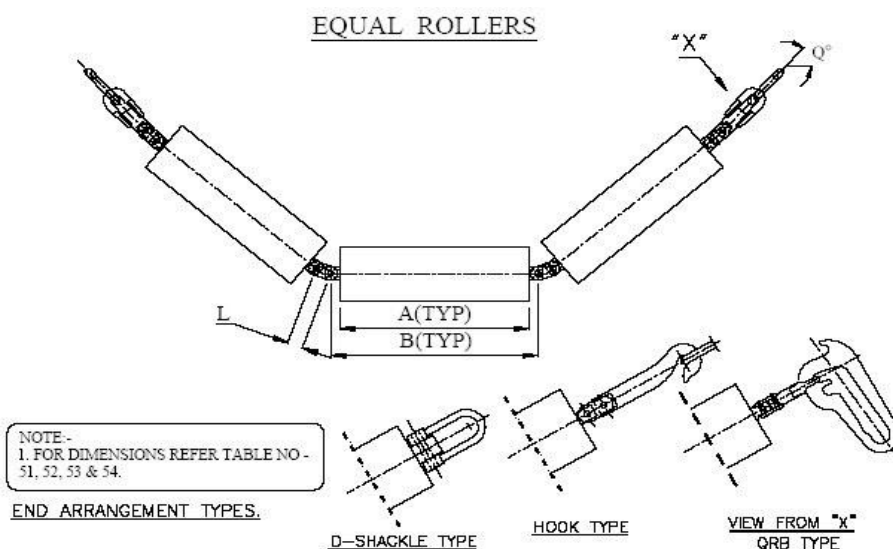


DIMENSIONS FOR TWO PIECE GARLAND CARRYING IDLER SET

TABLE - 44					HIC-SERIES
FOR IDLER DIA – ϕ 63.5, ϕ 76.1, ϕ 88.9					
FOR SHAFT DIA – 20 mm					
$Q^\circ = 5^\circ, 10^\circ, 15^\circ \text{ \& \ } 20^\circ$					
SR NO	B.W	A	B	L	
1	300	190	240	44	
2	400	240	290	44	
3	500	290	340	44	
4	600	350	400	44	
5	650	380	430	44	
6	800	465	515	44	
TABLE - 45					HIC-SERIES
FOR IDLER DIA – ϕ 88.9, ϕ 101.6, ϕ 114.3, ϕ 127, ϕ 139.7					
FOR SHAFT DIA – 25 mm					
$Q^\circ = 5^\circ, 10^\circ, 15^\circ \text{ \& \ } 20^\circ$					
SR NO	B.W	A	B	L	
1	400	240	290	44	
2	500	290	340	44	
3	600	350	400	44	
4	650	380	430	44	
5	800	465	515	44	
6	1000	575	625	44	
7	1200	700	750	44	

Note: On Request, HIC Universal Can Supply up to 80 mm Shaft Dia. OR any Customize

3 Pcs. Equal Garland Carrying Idler



DIMENSIONS FOR THREE PIECE GARLAND CARRYING IDLER SET

TABLE - 46					HIC-SERIES
FOR IDLER DIA – ϕ 63.5, ϕ 76.1, ϕ 88.9					
FOR SHAFT DIA – 20 mm					
$Q^\circ = 5^\circ, 10^\circ, 15^\circ, 20^\circ, 25^\circ, 30^\circ, 35^\circ, 40^\circ \text{ \& } 45^\circ$					
SR NO	B.W	A	B	L	
1	300	125	175	44	
2	400	160	210	44	
3	500	200	250	44	
4	600	235	285	44	
5	650	250	300	44	
6	800	315	365	44	
TABLE - 47					HIC-SERIES
FOR IDLER DIA – ϕ 88.9, ϕ 101.6, ϕ 114.3, ϕ 127, ϕ 139.7					
FOR SHAFT DIA – 25 mm					
$Q^\circ = 5^\circ, 10^\circ, 15^\circ, 20^\circ, 25^\circ, 30^\circ, 35^\circ, 40^\circ \text{ \& } 45^\circ$					
SR NO	B.W	A	B	L	
1	400	160	210	44	
2	500	200	250	44	
3	600	235	285	44	
4	650	250	300	44	
5	800	315	365	44	
6	1000	380	430	44	
7	1200	465	515	44	

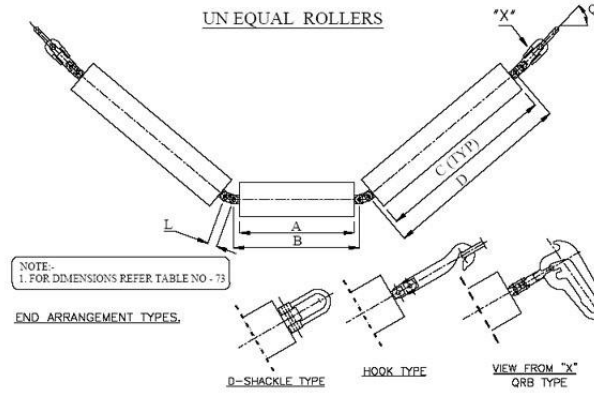
DIMENSIONS FOR THREE PIECE GARLAND CARRYING IDLER SET

TABLE - 48				HIC-SERIES
FOR IDLER DIA – ϕ 114.3, ϕ 127, ϕ 139.7, ϕ 152.4, ϕ 159, ϕ 165.1, ϕ 168				
FOR SHAFT DIA – 30 mm				
$Q^\circ = 5^\circ, 10^\circ, 15^\circ, 20^\circ, 25^\circ, 30^\circ, 35^\circ, 40^\circ \text{ \& } 45^\circ$				
SR NO	B.W	A	B	L
1	500	200	250	44
2	600	235	285	44
3	650	250	300	44
4	800	315	365	44
5	1000	380	430	44
6	1200	465	515	44
7	1400	530	580	44
8	1600	600	650	44

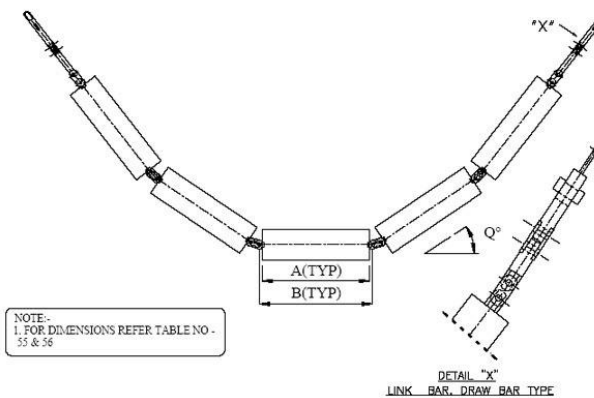
TABLE - 49				HIC-SERIES
FOR IDLER DIA – ϕ 152.4, ϕ 159, ϕ 165.1, ϕ 168.3, ϕ 193.7, 219.1				
FOR SHAFT DIA – 35 mm				
$Q^\circ = 5^\circ, 10^\circ, 15^\circ, 20^\circ, 25^\circ, 30^\circ, 35^\circ, 40^\circ \text{ \& } 45^\circ$				
SR NO	B.W	A	B	L
1	1200	465	515	44
2	1400	530	580	44
3	1600	600	650	44
4	1800	670	720	44
5	2000	740	790	57
6	2400	870	920	89

Note: On Request, HIC Universal Can Supply up to 80 mm Shaft Dia. OR any Customize

3 Pcs. Unequal Garland Carrying Idler



5 Pcs. Equal Garland Carrying Idler



DIMENSIONS FOR 5 PIECE GARLAND RETURN IDLER SET

TABLE - 50

HIC-SERIES

FOR IDLER DIA – ϕ 152.4, ϕ 159, ϕ 165.1, ϕ 168.3, ϕ 193.7, ϕ 219.1

FOR SHAFT DIA – 30 mm

$Q^\circ = 5^\circ, 10^\circ, 15^\circ, 20^\circ, 25^\circ, 30^\circ, 35^\circ, 40^\circ \text{ \& } 45^\circ$

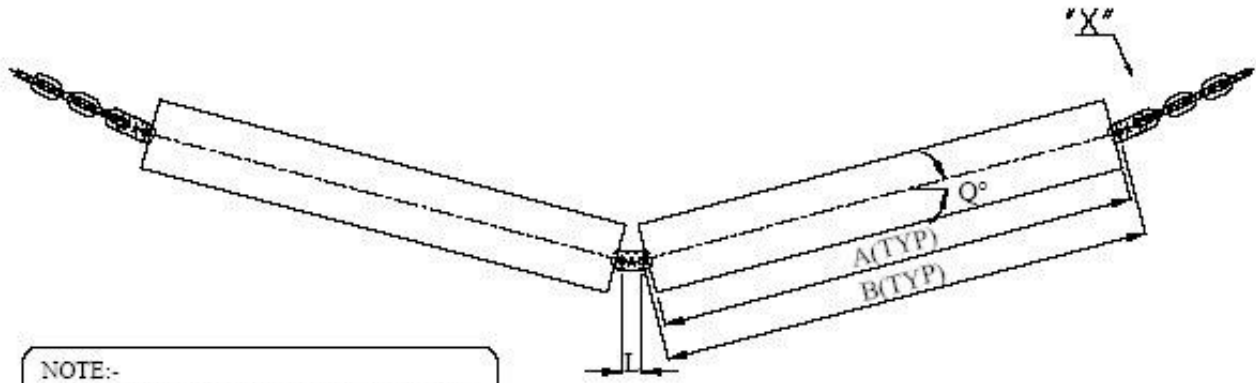
SR NO	B.W	A	B	L
1	1200	280	330	44
2	1400	320	370	44
3	1600	360	410	44
4	1800	400	450	44
5	2000	440	490	57
6	2400	520	570	58

Note: On Request, HIC Universal Can Supply up to 80 mm Shaft Dia. OR any Customize

Vendor Data: www.hic-india.com | Customers List: www.universaldelhi.org | Catalogue: www.rubber-steel-industrial-products.com

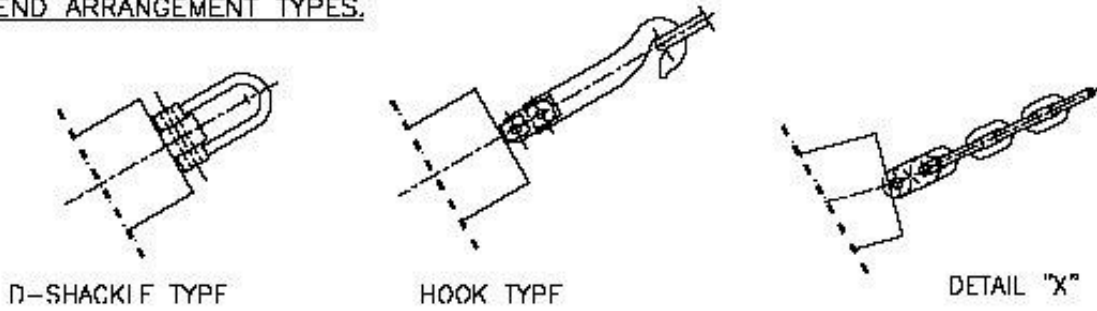
GA Drawing of Garland Return Idler

2 Pcs. Garland Return Idler Roller



NOTE:-
1. FOR DIMENSIONS REFER TABLE NO - 57, 58 & 59.

END ARRANGEMENT TYPES.



DIMENSIONS FOR 2 PIECE GARLAND RETURN IDLER SET

TABLE - 51				HIC-SERIES
FOR IDLER DIA – ϕ 88.9, ϕ 101.6, ϕ 114.3, ϕ 127, ϕ 139.7				
FOR SHAFT DIA – 25 mm				
$Q^\circ = 5^\circ, 10^\circ, 15^\circ \text{ \& } 20^\circ$				
SR NO	B.W	A	B	L
1	400	240	290	44
2	500	290	340	44
3	600	350	400	44
4	650	380	430	44
5	800	465	515	44
6	1000	575	625	44
7	1200	700	750	44



TABLE - 52				HIC-SERIES
FOR IDLER DIA – ϕ 114.3, ϕ 127, ϕ 139.7, ϕ 152.4, ϕ 159, ϕ 165.1, ϕ 168.3				
FOR SHAFT DIA – 30 mm				
$Q^{\circ} = 5^{\circ}, 10^{\circ}, 15^{\circ} \& 20^{\circ}$				
SR NO	B.W	A	B	L
1	500	290	340	44
2	600	350	400	44
3	650	380	430	44
4	800	465	515	44
5	1000	575	625	44
6	1200	700	750	44
7	1400	800	850	44
8	1600	900	950	44

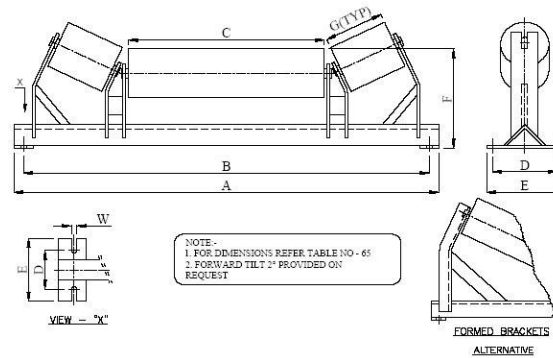
TABLE - 53				HIC-SERIES
FOR IDLER DIA – ϕ 152.4, ϕ 159, ϕ 165.1, ϕ 168.3, ϕ 193.7, 219.1				
FOR SHAFT DIA – 35 mm				
$Q^{\circ} = 5^{\circ}, 10^{\circ}, 15^{\circ} \& 20^{\circ}$				
SR NO	B.W	A	B	L
1	1200	700	750	44
2	1400	800	850	
3	1600	900	950	
4	1800	1000	1050	
5	2000	1100	1150	
6	2400	1300	1350	57/89

Note: On Request, HIC Universal Can Supply up to 80 mm Shaft Dia. OR any Customize



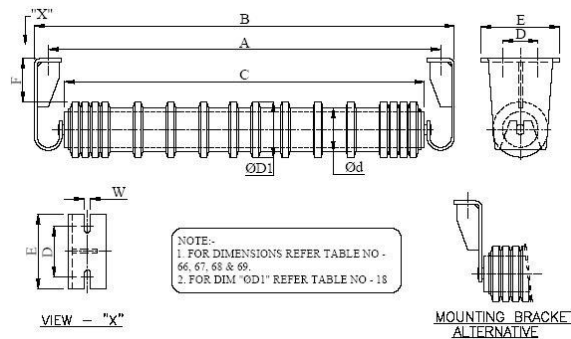
GA Drawing of Pickling Idler Roller

3 Pcs. Unequal Carrying Idler



GA Drawing of Self Cleaning Return Idler

Single Piece Self Cleaning Return Idler Roller



DIMENSIONS FOR SINGLE PIECE SELF CLEANING RETURN IDLER SET

TABLE - 54		HIC-SERIES						
FOR IDLER DIA – ϕ 63.5, ϕ 76.1, ϕ 88.9								
FOR SHAFT DIA – 20 mm								
SR NO	B.W	A	B(~)	C	D	E	F	W
1	300	590	650	400	40	75	75	14
2	400	690	750	500	40	75	75	14
3	500	790	850	600	40	75	75	14
4	600	890	950	700	40	75	75	14
5	650	940	1000	750	40	75	75	14
6	800	1090	1150	950	40	75	75	14

TABLE - 55							HIC-SERIES	
FOR IDLER DIA – ϕ 88.9, ϕ 101.6, ϕ 114.3, ϕ 127, ϕ 139.7								
FOR SHAFT DIA – 25 mm								
SR NO	B.W	A	B(~)	C	D	E	F	W
1	400	690	750	500	65	100	75	14
2	500	790	850	600	65	100	75	14
3	600	890	950	700	65	100	75	14
4	650	940	1000	750	65	100	75	14
5	800	1090	1150	950	65	100	75	14
6	1000	1290	1350	1150	65	100	75	14
7	1200	1490	1550	1400	65	100	75	18

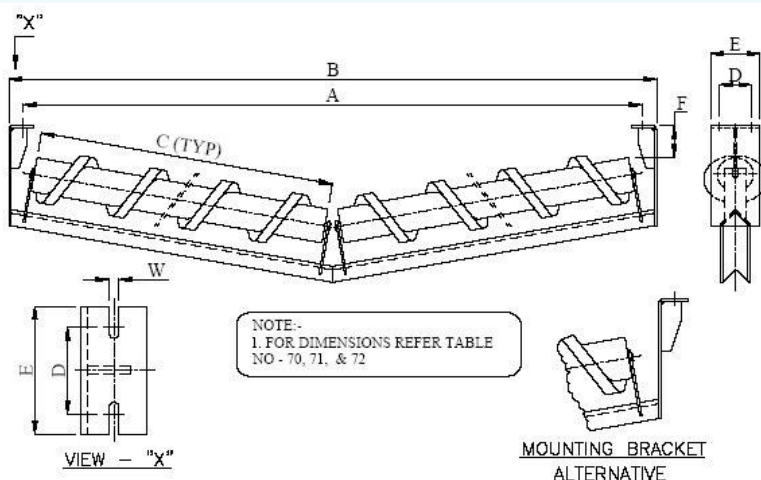
DIMENSIONS FOR SINGLE PIECE SELF CLEANING RETURN IDLER SET

TABLE - 56							HIC-SERIES	
FOR IDLER DIA – ϕ 114.3, ϕ 127, ϕ 139.7, ϕ 152.4, ϕ 159, ϕ 165.1, ϕ 168.3								
FOR SHAFT DIA – 30 mm								
SR NO	B.W	A	B(~)	C	D	E	F	W
1	500	790	850	600	65	100	75	14
2	600	890	950	700	65	100	75	14
3	650	940	1000	750	65	100	75	14
4	800	1090	1150	950	65	100	75	14
5	1000	1290	1350	1150	65	100	75	14
6	1200	1490	1560	1400	65	100	75	18
7	1400	1690	1750	1600	65	100	75	18
8	1600	1890	1950	1800	65	100	75	18

TABLE - 57							HIC-SERIES	
FOR IDLER DIA – ϕ 152.4, ϕ 159, ϕ 165.1, ϕ 168.3, ϕ 193.7, ϕ 219.1								
FOR SHAFT DIA – 35 mm								
SR NO	B.W	A	B(~)	C	D	E	F	W
1	1200	1490	1550	700	100	150	75	18
2	1400	1690	1750	800	100	150	75	18
3	1600	1900	1950	900	100	150	75	18
4	1800	2100	2150	1000	100	150	75	22
5	2000	2300	2350	1100	100	150	75	22

Note: On Request, HIC Universal Can Supply up to 80 mm Shaft Dia. OR any Customize

Two Piece Self Cleaning Return Idler Roller



DIMENSIONS FOR 2 PIECE SELF CLEANING RETURN IDLER SET

TABLE - 58		HIC-SERIES						
FOR IDLER DIA – ϕ 88.9, ϕ 101.6, ϕ 114.3, ϕ 127, ϕ 139.7								
FOR SHAFT DIA – 20 mm								
$Q^\circ = 5^\circ, 10^\circ, 15^\circ \text{ \& } 20^\circ$								
SR NO	B.W	A	B(~)	C	D	E	F	W
1	300	590	650	240	40	75	100	14
2	400	690	750	290	40	75	100	14
3	500	790	850	350	40	75	100	14
4	600	890	950	380	40	75	100	14
5	650	940	1000	465	40	75	100	14
6	800	1090	1150	575	40	75	100	14
7	1200	1490	1550	700	40	75	100	14

TABLE - 59		HIC-SERIES						
FOR IDLER DIA – ϕ 114.3, ϕ 127, ϕ 139.7, ϕ 152.4, ϕ 159, ϕ 165.1, ϕ 168.3								
FOR SHAFT DIA – 25 mm								
$Q^\circ = 5^\circ, 10^\circ, 15^\circ \text{ \& } 20^\circ$								
SR NO	B.W	A	B(~)	C	D	E	F	W
1	500	690	750	500	65	100	75	14
2	600	790	850	600	65	100	75	14
3	650	890	950	700	65	100	75	14
4	800	940	1000	750	65	100	75	14
5	1000	1090	1150	950	65	100	75	14
6	1200	1290	1350	1150	65	100	75	14
7	1400	1490	1550	1400	65	100	75	18
8	1600	1900	1950	900	65	100	100	18



TABLE - 60						HIC-SERIES		
FOR IDLER DIA – ϕ 152.4, ϕ 159, ϕ 165.1, ϕ 168.3, ϕ 193.7, ϕ 219.1								
FOR SHAFT DIA – 30 mm								
$Q^{\circ} = 5^{\circ}, 10^{\circ}, 15^{\circ} \text{ \& } 20^{\circ}$								
SR NO	B.W	A	B(~)	C	D	E	F	W
1	1200	1490	1560	700	100	150	100	18
2	1400	1690	1750	800	100	150	100	18
3	1600	1900	1950	900	100	150	100	18
4	1800	2100	2150	1000	100	150	100	22
5	2000	2300	2350	1100	100	150	100	22

Note: On Request, HIC Universal Can Supply up to 80 mm Shaft Dia. OR any Customize

Disclaimer: Information's, written and verbal are provided by HIC, relative to its products which it determines to be reliable & no liabilities of whatsoever nature in regards to its uses. The purchaser of UNIVERSAL brand industrial products should determine for itself the suitability of such products.



Selection of Roller Idler

Belt Conveyor System, Load Movement HIC Belts Guide *

Follow simple steps for as to How to select conveyor idler to move material load through rollers on belt conveyor system:-

Step 1 of HIC Universal conveyor idler Selection:

Conveying Capacity of belt conveyor assessment Cross-sectioned **Area (A)** multiplied by conveying **speed(V)** gives result of conveying capacity of belt conveyor, further multiplied by **slope Correction factor** ranging from 0.8 to 1.0 .

$$Q_v \text{ (m}^3 \text{ /h)} = A \text{ (m}^2\text{)} \times V \text{ (m/s)} \times 3600 \times \text{(Slope Correction Factor)}$$

$$Q_m \text{ (TPH)} = A \text{ (m}^2\text{)} \times V \text{ (m/s)} \times 3.6 \times \text{Material Density (kg/m}^3\text{)} \times \text{(Slope Correction Factor)}$$

Step 2 of HIC Universal conveyor idler Selection:

Troughing Angle of Idlers choice based on conveyed Material Class – Greater carrying capacity for a given belt width is achieved using idlers with end-roll sets at steeper troughing angles of 35° and 45-degree angles in place of normal 20° angle. Though, minimum transition distances (1.0 belt width to 9b as per trough depth and rated tension) for idler adjacent to terminal pulleys need to be followed if using steeper troughing angles and higher transverse flexibility fabric carcass design conveyor belting by opting very high tensile rating belt with lesser number of plies.

Step 3 of HIC Universal conveyor idler Selection:

Belt Width choice based on Lump size and Peak Load vis-à-vis- Belt Speed - Belt width between 500 mm (max lump size of 4") to 2400 mm (max lump size of 18") based on 20° angle of surcharge and surge or peak load (TPH) being 80% full cross-sectional load area of the belt and belt speed 100 FPM to 750 Feet Per Minute may be chosen. Belt width calculation method:-

i) Capacity conversion to cubic feet per hour from TPH:

$$FT^3 / HR = TPH \times 2000 \text{ LBS/TON}$$

$$\text{Material Density (LBS/ FT}^3\text{)} \times 80 \%$$

ii) Capacity Equivalent at a belt speed of 100 FPM:

$$\text{Capacity equivalent} = FT^3 / HR = 100 \text{ FPM}$$

Belt Speed FPM (chosen)

iii) Minimum or higher Belt Width selection based on correct surcharge and troughing angle.

iv) Design Belt Speed or final FPM:

Design Speed FPM = FT^3 / HR (Method i) x 100 FPM

selected BW Capacity $FT^3 / HR @ 100$ FPM (Method iii)

Higher speeds above 350 FPM requires special chute design and tripper drive, thus idlers designing involves complex procedure.

Step 4 of HIC Universal conveyor idler Selection:

Adjusted Load of Idlers computation- Actual load and then Adjusted load of troughing carrying idler be calculated as stated:

Actual Idler Load, **IL** = W_b (conveyor Belt weight, kg/m) + W_m (material weight, kg/m) x S_i (Idler Spacing, between 0.6 to 1.5 m)

Adjusted Load, **AL** = **IL** x K_1 (lump adjustment factor, bet. 1.0 to 1.4) x K_2 (maintenance factor, bet.1.0 to 1.15) x K_3 (service factor, bet. 0.8 to 1.2) x K_4 (belt correction factor, bet. 0.8 to 1.05) + **IML** (force due to idler height deviation)

Step 5 of HIC Universal conveyor idler Selection:

Pipe Series and Bearing Load Ratings of Idlers choice - Approximate Load ratings with rigid frame based on min. 30,000 operating hours at 500 RPM at trough angle of 20° with three equal length rolls of '**B**'class Pipe series carrying roller idlers with ball **bearings** being 185 kgs up to 800 mm belt width, 160 kgs >800 up to 1000 mm BW, 150 kgs >1000 up to 1200 mm conveyor belt-width.

'**C**' series, '**D**' series pipe rollers with tapered roller bearings for heavy duty and corrosive environments are selected for 60,000 operating hours or more trouble-free movement.

$RPM = Belt\ Speed\ (FPM) \times 12$

Roll Diameter (inch) x 3.146 (π)

Larger diameter roller sizes choice implies increased bearing life and idler-wear life. Similarly, **larger shaft thickness choice** also influences more load carrying capacity as higher capacity bearing size is used, thereby increases overall idlers running life.



Load Ratings for Idlers

The Following conveyor belt capacity charts show tons per hour (TPH) based on material weighing 100 lbs. per cubic foot, 20° material surcharge angle with three equal length rolls on troughing idlers.

Load Ratings for CEMA Idlers - Rigid Frame (Lbs)

Idler Class	Belt Width (Inches)	Single Roll Return		Two Roll Vee		NOTES FOR TABLE:	
		20°	35°	45°			
CEMA B Idlers	18	410	410	220		1. TROUGHING IDLER LOAD RATINGS ARE FOR THREE EQUAL LENGTH ROLLS. 2. LOAD RATINGS ALSO APPLY FOR IMPACT ROLLS. 3. TROUGHING IDLER LOAD RATINGS ARE BASED ON A LOAD DISTRIBUTION OF 70% ON CENTER ROLL AND 15% ON EACH END ROLL FOR ALL TROUGH ANGLES.	
	24	410	410	190			
	30	410	410	165			
	36	410	410	155			
	42	390	363	140			
	48	380	353	125			
Ratings Based on Min L10 of 30,000 Hours at 500 RPM							
CEMA C Idlers	18	900	900	475			
	24	900	900	325			
	30	900	900	250			
	36	900	837	200			
	42	850	791	150			
	48	800	744	125			
	54	750	698	*			
	60	700	650	*			
CEMA D Idlers	24	1,200	1,200	600			
	30	1,200	1,200	600			
	36	1,200	1,200	600			
	42	1,200	1,200	500			
	48	1,200	1,200	425			
	54	1,200	1,116	375			
	60	1,150	1,070	280			
	66			215			
	72	1,050	977	155			
	78			125			

Picking Idler Load Ratings (Lbs.)

Belt Width(Inch)	CEMA C	CEMA D
24	475	600
30	475	600
36	325	600
42	250	600
48	200	530
54	150	440
60	125	400
72		280
84		
96		

Live Shaft Idler Load Capacities (Lbs.)

Belt Width(Inch)	CEMA C	CEMA D
18	1,200	
24	1,200	1,400
30	1,200	1,400
36	1,200	1,400
42	1,100	1,400
48	1,000	1,275
54	875	1,150
60	780	1,000
72		850
84		





Conveyor Idler Bearing Load as per CEMA

Belt width mm	load on center bearings kg*			shaft dia. mm
	S 500	S 1000	S 1500	
450	11	23	34	
600	20	40	60	
750	31	63	94	
900	45	90	135	
				20
1050	61	123	180	
1200	80	160	240	25
1350	101	203	304	
1500	125	250	375	
1800	180	360	540	30
2100	245	490	735	
2400	320	640	960	
				40

*check Disclaimer, please



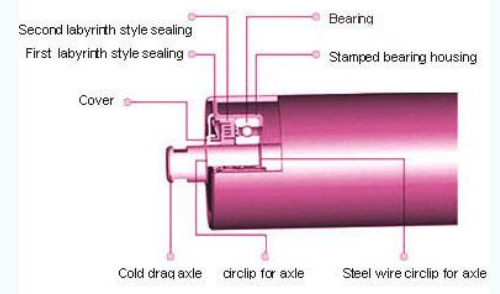
Purchase Enquiry Info

Conveyor Carrying, Return, Impact Roller Troughing Idler Min. *Information to Be Sent*

(Email at: belts@universaldelhi.org ; universal@hic-india.com or Call +91 11 2874 5120)

HIC ships roller conveyor belt trough idler conforming IS 8598 tailor-made to buyer's order specifications to different countries including India. Please send following information in English to quote prices:

1. **Diameter** of pipe OD mm **Size**
2. **Long** mm
3. Roller application **Type**, impact with rubber rings or self-aligning or carrying or return
4. Spindle diameter or shaft thickness
5. **Bearing** size
6. **Notching** dimension
7. For conveyor **Belt** width
8. **Quantity**-numbers



Shipment Handling and Delivery Time

Bulk quantity orders are packed in sea-worthy jute or HDPE in Rolls or Bags shipped via sea in less than container loads (LCL) /FCL or by air. Sea freight (BL) or Air freight (AWB) charges payable at destination.

Small orders are shipped overseas via **DHL** or **FedEx** or **Aramex courier**, for which your Authorization Account number be sent to be booked on "Freight To Collect" basis, together with complete acceptable physical address and phone or mobile number.

Domestic orders are dispatched to any destination in **India** by Road Transport, Gati or TCI or ARC or Jaipur Golden on **COD** basis.

Shipping Time, generally within 4-6 weeks or as stipulated in quote and accepted order.

Installation Method of Conveyor Idlers

Safe Materials Movement, HIC Continuous Conveying Tips



- **Pitch** or spacing of carrying idler sets of minimum 1meter, in general be done for high efficiency of belt conveying system
- **Spillage** of material at loading area is cleaned periodically to protect idler shell, belt cover damages & high power consumption.
- **Collision** or impingement in tail-pulley & take-up area must be taken care of to avoid damages.
- **Feeding Point** must have 4-5 sets of rubber lagged Impact idlers at 500-750mm distance to protect high value belting early damage.
- **Material** of construction used are proven Housing of CRCA Steel, Shell of MS pipe as per IS9295, Shaft of EN8, Sealing of double labyrinth dust & waterproof, Bearings of reputed seize resistant.

* Size Variation as per mfg dimensional tolerances should be acceptable



Organization Structure

Industrial supply manufacturing company having dedicated team of 63 skilled work forces includes Rubber Technologist, Chemists, Engineers and Skilled Labor's, Management Experts viz., Plant Manager, Quality Control Inspector, Lab In charge and I.T specialists. Majority of operations are automatic.

Production Capacity of Conveyor Transport Products

	Approximate Qty. per annum
1. Carrying Idlers, Impact Rollers with Rubber Rings, Self Aligning Idlers, Conveyor Return Idlers http://www.rubber-steel-industrial-products.com/conveyor-rollers-manufacturer/index.htm	60,000 nos.
2. Head Drum Pulley, Tail Conveyor Pulley, Snub Pulley	1,200 nos.
3. Conveyor Belts General Purpose , Heat Resistant Rubber Belt, Food Grade PVC Belt http://www.rubber-steel-industrial-products.com/conveyor-belts-manufacturer/index.htm	72,000 meters
4. Conveyor Belt Fastener, Bucket Elevator Bolt, Staple Type Lacing Fastener	1,00,000 numbers

Visakhapatnam Steel Plant (721354), NALCO (3072),
Subhash Projects (EM-10,18), Heavy Engg. Corp.(6003),
Bokaro Steel (72621), Salem Steel(000155),
Gujarat State Road(000118), ACC (944),
Army Base(512/ABW-LP/76), NTPC(H8267), etc.

* Price List & terms on specific enquiry please.



Quality Assurance Plan

HIC Roller Idlers Testing Parameters

Quality conveyor idlers manufactured in ISO 9001 certified HIC factories in India with Production Supervisors conducting routine pre-manufacture checks and post-manufacture tests as to:

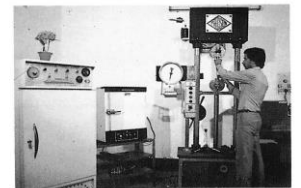
- 100% **Physical checks** with respect to dimensions,
- 100% **Chemical checks** w.r.t. MOC,
- 20% **Random physical tests**



Friction Test Apparatus



Water and Dust Penetration Test Apparatus



Tensile Strength & Elongation Testing Machine

Test Certificate & Warranty

HIC Manufacturer's Lab TC of Idler Roller Supplied

Quality conveyor rollers conforming IS 8598, IS 9295, BS 970-En3B - HIC manufacturers modern in-house Lab Test Certificate issued with respect to Overall dimensions, besides other tests such as Pipe Co-axiality being machined at both ends simultaneously, Bearing Housing of CRCA sheet simultaneously welded to the pipe at both ends, Bearings type, Spindle or shaft of EN8 bright steel bar, seals of multi labyrinth, etc.

Warranty of one year against any manufacturing defects in HIC manufactured conveyor roller product.

Third Party Inspections by DNV, RITES, EIL, QSS, SGS, also arranged in HIC's conveyors factory or by Government Approved Laboratory, Test Certificate issue fee charges directly reimbursed by buyers.

Legalization by Embassy or Chambers of Commerce **Attestation** of export shipping Invoice and other documents also provided towards export of Indian Origin machined rollers products if demanded on actual fee remitted by importers directly to HIC and or cost added up in Invoice.

Manufacturing & Testing Equipments



Belt Press

Exporters-Importers of industrial products having latest manufacturing machinery and advanced testing equipments.

Conveyor Products Production Machinery



Belting Calander

Banbury Rubber Mixer, Dispersion Kneader(s), Mixing Mill(s) 2 Roll, Calander Machine (3Roll), Jointing Machine, Rubber Bale Cutter, Hydraulic Presses (2 daylight), Hydraulic Press (single daylight), Hydraulic Finishing Press, Belt Endlessing M.C.(Vulcaniser), Sundry Machines viz. Lathes, Shaper, Generator sets, Hydraulic Jacks, etc.

Rubber Products Quality Testing Apparatus as per ISO :



Manufacturing Hydraulic Press

B.O.D. Incubator (seasoning chamber), Hot Air Ageing Oven, Physical Balance, Tensile Testing Machines, Abrasion Tester(as per DIN), Drum Friction Tester (as per Canadian stds), Scott Flex Tester (as per railways), Dumbbell Dies, Yarn Testing Machine, etc. **Calibrated** periodically. Indigenous technology with latest technical Indian knows how, however, no collaboration made so far.

Quality Control

It is in between process checks that are strongly checked & lodged in register to ensure finished rubber product meeting quality standards.

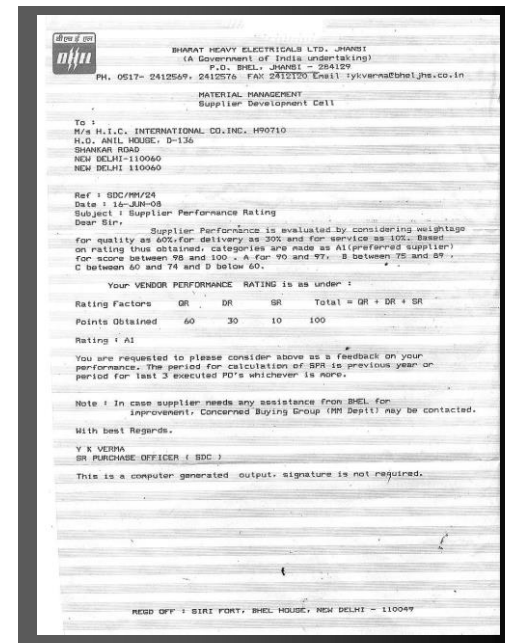
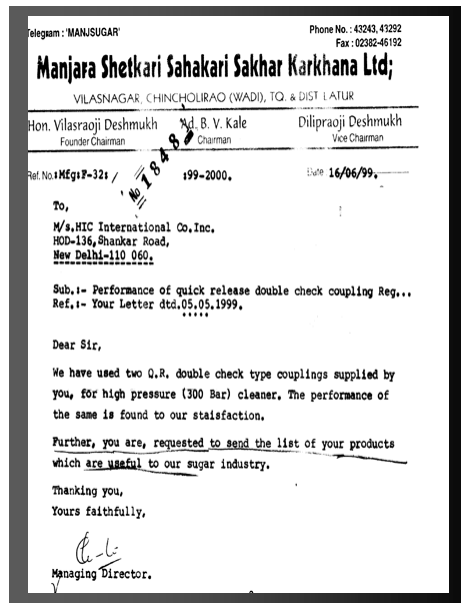
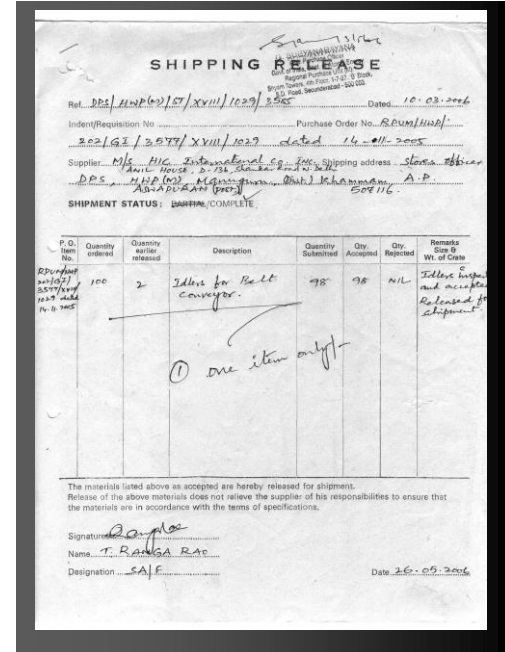
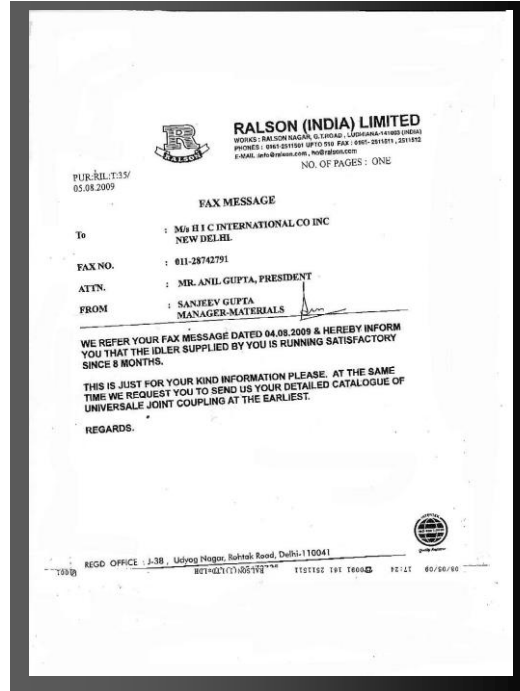
Test Certificate (TC) of our Lab, wherever, applicable, is **forwarded** along with the supply.



Performance Certificates



Export Excellence Award during Feb 1997



Many more certificates available as feedbacks are constantly monitored for providing highest customer's satisfaction.

Total Quality Management Principles Followed





Dust-Proof. Class Housing. Best Seals.

Steel Roller Idlers

TRUSTED BY MACHINERY OEMs OF THERMAL POWER, MINING, CEMENT, PAPER, SUGAR SINCE 1988

www.hicconveyors.com | www.carryingrolleridler.com | www.crusherbeltroller.com | www.conveyoridlerbrackets.com

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HIC India Headquarters

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