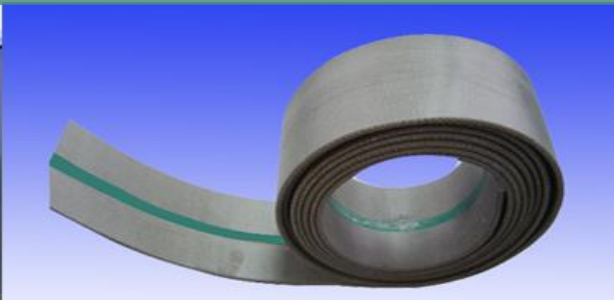




# Machinery Power Transmission Nylon Leather Belting

Technical Specifications

Conforming IS 1370, 6538



Energía Eficiente Caucho Cuero Transmisión Correas

سد يورن قل والجلود والمطاط ل طاقة الموفرة

Energie efficiente caoutchouc cuir de transmission courroies

**HIC**  
**UNIVERSAL**  
True Performance Rubbers





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## Specification of Rubber Leather Belting

Classified under HS Code 4010, 4204



HIC Universal Rubber leather nylon sandwich Flat type transmission belting are used for pulley to pulley power transmission in textile mills, flour mills, stone crushers threshers, rice mills, agriculture and other industrial usage and Universal offers high grade rubber compounded belt with pre-stretched fabric of great tensile strength to give trouble-free service and supersedes IS 1370, IS 6538, BS 3790, ISO 4184 quality standards.

### About HIC

HIC International Co Inc, formed in 1988 manufacturing industrial **steel and rubber** products **ISO 9001** certified producer of Power Transmission flat belting sheave coupling, Conveyor belt idler 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 Flat Transmission Belts?



### Energy Efficient

Nylon Core Reduces Power Consumption

### High Breaking Strength

Fabric Plies Ensures Longer life

### High Friction Rubber

Allows Extreme Power Transmission

### Oil Resistant, Super Grip

Chrome Leather Ensures Flexibility

### Minimal Elongation Drive

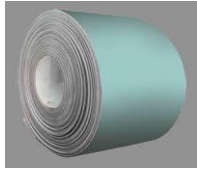
High Speed Flat Belting Solution

**Electric motors and engines flywheel high speed effective power transmission using leather nylon belting made in India by HIC Universal.**

HIC Universal Leather transmission belting and flat rubber transmission belts are Original Choice by textile machinery and flour mill machines manufacturers in India, USA, China, Italy, Canada, Germany, Japan, Austria, Belgium, Spain, South Africa, Taiwan, UK, South Korea, Peru, Australia, Philippines, Thailand, Indonesia, Bangladesh, Pakistan and other Asian countries.

## RANGE of Belting

### Machinery Line Shaft Drive HIC Power Transmission



Tangential Belt TA Series



Leather Transmission Belting



Rubberized Nylon Sandwich Belt



Rubber Transmission Belt Cotton Hard Duck



Balata Belting



Treadmill Belt

- ❖ **Rubber Nylon FR** sandwich flat textile machinery belt 1.25mm thick green black colour up to 300 mm Width.
- ❖ **Tangential** rubber nylon textile mills belts TA 1.25~2.8mm thick green yellow colour up to 300 mm W.

- ❖ **Leather** belting cone drum drive LL 3~8mm thick off white chrome leather up to 300 mm W.
- ❖ **Leather nylon** paper mills line shaft drive belting LF 2.5~5.5mm thick up to 300 mm W.

- ❖ **Nylon** elastomer friction coating circular looms power transmission belts FF 1mm thick up to 300 mm W.
- ❖ **PVC Nylon DB** motorized tread mill and jogger machine belts 1.3~2.5mm thick up to 2000 mm W.
- ❖ **Rubberized Nylon XRT** textile carding drive motors belts 2~3.9mm thick up to 900 mm W.
- ❖ **Spindle Tapes ST** folder and carrier belts.

- ❖ **Friction surface train lighting** belting 3~5 ply 31-34 oz duck up to 1050 mm W.
- ❖ **Canvas Rubber agricultural** machinery drive belts 4~5 ply 28-31 oz quality up to 1050 mm W.
- ❖ **Transmission Rubber belts** stone crushers, balata, flour mills motor drive 4~10 ply 37-34-31 oz up to 1050 mm W.

## Types of Flat Belting Manufactured

### *Rubber, Nylon and Leather Transmission Belts*

Rubber transmission belts, Cut edge flat transmission belt, Round edge transmission belt, Balata transmission belting, Power transmission belt for Train lighting, Round hay Baler belting, Combine harvester flat belt.

Nylon transmission belts, Tangential belts, Extremultus replacement flat belts, Nylon sandwich belt, Endless flat belts, Folder gluer belts, Twisted flat belt for line shaft, Knitting Loom belt, TFO- two for one Twister high speed belt, Treadmill running belt, Fabric textile belting, Flat belt flywheel, Gang Saw belt.

Leather transmission belting, Double chrome leather transmission belt, Single side chrome leather belting, Rubber leather transmission belts, Generator leather belt, Paper mill Cone drive belting.



## Thickness and Ply of Flat Belting

### *Rubber, Leather, Nylon, Loom, Treadmill, Tangential, Textile Machine Belts Produced By HIC*

Flat transmission Rubber belts manufactured in hard cotton duck fabric **31oz** flour mills quality, **34oz** rice mills quality, HIC unique **37oz** crusher quality, **28oz** soft duck canvas belt agricultural quality, in **Ply** rating 3, 4, 5, 6, 8, 10, 12, 14, having overall total respective flat belting Thickness of MM 3.9, 5, 6.2, 7.8, 9.8, 12.2, 15, 17.

Power transmission Leather belting produced in double chrome leather with nylon polyamide core **LL** series 6, 10, 12, 20, 30, having overall total respective flat belt Thickness of MM 3, 3.2, 4.7, 6, 7.5.

Nylon core heavy duty belts manufactured in single chrome leather with nylon polyamide core **LF** series 6, 10, 12, 20, 30, 40, 50 having total respective flat belt Thickness of MM 2.5, 3, 3.2, 4.5, 5, 5.5.

**FR** series 1 having overall total respective fabric rubber flat belt Thickness of MM 1.25.

Rubberized nylon transmission belts produced in **XRT=ARS** series 1, 2, 3 having overall total respective flat belting Thickness of MM 2, 2.4, 3.



Circular Loom belts produced of elastomer friction rubber coating in **FF** series 6 having overall drive belt Thickness of MM 1.

Anti-slip Treadmill walking and running belts manufactured with Top PVC diamond chequered and bottom of heavy duty nylon fabric in **1 Ply DB** series 13, 16 having overall respective jogger belt Thickness of MM 1.3, 1.6.

**2 Ply** Strong-Grip quality walker belt **DB** series 13, 16 also manufactured having overall respective Thickness of MM 2, 2.5.

Tangential belts manufactured in **TA** series 15, 20, 24, grooved 24 having overall total respective flat belting Thickness of MM 1.25, 2, 2.4, 2.8.

Textile Twisting machine belt **T** series 2, 3H, 4 also produced having respective Thickness of MM 2, 2.4, 3.2.

## Colour of Flat Belts

### *Grey, Orange, Green, Blue, Off-white of HIC Beltings Produced*

Flat transmission rubber belting friction surface Cut edges 31oz, 34oz, 37oz, 28oz colour produced Grey with Blue sides, minimum flat Pulley diameter MM 100, 180, 250, 400 be used for respective belting Ply of 3, 4, 5, 6.



Transmission belting Round edges 28oz, 31oz, 32oz colour produced Orange TBS with Red or Blue sides.

Combine harvester flat belting colour produced Smoke Grey.

Tangential belts TA series colour produced Green and other side Yellow or Black.

Fancy Twisters belts T series colour produced Blue and other side Grey.

Leather Transmission belts LL series colour produced Off-White both double side.

Nylon core flat belts LF series colour produced Off-White and other side Red or Green.

Packaging machinery Rubberized belts XRT=ARS series colour produced Green and other side Yellow or Blue.



Pulley diameter for nylon core flat belts used be selected as recommended calculated from motor rpm, velocity ratios and centre distance, minimum diam MM 5, 10, 15, 24, 32, 40, 75, 80, 90, 100.

## Order Quantity Minimums

### *Roll Length Meters of HIC Nylon Sandwich and Rubber Transmission Beltings Supplied*

Transmission Rubber Belting 1050mm width equal to 42 inch slab cut to desired sizes of width Minimum order quantity in running roll length of 110 METERS L in single Quality x Ply rating of flat belt size.



Length Tolerance of + 10 %, - 5 % on all ordered quantity of flat belting shall be supplied deemed to have been accepted by buyers.

Nylon core transmission belts Minimum order quantity of 5 METER L in single Quality of minimum multiples of 10 mm Width chargeable of flat belt size, subject to Length Tolerance of +3 %, -2 %.

Endless transmission belts by hot splicing manufactured with special HIC Universal technique of keeping belting splice angle at 60 degree.

Packed in sea-worthy jute or HDPE wrapped.

## Flour and Rice Mills Belting

### *Differential Drive Cut Edge Power Transmission Flat Belt*

Cut Edge flat transmission belt used by manufacturers of rice mill machinery, oil mill machinery, flour mill machines advantageous for differential drive power transmission.

Flat belting also used by impellers manufacturers, tobacco machine advantageous for mechanical power transmission of machinery.



Friction surface transmission belting sizes manufactured width MM 25,37, 50, 62, 75, 100, 125, 150, 175, 200, 250, 300, 500, 600, 750, 900, 1000, 1050, 1100, belts up to 44 inch breadth.

**Vendor Data:** [www.hic-india.com](http://www.hic-india.com) | **Customers List:** [www.universaldelhi.org](http://www.universaldelhi.org) | **Catalogue:** [www.rubber-steel-industrial-products.com](http://www.rubber-steel-industrial-products.com)



## Agriculture Thresher Belt

### *Round Fold Transmission Belting*

Round Fold edge transmission belt used by manufacturers of wheat threshing machine, paddy threshers, belt grinding machines, agricultural equipment manufacturers advantageous for use in power transmitting equipment.

Agricultural flat belting sizes produced width MM 25 ,50, 75,100, 125, 150, 175, 200, belting up to 8 inch breadth.



## Balata Belt

### *Packing Machinery Transmission Belting*

Balata transmission belting used by packing machinery manufacturers advantageous for automotive punched parts and gas bottle retention strapping application.

Balata belt sizes manufactured width MM 25, 37, 50, 62, 75,100, 150, belts up to 6 inch breadth.



## Train Lighting Belt

### *Railways Dynamo Drive Transmission Belting*

Power transmission belt for **Train lighting** used by Railways advantageous for use in dynamo to produce electric current.

Dynamo drive belt sizes manufactured width MM 76,102,152, beltings up to 6 inch breadth.



## Agricultural Baler Belt

### *Farm Equipment Belting*

Round hay Baler belting used by Agricultural farm equipment manufacturers to suit all makes-models of round balers including Massey-Ferguson, Ford, International, Renn and others machines.

Baler belts sizes manufactured width up to MM 1000, which is 40 inch breadth.



## Combine Harvester Belts

### *John Deere, Kubota, CLASS Transmission Belting*

Combine harvester flat belt used by manufacturers of agricultural machinery, farm machinery for power transmission of combine harvesting machine manufacturers parts of make-model John Deere, Kubota, CLAAS, New Holland, Laverda and others to harvest rice, wheat, potato, corn agriculture produce.

Combine belts Flat sizes produced in width MM 45, 50, 100, 114, 125, and 137.5

Wrap harvester belt, wrap Banded belts, Ribbed harvester belts sizes produced in various sections as per specific orders.



## TFO Twister Belt

### *Textile Machine Power Transmission Tangential Belts*

Tangential belts used by manufacturers of textile twisting machine, rotor spinner advantageous for power transmission less than 50,000 rpm belt speed.

Spinning machine belt sizes produced in width MM 25 up to 300, rubber nylon flat belting up to 12 inch width.



**TFO- two for one Twister high speed belt** used by manufacturers of fancy twisters advantageous for more than 50,000 rpm belt speed.

TFO belt sizes produced width MM 25 up to 300, rubber nylon flat belting up to 12 inch width.

**Germany made flat belts** replacement used by manufacturers of textile twisting machine for A line, E line flat belting, P line German made flat belt flat belt, Aramide cord belt, Polyester cord high efficiency belt equivalent interchangeable with HIC Universal flat belt.

Germany made replacement belt sizes manufactured width MM 10 up to 300.

## Nylon Sandwich Belt

### *Energy Saving Drive Motor Belts*

**Nylon sandwich belt** used by manufacturers of energy efficient motors, cigarette making machine, polishing machine, particle board machinery manufacturers, plywood sanding machine, carding machine makers, textile ring spinning machines, as against straight and multiple pulley V belt drives.

Nylon belt sizes produced width MM 10 up to 900.

**Fabric textile belting** used by manufacturers of textile printing machine, cable pulling machine  
Fabric rubber belt sizes manufactured width MM 10 up to 300.



## Knitting Loom Belt

### *Endless Flat Belting*

**Endless flat belts** used by manufacturers of terry towel loom, oil mill machinery, machine tools manufacturers, textile printing machine producers, tobacco machine makers, vulcanized joint belt sizes produced length up to MM 30,000 = 30 meters.

**Knitting Loom belt** used by manufacturers of circular knitting machines, sizes manufactured width up to MM 100



## Folder Gluer Belt

### *Box Folding Belts*

**Folder gluer belts** used by manufacturers of packaging machinery, box making machine makers.

Packing belt sizes produced width up to MM 250, anti-static S series belt up to 10 inch.



## Carry Bag Machine Belt

### *Twisted Flat Belts*

**Twisted flat belt** for line shaft used without dismantling drive shafts.

Quick connectable belts cross section produced MM 2.5, 3, 4, 5, 6, 8, 9.5, 11, 12 and 14.

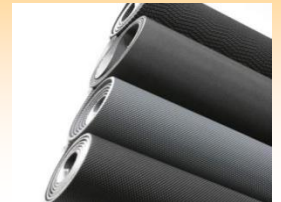


## Treadmill Belt

### *Gym Equipment Walker Belts*

**Treadmill running belt** used by manufacturers of gym equipment, body fitness equipment's, walking exercise machine makers.

Walker belts sizes produced width MM 455, 470, 555 up to 1100.



## Gang Saw Flying Wheel Belt

### *Marble, Granite Stone Cutting Flat Belting*

Gang Saw belt used by manufacturers of marble gang saw machine motor and granite gang-saw advantageous for use on driving and flying wheels to strengthen the friction force between wire and wheel.

Flat transmission belts for gang saw machine for cutting marble & granite produced Sizes width MM 30, 60, 100, 200, 300, 400, 500.



## Coil Wrapper Belt

### *Iron-making SPM Flat Belts*

**SPM Wrapper belts** used by manufacturers of iron coil wrapper machinery makers, steel wrapper machines advantage being that facilitates smooth 'Wrap-Around' of metal sheets by forming a strong-firm grip made of cut and oil resistant quality PU lining of 1mm thick at top and bottom with high tensile strength wear-resistant polyester fabric of 3 mm in middle produced in both Endless length size or open ends as per buyers requirements.



Skin pass mill wrapper flat belt sizes manufactured width up to MM 600.

## Rubberized Nylon Belt

### *Piston Compressor Flat Transmission Belts*

**Rubberized Nylon transmission belt** used by manufacturers of piston compressors and corrugated box machinery.

Flat belting sizes manufactured width up to MM 900.



## Paper Machine Belt

### *Leather Transmission Belting*

**Double chrome leather transmission belt** used by manufacturers of paper machine and wood chippers machinery advantageous features being stretch-less and longitudinally flexible that makes an ideal durable choice as needs no re-tensioning of leather transmission belting.

Cross and multiple drives LL belt sizes manufactured width up to MM 600.



## Band Saw Belt

### *Leather Covered Nylon Core Transmission Belting*

**Single side chrome leather belting** for driving surface and nylon fabric other side used by manufacturers of paper-pulper machinery, band saw machine, *crusher machinery, watch making grinder, vacuum pump manufacturers.*

Leather nylon transmission belt sizes produced width up to MM 300.

**Leather drive belt for lathe** used by manufacturers of automatic lathe, shaper machine makers and flat belting sizes produced width up to MM 150.

**Leather covered nylon core paper mill cone drive belting** used by manufacturers of paper mill machinery, wind powered paper machines makers, and rotary printing machine manufacturers.

Nylon core flat belt sizes manufactured width up to MM 300.





# Nomenclature of Nylon Sandwich Flat Belt

## Thickness, Colour and Tensile Strength for Power Transmission: Technical Data



Type	Total thickness (mm)					Weight (Kg/sq. mtr) Approx			Min. Pulley dia (mm)			Pull for 1% Elongation (kg/cm)			Tensile Strength (kgs/cm)			Top Surface			Driving Surface			Max. temp. resistance (oc)		
	Col.	Mat.	COF	Col.	Mat.	COF	Type	Total thickness (mm)	Weight (Kg/sq. mtr) Approx	Min. Pulley dia (mm)	Pull for 1% Elongation (kg/cm)	Tensile Strength (kgs/cm)	Top Surface	Driving Surface	Max. temp. resistance (oc)											
<b>LEATHER NYLON BELTINGS</b>												<b>RUBBER NYLON BELTINGS</b>														
LL-3	3.6	3.4	20	2	60	W	L	0.4	W	L	0.4	80	AR-1	2.4	3.0	40	4	120	G	NR	0.7	G	NR	0.7	100	
LL-6	4.0	3.7	40	4	120	W	L	0.4	W	L	0.4	80	AR-2	2.6	3.3	80	8	240	G	NR	0.7	G	NR	0.7	100	
LL-10	4.4	4.2	80	8	240	W	L	0.4	W	L	0.4	80	AR-3	2.9	3.6	100	10	330	G	NR	0.7	G	NR	0.7	100	
LL-12	5.0	4.6	100	10	330	W	L	0.4	W	L	0.4	80	AR3/6	6.0	6.7	100	10	330	G	NR	0.7	G	NR	0.7	100	
LL-20	6.5	5.5	160	16	480	W	L	0.4	W	L	0.4	80	AR-4	3.3	4.2	160	16	480	G	NR	0.7	G	NR	0.7	100	
LL-30	7.5	6.7	240	24	720	W	L	0.4	W	L	0.4	80	AR-5	3.9	4.6	220	19	570	G	NR	0.7	G	NR	0.7	100	
LL-40	8.0	7.8	320	32	960	W	L	0.4	W	L	0.4	80	ARS-1	2.4	3.0	40	4	120	G	NR	0.7	Y	NR	0.7	100	
LL-50	10	8.9	400	40	1200	W	L	0.4	W	L	0.4	80	ARS-2	2.6	3.3	80	8	240	G	NR	0.7	Y	NR	0.7	100	
LF-3	2.2	2.0	20	2	60	R	F	0.3	W	L	0.4	80	ARS-3	2.9	3.6	100	10	330	G	NR	0.7	Y	NR	0.7	100	
LF-6	2.4	2.3	40	4	120	R	F	0.3	W	L	0.4	80	ARS-4	3.3	4.2	160	16	480	G	NR	0.7	Y	NR	0.7	100	
LF-10	3.1	2.8	80	8	240	R	F	0.3	W	L	0.4	80	<b>TANGENTIAL BELTS</b>													
LF-12	3.4	3.5	100	10	330	R	F	0.3	W	L	0.4	80	TA 15M	1.8	2.0	50	5	150	PG	NR	0.7	B	NR	0.7	100	
LF-20	4.8	4.0	160	16	480	R	F	0.3	W	L	0.4	80	TA 16M	1.8	2.1	50	5	150	PG	NR	0.7	B	NR	0.7	100	

LF-30	6.0	4.5	240	24	720	R	F	0.3	W	L	0.4	80	TA 24M	2.4	3.0	100	10	300	PG	NR	0.7	B	NR	0.7	100
LF-30	7.3	6.3	320	32	960	R	F	0.3	W	L	0.4	80	TA 24MS	3.0	3.7	100	10	300	PG	NR	0.7	B	NR	0.7	100
LF-50	8.5	7.3	400	40	1200	R	F	0.3	W	L	0.4	80	TA 29HX	3.2	3.9	150	15	450	PG	NR	0.7	B	NR	0.7	100
L-6	2.0	2.2	40	4	120	T	PS	0.2	W	L	0.4	80	TA 29HXS	4.0	5.1	150	15	450	PG	NR	0.7	B	NR	0.7	100
L-12	2.8	2.8	100	10	330	T	PS	0.2	W	L	0.4	80	SPINDLE TAPES												
L-16	3.9	3.4	160	16	480	T	PS	0.2	W	L	0.4	80	ST-0	0.7	0.5	10	0.5	20	B	F	0.20	W	F	0.20	80
LR-6	5.7	6.6	40	4	120	G	NR	0.7	W	L	0.4	80	ST-3	0.8	0.6	10	1	30	B	F	0.20	W	F	0.20	80
LR-10	4.2	4.1	80	8	240	G	NR	0.7	W	L	0.4	80	ST-6	0.9	0.7	20	2	60	B	F	0.20	W	F	0.20	80
LR-12	4.5	4.5	100	10	330	G	NR	0.7	W	L	0.4	80	WW-3	0.7	0.55	10	1	30	W	F	0.20	W	F	0.20	80
FABRIC NYLON BELTING													WW-6	0.8	0.65	20	2	60	W	F	0.20	W	F	0.20	80
FF-0	0.6	0.4	10	0.5	20	R	F	0.25	R	F	0.25	80	WW-6	1.5	1.05	20	2	60	W	F	0.20	W	F	0.20	80
FF-3	0.8	0.6	20	2	60	R	F	0.25	R	F	0.25	80	WW-8	1.0	0.9	40	4	120	W	F	0.20	W	F	0.20	80
FF-6	1.0	0.9	40	4	120	R	F	0.25	R	F	0.25	80	CONDENSOR TAPES												
FF-10	1.5	1.4	80	8	240	R	F	0.25	R	F	0.25	80	Astra	3.2	2.8	40	4	120	BR	L	0.4	BR	L	0.4	80
FRI	1.6	1.4	50	4	120	R	F	0.25	G	F	0.7	80	Coriatex	3.2	3.2	40	4	120	BR	L	0.4	BR	L	0.4	80

DISCRIPTION

Col - Colour  
MAT - Material  
COF - Coefficient of friction  
W - White  
R - Red  
T - Transparent  
G - Green  
PG - Parrot Green

B - Black  
BR - Brown  
Y - Yellow  
L - Leather  
F - Fabric  
PS - Polyamide Strip  
NR - Nitrile Rubber

**Tolerance**  
101 - 500 mm 3 mm  
501 - 750 mm 10 mm  
751 - 950 mm 15 mm

**Length**  
500 - 5000 mm  $\pm 0.5\%$   
5001 - 15000 mm  $\pm 0.3\%$   
150001 & Abv  $\pm 0.2\%$

**Width**  
Up to 50 mm  $\pm 1$  mm  
51 - 100 mm  $\pm 2$  mm

**Thickness**  
Rubber Series 0.15 mm  
Leather Series 0.3 mm  
ST/FF Series 0.05 mm

**BASIC STRUCTURE**



# Nomenclature of Rubber Transmission Belting

## Friction Surface Hard Cotton Duck Fabric Superseding BS:351 and IS:1370



Rubber Belt Quality Type	Belting Industrial Brands	#Drive Belt Edge Construction	~Transmission Belting Widths (mm)	*Belts Colour	~Belting Ply	App. Wt. Per 25mm=1" per ply per meter
1. 28oz light duty	Universal Super	Cut	25, 31, 37, 50, 62, 75, 88, 100	light grey With blue sides	3,4,5	0.037
2. 31oz medium duty	i) Universal Kinetic ii) Tor Steel iii) Tusker Super Deluxe	Cut	25, 31, 37, 50, 62, 75, 88, 100, 125, 150, 175, 200	do	3,4,5,6	0.038
3. 34oz heavy duty	i) Universal Oak ii) Dynapower iii) Cannon	Cut	37, 50, 62, 75, 88, 100, 125, 150, 175, 200, 225, 250 150, 175, 200, 250, 300	do	4,5,6 8	0.040
4. 37oz extra heavy duty exclusively mfd. to our standards	i) Universal Brute ii) Rhino (super tough quality)	Cut	75, 100, 125, 150, 200, 250, 150, 200, 250, 300, 350, 400	do	4,5,6 8,10,12	0.045
5. 31oz Black medium to high duty	i) Universal Black Belt ii) Black Stone (with 0.4 mm app. thick black rubber coating on face & bottom frictioned)	Cut	75, 100, 125, 150	black	4	0.045

# Round edge construction with red stripe in middle are also manufactured in 28oz, 31oz duck quality, types subject to min. quantity of orders are placed as required at higher charges than cut edge for which please refer to us.

\* **Other colours** are also manufactured, like orange (TBS) with red sides or light green with green sides on little extra charges subject to min. quantities of orders are placed.

~Widths and piles not listed above can be manufactured to order ranging sizes from # 25mm to 1050mm widths & 2 ply to 14 ply. Tolerance in width of +, - 3mm shall be applicable up to 125mm; +, - 4mm above 125mm up to 300mm; +, - 5mm above 300mm & up to 500mm; +, - 10mm above 500 & up to 750 ; +, - 15mm above 750 mm & up to 1050 mm widths.

# Pulley Diameter Recommendations

## Minimum Suggested Flat Pulley Diam of Rubber Belting

Belting Number of Plies	Belt speed (mtrs/sec.)				
	10	15	20	25	30
3					
4	90	100	112	140	180
5	140	160	180	200	250
6	200	225	250	315	355
7	250	315	355	400	450
8	355	400	450	500	560
10	450	500	560	630	710
	630	710	800	900	1000



Belt Width	Pulley to be wider than the belt width by
Up to and including 125 mm	15mm
From 125 mm up to & incl. 250 mm	25mm
From 250 mm up to & incl. 375 mm	40mm
From 375 mm up to & incl. 500 mm	50mm

**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 Power Transmission Belt

## *Machine Driving and Driven Shaft Hic Flat Belting Guide \**

Follow simple **steps** for as to How to select flat belt for power transmission over long distances, truly flexible machine element having convenience of changing the centre distance easily:-

**Step 1** of HIC Universal flat belt Selection:

### Speed of Driving and Driven Shaft computation

**Step 2** of HIC Universal flat belt Selection:

### Speed Reduction Ratio calculation

**Step 3** of HIC Universal flat belt Selection:

### Power HP or KW to be Transmitted

**Step 4** of HIC Universal flat belt Selection:

### Centre Distance of both Shafts

**Step 5** of HIC Universal flat belt Selection:

### Space Availability

**Step 6** of HIC Universal flat belt Selection:

Layout of Shafts- Flat belts may be run horizontal, crossed, quarter-turned, right-angled, vertical or reversed drive shaft layouts.

**Light** Duty flat belt drive are said to run up to 7.5 Kw ; max speed 12 m/s

**Medium** Duty flat belt drive are said to run up to 15 Kw ; max speed 24 m/s

**Heavy Duty** flat belt drive are said to run Above 15 Kw ; speed Above 24 m/s



## Purchase Enquiry Info

### Rubber or Leather Flat Transmission Belting Min. *Information to Be Sent*

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

HIC ships transmission leather nylon belting conforming IS 1370 tailor-made to buyer's order specifications to different countries including India. Please send following information in English to quote prices:

1. Belt **Width** size mm
2. **Thick** mm and or **Ply**
3. Belting quality grade **Type**, leather transmission or nylon sandwich or rubber- cotton fabric duck or tangential twister drive
4. **Color** – grey or **green** or blue or black
5. **Quantity** - Open Ends roll lengths in meter or Endless loop length



## 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.

Vendor Data: [www.hic-india.com](http://www.hic-india.com) | Customers List: [www.universaldelhi.org](http://www.universaldelhi.org) | Catalogue: [www.rubber-steel-industrial-products.com](http://www.rubber-steel-industrial-products.com)



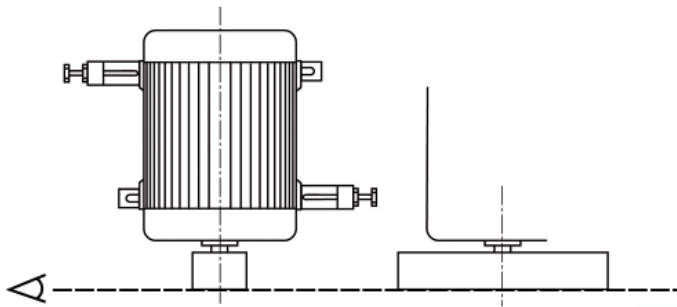
# Installation Method of Flat Transmission Belt

## Efficient Power Transmission, HIC High Speed Drive Tips

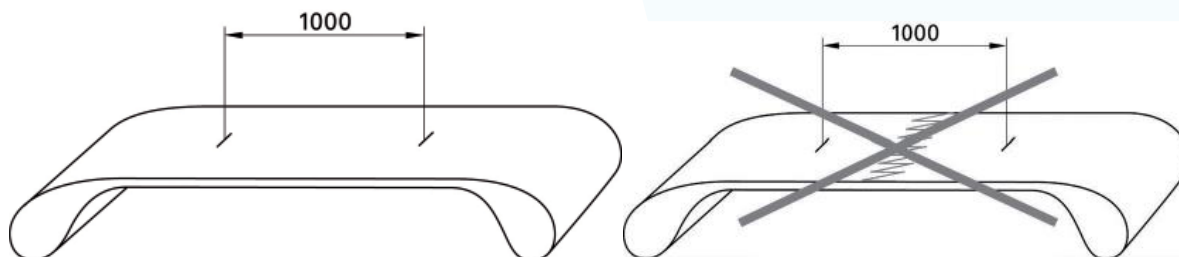
The following recommendations apply to the first installation of endless belts.

Proceed as follows:

1. Make sure that the *tensioning device* is in the innermost position.
2. Check that the *shafts* are parallel and the pulleys aligned perpendicular to the belt running axis.



3. The running *surfaces of the pulleys* must be clean and free from grease, soil and dust.
4. Before installing, *trace small measuring marks* at a distance of e.g. 1000 mm (recommendation) on the un-tensioned belt. Use a ball-point pen and mark as accurately as possible! Do not place the measuring distance over the joining area.



For short belts or if the control distance on the machine is shorter, choose a shorter measuring mark distance, e.g. 500 mm.

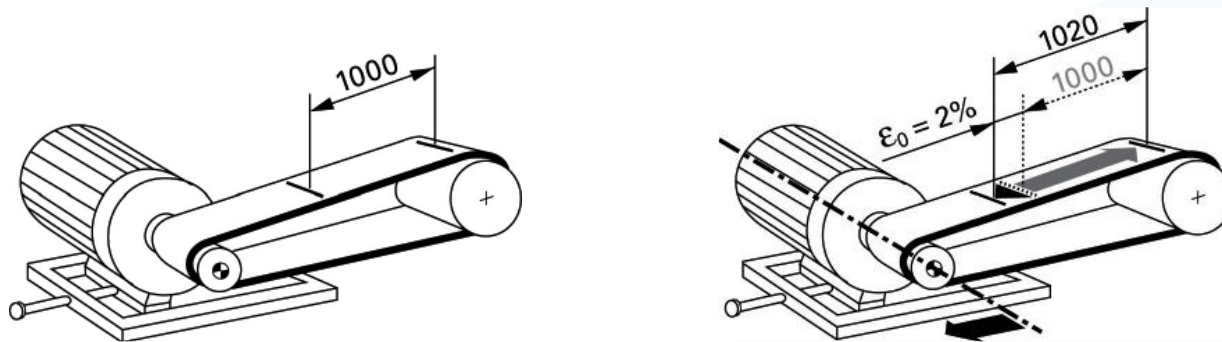
The longer the distance between the measuring marks, the higher the tensioning accuracy.

5. Install the belt *carefully*. Lay it first on the small pulley, then on the large pulley. Do not force the belt over

the pulley edges. Do not use unsuitable tools such as screwdrivers, hammers, etc.

Special care has to be taken when installing belts with an aramide traction layer (TF-belts). These belts are sensitive to twisting and buckling.

6. **Tension** flat belt by enlarging the center distance until the distance between the measuring marks has increased by the value of the required (calculated) initial elongation ( $\epsilon_0$ )



7. **Rotate** the belt once or twice by hand. The flat belt must not drift or run off even when the direction of rotation is changed.

8. Check the **distance of the measuring marks** again. If necessary, tension the belt to the required initial elongation.

9. Fix the **screws** of the tensioning device.

10. Secure the **original protective casing** before starting the motor.

11. Make sure that the **belt data** (type, dimensions, quoted initial elongation, date of installation and maintenance instructions are stored near the machine, e.g. in a self-adhesive envelope stuck on the machine).

## 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 Machinery Drive Products

	<u>Approximate Qty. per annum</u>
<b>1. Nylon Sandwich Belt, Leather Transmission Belting, Flat Rubber Transmission Belt</b> <a href="http://www.rubber-steel-industrial-products.com/rubber-belting-manufacturer/index.htm">http://www.rubber-steel-industrial-products.com/rubber-belting-manufacturer/index.htm</a>	<b>60,000 mts.</b>
<b>2. Classical V Belts, Cogged Belts, Wedge Belt, Poly v Belt, Banded Belt, Harvester Combine Belt , Narrow Section Belt</b> <a href="http://www.rubber-steel-industrial-products.com/v-belts-manufacturer/index.htm">http://www.rubber-steel-industrial-products.com/v-belts-manufacturer/index.htm</a>	<b>2,50,000 nos.</b>
<b>3. V Belt Pulley Sheaves, Timing Pulley, Taper Bush Pulley, Weld on Hubs</b> <a href="http://www.rubber-steel-industrial-products.com/belt-pulley-manufacturer/index.htm">http://www.rubber-steel-industrial-products.com/belt-pulley-manufacturer/index.htm</a>	<b>5,000 nos.</b>
<b>4. Spider Jaw Couplings, Rubber Tyre Coupling, Flexible Gear Coupling, Pin Bush Coupling Taper Bush System</b> <a href="http://www.rubber-steel-industrial-products.com/motor-coupling-manufacturer/index.htm">http://www.rubber-steel-industrial-products.com/motor-coupling-manufacturer/index.htm</a> <a href="http://www.rubber-steel-industrial-products.com/shaft-coupling-manufacturer/index.htm">http://www.rubber-steel-industrial-products.com/shaft-coupling-manufacturer/index.htm</a> <a href="http://www.rubber-steel-industrial-products.com/gear-coupling-manufacturer/index.htm">http://www.rubber-steel-industrial-products.com/gear-coupling-manufacturer/index.htm</a> <a href="http://www.rubber-steel-industrial-products.com/bush-coupling-manufacturer/index.htm">http://www.rubber-steel-industrial-products.com/bush-coupling-manufacturer/index.htm</a>	<b>75,000 nos.</b>

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.

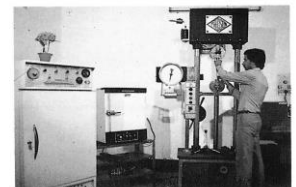
\* Price List & terms on specific enquiry please.

## Quality Assurance Plan

### *HIC Transmission Belts Testing Parameters*

Quality transmission belting 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



Tensile Strength & Elongation Testing Machine

## Test Certificate & Warranty

### *HIC Manufacturer's Lab TC of Flat Transmission Belt Supplied*

Quality flat belt conforming IS 1370, IS 6538, BS 3790, ISO 4184- HIC manufacturers modern in-house Lab Test Certificate issued with respect to average Tensile Strength in kgf/25mm, Elongation %, Pull for 1% Elongation kg/cm of nylon transmission belting, besides other tests like Ply Adhesion.

Warranty of one year against any manufacturing defects in HIC manufactured flat belting product.

**Third Party Inspections** by DNV, RITES, EIL, QSS, SGS, also arranged in HIC's belting 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 rubber products and leather made articles 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.

## Power Transmission 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.

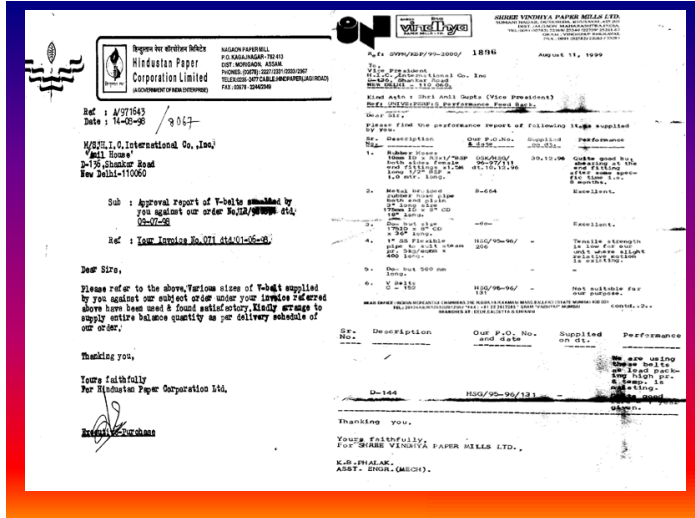
Test Certificate (TC) of our Lab, wherever, applicable, is **forwarded** along with the supply.



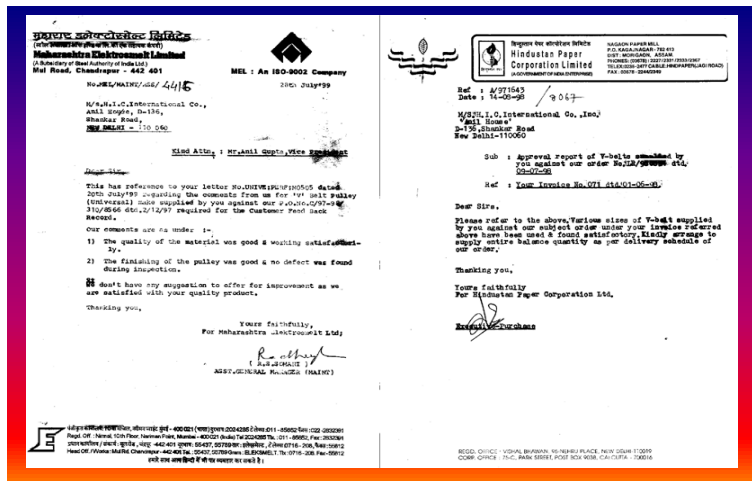
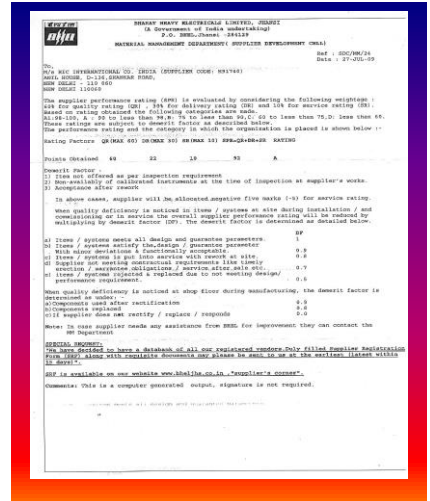
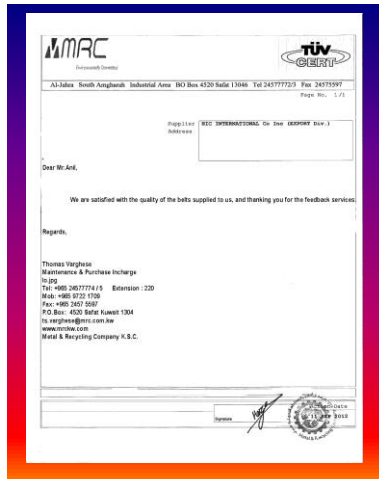
# Performance Certificates



Export Excellence Award during Feb 1997



ISO Certificate



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

## Total Quality Management Principles Followed

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**Stretch Less.**

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**Rubber Leather Belting**

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*HIC India Headquarters*

