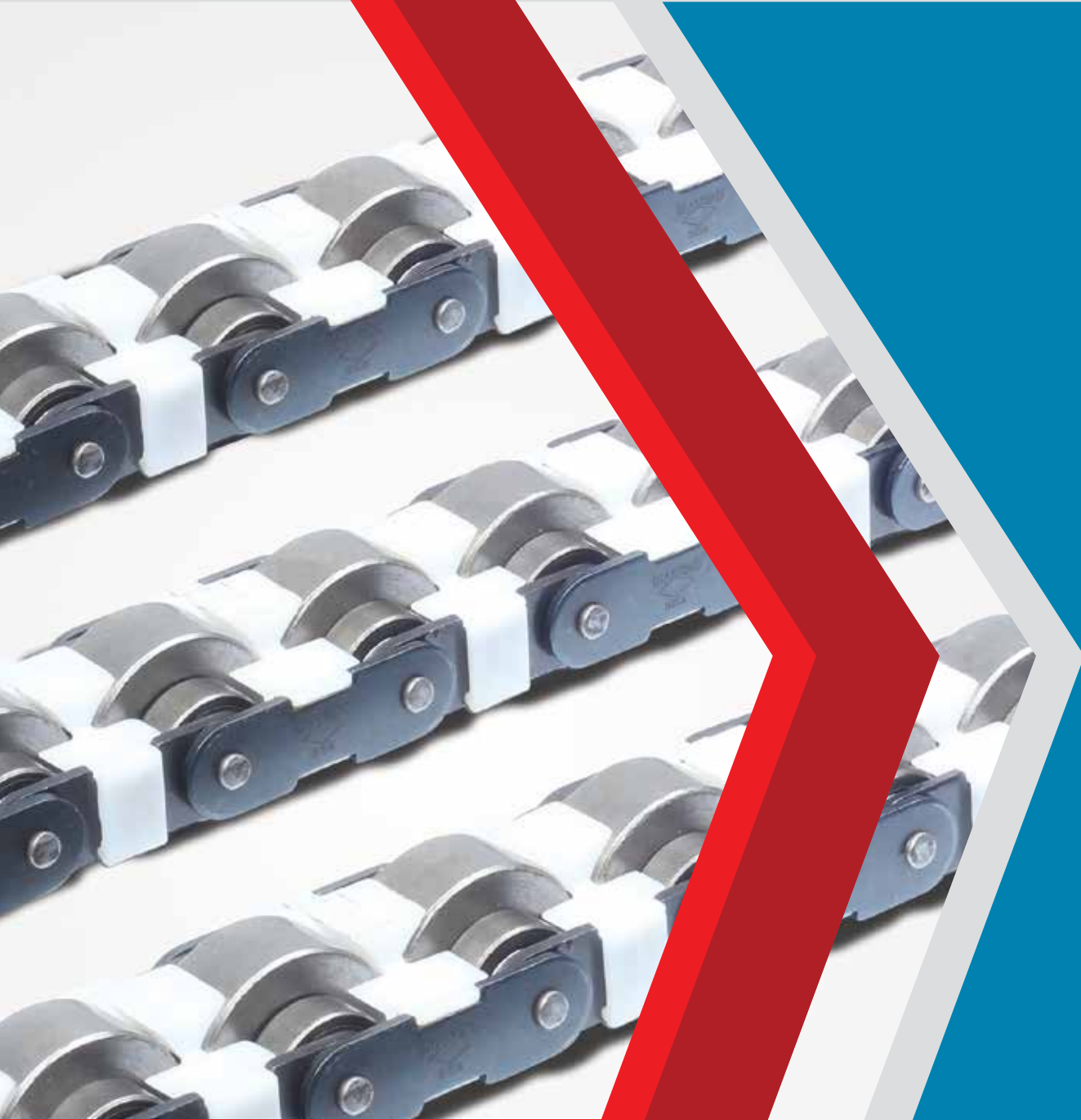




# DOUBLE PLUS CHAINS



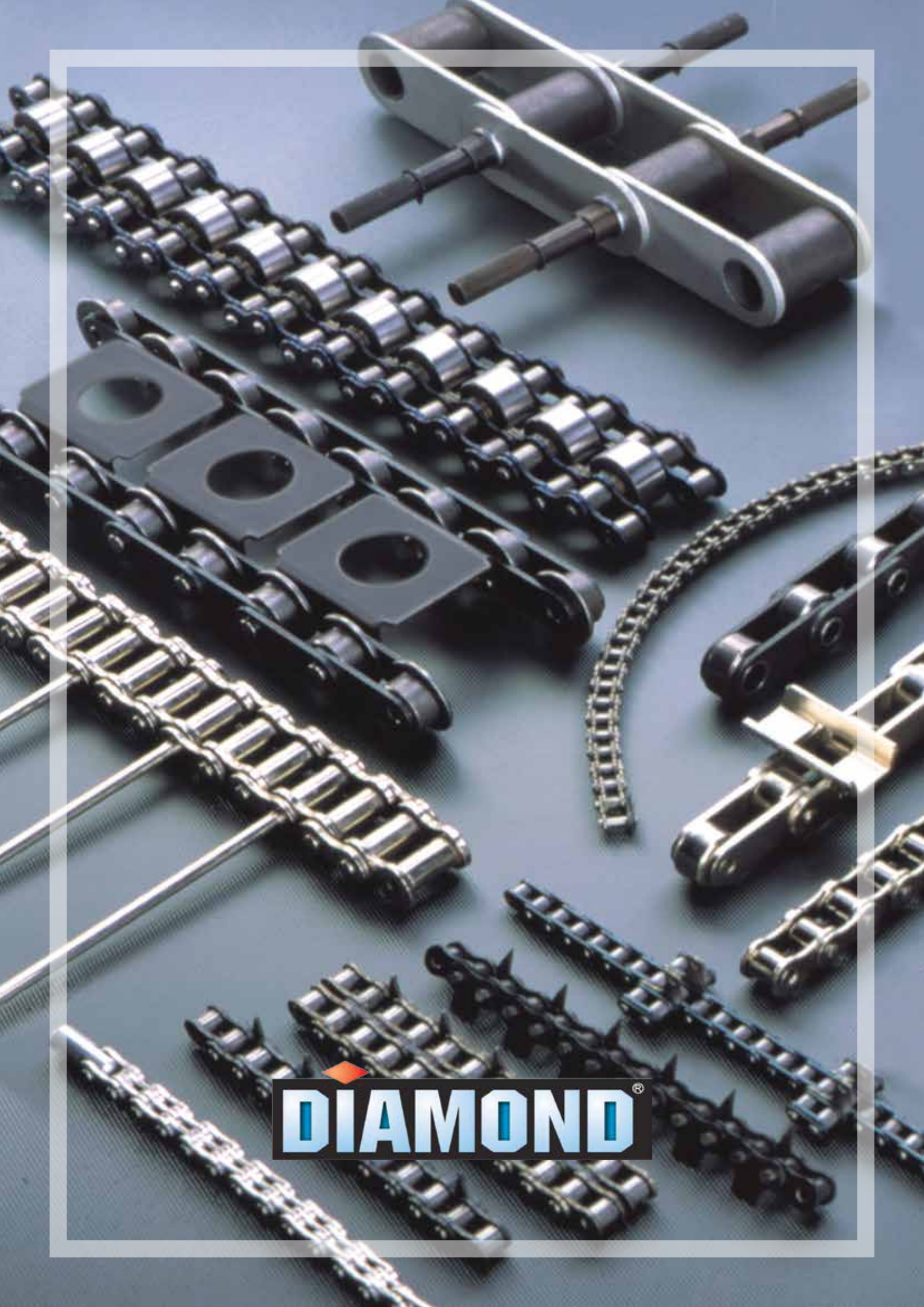
**TIDC INDIA**

(Unit of Tube Investments of India Ltd.)

**THE COMPLETE**

**CHAIN COMPANY**

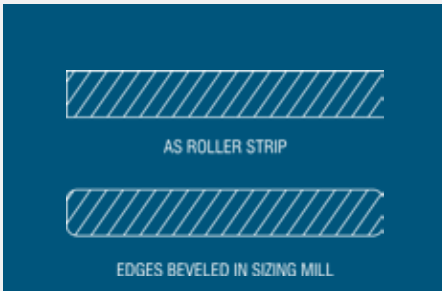




**DIAMOND**<sup>®</sup>

## Design & Engineering

The Engineering success of TIDC has always been a combination of the latest technology deployed and continuous innovations in existing products.

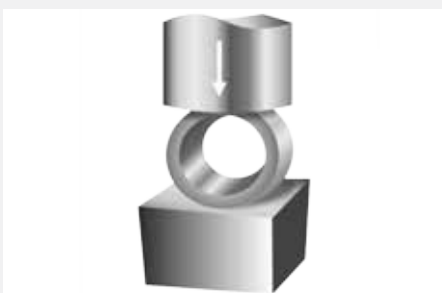
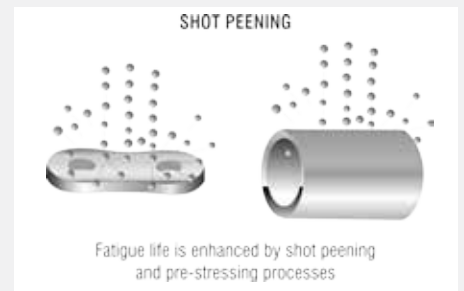


## Greater Fatigue and Tensile strength

The plates in each and every TIDC chain undergo piercing operation to extremely accurate specifications. Followed by Shaving or Drifting to increase bearing area, guaranteeing greater dynamic strength and fatigue life.

## Longer Wear Life

Roundness of the bushes and heat treatment of pins and bushes also impact wear life. At TIDC bushes are manufactured on a multi slide auto forming machine which produces them to uniform roundness. Edge beveling and meticulous sizing is also carried out for the bushes. A special purpose machine ensures perfect cropping of pins. All components are treated in a controlled atmosphere for outstanding endurance.



## Maximum Working Load capability

Critical applications call for chains with a high working load capability, and for this plates, bushes and rollers are shot peened- constantly bombarded with hard metal pellets at high speeds.

## Maximum Impact & Crushing Strength

High impact resistance of rollers is achieved by use of solid rollers which are cold extruded from wires. This enables the production of strong rollers with uniform wall thickness and excellent finish.

## Assembly & Testing

Pre-lubrication is followed by precision assembly and proof loading. Rigorous testing is done under various loads and speeds to evaluate their performance and to compare them against Indian and international standards.



## Quality & performance

Strict and complete adherence to constant quality and regular technology upgradation have ensure TIDC chains exceed all laid down parameters:

- Consistency in length control
- Higher than standard breaking loads
- Higher than standard fatigue limits
- Chain & Sprocket supply as a kit



## A manufacturer with rare strengths

Over the years we have developed and fine tuned immense competencies in cold working of metals, metal joining processes, metal treatment processes and development of tools, jigs and fixtures to support manufacturing technology.

## Our chains get the best treatment

Our team has rich experience in heat treatment to maximise strength and life in every chain element: pins, bushing, rollers and link plates.

We deploy our specialist skills in continuous hardening operations for martensitic heat treatment. Under a completely automated atmosphere we work with high, medium and low carbon steels, alloy steels, austenitic and martensitic stainless steels etc. Some of the other treatments we offer based on customer specification are:-

- Chain colorations –Ash, Straw, Blue Black, Brown etc. for aesthetic appeal, achieved through controlled atmosphere.
- Plates, rollers are shot peened after heat treatment thereby enhancing fatigue life. Based on application requirement we offer chromised pins that increase wear-life manifold.

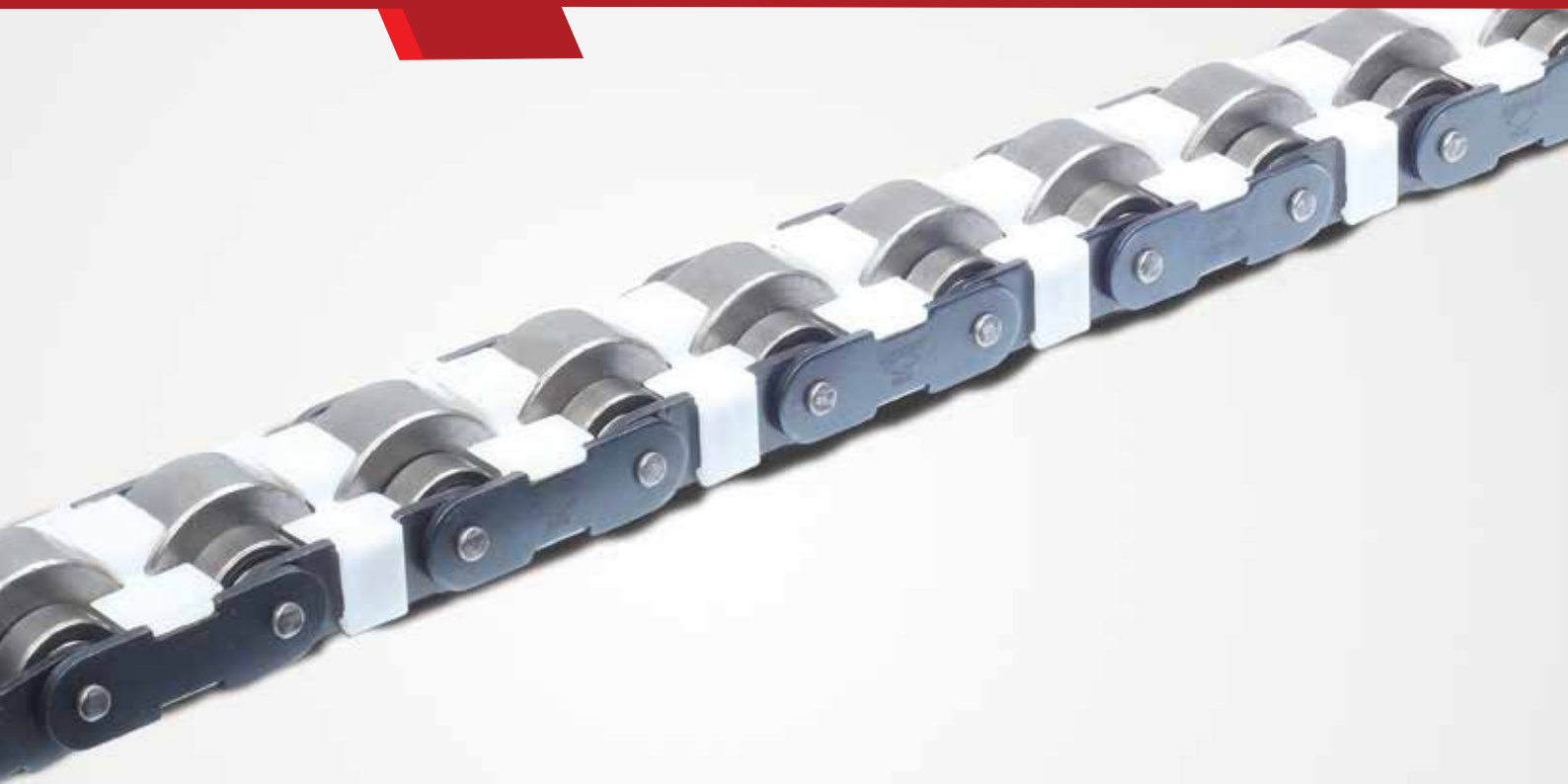


## The best certification are those that came from our clients

We are one of the world's few companies to be certified for API 7F specifications by the American Petroleum Institute for oil field chains.

Our manufacturing processes right from product design to testing of finished chains conform to ISO 9001:2008 standards. Our Motorcycle Engine Mechanism Chain and Fine Blanking Divisions are certified to TS 16949 standards. But what gives us the most pride is, the approval and repeat orders that come to us from our clients all over India & across the world.

## DOUBLE PLUS CHAIN



### Principle

The pallet (or) conveying material is positioned on top of the large roller which is protruding out from the Aluminium guide. The chains have been designed in a way that the speed of the conveyed material will be 2.5 times the chain speed. The chain Rollers are specially designed and Heat treated to withstand the load carrying capacity of conveyed material with operating temperature upto 170°C.

### Snap cover

Snap covers are made from engineered plastic and it is fitted between two rollers. Snap cover prevents fasteners from falling into the chain and prevent damage to the chain and to the conveyor system.

### Aluminium Guide

Aluminium frames are made up of special aluminium grade with greater surface finish and close tolerances. Steel wear plates are fastened with aluminium wear plate in the frame

### Sprockets

Sprockets are specially designed to suit double plus chains and are manufactured with medium carbon steel. Teeth are induction hardened for wear resistance

### Return Guide

Return guides are made with wear resistant engineered plastic so that it guides the chain smoothly.

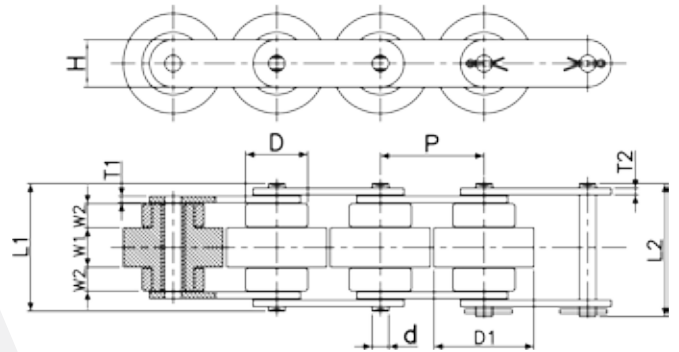
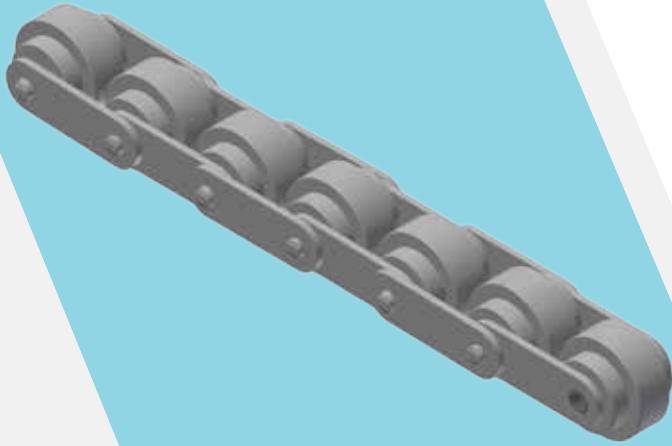
### Bracket

Bracket is made from aluminium. It is used to mount the return guide and aluminium guide.

### Applications

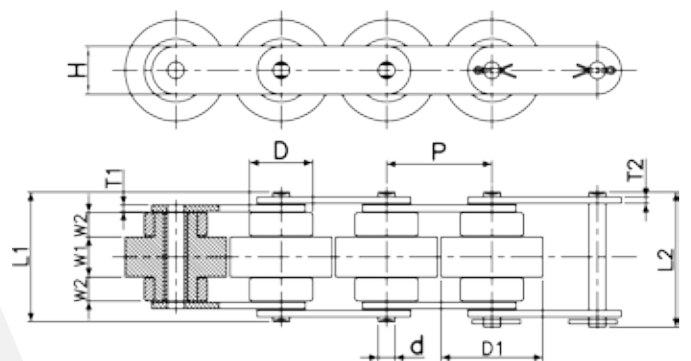
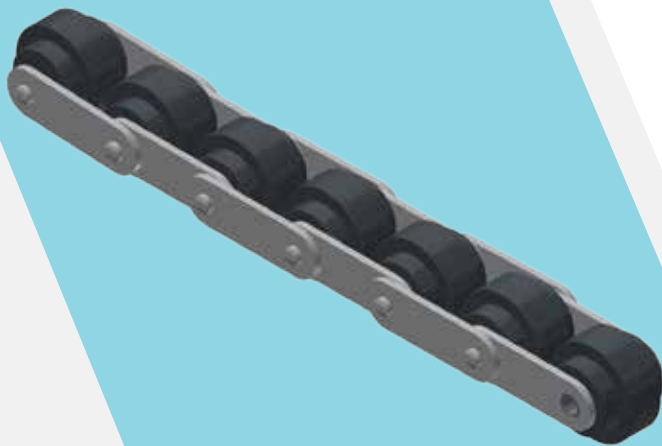
Double Plus Chains are available with Steel and Plastic Roller and with or without snapcover. Double plus chain conveyors are used in Automotive industry, Electronics industry and General industries like Food products, Plastic containers, Bottling plants, Healthcare products, etc...

# DOUBLE PLUS CHAIN WITH STEEL ROLLERS



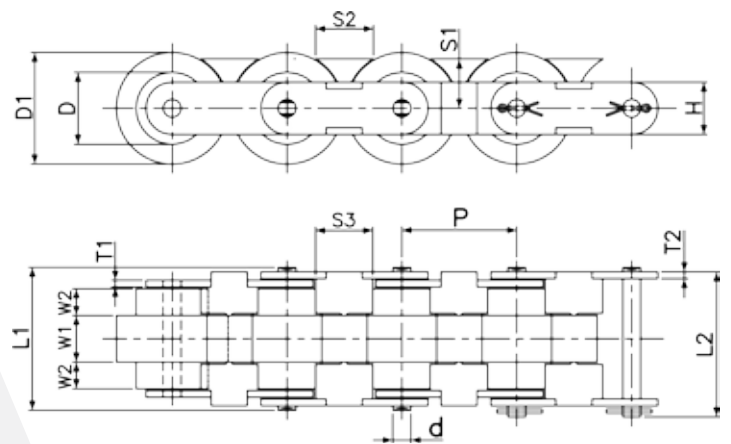
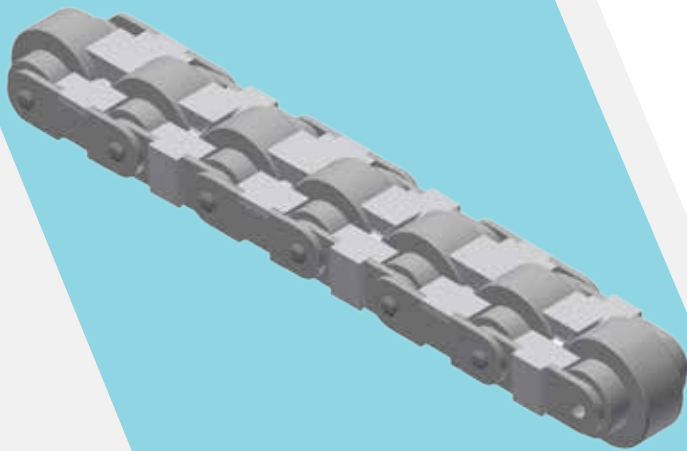
INTL. REF.NO	TIDC PART NO.	P	D	D1	W1	W2	T1	T2	H	d	L1	L2	AVG. WT. PER METRE (KG)	LOAD CARRYING CAPACITY/ROLLER (KG)
C2040	A 08A 01 DPS 01	25.40	15.88	24.60	10.30	5.70	1.50	1.50	11.56	3.96	30.60	34.00	2.50	160
C2050	A 102 01 DPS 01	31.75	19.05	30.60	13.00	7.10	2.00	2.00	14.48	5.08	39.10	42.50	3.93	250
C2060H	A 122 01 DPS 01	38.10	22.20	36.80	16.00	8.25	3.15	3.15	17.96	5.93	48.10	50.25	6.17	380
C2080H	A 162 01 DPS 01	50.80	28.58	48.00	20.00	15.00	4.00	4.00	23.95	7.91	70.50	74.10	10.46	550

# DOUBLE PLUS CHAINS WITH PLASTIC ROLLERS



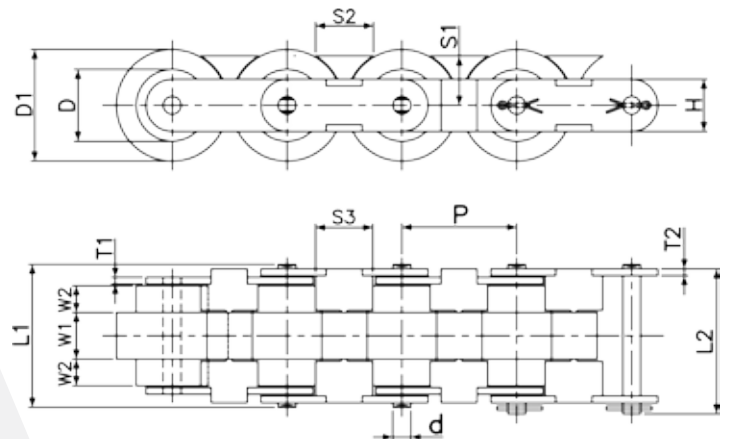
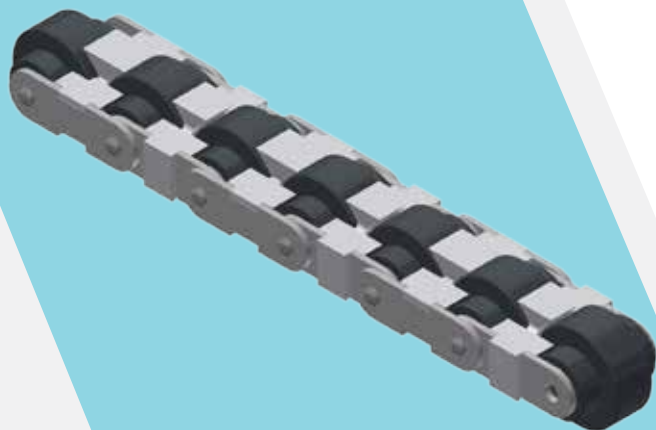
INTL. REF.NO	TIDC PART NO.	P	D	D1	W1	W2	T1	T2	H	d	L1	L2	AVG. WT. PER METRE (KG)
C2040	A 08A 01 DPP 01	25.40	15.88	24.60	10.30	5.70	1.50	1.50	11.56	3.96	30.60	34.00	0.90
C2050	A 102 01 DPP 01	31.75	19.05	30.60	13.00	7.10	2.00	2.00	14.48	5.08	39.10	42.50	1.34
C2060H	A 122 01 00 05	38.10	22.20	36.80	16.00	8.25	3.15	3.15	17.96	5.93	48.10	50.25	2.20
C2080H	A 162 01 DPP 01	50.80	28.58	48.00	20.00	15.00	4.00	4.00	23.95	7.91	70.50	74.10	3.58

## DOUBLE PLUS CHAIN WITH STEEL ROLLER & SNAP COVER

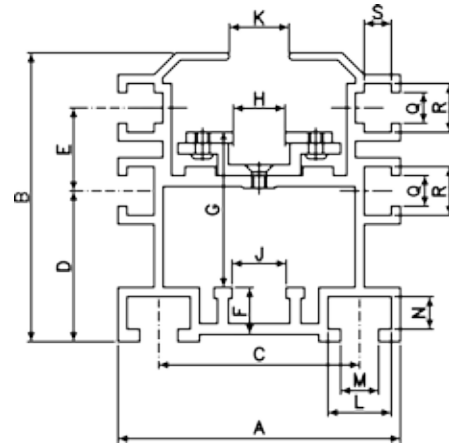
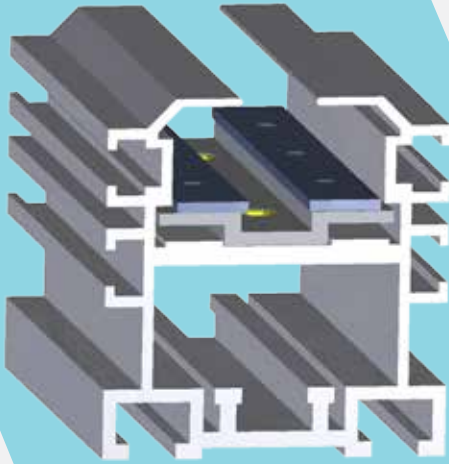


INTL. REF.NO	TIDC PART NO.	P	D	D1	W1	W2	T1	T2	H	d	L1	L2	S1	S2	S3	AVG. WT. PER METRE (KG)	LOAD CARRYING CAPACITY/ ROLLER (KG)
C2040	A 08A 01 DPS SC 01	25.40	15.88	24.60	10.30	5.70	1.50	1.50	11.56	3.96	31.00	33.58	10.90	9.90	12.70	2.50	160
C2050	A 102 01 DPS SC 01	31.75	19.05	30.60	13.00	7.10	2.00	2.00	14.48	5.08	38.80	41.21	13.40	12.50	16.90	3.93	250
C2060H	A 122 01 DPS SC 01	38.10	22.20	36.80	16.00	8.25	3.15	3.15	17.96	5.93	49.14	51.27	15.50	14.00	20.70	6.17	380

## DOUBLE PLUS CHAIN WITH PLASTIC ROLLER & SNAP COVER

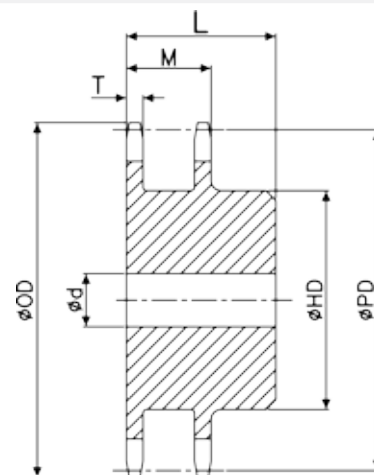


INTL. REF.NO	TIDC PART NO.	P	D	D1	W1	W2	T1	T2	H	d	L1	L2	S1	S2	S3	AVG. WT. PER METRE (KG)
C2040	A 08A 01 DPP SC 01	25.40	15.88	24.60	10.30	5.70	1.50	1.50	11.56	3.96	31.00	33.58	10.90	9.90	12.70	0.93
C2050	A 102 01 DPP SC 01	31.75	19.05	30.60	13.00	7.10	2.00	2.00	14.48	5.08	38.80	41.21	13.40	12.50	16.90	1.39
C2060H	A 122 01 DPP SC 01	38.10	22.20	36.80	16.00	8.25	3.15	3.15	17.96	5.93	49.14	51.27	15.50	14.00	20.70	2.25



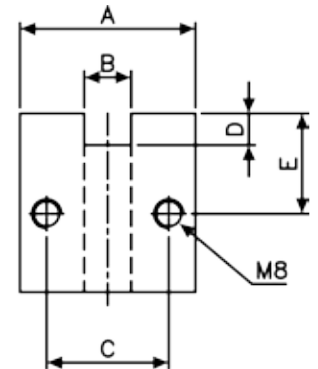
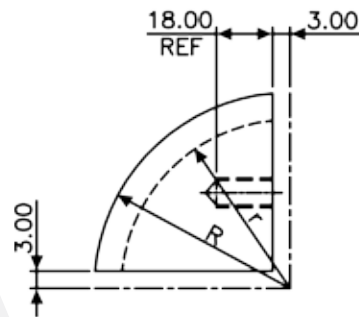
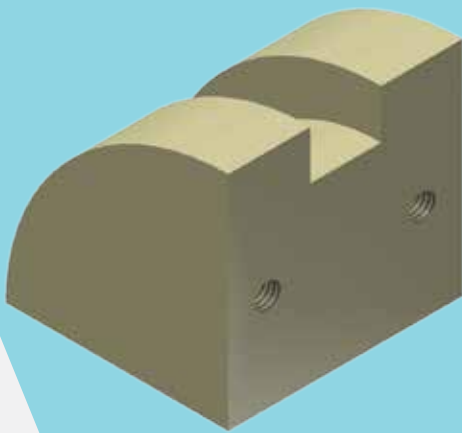
GUIDE RAIL ASSEMBLY PART NO.	A	B	C	D	E	F	G	H	J	K	L	M	N	Q	R	S	AVG. WT. PER METRE (KG)
A08A 01 DPS SC 01/GRLA1	63	66	44.5	35.25	18.5	11	34.9	11.4	12.1	13.5	13.6	8.5	7.5	6.5	10.5	5.3	3.3
A102 01 DPS SC 01/GRLA1	78	80	55.5	41.75	23.0	13	43.0	14.3	15.0	16.5	17.5	10.5	9.0	8.5	13.5	7.5	4.7
A122 01 DPS SC 01/GRLA1	95	91	72.5	51.25	23.5	13	50.5	17.2	18.0	19.5	17.5	10.5	9.0	8.5	13.5	7.5	5.73

# SPROCKETS

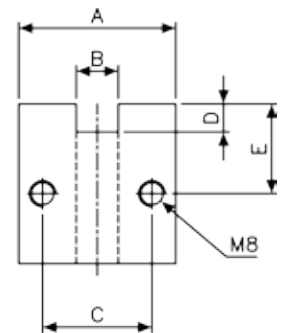
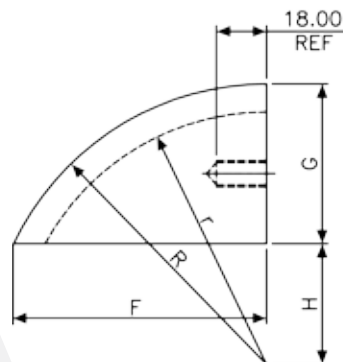
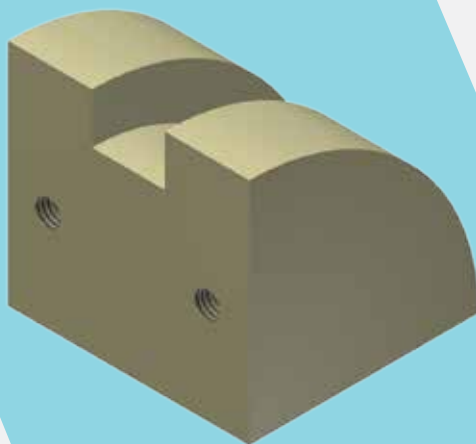


INTL. REF.NO	TIDC PART NO.	TYPE	NO. OF TEETH	PD	OD	T	d	HD	L	M	AVG. WT/NO. (KG)
C2040	W-A 08A 01 DPS 010C	B	10	82.20	85	4	16	52	40	20.4	0.75
C2050	W-A 102 01 DPS 010C	B	10	102.75	107	5	16	66	45	25.5	1.46
C2060H	W-A 122 01 DPS 010A	B	10	123.30	128	6	19	81	50	30.5	2.38

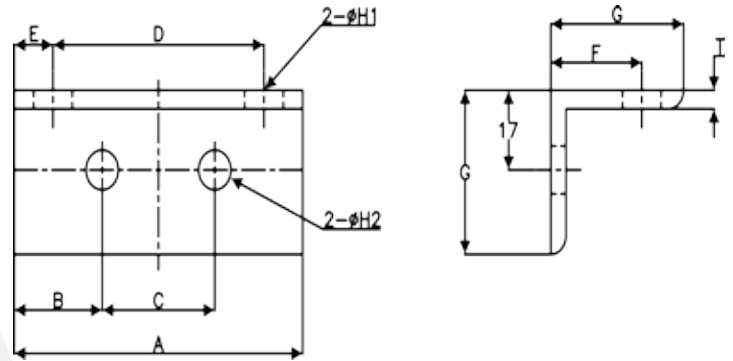
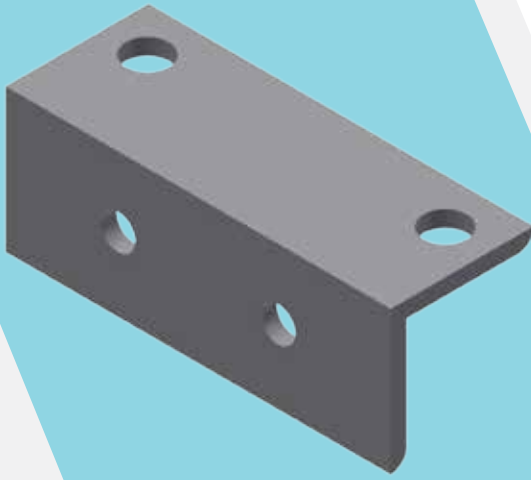




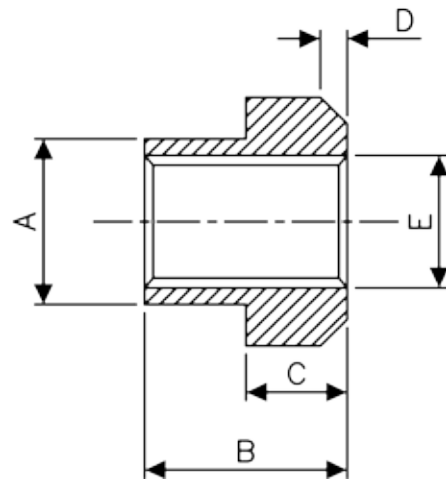
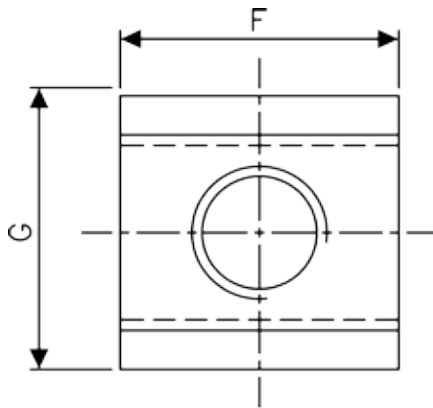
INTL. REF.NO	TIDC PART NO.	A	B	C	D	E	R	r	AVG. WT/NO. (KG)
C2040	A08A 01 DPS SC 01-RG	50	12	30	8	30	60	52	0.12



INTL. REF.NO	TIDC PART NO.	A	B	C	D	E	F	G	H	R	r	AVG. WT/NO. (KG)
C2050	A102 01 DPS SC 01-RG	56	15	35	10	32	90.3	57	43	100	90	0.23
C2060 H	A122 01 DPS SC 01-RG	60	18	39	12.5	32	90.3	57	43	100	87.5	0.24



INTL. REF.NO	TIDC PART NO.	A	B	C	D	E	F	G	T	H1	H2	AVG. WT/NO. (KG)
C2040	A08A 01 DPS SC 01-GB	60	15.0	30	44.5	7.7	20	30	3	8.5	8.5	0.045
C2050	A102 01 DPS SC 01-GB	76	20.5	35	55.5	10.2	24	35	4	10.5	8.5	0.050
C2060 H	A122 01 DPS SC 01-GB	94	27.5	39	72.5	10.7	24	35	4	10.5	8.5	0.062



INTL. REF.NO	TIDC PART NO.	A	B	C	D	E	F	G	AVG. WT/NO. (KG)
C2040	A08A 01 DPS SC 01/TNUT	8.50	9.00	7.20	1.60X45°	M6	13.00	13.00	0.010
C2050	A102 01 DPS SC 01/TNUT	10.50	11.50	8.70	1.60X45°	M8	17.00	17.00	0.012



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Fax : 020-6623 8630

Email: [icwest@tii.murugappa.com](mailto:icwest@tii.murugappa.com)

