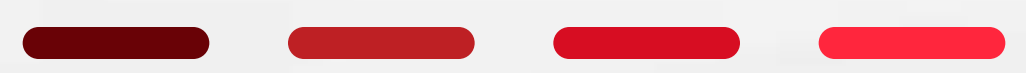


TIDC INDIA

THE COMPLETE

CHAIN COMPANY





Murugappa
Group
an introduction



TII
a brief



TIDC INDIA
an overview

*Its
product range*

*&
capabilities*

TABLE OF CONTENTS



*A \$ 4.4 Bn group
over 100 years in existence
diversified over 28 businesses
32000 + employees
footprints in over 40 countries*



murugappa



Coromandel International Ltd

Leading manufacturer of wide range of Fertilizers, Pesticides & Specialty Nutrients



Tube Investments of India Ltd

Leading manufacturer of steel Tubes & Strips, Chains, Bicycles & Car doorframes



Carborundum Universal Ltd

Pioneer in Abrasives, Refractories, Electro minerals and Industrial Ceramics.



EID Parry India Ltd

One of the largest producer of Sugar, Neem based pesticides & Nutritional supplements



Parry Agro Industries Ltd

One of the high yielding plantations in the country

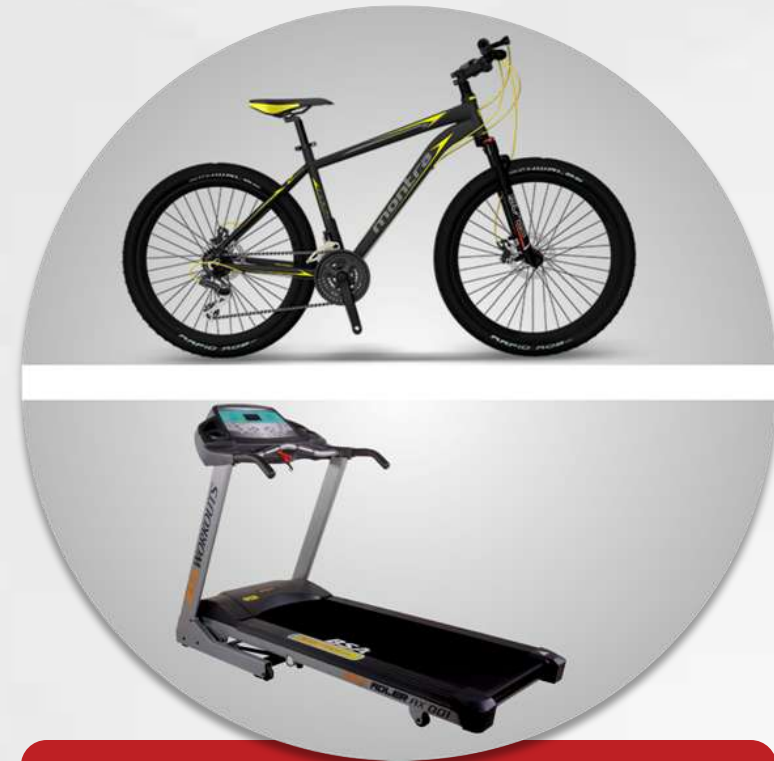
murugappa



TUBE INVESTMENTS OF INDIA

Engineering Arm of Murugappa Group

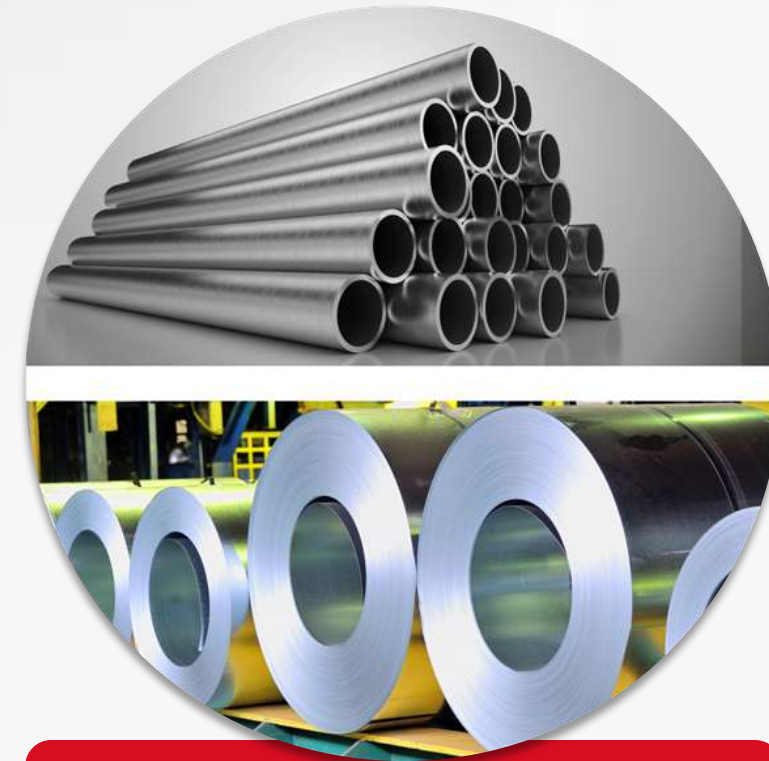
Engineering solutions for Metal to Mobility



TI Cycles of India

Manufacturer of Bicycles & Fitness Equipments

Premium Bicycles manufacturer of popular brands - BSA, Hercules, Montra, BSA Workouts



Tube Products of India

Manufacturer of Steel Tubes & Strips

Preferred supplier of precision tubes, ERW and CDW



TIDC INDIA

Manufacturer of Industrial & Motorcycle Chains, Fine Blanked Components

Preferred Global OEM suppliers across industries for chains & fine blanked components



T.I.Metal Forming

Manufacturer of car door frames, window & hydro-formed parts and frames

Pioneer and leader in precision value added sheet metal formed components

Subsidiaries



General Insurance Company

Has a network of over 90 branches across the country and 7,000 agents



Financial Services Company

vehicle finance, business finance, home loans, stock broking



Leading French Chain Manufacturer

Pioneer in Industrial and Engineering Class Chains in France



Manufacturer of Gears & Gear boxes

Preferred supplier across industries for demanding applications



TIDC INDIA

THE COMPLETE
CHAIN COMPANY



To become a World Class Global Player in Power Transmission and Conveyor Systems



TIDC INDIA MILESTONES

TIDC Established for manufacture of Bicycle Chains



1960

Forayed into Motorcycle chains with JIS Standard



1980

Started Global Sales with Brand ROMBO



1991

Fine Blanking Division Started



1996

New plant for Automotive chain in North India



2008

Obtained API 7F certification for specialised oil Field Chains



2011



1969



Diversified into Industrial Chains

1985



Developed Engineering Class Chain

1995



100% Export oriented Unit set up for Agriculture Chain

2006



Commencement of International Warehouse Operations

2010



Acquired French Chain manufacturer



Customers Profile

Global OEM

Global OEM Suppliers to

Agricultural, Material Handling, Construction & Motorcycle Industries.



Agriculture Industry



Material Handling Industry



Construction Industry

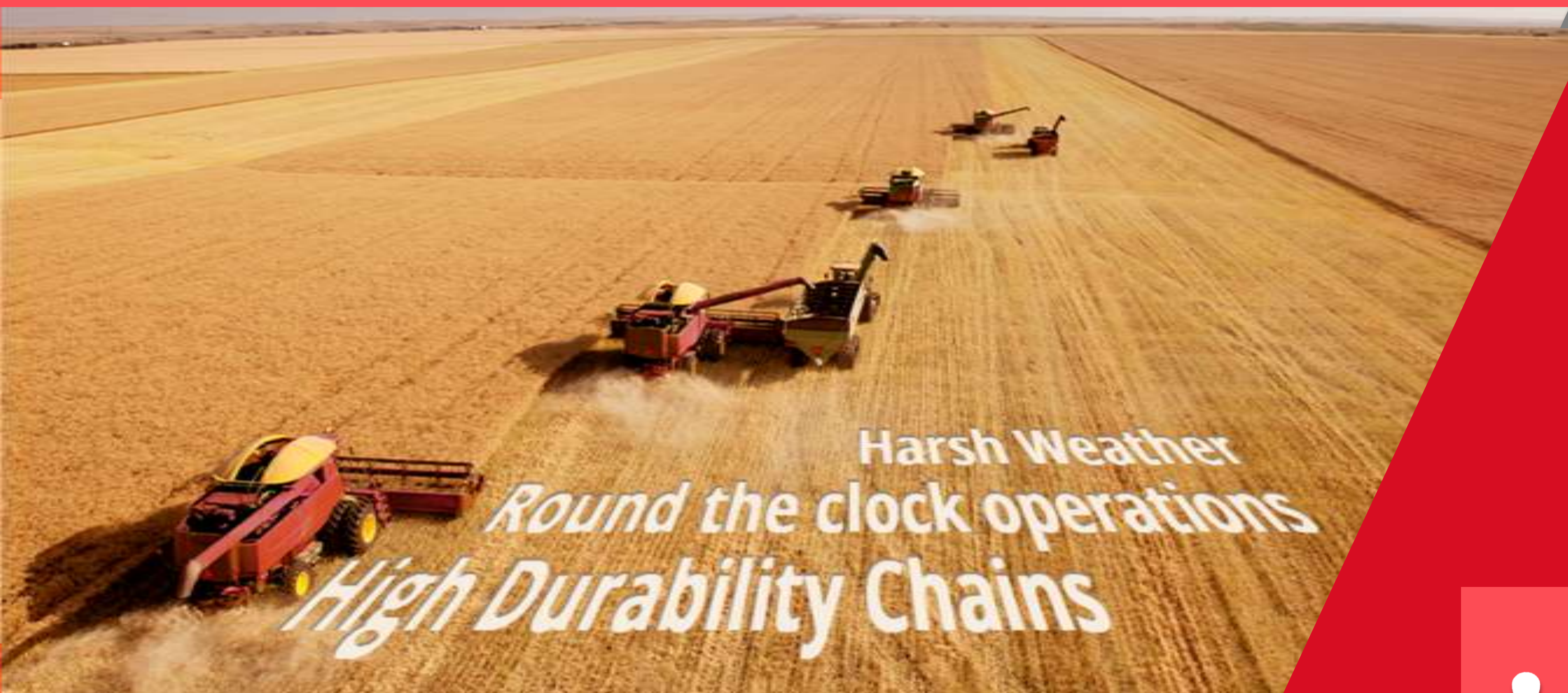


Motorcycle Industry



AGRICULTURAL INDUSTRY - THE ROMBO EDGE

Harvester Combines, Balers, Hay & Forage Harvesters, Rotavators



Harsh Weather
Round the clock operations
High Durability Chains



Products
Feeder Chain
Maize Chain
Elevator Chain



Features

- Special Manufacturing Cell
- Improved Wear Life by Hard Chrome Plating & Vacuum greasing
- Corrosion Resistance- Zinc, Nickel, ZAC coating etc.,
- Hi Performance series – 40% Improved fatigue life
- Entire range of chains for CLAAS/ JD/ CNH



Design & Testing

- Specialized press tool design & manufacturing
- Improved fatigue life by improved hole quality
- Better life of the chain thro improved waist width





MATERIAL HANDLING INDUSTRY - THE ROMBO EDGE

Industrial Forklifts, Rough Terrain Forklifts, Container Handling, TeleHandlers



Products
AL/BL/LL Series
BL Max Series



Features
Hi performance chains – 20-25% Improved life
Improved fatigue life by special treatment to pins



Design & Testing
Pressure blanked plates
✓ High holding power
✓ Improved hole quality
✓ Smooth plates
Dedicated leaf chain testing facility
Simulate the real time rugged application in testing



CONSTRUCTION INDUSTRY - THE ROMBO EDGE

Skidsteer Loader, MotorGraders & TeleHandlers



Extreme Weather
Massive Loads
High Performance Chains



Products
80H / 100H



Features

- Improved fatigue life
- Max Contour Plates
- Quad Riveting to withstand side thrust



Design & Testing

Pressure blanked plates

- ✓ High holding power
- ✓ Improved hole quality
- ✓ Smooth plates

Internal testing with special fixtures to simulate field conditions

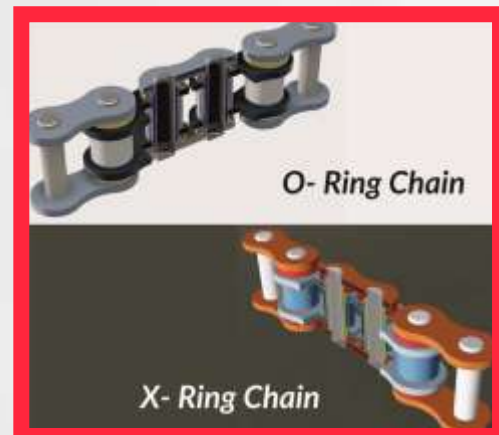


MOTORCYCLE CHAINS PRODUCT RANGE

Entire range of Motorcycle Chain as per JIS Standard

Preferred supplier for Motorcycle manufacturers

Strong player in the Motorcycle Aftermarket



Motorcycle Chains as per JIS standard
Special products include — Solid Bush chains, O Ring & X Ring Chains



Rear wheel Sprocket:
Aesthetically designed
Entire range for all Motorcycle chains

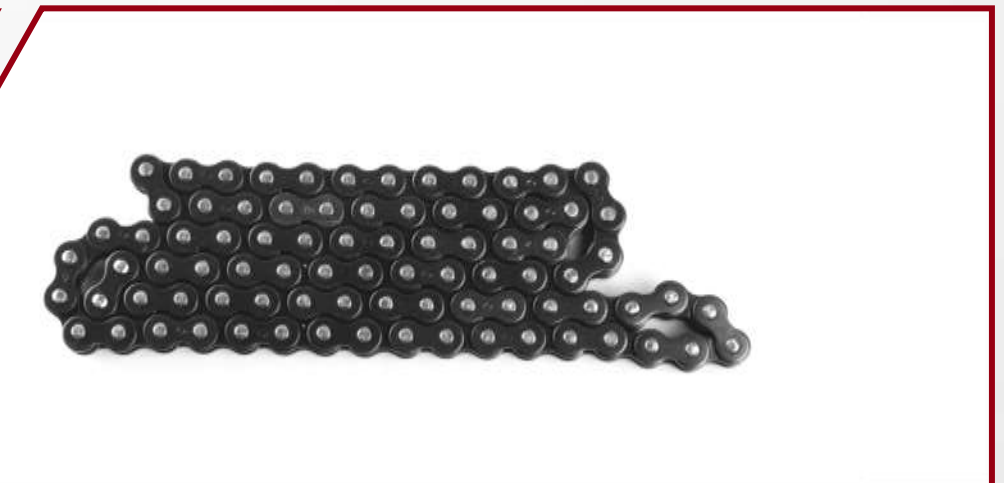


Gearbox Sprocket:
Fine Blanked Sprockets



ENGINE Timing Chain (CAM CHAINS)
25, 25H — Both Regular & Solid Bush Chains

Superior heat treatment process
Specially treated Delta Coated Pins
50% improved in life
Improved fitment accuracy





OIL FIELD CHAIN - THE ROMBO EDGE

Oil & Gas Industries – API 7F Certified Company



Products

ASA60/80/100/120/140/160/200/240

Heavy Series:

60H up to 240H

Both Cottered Type & Riveted Type Chains

Capability to manufacture up to 8 strands



Features

Ultimate Fatigue Strength

Precision manufacturing & exacting tolerance

Smooth pitch holes for high interference fit

Superior wear resistance

All Oil Field Chains are validated for API 7F requirements



Design & Testing

Plates designed using Finite Element Analysis to deliver better fatigue strength

Oil Field Chains are subjected to high shock loads and repeated cyclic loads

Ball drifting of plates to induce compressive strength





CONVEYOR CHAIN

Types : European Series / Metric Series (ISO)

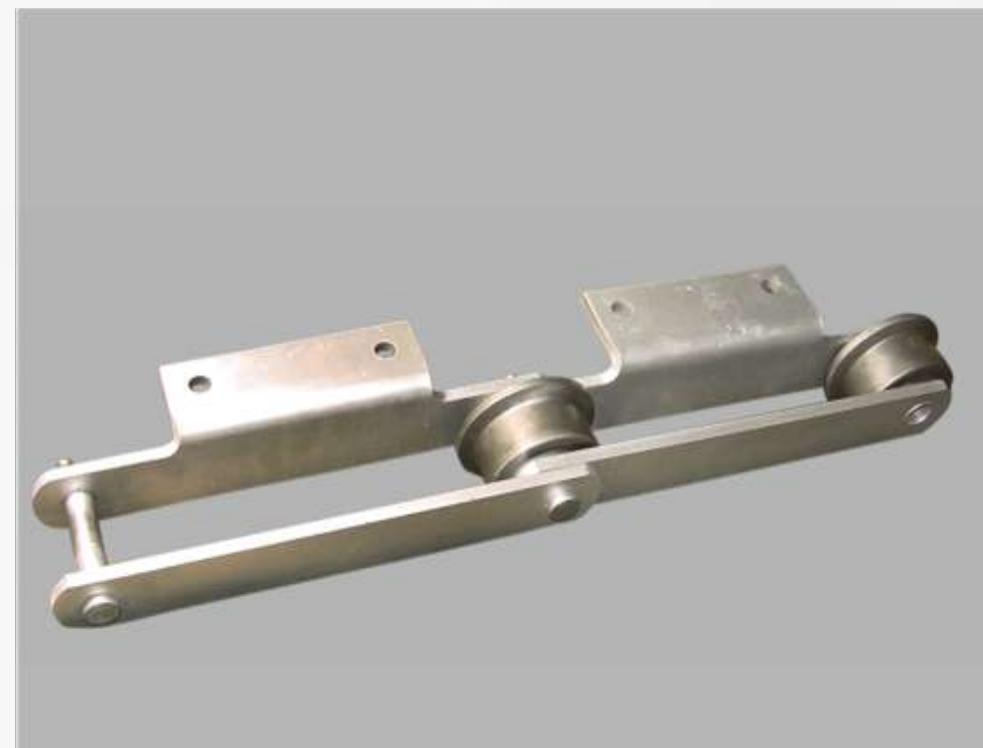
Applications : Bucket Elevator / Deep Bucket Conveyor / Slower Tester / Bagasse Camer / Scrapper Reclaimer / Drag Conveyor



Cement Industry



General Engineering



Automobile Industry



Mining Industry



Food Processing



Heavy Engineering Industry



Fertilizer Industry



Sugar Industry



Steel Industry



Paper Industry



Products

- ✓ Metric Series Conveyor Chain
- ✓ All types of Attachments
- ✓ Chains for Cement, Sugar, Fertilizer, Automobile & Mining Industries

Features

- ✓ VMC machine for better hde quality
- ✓ Higher Factor of Safety for better life
- ✓ High hardness to resist abrasion
- ✓ Precision manufacturing and exacting tolerance
- ✓ Resistance to both corrosion and wear

Design & Testing

- ✓ Design for high strength & resistance to shock loads
- ✓ Fatigue testing simulating cyclical conditions done inside an elevator
- ✓ Specially designed testing for wear resistance & corrosion resistance
- ✓ Designed by Finite Element Analysis to provide longer and trouble free life



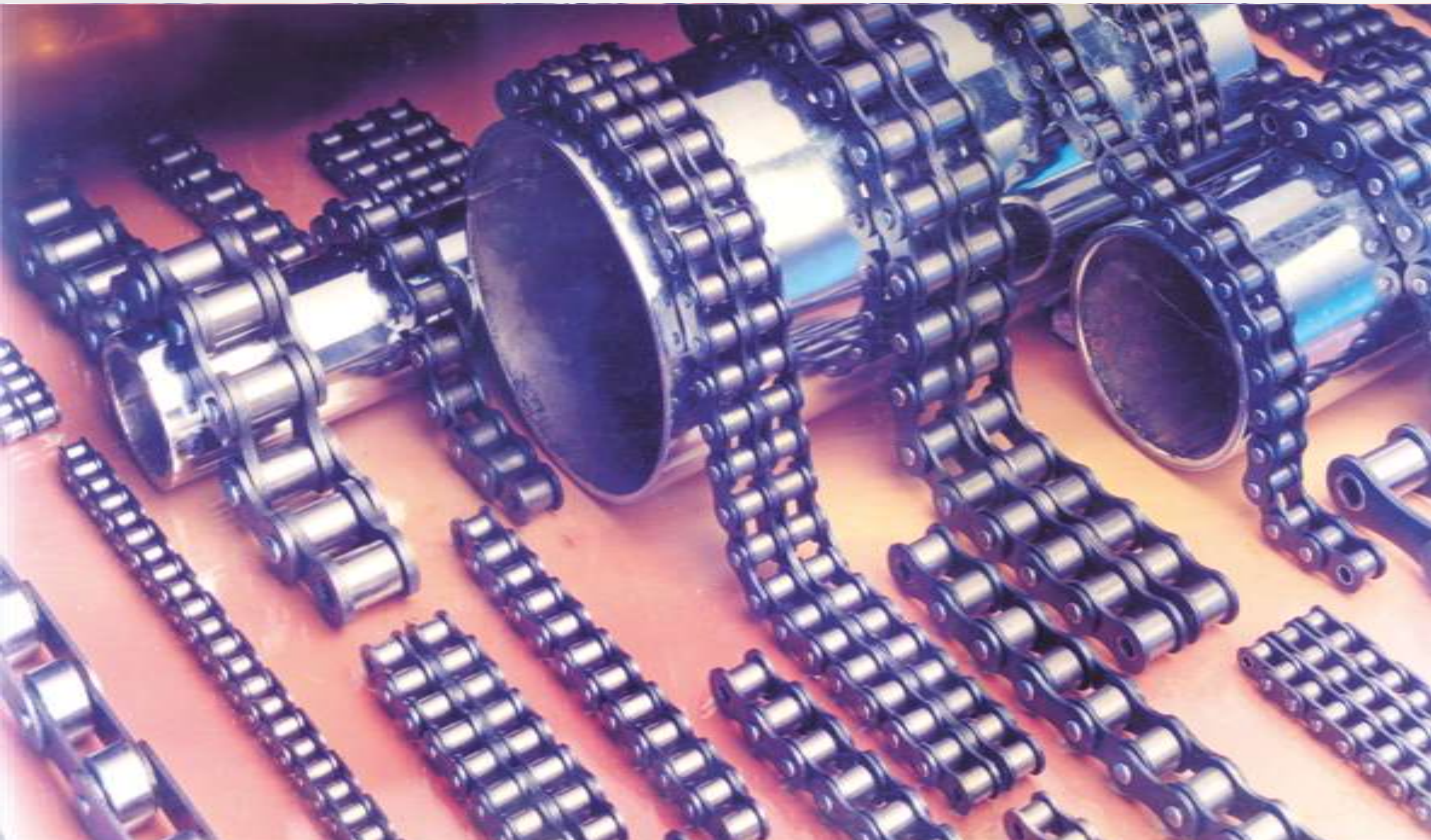


STANDARD SERIES

Roller Chain

Types : British Standard / ANSI Standard / Hi-Performance / Hi-Life Series / Stainless Steel / Plated / Corrosion Resistant / Lube Free Chains

Applications : Agricultural Machinery, Construction Equipment, Printing & Packaging, Confectionaries





ADAPTED SERIES

Adapted / Attachment Chain

Types : K Type Attachment Chains / M Type Attachment Chains / Extended Pin Chains / Rubber Top Chains / Spike Attachment Chains

Applications : Beverage Can Printing , Packaging, Confectionaries





SPECIAL SERIES

ANSI MAX Series



For Demanding Applications

Delta Chain



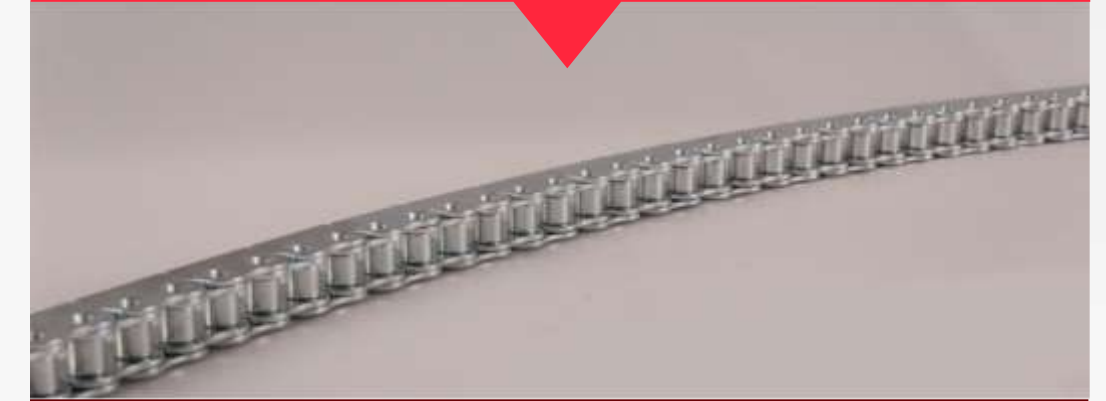
Printing Industry

Polyamide Chain



Pharmaceutical Industry

Side Bow Chain



Window Opening Application

Gripper Chain



Packaging Industry

Pin Oven Chain



Can Printing Industry

Double Plus Chain



Automobile & Electronics Industry

Accumulator Chain



Automobile & Electronics Industry



FINE BLANKED PRODUCTS

Product Range

- 2 Wheelers** : Body Starter Clutch, Drum Shift Stopper, Master Gear Shift, Pawl Gear Shift, Arm Gear Shift, Cam Sprocket, Cam Lobes, Sprockets, Ring Gear, Gear Comp Starter Clutch, Crank Gear Lever, Crank Rocker Shaft, Striker Gear Change Lever, Stop Pawl, Pump Casing Plate
- 4 Wheelers** : Link Rear, Link Drive, Lever HA, Trigger Latch, Expansion Valve Plate, Spacer Rivet, Transmission Parts, Safety Parts, Steering Column Parts, Seating Systems Parts.
- Industrial** : Cam, Roller Lever Plate, Ratchet, Pressure Thumb, Counter Weight





FINE BLANKING - FACILITIES

630 Ton Feintool Press, 400 Ton Schmid Press , Sealed Quench Furnace, Austempering Furnace, Double Disc Grinding — These are some of facilities that ensures the precision engineering/ reliability of our products





SUMMARY OF PRODUCTS



Power Transmission-B.S, ANSI and Custom made
 Conveyor Chains and Attachments-
 B.S, Metric & custom made Hoist & Lift Chains



Bulk & Unit Material Handling



World Wide OEMs / After Market



Motorcycle / Moped Chains
 Fine Blanked Components



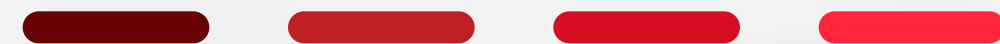
TIDC INDIA

MANUFACTURING CAPABILITIES

All plants are integrated manufacturing centers with cellular manufacturing
In-house tool engineering capabilities.
50 years of chain making for varied applications.



- P** World class equipments with statistically controlled processes
Special process equipments to enhance product life
Shot Peening / Special plating processes / Application specific lubrication
- Q** State of the art process & product testing facilities
Established quality standards with robust Quality Management Systems
- C** Integrated cellular manufacturing for improved throughput
- D** Data monitoring & planning process through ERP

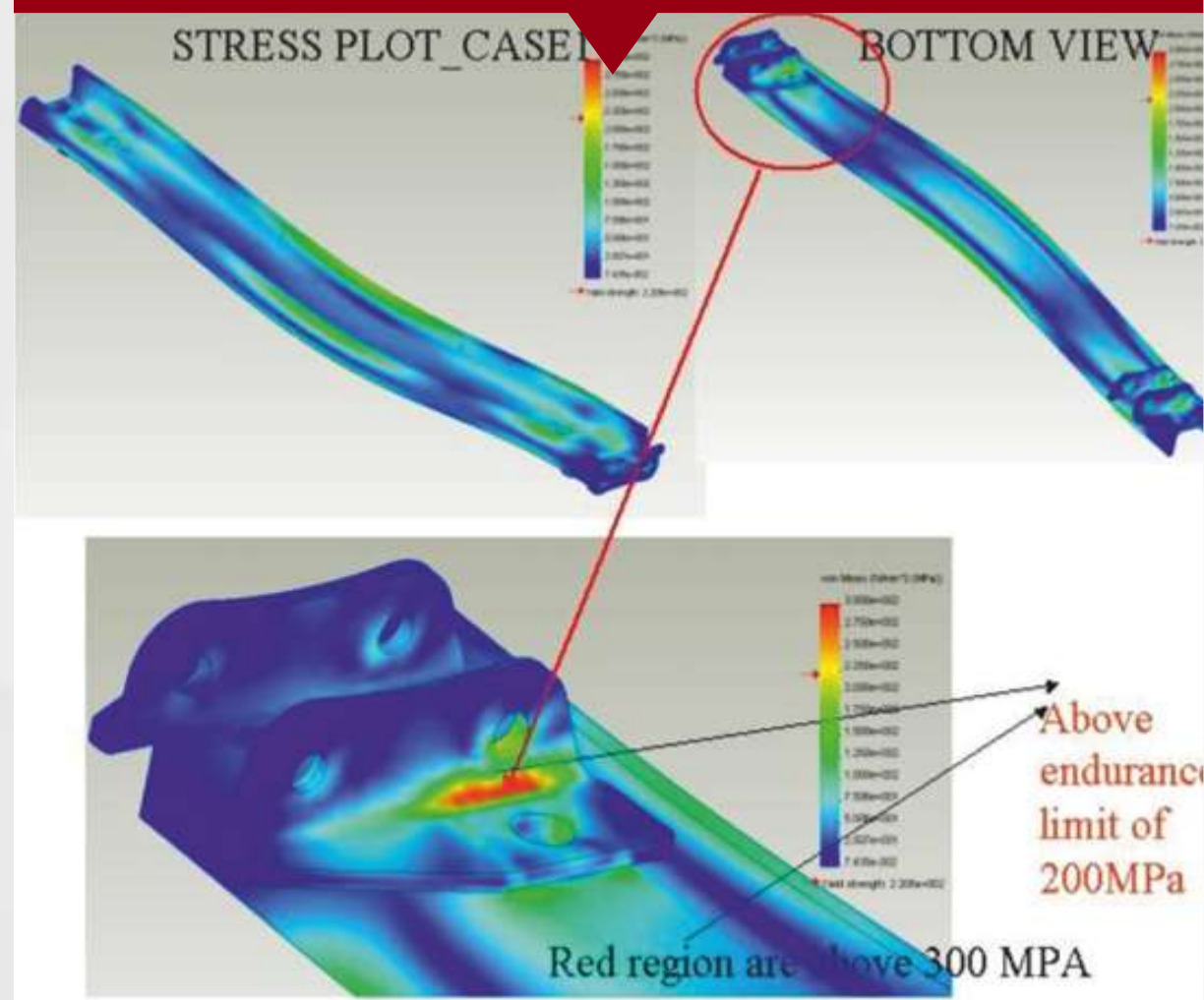




TIDC INDIA

ENGINEERING & PRODUCT TESTING CAPABILITIES

Product Design



Deployment of contemporary design software through Auto CAD, Solid works, Cosmos and Dynamic design motion.

Tool Design & Development



Fully equipped in-house tool room deploying world class equipments with competent design engineers to handle variety of tooling requirements.

Product Testing



Endurance and fatigue testing with global standards of equipments. Corrosion testing facilities and state of art metrology and metallurgical laboratories. Testing on global standards as per customer requirements

Corporate Technology Centre

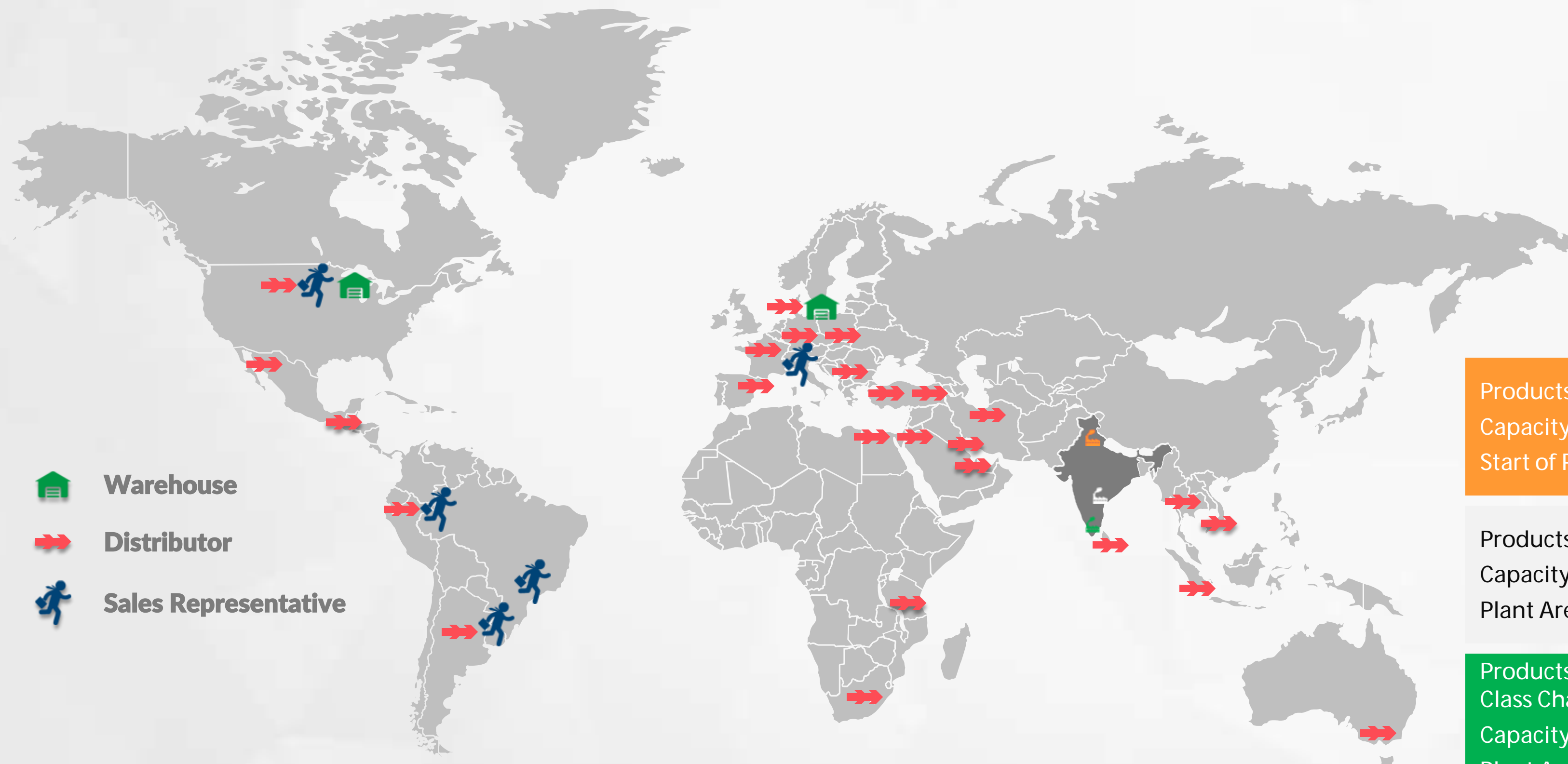


The state-of-the-art computing facilities in the Corporate Technology Centre enables the organization to do virtual simulation and prototyping of new products. Also these facilities are oriented towards process simulation to facilitate improved process control in manufacturing.



Global Presence


Robust service with an established network that offers absolute customer comfort across the supply chain



- Warehouse
- Distributor
- Sales Representative



Products: Motorcycle Drive/Cam Chains
 Capacity: 12 Million feet / Year
 Start of Production: Oct '08



Products : Motorcycle Drive/Cam Chains
 Capacity: 25 Million feet / Year
 Plant Area: 5000 Sq.Mtr.



Products: Industrial roller chains, Material handling & Engg Class Chains, Agri chains, CAM Chains & FB Components
 Capacity: Chain - 30 Million feet /Year FB Parts-1440 ton / year
 Plant Area: 15,000 Sq. Mtrs.



Thank You



Visit Us

: www.rombochain.com



Contact Us

: exports@tii.murugappa.com