



Made in INDIA



A RELIABLE HOUSE OF
RUBBER PROCESSING MACHINERY

Anant[®]
ENGINEERING WORKS
AN ISO 9001-2000 COMPANY

SINCE 1942



308571



INNOVATION



QUALITY



DURABILITY



AFTER SALES SUPPORT

Company Profile

Established in 1942, ANANT ENGINEERING WORKS is a leading manufacturer of quality Rubber Processing Machinery, serving the Indian Rubber Industry and the export markets. We lead in our supplies to the SME sector with continuous repeat orders. Our scope of supply includes single unit machines as well as complete plants for various end products.

OUR MISSION : to continuously improve our products by keeping in touch with the latest requirements of the Rubber Industry. This is possible because of our vast experience and desire to innovate.

Working Principal : Working on the feed-back from our customers, we strive to improve and manufacture viable, economically priced machines without compromising in quality.

All the products manufactured by ANANT ENGINEERING WORKS go through stringent quality control measures during all the stages of the manufacturing process.

Our esteemed customers are the epicenter of our daily routine. We have the strength to adhere to strict moral and ethical values of business.

We earn profits to reinvest in R & D and boast of the best after sales service in the industry.

Anant is an I.S.O. 9001 certified company established in 1942, located at SIRHIND (Punjab), Distt. Fatehgarh Sahib engaged in manufacturing of Rubber Processing Machinery, supplied to M.S.M.E & large sectors.

We are proud to have the following IN HOUSE facilities and machinery:

1. Designing, keeping in with the latest trends and our own innovation/improvements.
2. Pattern shop with the latest equipment.
3. C.I. Casting (Cupola) unit with a capacity of 4 M.Tons/hr. melting rate approx 30 Tons of casting is done every FORT NIGHT.
4. Machine shop comprising of traditional and latest machines. (List enclosed)
5. Machines manufactured are accurate, precision machined and heavy-duty designed for extended periods of operation, under experienced and technically competitive supervision.

OUR ACHIEVEMENTS: More than Ten Thousand Mixing-Mills, more than three thousand Extruders and more than two thousand Calendaring machines of different sizes and specifications are operational all over India and abroad.

We have one of the largest inventory of parts. The parts of machines manufactured more than thirty years ago are available OFF THE SHELF. After sales service is our biggest asset. Service is provided within 36 hrs. of requirement by our esteemed customers, to every nook and corner of India and abroad. Our esteemed customers have patronized us for more than Five decades from all over India and abroad, with repeat orders.

Supplies of Crumbing and Reclaim Plants include more than thirty customers from all over India consisting of more than hundred Mills like Crackers, Grinders, Pre-Refiners Refiners & Breaker Mills of various sizes.

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IN HOUSE FACILITIES/MACHINES/EQUIPMENT

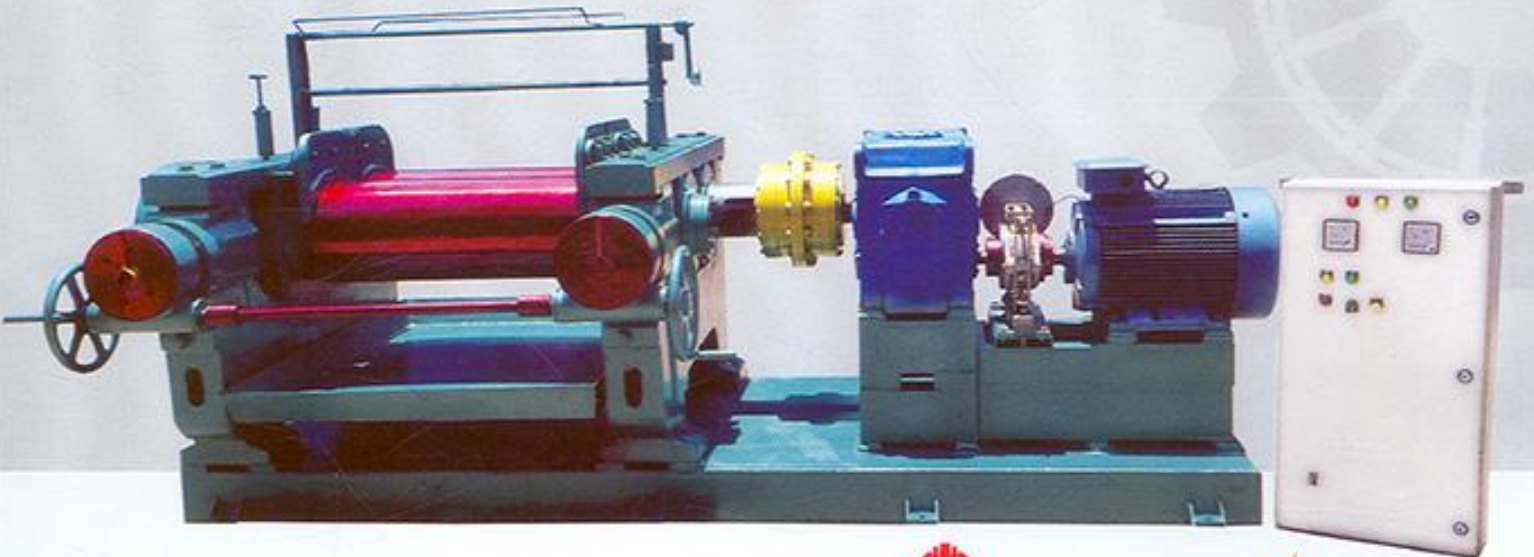
1. Pattern Shop	
2. Cupola Furnace	
3. Lathes-4' to 20' Total	30
4. Horizontal Boring Machines	Four
5. Gear Hobbing Machines	Four
6. Shapers	Six
7. Planers	Three
8. Plano Millers	Three
9. Bed Type Milling & Facing Machine	Five
10. Bed Type Horizontal Milling for teeth cutting	Two
11. Hob Sharpeners	Two
12. Fluting/Grooving Machine	Two
13. Gen Sets	Three
14. Welding Generator	Two
15. Pillar Drilling Machines	Three
16. Radial Drilling Machines	Three
17. Stand-Bye Gen. Sets	Two
18. Overhead Gantries	Four
19. Cylindrical Grinder	One
20. Worm/Screw Cutting Lathe	One
21. Worm Grinding/Profile Grinding Lathe	One
22. Slotting Machines	Four
23. Power Bandsaw	Five
24. Hydraulic Shears	Two
25. Sheet Cutting Machine	One
23. Power Hacksaw	Three
24. Hydraulic Shears	Two
25. Sheet Cutting Machine	One
26. Vertical Turning Lathe (VTL)	One

Mixing Mills

TWO ROLL MIXING MILL

For rapid and homogeneous mastication of natural Rubber, Synthetic Rubber, EVA compound or PVC pellets with various chemical and fillers.

The mixing-mills are suitable for different usage such as compounding mills, sheeting mills, warming mills and supply mills.



ANANT RUBBER MIXING MILL® >>>



SAVE LABOUR

+



SAVE ELECTRICITY

>>> BASE PLATE

Mild steel fabricated, heavy-duty perfectly machined, common for mill, Reduction gear-box and electric motor.

>>> FRAMES & CAPS

Heavy-duty for extreme loads. Available in Graded C.I. Casting, M.S. Fabrication, steel casting with proper machining for accurate alignments

>>> ROLLS

Alloy Chilled Cast Iron, peripherally hollow rolls, duly ground with hardness 520+2% BHn.

>>> HOUSINGS

Graded C.I. Casting or Steel Casting fitted with Anti-Friction Bearings with provision for recirculation of lubricant. Full circle gun metal or Phosphor Bronze Bushes are available as an alternative.

>>> REDUCTION GEAR-BOX

Own make heavy-duty with graded steel casting/forging helical gears, Direct or V-pulley driven. Standard make Worm/helical gear-boxes of Shanthi/Elecon/Premium make.

>>> BULL GEARS

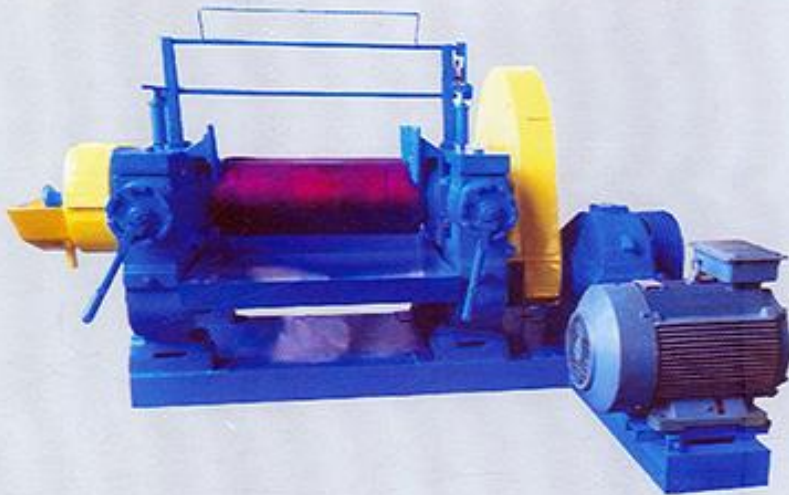
C.I. Casting, M.S. Fabrication or grades steel casting hob-cut with EN-8/9 steel forged steel pinion, hob-cut with spur of helical teeth.

>>> FRICTION GEAR

EN-8/9 grade steel forgings Hob-cut, spur teeth gears to provide friction ration 1:1.08 to 1:1.18
In our Double Bull Gear Drive model friction ratio 1:1.08 to 1:2.5 is available.

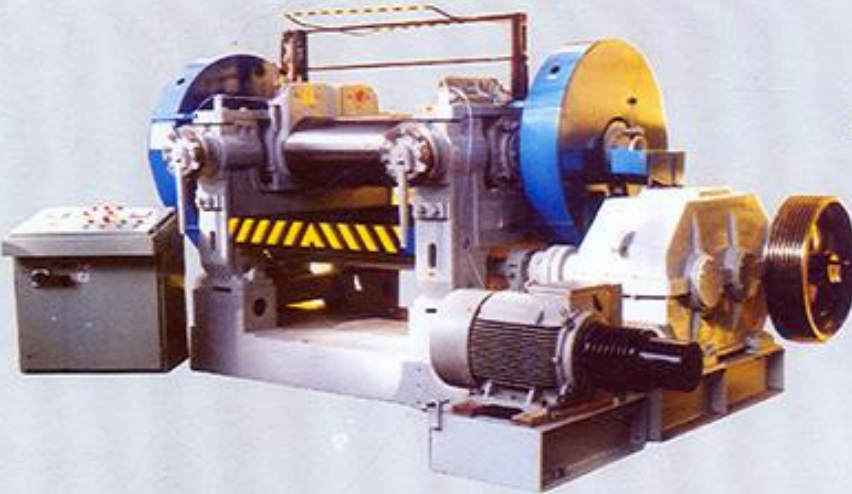
>>> RANGE

Normally 6"OX16"B.L to 22"OX60" B.L. larger sizes against order also available.
More than Fifteen Thousand units running successfully all over India and abroad with repeat orders.



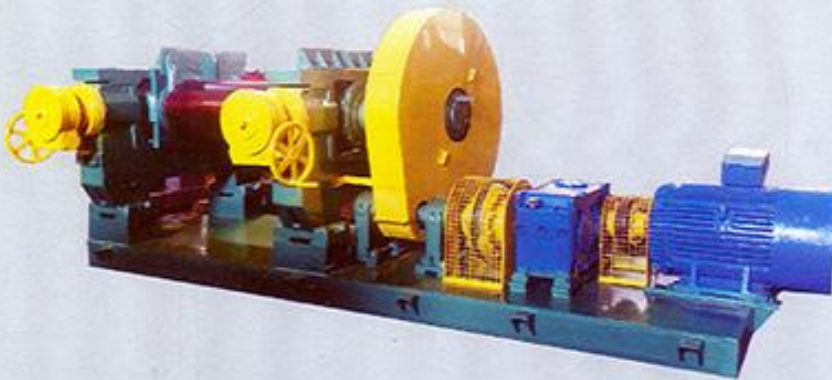
V-Belt Single Drive

- ✓ Single Bull Gear & Pinion.
- ✓ Affordable series.
- ✓ Capable of Heavy loads.
- ✓ Easy to maintain.



V-Belt Double Drive

- ✓ Double Bull Gear & Pinion saves Power and Labour.
- ✓ No connecting gears.
- ✓ Capable of handling ultra heavy pay-load of work.
- ✓ Approximately 10% less Power Consumption.
- ✓ Approximately 10% more Production.
- ✓ In case of anti-friction bearing type mills, power bills can be reduced by a further 20%.
- ✓ Provides better mastication in lesser time (for high quality products)
- ✓ 50% more life of the drive system therefore of the total parts of machine.



Direct Drive

- ✓ No V-belts.
- ✓ Suitable Helical gears type of ELECON/ PREMIUM make. Input shaft directly coupled to Electric Motor and output shaft directly coupled to shaft of Pinion gear of the Mill, through Tyre coupling.

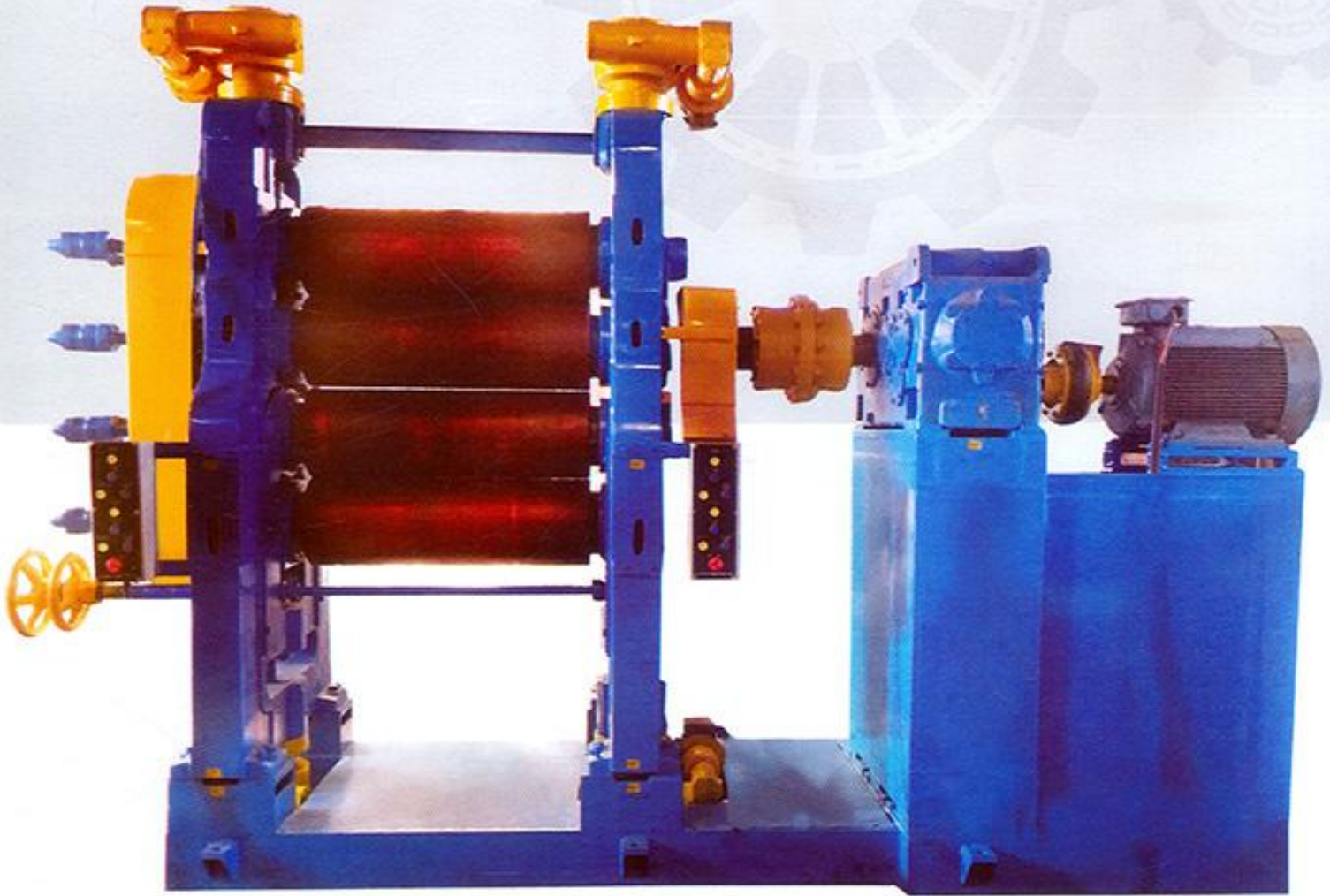


Uni-Drive

- ✓ No Bull Gear & Pinion.
- ✓ Lesser noise & vibrations.
- ✓ Suitable Helical gears type of ELECON/PREMIUM make Input shaft directly coupled to Electric Motor and output shaft directly coupled to Rear Roll of the Mill, through Gear coupling or chain sprocket Coupling.
- ✓ Lesser number of parts to maintain.

Calendars

The 'Anant' make calendaring machines are available in Three, Four, Five Bowl with 'I', 'L' & inverted 'L' configurations.



- ▶▶▶ **FRAMES** — Well designed, of graded C.I. Casting, heavy-duty, machined to close tolerance for accurate and vibration free operation.
 - ▶▶▶ **HOUSINGS** — Graded C.I. Casting housings, lined with Phosphor Bronze Bushes/ Anti Friction bearings with sealing system. Accurately machined for smooth travel in the frames.
 - ▶▶▶ **REDUCTION GEAR-BOXES** — Own Make Heavy-duty or standard make suitable gear-boxes to provide vibration free transmission.
 - ▶▶▶ **NIP ADJUSTMENT** — Manual synchronized nip adjustment through worm and gears with provision for individual nip adjustment. Motorized Nip adjustment, individual as well as synchronized mode, are also provided.
 - ▶▶▶ **RANGE** — 6" X 18" to 22"OX 68". Bigger sizes are also on the anvil.
- OVER TWENTY FIVE HUNDRED CALENDARING MACHINE running successfully all over India with repeat orders.



4 ROLLS CALENDAR
'I' TYPE
WITH MOTORISED NIP
ADJUSTMENT

V-Belt Single Drive

- ✓ Single Bull Gear & Pinion.
- ✓ Affordable series.
- ✓ Easy to maintain.



3 ROLLS
CALENDAR
'I' TYPE

Direct Drive

- ✓ No V-belts.
- ✓ Suitable Helical gears type of ELECON/ PREMIUM make. Input shaft directly coupled to Electric Motor and output shaft directly coupled to shaft of Pinion gear of the Mill, through Tyre coupling.

Uni-Drive

- ✓ No Bull Gear & Pinion.
- ✓ Lesser noise & vibrations.
- ✓ Suitable Helical gears type of ELECON/PREMIUM make. Input shaft directly coupled to Electric Motor and output shaft directly coupled to Centre Roll of the Calendar, through Gear coupling or chain sprocket Coupling.
- ✓ Lesser number of parts to maintain.



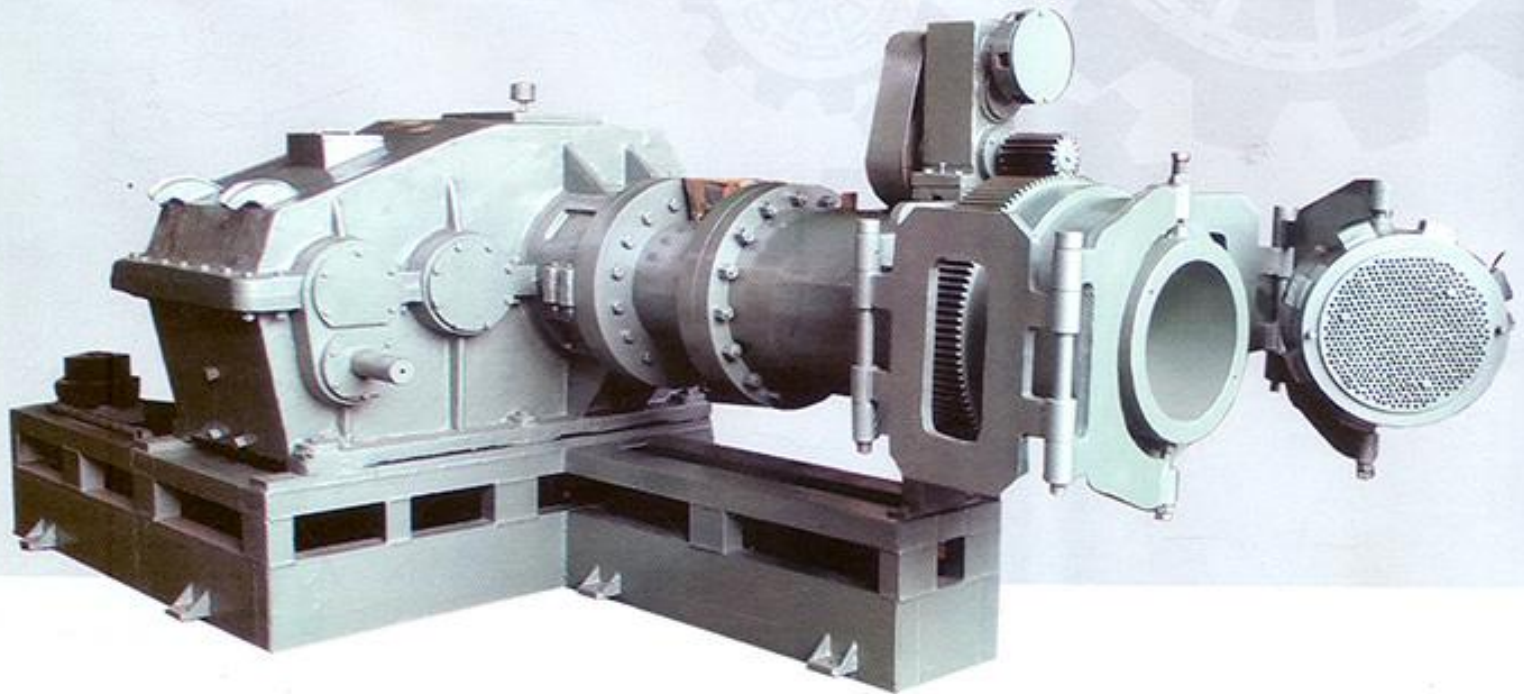
3 ROLLS
CALENDAR 'I' TYPE



5 ROLLS CALENDAR
INVERTED 'L' TYPE

Extruders/Strainers

'Anant' make Rubber Extruders are available with Own Make built in type reduction gear-boxes as well as with standard gear-boxes i.e. Shanthi/Elecon/ & Premium.



GEAR BOX

Graded C.I. Casting housing for different sizes have hollow output spindles which is secured in two heavy-duty ball bearings, One Spherical Roller Thrust Bearing and one three pieces thrust bearing for pre loading of the main bearing.

The helical teeth gears are of graded steel casting/forgings. Hardened, tempered and ground gears are also available.

WORM

are of EN-8/9, EN-19, EN-41B material. Hollow with double flight. SNUG FIT IN HOLLOW SPINDLE.

The worm: available in

- Hardened, tempered and ground
- Eutectic hard surfacing, duly profile ground.
- Profile ground and gas Nitrided.

Sleeves: available in

- Alloy chilled C.I. Material
- EN-9 & EN-19 hardened, tempered and ground
- EN-41 B Gas Nitriding

Sleeves fitted in sleeve-body with water cooling jacket

L.D.RATIO

1:4.5 to 1:10 with variable depth and or variable flight for compression of extruded material.

FEED ZONE

Graded C.I. Casting, with undercut to receive material easily.

Scope of fitting separate sleeve with water cooling jacket is also available.

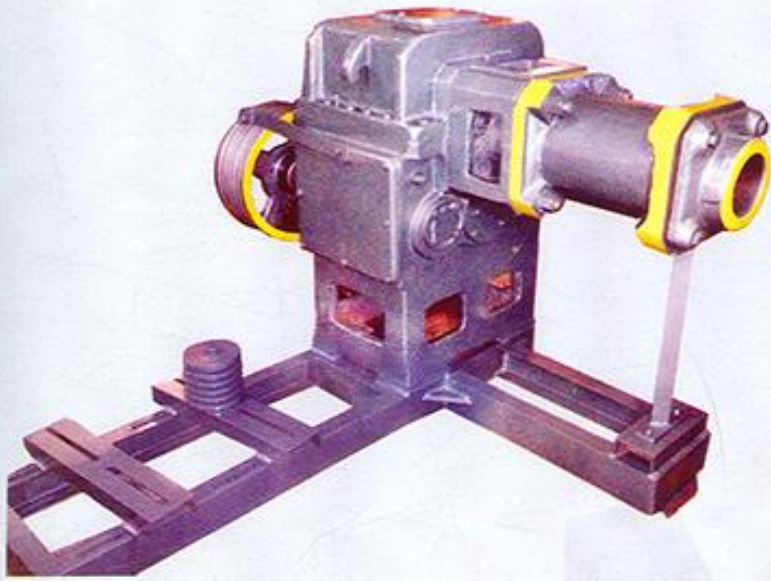
'ANANT' Extruders are being used all over India for profiles, Tread-rubber, Cycle/auto tubes, flaps, Hose pipe and are used successfully as strainers in different units.

RANGE

1" worm dia to 10" worm dia.

Extruder 12" worm dia under designing.

OVER SIX THOUSAND EXTRUDER/STRAINERS running successfully all over India with repeat orders.



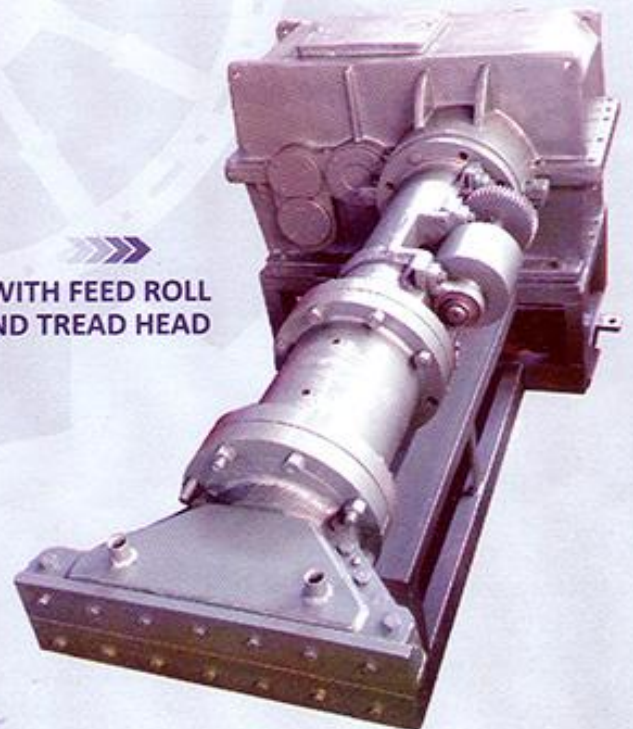
EXTRUDER STANDING MODEL



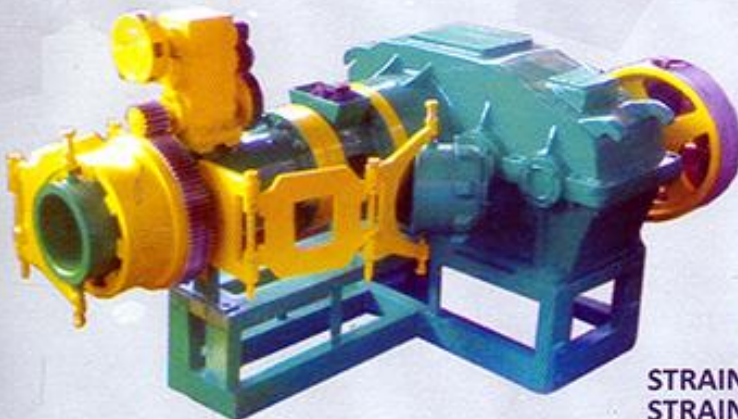
EXTRUDER
(Direct Coupled Double die)



COLD FEED EXTRUDER



EXTRUDER WITH FEED ROLL AND TREAD HEAD

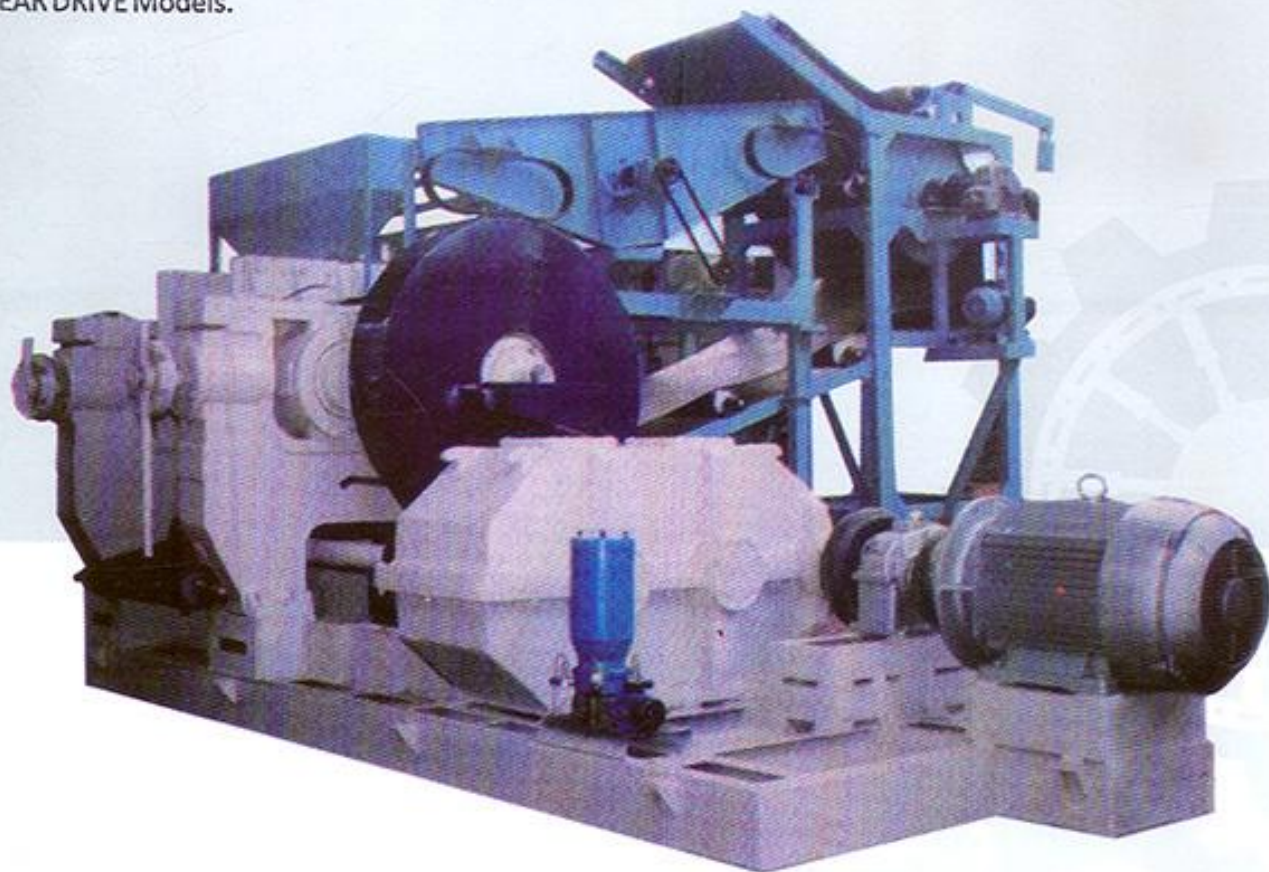


STRAINER WITH TWIN STRAINING HEADS

Crackers/Grinders/Pre-Refiners/Refiners

We designed and manufactured the first Cracker in 1981 and set up a complete Crumbing/Reclamation plant in 1983.

We have developed the most efficient, user-friendly, extra heavy-duty Crackers & Grinders mills of India in the DOUBLE BULL GEAR DRIVE Models.



SALIENT FEATURES

- ✓ Rigid Steel Casting Frame
- ✓ Graded Steel Casting Bull Gears
- ✓ Graded Steel Casting gears and pinion of reduction gear-boxes to withstand the heavy load.
- ✓ Well designed accurately machined fluting of rolls as per requirement.
- ✓ Re-teething, repeated turning or replacement of connecting gears is totally abolished with every re-grooving/fluting of rolls.
- ✓ Reduction of roll wobblers size some times resulting in Cracking of rolls to accommodate smaller dia pinion is not required. In fact friction ratios as high as 3:1 are easily available.
- ✓ Rolls need not to be discarded as after certain reduction in diameter, friction gears no more remain compatible. Optimum utilization of the rolls (till the end of the chill depth) is possible, without making any changes in the transmission or otherwise with mills.

Range

12"x18", 14"x14"x18", 16"x16"x24", 18"x18"x30", 24"x24"x36", sizes are available against order, with their respective recirculation systems with vibratory sieves.

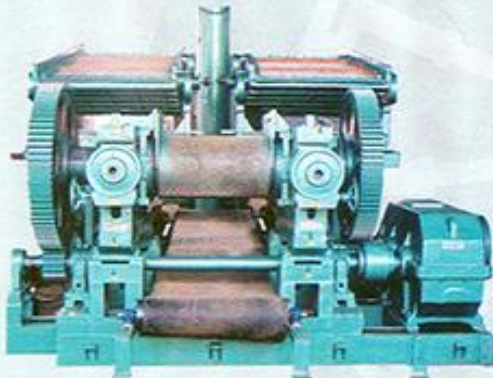
Accurated, high-speed, high friction, Refiner Mills in sizes 15"x17"x24", 22"x18"x30", 21"x24"x36" are available with Phosphor Bronze Bushes / Anti friction bearings..

Fifty Customers from all over India are satisfactory using the 'Anant' make Crackers, Grinders, Refiners and Breakers comprising more than Two Hundred Machine units.

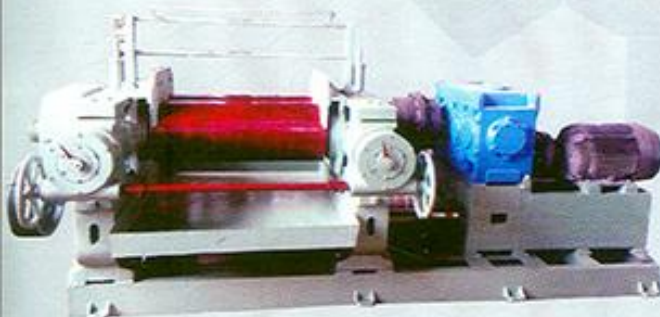
We also manufacture Cracker/Grinder/Pre-Refiner & Refiner mills in direct coupling bull gear type & Uni- drive models



CRACKER MACHINE WITH AUTOMATION



GRINDER MACHINE WITH AUTOMATION



PRE REFINER MILL UNI-DRIVE MODEL



REFINER MILL UNI-DRIVE MODEL

Crumb & Reclaim Process

FOR BUTYL TUBE

RAW MATERIAL

BOILER

DEBEADER
(For Cut pieces)

CRACKER

ROTARY AUTOCLAVE

REFINER
(Final Product)

STRAINER
(For extracting Foreign material)

PRE - REFINER

WTR - Whole Tyre Reclaim

FOR NYLON TYRE

TYRE SCRAP

D
BOILER
(Steam for Autoclave)

A
DEBEADER
(For Cut pieces)

B
CRACKER
(1-4 Mesh Powder)

C
GRINDER
(24-30 Mesh Powder)

E
ROTARY AUTOCLAVE
(De-vulcanizing)

By process A, B & C Rubber Crumb/Powder is obtained.

H
Refining
(Final Product Refined Sheet)

G
Strainer
(For extracting Foreign material)

G
Pre Refining
(Semi finished sheet)

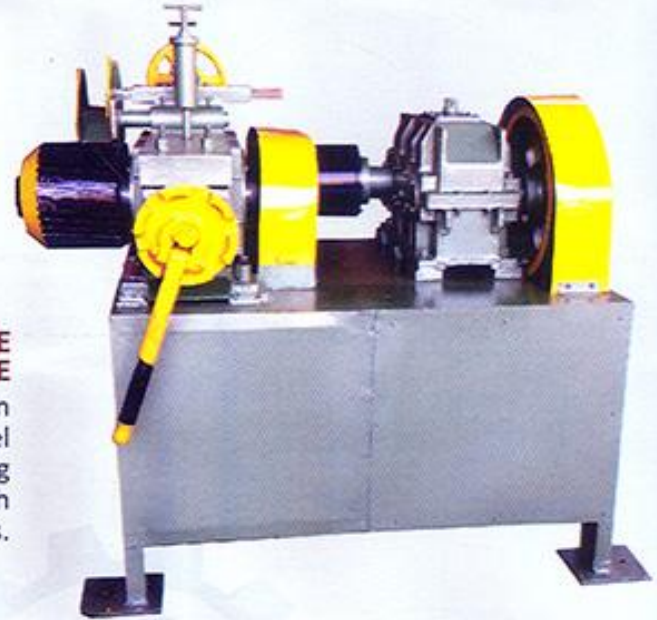
By process A, B, C, D, E, F, G & H Reclaimed Rubber sheet is obtained.

Radial Section



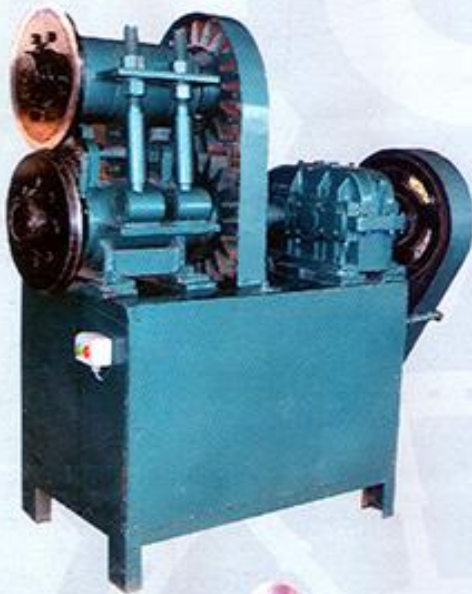
SIDE WALL CUTTING MACHINE

Tyre tightening system on a rotary table, tough cutting blade driven with heavy duty geared motor



BEAD WIRE SEPARATOR MACHINE

Electric Motor, reduction gearbox, coupling, Alloy steel shafts, steel case bearing housing and main frames with alloy steel fluted rolls.



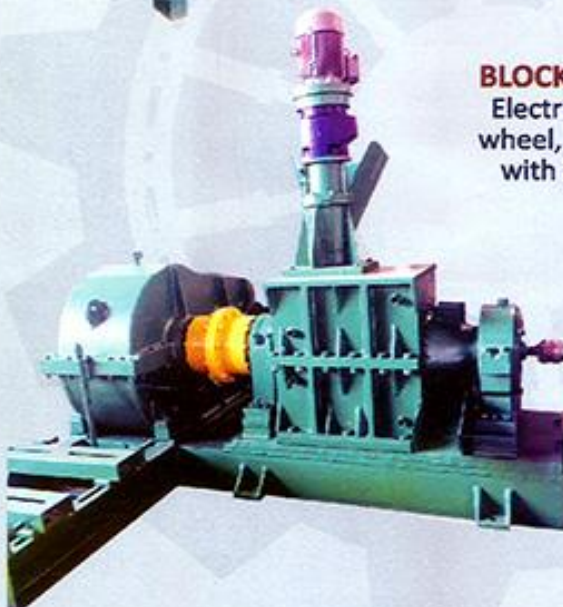
STRIP CUTTER MACHINE

Electric motor, reduction gearbox, coupling, connected gears with 16" dia High Carbon, high chrome rotary blades adjustable on two axis.



BLOCK CUTTER MACHINE

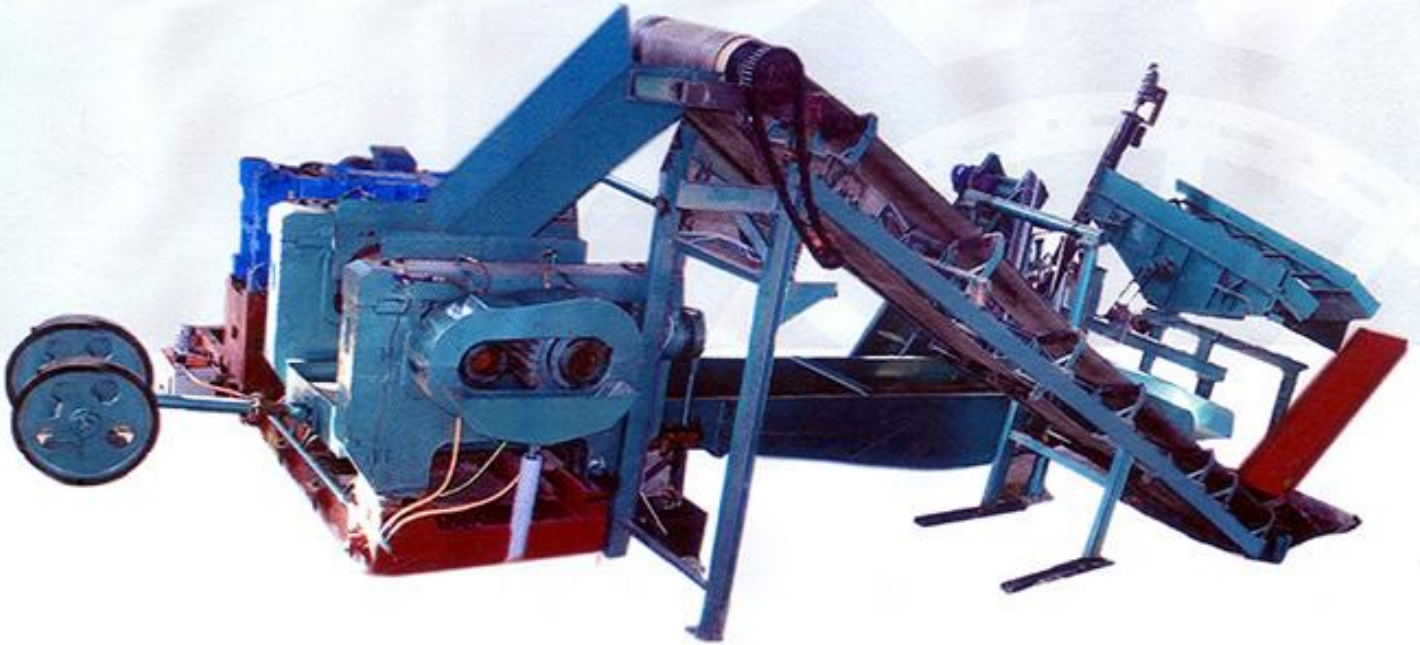
Electric Motor V-Pullies, fly wheel, robust housing block with alloy steel rotor shaft fitted with blades.



COARSE CRUSHER MACHINE

A machine specifically designed and developed to crush the rubber blocks obtained out of a Block Cutter Machine. It reduces the load on the Breaker Mill thereby increasing efficiency and part life.

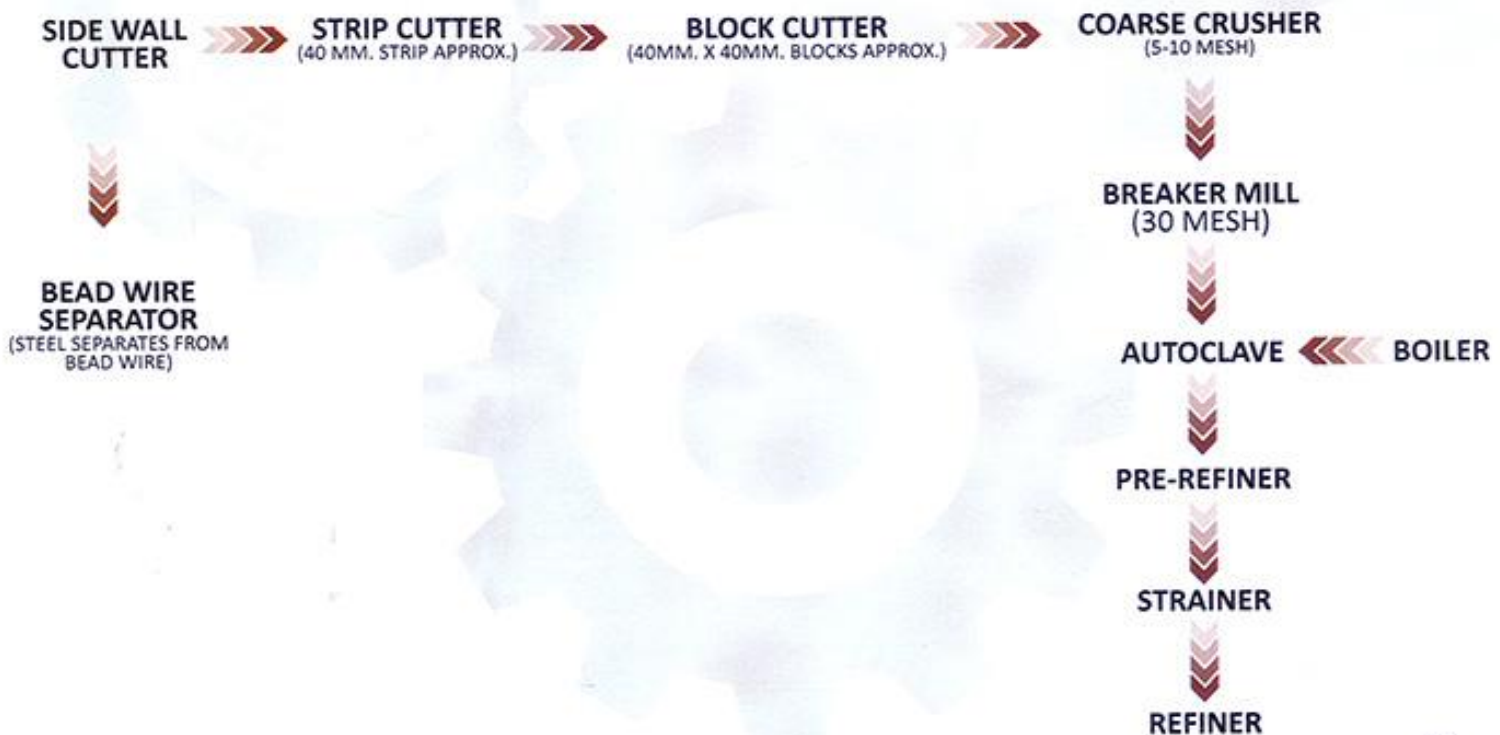
INTRODUCING SIMPLE TO OPERATE, EFFICIENT, AFFORDABLE AND ROBUST MACHINERY SERIES



BREAKER MILL WITH AUTOMATION AND STEEL SEPARATION SYSTEM

Heavy Duty Steel Cast Frames, Housings lined with Phosphor Bronze bushes, Alloy steel rolls (fluted & plain) with eutectic welding for long life, Reduction gearbox with oscillating sieve, belt conveyor, magnetic drums, final sieve with re-feeding belt conveyors. State of the art and efficient design, robust material and excellent workmanship.

CRUMB AND RECLAIM FLOW CHART FOR RADIAL TYRES



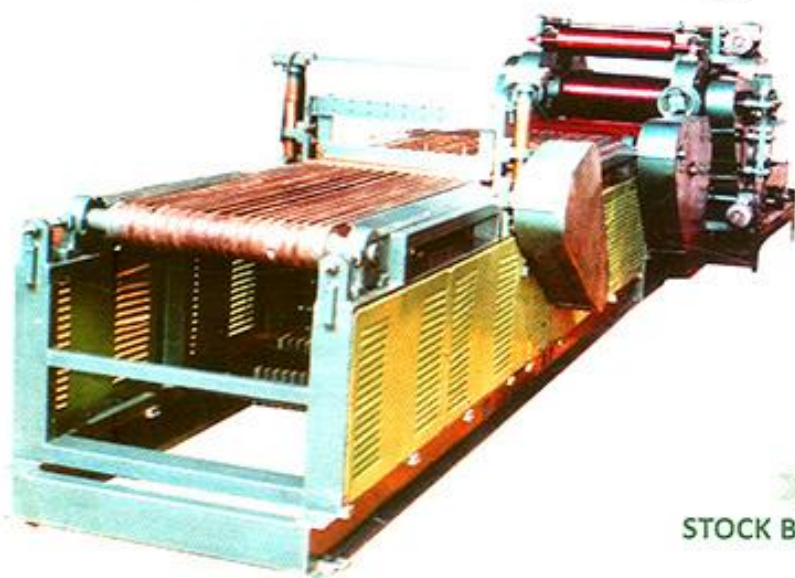
Additional Supplies

WE ALSO UNDERTAKE PROJECTS TO RE-CONDITION AND/OR UPGRADE OLD/IMPORTED MACHINERY.

➤➤➤
AUTOMATION FOR
VARIOUS APPLICATIONS



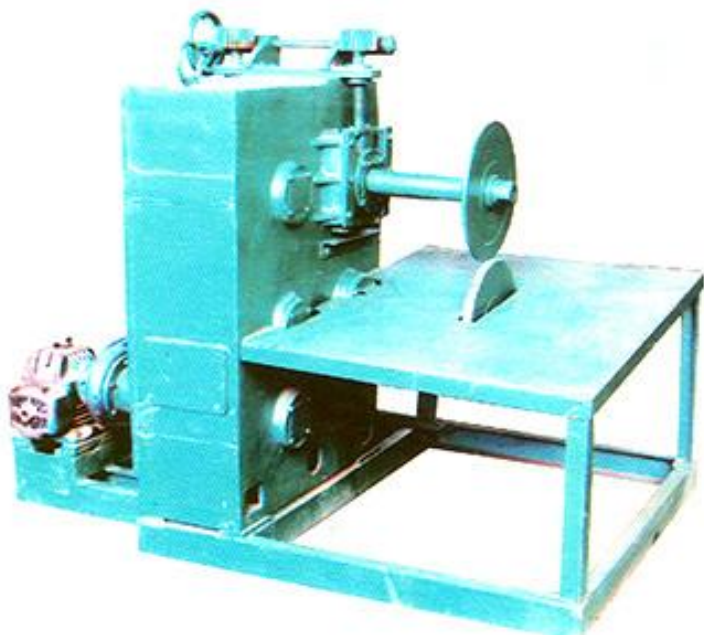
➤➤➤
CONVEYOR LINES



➤➤➤
STOCK BLENDER



➤➤➤
DEBANDING MACHINE



Our Satisfied Customers



CRUMB & RECLAIM

Centurion Rubber, R.D. Rubber, Minar Reclamations, Hitech Rubbers, M.J Reclaim, Lead Rubber, Spry Rubber, Kohinoor Reclaims, H.J. Reclaims, A.T.G. Rubber, G.R. Rubber, Shivalik Rubber, J.B. Industries, Him Stone, A.K. Rubber, Recalimation, Consolidated Boards, MSS Rubber, L & J Rubber, Gijas Rubber, M.K. Rubber Inds., J.K. Rubber, Southern Rubber, Balaji Rubber Inds., Platinum Rubber, Lokesh Reclamation, Super Reclamation, C.M.T. Rubber Essar Rubber, V.J. Rubber, Rainbow inds., Alfa Rubber, Eswar, Ganesha, Sri Kumaran, Bharti Enterprises,

HOSES

Padmawati Rubber, Vardhman, Imperial Auto, Rajesh Rubber, Veer Udyog, Indo Rub, Shree Krishna, Jagdambay, M.S. Rubbers, R.M. Export & Indian oil seals.

FOOTWEAR

Saroop Industries, Venus Foot Arts, Baraithi Shoes, P.P.R.Pvt. Ltd., Bansal Shoes Pvt. Ltd. Lehar Polymers, Surya Rubber Inds., Murikad Rubber, Ved Polymers, Shri Bihariji, Triveni Rubber Inds., Rupani Rubber, Julka & Co., Diamond Rubber, Lawreshwar, Venus, Mahavir (Binny) & Tri Star Rubber.

OTHERS

Alp Nishikawa, Roop Rubbers Ltd., Gold Mohar Profiles, Zenith Rubber, New Cork, Ajit Rubber, Super Asian, M.B. Rubber, K.H. Rubber Aggarwal Rubber & Virmani Rubber.

EXPORTS

Nigeria, Bangladesh, Sri Lanka, Nepal, Euthopia, Egypt & Tanzania.

AUTO TYRE & TUBES

Pelican Rubber Product, T.M. Tyre & Tube, Aggarwal Rubber, Amrutha International, Chadha Rubber Ltd. Hindustan Rubbe & U.S.R. Tyres.

CYCLE TYRE & TUBES

Vyas Rubber Ltd. Maruti Cycle Pvt. Ltd., Jain Chemicals, Poddar Tyres, Suntec, Hindustan Tyre, Gangotri Tyre & Dib Dip tyres.

V-BELT TRANSMISSION BELT

Navyug, Krishna, Ajanta, Alaska, Nain Rubber, Nirmal Rubber, Girsons & Kohinoor sales.

CONVEYOR BELTS

Forech India, Premier Rubber, Somi Conveyor & Hari Belts.

TREAD RUBBER

N.S.C. Polymers, T.P. Rubbers, T.K.B. Treads, Tecber Rubber, Turj Rubber, Blackstone, Sun Tread, Best Patch, Vardhman Elastomer, Supreme, Chopra, Poddar, Captain, King Rubber, Simco Rubber, Sun Polymers, Rajasthan rubber, Kota Tread, Krishi Tyres, Hardi Treads, Sun Tread & Shakti.

RUBBER COMPONENTS

Prag Rubber Industries, Geeko Industries, Jagat Industries, Shyam Cable inds., R.K. Profiles, Chadha Rubber Ltd., Tool & Gage Co., Rubber India, Krishna Synthetic, Sujaya Rubber, Subam Rubber Inds. & Senior Rubber.


MICRO SHEET

Novelty Udyog, Capstan Rubber India, Sandeep Rubber & Simco Products.



ANANT ENGINEERING WORKS
DIESEL & RUBBER ENGINEERS

 **BASSI ROAD, SIRHIND- 140406, DISTT.FATEHGARH SAHIB, (PUNJAB)  INDIA**

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