

## FEATURES



### ADVANCED BEARING HOUSING

Isolates Bearings from Cutting Chamber Contamination.



### CLEAN CONSISTENT OUTPUT QUALITY

98% steel free rubber mulch / chips and 99.9% fibre and steel free Granules.



### LOW MAINTENANCE COST

Specially Designed Knives - with Hard face & Re-grind multiple times for low cost operations.



### LONGEVITY

Replaceable Wear Plates increase durability of cutting chamber.



### SECOND-TO-NONE SERVICEABILITY

Hydraulic hopper opening & service platform ensure easy maintenance.



### PRECISION CONTROL

Specific Stop/Auto Reversal Feature - Protects against overfeeding and damage by unsuitable materials.

## OUTPUT PRODUCT APPLICATIONS



## PARTS AND SERVICE

FORNNAX understands the value of superb customer services, making us stand out of the crowd. No more hassles in reaching out to after sales-service department, as our engineers are easy to contact. This is what our lifetime support system is. Our machines are unique since they are customized according to the needs of every business. We have the data of every shredder we manufacture along with providing on-site diagnosis, superior quality equipment, 24\*7 customer support from our factory technicians. This makes us set standards in the industrial shredder parts and service.

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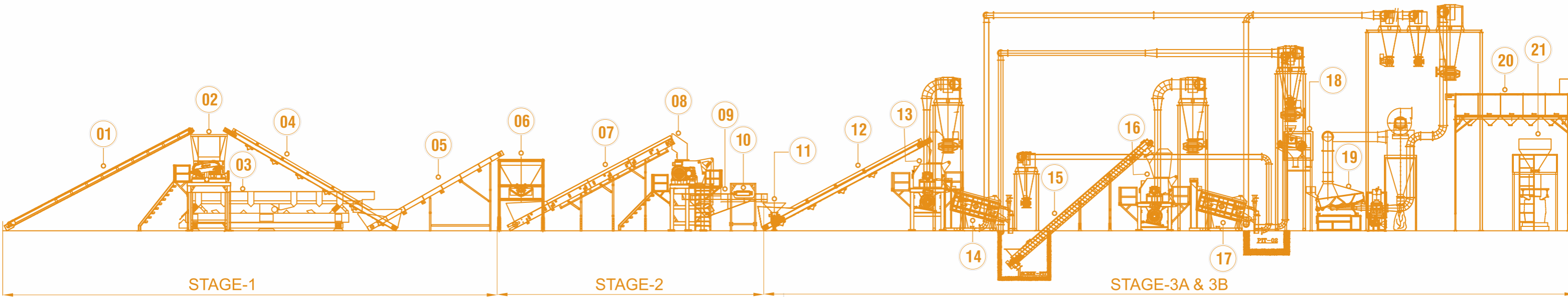


## TYRE RECYCLING PLANT CRM-1500/CRM-3000/CRM-5000



## INTRODUCTION

Fornnax introduces the world class design and technology for Crumb Rubber Plant of processing of 25 Tons to 200 Tons per day. The main features include high level safety, environment attributes with international standards, easy & affordable maintenance, higher efficiency and commercial viability. The Plant is auto-controlled with PLC Panel. Fornnax Tyre Recycling Crumb Rubber Plant includes a broad range of customized Shredders and Granulators, which have higher efficiency, toughness and consistency. Fornnax Crumb Rubber Plant generates 99.9% pure crumb rubber free from steel and textile for various applications.



- 01 Infeed Conveyor    02 Primary Shredder    03 Resonance Screen    04 Oversize Conveyor    05 Discharge Conveyor
- 11 Stability Silo    12 Infeed Conveyor    13 Granulator - 1    14 Classifier - 1    15 Infeed Screw Conveyor
- 21 Auto Bag Filling System

- 06 Balance Silo    07 Infeed Conveyor    08 Secondary Shredder    09 Vibratory Discharger    10 Over Band Magnet
- 16 Granulator - 2    17 Classifier - 2    18 Drum Magnet    19 Separation Table    20 Grading Screen

## TECHNICAL SPECIFICATIONS

MODEL OPTIONS	CRM-1500	CRM-3000	CRM-5000
<b>DRIVE AND TRANSMISSION SYSTEM</b>			
Total power	600-700 HP / (450-525KW)	1200-1300 HP / (900-970KW)	1600-1700 HP / (1200-1275KW)
Estimated Power Consumption	480-560 HP / (360-415KW)	950-1050 HP / (710-785KW)	1280-1360 HP / (960-1020KW)
Drive Specification	Electric	Electric	Electric
Voltage	As per Customer's Requirement		
<b>INPUT/OUTPUT &amp; CAPACITY</b>			
Input Product	Full Car Tyres	Full Car/Truck Tyres	Full Car / Truck / OTR Tyres
Output Product (1st Stage )	50-150 MM Tyres Shreds		
Output product (2nd Stage )	20-30 MM Rubber Mulch + Steel		
Output Product (3rd Stage )	0.8 - 4 MM Crumb Rubber + Steel + Fibre		
Input Capacity	1.5 TON/HOUR	3 TON/HOUR	5 TON/HOUR
<b>SYSTEM DIMENTIONS</b>			
Equipment Length	60,700 MM ( Approx.)	70,000 MM ( Approx.)	75,000 MM ( Approx.)
Equipment Width	12,000 MM ( Approx.)	18,000 MM ( Approx.)	21,000 MM ( Approx.)
Equipment Height	10,750 MM ( Approx.)	10,750 MM ( Approx.)	10,750 MM ( Approx.)
Equipment Weight	35,000 KGS ( Approx.)	50,000 KGS ( Approx.)	70,000 KGS ( Approx.)
Estimated Shipping Loads	8 Containers	10 Containers	12 Containers
Ware House Size ( Equip. Only)	15,000*45,750 MM	18,300*61,000 MM	21,350*76,250 MM

\*Above displayed technical data, dimensions and specifications of equipment is representational. Dimensions are approximate. Actual equipment data may differ from shown. Consult with fornna for actual equipment drawing and layout plan.

## OPTIONALS

Steel Cleaning System | Dust Collection System |

## PROCESS STAGES:

### STAGE-1 PRIMARY SHREDDING:

At this stage, whole tyres are fed into Fornnax SR-Series primary shredder through the Infeed conveyor system. This unit is high torque low-speed equipment, which reduces the whole tyre to variable-size strips. The shredded tyre strips are approximately 50mm wide x 300mm long with occasional pieces up to 400mm long. The strips, sized up to 150mm, are passed through a screening process. Strips, larger than 150mm, will move back to the primary shredder to produce a consistently sized shred averaging 50mm-150mm in size.

### STAGE-2 SECONDARY SHREDDING:

At this stage, primary tyre shred is fed into Fornnax R-Series secondary shredder through a conveyor feed system. This unit is heavy-duty medium speed equipment with a screening system, which produces tyre chips of size 20-30 mm called rubber mulch. This process liberates ferrous metal from the bead and tread area and then separate through the over-band magnet, providing rubber mulch that is up to 98% steel-free for further processing. The material at this stage can be marketed as high-quality low-steel Tyre Derived Fuel (TDF) for a wide variety of combustion applications.

### STAGE-3A PRIMARY GRANULATION:

In the primary granulation stage, 98% of steel-free rubber chips (rubber mulch) are fed to the Fornnax TR-Series granulator through the conveyor feed system. TR-Series Granulator is specially designed to accept steel-free rubber mulch for further downsizing and textile liberation. This process liberates 50% fiber (textile) and then separate through Classifier-1. Material is then routed via a screw conveyor and pneumatic conveying system either to the next granulation stage to undergo further reduction or to the Auto Bag Filling System; where it is packaged for a broad range of granulate applications.

### STAGE-3B FINAL GRANULATION:

In the final Granulation stage, primary granulated material is fed into Fornnax TR-Series granulator through a screw feed system. This unit is high-speed equipment with the screening system, which produces rubber granule of size 0.8-4 mm and separate remaining liberated 50% textile with the help of classifier-2 and separation table. Secondary magnetic separation ensures the removal of remaining leftover 1-2% steel wire. It provides a high-quality rubber granule with a purity of up to 99.9%.