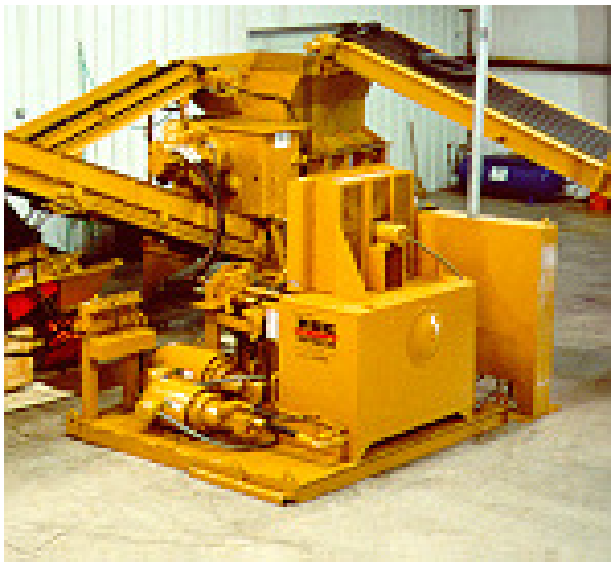
CRUMB RUBBER SYSTEM
STANDARD PROCESS DESCRIPTION

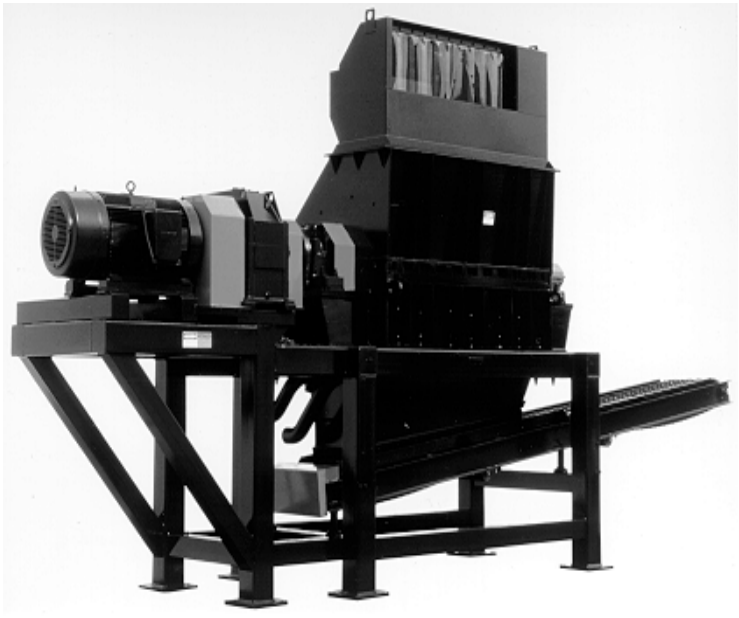
1st Stage
Primary Reduction - Saturn Model 62-40HT

Whole tires will be fed to the **Saturn 62-40HT** tire shredder.
This unit will reduce the whole tires to a variable size strip.
The shredded tire strips will average: ***5-10cm wide x 15-25cm long***
with occasional pieces up to: ***30-40cm long***.



2nd Stage
Reduction to Chips - Granutech Model 80 Grizzly

Primary tire shreds are then fed to the Granutech Model 80 Grizzly. This unit is an intermediate-speed grinder that utilizes an internal screen. The primary tire shreds are reduced to a ***1,5 – 2cm*** material in the Grizzly.

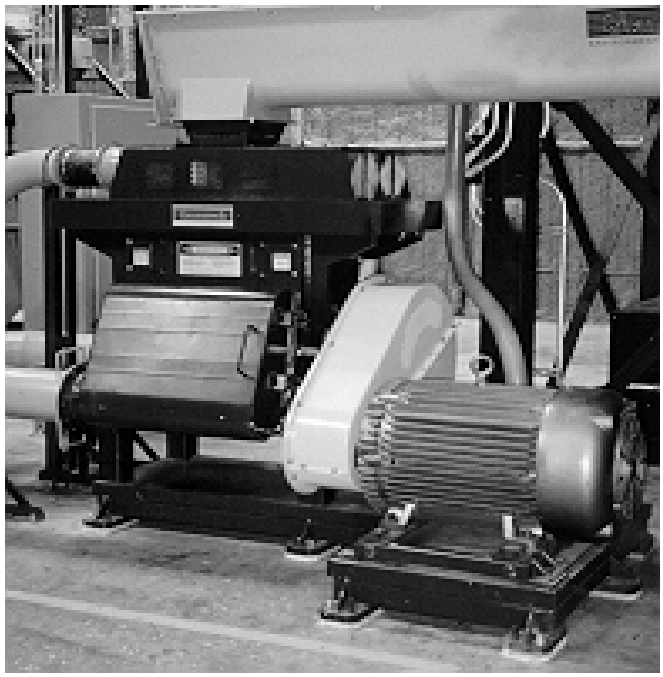


This reduction will allow ferrous metal from the bead and tread area to be liberated, and then magnetically separated, providing a material that is up to ***98% metal-free*** for ease of further processing. An aspiration system evacuates airborne particulate produced from dust and fiber. ***Material at this stage can be marketed as high quality low-steel tire derived fuel (TDF) with average caloric value of 40 – 42MJ/kg. TDF can be used for a wide variety of combustion applications***.

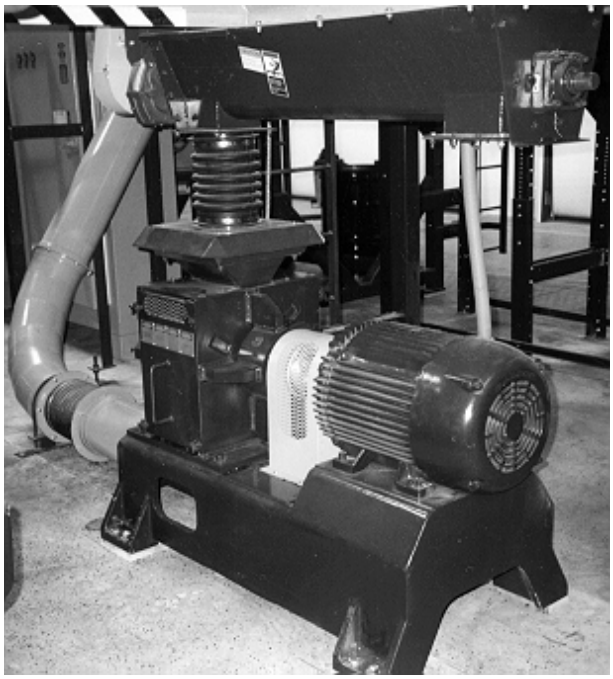
3rd Stage
Reduction to Granules - Granutech Model G3 Granulator

The minus ***1,5 – 2cm*** chips are then fed to a walking-floor chip bin for storage. The chips are then fed to the ***G3 granulator*** via a variable speed feed screw. The ***G3*** reduces the chips to a 0,6cm product size. The material is removed from the ***G3*** via vacuum pneumatics. Metal separation and fiber aspiration follow the ***G3***. The 0,6cm material that is virtually wire-free, is then conveyed into the powderizer-infeed storage bin or sent directly to the bagging area for packaging to go to end markets. Material at this stage can be marketed for numerous applications, including but not limited to:

- Soil amendment,
- Play ground material,
- Road sub-base, and
- Some molded product applications.



4th Stage
Reduction to Fine Granules - Granutech High Output Powderizers



The 0,6cm granules are stored in a bin and fed to each powderizer via an independent feed screw. Once the material is reduced sufficiently, it is removed from the powderizer via vacuum pneumatics and conveyed on to fiber separation equipped with aspirators, efficiently removing the remaining fiber.

Crumb rubber is produced in sizes from:

10-30 mesh / ***0,9 - 2,7mm***

through the powderizer.

5th Stage

Custom Blending and Packaging – Automated Weighing and Bagging

Materials of specific sizes can be automatically dispensed into a variety of storing or shipping containers.

Material is then electronically weighed and mechanically shaken to ensure consistent and accurate weight and density.