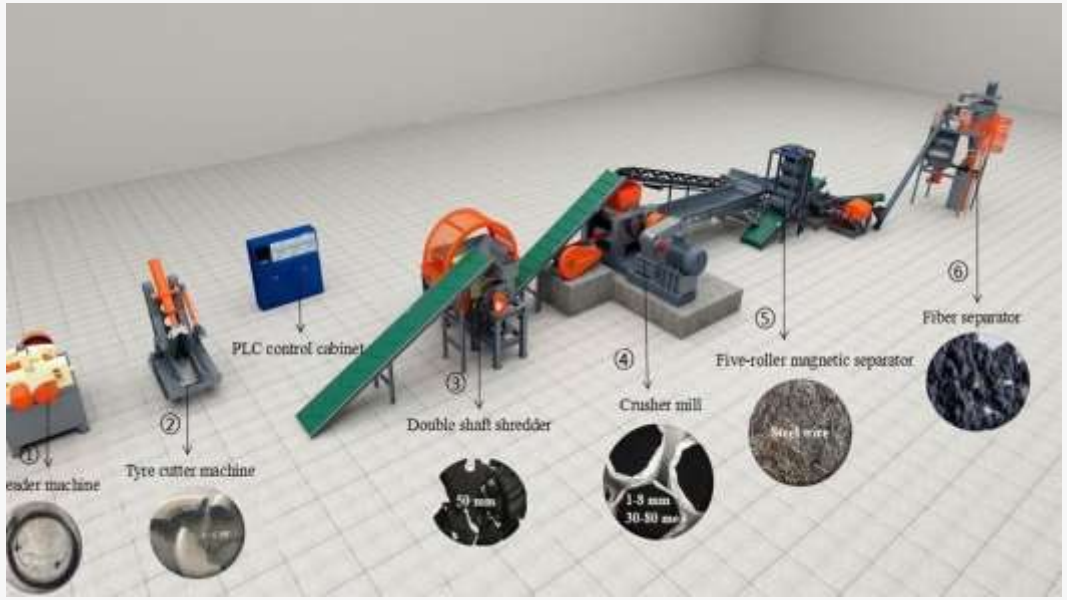
TIRE CRUSHER PLANT

CAPACITY 1000 Kg/h



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General Description

Materials: Wheel tires -- below 1200mm

Capacity: 1000 Kg/hour

Finished product size: Powder (30 - 80 mesh)

Operators per plant: 2 - 3 People.

Configuration List

1.1 Preprocessing stage:

Brushcutter: To clean the inner circle steels cut rubber strip (Power: 15 kw + 0,75 kw) 1 Unit.

Tire cutting machine: For cutting scrap tires into 4 - 5 pieces (Power: 5.5 kw) 1 Unit.

1.2 Rubber block stage:

Rubber conveyor belt: To send the material to the shredding machine (Power: 2.2 kw) 1 Unit.

*Double shaft shredding machine: scrap tires less than 800 mm and rubber materials can be shredded into 50 mm blocks (Power: 37 kw*2+2.2 kw) 1 Unit.*

1.3 Separation stage of rubber powder and steel wire and fiber:

Conveyor belt: Sending the material to the grinder mill (Power: 2.2 kw) 1 unit.

Grinding mill: To treat 50mm rubber block to 1-6mm granules or 30-80 mesh powder (Power: 55 kw+0,37 kw) 1 Unit.

Large vibrating screen: Make the rubber crumb more eventually and avoid adhesion, separate the steel wire and rubber. (Power 7.5 kw) 1 Unit

Small vibrating screen: Classify rubber powder of different sizes below the target (Power: 2.2 kw) 1 Unit.

5-roll magnetic separator: Sorts steel wire from the rubber wire mixture (Power: 0.75 kw) 1 unit.

Large conveyor: Material return system, if the size is too large, it will be returned to the crusher mill for secondary crushing (Power 2.2 kw) 1 Unit.

Small conveyor with magnetic roller: Conveying rubber powder sorting target powder size and secondary magnetic separation (Power 0,75 kw) 1 Unit.

Separator conveyor: Sends the rubber powder to the fiber separator (Power 2.2 kw) 1 Unit.

Fiber separator: Separate fiber from rubber powder (Power 3 kw + 0.75 kw*3) 1 Unit.

PROCESS DETAILS

Preprocessing stage

Rubber block stage

Rubber powder stage

Wire and steel fiber stage

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Preprocessing stage

1. Whole tires up to 1200mm

2. Handling scrap tire bead wire

3. Through the reducer, the two wheels are driven by gears to promote strong and slow relative operation.

4. The deceleration of the two turns is relatively different, the ring is forced to be crushed by the strong rotation of the wheel between the two wheels.

Applications: Selling to steel mills for smelting and recycling

Preprocessing stage

Tire cutting machine

1. Whole tires up to 1200mm
2. Blade: D2 -- 62-65 HRC
3. Stable and factory loader, supplied hydraulic pump station to make the cutting effect of the blade is great, guarantee the work smoothly.

Rubber block stage

Shredding machine

1. Entrance:

Whole tires up to 1000mm

Cut mining tires (debarked)

Scrap tires.

Neumáticos (descascarillados) en bruto

2. Exit:

Rough shredded tires up to 2" in.

The TDS (Tire Derived Shavings System) provides quality rubber output for the following secondary applications:

- Civil engineering.

- Clean cut TDS chips for further processing.

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Benefits of these Stages

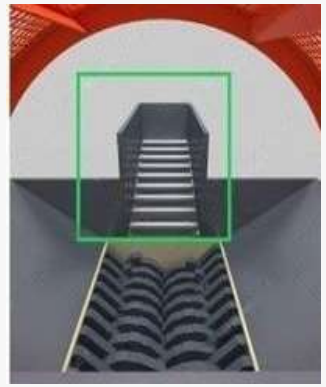
1. Water cooling system to lubricate the tires in the working chamber.

2. Improved technology and shredding power through improved blade design.

3. Easy replacement of the cutting blades, low maintenance costs.

4. Perfect shredder, module system to obtain clean cut TDS (tire shavings).

5. Handles various sizes of tire input (passenger, truck, super singles, semi OTR (off-road), and cut OTR (off-road) parts, etc...



Input tire size (≤ 800mm de diameter)

Output tire size (≤ 50 * 50 mm)

Capacity (2000 kg – 3000 kg/h)

Power (37 kw*2 + 2.2 kw)

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Rubber powder stage

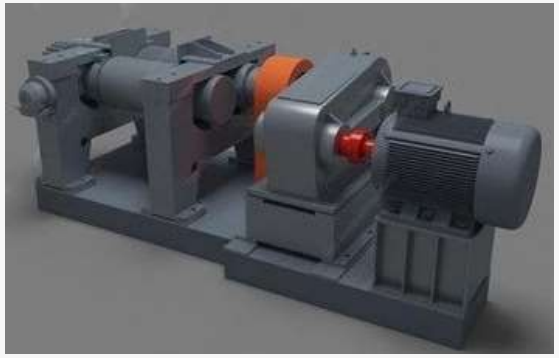
Input:

Rough tire tread, less than 50 mm

Output:

- Dust (Mesh 30-80).

- 99% of steel released.



Quality crumb rubber is in demand in the following markets:

- Surfaces and sports fields

- Asphalt rubber and sealants.

- Automotive parts.

- Trails, walkways, gardens and erosion surfaces.

- Equestrian rugs and flooring.

Steel wire magnetic separator stage

Input:

Rubber granules and steels

Output:

- Rubber granules without steel wires

- 99.7% of steels

Applications:

Magnet to pick up the steel wire from the rubber particles . .

Recovered steel can be melted and reused.

E.g.: bearings, springs, etc.

Fiber separation stage

Input:

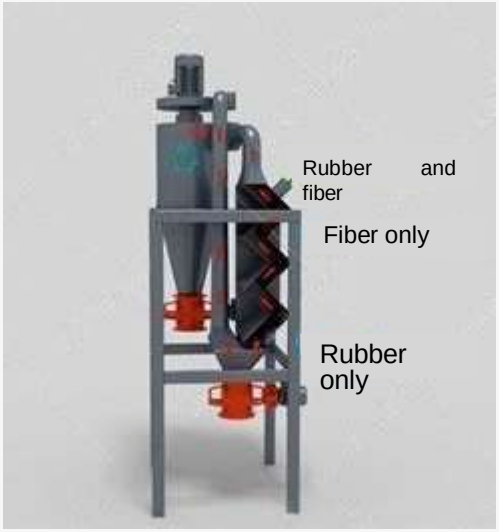
Rubber and fiber granules.

Output:

- Rubber-free textile granules.

- 99.9% textile fiber.

15% steel - 75% rubber between powder and granulated rubber



The textile fraction is a waste fraction that includes nylon, polyester, rayon, aramid and little rubber.

It is mainly used in connection with energy recovery (incineration).

It is used as acoustic insulation and to reduce vibrations in industrial plants.

10% TEXTILE

Recycling plant for many types of tires: cars, vans, trucks, tractors and large industrial vehicles. In a highly technological production process, tires are separated into their original elements: rubber, steel and textile fibers.

All incoming scrap tires are processed and recycled in a sustainable manner, allowing for the recycling of excellent raw materials.

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Rubber Applications

Sports surfaces

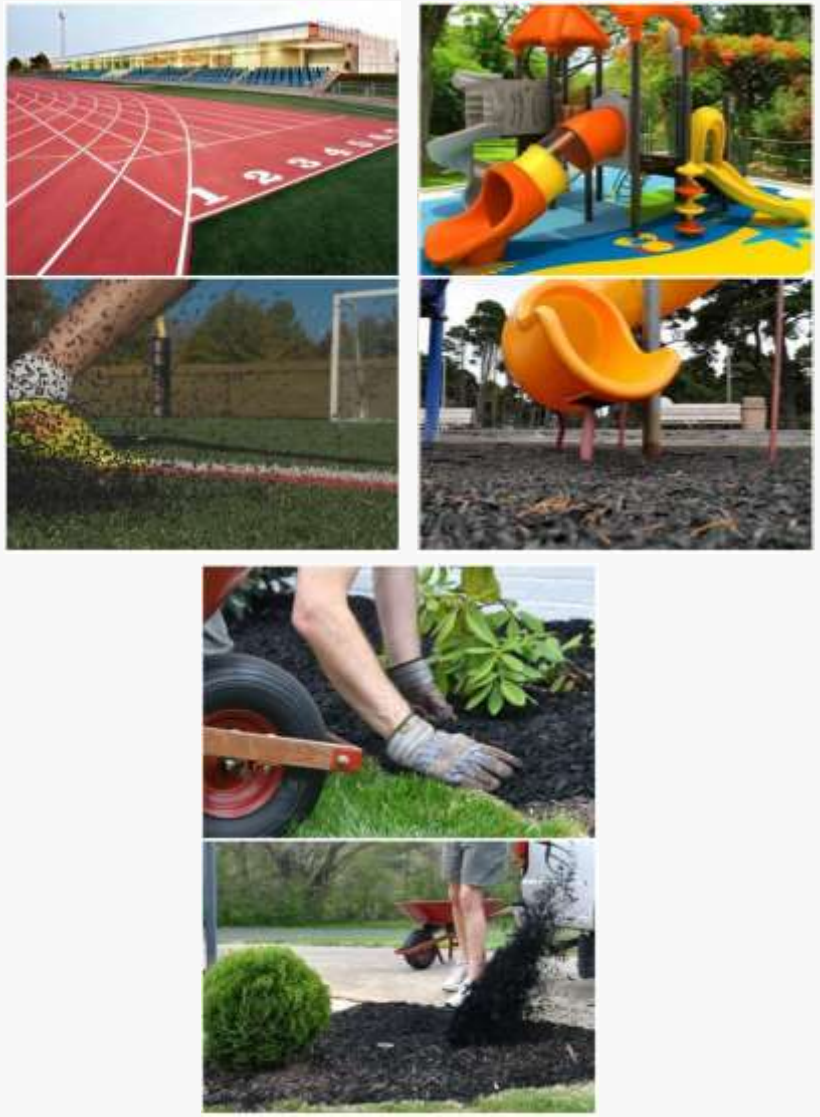
- Playgrounds and recreation areas
- School sports áreas
- Tennis courts, basketball courts, athletics, etc...

Safety products and shock absorption

- Damping pads for rails and machinery
- Acoustic barriers for roads
- Abrasion coating on mining equipment
- Bicycle lane separator and parking stop
- Modular Roundabouts

Automotive industry

- Splash guards and fenders
- Car and truck floor mats
- Floor coverings for trucks and vans



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Rubber Applications

Construction

- Rubberized asphalt for highways and roads
- Bumper
- Floor tiles
- Foundation waterproofing

Geotechnical/Asphalt Applications

- Drainage pipes
- Floor conditioner
- Porous irrigation pipes
- Road construction and repair

Rubber and plastic products

- Pipe insulation and coating
- Garbage bins
- Shoe soles and heels
- Cable and wire insulation






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