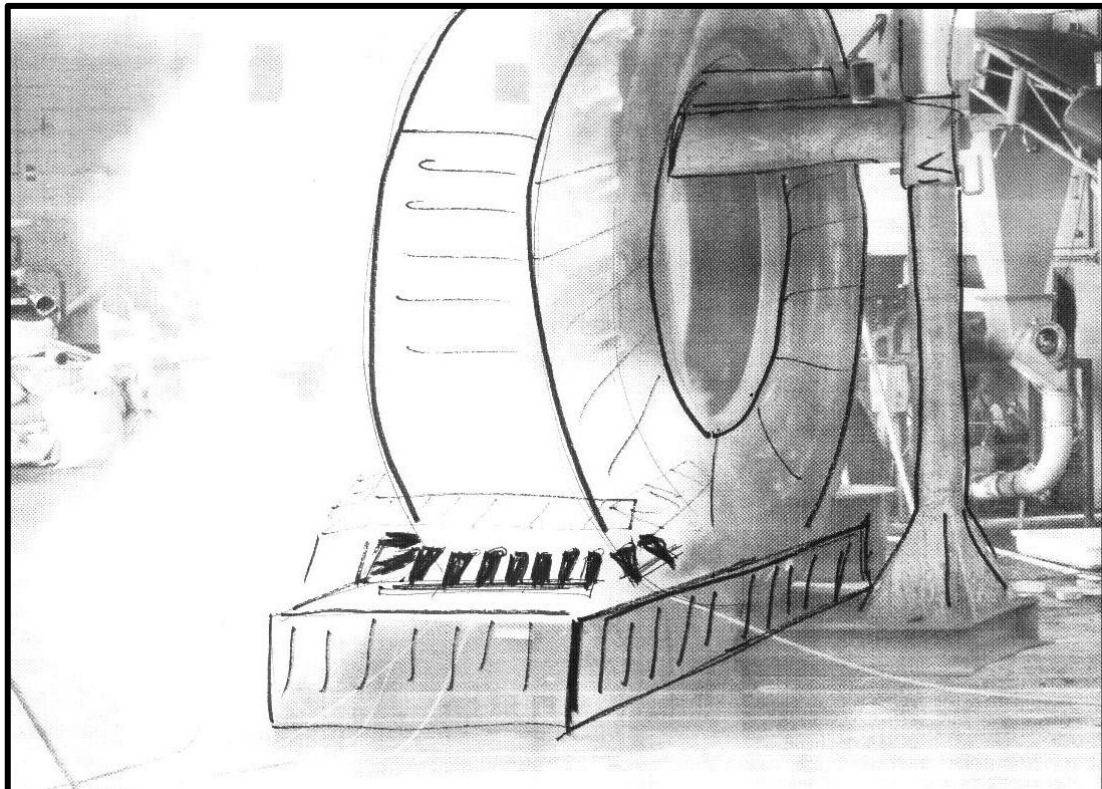


**B.T.R.C.**

**OTR R53 - R63 pulverization**

**Full Recycling**



# B.T.R.C.

## Recycled steel cord and bead wire:



Steel cord



bead wire

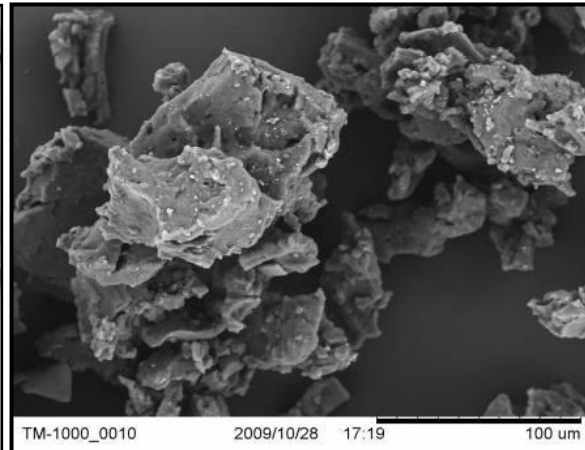
## Pulverized rubber powder:

Reclaim quality, P.A.R. - Physically Active Rubber.

This is a special program for any EOL OTR recycling, using UHP water jetting of 4.200 bar with rotojetters @ 3.000 rpm to pulverize EOL rubber **directly** into reclaim powder of less than 400µm (40 mesh) ready to be re-vulcanized **on its own** or in new compounds @ more than 50phr.



Reclaim powder less than 400µm



SEM @ 1.000 X

## Safety issues.

The UHP water jetting of some 4.200 bars with water jetting speed of some 850m/sec (Mach 2) is a dangerous operation and needs special precautions.

The machinery is designed for taking this important issue into consideration.

## Green issues / CO<sub>2</sub> reduction.

The CO<sub>2</sub> reduction using the BTRC technology is basically the sum of 2 issues:

1. The CO<sub>2</sub> reduction due to the recycling of the steel components.
2. The CO<sub>2</sub> reduction due to the recycling of the rubber and fluff products.

# **B.T.R.C.**

The re-use of the recycled rubber is a reduction of: 2,27 ton CO<sub>2</sub>/ton rubber.  
The re-use of the recycled steel is a reduction of: 1,90 ton CO<sub>2</sub>/ton steel.

It is obvious that the total annual reduction of the CO<sub>2</sub> has to be calculated depending on the total tonnage recycled.

## **General EOL (end-of-life) rubber recycling.**

BTRC developed a UHP water jetting technical report for EOL rubber products e.g. OTR's from dia 1.4m to dia 4m, tracks, steel cord conveyors, fenders, oil hoses, dredging pipes, etc.

The engineering covers also a theoretical research to determine the physical issues of the de-vulcanisation process and the 8 papers on the fluid mechanics of the water and the 10 issues of the feeding water.

This UHP water jetting process is also applicable on any other solid rubber product pulverizing the rubber and cleaning the steel parts.

The technical description has been recorded in a 320 page document.

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