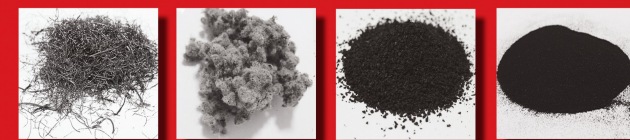
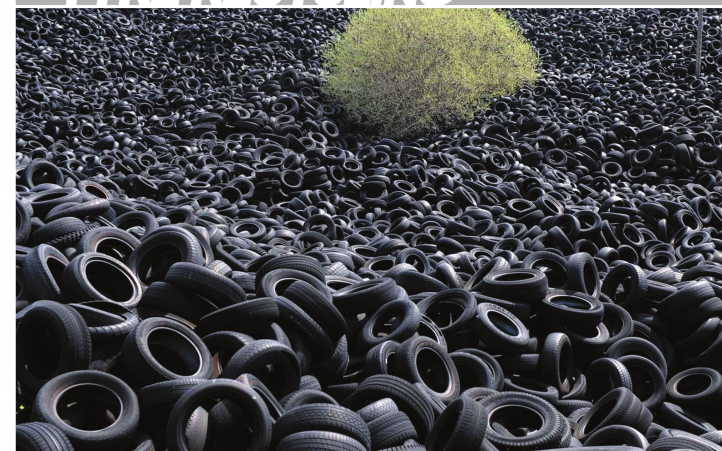
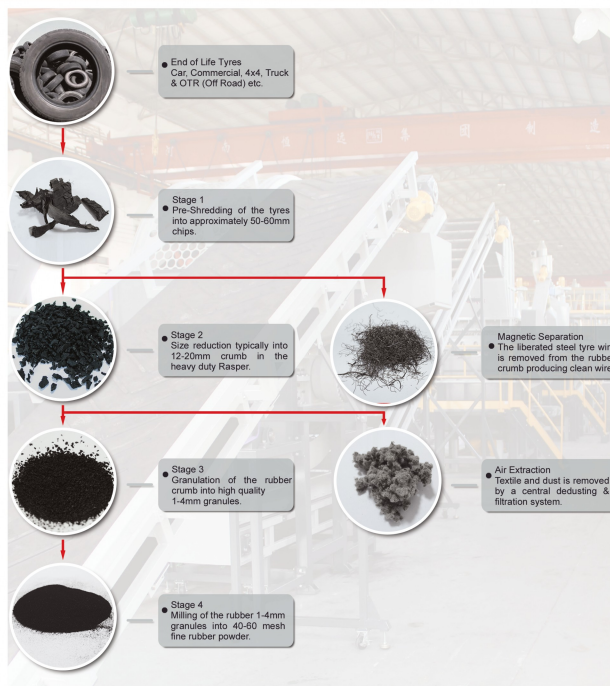


## TYRE RECYCLING



## TYRE RECYCLING SYSTEMS

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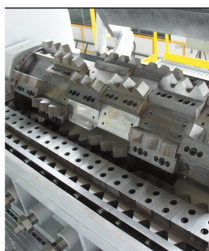


## TYRE RECYCLING SYSTEMS



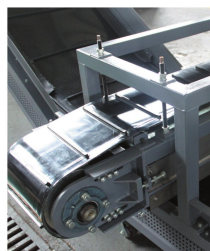
**Pre-Shredding**

M & X-Series Pre-Shredders are powerful first stage size reducers, capable of processing complete car, truck and OTR tyres down into approximately 50-300mm shreds. They utilise twin low speed counter rotating shafts, operating with massive torque on the large diameter wear resistant blades. De-beading of the tyres is not necessary prior to pre-shredding.



**Secondary Size Reduction**

S-Series Heavy Duty Rasps with serrated edged blades are aggressive secondary processing machines and are well suited for the size reduction of pre-shredded tyres. During cutting the steel wire is liberated from the rubber allowing for effective separations. The resulting rubber chips created by the Rasper can be sold as T.D.F. (Tyre Derived Fuel) or used in various other applications.



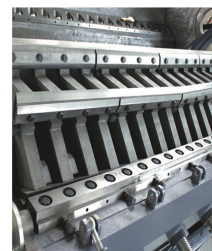
**Steel Wire Separation**

Overband Magnets mounted above conveyor belts or vibratory feeders remove the liberated steel wire from the rubber crumbs. Due to the efficient cutting design of our Rasps, the resulting steel wire is extremely clean, containing very low levels of rubber contamination. Our steel separators incorporate high strength, rare earth magnetic elements to ensure effective separations.



**Recirculation System**

The Recirculation System is a combination of conveyors and a disc screening unit. After the pre-shredding stage, material that passes through the screening unit is transported to the Heavy Duty Rasper for secondary size reduction. Oversized material that remains on top of the screen is returned via conveyor to the loading hopper of the Pre-Shredder for further size reduction.



**Fine Granulation**

GXC-Series Granulators with their rubber specific rotor designs are ideal for the third stage size reduction of rubber crumbs into high quality granules. The open design of the rotors aids cooling and promotes air flow through the cutting chamber, thereby minimising heat build up and production of fines. The output product size can be easily controlled through screen size selection.



**Product Classifying**

Rubber granules from the fine granulation stage can be classified by size into different product streams and oversized material then recirculated back to the granulators for further size reduction. Extraction equipment can be configured above the vibratory screening unit, facilitating the removal of a portion of the textile from the rubber granulate.



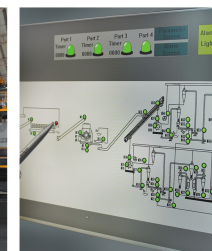
**Textile Separation**

Zig-Zag Separation Systems remove the remaining textile from the rubber granulate. The aspirator units allow for adjustment and fine tuning of air flow volumes on site enabling the effective separation of fluff from rubber crumb in a wide range of sizes. A motorised magnetic drum is often installed below the classifiers to remove tramp metal fines, ensuring high quality products.



**Dust Collection**

Central Dust Collection Systems are provided with take off points around the entire recycling plant to remove dust and textiles created during the pre-shredding, secondary size reduction, granulation, classifying, and textile separation stages. The extracted dust and fluff is conveyed through ducting to a single filtration unit equipped with high efficiency replaceable filters and self cleaning system.



**System Control Panel**

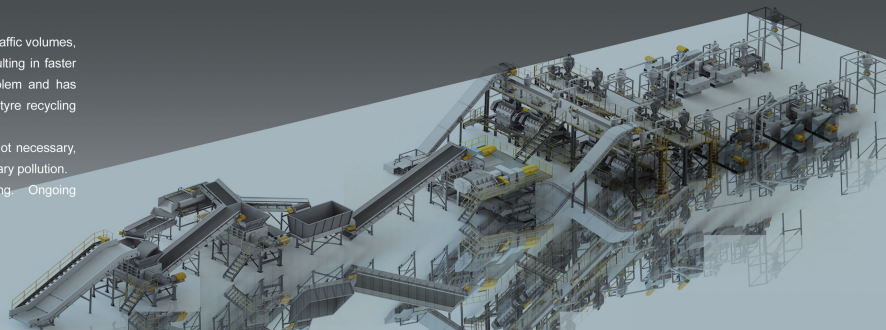
A Control Panel is supplied to provide full automation of the recycling system. Touch Screen displays can be included to provide ease of access for system programming, maintenance, and inspection. Motor soft starting and VFD's (variable frequency drives) are available to provide further control and reduce on site electrical demands, particularly during system start-up.

## GENOX TYRE RECYCLING TECHNOLOGY

End of Life Tyres present a severe environmental problem. Ever increasing traffic volumes, our reliance on motor vehicles, and stricter legislation usable tyre life is resulting in faster growing mountains of used tyres worldwide. Genox recognises this problem and has therefore focused on the design and development of a range of advanced tyre recycling plants to tackle the issue.

These fully automatic systems, whereby manual de-beading of the tyres is not necessary, feature ambient temperature processing, and don't create any form of secondary pollution.

The plants are easy to operate and maintain, requiring only basic training. Ongoing operational costs are amongst the lowest in the industry.



Prior to delivery from our facility, all tyre recycling systems are assembled and rigorously tested under "real world" conditions, not only to ensure the plant capacity, but also that the quality of the finished products is guaranteed. Customers are most welcome and are encouraged to attend these trials to see their plant in operation before it arrives at site. During these trials, training on the operation & maintenance of system can take place, and viewing of similar equipment in build is possible.