



Range of applications **Recycling of elastomers**



THE CHALLENGE.

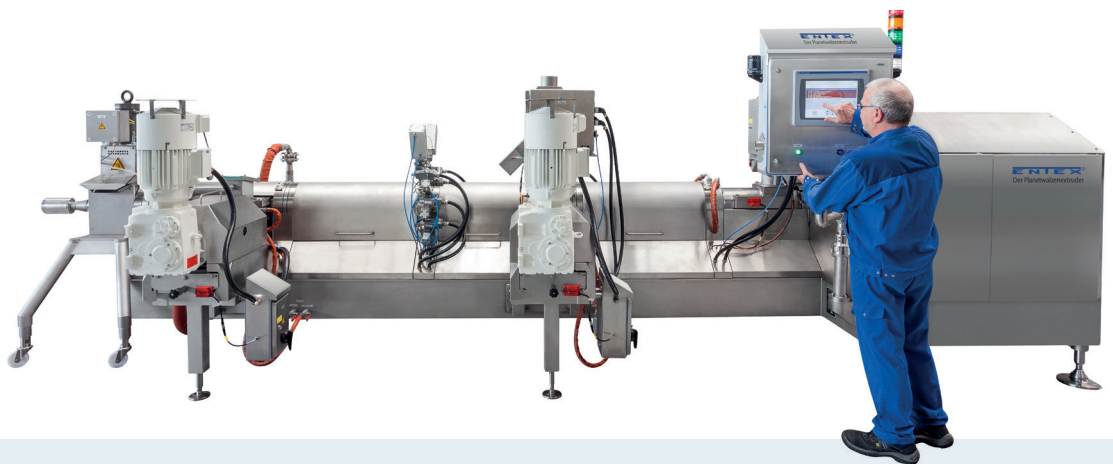
Huge quantities of rubber waste – e.g. hundreds of millions of used tyres annually – need recycling processes that will take them beyond a secondary use in riding stables, as gym mats or as an admixture in building materials. Processes are needed that break

the sulphur bridges and preserve the carbon bonds and thus lead to recycled products that can be reused as raw material for the production of new car tyres and rubber mouldings.

THE SOLUTION: the ENTEX Planetary Roller Extruder.

The patented ENTEX devulcanisation process ensures an optimal temperature-pressure profile, through which the material only remains in the extruder for a few minutes and is devulcanised quickly without significantly breaking down the carbon chains of the

elastomers. During this process, volatile substances and vapours are largely evacuated by means of tailored degassing at several points of the process section.



Benefits of devulcanisation on the Planetary Roller Extruder

- Thermo-mechanical process
- Continuous extrusion process
- Possibility of processing without any additives
- Simple and cost efficient

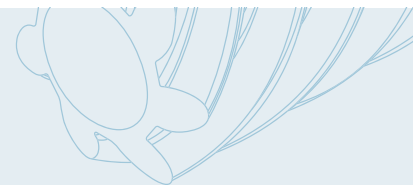
Precision extrusion A system concept that delivers.

This system's combination of a targeted, process-oriented feed of various fluids and solid materials in defined process zones with mechanical configurability and efficient tempering allows it to conduct

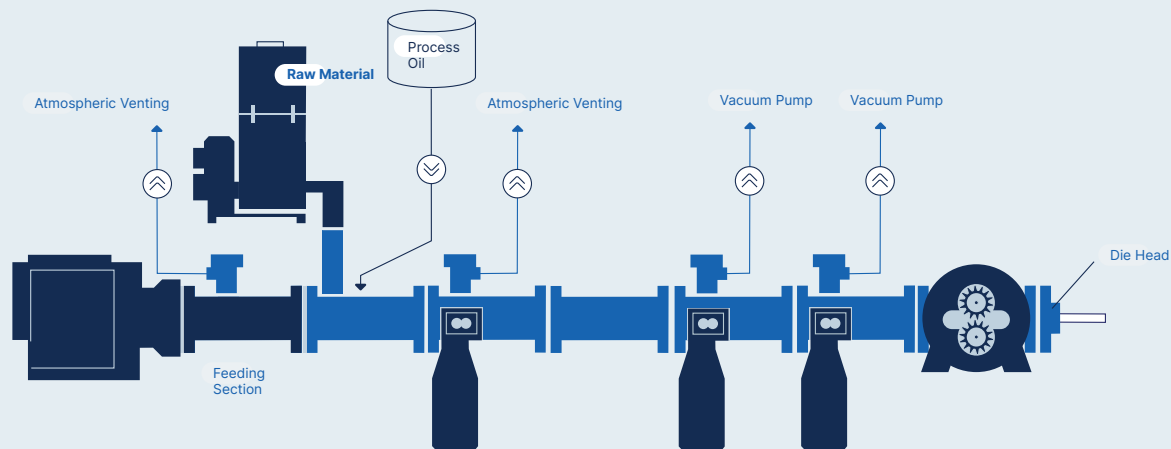
gentle, low-shear compounding to produce extrudates with outstanding homogeneity. Every single step in the process can be controlled individually.



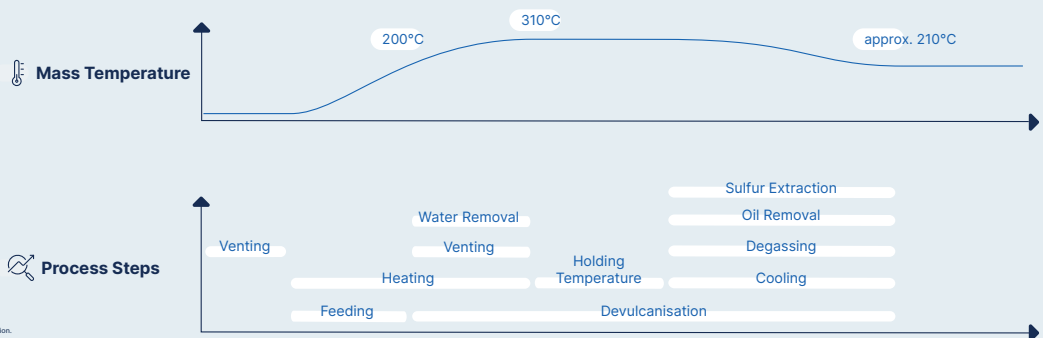
Devulcanisation process for recycling end-of-life products.



PRE-M5
Devulcanisation Process



PATENTED



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ENTEX Rust & Mitschke GmbH
Heinrichstraße 67 a | 44805 Bochum | Germany
info@entex.de | www.entex.de

Phone +49 (0) 234 891 22 0
Fax +49 (0) 234 891 22 99