



Range of applications **Recycling of elastomers**



THE CHALLENGE.

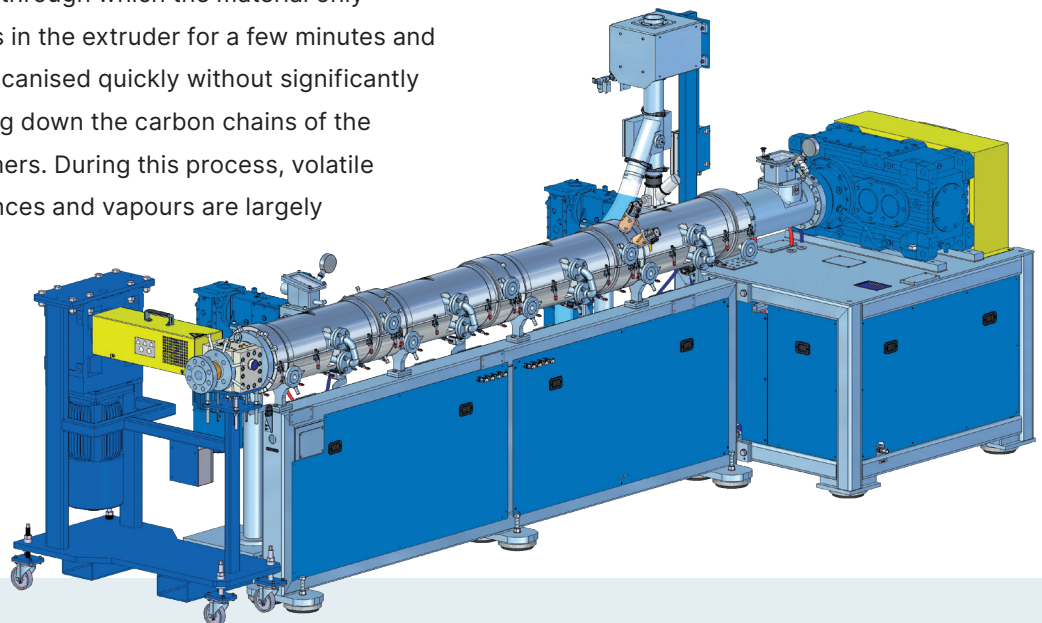
Huge quantities of rubber waste – e.g. hundreds of millions of used tyres annually – need recycling processes that will take them beyond a secondary use as cowshed mats, as sports tracks or as an admixture in building materials. Processes are needed

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

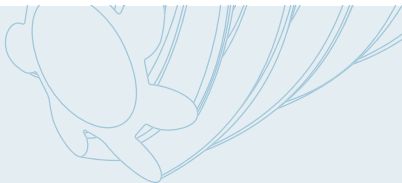
Precision extrusion
A system concept that delivers.

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

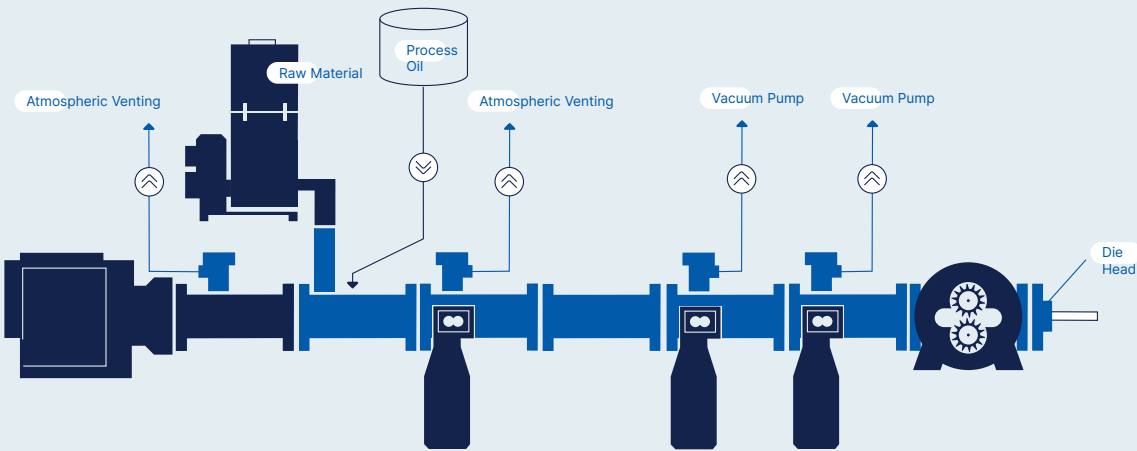
tempering allows the processing of recyclates with outstanding homogeneity. Every single step in the process can be controlled individually.



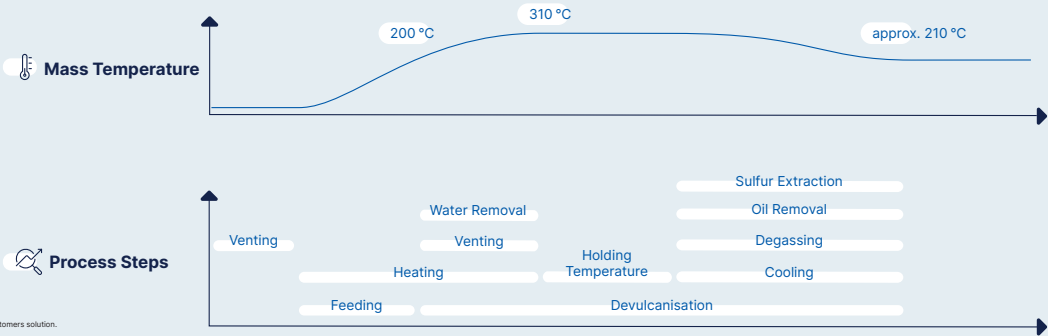
Devulcanisation process
for recycling end-of-life products.



PRE-M5
Devulcanisation
Process



PATENTED



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Displayed process scheme may differ from the final and individual customers solution.

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