Sustainability that pays off.

TRP Reworker for the economical processing of recyclable materials



High degree of automation for efficient, material saving rework processing

The TRP Reworker is an innovative, resource-saving, recycling technology for the economical processing of recyclable materials based on the Two-Roll Plasticizer (TRP) with an integrated roll-ex® gear pump. Unvulcanized rubber compounds (such as treads, sidewalls, profiles or skins) are processed in a particularly gentle and continuous way, using an automatic process, so that these materials can be returned to the production process.

The production of tires inevitably creates reject material related to the process. This material should be recycled with regard to sustainability and the economical use of valuable resources – not least because of the high raw material prices. In this process the basic principles of the TRP technology come into play, combining the proven methods in rubber processing, such as breaking, homogenizing and discharging. The system consists of three zones located along the length of a roll which in combination, give rise to a fully automated, continuous and reproducible process.

The TRP Reworker has several advantages compared to existing technical processes, making it an economical alternative:

- The energy consumption is significantly lower. Throughputs of up to 2,500 Kg/h per system are possible. The prevention of emissions is an important contribution to climate protection.
- In the refinement process the material is processed very gently. Very good temperature control is also ensured.
- The compact, space-saving design can cut costs considerably.



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- The process area is completely enclosed and thus ensures a high degree of work safety.
- The system has a modular structure. In this way the material can be formed into almost any shape by an integrated rollex[®] gear pump with an optional fine strainer.

The modular concept allows customized designs and includes modules such as slab feeders, cutters, metal detectors, scales and various discharge nozzles.

Facts:

- Up to 50% energy savings compared to existing technical processes
- At least 5% of raw materials can be saved in tire production by employing the TRP process.
- 98% of the process-related waste can be returned to the tire manufacturing process.

BLUECOMPETENCE

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