



# CABLE RECYCLING CLEARLY SEPARATED

*Recycling application.*



**HOSOKAWA ALPINE**

Process technologies for tomorrow.



# A PARTNER YOU CAN RELY ON

*We work for your products. At all times.*

We at Hosokawa Alpine set new standards in comminution technology. Precision interaction of all components is required from the development phase right through to production of high-performance turnkey granulator and shredder systems for hard, fibrous and tough materials. Decades of experience, continuous development and constant innovations ensure that we master this technology perfectly. The latest automation and visualisation technology also ensures a high degree of process stability in this respect and easy operability.

Whether you are interested in consultancy and design, development and engineering, production and commissioning, after-sales service or system upgrades – we are your one-stop service provider, ready to meet your every need. With Hosokawa Alpine comminution technology, you take delivery of an optimum solution for every requirement.

Do you already have specific ideas regarding the plant system you need and wish to develop

it together with our experts? Our testing centre has machinery and complete systems at your disposal to develop a variety of plant configurations. That provides you with the opportunity to gain a personal impression of the precision and quality of our innovative technologies and

can incorporate this knowledge in your system planning.

We will support you every step of the way and develop the most efficient solution in economic terms to meet your individual needs.



➤ Alpine Rotoplex Granulator Ro

➤ Alpine Universal Crusher UZ



➤ Alpine Fine Impact Mill UPZ



# TAILOR-MADE SOLUTIONS AND INNOVATIVE FORCE.

*Quality and efficiency right down to the finest detail.*

Whether coarse or fine, we know what we are doing during every phase of the process, and we will tailor the solution exactly to meet your requirements. The model system we present enables you to gain an impression of our expertise.

## PRE-CRUSHER

The pre-crusher can consist of two phases, depending on the size and composition of the cable being processed. The optional comminution stage, which consists of a universal crusher, can crush both large cable bundles and long or extremely thick cables, enabling transportation via conveyor belts. In addition, sheathing can be automatically separated from the cable and ejected using downstream overbelt magnetic separators.

From an economic aspect, we recommend the use of a shredder in the pre-crushing stage in the case of high throughput rates. Our shredders can pre-crush every cable type, whether solid or stranded, aluminium or copper. This means that

cable can be continually dosed without difficulty in the next process stage.

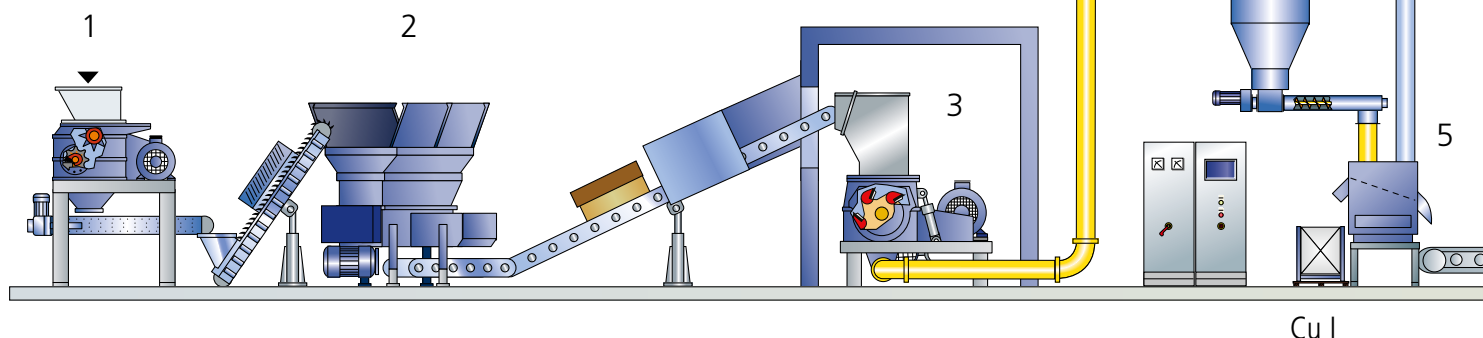
## DISINTEGRATION/SEPARATION – SOLID CABLES

The Rotoplex comes into its own in this process, a classic among granulators. It is the core component of any cable recycling system. Our Rotoplex series is particularly adept at coping with the intense mechanical loads encountered, thanks to its extremely robust cast steel construction, good accessibility for ease of maintenance, wear protection and powerful motorisation. It opens the insulation through its cutting action, exposing the copper wires contained inside. The result is pure copper granulate from solid cables (Cu-I fraction).

Our TTS separating table takes care of the separation of insulation material and uncovered wires. Air and the screen movement and incline can be optimally adjusted to suit the material to be separated. Perfectly harmonised interaction of the granulator and separating table is extremely important here.

## BALLING/SEPARATION – STRANDED WIRES

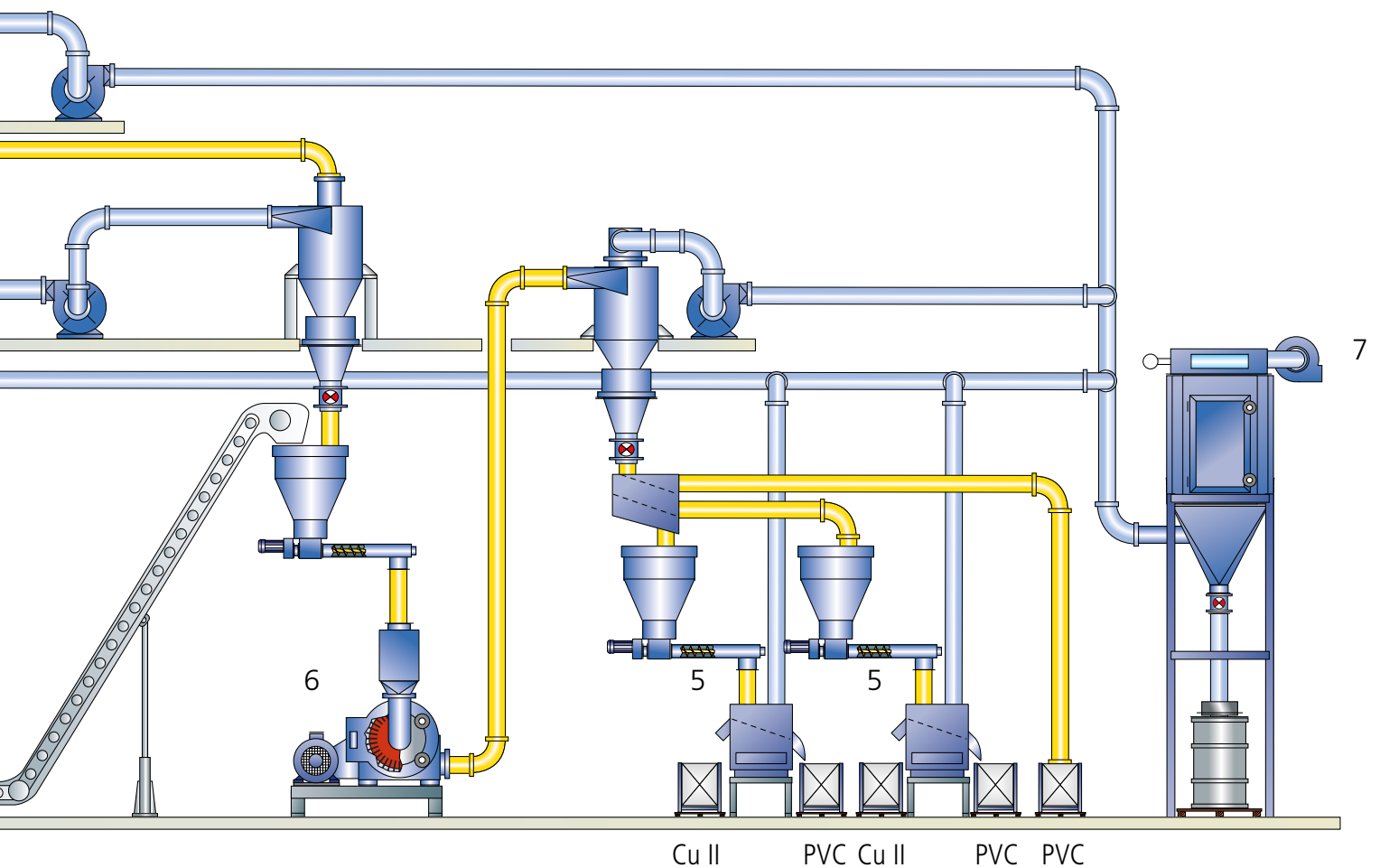
Should you wish to process extremely fine stranded wires, then our UPZ fine impact mill is the ideal addition to the process chain. This mill separates unexposed strands from insulation material in the granulator and, additionally, the load involved rolls them into spherical structures



(balling). This increases the specific weight of the strands, allowing the downstream separating table to sort out the strands in a reliable manner. Dosing of the Cu-II fraction created in this fashion is greatly facilitated as a result. Consequently, the pelletizing stage can considerably increase the recovery rate of copper in a cable recycling

system. Parallel operation of several separating tables enables the optimum configuration of these units to suit the feedstock, ensuring improved separation and increasing the recovery rate of copper.

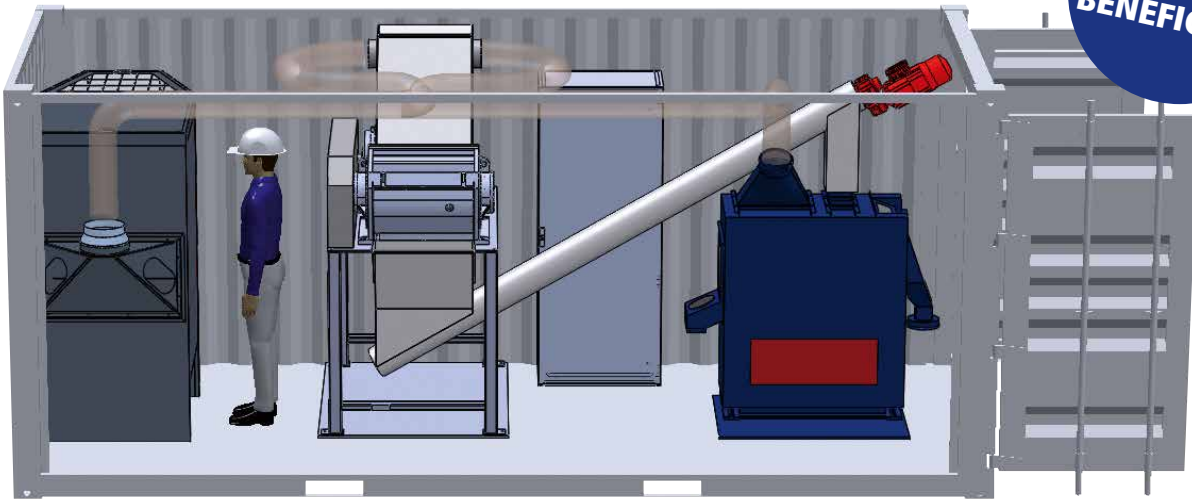
- 1 UZ universal crusher
- 2 DL shredder
- 3 Ro Rotoplex granulator
- 4 MZM zigzag classifier
- 5 TTS separating table
- 6 UPZ fine impact mill
- 7 Filter



# A NEW MILESTONE IN CABLE RECYCLING

*Learning from practical experience.*

**ROBUST  
PRACTICAL  
BENEFICIAL!**



We've got good news for interested newcomers or customers dealing with low throughputs, because we've developed a series of small systems to help them move into the cable recycling business. It combines standardised equipment and the highest product quality for small-scale industrial batches at an excellent prices/performance ratio.

## CONTAINER SYSTEMS – READY TO USE

The compact, modular system is integrated in a container, with the advantage that you take delivery of a turnkey system. Commissioning is also fast and simple, thanks to a plug-and-play system. This mobile container system crushes solid cable to any performance requirement. Stranded cables can also be processed by adding a manual

pre-sorting unit and simple conversion of the granulator. If the recovery rate requirements for stranded cables are of a similarly high level to that of large plants, the basic equipment can be expanded through the addition of a balling module with a fine impact mill. Basic features are already provided for these additions. The modules can also be ordered without a container for stationary installation in a building with the same equipment.

In addition to our standard system range, we can also configure systems that are individually tailored to meet your needs. Why not take a closer look at this unique technology – Made in Germany.



**HOSOKAWA  
ALPINE** ENGINEERED,  
MANUFACTURED  
& ASSEMBLED  
in GERMANY

➤ Balling stage of a large scale recycling plant  
with three Fine Impact Mills UPZ



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Process technologies for tomorrow.

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