

Throughput of up to 5 tons per hour: New Classifier plant for non-ferrous metals separates light material reliably and maintenance-free

In times of climate crisis, environmental protection and resource shortages, recycling is becoming increasingly important. The recycling of ferrous (FE) and non-ferrous (NF) metals is of particular importance in Europe. Germany, for example, can only ensure its economic growth by optimising metal recycling, according to the BDSV, the Federal Association of German Steel Recycling and Waste Management Companies. To enable modern and environmentally friendly recycling plants to achieve complete recovery of valuable materials, Erdwisch Zerkleinerungs-Systeme GmbH, a specialist in the field of recycling and reuse of valuable materials, recently developed a classifier plant for non-ferrous metals which separates heavy from light materials, thus making an important contribution in securing raw material supplies and the conservation of resources.

**Recycling equals
environmental
protection**



“The word „Classifier“ generally defines a device used for the classification of solids. By exploiting the different sinking speeds of the various substances in an air stream, these are subdivided and separated according to defined criteria, for example, particle size, density or inertia,” explains Florian Boehm-Feigl, CTO at Erdwisch. „One of our projects includes a classifier system for non-ferrous metal granules.“ With it, dust, pure granulate, foils, fluff and other light material can be separated from the non-ferrous metal. It is important to extract the light material as reliably, easily and above all as maintenance-free as possible, in order to either further separate the non-ferrous metal or to sell it. Specially adapted to achieve a throughput rate of up to 5 t/h and to deal with a wide variety of material mixtures such as aluminium, iron, copper and other non-ferrous metals as well as wood, plastics, fabric or dust, make the plant unique on the market, and it can be employed in all areas in which heavy and light materials are to be separated. The only limitation is that the grain size of the metal must not exceed 100 mm in diameter.

Classifier plant as an extension of an existing large-scale plant

In the field of metal recycling, the classifier plant, which measures 7,146 mm in height and between 5,616 mm and 7,461 mm in width - depending on the position of the elevator support - can be used, for example, in combination with an RM 1350 twin-shaft ripper functioning as a pre-shredder for non-ferrous scrap. Six different, automatic program sequences can be monitored and controlled. These are the control cabinets for the granulator, magnet technology, non-ferrous separation technology and X-ray separation technology as well as the dust filter system and the RM 1350 pre-shredder. The classifier system thus enables the expansion of an existing large-scale plant and is installed directly under the conveyor belt discharge of a screening drum. In the classifying process of the various materials such as aluminium, copper or other metallic alloys, the material is dedusted and freed of foreign matter and thus achieves considerably higher prices when resold.

