





# STEINERT ISS<sup>®</sup> Induction Sorting System

> Stainless, residue, municipal waste, WTE-ash, electronic-scrap, wood, chips, glass, mould sand

# Induction Sorting System ISS®

The Induction Sorting System STEINERT ISS® is the perfect solution to recover the non-ferrous metals not recovered by ECS processing or magnetic separation. The STEINERT ISS® provides efficient and effective automated recovery of metals, stainless steel and any other metals, eliminating the need for hand picking. The primary applications for the STEINERT ISS® are shredder residue, electronic scrap, wood chips, glass, domestic waste, and mould sand. The recovery of stainless steel from ECS waste streams and the processing of electronic scrap are ideal uses for the STEINERT ISS®. The STEINERT ISS® is the solution for removing tramp metal from bulk material to ensure the quality of the processed product.

# Applications

The technology of the Induction Sorting System STEINERT ISS® combines sophisticated sensor technology and computercontrolled air jets to quickly detect and eject metals.

**The result:** The Induction Sorting System STEINERT ISS® provides increased economic efficiency and improved quality of the product and/or recovery of valuable materials.

A consistent high output of clean valuable materials. And in typical industrial use, the STEINERT ISS® produces purity and recovery greater than 90 %. This means that automatic separation using STEINERT ISS® technology can more than double the recovery of valuable materials when compared to manual sorting.

Additionally, the throughput can be increased three or four times using an STEINERT ISS® substantially improving your bottom line. Additional screening or crushing before the STEINERT ISS® will increase recoveries even more and actual results may vary depending on the specific objectives of the application.

# Technology

How the STEINERT ISS<sup>®</sup> works: The previously separated bulk material is transported by a fast conveyor belt to a sorting zone. Below the conveyor belt, immediately in front of the main coil of the STEINERT ISS<sup>®</sup>, there is an arrangement of sensors.

These sensors analyze the material over the whole width of the conveyor belt by means of magnetic induction. As soon as metallic particles are detected, electronic signals are sent to the central computerized control unit. The compressed air jets, individually controlled by the programming, push the detected metals over the diverter gate.















Introducing smart sensor technology: In addition to the STEINERT ISS® all-metals sensor, STEINERT offers the innovative, "smart" sensor technology. The latter not only detects metal but also distinguishes between ferrous, non-ferrous metals and stainless steel, and can even be set to separate big and small pieces or one metal from another!

**Possible adjustments:** Adjustments may be made in order to optimize the results: the speed of the belt, the sensitivity of the sensors, the interval between detection and jetting, the pressure of the compressed air jets and the jetting time can be programmed individually.

The position of the compressed air jets – either beyond or below the sorting zone – and their distance to the bulk material or their angle may also be adjusted. The closer the jets are situated to the product stream, the cleaner the product. In order to fulfill the specific throughput conditions prevailing in the plant, STEINERT offers various working widths for the STEINERT ISS<sup>®</sup>.

We conduct tests with your material in our R&D department.





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