

SAW RFID for Identifying Slag pots

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Harsco Metals Holland BV, is part of the Harsco Corporation. Worldwide Harsco provides specialist services and solutions for waste and byproducts to the global metal industry. In Holland, Harsco is responsible for the slag management at the plant of the steel producer Corus in IJmuiden.

Slag is a byproduct of the steelmaking process. Depending on the quality, the slag can be re-used for different purposes e.g. material for roads.

To manage the different kind of slag, Harsco Holland developed a state of the art solution to separate slag based on slag quality. Key of this solution was to find a identification system for the slag pots. A system that is capable to survive the high temperature and is ruggedized for heavy duty. In addition to these hard conditions the contactless reading range should be at least 4 meter.

In cooperation with CTR and Hescon BV, Harsco developed a RFID solution that meets all the requirements.

Every slag pot is accommodated with a SAW RFID sensor to provide it with a unique ID . This unique ID is linked to the slag quality .

In this presentation we will describe the tests we performed and the problems we solved to make the SAW technology into a successful solution, that can be used in a harsh environment. Separating slag by using a identification system is unique in the World. Beside slag pot tracking Harsco believes that this SAW RFID solution has more potential in the harsh environment of the steel industry.