

## **GERDAU Business Challenge**

**GERDAU** is one of the main steel producers of America and one of the main scrap recyclers in the world. In Uruguay it dedicates to the production and comercialization of steel for the civil construction and industry sectors.

The principal challenge in Uruguay is to optimize the reuse of waste generated in the steel production process, so that they can be incorporated into other industrial processes as inputs.

The melt shop has a dust collection system derived from the fusion of ferrous scrap. This steel dust is mainly composed of 20% iron oxide, 24% zinc oxide and other metals. In other countries of the world are technologies that receive this waste as raw material and recover those metals. These technologies have been evaluated for Uruguay, but since they are large-scale, their installation in the country is impossible. For this reason, the company has evaluated the exportation of the waste, which until now has been unfeasible due to the requirements of the Basel Convention that must be fulfilled by its classification according to legislation N°182/013.

### **Expected results**

The proposed challenge seeks to find an alternative solution to the final disposal, allowing the revaluation of the metals found in steel dust or some other alternative that enables sustained management. The alternatives may include a previous stage of treatment or management in the company to then be able to export the waste or incorporate it into industrial processes that need the metals contained in the steel dust.