



CASE STUDY NR 13 • FRANCE

## REMOVING ACID GAS AND MICRO-POLLUTANTS IN A SECONDARY SMELTER

### THE CHALLENGE

As an European leader in its field, this customer recycles annually 60,000 tonnes of end-of-life engines. The company uses the recycled metal to produce aluminum ingots, engine-grade cast iron, E40 milled steel, A4 cupola steel and custom alloys.

The gaseous effluents from the smelting process notably contain SO<sub>2</sub> and HCl acid gases. These corrode facilities and produce micro-pollutants: dioxins, furans and heavy metals.

Reducing the acid gases and micro-pollutants requires the use of a multi-purpose sorbent. It must be:

- alkaline to neutralize acid gases
- absorbent to take up dioxins and furans.

### THE LHOIST SOLUTION

To meet the customer's reduction targets Lhoist designed a custom blend of Sorbacal® SP and Minsorb® Dx with an optimized feed quantity. This type of blend offers the following advantages:

- A unique, versatile and ready-to-use sorbent for the combined reduction of HCl, SO<sub>2</sub> and micro-pollutants (dioxins, furans, PAHs and PCBs).
- Only one storage and feed solution needed, reducing costs.
- A 100% mineral solution that does not require ATEX equipment and presents no risk of combustion.

#### SORBACAL® SP

Hydrated lime with a high specific surface area and high pore volume, Sorbacal® SP is designed to neutralize acid gases (SO<sub>2</sub>, HCl, HF) in a dry absorption process.

#### MINSORB® DX

As an absorbent, non-flammable and non-ATEX mineral reagent, Minsorb® Dx reduces dioxins, furans, PCBs, PAHs and aromatic compounds.

### THE BENEFITS

"During installation of our first baghouse we opted for activated carbon injection to reduce micro-pollutants. But using this system proved very restrictive, and the product flammability risk forced us to abandon it during the renovation of our filtration equipment. Lhoist then worked alongside us and created a specific Sorbacal® + Minsorb® blend. This was injected into the suction duct using a single silo equipped with an injection screw. The results were tangible, and the simplicity of this treatment method definitively convinced us to choose a similar system on the new filtration line we installed when doubling our production capacity" (dixit of CEO).

#### OUR EXPERTS CLOSE TO YOU

Find the best solution for your business by contacting one of our experts in your country or region via the contact page on [www.sorbacal.com](http://www.sorbacal.com).



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