



## Case study Neutralac® SLS45

# Neutralization and precipitation of chromium from effluents from a surface treatment plant

### Customer Application and Activity

BeL'M, a specialist front door manufacturer with over 30 years experience and 200 models, was looking for a concentrated milk of lime for purifying its effluents and optimizing its operational costs.

### Problem to be solved

The effluents from the factory's surface treatment plant at Machecoul (France) were predominantly contaminated with chromium. Lhoist devised an overall approach:

- Ease of implementation
- Simple integration in the existing installations
- Sufficient reaction speed for the installation
- Water savings

### Neutralac® SLS45 Solution

From the range of products available, Lhoist proposed the Neutralac® SLS45, a ready-to-use liquid reagent. Lhoist's technical assistance team first carried out an audit of the lime installation to check the technical feasibility: concentration, injection device, dosing unit, etc. Lhoist then monitored the injection of the Neutralac® SLS45 reagent, an innovative product, patented by Lhoist R&D:

- Low viscosity making dosage and pumping easy
- Easy to put in suspension through temporary stirring
- High concentration of 600g of  $\text{Ca}(\text{OH})_2$  per liter
- High reactivity
- No heavy investment required

### VIU results

The benefits enjoyed by BeL'M were:

- Safe and immediate substitution of the chemical reagents used
- Water consumption reduced by 125 m<sup>3</sup> per year
- 2 fewer preparations per week
- 5 hours of operation per day instead of 8

### Conclusion

Lhoist met BeL'M's expectations by:

- Supplying an innovative high quality product
- Providing a solution suited to the existing process without additional investment
- The treatment's performance
- The ease of use

