



## Precipitation of heavy metals in a galvanisation treatment unit

### Defining the issue

Frantz Electrolyse, a galvanisation treatment specialist, needed to reduce the total quantities of zinc and chrome in its waste water effluent.

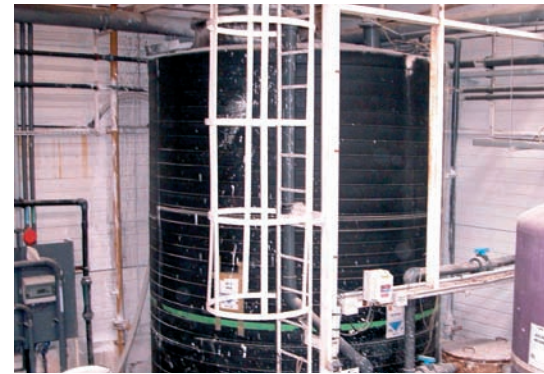
During heavy metal concentration peaks, it was having occasional difficulties in staying within regulatory limits for these metals.

To address this, Frantz Electrolyse wanted:

- to test the effectiveness of a new reagent for precipitating heavy metals in industrial conditions
- to establish that its implementation would not modify the plant's current operational conditions
- to evaluate its impact on the other regulatory parameters, particularly the effects on suspended solids in the waste effluent

### The solution

From the wide range of its Calci-action® answers, Lhoist selected the one which provided a reagent with a constant neutralising effect.



Using an existing tank for the storage of Neutralac® SL

The solution which was used integrated:

- the delivery of various samples of ready-to-use Neutralac® reagents for trials in the customer's laboratory
- an audit of the existing storage/ dosing conditions (no adaptation was needed for the chosen reagent, Neutralac® SL)
- industrial trials over a 3 month period to confirm that the new system had achieved the required level of performance
- regular deliveries of Neutralac® and technical assistance

### Conclusion

Thanks to this complete and directly operational solution, Lhoist was able to meet Frantz Electrolyse's expectations by:

- meeting the regulatory thresholds for heavy metal levels in its effluents
- significantly improving recovery levels of both zinc and chrome
- supplying a reagent of consistent quality which was well suited to the existing process

This solution eliminated the need for additional capital investment by the customer.