



Increasing Potline Amperage And Gas Flow While Lowering DP In European Aluminium Smelter

CHALLENGE

A European Aluminium smelter was looking to increase potline amperage while increasing gas flow from the pots and lowering filter Differential Pressure (DP).

Following an earlier failure of standard design Extend Surface Bags (ESBs) to meet the facility's operational targets, our team was brought in to explore other options. We carried out a trial with SOLAFT® PrimaFlow® technology to enhance results.

SOLUTION

PrimaFlow® is a revolutionary combination of proprietary filter bag, filter cage, and customized filtration media, and is the next generation of Extended Surface Bags (ESBs), building on our SOLAFT® StarBag™ legacy.

The aerodynamic PrimaFlow® design allows for lower internal gas flow resistance, reducing pressure drop along the filter bag length.





SOLUTION

After a successful trial, we were able to quantify the following benefits of SOLAFT® PrimaFlow® for the aluminium client, as compared to the existing standard ESBs:

- 32% reduction in filter DP
- 15% increase in filter gas flow
- 50% reduction in pulse air pressure
- 79% reduction in pulse cleaning frequency

The reduction in pulse air pressure and pulse cleaning frequency yielded ~75% reduction in compressed air in the Gas Treatment Center (GTC) operation.

You can rely on the Micronics Engineered Filtration Group to be your proven single source for solving complex dry filtration and liquid filtration challenges in the aluminium industry worldwide from Australia to Canada to Brazil.



The Micronics Engineered Filtration Group is the premier company in the alumina and aluminium industries for addressing all your filter media, filtration equipment, service, and parts needs - liquid and dry filtration. We have been partnering with the aluminium industry since the 1960s and are proud to work with many of the largest and most sophisticated aluminium producers in the world.