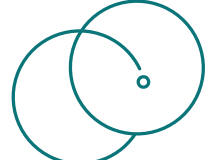




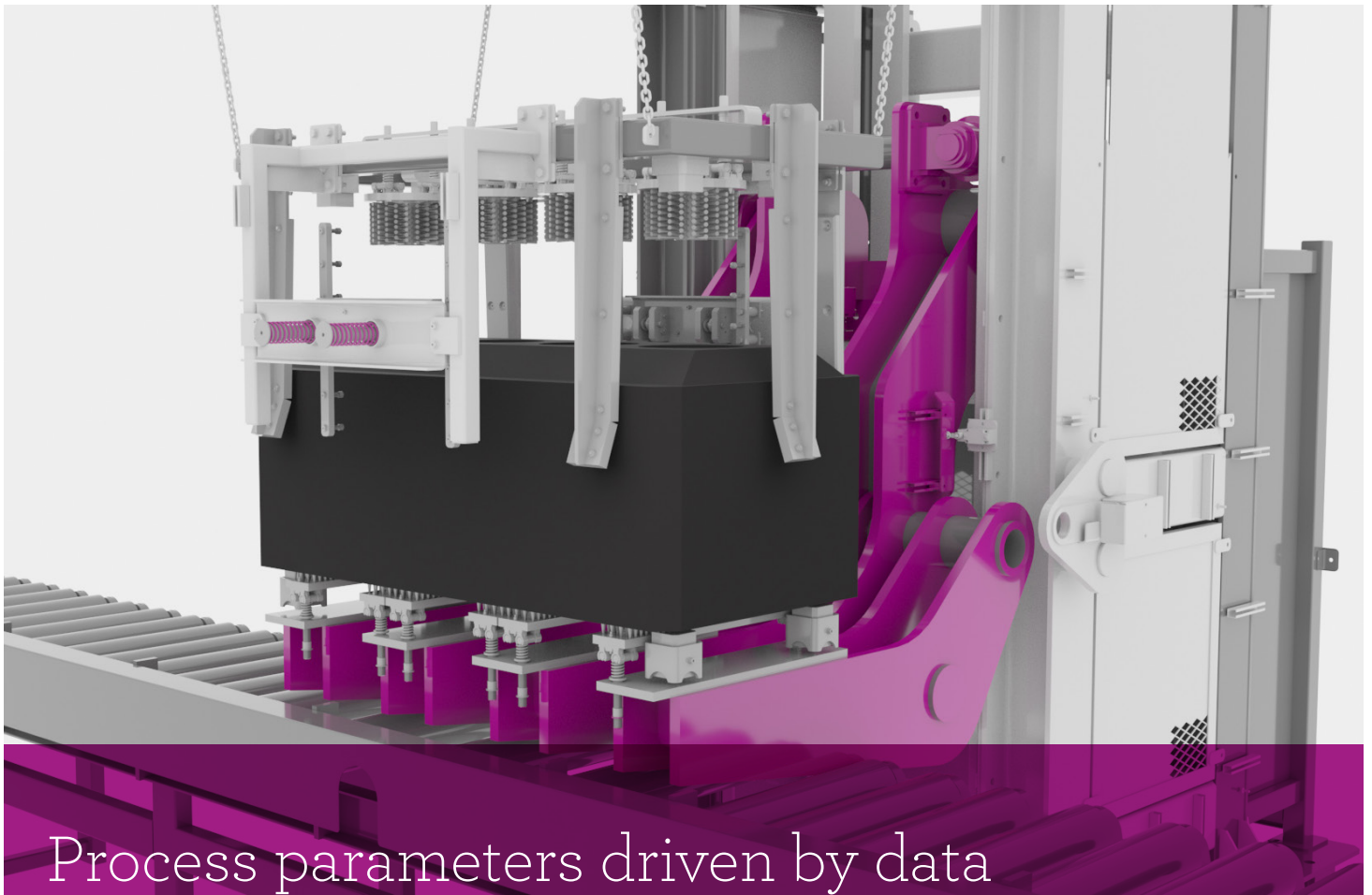
fives



PROCESS
TECHNOLOGIES

ALUMINIUM

On line Electrical Resistivity Measurement (MIREA)



Process parameters driven by data collection

- 100% of production measurement
- Characterization of the anode resistivity distribution
- Installation on existing lines



The solution to characterize the anode production

MIREA has been especially designed by Fives to measure the electrical characteristics of the anode as it is used in the pot.

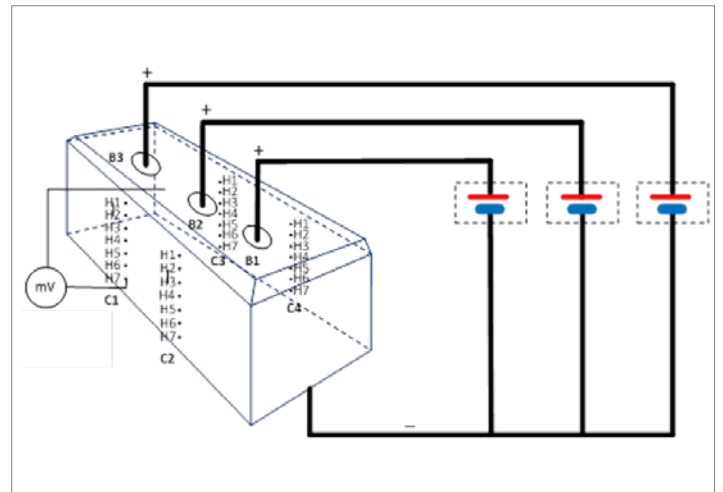
PRINCIPLE

MIREA is composed of two main features:

- The current injection: a high amperage continuous and stabilized current is injected in the anode through the holes and collected at the base of the anode. The level and the heterogeneity of resistivity will divert the current lines and modify the electrical potential of the whole anode.
- The measurement of this electrical potential field at the surface of the anode reflects its internal characteristics.

All components have been proven in industrial environment.

MIREA is able to give instantaneous and continuous measurement of the anode production and characterize the whole process of anode forming and baking.

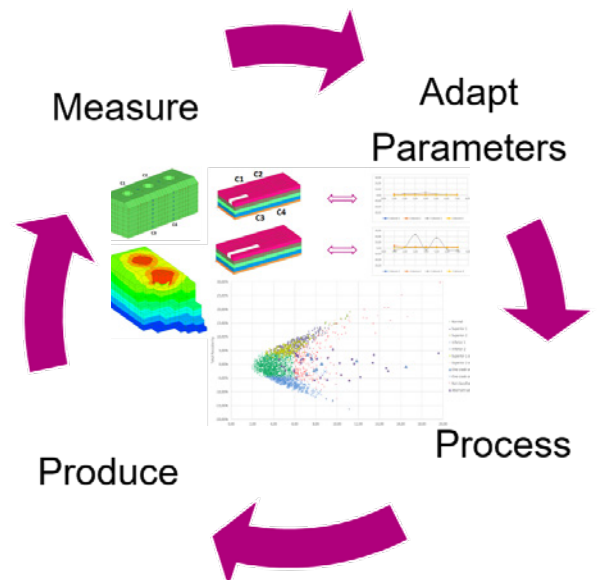


OPERATIONAL ADVANTAGES

- Fully automatic on-line measurement: MIREA can be fitted on existing roller conveyors
- Continuous process monitoring
- Real time anode scoring for 100% of anodes
- Process stabilisation thanks to a recipe optimisation

Measurement of 100% of the production and characterization of the anode electrical properties:

- Main resistivity
- Resistivity of 28 different volumes
- Anode categorization



MIREA can provide different levels of insight on your equipment, process and operations



REFERENCES

Aluminerie Alouette, Canada

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