

FIVES PROVIDES INNOVATIVE AND HIGH TECHNOLOGY SOLUTIONS ALL OVER THE WORLD IN ORDER TO MEET CUSTOMERS' REQUIREMENTS IN TERMS OF PERFORMANCE, ENVIRONMENT AND SAFETY.

Gas Treatment Center - Alcoa Fjarðal (Iceland)



HARBOUR

Liquid Pitch Marine Terminal:

- Pitch fume treatment with Lineos

CARBON

Green Anode Plant:

- Dry material preparation with Rhodax®
- Anode Paste preparation with IMC®, Intensive Mixing Cascade
- Anode forming with Xelios
- Pitch Fume Treatment with Eolios, combining a dry-scrubber with a RTO system
- Anode Cooling Tunnel
- Carbon Butts recycling with two crushing stages

Anode handling and storage

Anode Baking Furnace:

- Firing and Control System
- ECL Furnace Tending Assembly to handle the anodes and the firing ramps during the baking process
- Fume Treatment Center to treat fumes generated by the anodes baking

Anode Rodding Shop:

- Separation, sorting and recycling of anode butt materials
- New anode assembly

Bath Processing and Recycling Unit

REDUCTION

Gas Treatment Center:

- Alumina storage silos, alumina metering and transport system
- Innovative Dry Scrubbing Solution for modern smelters, Ozeos
- Sea water scrubbers for the desulphurization of gases
- Reduction of emissions during pot maintenance with Yprios

ECL Pot Tending Machine

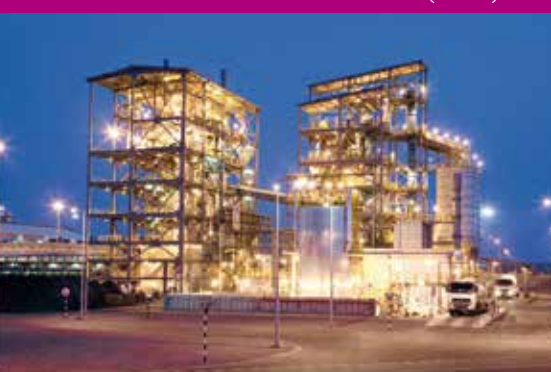
ECL Potroom cranes:

- Transfer system for crane transport
- Cathode transfer crane
- Tapping crane

Pot equipment:

- Anode beam raising frame
- ECL Crust breaking & feeding device
- ECL Anode stem connection device
- ECL Sealing jaws
- ECL Anode jacking system

Pot Tending Machine - E.G.A. (U.A.E.)



Anode Rodding Shop - (Canada)



Green Anode Plant - Sohar Aluminium (Oman)



Fives Solios

32, rue Fleury-Neuvesel - BP 24
69702 Givors Cedex (France)
Tel.: +33 (0)4 72 49 54 54
Fax: +33 (0)4 72 49 54 32

Fives Solios Inc.

625, President Kennedy Avenue - Suite 1400
Montreal (Quebec) H3A 1K2 (Canada)
Tel.: +1 (514) 284-0341
Fax: +1 (514) 284-1326

fivessolios@fivesgroup.com

Fives ECL

100, rue Chaland
59790 Ronchin (France)
Tel.: +33 (0)3 20 88 70 70
Fax: +33 (0)3 20 88 70 99
fivesecl@fivesgroup.com

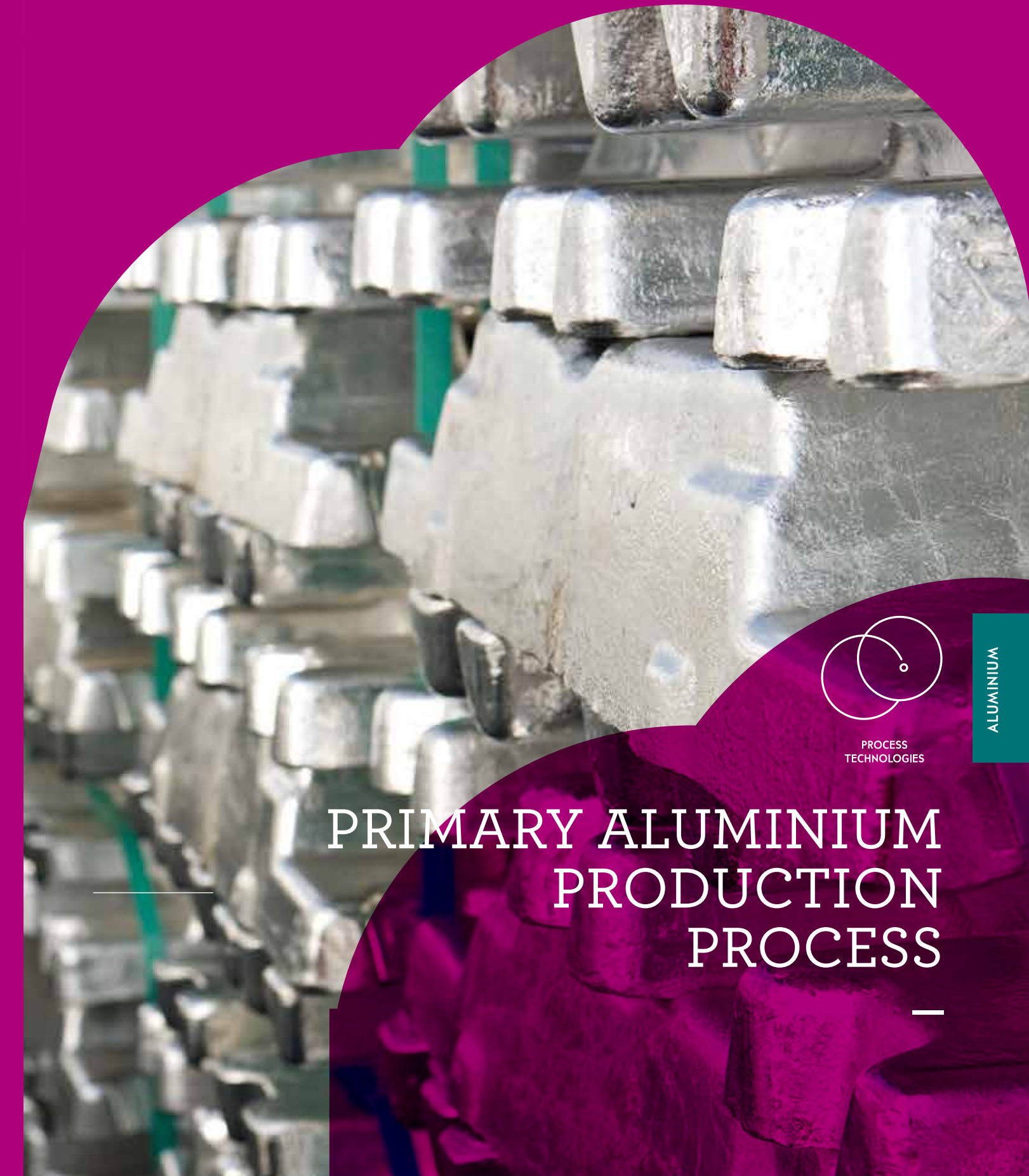
www.fivesgroup.com

Fives India Engineering & Projects Pvt. Ltd.

VTB Centre, 3rd Floor,
7, South Boag Road, T. Nagar,
Chennai - 600 017 (India)
Tél. : +91 44 4292 7272
Fax : +91 44 4292 7282
fivesindia@fivesgroup.com

Services locations:

- Australia
- Bahrain
- Canada
- Saudi Arabia
- Southern Africa
- United Arab Emirates



PROCESS
TECHNOLOGIES

ALUMINIUM

PRIMARY ALUMINIUM PRODUCTION PROCESS

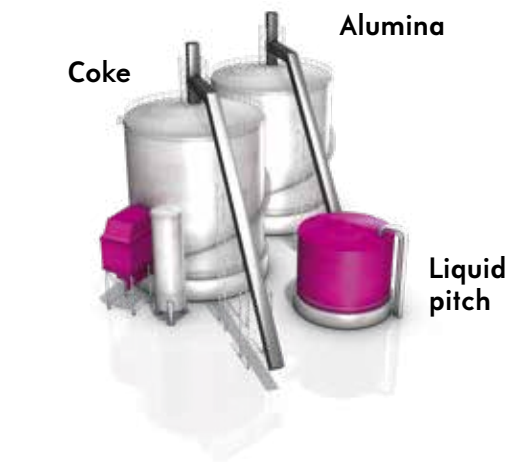


Copyright © 2021 - Fives - All rights reserved

FIVES WITHIN THE ALUMINIUM PRODUCTION PROCESS

HARBOUR

LIQUID PITCH MARINE TERMINAL



Liquid pitch
Coke

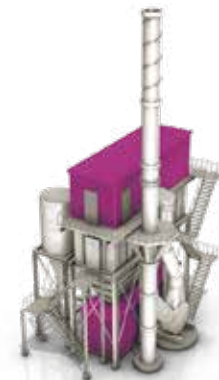


GREEN ANODE PLANT

Alumina

Pitch fumes

PITCH FUME TREATMENT SYSTEM

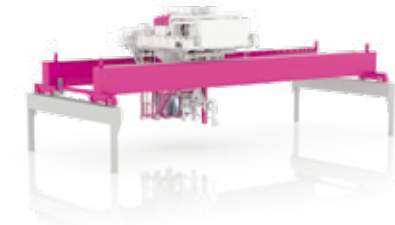


ANODE CONVEYING SYSTEM

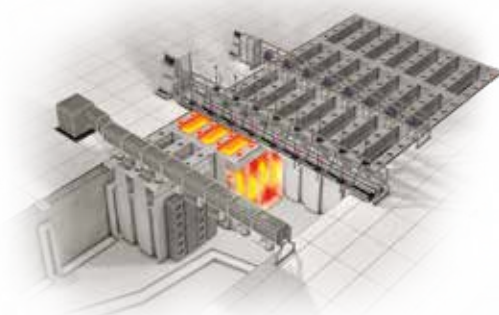


Alumina

FURNACE TENDING ASSEMBLY

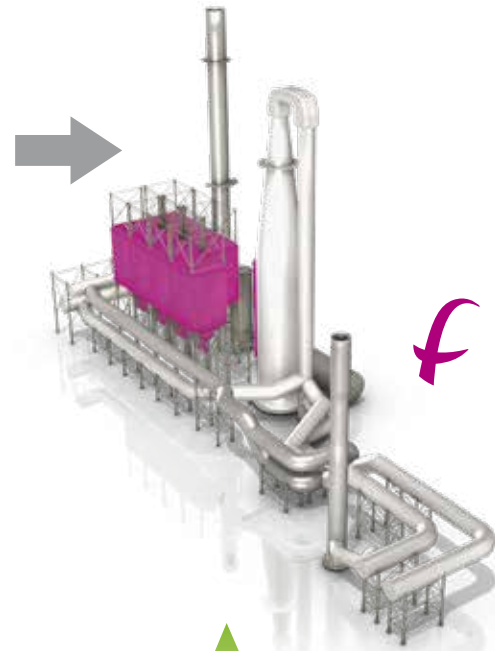


Green anodes



ANODE BAKING FURNACES

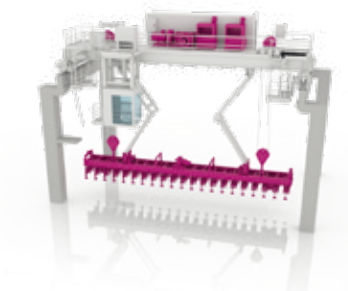
CARBON SECTOR



FUME TREATMENT CENTER

Fumes

ANODE HANDLING SYSTEM



FIRING AND CONTROL SYSTEM

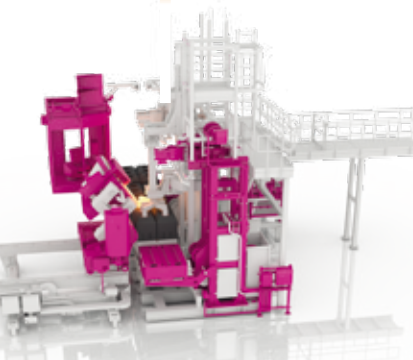


CARBON BUTTS RECYCLING UNIT



Alumina

Baked anodes



ANODE RODDING SHOP

Rodded anodes



ELECTROLYSIS POT



REDUCTION SECTOR

GAS TREATMENT CENTER



Fluorinated gas

Fluorinated alumina

BATH PROCESSING UNIT



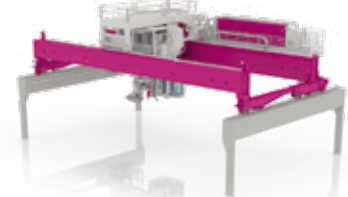
Bath

Bath

Bath

Anode butts and rods

POT TENDING MACHINES AND POTROOM CRANES



POT EQUIPMENT



Electricity

Carbon butts

