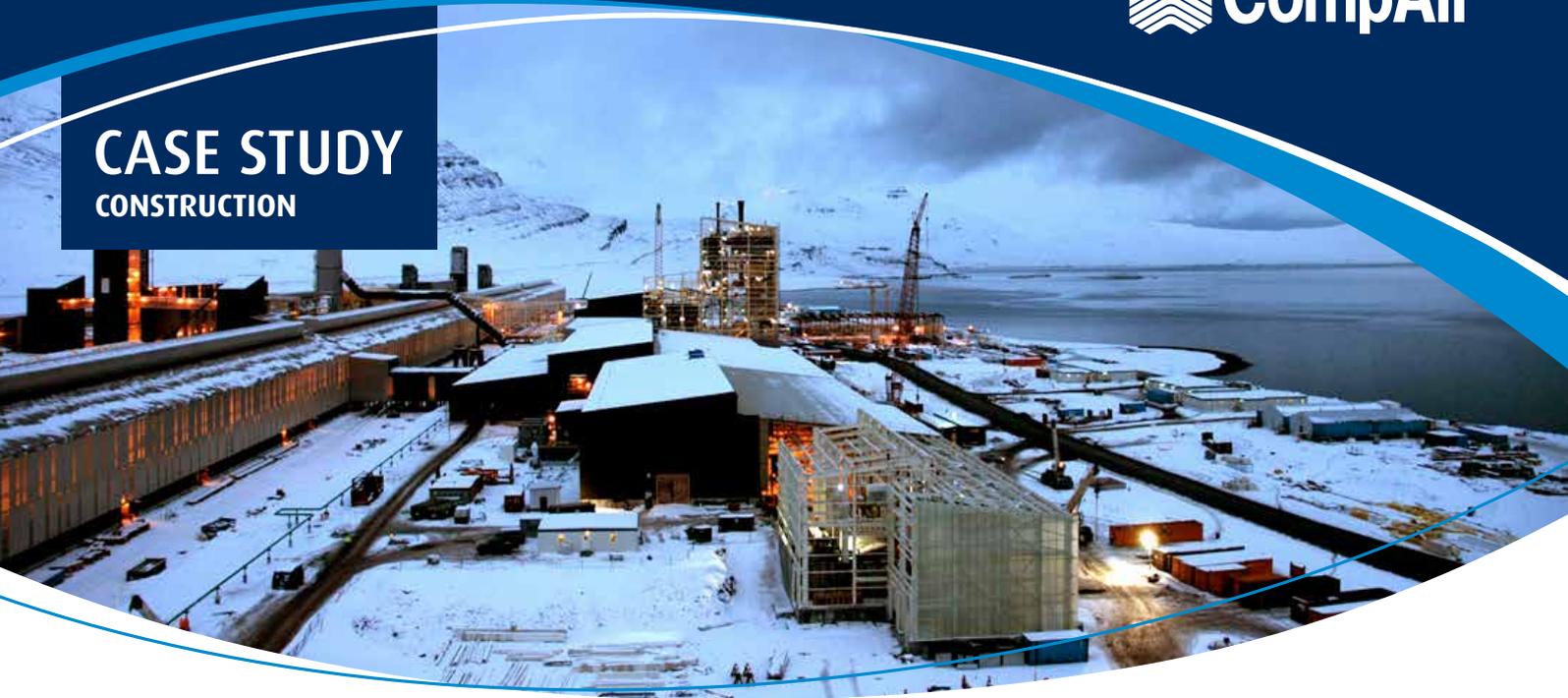


CASE STUDY CONSTRUCTION



Twenty compressors reduce environmental impact for Bechtel

CompAir has proved its cool credentials in Iceland thanks to the hot performance of its industrial and portable compressors, which have helped to reduce environmental impact by up to 30%.

Twenty compressors were purchased as part of an exclusive partnership with global engineering solutions provider Bechtel and Icelandic engineering specialist HRV, for the construction of one of the world's largest aluminium smelting plants in Iceland.

Complete Equipment Solution

Tasked with providing a complete process solution for the construction of the one billion dollar plus Alcoa Fjarðaál Smelter Project, owned by Alcoa, the world's leading producer of aluminium, Bechtel approached CompAir to provide the compressed air solutions required for both the construction and operating phases of the project. A range of compressors was chosen to perform numerous tasks, including concrete

Overview

Client

Betchel

Location

Alcoa Fjarðaál Smelter Project, Fjarabyggo, East Iceland

Application

Construction phases and operation of aluminium smelting plant

Products

Various portable and industrial compressors, including new C180TS-9 TurboScrews

Customer Benefits

Environmental impact reduced/complete equipment and service solution from single supplier

vibration for storage tank wall forming and provision of power for general machine tool operation. This included portable C50s, C76s with electrical generators, C105-14 high-pressure units and two revolutionary, fuel saving C180TS-9 TurboScrew models. Bechtel also installed a stationary L30 compressor to run the cathode rodding induction furnace, a key process housed within the development.

Commenting on the project and the purchase of CompAir equipment, CompAir Regional Sales Manager Franz Weisbrod

CASE STUDY

CONSTRUCTION



Benefits at a glance

- ▶ Extensive compressor portfolio - Bechtel could choose the ideal range of equipment to suit the wide variety of air pressures and volumes required
- ▶ Industry-proven products - assures process reliability to ensure productivity
- ▶ C180TS-9 TurboScrews save more than 10 litres of fuel per hour - reducing environmental impact by up to 30%
- ▶ Total equipment supply and service package from one source - simplifying installation and maintenance
- ▶ Prompt, local support and planned maintenance from MEST - to ensure optimum compressor efficiency, for reduced downtime

said: "Having worked with Bechtel on a number of unique and challenging projects across the world, we have a real understanding of the support and service it has come to expect from CompAir. By offering a complete solution for its compressed air needs, we have been able to form an exclusive partnership involving our distributor MEST, to provide the equipment, service and support Bechtel needs to get the job done."

Environmental Commitment

Working to tight deadlines in difficult terrain with up to 1,600 workers on site at any one time, Bechtel not only had to consider the time constraints of the construction programme, it also had to consider the environmental impact work would have on the unique landscape.

Franz continues, "As with any project of this scale, reducing the environmental impact of construction and operation is extremely important and a key reason why Bechtel chose to purchase two of our industry-leading TurboScrew C180TS-9 compressors. Located outside in harsh weather conditions, the C180TS-9 came into its own when used to power no fewer than 40 concrete vibrators to form a cylindrical concrete bauxite container in just 10 days."

Energy use and performance were also a major focus, with the electricity required to operate the aluminium plant supplied by a nearby hydropower station, reducing the need to burn fossil fuels, whilst benefiting from the natural resources Iceland has to offer.

Technical

Located 6 km east of Reyðarfjörður, within the municipality of Fjarðabyggð in East Iceland, where temperatures reach sub-zero figures, the low-emission aluminium facility has taken more than three years to construct and is on schedule to be completed in December 2007. Expected to produce up to 346,000 metric tons of aluminium per year, the productivity of the facility will depend heavily on the reliability of the process and machinery used to power it.

Using 150,000 cubic metres of concrete and 26,000 tons of steel, the development of the project will span more than 2 km, consisting of 336 'pots' operating at 365 Amp DC. Each 'pot' will produce approximately 2 metric tonnes of aluminium every day. On completion, the additional supporting facilities will include a Reduction Line over 1 km long, a Carbon Facility, Cast House and Port Facility provided by the municipality of Fjarðabyggð.

