It’s already 10 years since Novelis came into existence on 6 January 2005.

The company was created from a spin-off of Alcan, two years after acquisition of the Pechiney Group. Since its creation, Novelis has undergone a significant transformation and overcome major challenges to become the world leader in aluminium rolling and recycling, with more than 2,700 kilotons in shipments each year.

Novelis has been a major contributor to the development of the aluminium sector and has invested nearly $2 billion over the past three years in rolling, finishing and recycling operations to meet the growing demand for rolled aluminum in premium markets.

We at Novelis PAE are proud to be part of this success story and have been able to consolidate our position as a leading supplier of casthouse equipment in all our markets: twin-roll continuous casters, sheet ingot (slabs) casters, degassers and metal filtration. We have also developed our capabilities to provide engineering services and technical support for our customers. Over this period, Novelis PAE has delivered 22 twin-roll continuous casters (2 of these being for magnesium strip casting), 24 vertical DC casters, and 232 degasser or filter units.

But our greatest achievement has been the building of a talented, professional and motivated team that will enable us to better satisfy our customers in the years to come.

Next meetings

We will be happy to meet you at the ALUMINIUM CHINA Fair, 8–10 July 2015, Stand 1H03 – Hall Premium N1 at the Shanghai International Expo Center, and to invite you to a presentation entitled: “Metal treatment equipment meeting the challenge of aluminium recycling”.

We will also be very pleased to welcome you at the CONGRESS & EXHIBITION “NON-FERROUS METALS and MINERALS, 14–17 September 2015, Booth 402, in Krasnoyarsk, Russia.
New contracts in China

In-line units for High Purity Aluminium Production

Last year, Xinjiang Joinworld Co Ltd ordered 1 new ALPUR® TS35 and 1 new PDBF 20 unit to equip a new slab casting line. This is the third project that we have successfully carried out with Joinworld and it confirms the leading position of Novelis PAE in supplying equipment dedicated to manufacturing high-purity aluminium. The production of high-end aluminium, used mainly in electronic components, requires a high level of degassing and filtering efficiency. During the molten treatment of high-purity aluminium, it is most important to avoid the release of any particles or chemical elements.

The ALPUR® TS35 and PDBF 20 will be commissioned soon in Urumqi.

In April 2015, Novelis PAE has been pleased to receive Mr. Sun Lijun, Mr. Qin Chao and Mr. Xu Peijun from Xinjiang Joinworld Co., Ltd together with Mr. Zhao Lingchao from Fargo Marketing Services Shanghai Co., Ltd in its Voreppe premises for a project review and technical discussions.

Two new Alpur® TS2 for South West Aluminium

SWA, one of the major Chinese Aluminium suppliers, has awarded Novelis PAE a new contract for two new ALPUR® units. This new project confirms and reinforces the long-term partnership between SWA and Novelis PAE. The new ALPUR® TS2 was particularly appreciated by SWA engineers for its proven efficiency and robustness. It has also been recently improved with specific features such as:

- New Dynamic Seal shaft
- Screwless rotor
- Renewed, stable motorization units, with ready-to-use injector, integrated pressure sensor and rotation speed control
- New integrated hydraulic lid-lifting unit with quick connecting utility beam.

Start up is planned for the beginning of 2016. Undoubtedly all these improvements will make operation, maintenance and daily use of the degassers much easier.
Product Development

A reliable means of measuring metal level in moulds

Novelis PAE developed its own metal-level measuring device long ago and has since benefitted from continuous improvements. The technology has now proven successful over more than 3 decades and is used by major casthouses around the world, many of whom are long-standing customers. It is much appreciated for its sturdy design and its ability to function efficiently under severe ambient conditions relating to fumes, dust, and air temperature variations.

The operating principle is based on two capacitances, the bottom one measuring the metal level, the top one offsetting variations in ambient conditions. While the principle is applicable to all alloy families, it is even more adapted to hard alloys for the following reasons:

- the signal is practically insensitive to dross formation, being integrated over a surface area rather than based on one spot as with a laser beam,
- it evens out metal level fluctuations, which are unavoidable at the start of the cast, by means of a useful signal indicating the formation of the first metal in the bottom block (picture below)
- it functions well under an inert gas cover, which is sometimes used for hard alloys, where the laser signal is poorly reflected due to the very limited oxide layer

Spotting the first metal during mould filling

Deriving the metal level \( h \) from a double capacitance system

Our degasser range is going to be extended to better meet customer needs: more information will all be available in a few months.

Should you like to know more about these products or to cooperate with the development team, please contact: betrand.rozier@novelis.com or pae.metaltreatment@novelis.com.

Contact

After-sales services team in China

Fargo Marketing Services (FMS), based in Shanghai, has strengthened its present team responsible for Novelis PAE affairs in China with the addition of a new Service Engineer M. Bill Zhao.

This team is already actively involved in commercial business and after-sales services. A selection of spare parts is kept permanently in stock at the FMS Shanghai warehouse for rapid delivery, and specific parts can be added to the stock depending on customer needs. Requests can be sent to Jordan Wang, Fargo Services Shanghai Co., Ltd. • jordan.wang@fargogroup.com.cn
Trade fairs & Conference

Overcoming the challenge of hard alloys casting

Novelis PAE took part in the 2nd CHINA INTERNATIONAL ALUMINIUM CASTING FORUM, held in Fengcheng, on December 11-12, 2014. This successful event drew 150 participants from both industry and university backgrounds, providing a valuable mix of casthouse equipment users (engineers and managers) and academic expertise.

Ghislain Le Roy outlined the benefits of our equipment offer for hard alloys focusing on the overall melt temperature control from furnace outlet to casting pit, the use of wipe-offs during the cast and that of capacitance sensors for metal level control.

Separately, Mr. Shao Zhengrong made a presentation on the recent start of the QIXING 35 t hard alloy casting line in Zouping, China.

He reminded participants of the key factors for success when casting hard alloys, based on his experience and use of a casting line supplied entirely by Novelis PAE. His talk was admirably illustrated by pictures of 2A12 and 7050 full-size slabs. In particular, he highlighted the importance of using our capacitance sensor in following precise casting recipes at all times, including during the critical mould filling phase.

TMS 2015 Annual Meeting & Exhibition

Dr. Frédéric Basson, head of our project management department, presented a paper on March 17th at the TMS 2015 ANNUAL MEETING & EXHIBITION in Orlando, Florida. The paper, entitled “Magnesium twin-roll casting benefits from Aluminum heritage”, was selected as the keynote invited talk for the Strip Casting session of the Light Metals Division.

The talk was well received by both the magnesium and aluminum communities and triggered some very fruitful questions and discussions.