

PRESS RELEASE

Dubai, United Arab Emirates, March 15, 2016

25 Years Partnership between EGA and Hertwich

Hertwich Engineering ("HE") has become the technology and market leader in the business sector of melting, heat treatment and recycling technology for aluminium. On the way to this success, the trustful collaboration with Dubai Aluminium ("DUBAL"), now an operating subsidiary of Emirates Global Aluminium ("EGA") and referred to as EGA Jebel Ali, has been extremely helpful. On the occasion of the 25th anniversary of the partnership, both parties met for a joint celebration in Dubai.



Left to right: Fadi Awadhalla (EGA), Mohamed Nagib (EGA), Walid Al Attar (EGA), Franz Niedermair (Hertwich Engineering)

In the past two and a half decades, EGA Jebel Ali has become one of the largest and most efficient primary aluminium smelters in the world, producing more than one million tonnes of aluminium per year. Together with Emirates Aluminium ("EMAL"), another EGA subsidiary referred to as EGA AI Taweelah, EGA today has a production capacity of 2.4 million tonnes per annum, accounting for around 5 percent of smelter production worldwide. Almost half of EGA's annual production is processed into billets for extrusion and forging.

For Hertwich, the collaboration with EGA Jebel Ali has been valuable in many respects. In the field of Heat Treatment of extrusion billets, Hertwich has successfully developed new concepts to reduce energy consumption (and thus also emissions); achieve a uniform temperature distribution inside the furnace, which is a pre-condition for quality products; and inspect the material for center cracks and inclusions. The whole heat treatment process including Ultrasonic Testing, Sawing and Packing has been integrated in a fully automated production process by Hertwich.

In order to establish these new technologies on the initially sceptical market, EGA Jebel Ali has been a helpful partner. Only when EGA Jebel Ali, as one of the leading casthouses worldwide, decided to install the Hertwich Technology and showed the expected results, competitors followed.

This happened in 1994, when EGA Jebel Ali successfully commissioned the first Hertwich Continuous Homogenizing Plant including two sawing machines. Thereafter, a series of notable aluminium producers ventured to invest in the new technology: Comalco and Boyne in Australia, NZAS in New Zealand, ALCOA (previously Eastalco and Intalco) in the USA, Alba, and others. Since then, more than 120 continuous homogenizing units have been installed, and around 60 percent of all billets for extrusion produced today are homogenised using these units.

The development of the new batch furnace concept (reverse air) by HE was not very different. Again EGA Jebel Ali was the first company to venture onto this new ground. Having witnessed the advantages of the new batch furnace concept, other notable casthouses have selected it as well. In 2016, three plants of this type are

to be commissioned.

In total the production of the homogenising units installed by HE at EGA's two operating subsidiaries amounts to more than one million tonnes per year. A total of six continuous furnaces and the same number of batch homogenising furnaces have been installed, including numerous auxiliary units such as charging machines, sawing and ultrasonic inspection equipment, briquetting presses and much else. There are also two horizontal continuous-casting lines with a total capacity of 130,000 tonnes.

Hertwich Engineering, a company of the SMS group is renowned for its future-oriented, energy saving technologies and outstanding service in aluminium casthouse. The company is active worldwide with design, supply, construction and commissioning of special machinery and equipment for the Aluminium industry. Hertwich is competent for supplying complete Al-casthouse on a turnkey basis (one-stop-shopping). The product range comprises melting equipment for aluminium scrap, conti and batch homogenizing plants, sawing plants, horizontal and vertical casting machines and quality inspection stations, etc. To stay ahead Hertwich relies on its own R&D and proprietary know-how. For 50 years, the advanced technology has revolutionized the industry and the company maintains its worldwide lead.