

PRESS RELEASE

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Emirates Global Aluminium orders seventh Hertwich batch homogenizing unit

Emirates Global Aluminium has placed an order for the supply of an additional batch homogenizing furnace for the heat treatment of billets with Hertwich Engineering, a company of the SMS group. Including this new unit, which will go into operation at the end of 2017, a total of five batch furnaces of this type will be operating at EGA's Jebel Ali plant and two at EGA's Al Taweelah smelter.

Emirates Global Aluminium is one of the largest industrial companies in the United Arab Emirates outside oil and gas. Its production makes the UAE the world's fourth largest aluminium producing nation. EGA has smelters in both Jebel Ali in Dubai and Al Taweelah in Abu Dhabi.

The cooperation between EGA in Jebel Ali and Hertwich goes back to 1994, when the first continuous homogenizing plant was commissioned at EGA. In 2010, EGA was also the first company to place its trust in the newly developed Hertwich batch-furnace concept. Due to the positive experience gained, EGA is subsequently replacing all its older batch furnaces in Jebel Ali with modern units from Hertwich. The fourth unit started operation in the autumn of 2015; the batch furnace currently on order will be the fifth of its type at

this aluminium plant. Including the two batch furnaces in operation at the Taweelah plant, EGA will soon operate a total of seven Hertwich batch homogenizing units.

The new furnace is designed for use with billets 125-406 mm in diameter and 5000-8000 mm long. During heating in a conventional batch furnace, the gas stream loses energy as it passes through the stack of material being heated; the new design achieves more uniform heating of the furnace contents by alternating the direction of the incident gas flow. Experience has shown that heating-up times can be reduced significantly in this way. A new feature of the fifth homogenizing unit is that certain alloys can also be cooled down in the furnace. The temperature range is 620-450 °C.

Where cooling is carried out in a separate cooling station, air from the casthouse is sucked in via fans and passed through the stack of material being cooled, the direction of the incident gas flow is alternated here too.

The ancillary equipment required for furnace operation has already been supplied with the existing furnaces and can be used for the new furnace. It facilitates a large degree of automation of the heat treatment process. This begins with the loading of the trolley and incorporates a whole host of subsequent steps: stacking with automated spacer handling, ultrasonic testing, furnace charging and operation, transfer to the cooling station and unloading the stack, sawing, weighing and packaging.

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.