

Tailor-made Volvo machines increase productivity at Korean plant



Four specially-engineered E-Series excavators from Volvo are boosting production levels at Hwanyoung Steel's factory in the Chungnam province.

Their efficient operation means the facility is enjoying higher profitability even though steel prices are declining.

Hwanyoung Steel, Co. is one of the largest billet and reinforcing steel manufacturers in Korea. The company can produce over 1.5 million tons a year at its Dangjin plant, in Chungnam Province.

To meet its ambitious production targets, the company

has added four Volvo CE excavators to its equipment fleet. These new machines, two EC380E and two EC480E units, were adapted by Volvo's Special Application Solutions team to handle the extreme working conditions at the plant. The EC380E and EC480E are handling scrap metal, and their work includes loading materials into the 100-ton electric arc furnace, where temperatures can reach 1200 °C.

"Our site is particularly challenging as the machines operate with heavy and abrasive materials and in areas of extremely high temperatures," said Dae-sik Choi, manager at

Hwanyoung Steel. "We worked in collaboration with our local Volvo sales team and the Special Application Solutions team to tailor the machines to withstand the demanding conditions."

Equipped with a raised cab and 3-stage front attachment with grapple, the specialized machines organize and load scrap metal at the site's outdoor yards. Once the material moves inside the excavators are used again, this time for loading material into the electric arc furnace for processing.

"These new Volvo E-Series machines can move larger amounts of scrap metal in a shorter time than competing

excavators," continued Dae-sik Choi. "They helped us manage our workflow better and boost the plant's overall productivity."

As part of Volvo's award-winning E-series of excavators, the EC380E and EC480E feature industry-leading fuel efficiency combined with a choice of work modes. Another attractive benefit for Hwanyoung Steel is the longer durability of the machines' boom, arm and frame.

The EC380E has an operating weight of up to 43,000 kg, a maximum working height of 10,000 mm and reach of 11,000 mm. Its Volvo engine delivers 226 kW of power. For the EC480E, operating weight is up to 54,500

kg and its maximum working height is 18,000 mm and reach is 16,000 mm. This model's Volvo engine has a 278 kW-power rating.

"We really appreciate the service we get from Volvo's sales and customer support teams," said Choi. "They give us the information and support we need to get the very best out of our Volvo machines. Working with the team at Special Application Solutions, we were also able to gain a better understanding of our own work site and we look forward to working with the whole Volvo organization in the future."