

# Powerful pump unit for stiff concrete

*With an investment of three billion Euros the South Korean project company IREX is currently having a line built for high-speed trains between the new Incheon International Airport and the capital Seoul. For placement of the concrete, which is usually very stiff, they put their trust in a truck-mounted concrete pump made by Putzmeister's South Korean company. The reason: the machine with the "16 H" unit is in a position to be able to deliver 50 m<sup>3</sup>/h even at a concrete pressure of 85 bar.*

After the great economic crisis in Asia in the middle of the 1990s the Korean government decided in close coordination with the city of Incheon, located west of Seoul, to draw up a long-term development plan. To achieve sustainable economic growth for the region it was necessary to create an attractive centre for service, research and technical development. The prerequisite for this was the construction of a new international airport, a site with favourable traffic links and basic economic incentives. The prerequisites for long-term investments in Korea were to be created by this means. The measures included among other things the construction of a line for high-speed trains.

## **An output of over 50 m<sup>3</sup>/h at a concrete pressure of 85 bar**

A large goods terminal is under construction in conjunction with the first stage of construction between Incheon Airport and Gimpo Airport. After completion it will be used by domestic and foreign investors as an international turntable for goods handling. For the carcass work the local pumping service YOUNG JONG received from the general building contractor DAELIM INDUSTRIAL COMPANY an order for the delivery of about 70,000 m<sup>3</sup> of concrete. As a rule the stiff, plastic material has a slump dimension of just 12 cm. The flagship of the pumping service is a BSF 36.16 H which was delivered by Putzmeister's Korean subsidiary in February 2005. Since then the machine has been deployed on this huge construction site and delivers between 300 and 1,000 m<sup>3</sup> of concrete daily. The purchase decision in favour of the Putzmeister BSF 36.16 H was taken by Hyeon So Chang, the owner of YOUNG JONG, primarily due to the



*A lot of work to be done at the goods terminal of Gimpo Airport: the Putzmeister BSF 36.16 H, produced in Korea*

enormous power reserves that the pump unit "16 H" has at its disposal. With an engine performance of 180 kW the machine achieves an output of more than 50 m<sup>3</sup>/h at a concrete pressure of 85 bar. With such performance data the "16 H" unit differs considerably from the concrete pumps of other – and not only Korean – manufacturers.

Since the commissioning of the Incheon International Airport in March 2001 they have been working at full stretch on a better connection between the airport and the capital Seoul. With an investment volume of approx. € 2.5 billion the new airport is designed to handle 50 million passengers per annum. This corresponds approximately to the passenger incidence at Frankfurt Airport. Korea's new airport was erected on an island regained artificially from alluvial land off the Korean west coast. Till now Incheon Airport was attainable only via a 6 to 8-lane motorway. The new rail line will relieve the local public transport system. In its first expansion stage the new line will connect the new airport with the previous international airport Gimpo and will later be extended to Seoul central railway station. Completion of this section with a total length of 61 km is planned for the end of 2009. The costs amount to over three billion Euros.



*The mixer driver has to really scrape the remainder of the relatively stiff concrete off the chute*



*A saturated jet of concrete with a slump dimension of 12 cm*