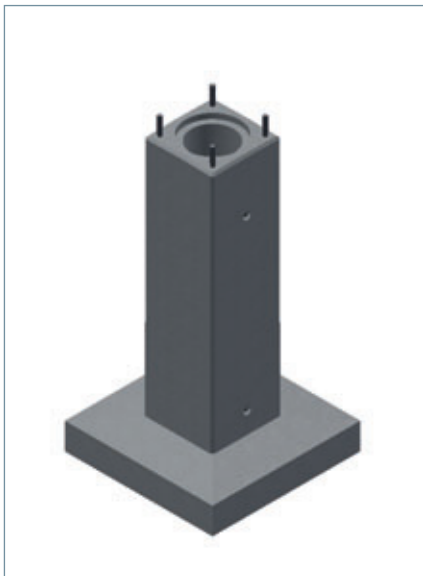


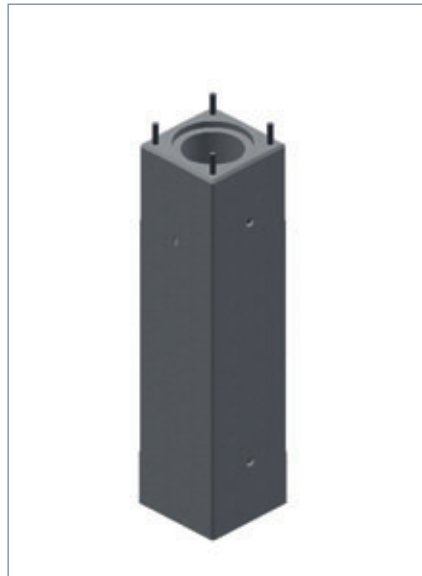
Prinzing-Pfeiffer GmbH, 89143 Blaubeuren, Germany

Instant demoulded foundation blocks for the Swedish railways

The Swedish concrete plant Botnia Betong AB is based in the tranquil little town of Sjölevad, about 500 kilometres north of Stockholm. In the region there is a whole series of towns on the coast along which the trains of the “Botnia Line” run. The 190 km long track runs from Vännäs to Sundsvall. The Botnia Line is the largest investment in the Swedish railways since 1937. Modern passenger trains operate at speeds of up to 250 km/h on the line.



Foundation for overhead power line mast with foot



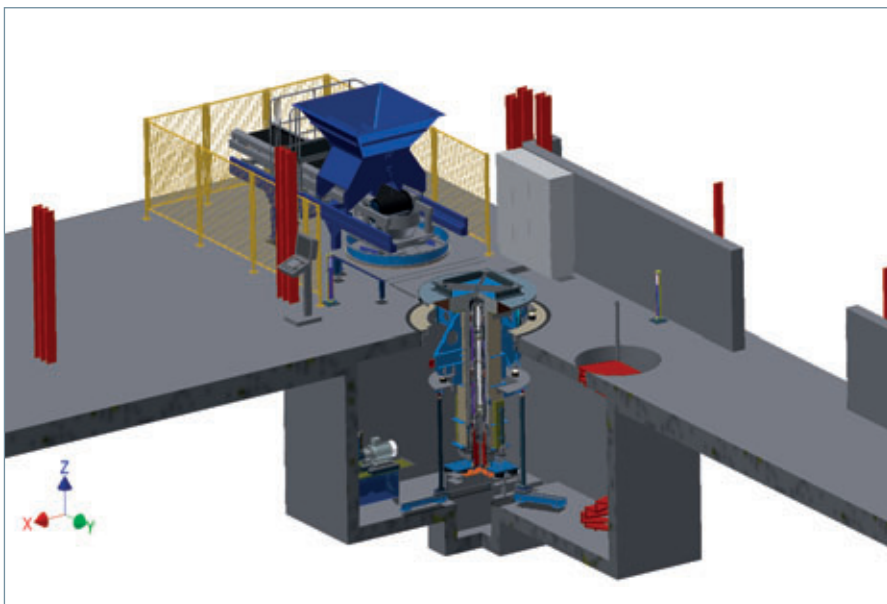
Foundation for overhead power line mast without foot

Botnia Betong delivers the majority of its products to the Swedish railways. There is a wide range of products, from cable ducts and platform edges up to foundation blocks for the overhead power line masts. Further products manufactured by Botnia Betong include paving stones, slabs, retaining walls and wall elements. The company is certified to “Nordcert”, which means a high technical standard.

Botnia Betong relies on the experience of Prinzing-Pfeiffer GmbH from Blaubeuren, Germany for the manufacture of foundation blocks for the overhead power line masts. The concrete foundations, which measure up to 3 metres in height, are manufactured with the Atlas plant installed in 2014 and are demoulded directly after production.

The strongly reinforced foundation parts have some technical properties that demanded several special solutions from the mould construction and the manufacturing method. For instance, connecting bolts for mounted parts and diverse cable feed-throughs have to be installed directly during the production. In Prinzing-Pfeiffer the company has a partner with a great wealth of experience in plant and mould construction that was able to supply the right solution here.

Like many machines from Prinzing-Pfeiffer, production on the Atlas plant takes place “below ground”. The principal reason for this is the low noise emissions and better access to the machine and to the mould. The mould, prepared with the reinforcement and the built-in components, is placed into the concreting station by means of a turnover spreader beam. The earth-moist concrete is filled into the mould gap and compacted at the same time by a central vibra-



Schematic of Atlas production plant



Foundation blocks with foot

tor. By means of hydraulic clamping, a pallet is pressed into the mould under further compaction. Subsequently an ejection device ejects the complete mould equipment above ground, where it is taken over by the turning spreader beam. The turning spreader beam, which is suspended from the gantry crane, turns the mould by 180° and transports it at the same time to the curing station. After the mould core has been pulled forward, the product is completely demoulded in the subsequent installation orientation and is not moved any further during the curing process. These high product qualities can only be attained in this way.

The example of Botnia Betong shows that even smaller companies can establish themselves on the market with special products and the associated flexible production plants. Botnia Betong is amongst other



Turning with the turning spreader beam

things a dealer for the established Benders Group, which is active in Scandinavia and wide areas of Europe. ■

FURTHER INFORMATION

TOPWERK
PRINZING-PFEIFFER

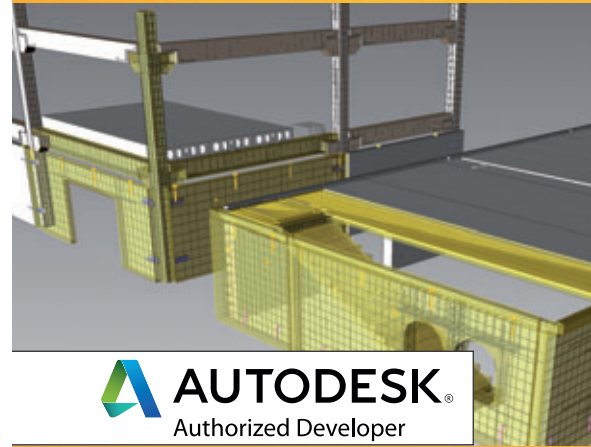
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Demoulding at the curing station



Atlas with turning spreader beam



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