
Major order from the Baltic region

ELME METALL – an expanding company

Elme Metall, founded in 2001, is one of the leading companies engaged in the sale of ferrous and non-ferrous metals in the Baltic Sea region, and has been expanding since 2002. Today, Elme Metall, part of BLRT Group, has its own subsidiaries in five European countries and has 14 warehouses with a total area of almost 100'000 m².

Elme Metall also has six production and service centres in:

- Estonia – Tallinn and Maardu
- Latvia – Riga
- Lithuania – Vilnius and Klaipeda
- Finland – Parola

At the beginning of 2013, TRUNINGER was able to deliver four magnet systems to the Tallinn warehouse and 13 systems to the Riga plant. Before the order was placed, detailed discussions took place about the products to be transported, the material flow within the warehouse, the storage of goods and the handling process. This resulted in:

a) for the Service Centre in Tallinn

- 1 magnet system for outdoor rebar bundle handling
- 1 magnet system for tube handling
- 2 magnet systems for indoor and outdoor plate handling



Figure 1: Handling of rebar bundles in the Baltic winter

Special precautions had to be taken for the three outdoor systems. For example the battery boxes were fitted with heating elements to prevent, in cold temperatures, loss of battery capacity (and therefore any loss of down-time in the event of mains failure). In addition, the TRUNINGER magnets were specially treated for outdoor use.

b) for the Service Centre in Riga

- 2 magnet systems with 2 magnet grippers for plate, merchant bar and beam handling
- 5 magnet systems for merchant bar and beam handling
- 1 magnet system for hollow section and tube handling
- 2 magnet systems for plate handling only, singles and packs
- 1 magnet system for hollow section, tube and beam bundle handling
- 2 magnet systems for merchant bar, tube and beam handling



Figure 2: Plenty of power for safe and fast handling of hollow sections with the new TM magnet

In two hall areas of the Riga plant, large-format plates and individual long beams are handled. Safe plate handling requires magnets having a large contact area with the material, while narrower magnets are needed for picking beams directly on the web.

In most cases plates and beams cannot be handled with the same magnet gripper. Deflection would cause long thin plates to peel off narrow magnets. On the other hand the desired storage density using different beam dimensions cannot be achieved with wide magnets.

For these reasons it was decided to equip the crane with two material-specific magnet grippers (see Fig. 3). Both beams are automatically detected by the multi-spreader feature of the magnet controller. Magnet current as well as other relevant parameters are also automatically set. The spreader beams can be exchanged quickly and safely with a few simple steps and are available for immediate use.



Figure 3: Passive telescope with narrow magnets for optimal beam handling

In general, simple and reliable spreader construction is used, such as in the robust fixed spreaders (see Fig. 1 and 4) or in the passive telescope (see Fig. 2 and 3), which adapts easily and quickly to the different material dimensions and to the movement of the crane crabs.



Figure 4: Trouble-free transport of large heavy plates