Case Study

Increasing your yields with ASK's KMV risers

Kohlswa Gjuteri AB increases material efficiency with ASK Chemicals EXACTCAST™ KMV riser

Background

Kohlswa Gjuteri AB is a very traditional foundry that dates back to 1548. Located in the town of Kohlswa, Sweden, it manufactures structural, heat-treatable stainless and manganese steel products mainly targeted at the European and North American markets.

Kohlswa runs a flask molding line using Avenol NB 410 and hardeners from ASK Chemicals and involving flask sizes from 600x600 mm up to 3500x3500 mm. The foundry produces a broad range of casting sizes and varieties from 50 to 18000 kg weights in all different steel alloys and white iron. Melting at Kohlswa is carried out in an electrical arc furnace and two 1700 kg high frequency induction furnaces.

Leif Mikkelsen (Supervisor Foundry) and Thomas Eriksson (Foundry technician) describe how they were able to optimize material efficiency and what they expect from their suppliers.
Among your list of customers are big names like MAN, Rolls Royce, Sandvik and Schottel. What differentiates Kohlswa foundry from its competitors and makes major international customers buy from you?

Leif Mikkelsen (Foundry Supervisor):

Our emphasis is on one-off manufacturing and small series manufacturing, and we are able to produce castings ranging in size from small to really large. Our customers appreciate this flexibility. Our company places the utmost importance on quality. We work to the requirements of many classification societies such as Det Norske Veritas, Lloyd’s Register of Shipping, the American Bureau of Shipping, Bureau Veritas, Germanischer Lloyd, and the Russian Maritime Register of Shipping. We have converted our quality assurance system to SS ISO 9001:2008. We are also approved by Achilles Joint Qualification System in Norway. Our ability to comply with all these different societies underlines our quality awareness even more.

Question #1

Considering the quality of the castings you are manufacturing and the flexibility your customers expect from you, how important then is supplier excellence to you?

Leif Mikkelsen (Foundry Supervisor):

Supplier excellence is very important to us because of our flexible production. We sometimes need our raw materials at short notice. Even then, we expect delivery accuracy and excellent quality of the materials supplied. We place great importance on long-lasting and trustful relationships with suppliers. For example, ASK Chemicals has been supplying us with its products since the middle of the seventies. Since that time, ASK Chemicals has always tried to meet our demands, providing us with excellent customer service and communication. We know that ASK Chemicals is able to support us when issues need to be solved.

Question #2

Can you give us an example of a solution that ASK Chemicals provided you with?

Leif Mikkelsen (Foundry Supervisor):

Of course. Some time ago, we wanted to reduce the cast weight. The biggest casting in our production used to have a casting weight of 18500 kg. We tested the EXACTCAST™ KMV 6800 mini-riser and were able to reduce the quantity of poured metal to 16000 kg. Actually, we think that we might even be able to decrease metal usage by another hundred kilogram. Apart from the increase in material efficiency, the handling of the KMV risers is much easier when molding and we noted a positive effect on gas defects, which have disappeared since we started using this new riser. But the overall decisive factor is that we have been able to significantly optimize yield.