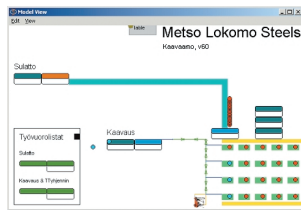




## Case: **Metso Lokomo Steels**



### **Studying the new Metso Lokomo Steels' moulding line investment beforehand by using dynamic simulation**

Metso Corporation is a global supplier of process industry machinery and systems and aftermarket services. The Corporation's core businesses are fibre and paper technology (Metso Paper), rock and mineral processing (Metso Minerals) and automation and control technology (Metso Automation).

Metso Lokomo Steels (a part of the Metso Ventures located in Tampere Finland) is going to increase its production efficiency by investing in a new moulding line. In the past few years SW-Development has been ensuring Metso Lokomo's investment projects by using dynamic simulation and the feedback from the projects has been positive. Also in this case SW-Development constructed a simulation model based on the planned moulding line, made several simulation runs and analyzed the results.

By using the simulation model with appropriate parameters it was possible to check the functionality of the line's moulding, pouring and cooling systems and thereby the investment risks was reduced. For example the effects of the following parameters were examined: moulding and pouring rates and the filling logic of the cooling area. Also the impact of the different work shifts was analyzed.

The different disturbances that affect the manufacturing processes were also modeled in the simulation model. The functionality of the moulding line in the case of disturbance was studied by raising malfunctions in the simulation model. Thus it was possible to monitor for example how the manufacturing line was able to recover from the interruptions in the pouring.

According to Lokomo Steels: "By using the simulation we were able to have valuable information about the functionality of the system and verify the investment beforehand. In the future we will consider using simulation in operations more widely to maintain efficiency."

Further information:

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