

From April 2

Lokomo Steels Oy is Metso Lokomo Steels Oy

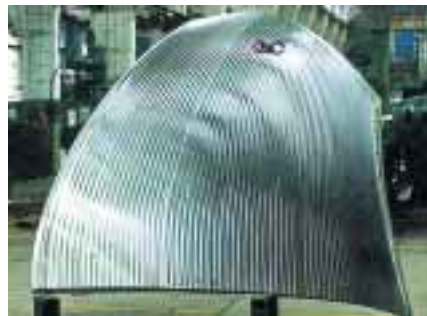
See information on last page



Coiler Drum



Propeller blade



Francis runner blade



Casting for pulp and paper machinery

**OUR PRODUCT RANGE COVERS
STEEL CASTINGS FOR**

- Hydro Turbines
- Wood and fiber processing machines
- Industrial valves
- Ship propellers
- Coiler drums for steckel mills
- Stone Crushers
- Other applications for demanding steel castings

COILER DRUMS

Coiler drums are used in Steckel hot rolling steel mills. Coiler drums operate in a temperature of close to 1000 °C, and the casting is subject to fatigue stress. Metso Lokomo Steels makes the drums from DRUMOK 1000 Vaculok®, which has been specially developed for this demanding application.

Orders for coiler drums reached a record level in 2000. Since the beginning of 1990s there are more and more DRUMLOK 1000 Vaculok® on the market. Customers have been very satisfied with the performance of these drums. Good experiences combined with our expertise and efforts give grounds to expect a good future for this product.

Castings for pulp and paper machines

Deliveries for wood processing machines grew significantly during last year. The most commonly used materials are martensitic and austenitic stainless Vaculok® steels, as well as a certain amount of Duplex steels.



Low pressure feeder housings for pulp machine.

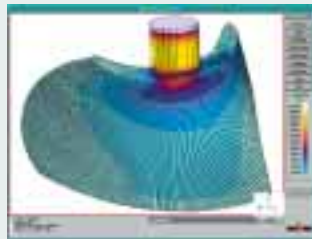


Coiler drums currently in production at Metso Lokomo Steels.

St. Lawrence Runner
The cast steel chosen for these runners is vacuum treated CF8M Vaculok® with improved mechanical properties.



Blade simulation
The quality of the casting is ensured by thorough design and simulating the casting process. This is especially important for a runner blade with its high requirements and complex shape.



Pattern for the blade
The pattern is manufactured with a milling machine to ensure accuracy.



Castings for St. Lawrence hydro turbine project

Alstom Power Canada is responsible for replacing 8 runners for the New York Power Authority's St Lawrence power plant. Each runner weights 40 tonnes. Metso Lokomo Steels is supplying the castings for the blades and hubs.

Alstom Power Canada states: "Propellers or mixed flow turbines could be considered the "Formula 1" of low head turbines. Refinement in the design and fabrication process has been pushed to the limit. From this perspective, the quality of steel supplied by Lokomo makes a major contribution in optimizing the design. The purity of this steel maximizes the mechanical properties and significantly extends the expected fatigue life."

Blades for reversible pump turbine projects

Knowhow and partnership were important factors when GE-Energy Norway chose Metso Lokomo Steels to supply the blades for their Horse Mesa and Mormon Flat projects.

Metso Lokomo Steels will supply the blades, machined and milled ready for welding, for two runners for pump turbines with outputs of 114 MW and 57 MW. The power plants are located in Salt River, Arizona; the Horse Mesa power station has a net height of 77 m and Mormon Flat of 40 m.

The material chosen is the 16/5 Vaculok® martensitic stainless steel, which has excellent properties specifically for structures that need welding. The superior weldability of Vaculok® steels is due to the lower carbon contents and the purity achieved through the vacuum treatment.

The latest CAD/CAM technology was used in making the blades, from simulating the casting to the final measurement of the blade. The aggressive shape of the blades and the welding bevels were machined on a five-axis CNC machine, with the shapes being checked on a 3-D measuring machine.



The Horse Mesa blade, machined and measured. Note the heavy skew of the blade.

New name

On 2 April 2001 our name changed from Lokomo Steels Oy to Metso Lokomo Steels Oy. The change does not affect the company's status. The same contact persons remain at your service; all products and services remain unchanged.

Metso Corporation is a global supplier of process industry machinery and systems.

Metso's core businesses are divided into Metso Paper (fiber and paper technology), Metso Minerals (rock and mineral processing) and Metso Automation (automation and control technology). In 2000, the net sales of Metso Corporation were EUR 3.9 billion and the personnel totaled approximately 22,000. Metso Corporation is listed on the Helsinki and New York Stock Exchanges.



Investing in the environment

We are currently building an environmental management system to ISO 14001 standards. The work to identify environmental aspects has been done, and the environmental management manual and most of the operating instructions have been prepared. The general requirements for the environmental management system will also conform to the procedures of the ISO 9001 quality system. The system will be up and running by the end of 2001.

Metso Lokomo Steels has succeeded in reducing emissions by investing in air cleaning equipment. Our latest environmental investment has been a plant to clean the emission gases from flame cutting. After the equipment was installed, the particle contents of the outflow air fell by up to 99.7 per cent.

We had earlier invested in equipment to clean the emission gases from the melting shop in 1997. The reduction in the level of emissions has been similar to that in flame cutting. The dust extracted from the emission gases is processed at a certified waste treatment plant.



Filtering plant at melting shop



Filtering plant for flame cutting