ARIES CHEMICAL
Water Treatment Specialists

Case History

FOUNDRY SAVES $ 3,100 PER MONTH WITH ARIES CHEMICAL WATERTREATMENT PROGRAM

A grey metal foundry was experiencing excessive down-time, poor product quality and maintenance costs due to scale formation in one of their blast furnace cooling water systems. The foundry had chosen to stop treating this cooling water system, because it believed that the cost of water treatment chemicals was not justified. This application used approximately 70,000 gallons of water per day. The make-up water's total hardness was 225 mg/l. The cooling water application is high stress with water temperatures surpassing 150 degrees F.

Without water treatment chemicals being added to this system, the foundry was replacing an average of two tuyeres per month at an average cost of $ 4,000 per month. Calcium carbonate scale formed in the tuyeres and reduced the heat transfer rate to the point that product quality was detrimentally affected. The scaling problem also increased maintenance costs and caused increased costs due to extended production downtime.

The foundry asked Aries Chemical to develop an economically feasible solution to their problem. Aries Chemical performed an extensive system survey that included water chemistry and deposit analysis. Aries Chemical then designed a specially formulated chemical treatment program to treat this high stress cooling water system. The application of Aries Chemical's water treatment products resulted in the elimination of the scale problem and associated heat transfer problems. Aries Chemical's program provided a $ 3,100 net savings per month to the foundry in reduced tuyere replacement alone. Product quality problems associated with poor heat transfer in the blast furnace were eliminated as well as costs associated with increased maintenance and downtime.

Aries Chemical's Cooling Water products are custom designed specifically for your cooling water system and conditions with the goal of maintaining a scale, corrosion and deposit-free cooling system. If you currently have scale problems, Aries Chemical will design a program to eliminated scale, improve heat transfer and optimize your system.

CSFoundryCT408

■ PO Box 519 ■ Beaver Falls, NY 13305 ■ Tel: 315-346-1489 ■ Fax: 315-346-1658 ■
■ E-mail: aries@arieschem.com ■