

## STEEL PLATE OPERATION UPGRADES WEIR-STYLE FILTRATION SYSTEM WITH LAKOS

### PROBLEM

The original filtration system in operation at Burger Iron in Dayton, Ohio was a floor mounted, 1500 gallon tank with a drag chain and weir-style overflow. In theory, metal fines and swarf were to settle at the bottom of the “dirty” side of the tank and then be removed to a tote box by the way of the drag chain.



Meanwhile, fine-free synthetic coolant was expected to overflow from the “dirty” tank to the “clean” side, which contained a pump for returning the supposedly clean coolant to the grinder. In practice, however, even with an appropriate retention time of ten minutes to allow fines to settle, metal continued to overflow along with the coolant into the “clean” tank area. As a result, fines either accumulated back into the grinder, threatening both the life of the machinery and quality of the metal plates.

### SOLUTION

A LAKOS AXL Series Separator with an automatic bleed/purge system was installed in the 150 U.S. gpm full-stream coolant line, directly above the “dirty” tank. Purged solids are now deposited into the existing

drag-out, which has resulted in a 20% increase in the amount of fines and swarf delivered by the drag chain to the tote box. In addition, the previously flat-bottomed “clean” tank was redesigned with a slope to direct any fines not removed by the drag chain to the intake of a new, higher pressure pump, which directs the coolant back into the full-stream line, prior to the separator inlet.

### OUTCOMES

As a result of the LAKOS installation, there has been even more improvements:

- **Substantial reduction in the quantity of fines** returned to the grinder
- **Increased life expectancy** of machinery and quality of fabricated metal plates
- **Costly maintenance** of the “clean” tank has been **eliminated**

**Adding a LAKOS system costs less than you think**

To get one customized to your needs, contact your local representative