



CASE STUDY 20061109S

Steel Sawing Application Converts Buckets to Ounces

Equipment Manufacturer Reduces Consumption, Doubles Blade Life

Sawing is one of the simplest applications for UNIST Coolubricators and Single Line systems, yet it continues to deliver benefits worth noting.

Application: Band Sawing of 3" – 9" Diameter Steel Billets.

Problems: Blade Life Unpredictable
Work Area Messy and Dangerous
Fluid Consumption Expensive

Solution: Saw Coolubricator with Bat Nozzle
Coolube 2210

Comments: When told that the steel could be cut using only a small amount of fluid sprayed onto the tooth face and sides of the saw blade, the company was skeptical. They requested a 30 day trial to evaluate how the UNIST system would perform in their application. The results they achieved, led them to later retrofit about a dozen other band saws.

Results: *Blade Life Doubled*

In this case there was actually no reliable data on the blade usage. Depending on the sequences of material sizes being cut, the blade had previously lasted anywhere from half a shift to two days. The operators on all three shifts agreed that blades were being changed with much less frequency, saving maintenance cost, downtime, and blade cost. At any time during the cut the blade could be checked and found cool to the touch.

Fluid Consumption Minimized

The operators had previously been topping off a five gallon bucket with coolant at the beginning of each shift, using the majority of that bucket three times a day. With the Coolubricator, fluid usage was reduced to filling the 10 oz. reservoir a couple of times each day. Even though the fluid cost of the flood coolant was only 10% that of the Coolube, fluid savings alone were estimated to be at least \$100.00 per day.

Maintenance, Housekeeping Down - Safety, Production Up

The operators frequently commented on how the system improved their lives. Wet gloves and aprons became a thing of the past, skin irritation was gone. Not

only did they spend less time changing blades, and cleaning chips out of the machine, but they could sweep dry chips up off the floor – which they no longer worried about slipping on, and were able to completely remove the fluid sump. Overall, this enabled them to do more cutting in less time. The word is that production doubled.