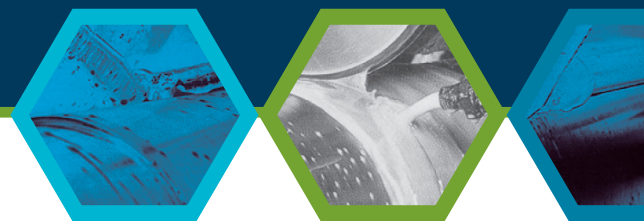


LUBRICUT 5458

METAL WORKING FLUID

CUSTOMER: LARGE PARTS MANUFACTURER



PRODUCT

Lubricut 5458 is a newly developed semi-synthetic metalworking fluid formulated for the today's multi-metal machining applications.

Lubricut 5458 is a high performance metalworking fluid designed for heavy duty machining of aluminum, steel, cast iron and other alloys.

Part Descriptions:

Camshaft End Pieces
Spindles and Shafts
Hand Tools
Manifolds
Housings
Hydraulic Components
Various steel bar stock
6061 Aluminum

Machining Applications:

Off-center drilling and treading
Inclined drilling, cross drilling, contour milling
Gear hobbing and shaping
Polygon tuning
Broaching
Thread rolling (form tapping)

PROCESS AND EQUIPMENT

Industry/Market	Industrial
Product Type	Metal Working Fluid
Product Number	2314000000
Machinery Involved	Various Index Multi-Spindle and Lathes, Kitamura Horizontal Mills
Description of Environment	Machine Shop
Volume Used	TBD
Date of Use	January 2017
Documented Cost Savings	10% tool life improvement, 33% usage reduction

▷ DESCRIPTION OF PROBLEM

High carry out, high usage rates, constant additions to maintain concentration, seeking to improve tool life. Incumbent product contains ~50% oil causing many of the carry out and usage problems.

▷ SOLUTION

Lubricut 5458 improved all of the above problems by:

- lowering the oil content (~20%)
- adding unique additives
- layering biocides for bacteria/fungus resistance.

▷ CONCLUSION

After testing other suppliers, including competitors, the Lubricut 5458 was selected as the main shop coolant for the following reasons:

- Tool Life Improvement ≈ 10%*
- Usage Reduction ≈ 33%*
- Concentration Control = every day additions reduced to 1-2x per week
- Cleanliness/RP Protection = improved machine and sight window cleanliness
- Local Support and Service = routine coolant monitoring

* Improvement percentages compared to incumbent product.



LUBRICUT 5458

METAL WORKING FLUID



Camshaft End Pieces

Hand Tools

Housings

Spindles and Shafts

Manifolds

LUBRICUT 5458 COOLANT MONITORING REPORT - MACHINE ID: C2

Sample Date	11/1/2017	11/27/2017	12/8/2017	1/11/2018	2/12/2018
Concentration (% Refract)	16.2	13.9	14.1	11.8	10.2
Refractometer (BX-TC)	10.1	8.7	8.8	7.4	6.4
pH	9.2	9.2	9.2	9.1	9.3
Conductivity	2792	2421	2879	2354	2230
Rust Test (Cast Iron)	nil	nil	nil	nil	nil
Free Oil (%)	0.3	0	0.3	0.3	0.3
Sediment	trace	nil	trace	trace	trace
Bacteria (10 ⁶ CFU/ml)	0	0	0	0	0
Fungus (10 ⁶ CFU/ml)	0	0	0	0	0

WATER PROFILE

Source	City
pH	7.7
Conductivity	312
Total Hardness (ppm CaCO ₃)	122
Total Alkalinity (ppm CaCO ₃)	115
Calcium Hardness (ppm CaCO ₃)	74
Chloride (ppm Cl)	22

MACHINE C2 - CLEANLINESS

