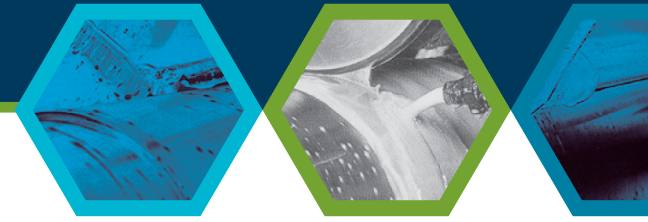


LUBRICAST PL 14

METAL WORKING FLUID



CUSTOMER: INDUSTRIAL DIE CASTING AND TOOLING COMPANY

PRODUCT

Lubricast PL-4 C is a heavy duty, high viscosity product that contains graphite. It is an oil based product that incorporates high-temperature lubricity additives. This combination provides the wetting, film strength and maximum protection required for the plunger tips and shot sleeves.

BENEFITS

- Consistent shot-to-shot profile
- Low smoke and flame
- Excellent lubricity to protect shot sleeve and plunger tip
- Reduced porosity and outgassing

PROCESS AND EQUIPMENT

Industry/Market	Industrial
Product Type	Die Cast Lubricant
Product Number	1308400000
Machinery Involved	LK 1800 ton Die Cast Machine, 6" Copper Beryllium Tip
Description of Environment	Foundry
Volume Used	5,000 gallons
Date of Use	Testing from Q4 2015 to Q1 2016
Documented Cost Savings	\$10,000 - \$15,000

▷ DESCRIPTION OF PROBLEM

Seeking to improve cleanliness, reduce usage, and maintain or improve current tip life.

▷ SOLUTION

The incumbent product, had a relatively high graphite content for high temp. lubricity. Since graphite is extremely dirty and produces black smoke, I chose the Lubricast PL-14, our graphite free and slightly more viscous product. The Lubricast PL-14 contains high temp lubricity additives in place of the graphite. By moving to a more viscous product, we reduced dripping time and overall usage by ~20% (adjusting for machine utilization). Tip life remained the same and cleanliness improved drastically.

▷ CUSTOMER TESTIMONIAL

Maintenance was extremely happy by the improved cleanliness since they constantly work on these machines. Cost savings was received well by management.