

# Honing Safely with CareCut ES 3

## POWER GENERATION (USA)

Gas and Steam Turbines

Castrol CareCut ES3

**ANNUAL SAVINGS: \$17,718**



### THE SITUATION

A major power generation equipment manufacturer was having multiple issues with their honing fluid. The issues included high safety risk, poor sump life, elevated maintenance costs, high fluid price and high usage. The customer was replacing the fluid and filters more frequently than necessary. The honing oil had a low flash point and was combustible, which created a fire hazard risk to the operators.

### BEFORE

- Sump life of 6 months
- Frequent filter changeouts
- Elevated price per gallon and high usage
- Equipment/downtime costs of over \$8,000 annually

### AFTER

- Sump life of 12 months
- Improved filter life
- Lower price per gallon and reduced usage
- Equipment/downtime costs of only \$300 annually

### THE SOLUTION

- **Fluid Costs:** Reduction in price and lower oil usage saved money right away.
- **Safety:** Conversion to CareCut ES 3 eliminated the fire hazard that existed with the previous oil, due to the higher flash point. This led to improved operator acceptance.
- **Maintenance/Downtime:** Eliminated nearly all costs associated with maintenance and downtime.
- **Sump Life:** Sump life has gone from 6 months to 12 months. This has significantly reduced waste treatment costs from \$1,540 to \$330 annually.

- **Reduction in oil usage**
- **Doubled the sump life**
- **Drastically reduced maintenance costs**

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## RECOMMENDATIONS

The customer hones alloy steel (CrMoV) turbine housings and were using a combustible honing fluid that created safety risks. Castrol offered a higher performing honing oil with improved flash point and lower mist. This fluid technology provides superior lubricity properties, excellent filtering ability and great safety properties.

## CONCLUSION

CareCut ES 3 has delivered value across the board by reducing costly maintenance/downtime issues, eliminating safety concerns and improving sump life while decreasing fluid usage.

**The result is much less hassle and over \$17,000 in annual savings!**



## OTHER POTENTIAL APPLICATIONS

CareCut ES 3 is a high performance, multi-metal compatible, synthetic oil for general machining, broaching, honing and gear manufacturing. Its high flash point and low mist qualities improve the work environment. Cutting oil life is extended due to its good filtering properties and high oxidation stability.

	BEFORE	CASTROL
Annual Fluid Cost	\$16,500	\$7,700
Waste Treat Cost	\$1,540	\$330
Equipment Cost	\$3,919	\$201
Downtime Cost	\$4,095	\$105
TOTAL COST	\$26,054	\$8,336
SAVINGS	-	\$17,718