

Alusol AU 70 Increases Productivity

AEROSPACE (USA)

Aerospace Parts Machining

Castrol Alusol® AU 70

15% Improvement in Tool Life and Cycle Times



THE SITUATION

An aerospace job shop was using a premium coolant with great success. Continuous improvement engineers wanted to compare tool life and cycle time of their existing coolant with Castrol's newest high performance fluid, Alusol AU 70.

They focused on their most difficult alloys including Inconel 718, Waspaloy, and Rene 41 running on Puma (Doosan), Schiess, and Century machine tools.

BEFORE

Using premium coolant:

- Good machining performance
- Great sump Life
- Great oil rejection
- Decent carry-out
- Run at **11% concentration**

AFTER

Using Alusol AU 70:

- Reduced usage
- Run at **8% concentration**
- **Reduced cycle time** by 15-20%
- **Increased tool life** by 15-20%

THE SOLUTION

Striving to improve operations led this customer to evaluate Castrol's top performing coolant.

Alusol AU 70 provided everything this customer was looking for:

- Exceptional cleanliness
- Long sump life
- Great part finishes
- Reduced usage
- Excellent machine compatibility

- **Improved productivity**
- **Reduced usage**
- **Great part quality**
- **No lost production time**

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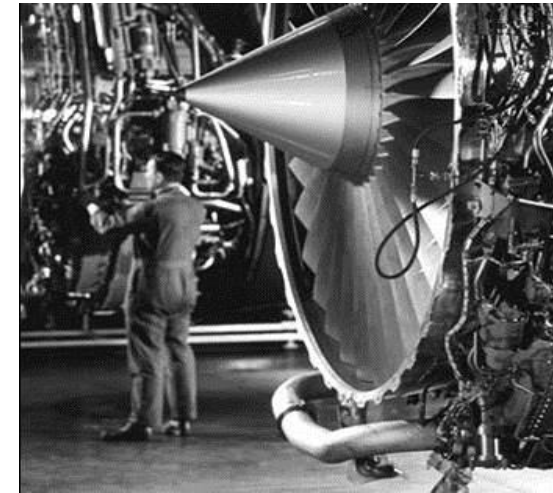
CONCLUSIONS

The customer is very happy with the incremental improvement in performance of Alusol AU 70 over the previous fluid.

Reducing concentration from 11% to 8% plus reduced carry-off on the chips & parts resulted in lower fluid consumption. This easily overcame the increased cost per gallon for the higher performing coolant. Improved tool life and cycle time of 15-20% put \$ right to the bottom line*.

Operators widely accept the fluid, and sump life is nearly indefinite.

This facility is constantly challenged by their customers (Pratt & Whitney, GE, Honeywell) to improve productivity, and Alusol AU 70 helped them achieve that.



OTHER POTENTIAL APPLICATIONS

Alusol AU 70 is a great choice for machining and grinding tough workpiece materials. It has excellent lubricity, with EP additives to prevent burning and tool loading. Aerospace alloys and high alloy steel components are typical materials that call for the high performance of AU 70.

*Note: Due to proprietary reasons, the customer could not share key cost data but only % savings..

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