



Industrial Fluid Systems

Maybar Annual Cost Savings

1. Complete elimination of filter elements at a cost of \$90/ea. and the 4 to 6 hours of down time per week required to change them has provided a significant cost savings. Based on the cleanliness of the centrifuged oil, the filter cartridge **was completely removed** from the system.

Estimated annual savings: **2filters/week x 52weeks x \$90/element = \$9,360**
5 hrs./week x 52 weeks x \$35/hour = \$9,100

2. With the centrifuge operational the hone is shut down **once a year** for cleaning, not every 2-3 days. Cleaning requires (1) 8 hour shift to complete.

Estimated annual savings: **16 hrs. x 52 weeks x \$35/hour = \$29,120**

3. Hone stones life (\$480/set) went from 2 weeks to 6 weeks. Centrifuging the oil and the 20 gallon centrifuge reservoir remove heat from the process; as a result the temperature of the hone tooling, oil and the part has been reduced from 200F down to 120F which has greatly extended the stone life.

Estimated annual savings: **50% x (26 sets – 9 sets) x \$480/set = \$4,080**

4. Production went from 40 parts/shift to 120 parts/shift. The cycle time dropped from 6 minutes/part to 2.5 minutes/part and the hone now runs one shift instead of three. There are many factors that affect cycle time and the centrifuge cannot take all the credit. Lowering the temperature of the oil/part makes loading and unloading the part faster. A lower temperature also makes holding tight tolerances easier.

Estimated annual savings: **30% x 2 Shifts x 8hrs./shift x 52 weeks x \$35/hour = \$8,736**

5. Clean oil is available at all times to the hone tooling. The centrifuge system processes oil at 4.5 gallons per minute drawing it from the bottom of the hone's reservoir. The oil pump feeding the hone operates at a maximum of 4.5 gallons per minute drawing from the middle of the hone's reservoir.

Total Estimated annual savings: **\$60,396**

ISO 14001 CONSIDERATIONS

- The centrifuge has eliminated the use and disposal of filter elements.
- Centrifuge sludge, primarily stainless steel, is now collected and sold as scrap metal.
- The generation of waste oil has been reduced to a minimum.

Contact IFS today to find out how we can help you maximize your fluid performance and minimize costs.