INDUSTRIAL FLUID SYSTEMS

The plant has over 100 machine tools running on four grades and blends of cutting oil. Cleaning out a reservoir meant pumping out the oil, cleaning out the chips and pumping the same oil back in the machine. One oil was collected and recycled off site but cost were becoming prohibitive.

System Requirements

- Provide a turnkey system to process one 320 gallon batch / day of cutting oil
- Remove all free water and solids down to 5 micron
- Filter non metallic particles down to 15 microns.
- Provide hardware required to add EP additives and blend mineral seal and cutting oils.
- Provide viscosity measuring device to check viscosity
- Develop a process for the operators to run the system
- Develop a plant layout and assist in installation.

Equipment Provided

- 600 gallon processing tank
- 15 GPM feed/blending pump with strainer and filter.
- High Speed Disc Centrifuge
- 12 Kw heater w/PID control
- Duplex bag filter w/15 micron bags
- PLC controls w/ Touch Screen
- Complete Documentation with Spare Parts List
- Runoff & Training at the Customer Plant

Initially, the goal was to replace off site recycling of one oil which was becoming more expensive, with inhouse recycling. This would reduce cost and enable the plant to recycle more oil. Machine reservoir could be drained, cleaned and refilled with recycled oil instead of contaminated oil.

Application testing at IFS established that at least two other oils could be recycled. As the project progressed the requirements grew to include: 1. Generate 350 gallons a day of clean usable oil. 2. Process cutting oils, grinding oils and mineral seal oil. 3. Provide the hardware required to add EP additives and blend mineral seal oil with cutting oil.
Industrial Fluid Systems developed a process and built a system that achieved these requirements. From initial conversations to the delivery of a turnkey system took 6 months to complete.

Prior to quoting this system an application study was done to establish the processing rate, equipment sizing, and oil quality that could be obtained. This study was u
the system cost. Payback was less t

INDUSTRIAL FLUID SYSTEMS
22200 Ryan Road
Warren, MI 48091
Phone: 800-343-8106
Fax: 586-754-8284
www.industrialfluidsystems.com