Contamination is a fact of life in many mill systems. Removing contamination and maintaining oil temperature will contribute greatly to optimum lubrication with correct oil viscosity.

SKF has designed two units to enhance oil lubrication of industrial machines. SKF-OCU-XX models are used for applications where only filtration is required. SKF-OCU-WAC and SKF-OCU-AIC models also include a cooler to lower the operating temperature of lubricating oil. All these units act in a side stream (kidney loop) configuration.

Low-volume off-loop or kidney loop filtration and cooling systems protect oil, extending its useful service life. Most importantly, wear and premature failures are virtually eliminated. Kidney loop filtration and cooling can be used effectively in many applications such as large bearing housings, compressors, turbine systems, vacuum pumps and gearboxes. It can be useful on machinery where the existing filtration is not satisfactory or does not exist.

The unit is installed on the machine. Access ports should be located on opposing sides of the oil sump, so that suitable oil circulation is possible. Once connected to the sump, bearing housing, gearbox, etc, the system is ready for continuous operation. The design is fully integrated with a minimal number of connections. There is very little chance of error and, apart from periodic filter changes, there is no need for regular maintenance.

SKF Oil Conditioning Unit helps to protect your machinery from unexpected failures. The solution helps to extend machine service life by reduced wear and improved lubrication.

Hydraulic diagrams

SKF-OCU-WAC
1 Motor, 2 Pump, 3 Filter, 4 Clogging Indicator, 5 Safety valve, 6 Cooler

SKF-OCU-AIC

SKF-OCU-XX
Options
• Electrical clogging indicator
• Temperature transmitter with display
• Pressure transmitter with display
• Manometer
• Thermometer
• Shut-off valve before unit
• Flowmeter (SKF Flowline or SKF Safeflow)
• Moisture transmitter

Options with water cooler (WAC)
• Self-acting water control valve
• Automatic water control valve including PID controller

Options with air cooler (AIC)
• Thermostat
• Frequency converter for air cooler

Size recommendation

<table>
<thead>
<tr>
<th>Size of oil reservoir/litres</th>
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<th>OCU-30</th>
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Viscosity and temperature limits

1. Plot oil viscosity in centistokes at 40 °C and 100 °C
2. Draw straight line through points
3. Read off centistokes at any temperature of interest

OCU order structure

Example: SKF-OCU-5-P-400-WAC
SKF-OCU-A-B-C-D

SKF-OCU
Flowrate
A 5/10/30
B P = Ultipleat SRT
Motor voltage *
C 400 = 400/690 V, 50 Hz
Cooler
D WAC = Water cooler
AIC = Air cooler
XX = No cooler

* Other motor voltages available on special request

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