## AUTOMATION APPARATUS for FILTERABILITY OF HYDRAULIC FLUIDS

- Fully Automated Apparatus
- Conforms to AFNOR NF E 48-690 and 48-691
- Windows PC Controlled

Model 377-1 and Model 377-4 Hydraulic Oil Filterability Apparatus are 1 and 4 position, respectively, fully automated analyzer conforming to the AFNOR NF-E 48-690 and 48-691 test methods.

Each of the test positions is independently controlled by a Windows PC (not supplied). The proprietary software records the applied pressure, the first fluid drop collected, the level of fluid collected over time, and the temperature of the filtered sample. Data is stored up to the capacity of the hard drive and may be retrieved for spread sheet analysis, or downloaded to a LIMS.

Each position has a metal pressure container (ID 35 mm and 500 mL volume) with a screw on pressure cap and equipped with a 47 mm filter support. It can be easily disassembled for quick cleaning.

The first drop of the filtered sample is electronically detected and the level of the collected filtrate is recorded. In addition to detecting the first drop filtrate, a non-contact detector measures the filtered fluid level at 50 mL, 100 mL, 200 mL, and 300 mL.

so for Methods:		
IP	448	
ISO	13357	
NF	E 48-690, 48-691	

After the operator fills the test oil into the pressure vessel, and presses start, the full operation is automated to the completion of test. An alarm sounds when the test is completed.



▲ Model 377-4

## BOTTLE TUMBLER for HYDROLYTIC STABILITY OF HYDRAULIC FLUIDS

- Conforms to ASTM D2619 Test Method
- Temperature Range 30° to 110°C
- Temperature Stability of ±0.5°C

Model 212-6 and Model 212-12 are heated ovens for rotating six and twelve 200 mL bottles, respectively, at 93°C. The temperature stability of ±0.5°C is maintained by digital indicating PID controller.

The bottles are rotated at 5 rpm as specified by ASTM D2619. The rotational speed is digitally displayed and adjustable. An onoff switch is provided for the rotating rack. The rotating rack firmly holds sample bottles. The top opening insulated cover allows easy access.

The temperature uniformity is maintained by a forced air blower. A timer is provided that sounds a continuous alarm when the selected time has elapsed and the rotation is stopped.



