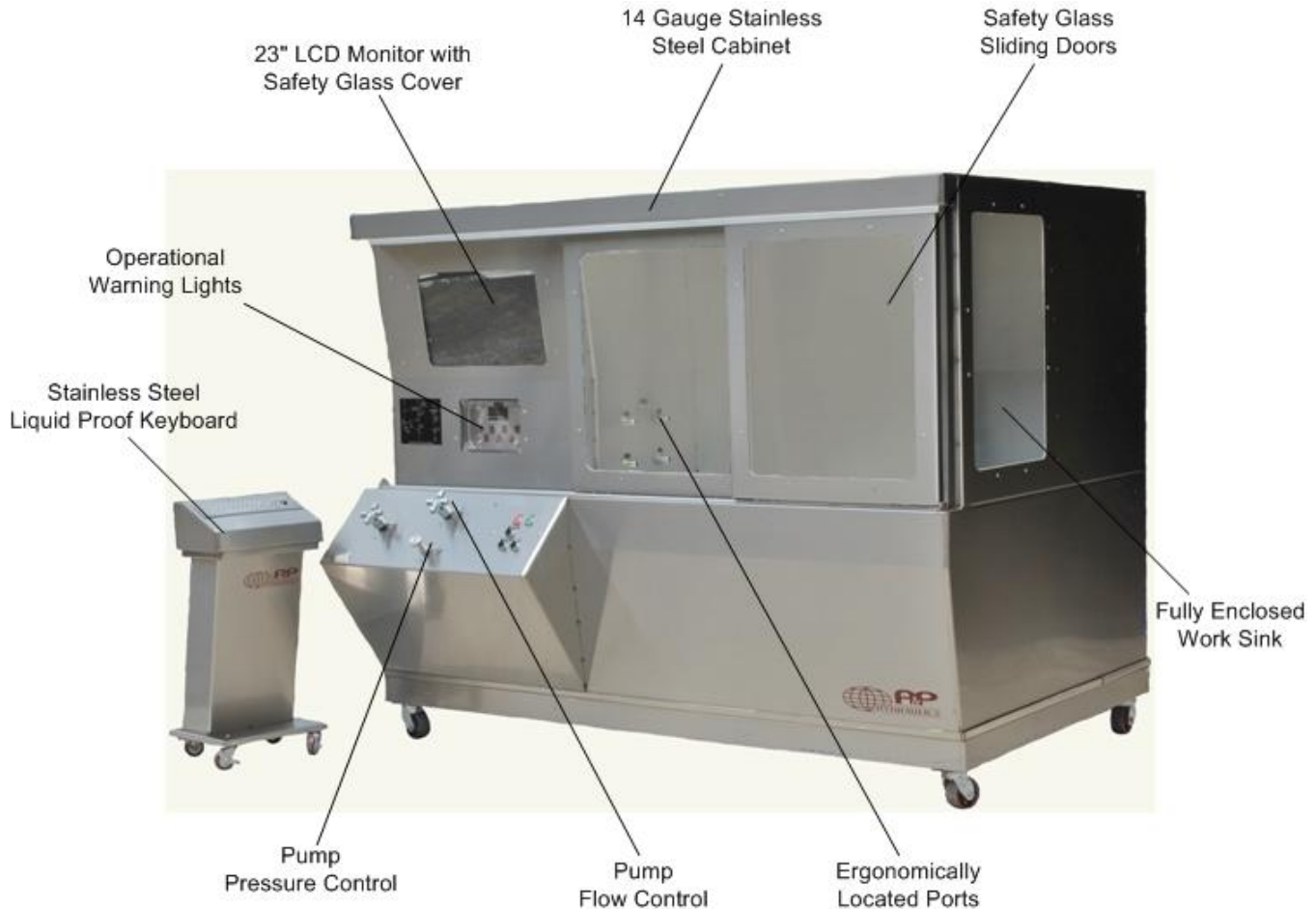


# HYDRAULIC TEST STAND WITH COMPUTER MONITORING AND DATA ACQUISITION (APD<sup>2</sup>)

970  
Series

2 Year  
Warranty

*APD<sup>2</sup> Simultaneously Measures Flow, Pressure and  
Temperature with a Straightforward Method of Monitoring  
System Parameters Complete with Data Acquisition*



Model 07-973-05

## **APD<sup>2</sup> Monitoring System with Data Acquisition:**

- Will Save Time and Money
- Insure Compliance with FAA Regulations and OEM Test Requirements
- Provides a Convenient and Easy to Understand Method of Testing and Reporting
- Produces Accurate Records for Stored Data for FAA Audit Compliance and Accountability
- Eliminates Hard to Support Component Testing Procedures
- Easy to Interpret Strip Chart That Displays Pressure, Flow and Temperature Simultaneously



9283 Industrial Blvd. Leland, NC 28451 USA  
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ap-hydraulics.com

# HYDRAULIC TEST STAND WITH COMPUTER MONITORING AND DATA ACQUISITION (APD<sup>2</sup>)

## 970 Series

### STANDARD FEATURES:

- Panel Mounted Pump Controls for Ease of Operation and Safety
- Safety Glass Sliding Doors with ¼" Tempered Glass with Heavy Duty Door Rollers and Rails
- Complete Pump Pressure Adjustment (450 – 5000 PSI)
- Complete Pump Flow Adjustment (0 – Full GPM)
  
- **Five Pumps**
  1. Oilgear® Pressure Compensated Pump
  2. High Pressure Hand Pump (10,000 PSI)
  3. Work Sink Drain Pump
  4. Automatic Nano Filtration Pump
  
- **High Pressure Hand Pump**
  1. Digital Pressure Gauge (.25% Accuracy)
  2. Pressure Release Valve
  3. Dedicated Port
  
- **Super Clean Filtration** – Industry Leading Filtration Ensures Quality While Increasing Aircraft Component Life and Decreasing Aircraft Filter Changes
- High Efficiency, Non-Bypass Pressure Filter (3 Micron Absolute)
- Reservoir Kidney Loop Filter (3 Micron Absolute)
- Sink Drain Filter (3 Micron Absolute)
- Exclusive Automatic Nano Filtration System (.25 Micron Absolute)
  
- **4-Way Directional Flow Control Valve**  
Electrically Operated with Port Indicator Lights for Testing Cylinders
  
- **Calibration**
- Calibration parameters are stored in the electronic interface and the software automatically reads the calibration parameters from the device when launched
- Operator can adjust the sensor parameters during calibration for the correct accuracy needed
  
- **Software Parameters**
- Main screen displays strip chart enabling the hydraulic technician to have a more in depth understanding of the operation/test procedure and troubleshooting of the component under test
- Color coding of the parameters are easily read

- **Software Includes**
  - Viewing of Graph History
  - Displaying and Hiding of Individual Graph Plots
  - Adjusting Graph Scale
  - Changing Alarm History
  - Data Acquisition
  
- **Operational Warning Lights**
  - 1. Pressure Filter Condition LED Indicator
  - 2. Kidney Loop Pump Filter Condition LED Indicator
  - 3. Reservoir Low Level LED Warning Indicator
  - 4. High Fluid Temperature LED Warning Indicator
  - 5. Nano Filter Condition LED Warning Indicator
  
- **Reservoir Kidney Loop Pump**
  - Continuously Filters Fluid
  - Continuously Cools Fluid
  - Automatic Oil Temperature Control
  
- **Oil Polishing System**
  - Extremely Clean Nano Filtration with Automatic Timer and Operation LED Indicator Light
  
- **Additional Features**
  - All Welded, 14 Gauge B3 (Brushed Finish) Stainless Steel Cabinet
  - Illuminated Work Area Provided By The Over Head Work Sink Lights
  - Easy Access Fluid Sample Port to Meet Quality Parameters
  - Guaranteed No Leaks
  - Safety Drip Pan Completely Covers Bottom
  - Work Sink with Perforated Metal Grating
  - Heavy Duty All Welded 1/4" Thick Wall Tubing Frame with Fork Lift Brackets
  - Easy Maneuvering Ensured By Two Fixed and Two Swivel Castors with Stability Provided By the Heavy Duty Floor Lock
  - Work Sink Drain Pump with Filter (4 GPM)
  - Durable Laser Engraved, Aluminum Placards
  - Panel Mounted Operational Instructions
  - Current Pressure Gauge and Flow Meter Certificates of Calibration
  
- **Safety Features**
  - High and Low Pressure Indication Alarm
  - High and Low Flow Indication Alarm
  - High and Low Oil Temperature Indication Alarm
  - System By-Pass Relief Valve (7500 PSI)
  - Safety Glass Doors to Protect Operator
  - Isolated Work Sink – No Hydraulic Controls Located with in Sink Area

### Dimensions:

Model Series 07-972-\*\*, 07-973-\*\*, 07-974-\*\*:

Length 100 in (254 cm), Width 62 in (157 cm), Height 80 in (203 cm)

Model Series 07-975-\*\*:

Length 120 in (305 cm), Width 80 in (203 cm), Height 80 in (203 cm)

### SPECIFICATIONS:

SERIES MODEL	PUMP PRESSURE PSI (bar)	MOTOR HP (kw)	PUMP FLOW		WEIGHT Lbs. (kg)
			50 Hz GPM (lpm)	60 Hz GPM (lpm)	
07-972-**	450 - 5000 PSI 30 - 340 bar	50 HP 37 kw	17 GPM 65 lpm	20 GPM 76 lpm	3900 lbs 1775 kg
07-973-**	450 - 5000 PSI 30 - 340 bar	100 HP 75 kw	34 GPM 126 lpm	40 GPM 150 lpm	4400 lbs 1996 kg
07-974-**	450 - 5000 PSI 30 - 340 bar	150 HP 112 kw	50 GPM 189 lpm	60 GPM 227 lpm	5400 lbs 2449 kg
07-975-**	450 - 5000 PSI 30 - 340 bar	200 HP 150 kw	66 GPM 250 lpm	80 GPM 302 lpm	6100 lbs 2767 kg

\*\*Model by Fluid Type: Mil-H-5606 = 02 Mil-H-83282 = 03 Skydrol = 05



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# HYDRAULIC TEST STAND WITH COMPUTER MONITORING AND DATA ACQUISITION (APD<sup>2</sup>)

**970  
Series**

## FEATURES:

- **Software**
- The APD<sup>2</sup> was developed utilizing Flo-Check® USB Hydraulic Analyzer which provides a software for real-time graphical and digital interface for monitoring and/or recording pressure, temperature, and flow rate parameters
- View real-time pressure, temperature, flow rate, and power measurements for instantaneous readings
- Permits the data to be saved for export into Microsoft® Excel spreadsheets
- Logs 12 hours of data
- Records all alarm history
- User friendly software that allows hydraulic technicians to utilize the software with minimal training for a seamless start-up.
- **Hardware**
- APD<sup>2</sup> Is a computer based test control and acquisition module with the latest technology:
- Gateway® SX2803-56 Central Processing Unit (CPU), Windows® 7 Operating System, Microsoft® Excel Software
- 23" LCD Display Monitor with tempered glass protective housing
- Stainless Steel Keyboard Podium
- Industrial strength keyboard featuring stainless steel keys and fascia with the integration of a ultra rugged trackball
- Hardware is housed in a stainless steel protective cabinet



## SPECIFICATIONS:

- **Flow**
- Accuracy  $\pm 1\%$  of reading @ 32 cSt
- Repeatability  $\pm 0.2\%$
- **Pressure**
- Accuracy  $< \pm 0.5\%$  BFSL
- Stability  $< \pm 0.25\%$  of full scale
- Response Time 0.2 milliseconds
- **Temperature**
- Calibration Error (25 °C)  $\pm 1$  °C
- Absolute Error (over full range of sensor, 0 to 150 °C)
- Repeatability  $\pm 0.1$  °C

