

# HYCOM DATASHEET

TEST BENCH FOR HYDRAULIC PUMPS AND MOTORS Maximum output power up to 240kW

### **FEATURES**

- COST EFFICIENT DESIGN DUE TO LOW INPUT POWER REQUIREMENT OF MAX. 120KW
- TESTING OF OPEN AND CLOSED LOOP PUMPS AND MOTORS UP TO 265KW HYDRAULIC POWER
- PRESSURE TESTING UP TO 420 BAR
- OIL FLOW VALIDATOIN TESTING UP TO 600 L/MIN INCL. FLOW CONTROL
- INTEGRATED VARIABLE SPEED CONTROL
- EASY TO OPERATE CENTRAL PLC CONTROL AND DATA LOGGING

#### POWER

#### **PUMP TYPES**

INPUT POWER 120KW OUTPUT SHAFT POWER 265KW TORQUE 2.060 NM UP TO 750 CC/REV 0 .. 420 BAR OPEN / CLOSED LOOP

#### **CONTROL OPTIONS**

PRESSURE FLOW SECONDARY

## DESIGN

#### DRIVE

- Variable speed drive e-motor (VFD)
- 400VAC @ 50Hz
- 100 2400 RPM

### **HYDRAULICS**

- Hydraulic reservoir content 1.200 Liter with:
  - Fluid level and temperature control
  - Air dryer / breather
  - Suction valve incl. proximity switch
  - Inspection cover
  - Drain valve
  - Filling connection
- Hydraulic pumps
- Control Manifold
- Hydraulic filtration:
  - Pressure filter
    - Return line filter
    - Offline fine filtration
- Hydraulic oil- air cooler

#### **SENSORS**

- Pressure sensors 0 .. 600 bar (±0,25% FS)
- Temperature sensor
- Flow sensors (turbine type)
- RPM sensor
- Condition monitoring

### **CONTROL SYSTEM**

- HYDAC TTC-580 PLC with High Performance 32-bit dual-core lockstep CPU
- PC control interface for monitoring and logging of:
  - Flow
  - Pressure
  - Speed
  - · Oil Cleanliness level
  - Graphic visualization in GUI and logging functionality
  - Possibility to export data to several formats

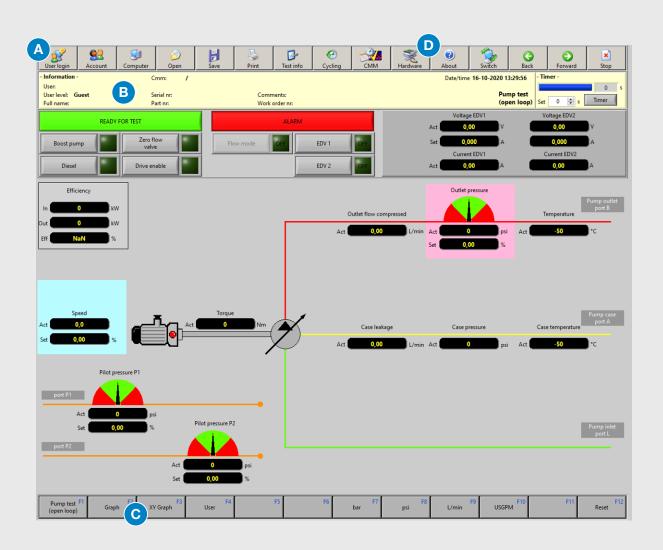
### **MECHANICAL DESIGN**

- Solid and robust design with large access sliding doors to testing area
- Spacious and well accessible working area for connecting the pump to the test bench
- Safety doors with interlock to testing operating interface for safety control
- Electrical connection plugs and pressure read out directly at pump test location
- Modular pump mounting interface with various flange adaption interfaces
- Extendable oil leak tray below pump test area
- Large access doors and hatches to HPU room and control cabinet
- Customized color and company logo on request



(HYCOM) HYDRAULIC TEST BENCH

# **USER INTERFACE**



- A PC control interface with dual screen visualization
- B Test sequence recording per customer or pump type
- C X-t and X-Y graphical multi-channel logger, free configurable, logging interval 5ms
- D Sensor calibration and due date monitoring



# **TECHNICAL DATA**

### GENERAL

Main power supply Overall dimensions Hydraulic reservoir Noise level Connection socket 400V - 50Hz3.900 x 3.000 x 2.800 (L x W x H) 1.200 liter ISO VG32/46 Less than 80 dbA at 1 meter distance

### HYDRAULIC

- Maximum flow 525 l/min
- Maximum 420 bar operating pressure at reduced flow
- High pressure filtration 3µm
- Return line filtration 10µm
- Offline conditioning filtration 3µm
- All filters with electrical visual clogging indicators

### **HYDRAULIC**

Α	: Pressure 1	SAE 2"
F	: Return	SAE 2"'
В	: Pressure 2	SAE 2"
PP	: Pilot 1	G1⁄2"
PP1	: Pilot 2	G1⁄2"
PP2	: Pilot 3	G1⁄2"
Y	: Drain	G1"

### MEASUREMENT

Pressure Gauge P1

0-400 bar Accuracy 1% of full scale

Pressure Gauge P2

0-400 bar Accuracy 1% of full scale

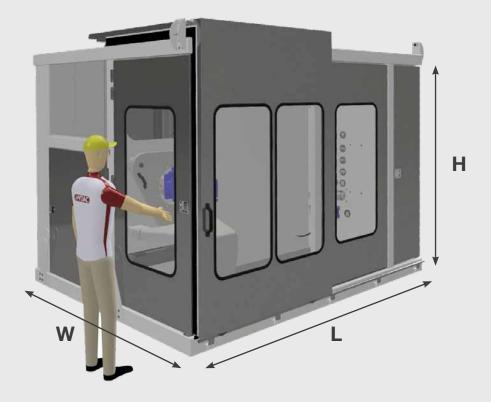
Digital readout of actual flow and pressure at ±0,25% of full scale

### POWER

Supply Current 3 Ph.+N+Pe 380/420 V – 50/60 Hz, other on request 230 A



## **DIMENSIONS & WEIGHT**



LENGTH	3.230 mm	
WIDTH	1750 mm	
HEIGHT	1625 mm	
WEIGHT	approx. 5500 kg	

# **POSSIBLE OPTIONS**

- Z = Quick disconnect couplings to connect hoses
- FAM = Integrated purifier for filtering, degassing and dewatering

Other options and accessories are available upon request.



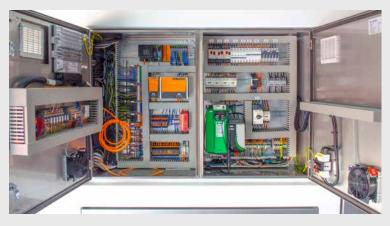
## IMAGES





## IMAGES











HYCOM B.V. PART OF HYDAC INTERNATIONAL

P.O. BOX 1079 | 7301 BH APELDOORN ANTILLEN 43 | 7333 PE APELDOORN

T +31 88 0597 200

E INFO@HYCOM.NL | W WWW.HYCOM.NL