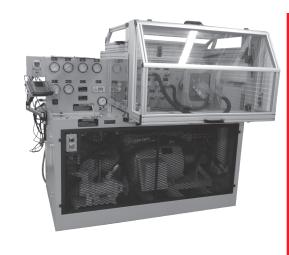
### Hydraulic Test Bench HTB



#### **Features and Benefits**

- An ingenious universal mounting bracket makes mounting pumps and motors on the bench a simple, quick operation
- Mounting plates are furnished to accommodate flange-mounted and foot-mounted pumps or motors
- Drive adapter equipment includes inserts for keyed shafts, an insert chuck and a universal drive shaft
- Quick disconnect porting on the bench provides convenient hook-up for test components
- Two complete operating manuals are supplied with each bench
- Kits and spare parts available for upgrades and maintenance











The Schroeder Model HTB hydraulic test bench is the ultimate diagnostic tool, capable of thoroughly testing a vast array of new or rebuilt components and subassemblies prior to their installation in a working system. Test bench instrumentation has been designed to make diagnosis fast and accurate, with virtually no requirement for connecting external instruments. The bench panel includes a digital flow gauge, a tachometer to measure the speed of tested pumps or motors, and a reservoir temperature gauge. Individual gauges measure pressure on the test bench main pump, the pump or motor being tested, the test bench load pump, the cylinder and valve pressure port, and the test bench super charge pump.

Every HTB includes efficient Schroeder hydraulic filters to keep the bench oil at optimum cleanliness, providing assurance that newly rebuilt components will not be subjected to harmful levels of dirt. To keep filters operating at peak efficiency, the instrument panel includes a red pilot light that signals the operator when any bench filter needs a new element.

These benches have been refined for over 50 years by Schroeder engineers, based on the comments and requests of over 1,000 test bench owners. The versatile hydraulic circuitry present in each of the three models can shorten troubleshooting time and take the guesswork out of diagnoses. Current models are powerful, compact units that pay for themselves quickly in saved maintenance time and expenses.





- Suction and pressure hose and fittings group (contains hose connection with female quick disconnects on both ends, plus a series of separate national pipe thread, straight thread, and SAE four-bolt flange adapters, ranging in size from 3/8" through 2", equipped with male quick disconnects)
- Oil cooler
- Solenoid and pilot-operated valve test group
- Spline shaft adapter kit
- Jib Crane Group
- Digital Instrumentation Package
- Water Cooled Heat Exchanger

- Filtration Group
- Safety Enclosure Group
- High Pressure Intensifier Circuit
- Bidirectional Pump Test Circuit
- HMG Digital Electronic Group
- Air Cooled Heat Exchanger
- 25 gpm Case Drain Meter
- TCM Kit

### Description

Accessories

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			, -		
			_		

НТВ

KLS, KLD

**X Series** 

**Appendix** 



## **Hydraulic Test Bench**

### **Applications**







**Pumps and motors** can be tested dynamically. Pump and motor testing is aided by the wide speed and torque ranges built into the bench and by the universal mounting bracket and mounting accessories that come with the bench. An open loop hydrostatic variable volume hydraulic system provides the power and speed control for the drive shaft. Motors can be dynamically tested, under load, for operating efficiency. Pumps can be tested for external leakage and volumetric efficiency in either direction, at speeds from 200 to 2400 rpm. The test bench can also be used to break-in pumps and motors to manufacturer's specifications before they are installed in a system.

**Cylinder** leaks are easy to find. Double-acting cylinders may be cycled, and tested for both internal and external leakage at any point of piston travel. Scored cylinder walls and defective packing are easily detected. Single-acting cylinders are tested at maximum stroke.

**Valve** testing time is minimized. Pressures can be set, external and internal leakage spotted, flow and pressure data can be generated and checked against operating requirements and overall valve efficiency determined. Optional electrical and pilot pressure supplies are available on the bench for testing solenoid-actuated and pilot-operated valves.

### **Specifications**

	Model HTB-50	Model HTB-100	Model HTB-150	
Speed Range in either direction	200 to 2400 rpm	200 to 2400 rpm	200 to 2400 rpm	
Power Available For testing pumps Expressed torque	275 ft-lbs to 1200 rpm	458 ft-lbs to 1200 rpm (decreasing proportionately to 2400 rpm)	670 ft-lbs to 1200 rpm	
Expressed in horsepower	60 hp at 1200 rpm	115 hp at 1200 rpm (with constant hp to 2400 rpm)	150 hp at 1200 rpm	
Test Pressure	0 to 5000 psi (345 bar)	0 to 5000 psi (345 bar)	0 to 5000 psi (345 bar)	
Test Motor Load Maximum in either direction	275 ft-lbs	458 ft-lbs	670 ft-lbs	
Electrical Drive Motor-230/460V, 1800 rpm; 3 phase, 60 hertz. A start-stop push button is mounted on the bench: Starter(s) islare not included. Customer must advise type of starter(s) and service voltage to be used.	50 hp	100 hp	100 hp and 50 hp	
Hydraulics Main Bench Pump (variable piston)	23 gpm/5000 psi (87 L/min/345 bar)	38 gpm/5000 psi (144 L/min/345 bar)	38 gpm/5000 psi (144 L/min/345 bar)	
Auxiliary Main Pump (variable piston)	N/A	N/A	23 gpm/5000 psi (87 L/min/345 bar)	
Supplemental Pump	20 gpm/2000 psi (76 L/min/138 bar)	20 gpm/2000 psi (76 L/min/138 bar)	20 gpm/2000 psi (76 L/min/138 bar)	
Pressure and Return Ports	1" quick disconnects	1" quick disconnects	1" quick disconnects	
Suction Porting	1" & 2" quick disconnects	1" & 2" quick disconnects	1" & 2" quick disconnects	
Flow Gauge Scales	Digital Readout from 0 to	100 gpm (all models)		
Reservoir Capacity	100 gallons (378 L)	100 gallons (378 L)	200 gallons (757 L)	
General	Full flow 3 micron filtration maintains excellent system cleanliness level; bench includes a 30" x 30" work pan, oil level gauge, fill cap mesh strainer, digital tachometer.			
Bench Dimensions and Weight	62" H x 76" L x 43" W 4100 lbs (1860 kg)	62" H x 76" L x 43" W 4500 lbs (2041 kg)	62" H x 76" L x 55" W 6000 lbs (2722 kg) Auxiliary Power Unit30" H x 50" L x 30" W 900 lbs (408 kg)	

# Hydraulic Test Bench HTB



### How to Build a Valid Model Number for a Schroeder HTB:

**Example:** NOTE: One option per box

Г	BOX 1	BOX 2	BOX 3	BOX 4	BOX 5
	HTB -	100 -	A	– AD	GXXXX = HTB100AADGXXXX

BOX 1	BOX 2	BOX 3	BOX 4	BOX 5
Model	HP	Voltage	Options	Custom Groups
HTB	50	A = 230V 60Hz	A = Water Cooled Heat Exchanger	Add G # for
	100	B = 460V 60Hz	B = Solenoid & Pilot Operated Valve Group	all custom parts & frame
	150	C = 575V 60Hz	C = Jib Crane Group	modifications.
		D = 380V 50H	D = Filtration Group (standard/included on all benches)	
		E = 415V 50Hz	E = Safety Enclosure Group	
		F = 380V 60Hz	G = Bidirectional Pump Test Circuit	
		G = 208V 60Hz	H = HMG Digital Electronic Group	
		H = 220V 50Hz	I = Air Cooled Heat Exchanger	
J = 25 gpm Case Drain Meter		J = 25 gpm Case Drain Meter		
			K = Digital Gauges	
			L = TCM Kit	
			Splined Shaft Group*	
			Hose & Fitting Group*	
			* Not part of BOM structure, listed as separate line item on P.O.	

Number Selection

Model

AS

**EPK** 

**Check Plus** 

НТВ

**RFSA** 

**Retrofit System** 

**AMFS** 

KLS, KLD

**X Series** 

OLF-P

**Appendix** 

NOTES: