



**Schroeder**  
**INDUSTRIES**

Advanced Fluid Conditioning Solutions

PROUDLY MANUFACTURED IN THE UNITED STATES

# HTB SERIES

## Hydraulic Test Bench

The versatile hydraulic circuitry in every Schroeder HTB allows users to perform comprehensive testing of pumps, motors, double or single-acting cylinders, and valves (relief and manually operated).

**FILTER SYSTEMS**

**Volume 1**

## Troubleshooting and testing made easy with Schroeder Hydraulic Test Benches

Schroeder HTB series hydraulic test benches can shorten your troubleshooting time, take the guesswork out of your diagnosis, and let you thoroughly test new or rebuilt components and sub-assemblies before you install them into a working hydraulic system.

Options for testing pilot or solenoid actuated directional control valves are also available.

These benches have been refined for over 60 years by Schroeder engineers, based on the experiences and feedback of over 500 proud test bench owners. Current models are powerful, compact units that pay for themselves quickly in saved maintenance time and costs, as well as improved productivity and bottom line.



## Pumps and motors can be dynamically tested

The HTB contains a hydraulic motor that is controlled via an open-loop, hydrostatic, variable-volume hydraulic circuit, providing flexible testing capabilities in terms of speed, torque and power. For example, motors can be tested for external leakage and volumetric efficiency in either direction. The HTB can also be used to break-in pumps and motors to manufacturer specifications before they are installed in a system.

## Mounting pumps and motors are simple

Mounting test pumps and motors can be performed quickly and simply through flexible componentry.

- A universal mounting bracket and interchangeable mounting plates
- Drive adapter inserts for keyed shafts, an insert chuck, and a universal drive shaft
- A spline shaft insert group kit is also available as an option

## Bench circuit filtration keeps oil clean

HTB circuits include efficient Schroeder Hydraulic Filters to keep its oil at optimum cleanliness, as well as filter element clogging indication directly on the main instrument panel. Therefore, you can perform testing with the peace of mind that components will not be subject to harmful levels of contamination.

## You get more than just hardware

Schroeder wants you to be able to begin cutting your maintenance and test time, and become more productive right away. That's why we furnish a factory-trained technician for a two-day, on-site training session.\* We also maintain an inventory of kits and spare parts so that you can upgrade and maintain your HTB through years of operation.

## Cylinder leaks are easy to find

Detecting cylinder leaks and evaluating cylinder condition (i.e. scoring, seals and packing) is a simple and safe process with the HTB:

- Single-acting cylinders are tested for leaks at maximum stroke
- Double-acting cylinders are tested at any point of piston travel

*\*Training available for scheduling after the HTB is completely installed and commissioned.*

# HYDRAULIC TEST BENCH

## Full instrumentation is included

HTB instrumentation has been designed to make testing fast and accurate, with virtually no requirement for connecting external instruments. Every standard HTB includes a three-scale flow gauge, digital tachometer for measuring test pump or motor speed, reservoir temperature gauge, and dedicated pressure gauges (main pump, main motor, supercharge pump, test component ports).



Instrumentation Panel

## Valve testing time is minimized

The HTB circuitry and instrumentation lets you efficiently perform a variety of valve tests and functions:

- Set relief valves
- Inspect for internal/external leakage
- Capture performance data under variably simulated operating conditions
- Determine overall efficiency
- Optional electrical and pilot pressure supplies are available on the bench for testing solenoid-actuated and pilot-operated valves.



QD Port Panel

## Porting and plumbing make changing test components easy

Quick Disconnect (QD) port panel enables test components to be connected and disconnected conveniently and in minimum time.

An optional hose adapter kit contains hose connections 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". The adapters are equipped with male quick disconnects for easy attachment to the hoses.

## Accessories

- Suction and pressure hose and fittings group
- Solenoid and pilot-operated valve test group kit
- Air-cooled heat exchanger
- Water-cooled heat exchanger
- Spine shaft adapter kit
- Jib crane with hand-operated hoist
- Digital instrumentation package
- Filtration group
- Safety enclosure
- Bidirectional pump test circuit
- HMG data recorder
- 25 GPM case drain meter
- Particle contamination monitoring kit
- Hand-held filtration/fluid transfer system

The **HMG 4000** data recorder is a portable measuring and data logging device. It enables HTB operators to easily collect, visually analyze and transfer measurement data when coupled with the digital instrumentation package.



The **HFS-15 Hand Held Portable Filter** is used as a portable service unit for filling and flushing hydraulic systems, as well as for cleaning in bypass flow. Solid particle contamination as well as free water can be removed by the filter elements.





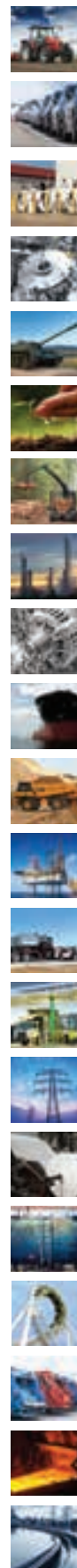


**JOE SAYS:**  
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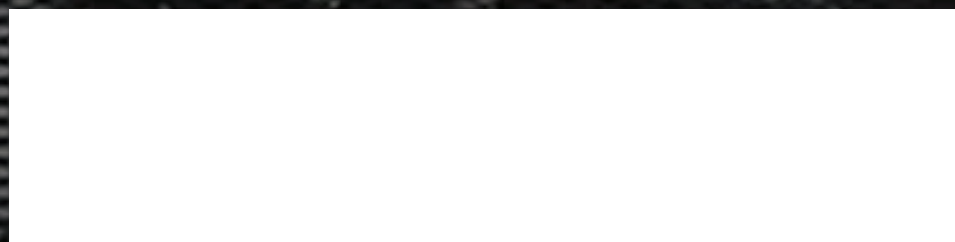
Markets Served



## HTB PRODUCT SPECIFICATIONS BY MODEL

	HTB-50-E	HTB-100-E	HTB-150-E
SPEED RANGE (bidirectional)	100 to 2,400 rpm		
POWER AVAILABLE for testing pumps at 1,200 rpm			
Expressed in torque	275 ft-lbs.	458 ft-lbs.	670 ft-lbs.
Expressed in horsepower	60 hp	115 hp	150 hp
TEST PRESSURE (bidirectional) for testing motors from 0 to 5,000 psi	275 ft-lbs.	458 ft-lbs.	670 ft-lbs.
ELECTRICAL DRIVE			
Motor voltage	230/460V AC / 1,800 rpm / 60 Hz / 3 Ph.		
Nominal power	50 hp	100 hp	150 hp
Operation	Start/stop push button(s) included		
Motor starter	Motor starter(s) is (are) not included; customer must advise type of starter(s) and service voltage		
HYDRAULICS			
Main variable piston pump(s) flow at 5,000 psi	23 gpm	38 gpm	61 gpm (38 gpm [main] + 23 gpm [aux.])
Supplemental vane pump at 2,000 psi	20 gpm		
Pressure and return ports	1" quick disconnects	1" quick disconnects and 2" cam-groove	
Suction ports for testing pumps	1" quick disconnects and 2" cam-groove		
Flow gauge scales	Three scales: 2 to 14 gpm; 8 to 36 gpm; 24 to 100 gpm		
Reservoir capacity	100 gal.		200 gal.
Filtration	3µm (absolute)		
Suction strainer	Magnetic - 20 mesh		
GENERAL	30" x 30" work pan; oil level gauge; fill cap with 70 mesh strainer; digital tachometer		
OVERALL DIMENSIONS	76" x 43" x 62"	76" x 43" x 62"	76" x 55" x 62" (main) + 50" x 30" x 30" (aux. power unit)
WEIGHT	4,100 lbs.	4,100 lbs.	4,100 lbs. (main) + 900 lbs. (aux. power unit)

Visit us online @ [www.schroederindustries.com](http://www.schroederindustries.com) for our complete product offering!



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