

## TEST EQUIPMENT DIVISION

### Injector Testers

#### Automotive Injector Testers



**S400**  
Manual operation, 700 Bar.  
Left or right hand operation with digital seconds timer.



**S400-5**  
Manual operation, 700 bar. Left or right hand operation with built-in S500-1 opening pressure monitor and printer.

#### Portable Injector Tester



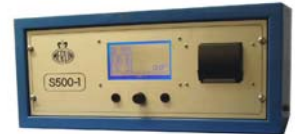
**S31**  
Portable 400 bar injector tester with spray arrester.



**S400A**  
Air operated, 700 bar.  
With built-in S500-1 opening pressure monitor and printer.



**S425A**  
Air operated, 700bar. With built-in S500-1.  
For testing 2-spring and conventional injectors.



**S500-1/R (Retro-fit kit)**  
Opening pressure monitor and printer. 700 bar transducer, includes conversion kit for existing injector tester.



**S300-1**  
Common rail injector test system for Bosch, Delphi, Denso and Siemens injectors.  
(Also suitable for some marine applications)

#### Marine Injector Testers



**S450-1**  
Air operated, heavy-duty injector tester with S500-1 opening pressure monitor and printer.

**S450-1 CR (see MDS-TE 790/2/0810)**  
As above but with capability to test marine common rail injectors.



**S100A**  
Mobile test unit suitable for checking the correct operation of B & W two-stage injectors

**S31 M**  
Marine injector tester ,700 bar.



**QUICK ACTION TEST PIPES & ADAPTORS**  
Various sizes available, details overleaf.

**S400-M, S400-5-M, S400A-M, S425A-M.**  
Marine/industrial versions of S400 series are available with 'V' blocks and 22mm threaded outlet, details overleaf.

The Merlin range of injector testers offer either hand lever or air operated options for the testing and setting of automotive and marine injectors before and after reconditioning.

The operator is able to accurately control fuel flow and pressure in order to perform all tests as detailed in ISO 8984-2, which are nozzle opening pressure, chatter (atomization), spray pattern, seat leakage and back leakage.

The S500-2 opening pressure and back leakage time monitor has been designed for accurate performance testing, production line testing and quality over checking.

**OPTIONAL EQUIPMENT**

- T022-001 Quick action test pipe with M14x1.5 hand-wheel and T022-003 split adaptor (M12x1.5)
- D8727 Vee Clamp assembly.
- SDS400 Perspex spray deflector.
- CAB400 Cabinet for S400 range.
- S300 Common rail test system.

**ADDITIONAL SPLIT ADAPTORS FOR T022-001**

- T022-003 M12x1.5 (A Size)
- T022-004 M18x1.5 (T Size)
- T022-005 M16x1.5
- T022-006 ¼" BSP (Gardner Injectors)
- T022-007 9/16" UNF x 18 TPI
- T022-008 5/8" UNF x 18 TPI
- T022-009 M14x1.5 (long reach)

	S400(M)	S400--5(M)	S400A(M)	S425A(M)	S450-1	S31	S31M
<i>Operation:</i>							
Manual, left or right.	x	x				x	x
Air pump(s).			x	x (2)	x		
Analogue gauge (400bar)						x	
Analogue gauge (700bar)	x				x		x
S500-1 & printer (700bar)		x	x	x	x		
Gauge isolator valve.	x				x	x	x
Trapped volume device.	x	x	x	x	x	x	x
Flow control valve.	x	x	x	x (2)	x		
Digital seconds timer.	x						
<i>Fume extraction:</i>							
Variable air operated.	x	x	x	x	x		
Tank capacity (ltrs).	13	13	13	15	100	1	1
Sight level gauge.	x	x	x	x	x		
14x1.5M outlet thread.	x	x	x	x		x	
22x1.5M outlet thread.	x (M)	x (M)	x (M)	x (M)	x		x
Marine V blocks.	x (M)	x (M)	x (M)	x (M)			
<i>Dimensions LxWxH (cm):</i>							
62 x 77 x 55	x	x					
62 x 77 x 77			x				
71 x 77 x 77				x			
160 x 85 x 136					x		
46 x 26 x 28						x	
92 x 46 x 31							x
Weight (kg):	60	55	65	80	250	9	28

**S500-2**

- Pressure range:- 0 - 700bar, psi, MPa or kgf/cm<sup>2</sup>,
- Timer range:- 0 - 99.9 seconds.
- Accuracy:- Pressure: ±1 bar.
- Time: ±1 second.
- Transducer: ±0.1% of full value.
- Linearity: ±1 bar over full range.

- Memory:-
- Display:-

- Printer:-

- Data store/recall for injector test plans.
- Tick/cross symbols advise user of NOP and back-leak pass/fail.
- Compensation for variations in test oil types and temperature.
- Thermal image printer.

Standard electrical specifications: 240v, 1ph, 50Hz, 110v, 1ph, 60Hz.  
Other supplies available. Please contact our office for further details.

