Fuel system maintenance

Fuel Injector Test Rig

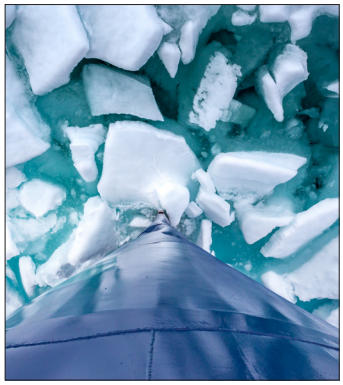
OBEL-P®

VPUD



The VPUD fuel injector test rig series ensures optimal fuel injector performance and helps to avoid unnecessary fuel consumption and particle emissions.
The test rigs are compatible with fuel injectors and safety valves from hundreds of different engine models.
The VPUD series is approved and recommended by leading engine designers like MAN Diesel, Wärtsilä, Rolls Royce and Caterpillar MAK. rs for 2-stroke and 4-stroke engines.







Application areas

- 2-stroke engines
- 4-stroke engines

Key benefits

- VPUD1100 SV for testing slide valve fuel injectors (slide-valve protection system is included)
- VPUD 1100 for testing of traditional valves
- Available in version MKI and MKII depending on engine type
- Digital read out for precise testing and injector adjustment
- Step-by-step test procedure to guide the operator
- Patented build in Safe test technology to prevent damage of costly injectors
- Air powered for fast and precise performance of test unit
- Engine specific adapters for fast set up time
- Valve holders for 150+ different injectors (optional)

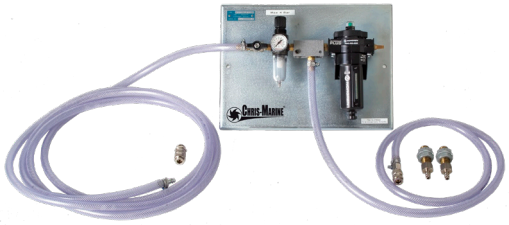
Sustainable engine operation

Regular testing of fuel injector valves is extremely important. Testing helps to reduce emissions, fuel consumption and engine fouling. It saves time and money and means reducing downtime while saving resources. Proper engine care prolongs engine lifetime and is a much more environmentally friendly alternative than replacing liners. It is also more cost-efficient as it means reducing downtime while saving resources



Optional: Test fluid

Test fluid based on a mineral oil designed to meet the requirements of high tolerance fuel injectors. Preserves the fuel injectors, so no cleaning is needed after test procedure. Approved for testing of both 2-stroke and 4-stroke fuel injectors. Protects core parts of pump unit and extends the lifetime of the test rig.



Optional: Oil mist separator

Oil mist separator, for environmental purposes. And better visual inspection of nozzle spray.

Technical specifications

	VPUD 1100	VPUD 1000	VPUD 1100 SV
• For MAN slide valves	NO, valve can be damaged	YES	YES
• If PPMI 1000 is used, can then be used for MAN slide valves	YES	N/A	N/A
• Suitable for engines	Wärtsilä RND, RTA 48-96 MAN 4-stroke	MAN 2-stroke injectors incl. slide fuel valves excl. gas injectors	Conventional 4-stroke and 2-stroke injectors incl. MAN slide fuel valves
• Test procedure	– Injector prefill – Opening pressure test – Nozzle leakage test – Manual operation (for test of 4-stroke engines)	– Injector prefill – Opening pressure test – Nozzle leakage test – O-ring sealing test – Venting /Non-return valve test	– Injector prefill – Opening pressure test – Nozzle leakage test – Venting /Non-return valve test – O-ring sealing test – Manual operation (for test of 4-stroke engines)
• Pressure (bar) Output@Input	0-1100@10, 0-800@7	0-1100@10, 0-800@7	0-1100@10, 0-800@7
• Air consumption (l/min) *Depending on output pressure*	2500-4000	2500-4000	2500-4000
• Hydraulic gauge	Class 1.0	Class 1.0	Class 1.0
• Display	Class 0.2	Class 0.2	Class 0.2
• Pneumatic inlet	1/2" BSP claw clutch female	1/2" BSP claw clutch female	1/2" BSP claw clutch female
• Hydraulic Outlet	1/4" BSP male coupling	1/4" BSP male coupling	1/4" BSP male coupling
• Weight (kg)	90	90	90
• Dimension (LxWxH mm)	560 x 950 x 1525	560 x 950 x 1525	560 x 950 x 1525
• Electric Power supply	1-phase 115/230 V AC	1-phase 115/230 V AC	1-phase 115/230 V AC



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