Fuel system maintenance

Gas Valve Test Rig

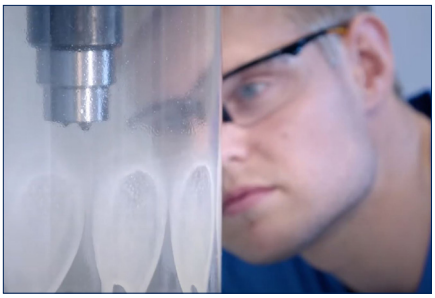
OBEL-P®

VPU 500 GI

VPU 500 GI is a pneumatic/hydraulic test rig designed for testing of gas fuel injectors on 2-stroke engines.
It features a robust design and is suitable for testing gas injector, window and blow-off valve with 300 bar or 400 bar of nitrogen, depending on engine type.

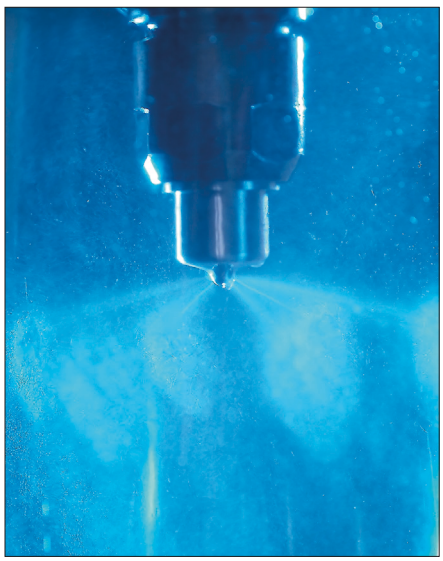


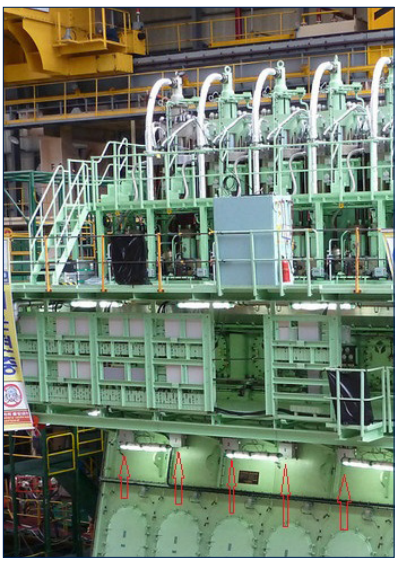
Fuel injector test rig



Application areas

- For MAN B&W gas valves and shut down valves.
- 2-stroke engines
- Onboard
- Workshops





Key benefits

- Easy to operate
- Cost-efficient
- Robust
- Time-saving
- Helps to avoid unnecessary fuel consumption and particle emissions

Sustainable engine operation

Regular testing of of gas fuel injectors 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

VPU 500 GI Features

VPU 500 GI is a pneumatic/hydraulic test rig with a booster for providing a correct simulation of the gas engine. It features a robust design and is suitable for testing gas injector, window and blow-off vave with 300 bar or 400 bar of nitrogen, depending on engine type (a nitrogen pressure bottle must be provided by the customer). VPU 500 GI is delivered with an engine-specific combined valve holder for injector, window, blow-off/purge, and resume valves.

- Booster for providing the high pressure of a gas engine
- Safety valves and sensors fo safe testing
- Easily read result through the gas leakage monitor
- Oxygen removal function

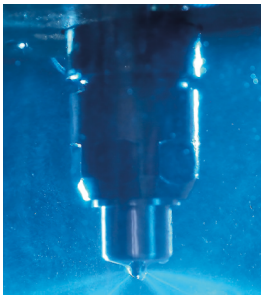
Available tests

- Gas sealing and injector test for injector valve
- Gas sealing test of window valve
- Gas sealing test of blow-off/purge valve
- Gas sealing test of resume valve
- Gas sealing test of bleed valve
- Gas sealing test of block valve



Optional: Oil mist separator

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



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.

Technical specifications

VPU 500 GI	
• Suitable for engines	MAN B&W
• Output pressure	0-440 bar sealing oil 0-200 bar / 0-300 control oil 0-300 bar / 0-400 bar gas (nitrogen)
• Air consumption (l/min)	300-1050 l/min
• Max. flow @bar (G)	1.4 l/min@ 7 bar air input
• Displacement / cycle	4 cm^3
• Max. cycle frequency	350 cycles/min @7 bar input
• Tank capacity	6 l
• Nitrogen consumption	30 l/test Min pressure 40 bar
• Weight (kg)	100 kg empty valve holder 80 kg
• Dimension (LxWxH mm)	560 x 950 x 1525 mm
• Power supply	Single phase 115/230 V AC
• Classification	Gauge: class 1.0

Chris-Marine Headquarters and Subsidiaries

CHRIS-MARINE SWEDEN HEADQUARTERS
Tel: +46 - 40 671 2600
info@chris-marine.com

CHRIS-MARINE DENMARK
Tel: +45 - 4498 3833
iop@chris-marine.com

CHRIS-MARINE GERMANY
Tel: +49 4101 5880 0
lemag@chris-marine.com

CHRIS-MARINE SINGAPORE
Tel: +65 - 6268 8611
chrism@chris-marine.com.sg

CHRIS-MARINE CHINA
Tel: +86 - 21 6575 9331
info.cn@chris-marine.com

CHRIS-MARINE INDIA
Tel: +91 - 712 224 2719
info.in@chris-marine.com

CHRIS-MARINE ECUADOR
Tel: +593 979 000 379
info.ec@chris-marine.com

CHRIS-MARINE USA
Tel: +1 786 212 9592
info.us@chris-marine.com

Contact one of our offices to get in touch with your local agent.

H078_2430E