

TK1035

COMMON RAIL PUMP TEST BENCH

**WORLD'S
NEW
ALL
MAKES
CR PUMPS
TEST BENCH**



Testing common rail pumps are becoming tough with each new generation of common rail systems.

More precise pressure controls, precise metering along with very precise speed control is now required for testing new generation CR pumps.



TK1035 is designed to be able to test all types of CR Pumps, including:

- Denso HP0, HP3, HP4, HP5
- Bosch CP1, CP2, CP3, CP4
- Cummins CR
- Siemens VDO
- Delphi Generation (1st Generation)

Please check the accessory packages for testing all other Common Rail Pumps.

FEATURES & BENEFITS

TK1035's capabilities to control temperature and measure flow and industry's shortest testing time, makes it the only standalone testing equipment for Common Rail Pumps.

Advanced Manuel Testing mode, allow the operator to control all CR pump actuators and design a completely unique test plan. This new feature therefore permits the users to design custom test steps to investigate various problems that can not be detected with standard test steps.

Complete Automatic Testing

TK1035 completes the test in about 12 min. The results are shown with easy to understand graphics.



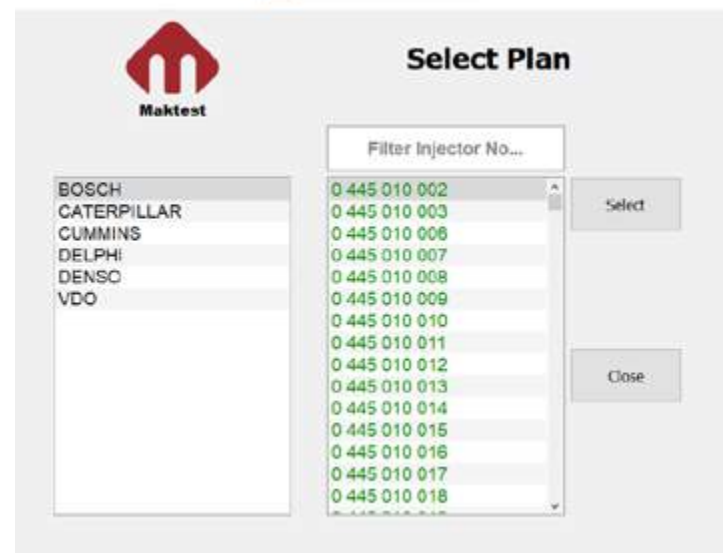
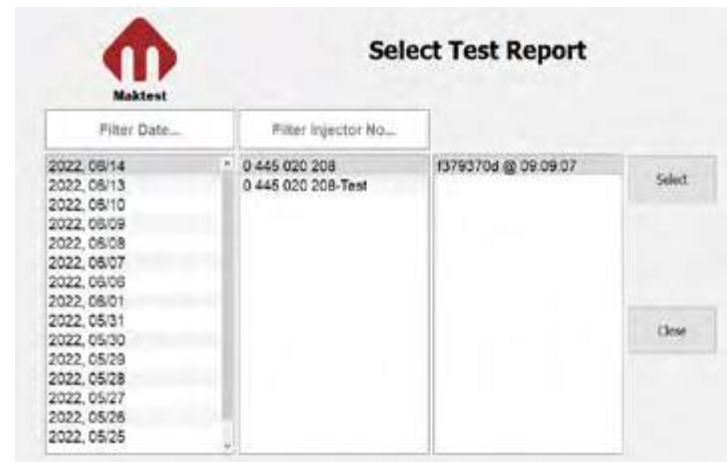
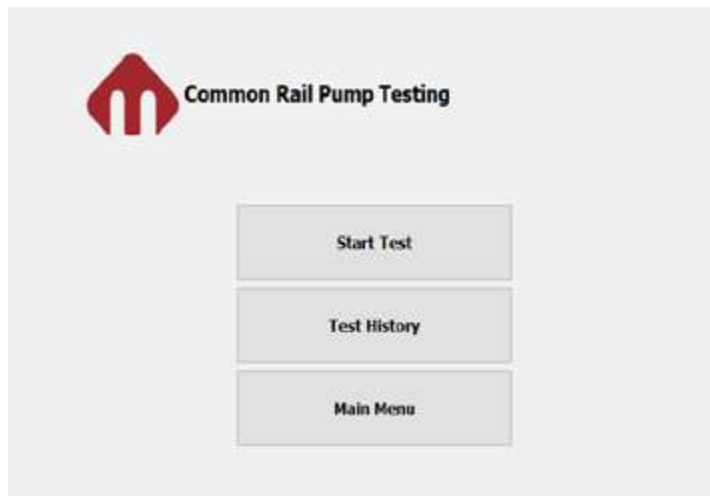
Simple Mounting Fixtures

TK1035 uses the standard pump mounting features for mounting common rail pumps, making life easy to understand.



Testing All Makes CR Pumps

TK1035 has what it takes to test all makes CR pumps. The control electronics is designed to run various SCV, PCV, ZME, IMV Valves according to their OEM standards.



FEATURES & BENEFITS



Start Up Check:
 The motor will start turning at 300 rpm. (But test oil transfer pump will start.)
 Press Start Check to stop.
 Please check following before proceeding:
 - Check equipment (Leak, Flow Pressure, Condition of Reservoir, Return Pressure, if applicable)
 - The Start Test button will be disabled when there is a flow (over 300 mm³/rev) from Start Test when ready to start.

Job No: 42002626
 Motor Direction: Reverse Forward
 Metering Valve Type: Open Closed
 EVV:

Real-time Data:
 DMF: 236, RPM: 600, Q (mm³/rev): 545, Tank: 424, Return: 320
 Feed Pressure: 2.2, Return Pressure: -0.2, Pump Pressure: 6.5

MAKTEST TestCenter Common Rail Pump Test Results

Operator Name: _____
 Address: _____
 Title: _____ Subject: T800 Article: 001

Job No: 0000 Pump Model: 000 Date: 0000-00-00 Test Order: 0

Start Up

SCV Type	Down Pump Output Range
IN	700 - 900

Test Note: Start Up sequence is completed successfully.
 Pass/Fail: _____

Flushing

Flow Pressure (bar)	RPM	Flow (mm³/rev)	Tank C	Return C	Feed Pressure (bar)	Return Pressure (bar)	Pump Pressure (bar)
24	80	81	4.0	0	1.0	4.1	2.7

Test Note: Flushing is completed.
 Pass/Fail: Pass

Metering Valve Test

Test	SCV Set	Rail Set	RPM	Test Error (bar)	Flow In (mm³/rev)
Start of Puffin	0	21	80	1 - 16	0 ± 0.0
Max Air Puffin	100	21	80	70 - 90	1000 ± 6.0

Test Note: Start of is successful, flow rate is within tolerance.
 Pass/Fail: Pass

TECHNICAL SPECIFICATIONS

Electricity Requirement

380 V A.C. 3 phase 50-60 Hz (no neutral required).

220 V A.C. Single Phase for Computer
Current : 44 Amper
Power : 29 KVA

Air Supply

min 5 bar, min 10L/min, dry and oil free

Test Oil Supply System

- Tank : 50 L
- LP Supply Pump : 9 L/min, max 10 bar
- Heater : 2kW
- Cooling System : Air Cooled,
4 L/min $\Delta T = -5$ °C between 40- 50 °C
- Filter : 5 μ

Lube Oil Supply System

- Tank : 10 L
- Lube Oil Pump : 9 L/min, max 10 bar
- Filter : 100 μ mesh

Instrumentation

- HP Sensor : Bosch 2200 bar (on the rail) 1 bar Resolution, 1% Accuracy.
- Flow Sensor : Gear Type; 0-4000 mm³/rev, 1 mm³/rev Resolution, 1% Accuracy.
- LP Supply Pressure : 0-10 bar, 0.1 bar Resolution, 0,1% Accuracy
- LP Return Pressure : 0-10 bar, 0.1 bar Resolution, 0,1% Accuracy
- Lube Oil Pressure : 0-15 bar, analogue, 7% Accuracy
- Temperature : 15-120 °C, 0.1°C Resolution, 1% Accuracy

High Pressure System

- HP Pump Motor : 15 kW. Speed Control between 50-3500 rpm.
- Max Pressure : 2200 bar
- Pressure Regulator : Bosch



Packing Dimensions

Width: 1880 mm
Depth: 1000 mm
Height: 1770 mm
Weight: 800 kg

Machine Dimensions:

Width: 1580 mm
Depth: 840 mm
Height: 1570 mm
Weight: 670 kg

Optional Accessories and Tools Recommended

- K01475 Clean Bench for Electronic Injector Repair, Including Injector Clamp and Ultrasonic Cleaner
- K01560 Torque Wrench Digital
- DE1382 Ultrasonic Cleaning Tank
- K01558 Hydraulic swieiving arm for dissamle

Delivered Accessories With This Product

BR1156 Pump Pressure Hose

BR1127 Pumptester CR Pump Supply Hose

AP1694 CP1-Siemens-Delphi Pump Cable

AP1689 CP2 Bosch CP3 Pump SCV Cable

AP1693 HP3 Denso SCV Cable

AP1731 CP1 Mercedes-Benz Pres. Set Valve Cable

AP1742 Standard Valve Cable

AA1195 Coupling 19mm Dia

MO1174 Delphi SCV Valve Plug

MO1175 Denso SCV Valve Plug

MO1177 Siemens Valve Plug

MO1178 CP3 SCV Valve Plug

MO1112 Common Rail CP1 Pump Plug Assamble

K01356 Denso Flange Adaptor Complete

AA3203 9 Hose Flange

K01467 Siemens Pump Coupling Complete

K01353 Bosch CP1 Pump Coupling Complete

K01347.s Bosch CP2-Denso HP0 CR Pump Test Kit with Simulator

LEARN MORE: COMMON RAIL TESTING 



About Us

Since its establishment in 1981, our company has been producing CR test equipment, HEUI test equipment, EUI injector and pump test equipment, mechanical test equipment and devices that can diagnose faults with close to one hundred percent accuracy, and has a dealer network that organizes its sales to the whole world.

Started the production of 9 types of turbochargers, which are modules of diesel vehicles and appeal to 68 different model vehicles with 1.3, 1.4, 1.5 and 1.6 liters.



Technical Support

To get help from our technical support, simply contact us today. The expert technical team responds quickly to all service requests registered on the web page.



Reach To Dealer

Maktest is located in İzmir, Turkey. We work with our authorized dealers to provide fast and perfect service in our sales, installation and after-sales services to the whole world. You can contact us via our website to learn about Maktest dealer near you.



Universal Solutions

All makes injector and pump testing



Maktest Warranty

Defect and malfunction coverage



Always Up-to-date


Continuously develops software for better test results

VISIT TODAY

MAKTEST.COM

ASK FOR MORE

SALES@MAKTEST.COM.TR

 / [instagram / maktestcom](https://www.instagram.com/maktestcom)

 / [Youtube / Maktest Diesel Injection Test Solutions](https://www.youtube.com/Maktest%20Diesel%20Injection%20Test%20Solutions)

