



TK1035

COMMON RAIL PUMP TEST BENCH

PRECISION CONTROL

Proven Results

User Profile

- Common Rail fuel injection pump repair and reconditioning workshops
- Diesel service centers testing multiple CR pump families (Bosch / Denso / Delphi / Siemens VDO / Cummins, etc.)
- Technical teams needing advanced manual control for diagnostics and custom test routines
- High-throughput workshops seeking repeatable results with stable pressure, temperature, and flow control

Supported Pump Families (Examples)

- Denso HP0 / HP3 / HP4 / HP5
- Bosch CP1 / CP2 / CP3 / CP4
- Cummins CR
- Siemens VDO
- Delphi (1st generation)
- Additional pump types supported via optional accessory packages



Complete Automatic Testing

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

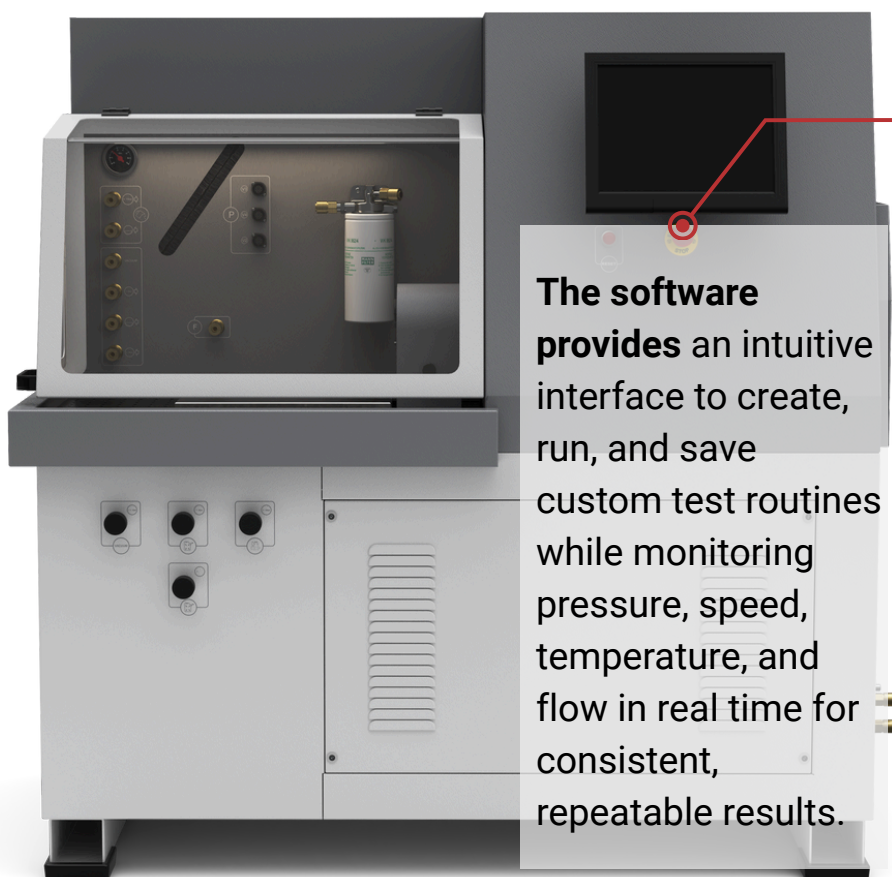


Testing All Makes CR Pumps

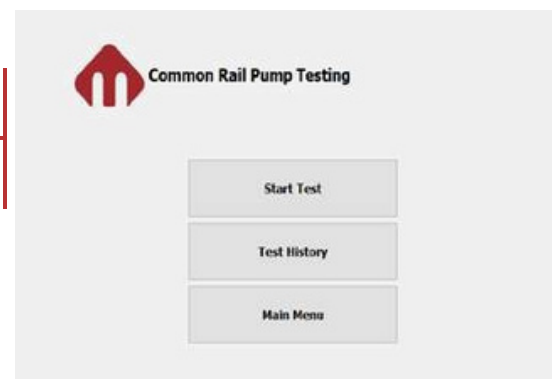
- TK1035 has what it takes to test all makes CR pumps.
- The control electronics is designed to run various SCV, PCV, ZME, IMV
- Valves according to their OEM standards.

Simple Mounting Fixtures

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



The software provides an intuitive interface to create, run, and save custom test routines while monitoring pressure, speed, temperature, and flow in real time for consistent, repeatable results.



Electrical & Pneumatic Requirements

Power supply: 380 V AC, 3-phase, 50–60 Hz (neutral not required)

PC supply: 220 V AC, single-phase

Current: 44 A

Power: 29 kVA

Compressed air: min. 5 bar, min. 10 L/min, dry and oil-free

High-Pressure (HP) System

HP pump motor: 15 kW

Speed control range: 50–3500 rpm

Max pressure: 2200 bar

Pressure regulator: Bosch

Test Oil Supply System

Tank capacity: 50 L

Low-pressure supply pump: 9 L/min, max. 10 bar

Heater: 2 kW

Cooling: air-cooled, 4 L/min; ΔT approx. -5 °C (within 40–50 °C range)

Filtration: 5 μ

Lube Oil Supply System

Tank capacity: 10 L

Lube oil pump: 9 L/min, max. 10 bar

Filter: 100 μ mesh

Sensors & Measurement

HP sensor: 2200 bar (on rail), 1 bar resolution, $\pm 1\%$ accuracy

Flow sensor: gear type, 0–4000 mm³/rev, 1 mm³/rev resolution, $\pm 1\%$ accuracy

LP supply pressure: 0–10 bar, 0.1 bar resolution, $\pm 0.1\%$ accuracy

LP return pressure: 0–10 bar, 0.1 bar resolution, $\pm 0.1\%$ accuracy

Lube oil pressure: 0–15 bar, analog, $\pm 7\%$ accuracy

Temperature: 15–120 °C, 0.1 °C resolution, $\pm 1\%$ accuracy

Machine dimensions (W×D×H):

1580 × 840 × 1570 mm

Net weight: 670 kg

Package dimensions (W×D×H):

1880 × 1000 × 1770 mm

Package weight: 800 kg