İzmir Kemalpaşa OSB Mah. Güney Sanayi Cad. No:61 PK: 35730 İZMİR / TÜRKİYE

sales@maktest.com.tr +90 544 349 40 20



# Maktest

maktest.com



Since 1985

# WE ARE YOUR PARTNERSHIP RELIABLE DIESEL TESTING AND REPAIR SOLUTIONS SINCE 1985

Maktest is a leading manufacturer of diesel injector and pump testing and repair equipment since 1985.

With a strong engineering background and global experience, Maktest offers a wide range of test benches and service tools for Common Rail, HEUI, EUI/EUP, and mechanical systems.

Trusted by service workshops and OEM suppliers in over 80 countries, we are committed to delivering precision, reliability, and long-term support to the diesel aftermarket.

We embrace an approach that understands the needs of diesel professionals and helps them make the most suitable and sustainable investment decisions.

Design & Engineering
Spare Parts | Adaptors | Tool Sets
Training
Technical Support

Export to 80+ countries, technical support network

Target sectors: Service shops, Injector repair and reconditioning, OEM suppliers, rail, construction, public vehicle fleets

























Free Flow Test Bench for Common Rail, Unit, and HEUI Diesel Injector Nozzles and Valves



### **Purpose of the Product**

The NV2001 evaluates the free-flow performance of diesel injector nozzle and valve components by testing them individually.

The test measures the amount of fuel (in cm<sup>3</sup>/min) that passes through under a defined pressure and time period.

#### **CR & Mechanical Testing**

#### **MECHANICAL & COMMON RAIL PUMP TEST BENCH PT2012 CRe**



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The test bench you need to test both diesel pumps and common rail pumps

Including: Caterpillar C4- C6 Denso HPO Bosch CP2 Bosch CP4 Cummins

Machine Dimensions: Width: 1915 mm Depth: 980 mm Height: 1800 mm Weight: 1004 kg Packing Dimensions: Width: 2100 mm Depth: 1140 mm Height: 1970 mm Weight: 1154 kg

#### Packaging:

Wooden Box / Not Stackable

USA: Our packaging is made from sterilizable wood. Our pallets are metal. It doesn't attract insects because it's made of plywood.

Shipping cost is not included in the price.

#### **CR Testing** & Mechanical

#### UNIVERSAL MECHANICAL PUMP TEST BENCH PT2012 B



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Powerful Drive System PT2012 B has a Special design 20 HP AC motor providing high torque at low

The standard flywheel has a moment of inertia of 1.0 kgm2. Machine Dimensions Width: 2150 mm Depth: 1080 mm Height: 1080 mm Weight: 980 kg

Packing Dimensions: Width: 1915 mm Depth: 980 mm Height: 1800 mm Weight: 850 kg

#### Packaging:

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#### **CR** Testing & Mechanical

#### INJECTOR CR MANUAL TK1022



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The TK1022 Injectester CR Manual is a versatile, manually operated tester ideal for pre-testing common rail injectors. Capable of testing multiple injector types -including common rail, double-stage (dual spring), and mechanical injectors. The TK1022 provides precise monitoring of opening pressures for both springs in dual-stage injectors via on-screen selection. Designed for efficiency, the TK1026 Injectester further enhances testing by performing return and spray tests before full CR injector diagnostics.

Machine Dimensions:

Width: 410 mm Depth: 690 mm Height: 1450 mm Weight: 65 kg

Packing Dimensions:

Width: 450 mm Depth: 780 mm Height: 1030 mm Weight: 77 kg

#### Packaging:

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## **Testing**

#### HEAVY DUTY COMMON RAIL INJECTOR TEST BENCH TK1029



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The TK1029 Injectester CRH is designed to test high-pressure, high-volume injectors with a measurement capacity of up to 2000 mm³/stroke. Equipped with an advanced measurement and cooling system, it efficiently tests heavy-duty injectors used in powerful MTU 4000 and 2000 series engines (12, 16, and 20 cylinders) with L'orange and Bosch injectors. Additionally, the TK1029 is versatile, making it suitable for testing injectors in passenger cars, light commercial vehicles, and trucks,

**TK1029 MODELS** 

Machine Dimensions Width: 930 mm Depth: 650 mm Height:1690 mm Weight: 270 kg

Packing Dimensions: Width: 1090 mm Depth: 860 mm Height: 1890 mm Weight: 360kg

#### Packaging:

Wooden Box / Not Stackable

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Shipping cost is not included in the price.

# Catalog of **Products**

# " All the equipment you need to test the next generation of Diesel Injection Systems"

# **Testing**

#### COMMON RAIL INJECTOR TEST BENCH TK1026

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**Testing** 

The TK1026.04, the fourth version of the TK1026 family, goes beyond a standard test bench with its cutting-edge electronic drive system and numerous upgraded features. Designed to meet the latest demands in injector testing, TK1026.04 offers users enhanced control and versatility.

Machine Dimensions Width: 930 mm Depth: 650 mm Height:1690 mm Weight: 270 kg

Packing Dimensions: Width: 1090 mm Depth: 860 mm Height: 1890 mm Weight: 360kg

#### Packaging:

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COMMON RAIL PUMP TEST BENCH TK1035

With each new generation of common rail systems, testing CR pumps becomes increasingly challenging. The TK1035 is engineered to test all types of CR pumps, including Denso HPO and Bosch CP2 models, offering advanced features like temperature control and fuel metering.

It meets the latest requirements for precise pressure control, accurate fuel metering, and exact speed control needed for nextgeneration CR pump testing.

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

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

#### Packaging:

Wooden Box / Not Stackable

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#### HEUI **Testing**

# HYDRAULIC ELECTRONIC INJECTOR TESTER

The TK2O24's new design provides a faster, more efficient approach to injector testing with a hydraulic system capable of delivering 300 Bar test oil pressure at up to 4 L/min.

With automatic high-pressure settings and new control applications, testing is uninterrupted, requiring no operator presence. Utilizing ISO4113 standard test oil ensures precise HEUI injector testing, while the PD flowmeter's rapid response and 0.3 mm<sup>3</sup> resolution enhance accuracy and repeatability, making the TK2O24 one of the most precise test benches available.

Machine Dimensions

Width: 930 mm Depth: 650 mm Height: 1690 mm Weight: 270 kg

Packing Dimensions: Width: 1090 mm Depth: 860 mm Height: 1890 mm Weight: 360 kg

#### Packaging:

Wooden Box / Not Stackable

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INJECTESTER HEUI EFM (INCL-KO1391 ADAPTOR)



#### **ELECTRONIC UNIT INJECTOR AND UNIT PUMP TEST BENCH** UTS1004



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**Download Brochure** 



Advanced Test Bench for Electronic Unit Injectors and Pumps

The UTS1004 is the only test equipment specifically designed for precision testing of QSK HPI injectors with advanced timing control. It supports a wide range of applications, including Caterpillar, Cummins, Bosch, Delphi, and Continental injectors. With its patented cam box design and solenoid response time measurement, UTS1004 offers accurate and efficient testing under near-engine conditions. The user-friendly interface and continuously updated software provide a seamless experience for testing and repairing electronic unit injectors and pumps.

Machine Dimensions

Packing Dimensions: Width: 1200 mm Depth: 800 mm Width: 1390 mm Depth: 1080 mm Height: 1830 mm Weight: 590 kg Height: 1970 mm Weight: 700 kg

#### Packaging:

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Delphi Euro-6 F2e Series Pumping & Non-pumping Injector Test Kit. Ko2O39 has a high-pressure rail that can control pressure up to 2200 bar.



#### Catalog of **Products**

#### **REPAIR** SOLUTIONS

#### COMPUTER-AIDED ASSEMBLY SYSTEM KO4000

Machine Dimensions Width: 1500 mm Depth: 820 mm Height: 1330 mm Weight: 200 kg

Packing Dimensions: Width: 1700 mm Depth: 900 mm Height: 1930 mm Weight: 260 kgg

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The KO4000 Computer-Aided Assembly System eliminates the trial-and-error process in injector assembly, offering users a fast and accurate assembly experience. With its precision measuring unit and specialized software, it guides the user step-by-step through each action and calculates the required adjustment shim thickness. These features reduce the risk of errors during assembly and enhance reliability in repair processes.

Packaging:

Wooden Box / Not Stackable

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#### **REPAIR SOLUTIONS**

#### **COMPUTER-AIDED REPAIR SYSTEM** A4000

The A4000 Computer Aided Repair System is designed to streamline injector

**Packing Dimensions:** 

Width: 800 mm Depth: 620 mm Height: 1160 mm Weight: 45 kgr



The system's software guides users through each step of the repair and assembly process, calculating the exact adjustment shim thickness required. This ensures accurate assembly and enhances the reliability of injector

Packaging:

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Shipping cost is not included in the price.

#### REPAIR SOLUTIONS

#### ADJUSTMENT SHIM GROUPING CENTER SM4000

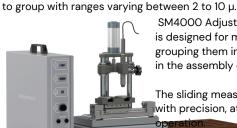
repairs.

The shims taken off the injectors usually will not be used in the same injector

after some parts are replaced. Those shims you have collected are now easy

**Packing Dimensions:** 

Width: 800 mm Depth: 620 mm Height: 1160 mm Weight: 45 kgr



SM4000 Adjustment Shim Grouping Center is designed for measuring shim thickness and grouping them into containers to use directly in the assembly of the injectors.

The sliding measuring seat allows measuring with precision, at the same time, fast

Packaging:

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Shipping cost is not included in the price.

# **BOSCH-TYPE CONTROL VALVE TESTER**

# **BOSCH TYPE CONTROL VALVE LAPPING UNIT**

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In the repair of common rail injectors, it is extremely important to ensure that each component, especially the control valve, is in proper condition before assembly.

The control valve is one of the parts for which it is nearly impossible to determine acceptability or predict failure during flow testing simply by inspecting the surface condition with magnifiers or advanced cameras.

Control valve lapping is a repair method not recommended by OEMs due to complex compensation calculations. The Maktest KO4000 CARS system effectively recalculates all critical dimensions after lapping, reducing the risk of failure in the flow test. The KO1816 Bosch Type Control Valve Lapping Unit provides a practical and efficient repair solution for Bosch control



Packing Dimensions: Width: 340 mm Depth: 280 mm Height: 560 mm Weight: 17,2 kg

#### Packaging:

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Shipping cost is not included in the price.