

UTS1003 injectester•UIP

Universal Unit Injector and Unit Pump Test Stand

Your Most Valuable Assistant for Repairing Electronic Unit Injectors and Electronic Unit Pumps



A vast majority of new generation light commercial road vehicles and heavy duty diesel engine applications are equipped with electronic unit injectors or electronic unit pumps. Your most important assistant for repairing Unit Injection Systems is UTS1003 injectester•UIP. Its computerized user friendly controls allow controlling all types of Unit Pump or Unit Injector Systems, independent of their operating voltage specifications or injection timing controls.

The new electronic system in injectester•UIP allows to test dual solenoid Delphi E3 unit injectors as well as Siemens Piezo actuated unit injectors. UTS1003 injectester•UIP is the only solution to test both Delphi E3 and Siemens Piezo actuated unit injectors.

The user friendly control software combined with the operator touch panel, leads the operator to complete the test with the most accurate results, by applying the pre-stored test plan parameters in the software database.

Operator only needs to choose the exact injector part number of the injector in the database to start testing.

EFM Electronic Fuel Measurement System can measure delivery and return fuel in a few seconds, providing the fastest test time in the industry.

UTS1003 injectester•UIP has all the adapters and test plans ready for the below electronic unit injection systems:

Bosch (PDE-P1, PDE-100, PDE-90, PLD)

Delphi (A3, E1, E3, F2P)

Siemens

Caterpillar

Cummins Celect (N14, M11)

Detroit Diesel (Series 60)



UTS1003

MAK TEST®

www.maktest.com.tr
info@maktest.com.tr

UTS1003 injectester•UIP

Testing Delphi E3 Diesel Electronic Unit Injector



Delphi E3 Diesel Electronic Unit Injector (EUI), is an advanced diesel unit injector for high performance heavy duty applications. Delphi E3 EUI is an integrated fuel injection device that contains a high pressure pump and an electronically actuated injector. Delphi's E3 EUI dual valve design offers high-speed, ultra high pressure operation and many advanced features including a flexible injection capability enabling pilot, post and split injections. UTS1003 injectester•UIP is developed with the control electronics to test and control dual solenoid injectors and the test plan for Delphi E3 is already included in its database.

Testing Piezo Actuated Electronic Unit Injectors



Piezo actuators response times are much faster than the solenoids and thus allowing multiple injections and complies with Euro 4 emissions for light commercial vehicles and passenger cars. Piezo actuated unit injectors also allows high pressure injections with precise timing controls. UTS1003 injectester•UIP control Electronics are designed to drive piezo actuators with precise timing as on the vehicle. All test templates for Siemens VDO Piezo Actuated Unit Injectors are included in the database and the adapters are available for UTS1003.

Spray Testing the Unit Injectors has never been this much easy

UTS1003 injectester•UIP contains a separate and special test type in the test plan database for testing the spray pattern and angles for unit injectors. Therefore disassembling the unit injector for testing the spray pattern is a now a history.

Technical Specifications

Drive Motor	10 HP Elektronik Hiz KOnrol Sistemi
Test Oil Transfer System	0-10 bar manual adjustable
Tank Capacity	26 lt
Cam Speed Range	70-1500 rpm.
Delivery Metering	500 mm3/stroke EFM Electronic Fuel Metering System 260 cm3 ve 38 cm3 Glass Metering Tubes (Optional)
Cooling System	2-4 bar City Utility Water Supply

Product Codes for Ordering

Product Code	Description
UTS1003.01.H	Injectester•UIP with EFM Electronic Fuel Measuring System, Unattended Testing, and 380 V 50/60 Hz 3 ph industrial electricity supply
UTS1003.02.H	Injectester•UIP with glass measuring tubes and 380 V 50/60 Hz 3 ph industrial electricity supply

EFM Fuel Measurement System and Unattended Testing



Fuel Injected (delivery) is measured in EFM System (Electronic Fuel Measurement) with $\pm 0,02 \text{ mm}^3$ resolution and %0,1 accuracy.

UTS1003 injectester • UIP can automatically test an injector without an operator attended throughout the test time. Operator can review the test result on the screen or print out as a report.

Injection Delay Time Measurement

UTS1003 injectester•UIP measures the delay between the injection command signal and actual injection. This valuable information helps to determine the solenoid and solenoid springs' conditions.

Adaptor Sets for Various Unit Injectors and Unit Pumps

CB22200 BOSCH DAF-RENAULT /EUP
 CB20900 BOSCH IVECO
 CB22300 BOSCH MAGIRUS
 CB20600 BOSCH MERCEDES ACTROS TRAVEGO /EUP
 CB20700 BOSCH MERCEDES AXOR /EUP
 CB21400 BOSCH SCANIA
 CB20800 BOSCH VOLVO
 CB23000 BOSCH VOLVO HEAVY DUTY WORK MACHINE /EUP
 CB20500 BOSCH VW-AUDI-SEAT SKODA
 CB22500 BOSCH VW-AUDI-SEAT-SKODA NEW TYPE
 CB21600 CATERPILLAR 2113025-2235320
 CB21500 CATERPILLAR 3116 (1071232-220264-1278209-727515)
 CB20300 CATERPILLAR 3406E (2113022, 2571515, 1189030, 1855742)
 CB21300 CATERPILLAR 3508 (1320202-108528)
 CB22100 CATERPILLAR C10 (1660155-437290AU)
 CB21800 CUMMINS CELECT M11 - M11+ - ISM AND N14
 CB21200 CUMMINS MECHANICAL INJECTOR @ SCANIA R SERIES
 CB22000 CUMMINS MECHANICAL INJECTOR MS 3084398-3028066
 CB22800 CUMMINS MECHANICAL INJECTOR NTA855
 CB20400 DELPHI A3 TYPE @ VOLVO
 CB22600 DELPHI E1 TYPE @ RENAULT/VOLVO
 CB21000 DELPHI E1 TYPE @ VOLVO
 CB22900 DELPHI E3 TYPE @ HYUNDAI TRUCKS (DUAL SOLENOID)
 CB21100 DELPHI LUCAS Land Rover - 17491CS
 CB21900 DETROIT DIESEL SERIES 60
 CB21700 MARIN MECHANICAL INJECTOR (BR55510 100)

Please contact to the nearest dealer to obtain latest adapter list for Common Rail Injectors. Maktest is continuously working to design adapters and test plans for newest injectors.

UTS1003 Injectester•UIP Dimensions

Machine Dimensions:	Packing Dimensions:
Width : 94 cm	Width : 130 cm
Depth : 65 cm	Depth : 101 cm
Height : 180 cm	Height : 203 cm
Weight : 450 kg	Weight : 520 kg



Fax: 817-485-6404

Email: sales@usdiesel.com

Web site: www.usdiesel.com

4243-A Road to The Mall
 Ft Worth Texas 76180 USA

817-485-6422

800-328-0037 (USA & Canada)