



DIESEL WORKSTATION

UMT 2512T



P./N.00 040 65

*Experience
and
Modern Technology*



SPARE PARTS AND TEST EQUIPMENTS FOR DIESEL SPECIALISTS

UMT 2512 T Diesel FI Pump Test Bench New Test Bench Ergonomically designed

- ◆ 18,5 KW (25HP) AC high torque motor.
- ◆ Industrial fan less PC with Windows TM Professional operating system fully integrated 15" XGA 450 units TFT-LCD sunlight readable (for easy reading).
- ◆ Anti Backlash coupling.
- ◆ Two DC supply 12-24 Volts 3 Amps.
- ◆ Pressure phasing to 80 Bar.
- ◆ Fully automatic Fuel Temperature Control System.
- ◆ Direct Drive System- DDS.
- ◆ Forced lubrication pump oil to 30 Bar.
- ◆ Analogue speed potentiometer for manual speed control.
- ◆ Digital speed control system provides smooth speed control between 0-4000 rpm via a multi turn precision speed control knob.
- ◆ Data base system management for test plan/customer records.



- ◆ 12 cylinders low volume / high volume glass reading deliveries for easy operating.
- ◆ Display of main features of test bench operating parameters via 15" TFT/LCD.
- ◆ Electronic Feedback System prevents speed changes in load variances by monitoring the speed and load relation during the entire run time.
- ◆ Larger flywheel inertia provides more stable speed Control.
- ◆ New measuring console with two axis of motion.
- ◆ New control panel provides for a user friendly operation.
- ◆ Well tooled standard accessory package for most common Rotary and Inline pumps.



Sophisticated NEW design

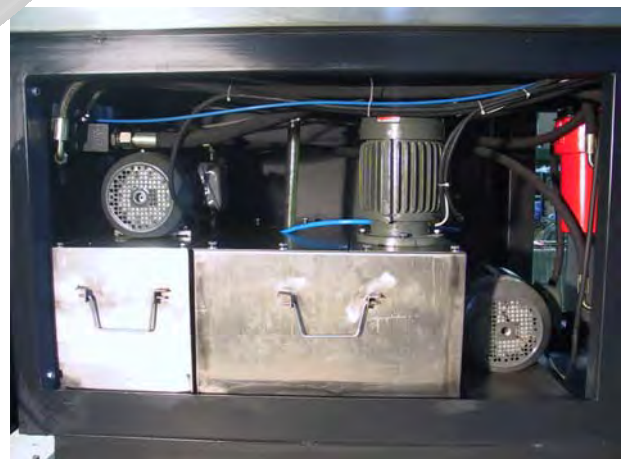
The UMT2512T will create a new image of your workshop with its design and colours and provide you the best operating, friendly and ergonomically designed environment.

Anti-backlash coupling

The Anti-Backlash coupling ensures the safety of the test bench operator with its durable and strong design and provides reliable testing of the new technology high-pressure fuel injection pumps.

The flywheel

Directly mounted on the motor shaft and with 1,0 kgm² inertia provides a smooth drive of even the toughest cam profiles, and absorbs the impact of the new pumps. The test results obtained are therefore much more reliable and accurate comparing with smaller flywheel drive systems.



Technical Specifications

Motor

Special design 18,5KW (25HP) AC motor providing high torque at low speed.

Control Console

Control Console push panel for operating the most important commands of UMT 2512T can be positioned, by preference, on both sides of the test bench for increasing operator's safety.

Computer Touch Screen

The use of a dedicated, fan less industrial, last generation computer Windows XP professional, together with fully integrated touch screen panel, will provide to the operator the best, friendly ergonomically suited station, positioning your business well in front of your competitors.

Ergonomic Touch Screen Computer Arm Positioning

The new design of computer arm consol, allows the operators to better position computer control station in any position around test bench's sides, for easy and safe operation. This feature will speed up the working operations reducing stress for operator.

Flywheel

Standard flywheel has the moment of inertia of 1.0 kgm².

Anti-backlash Coupling

Coupling stiffness is 550mm³/cyl/stroke.

Test Oil Transfer System

The system consists of a 60 lt oil tank with a 12 lt/min transfer pump and a single pressure regulator capable to control the pressure between 0-60 bars.

Test Oil temperature control system

A digital thermostat embedded into the main control system provides for the temperature setting of the between 26 to 50 degrees Celsius. The cooling system does not requires auxiliary water supply whereas two 2 KW heating element ensures the temperature stability in the tank.

Test Oil conditioning system

Is a standard feature, it doesn't need any connection to cooling water, in order to help the environmental safety. The optimum capacity of fully automatic cooling fan will easily allow testing of big in line pumps or any Common Rail/EUI/EUP system, keeping fuel temperature preset +/- 2° C in the range of 15 to 50 °C at easy.

Air supply

The Test bench provides a regulated air supply between 0-2.5 bars.



Dynamic Braking

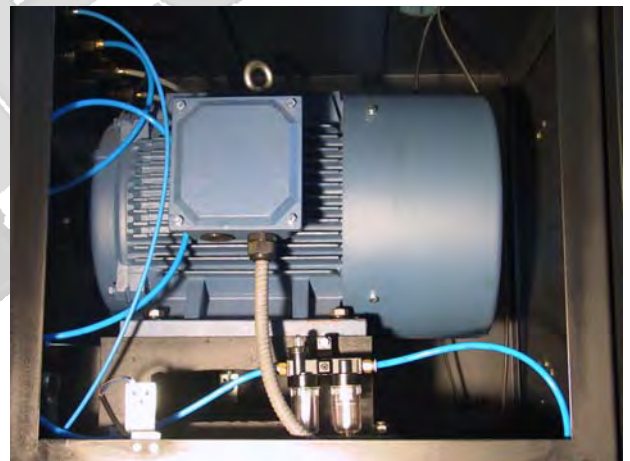
The speed control system with electronic braking feature enables a fast deceleration of the drive system despite the larger flywheel.

Measuring console

The design of the injector console provides for good space around the pump mounting bed and the 2-axis motion on the swinging arm helps the operator to mount various kinds of pumps and systems for test with ease of access.

AC power supply

12V and 24V AC voltage power supply is provided with its connection cables as standard on the Test Benches.



Benefits

- ◆ User friendly and stylish.
- ◆ Use of a standard, industrial, fully dedicated computer will allow future system updating.
- ◆ Possibility to work as a stand alone machine or in a network.
- ◆ Flexibility to work on different system manufacturing product easily and at maximum speed .

Safety and CE

The Test bench is CE marked. The complete system of the test bench is also designed and manufactured according to European Union Harmonic Standards.

Quality Certificates:

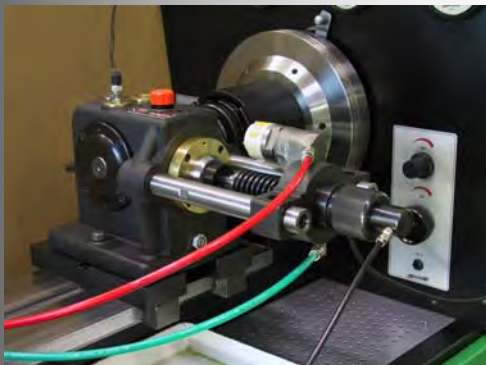
The Test Bench UMT 2512T is tested and approved according to ISO 4008 Standards and has the ISO 9001 certificate.

Optional:

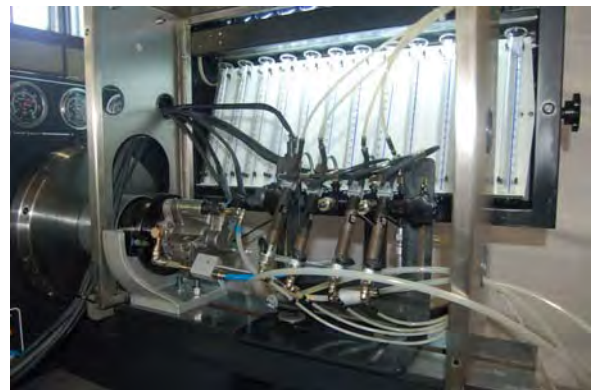
- ◆ Fully automatic test plan sequence
- ◆ Digital pressure gauges reading
- ◆ Digital inlet/outlet test oil temperature
- ◆ Digital Flow meter
- ◆ Printer
- ◆ Test injectors ISO 4010
- ◆ Arm for Test Bench 2512T complete with PC and touch screen

Standard Accessories :

- ◆ Inline pumps base mount brackets
- ◆ Quick action clamp
- ◆ Main cradle for flange adapters
- ◆ Bearing supported adapter for DPA's with Hydraulic Governor
- ◆ Bearing supported adapter for DPA's with Mechanical Governor
- ◆ Quill shaft
- ◆ Adapter flange
- ◆ Adapter ring Ø68
- ◆ Adapter ring Ø85
- ◆ DPS adaptor flange
- ◆ Drive Coupling
- ◆ Test pipe AB
- ◆ Test pipe BB
- ◆ Testing tubes distributors



	Unit	Capacity	Accuracy
Speed	rpm	9999 rpm	± 1
Delivery	cc	48	± 1%
	cc	150	± 1%
Test Oil Pressure	bar	0-4 bar	±1%
	Psi	0-60	±2,5%
Test Oil Vacuum	mmHg	0-760 mmHg	±2,5%
	inHg	0-30	±2,5%
Auxiliary Pressure	bar	0-16 bar	±1%
	Psi	0-240	±2,5%
Air pressure	bar	0-2,5 bar	±2,5%
	Psi	0-40	±2,5%
Test Oil Temperature (Optional)	DegC	0-99	±0.1
Back Leakage Temperature (Optional)			
Back leakage Flow (Optional)	L/min	2	±8%
Phasing Angle	Degree	0-360	±1
Phase Pressure	bar	0-60 bar	±2
Lube Oil Pressure Lubrifiant	bar	0-10 bar	±1%
	Psi	0-160	±2.5%



TEST BENCH UMT 2512T

380-440V, 50/60 hz, 3 phase 40 A.

Dimensions:

- ◆ **Width:** 70cm
- ◆ **Length:** 210cm
- ◆ **Height:** 156cm
- ◆ **Weight:** 980 kg (net) - 1080 kg (gross weight)

Air Supply: min 6 bars, dry and oil free.

Test Oil: ISO4113