



## PRODUCT SPECIFICATION

# **CRDi & Fuel Injection Pump Test Bench**

### **VDT-500**





Standard parts

## **Product Features**

#### Common rail test

- ✓ Testing for injector injection quantity
- ✓ Testing for injection figures
- ✓ Testing for injector injection returns
- ✓ Testing for various high-pressure pump discharge rate (Bosch, Delphi, Denso)
- Testing for various common rail high pressure input
- ✓ All kinds of common rail simulation testing
- Injector automatic cleaning during testing (Optional)
- Injector cleaning during vehicle engine starting (Optional)

### Diesel fuel injection pump test

- The testing bench is an experimental equipment and it is used to repair and remove the defects of injection pump in diesel engine of automotive, marine, etc. It can control all kinds of diesel injection pump.
- ✓ Control test of the injection time
- ✓ Timer angle test
- ✓ Control test of the injection amount
- ✓ Supply pressure and amount test of feed pump
- ✓ Overflow amount test
- ✓ Control test of each part

Technical specifications are subject to changes without notice.

- ✓ Air boost and pneumatic governor test
- Rack position adjusting test(Digital rack scale)

#### Monitor control box

 Display injection amount and common rail pressure by engine R.P.M

### Standard accessories & tools

- ✓ DND-103W standard accessories 77kinds
- ✓ High pressure pipe for high pressure pump and rail supply : 1 EA (3 Ø x 8Ø x 600)
- ✓ High pressure pipe for injector spray : 4EA (2 Ø x 6Ø x 600)
- ✓ Zig for injector for Bosch, Delphi, Denso : 4 EA per each
- ✓ Injector power connector: 2 sets
- ✓ Pressure sensor connector: 1 EA
- ✓ Ring bracket for Bosch H.P pump: 1 EA & connecting bracket for Bosch H.P pump: 1EA
- ✓ Ring bracket for Delphi H.P pump: 1 EA & connecting bracket for Delphi H.P pump: 1EA
- ✓ Ring bracket for Denso H.P pump: 1 EA & connecting bracket for Denso H.P pump: 1EA
- ✓ H.P pump mounting bracket: 1EA
- ✓ Rotation safety cover: 1EA
- ✓ Measuring glass : 150 cc (6EA), 32 cc (12EA)
- ✓ T bolt (2EA) and others





# **PRODUCT SPECIFICATION**

# **CRDi & Fuel Injection Pump Test Bench**

# **Technical Specification**

Description	CRDi & Fuel Injection Pump Test Bench
MODEL	VDT-500
High Pressure pump drive motor	AC 220V/380V/3PH/60HZ (control by inverter)
riigii i ressure purip arive motor	4 cylinders / 7.5KW (10HP)
Low pressure pump drive motor	AC 220V/380V/3PH/60HZ 200W (1/3HP)
Low pressure pump	Output pressure 0~7 kg/cm²
	Max. output flow 7 \( \ell \) min
Fuel tank	45 ℓ
Temperature control	0 ~ 100 °C
Measuring glass	150 cc (6ea), 32cc (12ea) - both sides
Stroke counter	0 ~ 1,050 turns
Engine RPM	600 ~ 4,100 (600,650m,7004,100) Digit
High pressure pump RPM	0 ~ 4,000 (4 digit 0 ~9999 rpm indication)
Low pressure analog gauge	100 Ø 6 kg/cm <sup>2</sup>
Low pressure regulator	0 ~ 6kg/cm <sup>2</sup> supply pressure control
High pressure analog gauge	100 Ø 2000 kg/cm <sup>2</sup>
High pressure regulator	0 ~ 2000 kg/cm²(2000 bar) pressure control
High pressure pump output	measuring valve
Fuel cooling device	400 x 400 (mm)
Fan for cooling(motor with 40W)	300 x 300 (mm)
Fuel filter for line	30 Microns
Testing time setting timer	0 ~ 60 min.
Test zig attach bed	220 x 35 x 600 (WxDxH) / T groove type
Drive Motor	AC 220-380V/3Ph/ 50-60Hz, 4 pole induction motor(Control by inverter)
Speed range	0 ~3600rpm, in both directions
Pump Motor	AC 3ph 0.75 KW (1 HP) 4 pole induction motor
Pump	Max output pressure 50kg/m² (Working pressure: 25kg/m²)
·	Max output flow 7.7l/min Vane pump
Heater	AC 220-380V, 1 KW PT 1" tank heater
Speed control	Manual / Auto (It can be operate 9 steps in auto mode)
Glass	200cc and 45cc both sides
Stroke Counter	0, 100, 200 ~ 1,000 / 0, 150, 250 1,050 turns
RPM Counter	4 digit 7 segment LED display (0-9999 rpm indication)
VM.VE(Rotary)Fuel control valve	0 - 2kg/m² supply pressure control
LOW(PE. In-line)Fuel control valve	0 - 6kg/m² supply pressure control
PE-A (In-line) pressure Gauge	Ø 100 x 6 kg /m²
VM. VE(Rotary) pressure gauge	Ø 60 x 2 kg /cm²
Transfer pressure gauge	Ø 100 x 15 kg/m²
Overflow pressure gauge	Ø 60 x 2 kg /m²
High pressure gauge	Ø 60 x 50 kg/m²
Governor pressure gauge	-760 mmHG ~ 1100 mmHG (Digital type)
Vacuum Regulator & Air Regulator (	For Vacuum Regulator: -760mm Hg ( *1Bar= 0.999 kg/cm2=14.22 psi) For air regulator: 0 ~ 1500 mmHg
1 set)	Motor capacity AC 220/380V 3ph 0.37kw(1/2HP)
Air compressor	Compressor 1HP
	Capacity 40 &
Air tank	Pressure switch 10 kg/cm²
Rack Scale	0 ~ 50mm with 0.05 mm
Dimensions (mm)	1690mm(W)x 950mm(L)x 1660mm(H)
Difficultions (min)	1000mm(11)/N 000mm(L)/N 1000mm(H)





## PRODUCT SPECIFICATION

# **Diesel Fuel Injection Pump Test Bench**

### **VDT-300**



## Product Features

- √ Three ranges of pressure regulator, 0~2kg/m² and 0~6kg/m², 0~50kg/m² will provide more accurate pressure regulation.
- ✓ The solenoid coil of rotary type pump can be driven through the power supply of DC 12/24V inside of the test bench.
- ✓ The driving shaft and the driven shaft are connected with a clutch. while the driving motor keeps a certain speed, subsidiary action for test or maintenance can be done through clutch's ON-OFF function.
- ✓ The electrical breaker protects electric overload automatically.
- ✓ The fluorescent lamp behind the injector mount will give clear and accurate measurements of measuring cylinders.
- ✓ Injection pump mounting brackets consist of a plain bracket and a ring bracket.
- But any kind of injection pump can be attached through the combination of packing pieces and mounting ring.

# **Technical Specification**

	mounting ring.
Description	Diesel Fuel Injection Pump Test Bench
Model	VDT-300
Drive Motor	AC 220-380V/3Ph/ 50-60Hz, 4 pole induction motor(Control by inverter) 11KW (15 HP) 12 cylinders: VDT-300(15HP), 7.5Kw (10HP) 10 cylinders: VDT-300(10HP) 5.5Kw (7.5 HP) 8 cylinders: VDT-300(7.5HP)
Speed range	0 ~3,600rpm, in both directions
Pump Motor	AC 3ph 0.75 KW (1 HP) 4 pole induction motor
Pump	Max output pressure 50kg/m²(Working pressure: 25kg/m²) Max output flow 7.7l/min Vane pump
Fuel Tank	45 liters working capacity
Temperature control	Variable from 0 ~ 100°C
Heater	AC 220-380V, 1 KW PT 1" tank heater
Speed control	Manual / Auto (It can be operated 9 steps in auto mode)
Glass	200cc and 45cc both sides
Stroke Counter	0, 100, 200 ~ 1,000 / 50, 150, 250 1,050 turns
RPM Counter	4digit 7 segment LED display (0-9999 rpm indication)
VM.VE(Rotary)Fuel control valve	0 - 2kg/m² supply pressure control
LOW(PE. In-line)Fuel control valve	0 - 6kg/m² supply pressure control
PE-A (In-line) pressure Gauge	Ø 100 x 6 kg /m²
VM. VE(Rotary) pressure gauge	Ø 60 x 2 kg /m²
Transfer pressure gauge	Ø 100 x 15 kg/m²
Overflow pressure gauge	Ø 60 x 2 kg /m²
High pressure gauge	Ø 60 x 50 kg/m²
Governor pressure gauge	-760 mmHG ~ 1100 mmHG (Digital type)
Vacuum Regulator & Air Regulator (1 set)	For Vacuum Regulator: -760mm Hg (*1Bar= 0.999 kg/cm²=14.22 psi) For air regulator: 0 ~ 1500 mmHg
Air compressor	Motor capacity AC 220/380V 3ph 0.37kw(1/2HP) Compressor 1HP
Air tank	Capacity 40 ℓ Pressure switch 10 kg/m²
Rack Scale	0 ~ 50mm with 0.05 mm
Packing Dimension	1,690 x 950 x1,660
Net weight	1,000kg