

## **AG Precision Diesel FIP Test Bench General Information:-**

**Introduction:** All our test benches have been designed for quick, accurate and economic operation with a quality target of zero defects. Our benches are capable of testing a wide range of diesel FIP pumps such as all types of Inline, DPC Rotary and Distributor / VE pumps up to 12 cylinders. With our new range of multipurpose test benches one can calibrate and test even the newer Common rail pumps and injectors as well electronic VE pumps / EDC pumps, such as the Bosch VP series pumps.

### **Benefits and Features:**

- AG Precision test benches are very quiet in operation without much vibration.
- All models have high effective driving torque even at low speeds, they provide maximum measurement accuracy for setting of right or left hand driven fuel injection pumps.
- Our test benches have good even running characteristics, provide exact speed control, high driving power, high torque and have a stiff non – distorting bed, hence guaranteeing precise and accurate adjustment of pumps, governors, timing devices, etc.
- Have robust electronic controls with touch button control panel.
- Easy to read micro processor based digital display electronic tachometer with built in self check and stroke counting (100 – 1200) which can be preset with display of stroke time in fractions of a second.
- Rugged construction and user friendly design.
- Speed range is between 0 – 6000 RPM (Depending upon the model ordered)
- Swiveling (180 degrees) injector console with 6, 8 or 12 measuring points.
- Hard and ground Gear Box made out of alloy steel, which has a life span of about 35 years. Two speeds with neutral position.
- High pressure phasing and oil supply with a soundless gear pump driven by an independent motor.
- Models fitted with low pressure gauge, high pressure gauge, cam box pressure gauge, transfer pressure gauge (for Rotary and VE pumps) and MPC gauge.
- All our Diesel FIP test benches are assembled using the **best quality inputs of internationally renowned brands** such as:- **ABB Motors, Schneider AC Frequency / Electronic Drives, Schneider / Cutler Hammer / L&T Switch Gears, Fenner / Gates Belts and Pulleys, Dowty Gear Pumps, Borosilicate Glass Burettes, Japanese Taper Roller Bearings, Special High Voltage Protection Device with Torque Multipliers for AC Drives, Pump mounting bed is made all out of Steel, Gear Box Gears are Hard and Ground, special alloy steel, two speeds with neutral position.**

- Please find below the ***list of Standard and special accessories***. The standard accessories are supplied free of cost with every model of the test bench whereas the special accessories can be ordered alongside at some extra cost:-

<b>Standard Accessories</b>	<b>Special Accessories</b>
Bracket for flange mounted inline VE / Rotary pumps.	Driving attachment for Delphi Rotary DPC pumps (Bearing type with adjustable height)
Quick Action clamp for base mounted inline pumps.	Feed pump tester with 1000 CC jar, Pressure gauge and drain valve can measure the back leakage of Feed pumps and Rotary pumps.
6, 8 or 12 Test Injector kit. (Depending on number of cylinders of the test bench ordered)	Cam box for single cylinder pumps.
6, 8 or 12 test high pressure pipes- 600X6X2 (M14/M14 Nuts).	Heating with digital electronic temperature controller with automatic cut off set at -- 40 C +/- 5 C
6, 8 or 12 test high pressure pipes- 600X6X2 (M12/M14 Nuts).	Flow meter for checking return delivery of rotary and distributor pumps.
Two setting Blocks for A and B types of pumps.	Common rail injector and pump testing kits (Models: CRIT 4000 or CRTK 5000) suitable for all kinds of test benches, to enable test bench for common rail injector and pump testing as well.
Set of graduated glass test tubes / Burettes (Borosil).	Flow meter for return delivery measurement of Common Rail / CRDI pumps.
Two perforated trays for keeping tools.	Timer travel gauge for Bosch VE pumps.
One Phasing Bar and One Machine Lamp.	Auto Advance gauge for Lucas / Delphi DPC rotary pumps.
Backlash Free Flexible Coupling.	EDC simulator for driving Bosch Electronic VE pumps such as VP 36 / VP 37 etc. (Model: EDC 7000)
Digital Temperature Indicator.	Ultrasonic cleaner for cleaning of diesel injector nozzles.
Manifold pressure compensator (M.P.C.) for testing leakage and functional tests of diaphragm fitted in pumps of turbo powered engines.	360 degree rotatable Ball joint vice with replaceable mounting plates; suitable for mounting all kinds of fuel injection pumps / turbochargers etc.
D.C. Power source 12 V / 24 V for testing solenoid switches.	Complete tool kit for VE pumps.
	Complete tool kit for Delphi / Lucas Rotary pumps.

- The following **pressure gauges** are fitted as **standard** to all our Diesel FIP test benches:-

<b>Pressure Gauge</b>	<b>Metric</b>	<b>FPS</b>
Low Pressure Gauge	0 – 7 KG/Cm sq.	0 – 100 PSI
High Pressure Gauge (Glycerin filled)	0 – 42 KG/Cm sq.	0 – 600 PSI
Transfer Pressure Gauge for Delphi Rotary & Bosch VE Pumps (Glycerin Filled)	0 – 14 KG/Cm sq.	0 – 200 PSI
Cam Box Pressure Gauge for Delphi DPC pumps	0 – 2.1 KG/Cm sq.	0 – 30 PSI
M.P.C. Gauge (Manifold pressure compensator)	0 – 2.1 KG/Cm sq.	0 – 30 PSI

- Note: Any Special gauges required by the customer can be fitted to the test bench at some extra cost.