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Over **60** years of  
consistent excellence

# Bend Rebend Testing Machine

Model : Power Bend - Pro



User Friendly Operation



Hydraulic Loading/Unloading



Loading accuracy as high as  $\pm 1\%$





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# Bend Re-bend Testing Machine

## Model : Power Bend - Pro

### Features:

- Sturdy load frame
- User friendly operation height
- Operates semi auto & Manual mode
- Both Bend and Re-bend operation
- Easy place and remove specimen
- Interchangeable mandrels with varying diameters
- Adjustable roller with specimen varying diameters
- Guard & covers provided for safety and protection
- Utility tray for mandrels
- Adjustable sensor for mandrel stroke in semi-auto mode

### INTRODUCTION

The FIE Make cold Bend-Rebend Testing Machine gives a uniform and accurate bending test to obtain ductility of metal. Ductility is judge by mean of metal bars under the condition of bend test for wires and steel metals samples, such as reinforcement bars used in concrete.

A simple cold bend test is used to determine the flexibility for ductile materials in the form of rod and bend shaping without cracking.

Bend-rebend testing machine's structure and operations meets the ISO 1599 standards. This machine operates manual and semi auto mode. Safety cover protects accidental issues while conducting bending tests. The interchangeable Mandrels are to meet requirements of specimens with varying diameter.

The purpose of re-bend test is to measure the effect of strain ageing on steel. Strain ageing has embrittlement effect which takes place after cold deformation by diffusion of nitrogen in steel.

### CONSTRUCTION

This machine is composed of a fabricated frame supported to load plates having a hydraulic cylinder-piston fixed horizontally on it. Two reaction rollers are fitted on the beam front of and perpendicular to cylinder-piston.

They may easily be adjusted in distance to be in accordance with the Standards concerning bars having diameter between 6 and 40 mm. At the end of piston there is a provision to hold replaceable mandrel for obtaining bend or re-bend test of different diameters. This machine has test pressure 200 bar and 350mm piston stroke.



### Specifications :

Standard	IS 1599
Specimen Diameter	Ø6 to Ø40 mm
Max Pressure	200 bar
Max. Bending Angle	0°-180°
Max. Re-bending Angle	90°
Piston Stroke	350 mm
Machine Dimensions (LxWxH)	1740x1170x1110 mm
Approx. Machine Weight	500 kg.
Power Supply	420 VAC, 3 Ph.
Mandrels	Selectable (According to Standards)
Instruction Manual	1 Book

Due to constant Research & Development, Specifications and Features are subject to change without notice.

Manufactured By :



## Fuel Instruments & Engineers Pvt. Ltd.

Plot No. 68 & 89, Parvati Co-op Industrial Estate, YADRAV-416 145 (Ichalkaranji),  
Tal : Shirol, Dist : Kolhapur, Maharashtra State, INDIA.

**Tel** : +91 2322 252137, **Cell** : +91 98223 94981, **E-mail** : mrk@fietest.com

**Web** : www.fiegroup.in, www.fietest.com, www.fuelinstrument.com