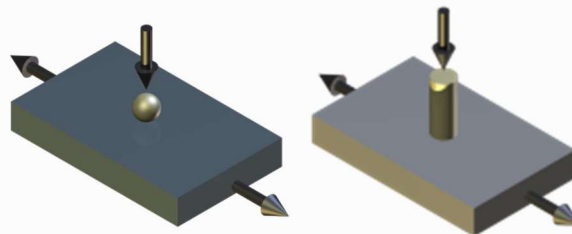
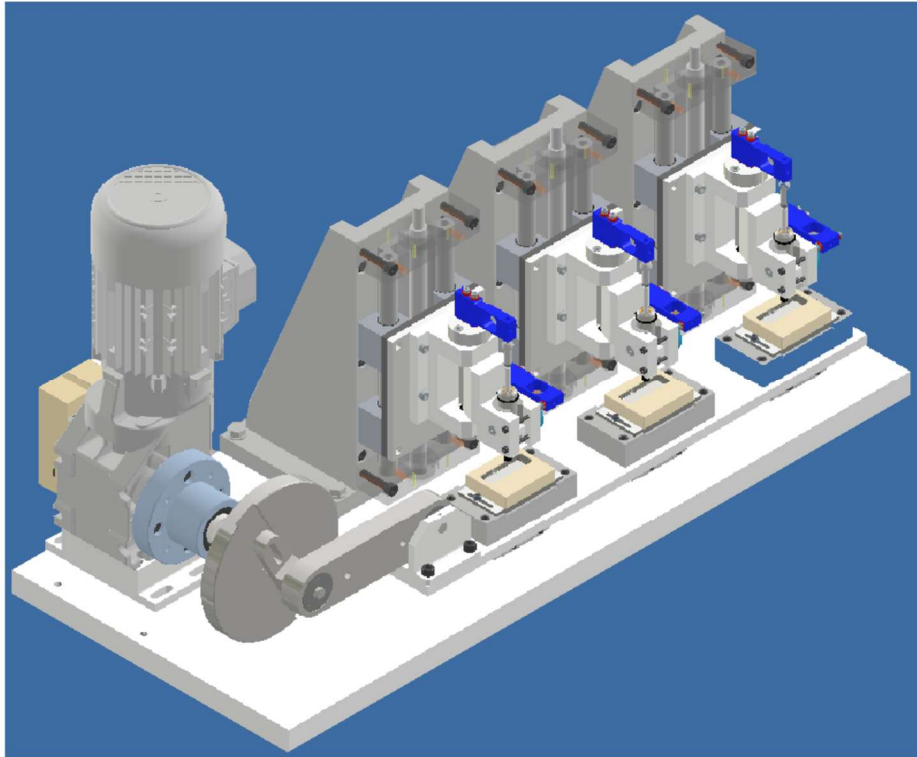


TE 88 RECIPROCATING PIN ON PLATE



Description

The TE 88 Reciprocating Pin on Plate machine is a three station wear and friction tester primarily designed for testing polymers and coatings in a production environment. The machine can also perform tests in accordance with ASTM F732.

The machine includes an a.c. variable speed gear-motor with variable throw crank, reciprocating assembly, three load, friction and wear pin carrier assemblies and a control and data acquisition system. Load is applied manually and measured with a force transducer. Friction is measured with a force transducer and wear is sensed by linear potentiometer.



Load, friction and wear assembly

Control and Data Acquisition

Control and data acquisition are implemented via host PC running COMPEND 2020 Windows compatible software, in conjunction with a Phoenix Tribology USB micro-controller interface.

Automatic control is implemented via user programmable test sequences. Manual control is implemented using on screen toggles. Data is stored to hard disc in either .csv or .tsv file formats.

TE 88 RECIPROCATING PIN ON PLATE MACHINE

Technical Specifications

Normal Load:	10 to 1,000N
Signal Conditioning:	Strain Gauge Amplifier Module
Friction Force Range:	250 N
Signal Conditioning:	Strain Gauge Amplifier Module RMS/DC Converter Module
Wear:	Linear Potentiometer
Range:	2 mm
Resolution:	0.5 μ m
Specimen Holder:	8 mm and 5.5 mm diameter pins
Optional Holders:	10 mm and 6 mm diameter balls
Interface:	USB Serial Link Interface Module
Software:	COMPEND 2000
Motor:	a.c. Vector Motor 0.55 kW
Contact Configurations:	Pin on Plate Ball on Plate
Temperature Range:	Ambient to 200°C
Heating Power:	800 W
Temperature sensor:	k-type thermocouple
Maximum Stroke:	50 mm
Maximum Frequency:	5 Hz
Maximum Frequency @ Maximum Stroke:	2 Hz @ 50 mm

Automatically Controlled Parameters

Frequency
Test Duration

Manually Controlled Parameters

Load
Reciprocating Stroke Length

Measured Parameters

Friction
Load
Temperature
Wear
Frequency
Number of Cycles
Test Duration
Friction Coefficient
Sliding Distance

Services

Electricity:

220/240V, single phase, 50 Hz, 3 kW
110/120 V, single phase, 60 Hz, 3 kW