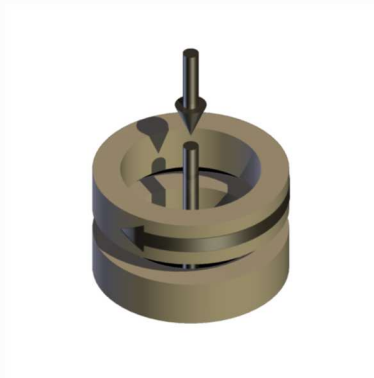
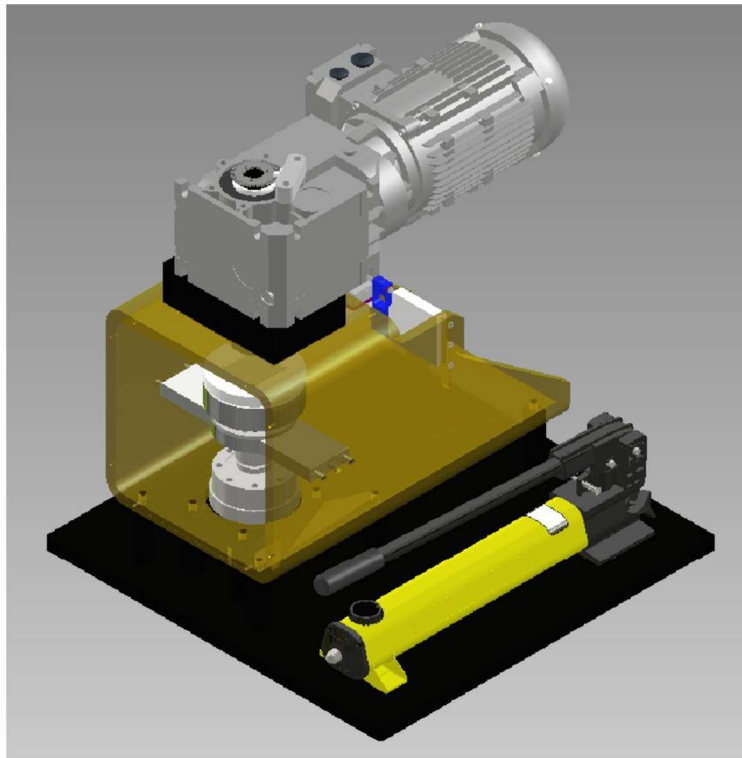


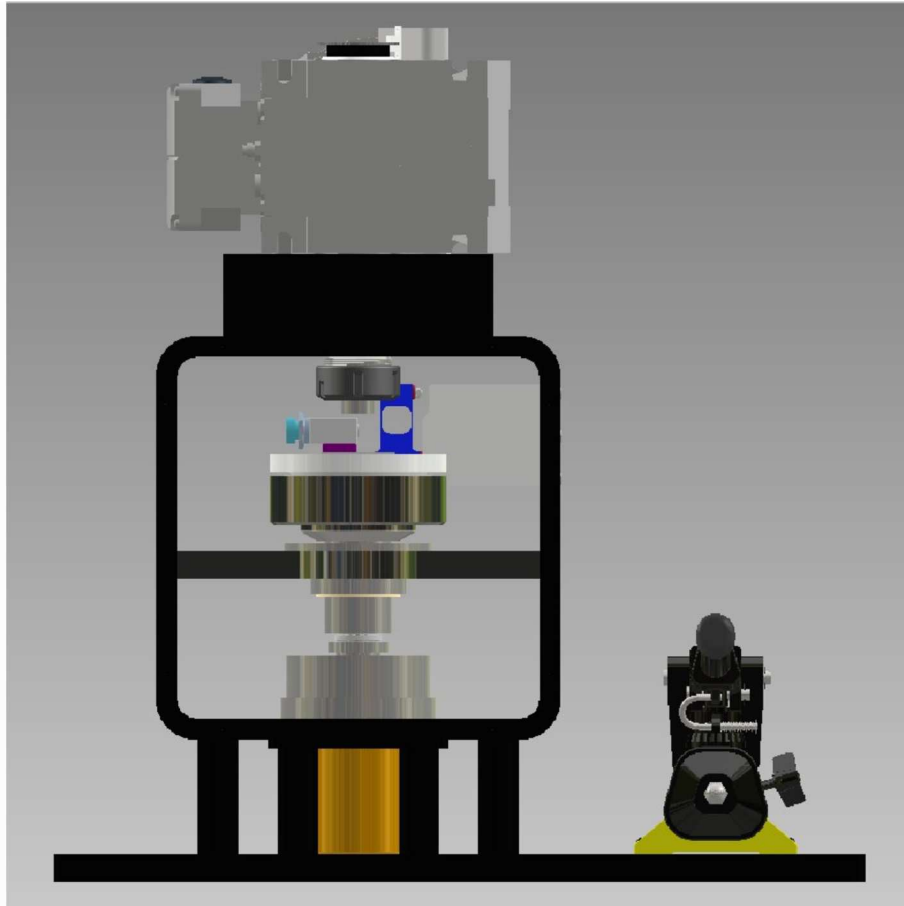
## ST- TC TWIST COMPRESSION TESTER

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### Description

The ST-TC test machine is designed for running tests in accordance with the ASTM G223 standard for evaluating the friction and adhesive wear properties of materials under both dry and lubricated conditions. This test bench ensures reliable, standardized testing and facilitates comparative wear performance analysis for end users.



The machine is equipped with a manual hydraulic pump and cylinder for loading, with a force transducer for load measurement. A high-torque, low speed, gear-motor, with encoder feedback, provides rotation of the upper specimen. The lower specimen is torque reaction mounted, with a lever arm that engages with a load cell for friction torque measurement.

The machine frame is designed to be sufficiently rigid to prevent deflection under high test loads. It features self-aligning mechanisms to ensure horizontal and concentric alignment of the contacting specimen surfaces.

### Control and Data Acquisition

Control and data acquisition are implemented via touch screen PLC with friction torque data exported via USB stick.

### Standard Tests

ASTM G223 Standard Test Method for Measuring Friction and Adhesive Wear Properties of Lubricated and Nonlubricated Materials Using the Twist Compression Test (TCT)

### Order As:

ST -TC TWIST COMPRESSION TESTER

## Technical Specifications

Hollow Cylinder:	25 mm outer diameter - 3 mm wall thickness
Flat Specimen:	40 X 40 mm - 3 mm thickness (can be varied)
Load Range:	1.5 to 50 kN
Loading Method:	Hydraulic
Load Measurement:	Load cell
Load Control:	Manual
Friction Measurement:	Force transducer
Temperature:	Ambient
Lubrication:	Manual
Rotational Speed:	0 to 37.4 rpm
Motor:	2.6 kW 3 phase a.c.gear-motor
Output Torque:	630 Nm
Control & Data Acquisition:	Touch-screen PLC & Interface
Data Export:	USB Stick

## Automatically Controlled Parameters

Rotational Speed  
Test Duration

## Manually Controlled Parameters

Load

## Measured Parameters

Rotational Speed  
Applied Load  
Friction Force  
Friction Coefficient  
Test Duration

## Services

Electricity: 400 V, 5.5 A, three phase, 87 Hz, 2.6 kW