

Torque Functional Test “TFT”

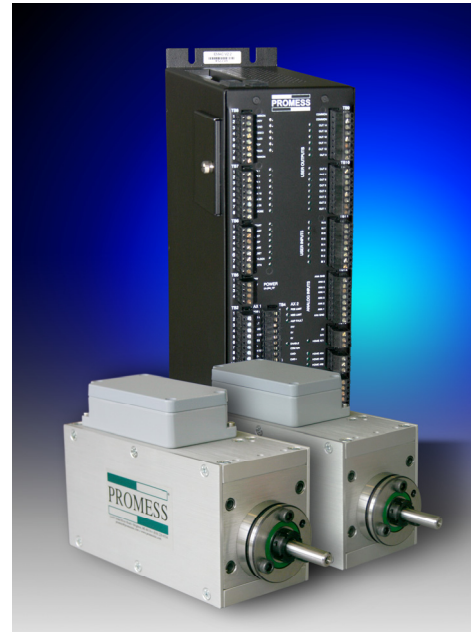
Torque Monitoring and Control

The Promess Torque Functional Test Systems “TFT” are the newest Total Systems Solution from Promess for the builder and the end user. The “TFT” has the ability to both monitor and control the rotational torque and angle. Advantages of the system include the ability to monitor small rotational torque with overload protection for the torque transducer. Data acquisition, signature monitoring and gauging are just a few of the standard features included in the system. The traditional approach to monitoring torque is to put a torque transducer in line with a motor or drive unit. The biggest downfall or drawback to this method is that the drive motor has the ability of producing torques greater than what the torque transducer is rated for. The torque transducer is selected based on the torque and resolution needed.

The Promess system consists of two main components, the **Torque Module** and the **EMAC controller**. The Torque Module consists of a servo motor, encoder, torque transducer and an output shaft for direct coupling to the tooling. Torque can be measured in both the clockwise and counter clockwise direction. An angular encoder provides the angle feedback and the mechanical overload protection prevents the torque transducer from being overloaded. It can be mounted in either a base plate or flange configuration. The EMAC is a multi axis controller and monitoring system all in one package. Additional inputs are available for feed- back from other analog or digital sensors. It has dedicated and user definable outputs for hand shaking purposes.

Applications:

- Steering Component Test and Assembly
- Drive Train Component Test and Assembly
- Manual Window Crank Final Test
- Seat testing
- Torque to Turn Testing
- Etc.



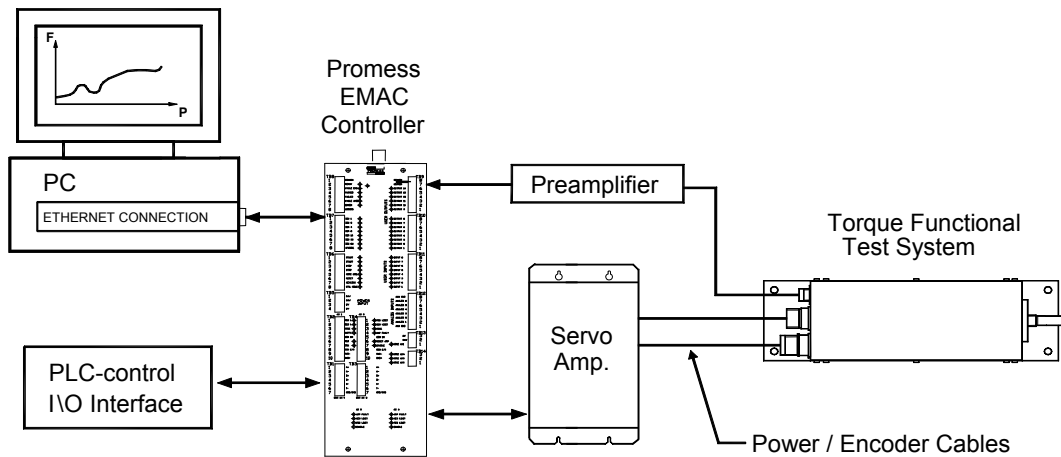
Promess Provides:

- Torque Module / Spindle
 - Includes:
 - Integrated Torque Transducer
 - Preamplifier
 - Servo Motor and amplifier
- EMAC: Promess Multi Axis Controller with Windows based software.
- Cables

Features:

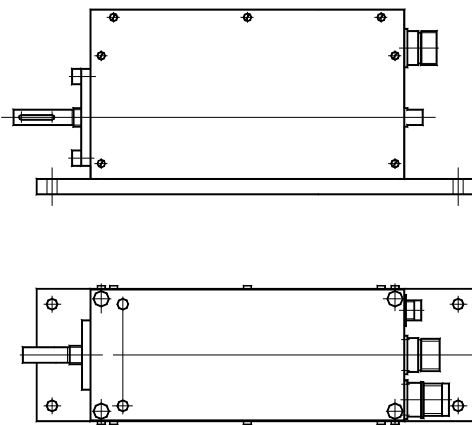
- Easy Programming
- Flexibility
- Turn to a Torque
- Turn to an Angle / Position
- Gauging of an external transducer.
- Signature Monitoring
- Data Acquisition
- Network Multiple Systems
- Multiple Part Programs

System Diagram / Components



Standard Mounting Configuration

Base Mount



Face Mount

