

NEW!

# Introducing Texcel VX100 PRO

## Dynamometer Control & Health Monitoring System



### Froude – the Industry Standard

- Froude's well-known high accuracy control
- Host control using Modbus, TCP, Ethernet and RS232
- Intuitive GUI – drag and drop functionality, enhanced screen views
- Multi-mode digital and analog control
- Enhanced dynamic control algorithms
- Control multiple dynos
- Advanced safety and health monitoring system
- User configurable displays
- Programmable flight simulation modes
- Host computer interface



The most recognized engine-testing brand for over 135 years.

## Applications

The New Froude **Texcel VX100 PRO** control and monitoring system is specifically designed for high performance engine and gas turbine test applications using hydraulic dynamometers. This includes research and development, production and post overhaul testing.

## Introducing the Texcel VX100 PRO

The VX100 PRO is the latest edition to our portfolio of control systems. It utilizes a real-time microcontroller to provide fast and extremely accurate load control. It incorporates sophisticated digital control algorithms with enhanced health monitoring and fault recovery software. The compact design simplifies installation and uses the latest distributed I/O hardware technology. The operator's control panel provides a MS Windows® based graphical user interface with a multi-page display that can be configured by the user to show numeric, bar chart, dial and real-time rolling trace displays.

# Texcel VX100 PRO Dynamometer Control & Health Monitoring System

### Specification

- Four control modes; position, speed, torque and powerlaw including bump-less mode change logic
- Bi-directional support
- Link to remote data acquisition system using the remote interface (modbus, TCP, Ethernet and RS232 supported)
- Control demands and operating modes using the remote interface or customer provided analog and digital signals
- System control accuracy better than  $\pm 0.25\%$  of dynamometer speed or torque
- Torque measurement accuracy better than  $\pm 0.25\%$  of full scale
- Speed measurement accuracy  $\pm 1$  rpm
- Selectable PIDs giving multiple dynamometer/engine capability
- Automatic or manual inlet valve control
- User configurable control panel screen displays
- Real-time trace display
- Dynamic fault detection algorithms
- Four level alarm annunciation and alarm log
- High speed data logging
- Overspeed, overtorque and temperature protection
- Calibration certificates

- Linear potentiometer control for transient load changes
- Configurable dump load facility for power generation applications

### Options

- Programmable control functions for engine specific applications including flight simulation for turboprop and turboshaft engines, such as the T56, AE2100, Dart, Tyne and T700.
- Tandem dynamometer control
- Vibration monitoring
- Additional IO modules

### Complementary Products

- Full range of high- and low-speed hydraulic dynamometers.
- Engine/dynamometer test carts
- Engine/dynamometer test stands
- Engine adaptor frames

### Customer Service and Support

- Facilities planning and installation service
- Comprehensive in-house and/or on-site training for customer engineering, operator and maintenance personnel
- Tailored preventative maintenance contracts

### Further information:

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