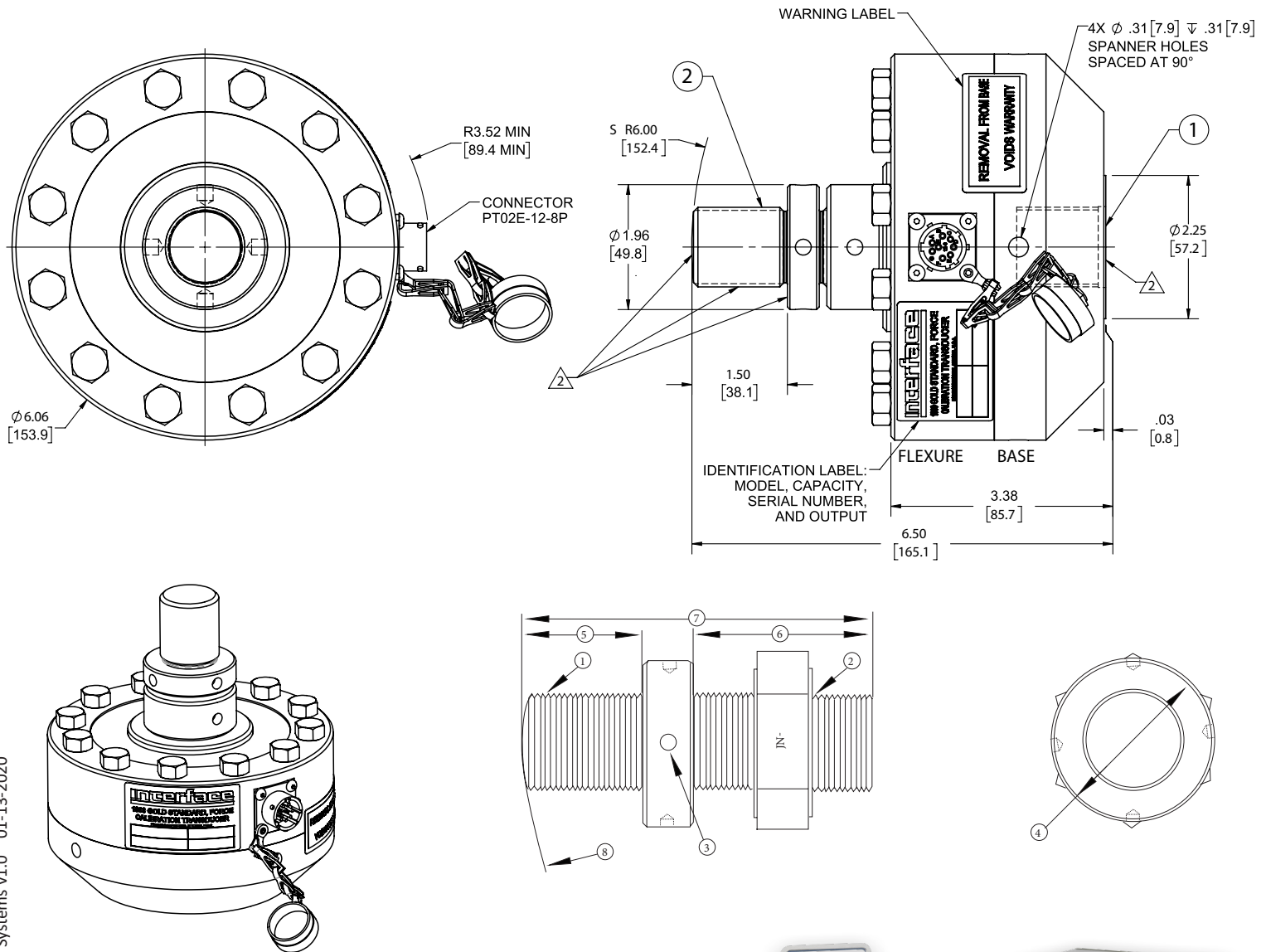


Calibration Systems



Calibration Systems v1.0 01-13-2020



Interphase
FORCE MEASUREMENT SOLUTIONS

The World Leader in Force Measurement Solutions™

Interface Load Cell Calibration Systems are available in design configurations for a wide range of rigid and portable systems.

We offer strain gage load cell calibration systems for nearly any force measurement application including custom designs. Our GS-SYS Gold Standard® Calibration System consists of a four-post rigid load frame, proprietary load feedback loop, signal conditioning hardware, and fully-automated calibration software for the highest accuracy and lowest uncertainty available. Portable versions of the GS-SYS system are also available for calibrating load cells and test equipment.

GS-SYS Gold Standard® Calibration System Load Frame

The Interface Gold Standard® Calibration System using the Interface Gold Standard® Load Cell ensures a metrology system of the highest accuracy and lowest uncertainty available.

GS-SYS01 Gold Standard™ Desktop Load Cell Calibration System

The GS-SYS01 Gold Standard™ System is a complete PC-based system for the calibration of load cells and torque transducers. Normally the system is used with a hydraulic load frame which can either be supplied by the user or by Interface. Separate software is available for the calibration of load cells in a deadweight system. Utilizing the experience obtained in more than five decades of force calibration of tens of thousands of load cells every year, this system provides state-of-the-art accuracy. The system is user-friendly and calibrations can be conducted with minimal training. Pull-down menus and step-by-step instructions guide the operator through a complete calibration.

This GS-SYS01 System Includes:

- SCB1 dual channel 20-bit signal conditioning board
- ICS-202 force calibration software
- Two Gold Standard interconnect cable assemblies
- CX-0440 $\pm 4\text{mV/V}$ transfer standard
- SIS-104 system setup
- SIS-103 one-day training at Interface

GS-SYS03 Gold Standard® Portable Load Cell Calibration System

The GS-SYS03 Gold Standard™ System is a complete PC-based system for the calibration of load cells and torque transducers. Separate software is available for the calibration of load cells in a dead-weight system.

The GS-SYS03 System Includes:

- 9840 Dual Channel 24-bit Intelligent Indicator
- Internal mV/V calibration of Model 9840
- ICS-202 force calibration software
- Two Gold Standard interconnect cable assemblies
- CX-0440 $\pm 4\text{mV/V}$ transfer standard
- SIS-103 one-day training at Interface

GS-SYS04 Gold Standard® Portable E4 Machine Calibration System

The Interface Portable E4 Machine Verification System integrates our Model 9840 Intelligent Indicator with any Windows-based PC. This solution creates a portable system for in-field verification of force test machines. This verification involves insertion of a reference load cell such as the Interface Gold Standard™ Load Cell into the equipment under test. Each data point in the test frame controller is compared against the reading from the reference load cell.

The GS-SYS04 System Includes:

- 9840 Single Channel 24-bit Intelligent Indicator
- Internal mV/V calibration of Model 9840
- ICS-205 machine calibration software
- Gold Standard interconnect cable assembly
- CX-0440 $\pm 4\text{mV/V}$ transfer standard
- SIS-103 one-day training at Interface

CX Series Precision mV/V Transfer Standard

The CX Series Precision mV/V Transfer Standard is the most accurate load cell simulator in the market. Since this product is NIST Traceable, it can be used to calibrate and check instruments in an accredited lab. Interface offers a variety of both single step and 13 step models.

9840 Calibration Grade Multi-Channel Load Cell Indicator

The 9840 is suitable for use in calibration labs, field service, or anywhere high accuracy is important. This product's features include a bipolar 6 digit 2 line display, remote sense, low noise, 24-bit internal resolution, USB port with RS232 communication, mV/V calibration, and is capable of storing calibrations for up to 25 sensors. Features that come standard on the 9840 include 6 point linearization, unit conversion, and front-panel tare. This unit also has self-calibration via TEDS plug and play ready IEEE 1451.4 compliance.

4 Channel 9840-400-1-T Intelligent Indicator

The 4 Channel 9840 features include 2 Interactive 7" graphical touch screen displays, remote sense, low noise, 24-bit internal resolution, USB port with RS232 communication, mV/V calibration, and stores calibrations for up to 25 sensors. Suitable for use in calibration labs, field service, or anywhere high accuracy is important. Features that come standard on the 9840 include 5 and 6 point linearization, unit conversion, and front-panel tare. This unit also has self-calibration via TEDS plug and play ready IEEE 1451.4 compliance.

Calibration Adapters

Interface uses high grade alloy steel, stainless steel, heat treatment, and machining practices on all of their calibration adapters to ensure that the performance of your transducer is maintained to factory standards.

1600 Gold Standard® Calibration LowProfile® Load Cell

Interface's 1600 Gold Standard® low profile load cell is designed for calibrating other load cells where the best possible load cell is required. It has a 4% lower load limit per ASTM E74 and is a step above the 1100. The 1600 series provides both tension and compression in one unit. Equipped standard with a high precision base installed and factory installed calibration adapter. Options for a 2nd, 3rd bridge and overload protection are available.

1601 Gold Standard® Calibration Compression-Only LowProfile® Load Cell

The 1601 is a compression-only Gold Standard® low profile load cell is designed for calibrating other load cells when the best possible load cell is needed. It has a 4% lower load limit per ASTM E74 and is a step above the 1100. Options for a 2nd, 3rd bridge and overload protection are available.

1606 Gold Standard® Low Capacity Calibration Load Cell

The 1606 Gold Standard® load cell is designed for low capacity applications while calibrating other load cells. It has a 4% lower load limit per ASTM E74 and is a step above the 1100. The option for a 2nd bridge is available.

1800 Platinum Standard® Calibration LowProfile® Load Cell

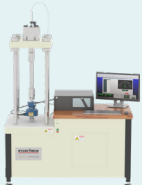
Interface's 1800 Platinum Standard® low profile load cell is the ultimate in calibration grade load cells which is capable of a 2% lower limit per ASTM E74 and features an integral stud. The 1800 has both tension and compression in one unit. Every 1800 comes standard with a high precision base installed. Handcrafted excellence for the most demanding calibration requirements. Options for a 2nd and 3rd bridge are available.

2200 Calibration Column Load Cell

The 2200 is a Calibration Grade Column Load Cell that is lightweight and portable for use in the field and is also excellent for performing calibrations in the lab as well.

5500 Calibration Grade Reaction Torque Transducer

The 5500 Series Calibration Grade Reaction Torque Transducer features a rugged flange-style design, low deflection, high torsional stiffness, and the ability to withstand large overhung moments. ASTM E2428 Calibrations are available on most capacities.



GS-SYS Gold Standard®
Calibration System
Load Frame
Capacities up to 100K lbf



GS-SYS01 Gold Standard®
Desktop Calibration System
Reduces Calibration Time 50-90%
Automatic Calibration and Archiving
Custom Report Writer



GS-SYS03 Gold Standard®
Portable Calibration System
Reduces Calibration Time 50-90%
Automatic Calibration and Archiving
Custom Report Writer



GS-SYS04 Gold Standard®
Portable E4 Machine
Calibration System
Reduces Calibration Time 50-90%
Automatic Calibration and Archiving
Custom Report Writer



CX-0220 Precision mV/V
Transfer Standard
Precision mV/V Output
Simulator +2, 0, -2 mV/V



CX-0440 Precision mV/V
Transfer Standard
Precision mV/V Output
Simulator +4, 0, -4 mV/V



CX-0404 Precision mV/V
Transfer Standard
Precision mV/V Output
Simulator +4.40 to -4.40 in 13 Steps



CX-0610 Precision mV/V
Transfer Standard
Precision mV/V Output
Simulator +6 to -6 mV/V
in 1 mV/V 13 Steps



9840-100-1-T Calibration
Grade Load Cell Indicator
Single Channel



9840-200-1-T Calibration
Grade Load Cell Indicator
Dual Channel



9840-400-1-T Intelligent
Indicator
Four Channel



CA Calibration Adapters
US and Metric Sizes Available



1800 Platinum
Standard® Calibration
1.1K lbf to 55K lbf
4.89 kN to 245 kN



1600 Gold Standard®
Calibration
500 lbf to 200K lbf
2.22 kN to 900 kN



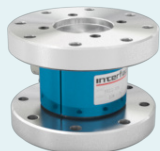
1601 Gold Standard®
Compression Only Calibration
1K lbf to 100K lbf
4.45 kN to 445 kN



1606 Gold Standard®
Low Capacity Calibration
50 lbf to 300 lbf
222 N to 1.33 kN



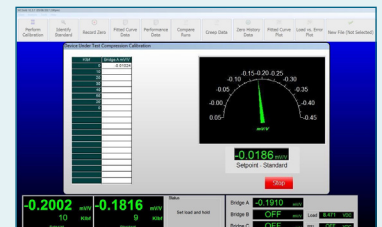
2200 Calibration
Column Load Cell
100K to 200K lbf
445 to 890 kN



5500 Calibration Grade
2K lbf-in to 300K lbf-in
220 Nm to 33K Nm

Calibration Software

- Load points can be preset as required per your test specifications
- The ICS-202 Gold Standard® Calibration Software will provide exact load output at specific load points
- Calibration results from other runs can be compared, measured, and displayed with current run results



ISO 17025 SCOPE OF ACCREDITATION

Interface is ISO 17025 | A2LA Accredited

Interface is A2LA accredited for Torque and Force Calibration in accordance with the recognized International Standard ISO/IEC 17025:2017.

Interface calibration certificates are the most complete in the industry. Certificate information includes tabulated measurement variables data, zero balance, computed nonlinearity and hysteresis, and traceability statements.

A2LA has accredited INTERFACE, INC. for technical competence in the field of Calibration. An accredited certification is offered at a nominal charge.

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 General Requirements for the Competence of Testing and Calibration Laboratories. This laboratory also meets the requirements of ANSI/NCSL Z540-1-1994 and any additional program requirements in the field of calibration. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated 8 January 2009). Presented this 16th day of October 2018.



Calibration Experts

- ISO 17025 Accredited
- 50+ Years of Calibration Experience
- Calibration of All Manufacturers Load Cells
- 100,000+ Calibrations Performed Annually
- Custom Calibrations to Meet your Needs
- IPerform Service Software for RMA, Tracking and Permanent Archive of Test Data
- NMI Certified Gold and Platinum Standard Reference Load Cells
- Interface Gold Standard Calibration Software for Data Collection and Analysis
- Full-Service Machine Shop for any Mechanical Requirements
- Interface Provides Full Calibration and Repair Services

Calibration Systems

- Load Frame
- Desktop
- Portable
- Transfer Standard
- Signal Conditioning Boards
- Intelligent Digital Indicators
- Calibration Grade Load Cells
- Calibration Adapter

Interface force measurement calibration systems are available in many design configurations for project designs requiring the highest performance.

To learn more about the Interface products or force measurement solutions call **480-948-5555.**

Interface is the world's trusted leader in technology, design and manufacturing of force measurement solutions.

Our clients include a "who's who" of the aerospace, automotive and vehicle, medical device, energy, industrial manufacturing, test and measurement industries.

Interface engineers around the world are empowered to create high-level tools and solutions that deliver consistent, high quality performance. These products include load cells, torque transducers, multi-axis sensors, wireless telemetry, instrumentation and calibration equipment.

Interface, Inc., was founded in 1968 and is a US-based, woman-owned technology manufacturing company headquartered in Scottsdale, Arizona.