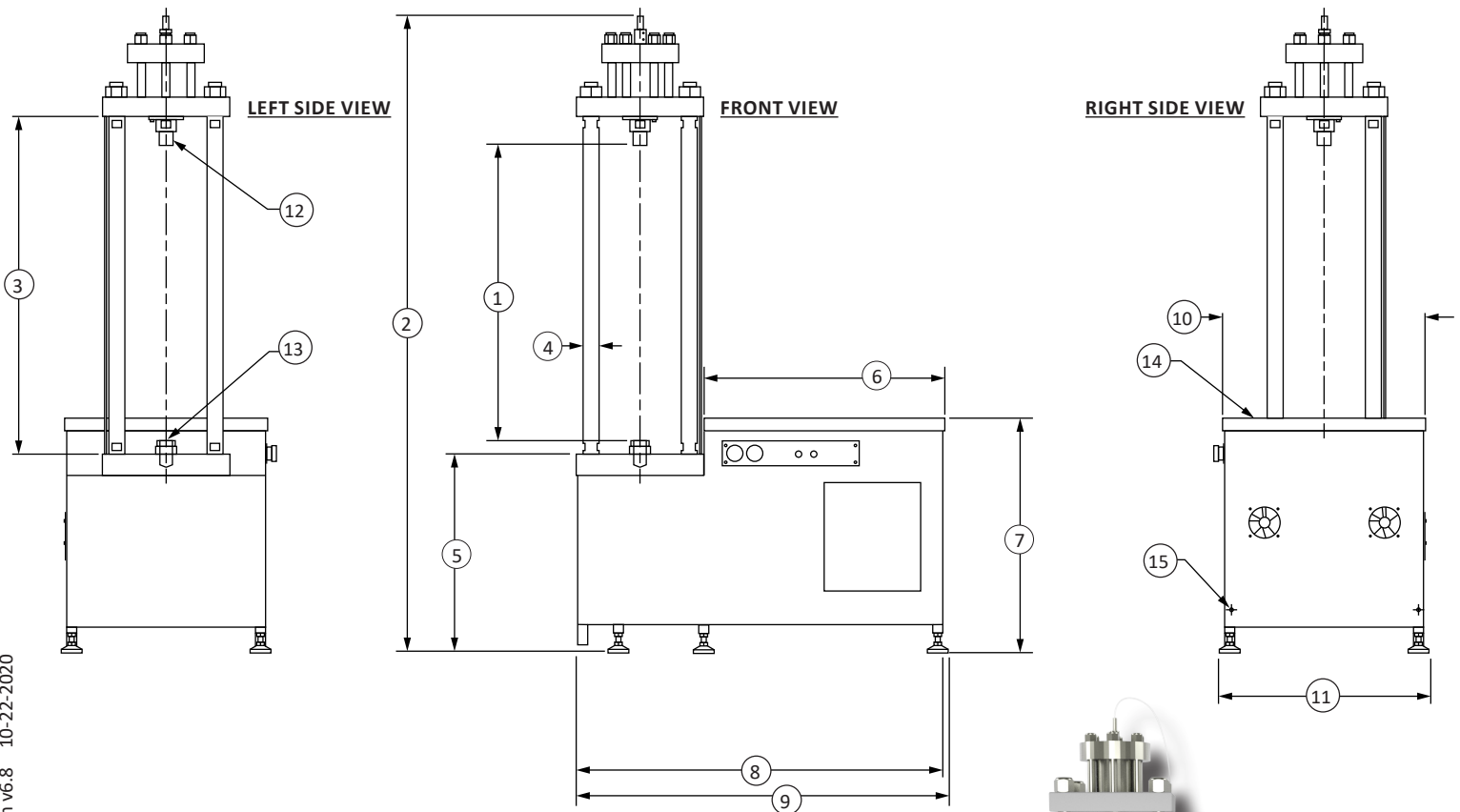


# Gold Standard<sup>®</sup>

## Calibration System



Gold Standard Calibration System v6.8 10-22-2020



# Why choose the Interface Gold Standard® Calibration System?

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.

## The Gold Standard® Calibration System Includes

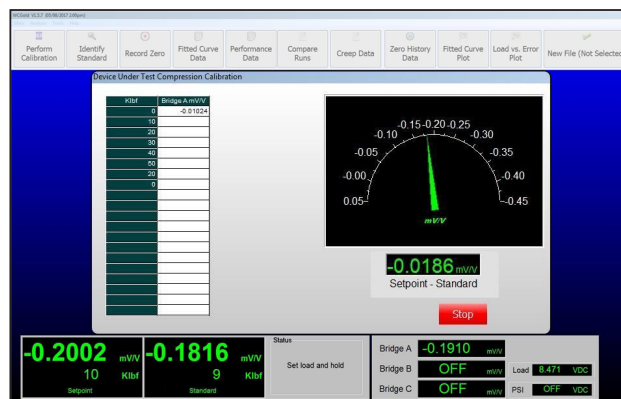
- 55K and 100K lbf capacities load frame
- Integrated control and measurement system
- Integrated computer system with Interface Gold Standard® Calibration Software
- One set of thread adapters for initial set-up and use

## Load Frame

- Interface Inc. is the industry leader for force calibration systems (50 years)
- The Gold Standard® Calibration Software is used in over 300 calibration labs worldwide
- 2 channels (option available for 4 channel)
- Less than 0.04% RDG uncertainty
- Signal conditioning has very low non-linearity specification (<0.003% FS)
- Fully automated system will reduce calibration time by 50% to 90%
- Automated calibration run can be completed in less than 5 minutes
- 4-post design provides superior stability throughout the calibration
- Innovative fixturing allows for tension and compression calibration without changing setup
- 12 in. clearance between posts allows for easy load cell installation and removal
- Accurate and reliable load control achieved by interactive load feedback design
- Testing and reporting per ASTM E74 and/or ISO 376 standards
- Automatically produces standard reports, graphs, and performance parameter calculations
- Ability to customize reports and graphs
- Automatically archives data

## Software

- Testing and reporting per ASTM E74 and/or ISO 376 standards with optional software
- Automatically produces standard reports, graphs, and performance parameter calculations
- Ability to customize reports and graphs
- Automatically archives data
- Load points can be preset as required per your test specifications
- The Gold Standard® Calibration Software will provide exact load output at specific load points
- Datasets for loading are automatically organized to provide curve-fitting and low and high data point values for metrology-based error analysis
- Results from earlier runs can be compared, measured, and displayed with current run results



# GOLD STANDARD<sup>®</sup>

## CALIBRATION SYSTEM

Next Generation Force Measurement Solutions

The Interface

Calibration Load

Frame using the

Interface Gold

Standard<sup>®</sup> Load

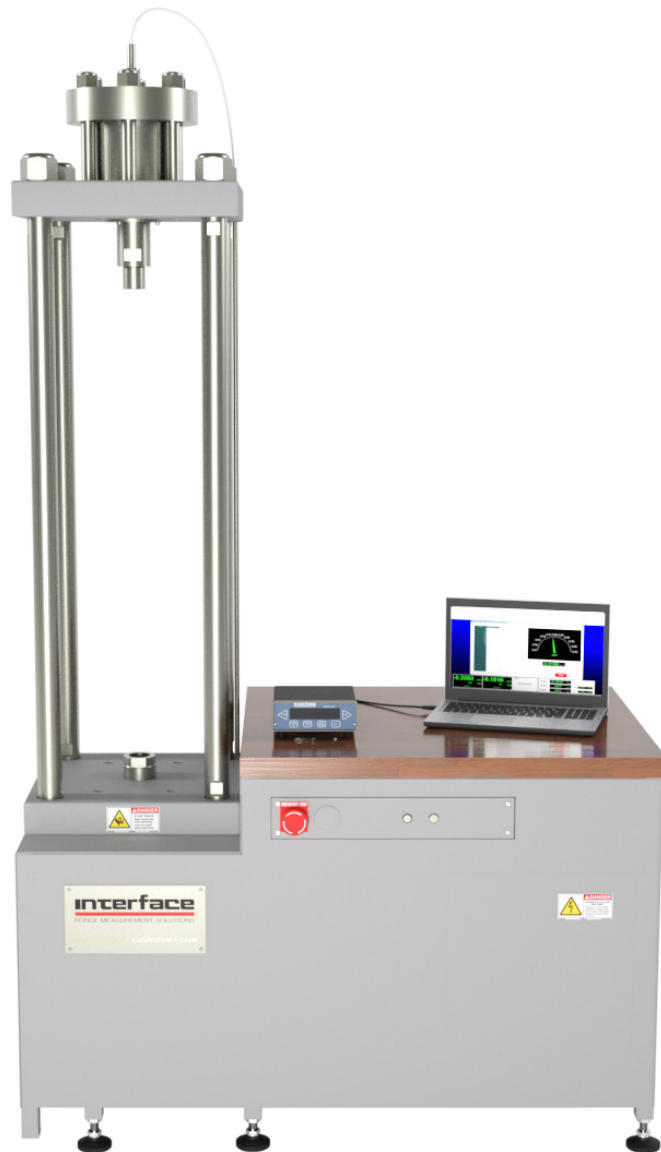
Cell ensures a

metrology system of

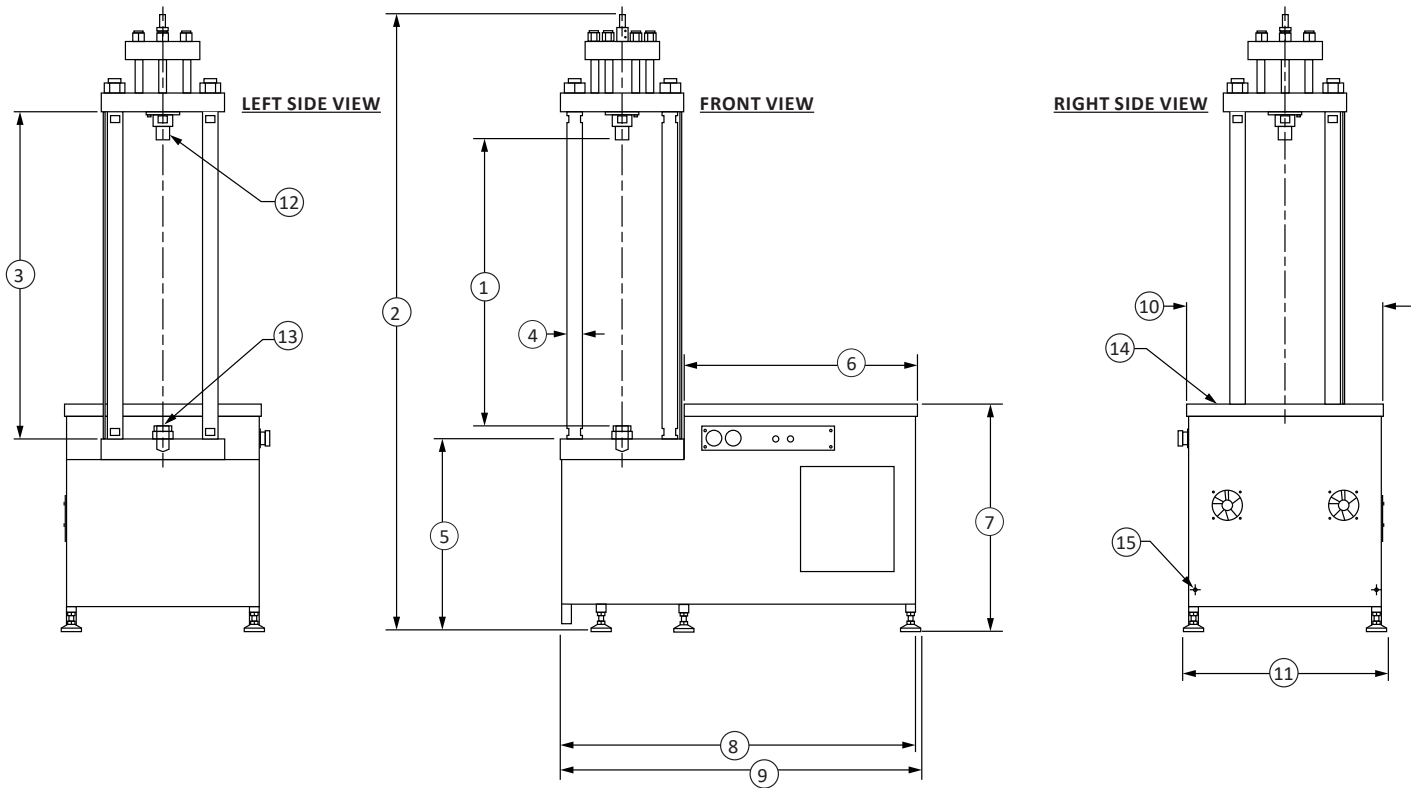
the highest accuracy

and lowest uncertainty

available.



# Dimensions



See Drawing	Model					
	LF1-55K-1-5		LF1-55K-1-6		LF1-100K-1-7	
	Capacity					
	U.S. (lbf)	Metric (kN)	U.S. (lbf)	Metric (kN)	U.S. (lbf)	Metric (kN)
55K	244	55K	244	100K	444	
in	mm	in	mm	in	mm	
(1)	24.4/30.4 (MIN/MAX)	619.76/772.16 (MIN/MAX)	38.4/44.4 (MIN/MAX)	975.36/1127.86 (MIN/MAX)	38.4/44.4 (MIN/MAX)	975.36/1127.86 (MIN/MAX)
(2)	82.0 (84.0 installed)	2082.8 (2133.6 installed)	96.0 (98.0 installed)	2438.4 (2489.2 installed)	96.0 (98.0 installed)	2438.4 (2489.2 installed)
(3)	36.5	927.1	50.5	1282.7	50.5	1282.7
(4)	Ø2.25 TYP.	Ø57.15 TYP.	Ø2.25 TYP.	Ø57.15 TYP.	Ø2.25 TYP.	Ø57.15 TYP.
(5)	29.688	754.08	29.688	754.08	29.688	754.08
(6)	36.0	914.4	36.0	914.4	36.0	914.4
(7)	35.063	890.6	35.063	890.6	35.063	890.6
(8)	55.0	1397.0	55.0	1397.0	55.0	1397.0
(9)	55.719	1415.26	55.719	1415.26	55.719	1415.26
(10)	30.0	762.0	30.0	762.0	30.0	762.0
(11)	31.25	793.75	31.25	793.75	31.25	793.75
(12)	Slack Adapter Assembly: 2-12 Male Thread, 3 (76.2) Dia. Rod, Vertical Range 0.5					
(13)	2-12 UN-2B Thread 3 (76.2) Deep					
(14)	Maple Table Top 36.0 x 30.0 x 1.75 (914.4 x 762.0 x 44.45)					
(15)	½-13 UNC CL2B Thread 1.5 Deep 2 - holes					

## Specifications

LOAD FRAME				
Model				
Capacity	lbf	55K	55K	100K
	kN	244	244	444
Max Working Height	in	30	44	44
	mm	762	1117.6	1117.6
Weight - TYP	lbs	2400	2500	2650
	kg	1088.6	1133.9	1202
Type	Four Column, Dual Action Hydraulic			
Test Type	Compression or Tension			
Piston Stroke	in	6		
	mm	152.4		
Measurement Range	2% to 100% of Rated Load Frame Capacity			
INSTALLATION REQUIREMENTS				
Power	208/240 VAC, 50/60 Hz, Single Phase, 30 Amp Circuit			
HYDRAULICS				
Oil Capacity	gal	5 - 10		
	l	18.9 - 37.8		
Oil Type	ISO 32			
Oil Temperature	Indicator with automatic over temperature cutoff			
Oil Level	Indicator with automatic low level cutoff			
LOAD FRAME CONTROLS				
Force Control	Closed loop, PID			
Piston Sensor	LVDT			
Slack Adapter Range	in	+/- 0.25		
	mm	+/- 6.35		
Setpoint Input	+/- 10 VDC			
Force Limit	User Selectable, requires acknowledgment			
Setpoint Interface	USB to +/- 10 VDC Converter			
GOLD STANDARD SOFTWARE				
Operating System	Windows 10			
Hardware Requirement				
Reports	ASTM E74, ISO 376, Custom			
Shunt Calibration	Automatic or Manual			
Calibration Control	Automatic			
Curve Fit	Least Squares Method			
Calibration Management	Compare Current and Previous Test Results			
SHIPPING				
Shipping Weight - Nominal	lbs	2600	2700	2850
	kg	1179.3	1224.6	1292.7
Crate Dimensions - Typ W x H x D	in	72 X 90 X 48	72 X 104 X 48	72 X 104 X 48
	mm	1828.8 x 2286 x 1219.2	1828.8 x 2641.6 x 1219.2	1828.8 x 2641.6 x 1219.2

# Interface Calibration Systems

- Additional Gold Standard® or Platinum Standard® load cells
- Additional input bridges
- Special thread and calibration adapters
- Transfer standard for system calibration
- On-site training



*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.