



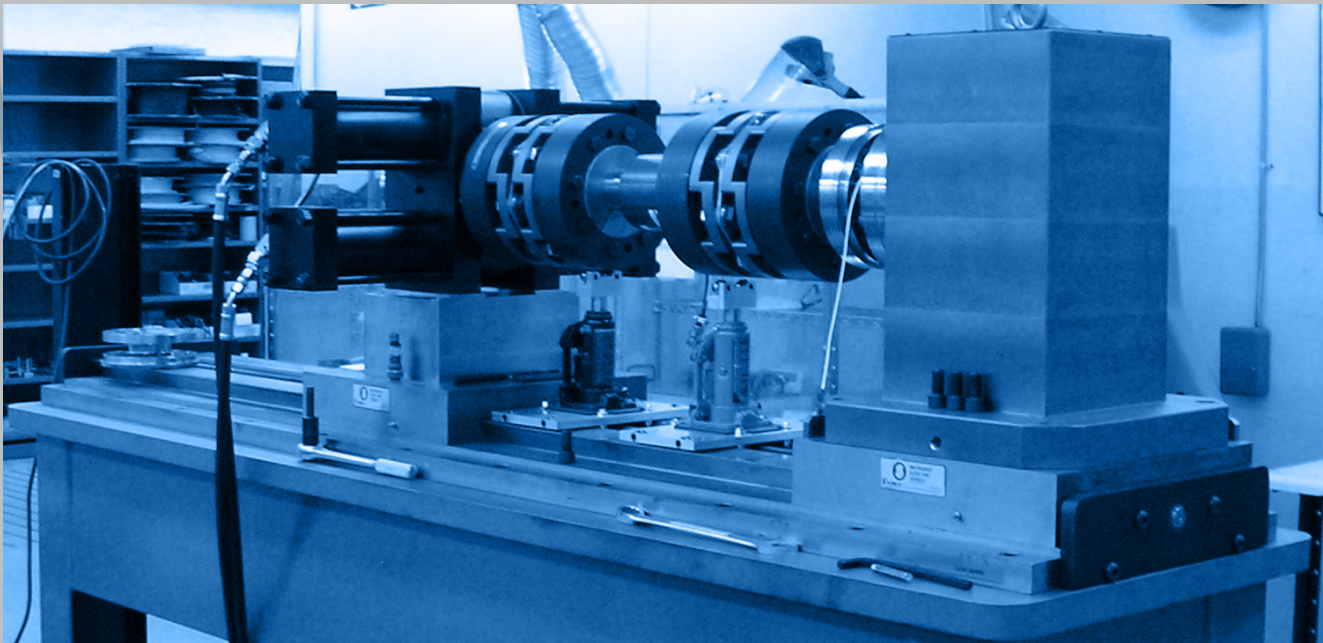
Some Much Needed R&R For Your Force Sensors

Recalibration & Repair for Load and Torque

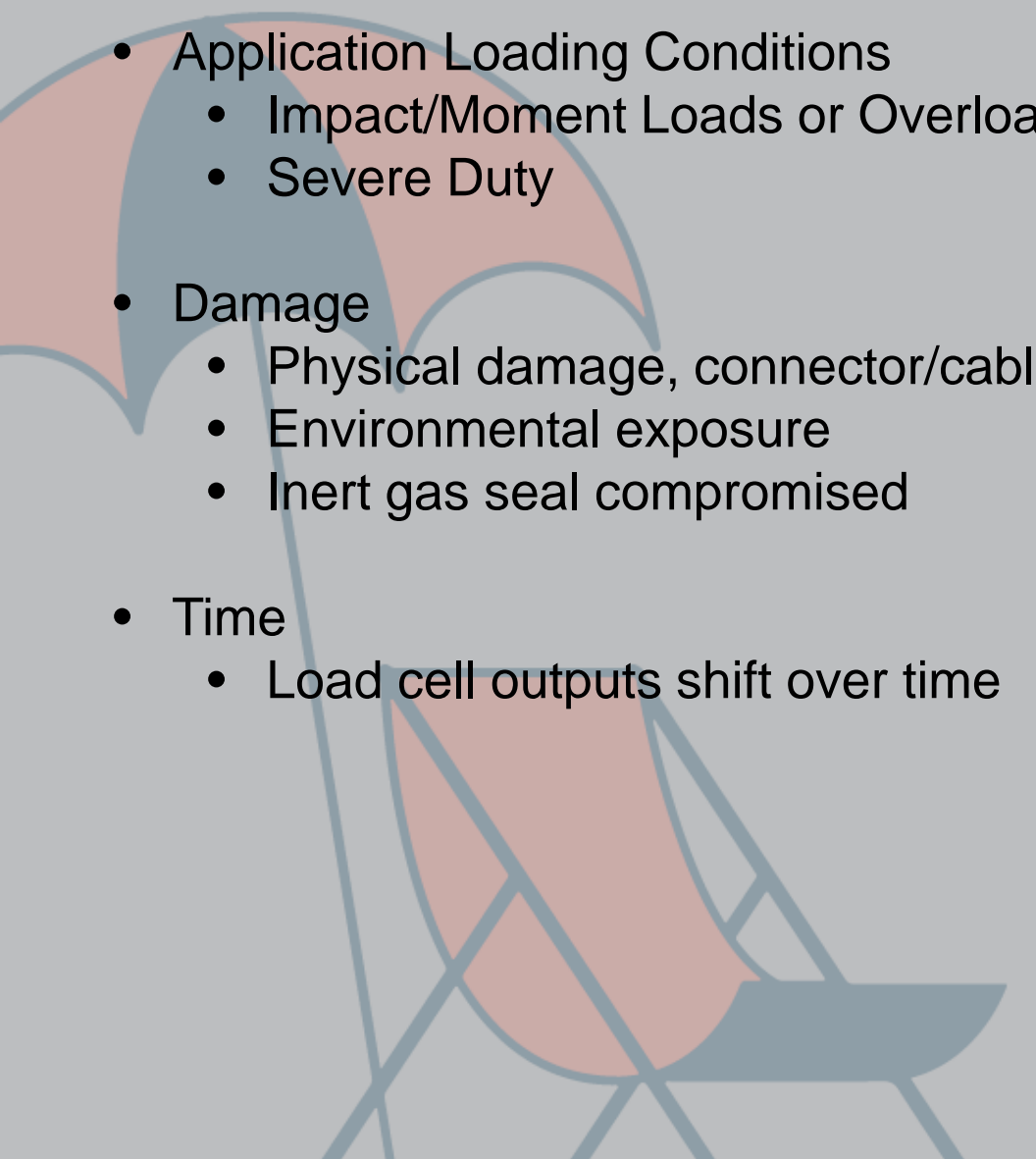


WHY RECALIBRATE?

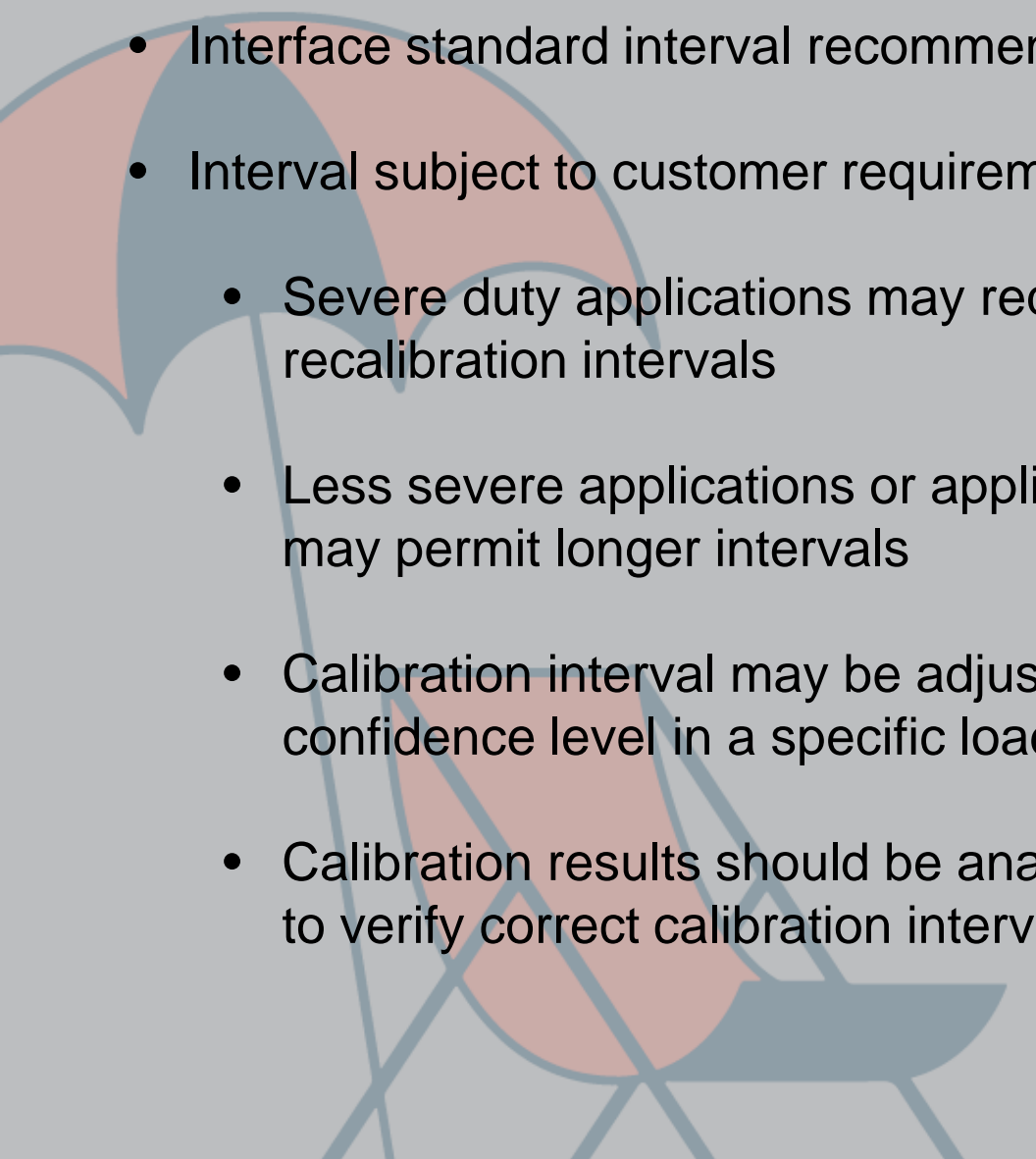
- To ensure you are getting the most accurate and reliable results for your testing/application
- Quality system compliance
- Regular check on the 'health' of your load cell



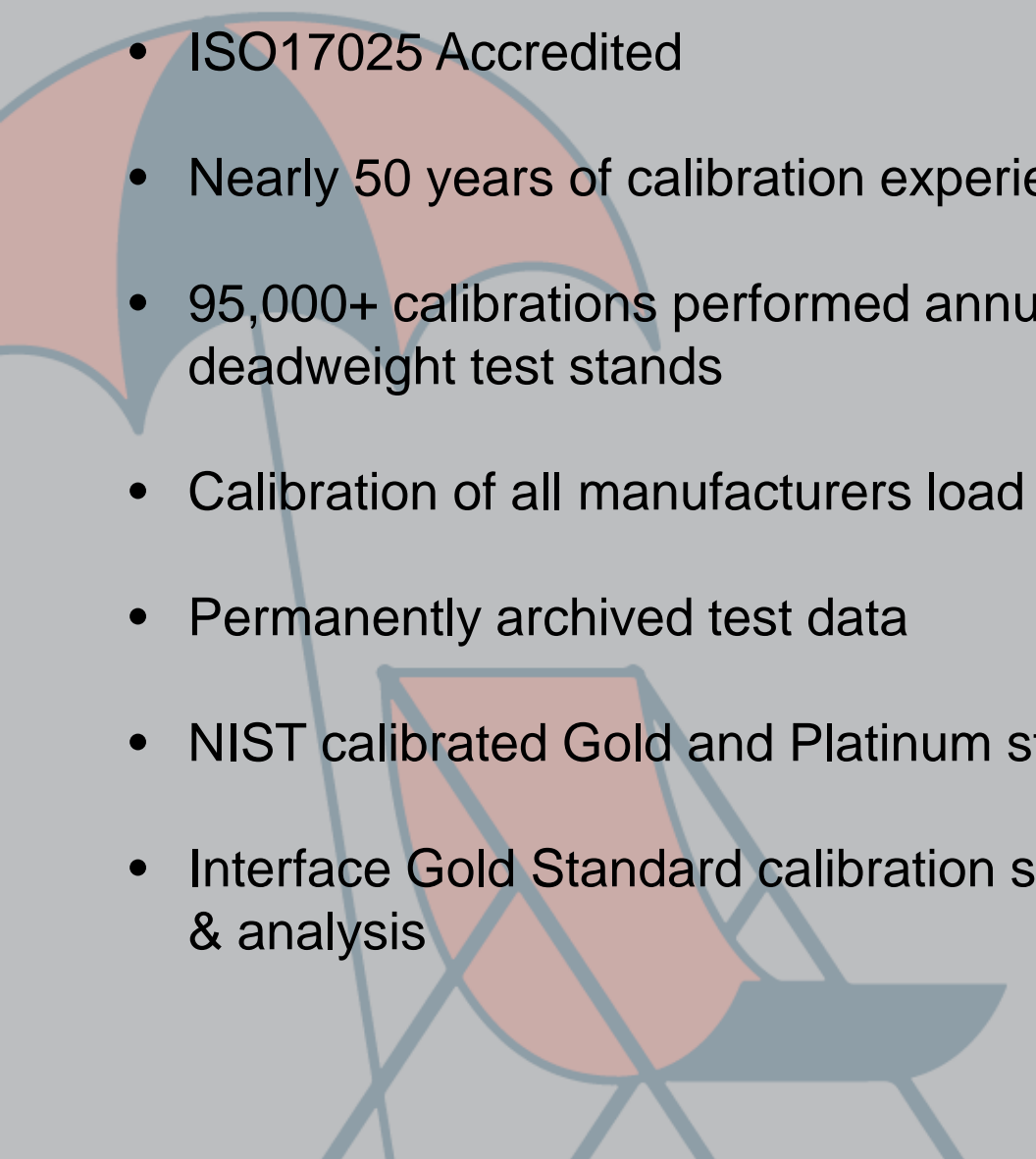
WHY DO LOAD CELL OUTPUTS CHANGE?

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- Application Loading Conditions
 - Impact/Moment Loads or Overloads
 - Severe Duty
 - Damage
 - Physical damage, connector/cable, other...
 - Environmental exposure
 - Inert gas seal compromised
 - Time
 - Load cell outputs shift over time

WHEN SHOULD I RECALIBRATE?

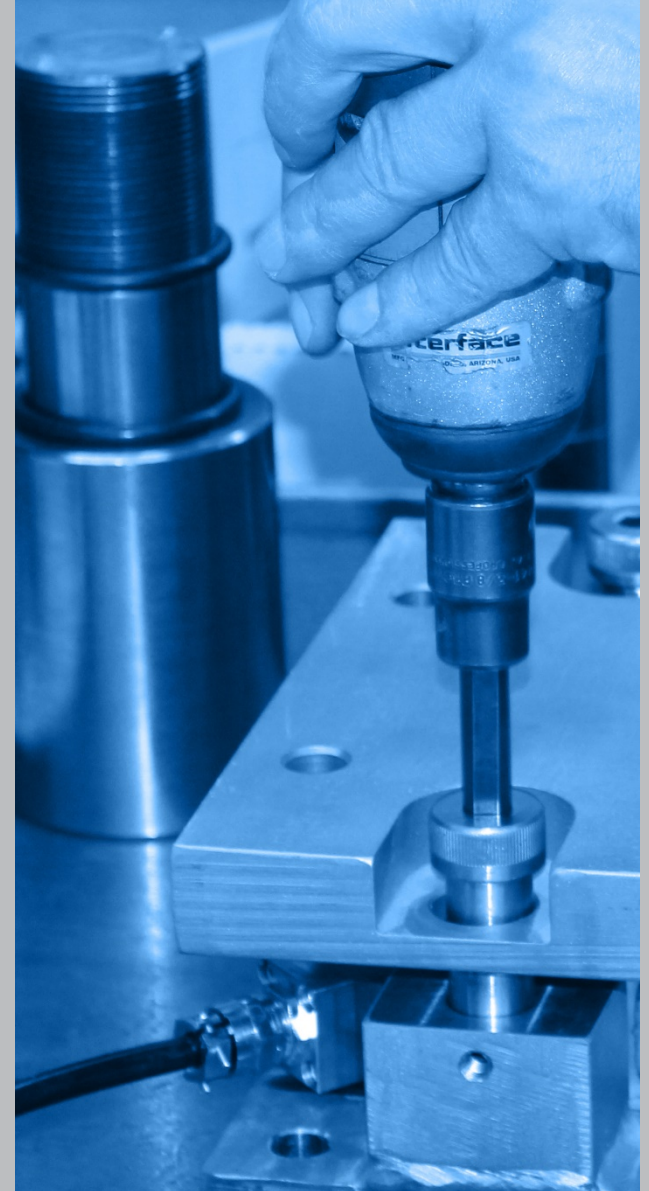
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- Interface standard interval recommendation is 1 year
 - Interval subject to customer requirements and application
 - Severe duty applications may require shorter recalibration intervals
 - Less severe applications or applications with infrequent use may permit longer intervals
 - Calibration interval may be adjusted based on customer confidence level in a specific load cell's calibration
 - Calibration results should be analyzed over a period of time to verify correct calibration interval is being used

WHY CHOOSE INTERFACE?

- 
- ISO17025 Accredited
 - Nearly 50 years of calibration experience as a company.
 - 95,000+ calibrations performed annually on 9 hydraulic and 5 deadweight test stands
 - Calibration of all manufacturers load cells
 - Permanently archived test data
 - NIST calibrated Gold and Platinum standard reference load cells
 - Interface Gold Standard calibration software used for data collection & analysis

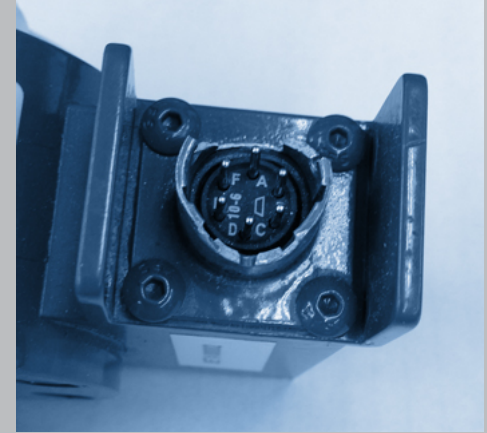
WHY CHOOSE INTERFACE?

- Custom calibrations tailored for your needs
- Full service machine shop for any mechanical requirements
- Highly trained and dedicated calibration and repair personnel



REPAIRS-COMMON DAMAGE

- Connector or Cable Damage
 - Recalibration always recommended with replacement
- Zero Shift
 - Common symptom of an overloaded load cell
 - Can be re-zeroed within limits
 - Zero-shift past a point is not repairable
 - Bridge leg resistances can sometimes provide clues as to the overload mode
- Overloads
 - Deformation of the load cell sensing element
 - Structural failure if severe enough



REPAIRS-COMMON DAMAGE

- Water/Moisture Damage
 - Can cause low insulation resistance
 - Often manifested as a 'drifting' or noisy signal
- Loss of inert gas seal on certain models



RECALIBRATION SERVICES

| FORCE | | Interface Standard | ANSI Z-540 MIL-STD-4562A | ASTM E74 | ISO 376 |
|------------------|-----------------------------------|--------------------|-----------------------------|----------|---------|
| Services Offered | Tension & Compression | ✓ | ✓ | ✓ | ✓ |
| | Dual Bridge | ✓ | ✓ | ✓ | ✓ |
| | System Calibrations | ✓ | ✓ | ✓ | ✓ |
| | Extra/Custom Points Available | ✓ | ✓ | ✓ | ✓ |
| | Interface NIST Traceable Cal Cert | ✓ | ✓ | ✓ | ✓ |
| | A2LA / ISO 17025 Accredited | | ✓ | ✓ | ✓ |
| | Lower Load Limits | | | ✓ | |
| | Coefficients | | | ✓ | |
| | Curved Fit & Graph Polynomials | | | ✓ | |
| | ISO 376 Class 0.5 – 0 - 500 LBF | | | | ✓ |
| | ISO 376 Class 1 – >500 LBF | | | | ✓ |

| TORQUE | | Standard Torque | ANSI Z-540 MIL-STD-4562A | ASTM E2428 |
|------------------|--|-----------------|-----------------------------|------------|
| Services Offered | Clockwise & Counter-Clockwise | ✓ | ✓ | ✓ |
| | Dual Bridge | ✓ | ✓ | ✓ |
| | System Calibrations | ✓ | ✓ | ✓ |
| | Extra Points | ✓ | ✓ | ✓ |
| | Interface NIST or NMI Traceable Cal Cert | ✓ | ✓ | ✓ |
| | A2LA / ISO 17025 Accredited | | ✓ | ✓ |
| | Lower Load Limits | | | ✓ |
| | Coefficients | | | ✓ |
| | Curved Fit & Graph Polynomials | | | ✓ |

FORCE

- Mini 2-Point Cal
- Interface Standard Calibration
 - 5 pt. tension and compression
 - Interface NIST traceable certificate
- ANSI Z-540/MIL-STD-45662A
 - 5 pt. tension and compression
 - A2LA/ISO17025 accredited calibration
- ASTM E74 Class A
 - 10 pts, 3 runs with rotation
 - Calibration certificate includes curve fit, plots, coefficients and lower load limit
 - A2LA/ISO17025 accredited calibration
- ISO 376
 - Class 0.5 to 500 lbf
 - Class 1 >500lbf

Interface Calibration Services



TORQUE

- Interface Standard Calibration
 - 5 pt. tension and compression
 - Interface NIST traceable certificate to 2200 in-lb
 - Interface NMI traceable certificate 2.2K to 100K lb-in
- ANSI Z-540/MIL-STD-45662A
 - Interface NIST traceable certificate to 2200 in-lb
 - Interface NMI traceable certificate 2.2K to 100K lb-in
- ASTM E2428 Class A
 - 10 pts, 3 runs with rotation
 - Calibration certificate includes curve fit, plots, coefficients and lower load limit
 - A2LA/ISO17025 accredited calibration

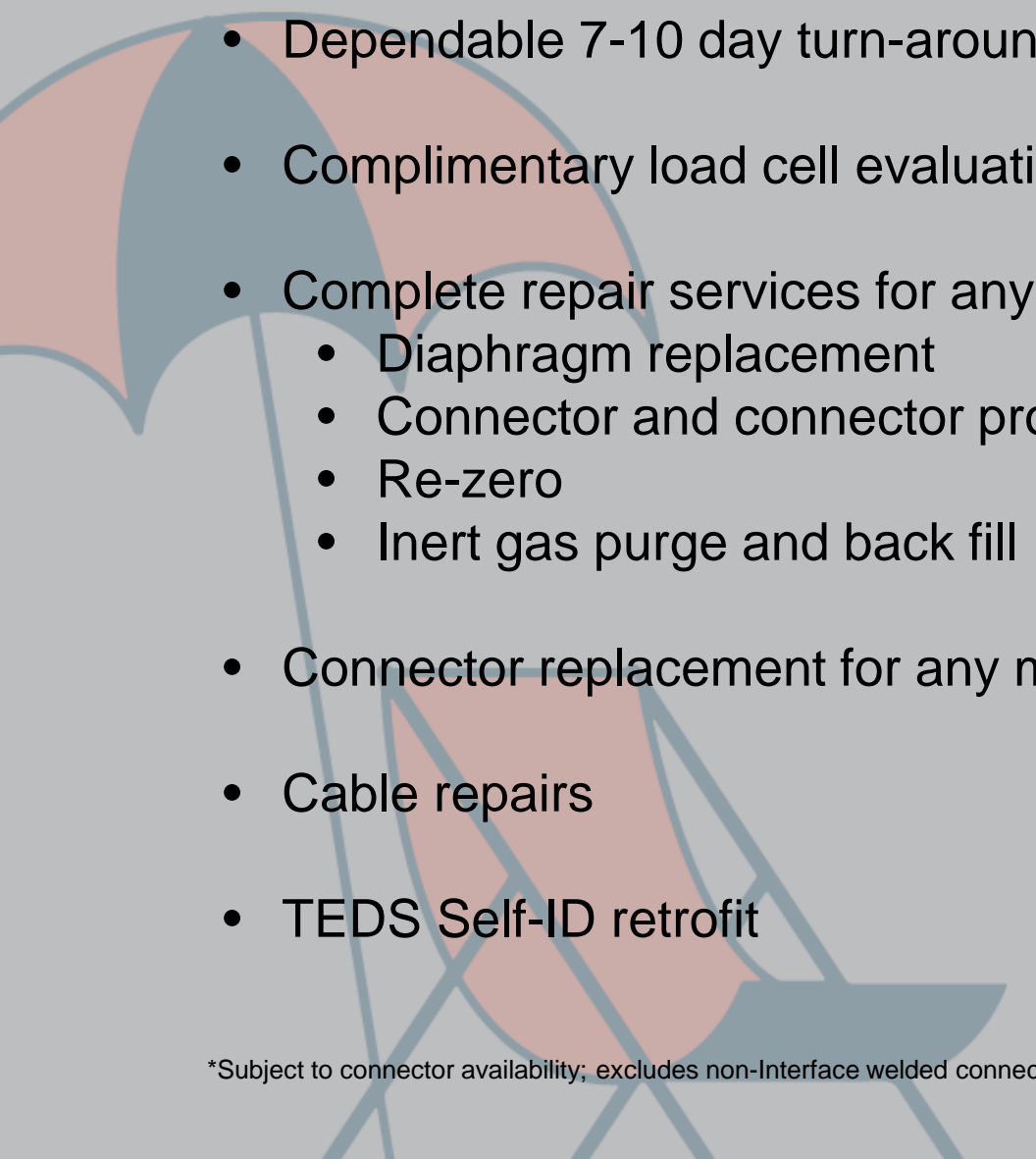


ADDITIONAL SERVICES AVAILABLE

- Extra or special points
- Additional bridges
- System Calibrations
(load cell and instrument)
 - Interface or non-Interface instrument
- Instrument Calibrations
 - Load cell simulators
 - Internal mV/V indicator calibration
 - Junction box calibration
- TEDS programming



INTERFACE REPAIR SERVICES

- 
- Dependable 7-10 day turn-around
 - Complimentary load cell evaluation
 - Complete repair services for any Interface load cell
 - Diaphragm replacement
 - Connector and connector protector replacement
 - Re-zero
 - Inert gas purge and back fill
 - Connector replacement for any manufacturers load cell*
 - Cable repairs
 - TEDS Self-ID retrofit

*Subject to connector availability; excludes non-Interface welded connectors

NEED A RECALIBRATION?

- RMA Request
 - Shoot us an email
 - Give us a call
 - Recalibration RFQ on the website
- Recalibration and Service Contacts
 - Elliot Speidell
espeidell@interfaceforce.com
1-800-947-5598 ext. 123
 - Lindsay Hanson
lhanson@interfaceforce.com
1-800-947-5598 ext. 152

A stylized illustration of a beach chair and an umbrella. The umbrella is on the left, with a light blue frame and a canopy divided into light blue and light orange segments. The beach chair is in the foreground, also with a light blue frame and a light orange seat. The entire scene is set against a light gray background.

QUESTIONS?