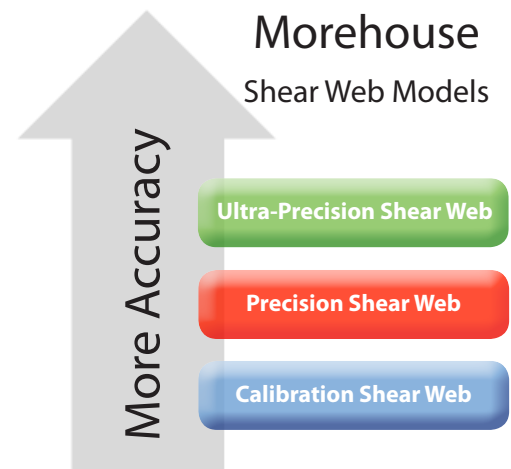




### High Accuracy Shear-Web Load Cells

- » Capacities from 100 – 120K lbf, or equivalent kgf/Newton.
- » Compression and/or tension modes.
- » Accredited calibration, ASTM E74 or ISO 376 available.
- » Calibration by deadweight primary standards for capacities up to 120K lbf (534 kN). This is required for ASTM E74 Class AA & ISO 376 Class 00 calibrations.
- » Load cell indicators, adapters, and accessories available.
- » Custom-cut system cases available for storage and secure shipping.



Morehouse offers three grades of high accuracy shear web load cells with varying design and performance characteristics for use wherever a high level of confidence is required. Higher accuracy load cell systems will use fewer load cells than most competing systems, lowering calibration costs, reducing cycle time, and requiring fewer setups.



## Morehouse Ultra-Precision Load Cells

- » ASTM E74 Lower Limit Factor (LLF) better than 0.005 % of capacity
- » ASTM E74 Class AA lower limit typically around 10 % of capacity 1,2,3
- » ASTM E74 Class A lower limit around 2 % of capacity 1,2,4
- » ISO 376 Class 00
- » Calibrated using deadweight primary standards for ASTM E74 Class AA & ISO 376 Class 00
- » Shear-web design available in capacities from 100 – 120K lbf

## Morehouse Precision Load Cells

- » ASTM E74 Lower Limit Factor (LLF) better than 0.01 % of capacity
- » ASTM E74 Class A lower limit typically around 4 % of capacity 1,2,4
- » ISO 376 Class 0.5
- » Direct reading calibration accuracy typically around 0.05 % of capacity 5
- » Single or multi-column design load cells also available in capacities 120K – 2M lbf

## Morehouse Calibration Load Cells

- » ASTM E74 Lower Limit Factor (LLF) better than 0.02 % of capacity
- » ASTM E74 Class A lower limit typically around 8 % of capacity 1,2,4
- » ISO 376 Class 1
- » Direct reading calibration accuracy typically around 0.1 % of capacity 5
- » Single or multi-column design load cells also available in capacities 120K – 2M lbf

### Notes:

1. When calibrated in mV/V or with a high precision meter such as Morehouse 4215, HADI, or DSC-USB.
2. Lower Limit is defined by ASTM E74 as the smallest force at which an instrument can be used.
3. ASTM E74 defines Class AA Lower Limit as 2000 x LLF.
4. ASTM E74 defines the Class A Lower Limit as 400 x LLF.
5. When calibrated as system with a Morehouse PSD indicator.



## Performance Comparison

Ultra-Precision	Precision Calibration	Calibration
<b>Uses</b>		
Force standard in Morehouse Universal Calibrating Machines, advanced industrial testing where accuracy is critical, and calibration of higher accuracy force measuring instruments	Force standard in Morehouse Universal Calibrating Machines, verification of material testing machines per ASTM E4 or ISO 7500, calibration of force measuring instruments	Verification of material testing machines per ASTM E4 or ISO 7500, general purpose testing machines, and as standards in testing machines
ASTM E74 Class AA & Class A ISO 376 Class 00 & Class 0.5	ASTM E74 Class A ISO 376 Class 0.5 DIRECT READING	ASTM E74 Class A ISO 376 Class 0.5 DIRECT TREADING
Pair with Morehouse 4215 Indicator and direct reading software. Above indicator can be used with multiple load cells.	Pair with Morehouse 4215 or Morehouse HADI Indicator & direct reading software. These indicators can be used with multiple load cells. Pair with Morehouse PSD handheld indicator for direct reading system.	Pair with Morehouse 4215 or Morehouse HADI Indicator & direct reading software. These indicators can be used with multiple load cells. Pair with Morehouse PSD handheld indicator for direct reading system.
<b>Accredited Calibration</b>		
Deadweight Primary Standards (Required for ASTM E74 Class AA & ISO 376 Class 00)	Deadweight Primary Standards or Secondary Reference Standard	Deadweight Primary Standards or Secondary Reference Standard
For capacities through 120,000 lbf, best accuracy is achieved when calibration is performed by Morehouse using deadweight primary standards, with an uncertainty of better than 0.005 % of applied force.		
<b>Recommended Accessories &amp; Adapters</b>		
Shipping and Storage Case	Shipping and Storage Case	Shipping and Storage Case
Compression Loading Fixtures	Compression Loading Fixtures	Compression Loading Fixtures
Tension Loading Fixtures	Tension Loading Fixtures	Tension Loading Fixtures

**\*\*Custom adapters for any force or torque product available on request\*\***