



# Load Cell Calibration Systems



## INTRODUCTION

Robert A. Denton, Inc. offers Load Cell Calibration Systems capable of performing computer controlled loading, manual loading, deadweight loading and pressure transducer calibrations. Each comes with its own suite of data reports. Calibrations can be performed in both tension and compression for up to six simultaneously sampled test channels. Software and hardware is supplied for the complete control of calibration set-up, data acquisition, data storage and retrieval and hardcopy reporting.

## SYSTEM FEATURES

- Precision reference cell,  $\leq 0.02\%$ FS non-linearity & hysteresis
  - Compression compliant loading fixture, 10000 LB capacity
  - Precision 8 channel instrument amplifier, 3 software selectable gain ranges (100, 200 and 500), software controlled zero offset compensation.
  - DC excitation power supply, software programmable via GPIB interface.
- Table top 19" rack mount electronics enclosure.
  - 6-Channel remote transducer connection IO module with manual shunt resistor capability
  - Intel Pentium™ Processor based PC computer with Microsoft Windows XP™ operating system, 19" monitor, 104+ keyboard, mouse.
  - GPIB interface card
  - 16 bit data acquisition card with 8 channel (differential) inputs, 8 programmable DIO lines, continuous sampling for all test and reference channels, typically 1000HZ sustained sampling per channel, 0.02% FS reading accuracy, overall system accuracy  $\leq 0.05\%$  FS, overall system repeatability  $\leq 0.1\%$  FS.
  - Automatic temperature/humidity monitoring
  - Ink Jet Printer, Label Printer
  - Uninterruptible power supply with automatic system shutdown capabilities.

## Three Models Available

- **Model CAL-20000:** United Model SFM-20 Floor Standing Load Frame, 20,000 LBF capacity tension and compression, 60" crosshead travel, 22" column clearance, 0.001" to 20"/minute programmable speed range, +/-0.1% of set speed accuracy, 32" W x 27"D x 96"H
- **Model CAL-30000:** United Model SFM-30 Floor Standing Load Frame, 30,000 LBF capacity tension and compression, 60" crosshead travel, 22" column clearance, 32" W x 27"D x 96"H.
- **Model CAL-60000:** United Model SFM-60 Floor Standing Load Frame, 60,000 LBF capacity tension and compression, 60" crosshead travel, 22" column clearance, 36" W x 42"D x 107"H.

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