

Load Cell Buyer's Checklist

Complete Guide for Industrial Weighing System Selection

TECHNICAL REQUIREMENTS ASSESSMENT

- Determine Maximum Load Capacity Calculate max expected load with 25-50% safety factor
- Define Accuracy Specifications Specify accuracy class (C1-C6) and resolution requirements
- Assess Environmental Conditions Temperature range, humidity, vibration, IP rating (IP65-IP69K)
- Select Load Cell Type Compression/tension/universal, strain gauge vs. digital technology
- Verify Electrical Specifications Output signal type, excitation voltage, cable requirements

PROVIDER EVALUATION CRITERIA

- Custom Engineering Capabilities Ability to modify designs, application-specific solutions
- US Customer Service Quality Technical support availability, response time, field service
- Manufacturing Quality Standards ISO 9001 certification, quality control, warranty terms
- Long-Term Performance Data Load cycle testing (1M+ cycles), fatigue failure prevention
- Compliance Certifications NTEP for legal-for-trade, FM/CSA approvals, OIML R60

INSTALLATION & INTEGRATION

- Mounting Requirements Hardware included, installation guidelines, alignment specifications
- System Integration Instrumentation compatibility, signal conditioning, communication protocols
- Multi-Cell Configuration Summing capabilities, load distribution, calibration procedures

COST & DELIVERY ANALYSIS

- Total Cost of Ownership Purchase price, installation, calibration, maintenance, service life
- Delivery Timeline Standard availability, custom engineering lead time, emergency options
- Spare Parts Availability Inventory status, replacement component access

WARRANTY & SUPPORT

- Warranty Coverage Standard period, extended options, failure analysis process
- After-Sales Support Calibration services, preventive maintenance, troubleshooting assistance
- **Documentation Quality** Installation manuals, technical specifications, training materials

CRITICAL QUESTIONS TO ASK YOUR PROVIDER

- 1. How do your load cells perform after 1 million+ load cycles?
- 2. How can companies reduce fatigue failures in harsh environments?
- 3. What is your failure analysis process for warranty returns?