

Introduction

The 5297i EL Intermediate In-Motion Checkweigher is an entry-level scale designed for institutional and packaged food manufacturing, specialty chemical, and corrosive or caustic product industries. It weighs products from 1 lb to 110 lbs with conveyor speeds in excess of 250 feet per minute, and production rates up to 60 units per minute.

The 5297i is available in stainless steel or powder coated mild steel and is designed to meet the demanding production needs for an easy-to-clean, low maintenance, yet highly accurate in-motion scale. For products that are within the 1 lb to 110 lbs range, the 5297i is the perfect choice.

A wide variety of weigh station conveyor lengths and widths are available to meet your specific application needs. Metering, pacing, reject, and material handling conveyors are available as well. Its standard I/O will interface to your new or existing metal detector.



Checkweigher Controller

This checkweigher employs Thompson Scale's Model 5297 Checkweigher Controller to provide a feature set with the highest possible accuracy. The controller offers many beneficial features such as a product memory storage and adjustable three weight zones per product. It also provides easy to read menus with both English and Spanish in full sentences for better comprehension. The controller can even run a complete self-diagnostics with errors described onscreen. Its modular card rack allows for easy expandability and can interface with virtually any line or management tools. The 5297i EL Checkweigher and Controller are highly flexible and reliable solutions to your checkweighing needs.

Easy Configuration

The 5297i features a food-grade belt driven by a newly developed motorized head pulley and food-grade rated drive components. Its unique load cell system is designed to provide a highly accurate and reliable weight each and every time. It also allows quick access for thorough cleaning and easy maintenance.

The 5297i offers washdown rated bearings, belt and drive components. The checkweigher's simple and clean design minimizes maintenance and the number of parts that can potentially wear out.

Quick Calibration

The 5297i only requires a single static calibration. Unlike other systems on the market, the 5297i utilizes a single calibration to provide accurate and repeatable weights over the range of the scale's capacity. There is no need for multi-pass dynamic calibrations every time product sizes or weights are changed. Simply enter the new product parameters and go – it's that simple.

Calibration of the 5297i is digital, with no pots to turn, and uses a single standard test weight. Easy to follow onscreen instructions with descriptive prompts guide you through calibration procedures with ease. A separate calibration check screen allows operators to verify calibration without having to access the calibration procedure. The calibration is password protected for added security and an audit trail for ISO or other quality assurance programs can be generated.

Specifications

Standard Construction

- UL and ULc Approved electrical controls
- IP 66 (NEMA 4X) standard
- Painted Mild or Stainless Steel weigh station construction
- USDA/FDA Approved conveyor belts
- Sealed Bearings for extended life and minimal maintenance
- Motorized Head Pulley, rated IP65 for wet, corrosive environments
- Conveyor Lengths from 24" to 36" overall length, widths from 12" to 36"
- 4" Diameter Dynamically Balanced Head & Tail Rollers
- Variable Frequency Drive Controls included
- Adjustable Leveling Feet
- Wall or Frame Mountable Scale Control Enclosure for flexibility during installation

Performance Features

- Conveyor Speeds up to 250 ft (60.96 m) per minute
- Production Rates up to 60 units per minute
- Capacities from 1 lb (0.45 kg) to 110 lbs (50 kg)
- Embedded True-Multitasking Operating System
- High Load Cell Sample Rate and A/D conversion rate
- English and Spanish Menus in full sentences for better comprehension.
- 5 Pole Low-Pass Filter
- Hardware and Program Adjustable Filtering
- Selectable Resolution
- Selectable Display Divisions
- Accuracy as great as $\pm 0.1\%$ @ 2 Sigma*
- Repeatability as great as $\pm 0.05\%$ @ 2 Sigma*
- Calibration Audit Trail for compliance requirements
- Fast-response Load Cells

Flexible Options

- Peripheral Conveyors: in-feed and out-feed, metering, accumulation tables, and reject bins
- Reject Options: air blow-off, side-pusher, diverter, or drop gate, three or five-zone classifiers
- Reject Bins and accumulation conveyors
- Full System Electrical Controls, turn-key, PLC, and conveyor layout capabilities
- Hazardous Area Protection up to Class I Division 1, Groups B, C, & D (Zone 1)



Internal View of Controller

Scale Controller Features

- One Product Memory Storage
- LCD Display Screen Displays:
 - Last Unit Weight
 - Gross Weight
 - Net Weight
 - Mean Unit Weight
 - Weight Conversion (lb, kg, oz, g)
 - Target Weight
 - Total Accumulated Weight
 - Total Accumulated Units
 - 3 Zone Boxes with Zone Count
- Modular Function-Specific Card Rack
- Complete Self-Diagnostics with errors described onscreen
- 20 mA Current Loop Serial Port transmits weight data in either of 2 modes
- Adjustable Reject Delay and Duration
- Retentive Reject Timers for up to 8 units
- Trend Alarm with adjustable reject populations
- Modular Function-Specific Card Rack
- Complete Self-Diagnostics with the errors described onscreen
- 20 mA Current Loop Serial Port transmits weight data in either of 2 modes

*Product dependent. Contact factory for specific product accuracy.

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