

MERRICK MODEL 475 NTEP APPROVED BELT SCALE

STANDARD FEATURES

BELT WIDTH

- 12" (305 mm) to 54" (1372 mm) 35, 100, 200 kg
- 42" (1067 mm) to 84" (2134 mm) 350, 1000 kg

CAPACITY

- 35, 100, 200 kg up to 2600 TPH (2359 MTPH)
- 350, 1000 kg up to 11,000 TPH (9979 MTPH)

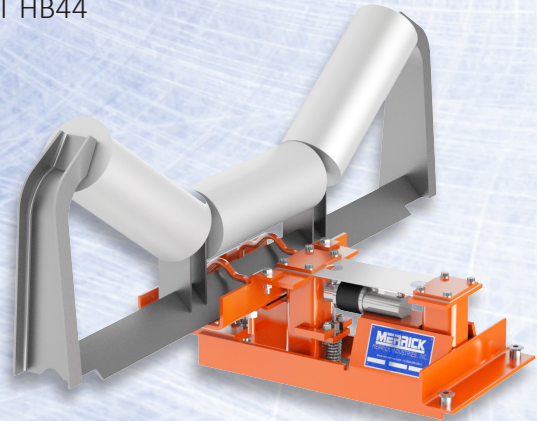
ACCURACY

Based on a totalized weight over a 35 to 100% design capacity and material test calibration, installed in accordance with MERRICK's guidelines and instructions:

- $\pm 0.5\%$ Single weigh module with a commercial idler set
- $\pm 0.25\%$ Single weigh module with a MERRICK precision, adjustable idler set

NTEP INSTALLATIONS

- $\pm 0.25\%$ of test load, repeatable to $\pm 0.125\%$ with three or four weigh modules, in accordance with NIST HB44



- Model 475 with adapter for commercial idler roll set (Standard for single idler, $\pm 0.5\%$ applications)

CALIBRATION

- Electronic, material test, test chain (optional) or test weight (optional).

OVERLOAD PROTECTION

- Infinite (mechanical stop). Models with 35, 100 and 200 kg load cells also have shock overload protection.

LOAD CELL

- Factory calibrated, precision shear beam, strain gauge type, temperature compensated and environmentally sealed.

LOAD CELL CONNECTION BOX

- Connects up to 4 weigh modules. Includes speed sensor pulse cut-off switch for measuring belt length. 304 stainless steel enclosure.

SPEED SENSOR

- Digital, photo-electric pulse generator for direct coupling to tail pulley or optional type CF wheel assembly carriage mounted between belt strands. 304 stainless steel enclosure.

WEIGH MODULE CONSTRUCTION

- Carbon steel with primer and painted safety orange enamel. All adjustment screws and bushings anodized for corrosion resistance.

WEIGH MODULE MOUNTING BEAMS

- Structural channel, carbon steel construction, custom designed and pre-drilled for mounting the weigh module to the conveyor stringers. Two supplied per weigh module with primer and safety orange enamel.

DYNAMIC INNOVATIONS SINCE 1908
WEIGHING, FEEDING, CONTROLS & ENVIRONMENTAL SOLUTIONS

MODEL 475 WEIGHTOMETER® NTEP APPROVED BELT SCALE



MODULAR DESIGN FOR SINGLE OR MULTI-IDLER INSTALLATIONS

FAMILY OF

MERRICK

COMPANIES

10 ARTHUR DRIVE
LYNN HAVEN, FL 32444 USA
CALL WORLDWIDE +1 850.265.3611
EN ESPAÑOL +1 850.271.7834



WWW.MERRICK-INC.COM

103,113 & 114, 7TH MAIN, 3RD CROSS
PEENYA INDUSTRIAL AREA 3RD PHASE
BANGALORE-560058
KARNATAKA STATE INDIA
+91 80 28394500 (PHONE)
+91 80 28394600 (PHONE)
+91 80 28395500 (FAX)

MERRICK

MERRICK MODEL 475 NTEP APPROVED BELT SCALE

MERRICK MODEL 475 NTEP APPROVED BELT SCALE

CERTIFIABLE DESIGN

The Model 475 Belt Scale is designed to meet or exceed the accuracy requirements of the National Institute of Standards and Technology (NIST) Handbook 44. A certificate of conformance, Number 92-196, was issued under the National Type Evaluation Program (NTEP) of the National Conference of Weights and Measures. The certificate is for capacities of 14.5 - 145 lb/ft at belt speeds of 100 - 800 ft/min with weighbridge lengths of 9 - 20 feet.

RELIABLE AND EASILY INSTALLED

- Maintenance-free. Parallelogram suspension eliminates all moving parts and friction points.
- Drop-in modular design. Custom designed mounting beams for each installation.
- Adjustable suspension bushings, idler arms and roller alignment trimming screws permit quick, accurate weigh platform alignment without the need for shims or special tools.

OPTIONS

- Precision, adjustable idler sets
- Stainless steel construction
- Explosion proof rating NEMA 7 or 9
- Test chains and storage devices
- Test weights and weight lifting devices
- Printers and recorders
- Remote rate meters and totalizers
- Bend pulley assemblies for speed sensor mounting
- Trailing arm tachometer assembly
- Field start-up assistance and contract service

ACCURATE, REPEATABLE, FLEXIBLE & EXPERIENCED

- Advanced alignment and innovative mechanical features permit greater accuracy with fewer idlers.
- The innovative parallelogram suspension is not influenced by off-center belt loading resulting in unsurpassed weighing stability and repeatability.
- Purchase the 475 design with confidence. If your accuracy requirements increase in the future, simply add another weighing unit in series with the existing scale to increase your weighing accuracy.
- MERRICK is the inventor and recognized pioneer of belt scale systems since 1908.

FEATURES

1. MODULAR DESIGN

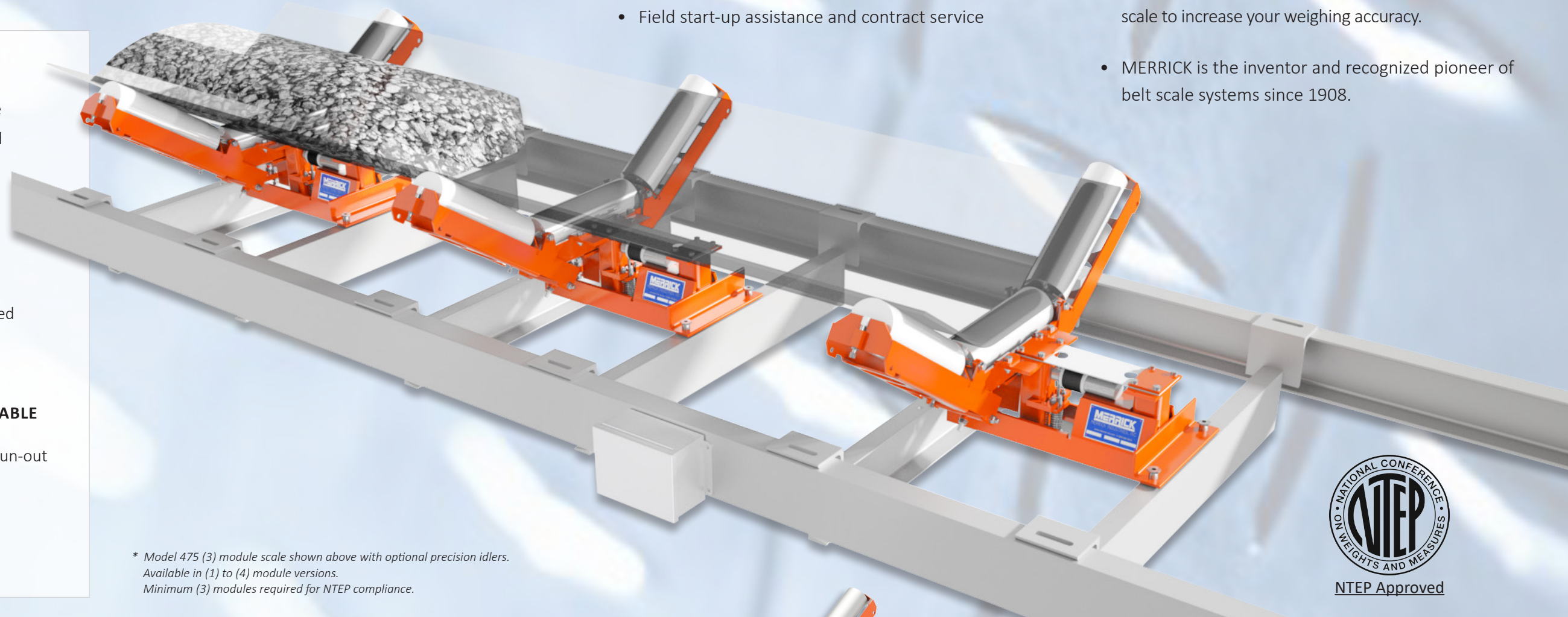
- Easy to install
- Adjustable elevation 3-point scale frame
- Simply add weigh modules for increased accuracy

2. PARALLELOGRAM SUSPENSION

- Superior design transfers material force directly to load cell
- No levers, pivots, or moving parts
- MERRICK double-sealed factory calibrated precision shear beam load cell
- Shock overload protection

3. OPTIONAL MERRICK PRECISION ADJUSTABLE IDLER ROLLER SET AND FRAME

- Superior alignment and total indicated run-out (TIR)
- Adjustable roller alignment
- Triple sealed roller bearings
- Adjustable idler arm troughing angle



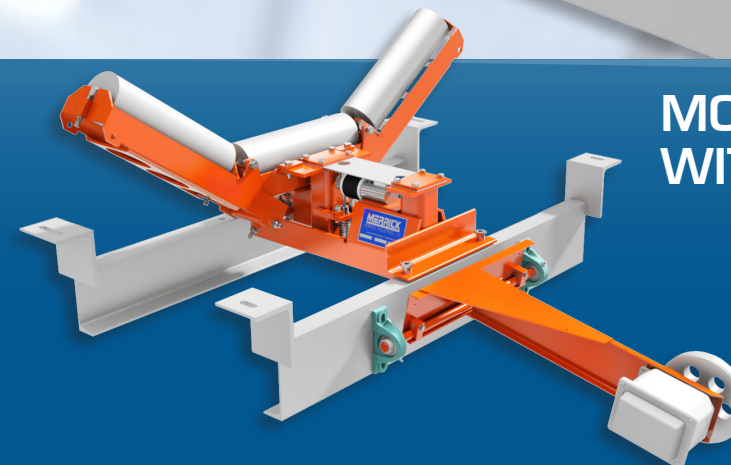
* Model 475 (3) module scale shown above with optional precision idlers. Available in (1) to (4) module versions. Minimum (3) modules required for NTEP compliance.



GENETIX® PROCESS CONTROLLER

Calibrate and monitor all scale readings including feedrate, belt load, and totalization. Genetix® has the flexibility to accommodate both simple and complex system configurations. With Genetix® you can choose where to add intelligence to your process and the best method to seamlessly integrate the information into your plant control system.

Genetix® is a registered trademark of MERRICK Industries, Inc. All other trademarks are the property of their respective owners.



MODEL 475 WITH OPTIONAL CF TACH CARRIAGE

- Trailing arm assembly enables tachometer to ride on the return belt
- Does not require use of tail pulley or bend pulley
- Maximum belt speed limited to 600 fpm
- Provides a calibrated belt length (No need to measure belt for calibration)