## FAIRBANKS® SCALES



# TRIDENT PRECAST CONCRETE TRUCK SCALES

Featuring an engineered concrete deck that is poured and cured in factory-controlled conditions to eliminate porosity and cracking, and produce incredible compressive strength.



## TRIDENT TRUCK SCALE 3 KEY BENEFITS



While concrete deck scales provide the most robust long-term weighing solution, time frame requirements can prohibit the use of field-pour concrete due to lengthy curing times. To bridge this gap, Fairbanks developed the Trident Precast Concrete Scale.

- · All the benefits of concrete
- · Same day installation



#### **NO-RISK CONCRETE**

Not all concrete is created equally. The Trident's TensileCore Engineered Concrete system and controlled finishing techniques eliminate the traditional enemies of concrete in truck scale applications.

- TensileCore fibers increase tensile strength
- Silicate Fume virtually eliminates porosity
- Factory steam cure results in traceable, ultimate, 8,000 psi compressive strength
- ACI concrete finishing methods prevent concrete failures



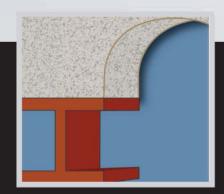
#### **LONGER-LASTING SCALE**

The Trident sets a new standard for scale longevity by coupling its advanced engineered concrete system with proven structural features.

- · Superior orthotropic bridge structure
- Structural arches effectively handle load distribution and reinforce deck integrity
- Open Bottom design eliminates moisture pooling and potential for corrosion
- A two-component, acrylic urethane, industrial coating system stands up to harsh environments











### **Encapsulated circuit boards**

provide superior protection against moisture damage. This same material has been tested and used in mission critical aerospace applications.



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## FACTORY-CONTROLLED PRECAST CONCRETE SCALE





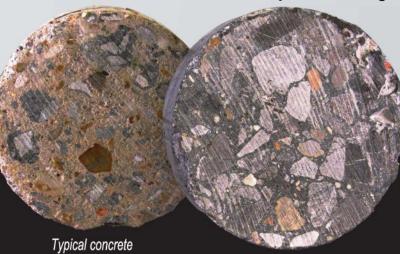




The Trident Precast is built and tested to ASTM standards in a factory-controlled environment, then shipped to your location ready for install.

## TensileCore Engineered Concrete — Secrets to its superior strength and longevity

- 1. To boost flexural strength, TensileCore steel fibers are added to the Trident's precast mix. These fibers bond the concrete, control potential for cracking and eliminate failures.
- 2. Using standards established by the American Concrete Institute (ACI), Fairbanks implements consistent concrete finishing practices. These practices include proper mix vibration to prevent blistering and an integrated crown that promotes adequate water drainage.



- 3. Steam curing under ideal environmental conditions ensures the Trident's TensileCore Engineered Concrete system eliminates risks associated with typical concrete.
- 4. The Microsilica Fume additive in Fairbanks' TensileCore Engineered Concrete fills the voids typically found in standard concrete mixtures. This additive helps create a much denser concrete that repels water absorption and prohibits corrosion and freeze/thaw failures.

TensileCore Engineered Concrete

## TRIDENT PRECAST CONCRETE TRUCK SCALES

**Weighing Solutions for the World Since 1830** 

Fairbanks.com

### **SPECIFICATIONS**

Capacities. . . . . . . . . . . . . 50 ton to 140 ton

CLC ..... 80k

Platform sizes

 Lengths.
 10' to 125'

 Widths
 10' and 11'

 Minimum division size
 10 lbs

 Sections
 2 to 7

 Modules
 1 to 6

Module data:

Design ...... Composite steel with TensileCore

**Engineered Concrete** 

Construction . . . . . . . . Structural I-beams with factory-poured

ASTM traceable, ultimate 8,000 psi compressive strength concrete

Under structure ..... Open bottom

Nominal deck thickness . . . . . 4"

Cover plates . . . . No

Checking . . . . . Bumper

Approvals . . . . . . . . . . . NTEP CC# 96-089, MC# AM-4949

Load cell:

Load cell material..... Stainless steel, 17-4 PH (1.4548)

Rating.....IP69K (NEMA 6P)

Rated output (=RO) . . . . . . . . . 2  $\pm$  0.1% mV/V

Load cell resistance . . . . . . 1,000 ohms Load cell output . . . . . . . . . 2.0 mV/V

sealed with glass-to-metal header

Approval . . . . . . . . . . NTEP CC #97-078

### **ACCESSORIES**

Scale Instruments



Remote Displays

Traffic Signals



Ticket printers

Custom software



**Driver Assist Terminals** 









### **OPTIONS**

Custom sizes

Dump through deck

Dress plates

Intrinsically safe electronics Load cell riser plates Coal Tar undercoating Rub rails Gide post kits Manholes (square)

## Trident truck scale utilizes time-tested structural arch to achieve super deck strength

The structural arch has been effectively used to carry load and span open spaces since ancient times and was first systematically

used during the Roman Empire. Aqueducts, buildings and bridges constructed by the Romans, as far back as 312 BC, remain standing today. Proof of structural arch durability and effectiveness is seen in modern construction as well. Examples are all around us — from road and highway bridges, to stadiums and landmarks. The time-tested structural arch continues to be the most efficient engineering choice for supporting gravity loads.



The Trident's arch design is supported by massive steel I-beams.

Your Fairbanks Scales Authorized Representative is:



