Electronic Railway Track Scale Full Floating Deck A.R.E.M.A. Design

The massively constructed, heavy steel weighbridge is stabilized laterally and longitudinally with checkrods and other specially designed restraints. Weighrails are sealed into the platform. Special design techniques and manufacturing procedures prevent excessive moisture, dirt and foreign materials from entering the pit.

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The unique weighbridge design prevents lateral forces, caused from rail traffic going on and off the platform, from being transmitted to the load cells. Special restraints include shock absorbent material which absorbs the shock created from

heavy railroad traffic. This design permits the weighbridge to move across the assembly when necessary, so that if expansion or contraction of the weighbridge occurs, it does not create a side load on the load cells. In effect, the weighbridge floats on top of the assemblies and is held in proper position by heavy-duty checkrods. The stainless steel load cells are hermetically sealed against moisture. Standard graduations of the digital weight indicator is 50 lb. Please consult a Cardinal representative for the option of 20 lb graduations.

| Model | Gross Ton Capacity | Platform Size | Sec. Ton Capacity | Cell Capacity | Cooper Rating A.R.E.M.A. | Instru. Capacity |
|-----------|-----------------------|------------------|----------------------|------------------|--------------------------------|---------------------|
| 6080-RSCA | 270 | 60' x 10' | 180 | 8 @ 200K | E-80 | 400,000 |
| 6680-RSCA | 270 | 66' x 10' | 180 | 8 @ 200K | E-80 | 400,000 |
| 7280-RSCA | 270 | 72' x 10' | 180 | 8 @ 200K | E-80 | 400,000 |







railway weighing challenges

Designed to

meet those rugged

Special load cell restraints contain flexures which maintain the proper position of all load bearing plates.

The heavy-duty weighbridge design coupled with rugged, hermetically sealed load cells and mounting assemblies make the Cardinal Pit Type Electronic Railroad Track Scale the logical choice for virtually every railway weighing need.



This design is the first fabricated steel lever railway scale approved by the A.R.E.M.A. (American Railway Engineering Maintenance Association). It's also the first to adapt "A"-Frame Construction to increase strength and rigidity of high capacity scales. The cutaway illustration above shows the Cardinal "A"-frame lever construction, a variation of the basic torque lever conformation required in heavier capacity railway track scales. Both the standard torque lever design, which is used on some of the

| Model | Gross Ton Capacity | Platform Size | Sec. Ton Capacity | Cooper Rating A.R.E.M.A. |
|-----------|-----------------------|------------------|----------------------|--------------------------------|
| 6080-RSAL | 250 | 60' x 10' | 25" - 150 | E-80 |
| 6680-RSAL | 300 | 66' x 10' | 25" - 150 | E-80 |
| 7280-RSAL | 300 | 72' x 10' | 25" - 150 | E-80 |

smaller capacity scales, and the "A"-frame design, provides load transmission on a true centerline to avoid any distortion of scale mechanism that could result in reading errors. This unique lever construction reduces the number of wear points. Standard installation includes the lever system with digital weight indicator, and a steel weighbridge for concrete deck.