Weighbridge

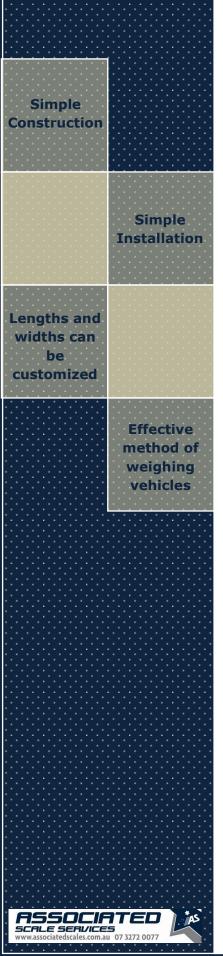




Photo Concrete Deck Above Ground, Trade Approved, Weighbridge





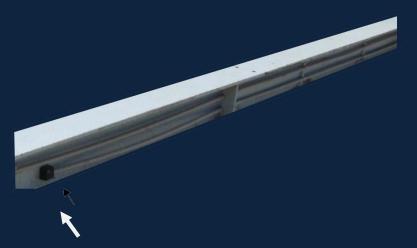


# Advances in Weighbridge Design

It is Associated Scales Services goal to never stand still with respect to improvements to the design of weigh bridges. Over the past few years many of the issue with weigh bridges have not been addressed and to this Associated Scales Services have redesigned some of the ways the final product is improved.

• Cabling in many cases is run under the weigh bridge which is both unsightly and, in some instances, can contravene the trade approvals. Through the webbing on the UBs there are holes drilled which allow for the conduit to run.

Note: saddles are also installed on the final installation to stop sagging) This allows for the conduit not to be under the weigh bridge and have issues late with conduit breaking or being unsightly on the underneath of the weigh bridge.



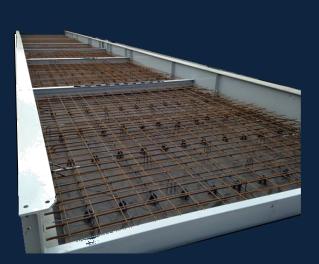
• In addition to the cabling there are no simple solutions for the cable to pass through the UB's. A custom mound was manufactured for poly urethane to allow for a clean affective bend through the UB.



• Simple changes to the load cell mount and the use of only stainless steel for the base plates increases the longevity of the life of the weighbridge.







- With the constriction, the weighbridge is also easily dismantled for reinstallation to another site.
  - Note: A large portion of weighbridges are concrete decks and the bridge can only be transported as a whole. Associated Scale Services PB system can be split for transport or fully dismantles in the case of the steel deck weight bridge
- As the cells are cemset and epyrezed to the foundations no pockets are required thus making the foundation pour far simpler than previous systems

# Above Ground/ Inground (pitted) or Semi Pitted Weighbridges

- Most cost effective for weighing complete vehicles in a trade application
- Simple construction and installation
- Lengths and widths have the ability to be designed by customer requirements

# **Customer Requirements** (Normally)

- Note: all facets of the weighbridge can be the responsibility to Associated Scale Service if the customer deems not to do the tasks
- Electricity for both the weigh bridge and the remote display
- Drainage and pumping if needed
  - Note: Associated Scale Services normally use a vortex style pump to reduce the clogging for foreign matter. Associated Scale Service is happy to purchase this for the customer at an additional cost or assist with a direct purchase.
- Dead weight for calibration. There will be 15t of trade approved masses supplied as per quotation
- Camera facility to ensure visual contact is kept on the 2 outside bridges.

# Checks to be carried out prior to civils work for Civils Company

- Is the site restricted for the removal of soil?
- Foundation tests for soil condition
- Checks for power, sewage, or any other utilities on or around the excavation site.





It is Associated Scale Services Pty Ltd goal to seek further improvements on all of the manufactured devices and strive for product longevity within the field of weighing operation.

# LOAD CELLS

The Associated Scale Services weighbridges use the European Manufactured Rice Lake 5416 (NMI APPROVAL).

This cell has an environmental protection of IP69K with inbuilt lightning protection.

Fully stainless steel and includes the bearings and plates.

The Rice Lake 5416 comes with a 10 year warranty.

NMI Approval: S739 Approved for 4000 Graduations Load Cell output : 2mV/V





#### **Remote Displays**

The external display and in some cases, the control of the weighbridge is from the Large External Remote Display. Associated Scale Services use a Canadian Designed System via ANYLOAD.



# Display Type: LED Display Size: 100mm

**Optional: traffic Lights** 

# Weight Controller

Designed and Manufactured in the USA. The Rice Lake 920i Is a fully programmable controller that allows for multiple weighbridges to be controlled by a single system. Multi Deck Weighbridges can have all the decks bridge weights on a single screen with the total.

This system also allows for Weigh In and Weigh Out functionality.

The 920i coupled with the manufactured driver control station allows for unmanned weighbridges

The 920i has the ability to control the optional traffic lights on the ANYLOAD remote displays.







### Servicing and Support

Associated Scales and its partners, within the weighing industry, support all supplied equipment with contact details for your local contact offered within Servicing Agreement

As associated Scale Services are the importers of the load cells and electronics, a guarantee of supply is offered to all customers. Stocks of this equipment are held in large numbers in 3 stores down the east cost of Australia. More stores are being developed continuously to create a seamless supply when needed.

Associated Scales owns and operates its own Prime Mover and Semi Trailer specifically designed for weighbridge servicing.

Through Associated Scales partners in Sydney which include PCS Precision and Standard Sales and Service (A major weighbridge service company) Downer EDI are fully covered with both service and any supply of equipment for the future. Direct Contact for Sydney Service is Karen Biddle (General Manager) Phone: 02 9756 1944

Servicing of weighbridges can vary depending on site conditions as well as the usage. It is normally beneficial to have an Associated Scale Services representative to visit the operation to determine if servicing needs to be more frequent.

A good indication on what is deemed as a high use weigh bridge is if the trucks per day exceed 120. This equates to 10 trucks per hour for a 12 hour day. If it is deemed to be higher than this, servicing should be either every 3 months or every 4 months.

Another indication of service frequencies is if the weigh bridge is being submerged from time to time. This is more for Pitted Style Weighbridges. Again it may be beneficial to service this operation more regular.

The following is for a standard system with 2 visits per year.

The services should be alternated every six months. It may be also be in the quality procedures of your company to have the calibration tested every 6 months. If this is the case, then a Primary Service is required every visit.



### Primary Service:

- Lift weighbridge and check load cells and cups for wear
  - Clean cups and replace grease (it is imperative for any metal to metal surface to have grease applied, regardless on the
- manufacturer.)
- Check and adjust end stops and side stops (if fitted)
- Check movement on weigh bridge to ensure no binds
- Run a corner Test
- Load Weighbridge with masses, test and adjust.
- Affix Test Label and arrange for reports to be sent to customer

# Secondary Service

- Lift weighbridge and check load cells and cups for wear.
- Clean cups and replace grease (it is imperative for any metal to metal surface to have grease applied, regardless on the
- manufacturer.)
- Check and adjust end stops and side stops (if fitted)
- Check movement on weigh bridge to ensure no binds
- Affix Test Label and arrange for reports to be sent to customer

The pricing for each type of visit is given in writing, on a company quotation.



ASSOCIATED SCALE SERVICES www.associatedscales.com.au 07 3272 0077

# WEIGHBRIDGE WARRANTY

Associated Scale Service Pty Ltd warranty on weighbridges and components differs from all other warranties within the company. This only covers weighbridges that are installed by Associated Scale Services Pty Ltd.

# **Warranty Periods**

- Load Cells: Limited 10 year warranty
- Electronics : Limited 2 year warranty
- Labour : Limited 12 months

Load Cell: Load cells are covered for all manufacturers' defects and standard wear and tear for 10 years from installation.

- Conditions for this warranty include
  - the weighbridge is properly maintained and serviced (min period of 6 months per service) serviced by Associated Scale Services.
  - the weigh bridge at no stage is flooded or water is not over the level of the base plate on the weigh bridge load cell assembly
  - $\circ$  ~ no physical damage to the load cells or cables has occurred.
  - $\circ$  lightning damage is covered for a period 3 year from installation

Electronics (excluding load cells): Electronics are covered for all manufacturers' defects and standard wear and tear for 2 years from installation.

- Conditions for this warranty include
  - the weighbridge is properly maintained and serviced (min period of 6 months per service) for this warranty period by Associated Scale Services.
  - the weigh bridge at no stage is flooded or water is not over the level of the base plate on the weigh bridge load cell assembly
  - no physical damage to the electronics or cables has occurred.
  - $\circ$  lightning damage is covered for a period 1 year from installation

Labour : Labour warranty is covered for a period of 12 months up to 60km from Associated Scale Services Acacia Ridge Qld office.

- Conditions for this warranty include
  - the weighbridge is properly maintained and serviced (min period of 6 months per service) for this period by Associated Scale Services.
  - the weigh bridge at no stage is flooded or water is not over the level of the base plate on the weigh bridge load cell assembly
  - $\circ$  ~ no physical damage any of the load cells or electronics has occurred.
  - $\circ$  ~ lightning damage is not covered with the labour portion of the warranty

Note any repairs or services performed by an unauthorized third party can void this warranty due to incorrect procedures or non-approved parts.

