



Electro Mechanical Weigh Frames

ACCUWEIGH® -1 Single Weigh Idler, Counter-Balanced Belt Scale

Accuweigh®-1 incorporates a low deflection, rugged, **counter-balanced**, single weigh idler, Approach type weigh bridge with a single, precision load cell, operating in tension, to provide superior weighing performance. The *load sensor assembly* on Accuweigh® weigh bridges is protected against mechanical shock. (Overload protection optional).

This scale model is supplied with a, simple to operate, *On-Board Test Weight* allowing calibration checks to be made as often as may be required, thereby ensuring that the scale remains accurate.

Due to the counter-balanced design of this weigh bridge it is better (than non counter balanced models) suited to applications such as:-

- Lighter belt loading applications.

This system should be considered where price is important or where available mounting space

precludes the use of the longer weigh bridge Accuweigh®-2, Accuweigh®-4 or Accuweigh®-6.

The inherent accuracy of the weigh frame is limited by the performance of the force transducer (load cell) and processing electronics (UNIPRO® weighing transmitter) only – typically $\leq 0,03\%$ of load cell capacity.

The installed accuracy achievable by the weigh frame will be determined by:

- The Application.
- The Installation.
- The Calibration facilities.

The Accuweigh®-1 conveyor scale has been "Approved" for Custody Transfer use, by the SABS Department of Metrology.

The Accuweigh®-1 is "Approved" for Custody Transfer applications (S.A. Approval No. 1281 AA5).



Process Automation manufactures a variety of belt scales in acknowledgement of our customers (applications) varied requirements. The Scale Models differ primarily in the weigh bridge designs. These weigh bridges vary, not only in their length (number of weighing idlers), but also on their technology (principle of operation).

Weigh Bridge Accuweigh®-1

Technology	Counter-balanced, Approach type
Variants	Available in Standard or Heavy Duty
Upgrade paths	Accuweigh® -1 - NIL
Weigh bridge construction	Welded mild steel. Others optional
Paint Finish	Epoxy std (Proprietary Colour) - Specials optional
Conveyor widths	300 mm through 2400 mm
Calibration reference	On-Board calibration weight
Operating temperature range	-40°C to + 80°C Std.
Weight	Subject to belt width and application duty (Std or Heavy Duty)

Load Sensor

Mounting Assembly	Protected against conveyor overload and mechanical shock
Type	High precision strain gauge
Material	Stainless Steel
Class	± 0.03% of capacity
Electrical cable length supplied	10 meters std – other optional
Protection	IP 67
Operating temperature range	-20°C to +60°C
Temperature compensated range	-10°C to +40°C

