

# TEN FACTS ABOUT JUNCTION BOXES

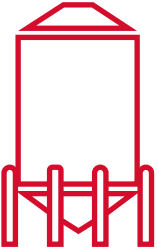
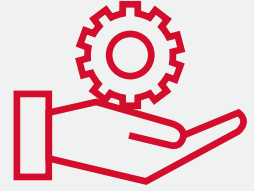


## 1 HOUSING FOR ELECTRICAL CONNECTIONS

A junction box is an enclosure used to bring multiple load cells together to function as a single scale. Essentially, a junction box houses wire connections from multiple load cells in order to average their signals and send the value to a weight indicator.

## 2 EASIER MAINTENANCE

Junction boxes are the most convenient place to troubleshoot system errors, since all load cells connections come into this one box together. They also make wire access easy and provide protection to the wiring, both from the environment and unwanted tampering.

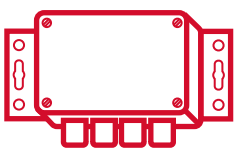
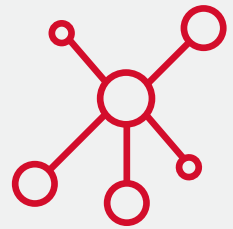


## 3 CUSTOM SCALE SOLUTIONS

By bringing multiple load cells together, junction boxes enable the quick integration of weighing into pre-existing structures such as weighbridges, large platforms, hoppers, tanks and silos to create a custom scale solution. These are ideal for applications that require filling, dosing, batching, checkweighing or sorting by weight.

## 4 NUMBER OF TERMINALS

A junction box can have multiple terminals (up to 10), depending on the number of connections you need to make. When choosing an electrical junction box, make sure you have enough terminals for each pair of wires you wish to connect.



## 5 METAL OR ABS?

Junction box construction plays a big role in how durable and reliable it will be. Most electrical junction boxes are either made of plastic or metals. Plastic is lighter and less expensive, but stainless steel is ideal for harsh and washdown environments.

## 6 PROTECTION RATING

The IP rating describes the degree to which a junction box provides protection against the intrusion of foreign bodies, dust, and moisture. Common IP ratings include IP65, IP66, IP67, IP68 and IP69K.



## 7 SHOCKPROOF

Junction boxes can be equipped with surge protectors to shield electrical equipment from transient over-voltages commonly caused by lightning and electrical shocks.

## 8 TO TRIM OR NOT TO TRIM

Not every load cell has exactly the same output, but you need an accurate weight no matter where items are placed on the scale: that's where trimming comes in. Thanks to potentiometers, the junction box can trim off differences from cell to cell and create the same signal-to-race ratio.



## 9 HAZARDOUS AREAS

In hazardous areas, electrical equipment has to comply with strict safety standards in order to eliminate an ignition source. For those areas, special junction boxes with ATEX certification should be chosen, which are manufactured specifically for explosive atmospheres.

## 10 THE RIGHT JUNCTION BOX FOR YOU

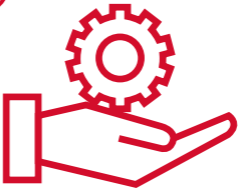
There are many different types of electrical junction boxes, each type works best for certain applications and choosing the perfect junction box will depend on your unique application. If you aren't sure which is the right junction box for you, work with our experienced customer support team to find the best solution for your application.



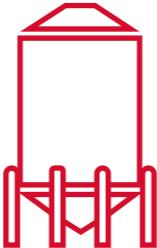
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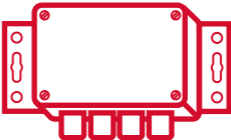
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