



White Paper

Truck Scales: Exactly - Essential Checks for Truck Weighing Scales to Perform Flawlessly

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Truck scales are the “heart” of many applications in the sand, gravel and aggregates industries - their metering results are used to estimate the producers revenues. To neither lose money nor best the client the scales need to be kept in optimum working conditions.

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Above-ground installation of a belt scale. (Pictures: © Quality Scales Unlimited)

Truck scales are used to weigh a variety of materials like crushed stone and other aggregate products. They are the most versatile weighing solutions and are called the muscle of the weighing system. The preventative maintenance program of the truck scale is very important. Inaccurate readings which may lead to under, and over charging, are reduced if the equipment is serviced properly and regularly. If it is not done so, there are chances that it may lead to excessive downtime which may result in costly repairs.



Belt scale during erection.

The right service contract with a well known, highly distinguished weighing scales solution provider is a must but the operator does need to take other preventive measures so that the equipment is reliable. Daily, weekly, monthly and twice yearly tasks are important to maintain proper functioning of truck scales. This is done to prevent the accumulation of dirt, debris, water and slurry which if left unattended in the long run may cause weigh bars to fail, after which the truck scale would become unusable.

Daily Tasks and Checks

- The platform should be visually inspected to make sure that it is free from debris.
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- The digital display should read zero before the vehicle drives to the platform and the sides and end frames are fine.
- While approaching the platform the vehicles should drive slow and avoid sudden breaking.
- To ensure that the weighing is correct, it should be noted that all the wheels should be on the truck.
- The operators should ensure that if T- section rubber is fitted, it is located correctly and the automatic pumps are also working correctly.
- There should be adequate clearance between the superstructure and the ground for the surface mounted truck scales.

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Weekly Tasks and Checks

- There are chances that debris might get accumulated in the load cell assemblies. Therefore, it needs to be checked weekly.
- Also, the discrepancies when comparing the weight of the vehicle, when it is weighed at the each end of the truck with its weight at the centre of the platform should be noted to avoid any such discrepancies in future.

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Monthly Tasks and Checks

- There are chances that debris has built up or water has accumulated which might damage the foundations or the end frames, hence the monthly tasks help avoid these problems.
- The scale should also be jet washed so that any loose debris which might have accumulated during operation would wash off.
- After all this the truck scale should be set to zero again.
- And now the test results should be compared again to avoid any discrepancies.

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Twice Yearly Tasks and Checks

- It might happen that the truck scale suffered structural damage and to keep a tab, checks every six months are necessary.
- If any cracks are noticed the maintenance or the service provider must be informed.
- The load cell cables in surface mounted truck scales should also be checked for any damage.

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In addition, it is essential to check the truck scale for any damage after any thunderstorm even though the modern ones are equipped with protection against

lightning. Preventive maintenance is important to ensure there is no down time in truck operations. The service provider should be consulted before any welding work is done on the truck scales because it might damage the weigh bars or the loading cells.

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