

# BITZER AXLE SCALES

## Static and dynamic weighing

BITZER AXLE SCALES are available in static as well as in dynamic construction.

The axle scale is used if there is not enough space for a truck scale and if there is no need for legal for trade use.

For the static weighing it is necessary to stop at the weighing platform in order to weigh each axle separately. The dynamic weighing process is carried out by passing over the platform at a constant and maximum speed of 12,5 km/h. The total weight is the summation of the individual axles' weights.

The weighing indicator registers the weight as well as the speed and other interferences. The system is able to filter out the interferences and therefore to optimise and correct the measurement results.

For this reason the BITZER AXLE SCALE is able to achieve the best possible accuracy.

### Accuracy:

- ▲ 10 kg internal measuring accuracy of the scale
- ▲ 100 kg recommended announcement at the display

### Technical Data:

- ▲ Dimensions: 3000 x 700 x 250 mm (other dimensions on request)
- ▲ Weighing capacity per axle: 15 t / 20 t

### External Influences:

- ▲ The accuracy of the measurement results depends on plane roadways in front of and behind the weighing platform.
- ▲ The construction of vehicles (spring system, axle suspension) influences the weighing because the vehicle does not stand completely on the weighing platform.
- ▲ As a matter of principle the weighing should be carried out without braking.



### Versions:

- ▲ Static version (individual weighing of each axle)
- ▲ Dynamic version (weighing in motion) (automatic summation of the axle weights)



### Options:

- ▲ Operation via transmitter / mobile device
- ▲ External display
- ▲ Printer
- ▲ Traffic light system
- ▲ Displaceable version
- ▲ Software for different branches available

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## Conditions of installation

### Approach and Departure

Approach and departure to and from the weighing platform are essential components of the scale and must therefore be carefully chosen or created. Determining a vehicle's weight by using an axle scale, it is necessary that the vehicle does not have to compensate for level differences while passing the weighing platform. Moreover, braking or accelerating speed is not allowed.

The lane should be well surfaced (concrete or asphalt) and the surface should be as even as possible. Rainwater drainage should be crosswise to the driving direction. It is very important that the vehicle passes over the weighing platform in a straight line without an angle of turn. Therefore the length of approach and departure should be equal to the length of the longest vehicle which is supposed to be weighed by the axle scale.

In general, vehicles with two axles are nearly insensitive to level differences whereas vehicles with tandem axles require a horizontal surface to obtain correct weighing results. As asphalt will be subject to lane grooves over the years, it is advisable to put a concrete slab with a minimum length of 3 m in front and behind the platform if vehicles with tandem axles are weighed.

The correct weight with discrepancies of under 1% can only be reached by providing an optimal approach and departure.

### Base of tire:

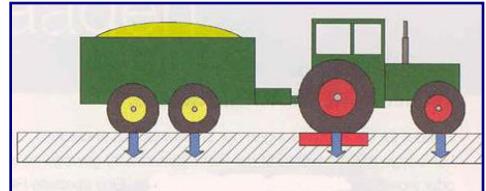
The base of tire must not exceed 70 cm. It should also be considered that the tire of a fully loaded vehicle is wider than the tire of an empty one.

### Dimension / Capacity:

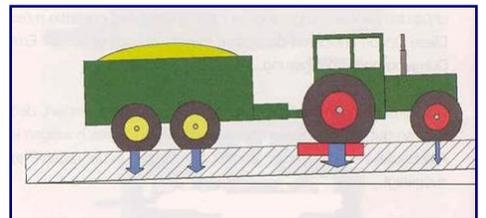
The face width can be 3 m maximum broadness.  
The maximum capacity per axle is 20 t.  
The speed at which the bridge is passed should be as constant as possible and not faster than 12,5 km / h.

### Distance between tire bases:

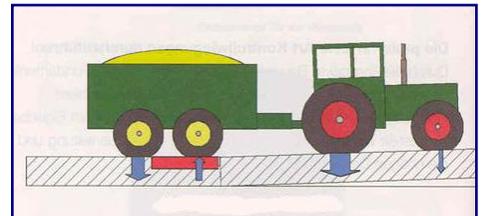
The distance between tires on tandem axle vehicles must be 100 cm at minimum.



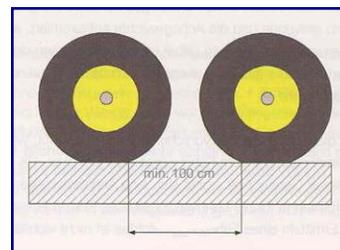
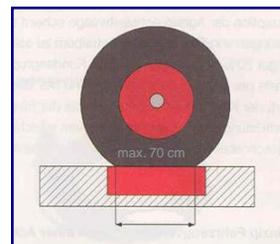
discrepancies under 1 %



discrepancies over 1 %



discrepancies over 1 %



More information under [www.bitzer-waage.de](http://www.bitzer-waage.de)  
– just scan the QR Code –

