



ACCURATE                      RELIABLE                      DURABLE

**CERTIFICATION**

AMTAB WIM is certified<sup>1)</sup> according to OIML R 106<sup>2)</sup> and EU-TEC<sup>3)</sup>

ESSENTIAL CHARACTERISTICS

Accuracy class (for wagon)	0,5 <sup>4)</sup> (and 1 or 2)
Maximum wagon mass	180 tonnes
Operating speed	3 - 8 km/h
Direction of weighing	Forward and reverse
Locomotive action	Push and/or pull
Wagons un-/coupled	Coupled
Number of wagons per train	1 - ∞
Electromagnetic Envir. class	E2
Temp. range (ambient)	-25 °C / +40 °C <sup>5)</sup>



CALIBRATION<sup>6)</sup> ANYWHERE AND ANYTIME

When calibrating AMTAB WIM the Trainweigh AX-400<sup>7)</sup> can be used as a control instrument.

This means that AMTAB can bring this high-performance portable railway scale to any location on earth to ensure that AMTAB WIM's certification process is correct. Otherwise the customer must ensure that there is a certified scale, with sufficient accuracy, closer than 50 km from the current installation.



A WORD OF CAUTION

Although some companies in this field claim to be certified according to one standard or another, using phrases like “comply with” or “in accordance with” that is a long way from actually being certified. There is one simple way to check similar claims; contact the Certification Body in question and ask – they are more than willing to answer and everyone benefits from this.



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### PURPOSE OF CERTIFICATION OF AMTAB WIM

The purpose of certifying the system as such is to demonstrate with external independent expertise what the system's capacity is. N.B. the system and installation are the same regardless of whether it is to be certified or not.

### PURPOSE OF CERTIFYING AN INDIVIDUAL INSTALLATION

The main purpose of certifying an installation is to ensure that this system (together with the site's rails, sleepers, embankments, etc.) delivers a certain measurement accuracy. This must be done when the scale shall be used for commercial purposes.

### WHEN CERTIFIED SCALE IS REQUIRED

Where products are sold by weight, it is a legal requirement that weighing equipment must be verified as "Legal for Trade" (a.k.a. "Trade Approved"). In summary, this means that the equipment has undergone a stringent set of tests to ensure it is sufficiently accurate and fit for purpose.

If this absolute and legal requirement does not exist, one should (always carefully) consider such a decision and take into account all aspects – not least the financial ones, both the direct costs and the costs over time. If a complete certification is perceived as too cumbersome and/or "overshoots the mark", AMTAB can always issue a Calibration Certificate (identical to the certification process, but not done by a Notified Body).



**1) Certification** is the formal attestation or confirmation of certain characteristics of an object (person or organization). This confirmation is often provided by some form of external review or audit.

**2) The International Organization of Legal Metrology (Organisation Internationale de Métrologie Légale, OIML)** is a worldwide, inter-governmental organization whose primary aim is to harmonize the regulations and metrological controls applied by the national metrological services, or related organizations, of its Member States.

**OIML R** are model regulations that establish the metrological characteristics required of certain measuring instruments and which specify methods and equipment for checking their conformity. OIML Member States shall implement these Recommendations to the greatest possible extent. There are 64 OIML Member States and 66 Corresponding Members. <https://www.oiml.org/en/oiml-cs>

**3) The EU-type examination (certificate)** is part of a conformity assessment procedure performed by a Notified Body, which examines the technical aspect of a product and verifies that such product meets the essential requirements of the relevant directives and regulations. If the product meets the requirements, the Notified Body issues an EU-type examination certificate to the importer or manufacturer.

**4) Accuracy class 0,5** means (simplified) that the weighing system can determine a wagon's weight better than  $\pm 0,25\%$ . This is achieved when the surrounding physical environment and the rolling stock are in good condition and the train's speed is within the specified speed range.

**5)  $-10\text{ }^{\circ}\text{C}$  /  $+40\text{ }^{\circ}$**  is the standard range for temperature.

**6) Calibration** is the process of adjusting a measuring instrument to ensure its readings are accurate and match a known standard. It involves comparing the instrument's output with a reference standard and making adjustments to minimize any discrepancies. Calibration ensures the instrument provides reliable and precise measurements within an acceptable range.

**7) Trainweigh AX-400** is a relatively lightweight portable static railway scale, manufactured and supplied by Weighbridge Services Ltd. The AX-400 can weigh four wheels simultaneously, either a bogie or a four-wheeled wagon. <https://weighbridgeservices.com>