NWI Weighing

Weighbridge Automation Documentation.

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NWI Weighing Weighbridge Automation

Weighbridge Automation Systems

As regulations change in Australia, the demand for weighbridges across multiple industries is increased. A Trade Approved automated weighbridge system will help your company to meet various trade and CoR (Chain of Responsibility) requirements. Not only this, but an automated weighbridge system can also completely streamline your day-to-day site workflow. Read on to see how an automated weighbridge system from NWI can enhance your daily operations, and what benefit each component adds to your outcome.

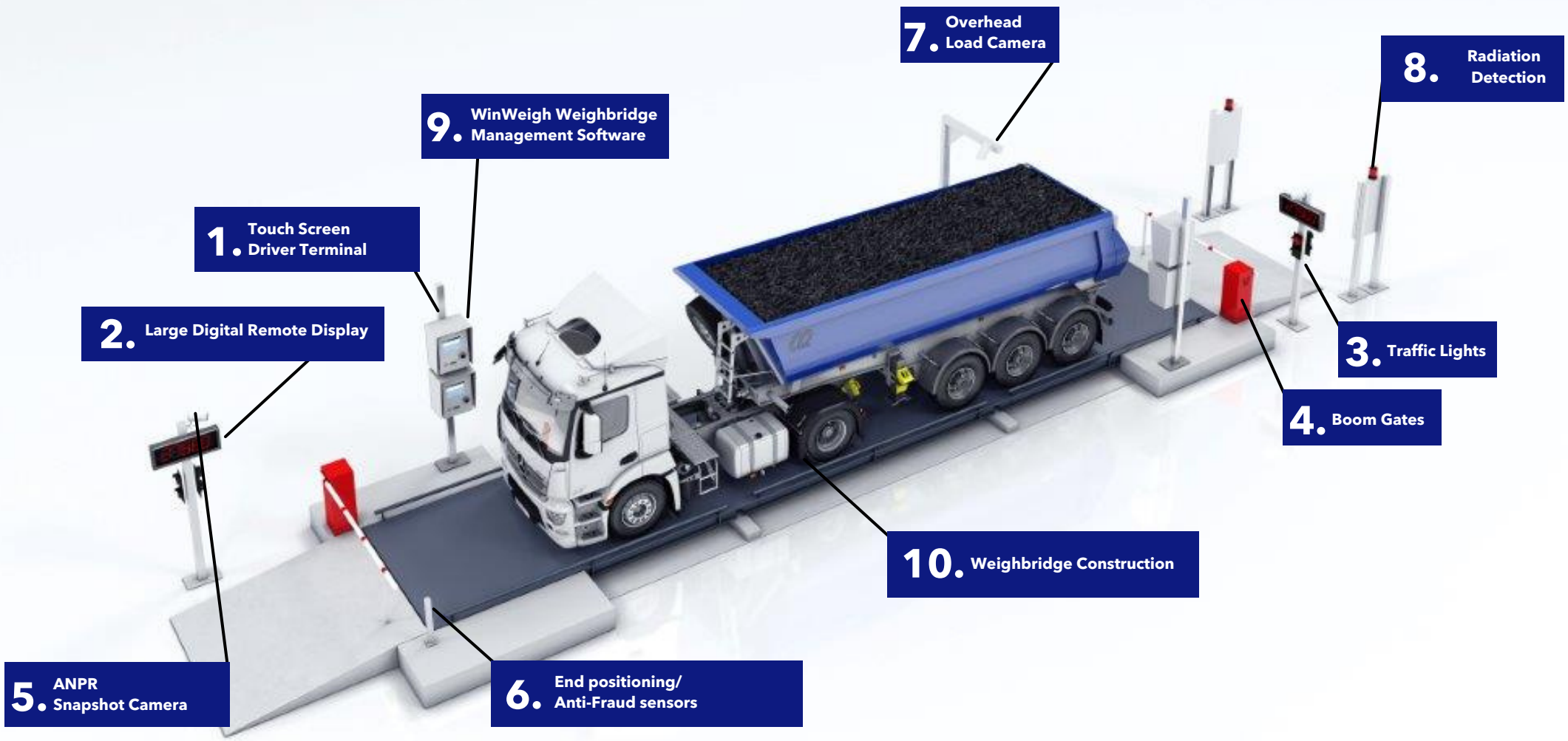
Why choose NWI Group?

NWI specialize in the design, supply, and installation of comprehensive automated weighing systems. A customized solution from NWI is tailored to suit your specific needs, challenges and desired outcomes. Our experienced team are able to advise you on hardware or software choices to ensure your operational objectives are achieved.

With over 25 years in business, and team members with 35 years or more of industry experience, our presence in the field is well known. Our exposure to, and experience with a wide variety of industries and applications ensures you receive the most efficient, robust, and safety conscious solution on the market.

NWI designed systems have a proven track record of providing increased efficiencies, increased operating hours, and cost reductions, as well as optimal performance.

Weighing Weighbridge Automation



1. Touch-Screen Bilanciai 2050/2060 Driver Self Service Weighing Terminal

The Touch-Screen Driver Terminal that we choose to use at NWI Group is the Bilanciai DD Series. The Bilanciai DD series touch-screen weighing terminal provides unrivalled user-flexibility and system integration for a wide range of industrial weighing applications. The integrated computer removes the need for a local PC and the instrument can be used with both analogue and digital load cells comes standard with a docket printer and RFID card reader. Barcode scanners and noise-cancelling intercoms can also be added.

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2. Large LED Remote Display

A large digit LED remote display provides simple, direct, and intuitive information to the driver in a variety of lighting & weather conditions. It is easy to read at distances up to 55m Day or Night.

Not only does the remote display feature built in LED Red/Green lights to assist with traffic control throughout the weighing process, but the driver is also able to confirm their weights immediately, without delay or confusion.

Our powerful WinWeigh software controls all these aspects of the weighing transaction behind the scenes, so the operator / site personnel need not worry about the autonomous weighbridge operation.

3. Traffic Lights

Ideal for traffic control or weighbridge operations. The 3 aspect 200mm LED Traffic light comes with sun visor and right-angle metal mounting brackets which can be easily mounted to a pole or wall.

- Energy saving, power consumption 90% less than incandescent bulbs
- High-intensity and efficient LED source, Life span more than 80,000 hrs.
- Rational designed optical lens, anti-phantom effect, optimal viewing angle.

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4. Boom Gates

The first automatic boom gate with digital thinking, the hi-tech Bionik AG boom gate's unique design offers precise speed control, easily programed multi-function digital controllerand ultra responsive performance.Its advanced features provide a smooth operation, instant reversing, superior safety sensing, tough 100% duty cycle and low power consumption.

The new generation Bionik AG features strengthened pole support allowing it to operate reliably in 90 km/h winds. The 8 metre AG has a 3mm thick reinforced cabinet, 2 x heavy duty springs and a boom pole with 2 internal braces making it suitable for all types of industrial applications.The brushless motor combined with the new digital control unit enables the Bionik AG Series Boom Gate to offer so much more than regular boom gates.

Hardware

5. Automatic Number Plate Recognition (ANPR)/Snapshot Camera

The role of the Automatic Number Plate Recognition (ANPR) or snap shot camera is to capture the number plate of the truck or vehicle on the weighbridge. This data can be used in conjunction with the RFID Card that the driver swipes at the DD Series Touch Screen Driver Terminal.

This RFID Card has a unique identification number which is stored in the WinWeigh software. The software receives the signal from the DD driver terminal and retrieves the data from the database which has details such as the truck registration, truck tare weight and the company name the truck is registered to. This data is then cross referenced with the ANPR camera reading to make sure that an approved truck is entering the site and completing a weighing transaction.

The ANPR camera is mounted on a pole or wall, 3-4 metres from the end of the weighbridge on a slight angle to obtain consistent readings.

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6. Anti-Fraud Sensors

End positioning/ Anti-Fraud sensors to ensure the truck is position correctly on the weighbridge as per NMI guidelines for unmanned operation.

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7. Overhead Load Camera

An overhead snapshot camera that takes a photograph of the load on the weighbridge.

8. Radiation Detection System

Accurate detection & adaptive alarm thresholds
- Very low false alarm rate
- Fully automatic and remote support

Featuring advanced technologies and modern design, SaphyGATE G is the new generation of Radiation Portal Monitors, the perfect solution for truck, train and cargo control. Extensive experience and highest quality standards are the guarantee of proven reliability in the field, making SaphyGATE G ideal for continuous operation in industrial environments and harsh conditions.

SaphyGATE G is based on multiple high volume plastic PVT scintillation detectors, associated to a new enhanced real-time Gamma energy distribution algorithm to ensure background compensation, adaptive alarm thresholds and alarm classification for the discrimination of natural and artificial radiation. This fully automatic and self-sufficient solution includes an intuitive supervision software and friendly graphic touchscreen interface.

Technical Features:

- DETECTOR TYPE: Plastic scintillator detector PVT (Polyvinyltoluene) – 25 liters / 6,6 gal
- ENERGY RANGE: From 30 keV to 7 MeV
- WORKING TEMPERATURE: From -20°C to +50°C (–4°F to +122°F)
- ENCLOSURE: Hermetic aluminium box, EMC shielded
- CENTRAL UNIT: Industrial PC with MS Windows and TFT XGA 12" colored touch-screen
- PROTECTION GRADE: IP 65
- STANDARDS: Compliant with international standards including IEC 62022
- DIMENSIONS & WEIGHT: 1500 x 750 x 320 mm (59"x 29"x 13") About 400kg (882 lb) with lead shields and stand

9. Winweigh Weighbridge & Traffic Management Software

WinWeigh software enhances your weighbridge operations by easily turning a stand-alone weighbridge into a custom weighbridge solution.

The system is completely customisable in terms of the data collection required by clients and will integrate with existing business systems, offering weighing data capture and administration together with system-oriented statistics and reports.

Business Integration

At the heart of the application is a powerful database module.
There is a flexible import-export function for standard file formats and WinWeigh can connect to external databases including SQL, Dbase, Paradox, MSExcel and Sybase.

The use of an API allows WinWeigh to integrate to 3rd party finance and IT systems to provide automated invoicing of chargeable products.

WinWeigh provides fully configurable weighing screens, databases, and processes, often no programming is needed for most bespoke modifications. If software upgrades or changes are needed, these can be carried out remotely via a standard internet connection.

Hardware Control

Not only is WinWeigh capable of managing your weighbridge operation and data collection, but it can also be used as a comprehensive vehicle management system, reducing on site bottlenecks, and improving site security.


NWI
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Calibration
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