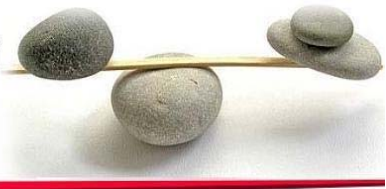




# Weigh-Comm

INNOVATIVE WEIGHING SOLUTIONS  
EVERY QUALITY TRIED & TESTED WORLDWIDE



## CommWeigh

Business requires knowledge (measurements) about various aspects of the business in order to be efficient and effective. Mass measuring can contribute to a range of production issues in most businesses.

### Background

The need for weighing or mass measuring is explicitly part of the production process in businesses that involve the acceptance/delivery of bulk/raw/processed materials or products e.g. sand, stone, grapes, wheat, cement, concrete, etc. These business processes require a controlled and secure environment that will ensure that a proper audit trail is kept of exactly what happened, when, who was involved, and how much. (Quantities usually translate into monetary equivalents and are therefore all-important). Both the “customer” and the “supplier” require a trusted source that will vouch for what occurred at their interface.

Other businesses can benefit indirectly from mass measuring. For example:

- Weighing vehicles during the entry and exit to a plant could be a way of monitoring pilfering, any unexplained discrepancies that may arise will result in further investigation.
- Transport businesses need to ensure that the loading of their vehicles is within the limits prescribed by the road ordinance, or else be subject to considerable fines.

**CommWeigh** is a software product aimed at supporting various weighing requirements. The standard product provides the following functions (not all may be required by a particular application):

- Registering and maintenance of various “static” information groups, such as: vehicles, customers, hauliers, orders and products.
- Weighing of vehicles.
- Axle weighing
- Uploading or downloading of information from an ERP or other system

### Maintenance of static information

The main purpose of CommWeigh is to support the various weighing operations. However, each weighing needs to be put into context with regard to its relevant variable information, e.g. the identification of the customer, product, vehicle, etc. By maintaining this

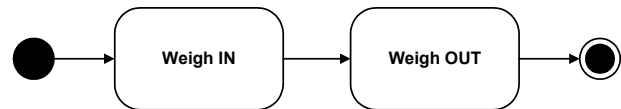
information using a separate function, the operator performing the weighing is greatly assisted in that the entry of information is limited to the selection from a set of available options presented.

An optional function within the standard CommWeigh includes the importation of the required “static” information from files prepared by another system.

### Weighing

A weighing application typically involves two real-time weighings.

The description that follows is for a business that receives raw material from a supplier. However, many other permutations are possible.



The first weighing will be the arrival of a truck from the supplier with a load of raw material. The operator will typically identify and enter all the information relevant to the transaction: supplier, product, vehicle, order number, etc. The vehicle will be stationary on the weighbridge at the time of weighing. All the relevant information (including date and time) is then stored waiting for the second weighing.

The second weighing occurs when the (now empty) truck departs from the plant. The operator will identify the truck and the weight will be recorded by the system as per the weighbridge. This measurement completes the transaction and the difference between the two measurements is recorded as the delivered mass. The system prints at this time a delivery ticket that includes most of the recorded information.

### Import/Export of Information

The key information required by the rest of the business is the completed transactions. The standard CommWeigh provides an export mechanism where the completed transactions are formatted according to one of the available options and recorded in a file. The target system can then read the information from this output file for further processing.

An import/export mechanism is also provided for the exchange primarily of "static" information. This may also include order information.

### User Defined Fields

A number of user defined fields are available. The user can utilise this facility to add own fields to the system that can be captured as required.

### Features Summary

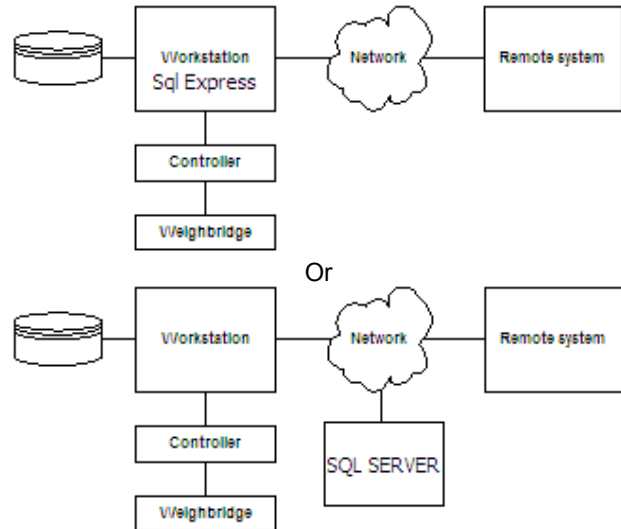
- A standardised package based on commercial off the shelf products
- It can be interfaced to all types of weighing equipment:
  - Weigh bridges
  - Platform scales
  - Laboratory scales
- It has been used in all types of industry:
  - Factories
  - Mining
  - Farming
  - Commercial
- Various standardised reports
- Public weighing
- User defined fields
- Backup and restore
- Scale / Bridge configuration, can allow manual entry
- System recovery
- Security
- Error / log reporting
- Low cost
- Online Updates

### Business Benefits

Most of the business benefits to be gained have been alluded to above. The question may arise why this functionality could not be incorporated in of the existing computer systems. One of key the characteristics of a typical weighing application is that it has a real-time nature. This implies that it should be responsive, must be highly available and quite often requires 24(hours) x7(days) operation. With current technologies these requirements can be best achieved using a stand-alone system. Such a system should be able to continue operation in spite of failing communications lines or external systems.

### Architecture

The CommWeigh software is executed on one or more standard PC workstations. These workstations are interconnected on a Local Area Network (LAN) and share a database. A controlling workstation is connected to the various devices that need to be controlled/monitored. Database platform is Microsoft SQL. A free version will be installed on the controlling workstation or a dedicated SQL Server on site. See diagram below:



The CommWeigh software runs a Graphical User Interface (GUI) on a Windows platform. The software has been constructed such as to allow the easy configuration of options and the introduction of new functions.

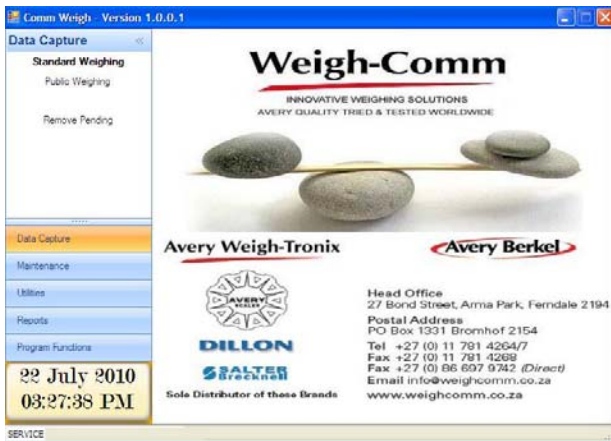
The standard CommWeigh can be extended to accommodate other customer requirements. The following functions are requirements that typically arise:

- Automated weighing: this usually involves the use of smart cards as a means of identifying the driver.
- Access control: this usually requires the installation of booms, robots and sensors.
- Security cameras: A number of cameras may be positioned around the weighbridge. At the time of weighing (or any other time as defined) photos are taken and stored with the weighing. This function will support a supervisor in the investigation of any suspicious transactions.
- On-line interfaces to other systems. In some applications it may be a requirement that certain information be exchanged with other systems on a real-time basis.

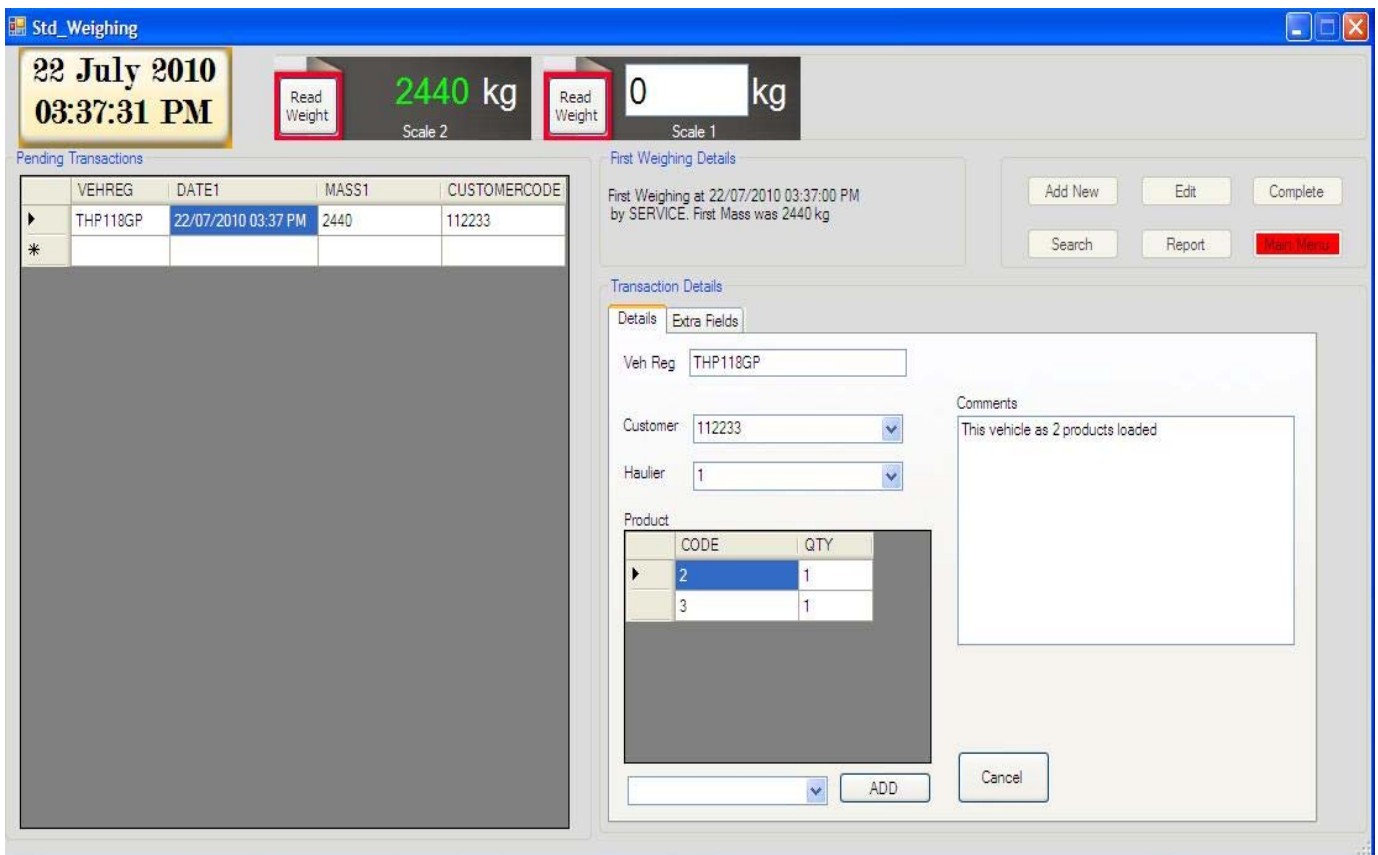
Apart from the above more common extensions, the scope of possible extensions could be very wide. Such extensions may involve the integration of available components/applications (e.g. an accounting package), or the development of a complete bespoke solution.

## Look and Feel

- Main Menu



- Standard Weighing Screen



• Weighbridge Ticket

CAREL DE GOEDE			
22/07/2010	Weighbridge Ticket		03:43:30PM
Veh.Reg	THP118GP	Weighbridge Ticket No	837
Customer Code	112233	CUST	112233
Haulier Code	1	HAULIER	ONE
Product Code(s)			
TWEEDE PRODUCT TWO	1	PRODUCT TEST	1
Comments			
This vehicle as 2 products loaded			
First Weighing	22/07/2010 15:37	2,440	kg
Second Weighing	22/07/2010 15:43	1,000	kg
Nett Mass		<u>1,440</u>	<u>kg</u>
Signatures			
SERVICE _____	Powered By Weigh -Comm (Pty) Ltd www.weighcomm.co.za	Driver Name _____	