ON BOARD WEIGHING SOLUTIONS
TECHNOLOGY CONCEIVED FOR YOU
As a company that manufactures and services OnBoard Weighing Solutions and Payload Management equipment worldwide, VEI’s solutions can be found on a diverse range of industrial vehicles, including wheeled loaders, excavators with bucket or grapples, rigid dump trucks, articulated dump trucks, underground LHDs, off-road self loading concrete mixers, forklift trucks, road vehicles and garbage truck, container handlers, round balers and agricultural trailers.

The VEI’s new generation devices feature a high quality, bright, colourful and glare-free display that assures a perfect visibility in direct sunlight also in the cabin. The VEI software interface also makes these devices very easy to use and upgrade from “entry” to “advanced” level; the wireless connection availability makes weighing data available anywhere in real time. With a worldwide trained network of companies, VEI promises a high level of service and technical backup. Its systems can be linked to third-party dispatch systems with ready communication protocols in place.

VEI’s millennium5 and helperX new generation takes into consideration incabin space, ergonomics, visibility, ease of use and connectivity, while reducing the amount of componentry. In-cab space is optimised by the innovative design and applied electronics, which have permitted the building of a unique small Device incorporating the printer, when necessary, continuing VEI versatility of the integration as always been in the past.
WHY INSTALL *millennium5* OR *helperX*?

- High precision and legal for trade
- Minimum components with no junction boxes
- Swap scale from one loader to another for no downtime
- Avoid overload fines by loading right in the first place
- Reduce haulage cost avoiding underload
- Reduce cycle times at the weighing bridge
- Weigh bridges and associated running costs can be eliminated with the legal for trade version
- Track loading efficiency
- USB data transfer at no extra cost
- Help stock and sales tracking
- End-to-end management of the payload process, with print out of the delivery tickets and data sent to billing system in real time using wireless cellular technology
- Real time, web-based consultation of loading and production data from any workstation, tablet or smart phone
- Easy-to-use thanks to the intuitive commands and guided data entry user interface made possible by the VEI innovative Operating System
- High-speed thermal printing
- The production plant can be loaded then suspended temporarily to load trucks. The system can manage simultaneous loading tasks (multitasking)
- Operator ID login with autolocking if not authorized
- Multiple weighing modes: Incremental, Target, Vehicle and Recipe
- Worldwide factory trained support backup
- 3 years warranty, best in the industry
HOW TO CHOOSE THE SCALE THAT FITS YOUR OPERATION

START WITH ENTRY LEVEL AND EASILY UPGRADE TO ADVANCED. DO IT YOURSELF

If you are not sure how your operation will develop and therefore which type of scale you need, start with the millennium5 “entry level”, see what it can do for you and eventually upgrade later to the “advanced level” in a fast and easy manner. The upgrade will be sent to your email account and by using the USB memory stick you can easily upgrade your scale without expensive indicator swap and on-site service like it is normally done by other scale providers; DO IT YOURSELF.

With VEI your initial investment is kept at a minimum and your future upgrades too.

ENTRY LEVEL
- Prevent overloading/underloading
- Check weight before scale house
- Plant loading
- Production Monitoring
- Small customer base

ADVANCED LEVEL
- Prevent overloading/underloading
- Check weight before scale house
- Plant loading
- Production Monitoring
- Large customer base
- Loading by Truck ID
- Load Destination ID
- Recipe program for blending operations

START WITH ENTRY LEVEL AND EASILY UPGRADE TO ADVANCED. DO IT YOURSELF
OPERATOR LOGIN

With the VEI scales you can set the Operator login ID and Password in order to allow only specified operators to use the scale. The operator name will appear on each loading record, printed or memory recorded, in order to be identified in case of need.

ACCREDITATIONS BRING SUPERIOR QUALITY

The VEI products have undergone diverse testing procedure in order to assure the customer satisfaction and industry latest requirements fulfillment especially dedicated to the On Board application. These accreditations assure product reliability over time and in harsh working conditions delivering superior quality, precision and therefore your fast return on investment.

HARDWARE CHARACTERISTICS

- Power supply: 9÷36Vdc
- Working Temperature: -40°C ÷ +80°C
- Metrological accreditation working Temperature: -25°C ÷ +60°C
- Measurement Error (%): 0 ± 1
- Shocks: 40G tested
- Protection Class: Device IP 54. Sensors IP67
- Size: 140 x 204 x 67mm. (5.5 x 8 x 2.6 inches)
- Weight: 928 gr (2 lb)
- Display: HD color TFT
- Light ambient sensor: day/night automatic display brightness
- Keyboard: Membrane, lighted
- Text editing: Mobile phone type
- Modem port: RS232
- Printer port: USB read/write
- Tilt switch: Open contact
- Remote keys: Open contact
- Auto-add
- Tip off
- Diverse tool’s calibrations
- Unit of Mass conversion
- Auto-Power On
- Auto-Shutdown
- Energy saving
- Plant and trucks simultaneous loading
- USB files backup/restore
- USB Software update
- USB/Wireless data update
- Operator ID login
- Split Weighing

SOFTWARE FEATURES

- Auto-add
- Tip off
- Diverse tool’s calibrations
- Unit of Mass conversion
- Auto-Power On
- Auto-Shutdown
- Energy saving
- Plant and trucks simultaneous loading
- USB files backup/restore
- USB Software update
- USB/Wireless data update
- Operator ID login
- Split Weighing

ELECTROMAGNETIC COMPATIBILITY:

- ISO 13766 earth moving machinery
- ISO 14982 agriculture and forestry machinery
- EN 50498 vehicle instrumentation
- EN 61326 measuring devices
- MID - European legal for trade approval
- SAE J1455, comprehensive of:
  - Dust test
  - Climatic test from -40° to +85°
  - Salt mist test
  - Vibration and shock test at 40G

VEI products are certified Legal for Trade in Europe, Australia, Russia, China and elsewhere the procedure is undergoing. Legal for Trade accreditation certifies superior precision and weigh bridges with associated running costs can be eliminated.
DELIVERY TICKET PRINTOUTS AND PRODUCTION REPORT

VPRINT
Thermal high speed printing, indestructible when compared to the needle printer which is very much more sensitive to dust and mechanical breakdown. It can be fitted under the millennium5 or helperX to produce a single, integrated unit or installed as a separate unit. The integration makes it the most compact unit in the market, easy to install and operative directly under the Device without having to move away from it.

PRINTOUTS AVAILABLE:

<table>
<thead>
<tr>
<th>Truck load</th>
<th>Truck load history</th>
<th>Production by favorite elapse dates</th>
<th>Management data</th>
<th>Configuration data</th>
</tr>
</thead>
</table>

PRINTED INFORMATION INCLUDES:

A Site Owner company with address
B Loading site with address
C Loading company with address
D Date and Time of printout
E Loaded Product
F Loaded Weight
G Vehicle ID with preset target
H Number of Weighings
I Multiple Products loading
J Products overall Total
K Recipe Name
L Recipe Products loaded
M Customer Name with address
N Machine code
O Destination Name with address
P Carrier with address
Q Loading Operator ID
R Ticket number
S Signature box
T Footer

Paper roll diameter 48 mm (1.9 inches)
Paper width 57mm (2.2 inches)

Others printout formats are available.
Please consult us with your requirements.

<table>
<thead>
<tr>
<th>PORTLAND QUARRY 13 PEAK ROAD ROSKANK CITY OR</th>
<th>PORTLAND QUARRY 13 PEAK ROAD ROSKANK CITY OR</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOADING SITE CREEK VALLEY QUARRY</td>
<td>LOADING SITE CREEK VALLEY QUARRY</td>
</tr>
<tr>
<td>LOADING COMPANY SMITH CONTRACTING AND CO.</td>
<td>LOADING COMPANY SMITH CONTRACTING AND CO.</td>
</tr>
<tr>
<td>05/29/2017 16:04</td>
<td>05/29/2017 11:15</td>
</tr>
<tr>
<td>SAND 23.45</td>
<td>RECIPE MAN CRUSHER</td>
</tr>
<tr>
<td>Vehicle AG 455 RT6</td>
<td>PRODUCT WEIGHT</td>
</tr>
<tr>
<td></td>
<td>SAND (1)</td>
</tr>
<tr>
<td>NO. OF WEIGHINGS 5</td>
<td>GRANITE 145.00</td>
</tr>
<tr>
<td></td>
<td>Target 145,00</td>
</tr>
<tr>
<td></td>
<td>LIMESTONE 13.00</td>
</tr>
<tr>
<td></td>
<td>Target 110.00</td>
</tr>
<tr>
<td></td>
<td>TOTAL LOADED 390,00</td>
</tr>
<tr>
<td></td>
<td>NO. OF WEIGHINGS 13</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WEIGHTS LOG FILE TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>05/29/2017 11:00</td>
</tr>
</tbody>
</table>

| START OF WEIGHING 05/29/2017 09:13         |
| END OF WEIGHING 05/29/2017 09:20           |
| PRODUCT WEIGHT                             |
| SAND (1)                                    |
|                                             |
| NO. OF WEIGHINGS 5                          |
| NO. OF TICKETS 170                         |
| OPERATOR ID FOREST                          |
| CUSTOMER RICHARDSON PLANT LTD              |
| DESTINATION PALM TREE DRONE                |
| CARRIER SOUTHEAST EXPRESS INC.             |
| LOADIN g SITE PORTLAND QUARRY               |
| LOADIN g COMPANY SMITH CONTRACTING AND CO.  |
| MACHINe CODE CARBIDE                       |
| DESTINATION WELLINGTON WAREHOUSE 20045 PINE TREE LIVERPOOL OR 50707 |
| CARRIER SOUTHEAST EXPRESS INC. 54 WELLINGTON ST STO KPORT SKY 195 |
| OPERATOR ID FOREST                          |
| TICKET number 11                            |
| SIGNATURE                                   |

Typical truck load history
SLIP PRINTER

The Slip Printer generates 3 copies of delivery dockets in a pre-printed format.

Ticket size 105 x 224 mm (4.1 x 9 inches)

USB DATA TRANSFER AT NO EXTRA COST!

AN ADDED VALUE, STANDARD MOUNTED IN THE DEVICE.

With a built-in USB port as standard on millennium5 and helperX you can use a commercial USB memory stick and download the accomplished loadings during the day without extra optional cost: it’s all built-in.

Read the USB memory stick in your PC and open your loadings by using a basic spreadsheet program like Excel; then import or export data as you like and where you like. The loadings data are saved into your USB by date and time so no overwriting will happen and your imports will be crystal clear to find them out.

REMOTE KEYS

REMOTE YOUR MAIN KEYS

Bring your main 2 keys closer to your hands by using this small size remote keys box. It can be screws fixed or velcro attached to where it is more comfortable for your operation, usually the machine’s right hand joystick.

REMOTE DISPLAY

BRING YOUR WEIGHT LIVE OUTSIDE THE CABIN

The remote display helps in those situations where the weight must be shown live outside the cabin. When loading a truck your customer has a real time knowledge of how much weight you are unloading into the truck. When loading bags from a hopper or conveyor the discharge can be remotely stopped at the desired weight. With an ADT truck equipped with millennium5 the remote display shows the real time weight to the loading machine which can then better achieve loading up to the maximum capacity.
Stay connected to your loader 24/24, 7 days a week. **Trackweight** sends you real-time data from your loader wherever you may be, all you need is an internet connection. Its compact function gives you:
- Unlimited transmission range
- Real time data transmission
- Production data at a selected email account.
- 100% data security as data is sent in real time and stored on a server provided for you.
- Automatic and direct billing without having to enter delivery tickets manually after they are printed on the loader.
- Easy management of all extraction sites located in and outside the country.
- Upgrade your scale data management remotely.

The use of **Trackweight** modem requires to open an account into [ipotweb.com](http://ipotweb.com) because data will be sent to VEI servers and from [ipotweb.com](http://ipotweb.com) visible to the registered account, only. In alternative data can be sent to a dedicated FTP server other than VEI. Please contact VEI representative for further info on this regarding.

**Wireless Data Transmission**

**Trackweight Mobile**
- Quad-band cellular modem

**RFlink**
- Radio modem.
- Real-time data transmission.
- Limited range

**WiFi**
- WiFi modem

**WIRELESS DATA TRANSMISSION**

Ideal for short distance data transmission within the same site where the loading machinery is working. **RFlink** is in fact used when delivery tickets need to be printed at the exit of the loading site or inside industrial plants in order to transfer data in real time. Frequency and power transmission depend upon country of usage. It can be used for real time or delayed data transmission. If you want to take advantage of VEI Payload Monitoring software an account must be opened into [ipotweb.com](http://ipotweb.com) and an internet connection must be available in the job site. Otherwise your loading .txt files will be placed one by one into your preferred PC folder.

**WiFi ROADS**
- WiFi modem

Ideal in job sites where a WiFi network is existing. Your loader will be part of the WiFi network in matter of minutes and loading data available at your preferred location in the job site and web wide. Transmission range depends from your local access point. It can be used for real time or delayed data transmission.

If you want to take advantage of VEI Payload Monitoring software an account must be opened into [ipotweb.com](http://ipotweb.com) and an internet connection must be available in the job site. Otherwise your loading .txt files will be placed one by one into your preferred PC folder.
Whether you use the USB or wireless data transfer, the payloads information ends up in a single database from where it can be exported to a billing software. With ipotweb, you can generate different types of reports, tracking down in real time your inventory, sales analysis and machine productivity. With ipotweb.com production and sales are linked to billing, cutting administration filing time drastically.

Ipotap is an ideal tool to control production and sales in real time directly from your pocket device. It is suitable for every kind of loading equipment: a front end loader, an excavator, a reach stacker, a fork lift, a mining or road truck, a garbage collecting truck. Ipotap gives you the right true insight of your machine production and sales. Imagine receiving vital information on your fleet production in real time while being seated somewhere else. Ipotap is supported by ipotweb.com a VEI production and sales data insight web portal connected wireless to your working equipment.
The vkiosk brings unparalleled automation to the sector, cutting running costs drastically and paying for itself in just a few months. With vkiosk, vehicles entering the loading site, whether it’s a quarry, construction site or landfill site, are controlled through manual or automatic vehicle recognition. This provides direct control over all vehicles operating in the site, and the opportunity to deny authorization as necessary. But vkiosk is not just a simple access control system, as once a vehicle has been recognized, all associated data, such as the customer name, vehicle registration number, weight and product is sent wireless to the loading machine. This means the driver no longer needs to get out to give these details to the loader operator, and the latter doesn’t have to enter data for the vehicle being loaded because it is already contained in the wireless data received from the vkiosk when the vehicle entered the site. Once the vehicle has been loaded, the loader operator, by deleting the running total on the scale, sends a message to the vkiosk specifying the weight actually loaded so when the vehicle is recognized at the exit, the driver receives the delivery docket automatically.

SCALE HOUSE AUTOMATION

Whether the job site is equipped with a scale house at the entrance, ipot kiosk, the software core behind the vkiosk, can be installed on the scale house PC to automate trucks loading, by registering the truck at the entrance, dispatching the truck info together with the weight to load to the loading machine and retrieving the loaded truck info at the exit for a quick delivery docket printout.

REMOTE PRINTING

The vkiosk can be used for simply printing the truck delivery docket remotely as job site security regulations are becoming stringent for truck drivers to step down from their truck to get the delivery docket from the loader operator.
VEI products can be installed on a variety of machineries throughout diverse industries. In each one of them VEI scales deliver superior accuracy for a better optimization of your loadouts, production processes, sales analysis, inventory updates, trucks load optimization, loading machines productivity. VEI scales are installed by trained personnel assuring a perfect fit into your machineries or easily done by your personnel because they are simple and straight forward to install; VEI local support is always available to help you out in case of need. VEI scales can be easily transfered from one machine to an other of the same kind, they are durable and DESIGNED TO LAST.

**APPLICATIONS**

**THE WEIGHING CONCEPT**

VEI products can be installed on a variety of machineries throughout diverse industries. In each one of them VEI scales deliver superior accuracy for a better optimization of your loadouts, production processes, sales analysis, inventory updates, trucks load optimization, loading machines productivity. VEI scales are installed by trained personnel assuring a perfect fit into your machineries or easily done by your personnel because they are simple and straight forward to install; VEI local support is always available to help you out in case of need. VEI scales can be easily transferred from one machine to another of the same kind, they are durable and **DESIGNED TO LAST**.

**WHEEL LOADER**

1. millennium5 - helperX onboard instrumentation
2. Contact-free weighing zone sensor
3. Tilt sensor for legal for trade systems, only
4. Bucket close sensor for legal for trade systems, only
5. Load sensors to know the lifting pressure

**ADT ARTICULATED DUMP TRUCK**

1. millennium5 onboard instrumentation
2. LOADLink™ on the rear axles
3. Led light to indicate the load in progress

**RIGID DUMP TRUCK**

1. millennium5 onboard instrumentation
2. Load sensor, one for each front suspension
3. Load sensor, one for each rear suspension
4. Led light to indicate the load in progress

**OPTIONS**

- vPrint thermal high speed printer
- Slip Printer slip dot matrix printer
- Wireless data transmission
- ipotweb.com payload monitoring
- Remote keys
- Remote display to indicate the load in progress
- Led light to indicate the load in progress

**Options**

- vPrint thermal high speed printer
- Slip Printer slip dot matrix printer
- Wireless data transmission
- ipotweb.com payload monitoring
- Remote keys
- Remote display to indicate the load in progress
- Led light to indicate the load in progress
- Led display to indicate the load in progress

**LED Remote Display**
**LHD UNDERGROUND LOADER**

1. **millennium5 - helperX onboard instrumentation**
2. Contact-free weighing zone sensor
3. Load sensors to know the lifting pressure

**OPTIONS**
- vPrint thermal high speed printer
- ipotweb.com payload monitoring
- Remote keys
- Remote display to indicate the load in progress

**TELEHANDLER**

1. **millennium5 - helperX onboard instrumentation**
2. Arm position sensor (optional)
3. Contact-free weighing zone sensor

**OPTIONS**
- vPrint thermal high speed printer
- Slip Printer slip dot matrix printer
- Wireless data transmission
- ipotweb.com payload monitoring
- Remote keys
- Remote display to indicate the load in progress

**OFF-ROAD CONCRETE MIXER**

1. **millennium5 - helperX onboard instrumentation**
2. Contact-free weighing zone sensor
3. Load sensors to know the lifting pressure

**OPTIONS**
- vPrint thermal high speed printer
- Slip Printer slip dot matrix printer
- Wireless data transmission
- ipotweb.com payload monitoring
- Remote keys
- Remote display to indicate the load in progress
**MATERIAL HANDLER**

- **millennium5 - helperX** onboard instrumentation

- **GR2 load sensing block**

**WEIGHT TOTALIZING**

- Totalizing option with push button

- or with pedal

**OPTIONS**

- vPrint thermal high speed printer
- Slip Printer slip dot matrix printer
- Wireless data transmission
- ipotweb.com payload monitoring
- Remote keys
- Remote display to indicate the load in progress

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**REACH STACKER**

- **helperX onboard instrumentation**

- **Contact-free weighing zone sensor**

- **Load sensors to know the lifting pressure**

- **Tilt sensor**

- **Boom extension position sensor**

**OPTIONS**

- vPrint thermal high speed printer
- Slip Printer slip dot matrix printer
- Wireless data transmission
- ipotweb.com payload monitoring
- Remote keys
- Remote display to indicate the load in progress

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**FORK-LIFT TRUCK CONTAINER HANDLER**

- **helperX onboard instrumentation**

- **Contact-free weighing zone sensor**

- **Load sensors to know the lifting pressure**

- **Tilt sensor**

- **Boom extension position sensor**

**OPTIONS**

- vPrint thermal high speed printer
- Slip Printer slip dot matrix printer
- Wireless data transmission
- ipotweb.com payload monitoring
- Remote keys
- Remote display to indicate the load in progress
OPTIONS
- vPrint thermal high speed printer
- Slip Printer slip dot matrix printer
- Wireless data transmission
- ipotweb.com payload monitoring
- Remote keys
- Remote display to indicate the load in progress

FORK-LIFT TRUCK
1 millenniumS - helperX onboard instrumentation
2 Contact-free weighing zone sensor
3 Load sensor to know the lifting pressure

TRACTOR
1 millenniumS - helperX onboard instrumentation
2 Contact-free weighing zone sensor
3 Quick disconnect plug to easily release front arm from tractor
4 Load sensors to know the lifting pressure

HOOK LIFTER
1 millenniumS - helperX onboard instrumentation
2 Weighing pads on the truck’s chassis
3 Junction box, command box, pump group, fuse box

OPTIONS
- vPrint thermal high speed printer
- Slip Printer slip dot matrix printer
- Wireless data transmission
- ipotweb.com payload monitoring
- Remote keys
- Remote display to indicate the load in progress
INDUSTRIES
VEI SCALES CAN BENEFIT A WIDE ARRAY OF INDUSTRIES

In every industry where a load is moved, knowing the weight is of prime importance because it implies the energy to move it, which establishes the profitability of the action.
WE LET YOU DECIDE WHO IS THE ON BOARD WEIGHING INDUSTRY LEADER PROVIDER!

www.veigroup.com
info@veigroup.com

WORLDWIDE NETWORK
53 TRAINED DISTRIBUTORS IN 63 COUNTRIES
THOUSANDS OF SYSTEMS INSTALLED
PROVIDING CUSTOMER SUPPORT AND ON-SITE TRAINING SINCE 1986