

The Masters of Industrial Weighing

Indicator Truck-scale and Platform Scale

IDe 400

CE



- ◆ The **IDe 400** indicator is a tool with a management of double weighing mode (Weigh in/ Weigh out), user friendly and very powerful. The **IDe 400** is suitable for all applications as weighbridges or platform scales . It is perfectly reliable in harsh environments and very easy to use.

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- > Compatible with all strain gauge weighing load cells on the market and **Master K** digital load cells.
 - > Excellent precision and stability of measurement.
 - **IDe 400** is CE approved for 6000 scale divisions.
 - Can be used in dual-range operation (e.g. 50 t/20 kg and 30 t/10 kg)
 - > Simple and intuitive operator face.
 - Keyboard 51 keys :
 - 28 alphanumeric keys,
 - 10 numerical keys,
 - 13 function keys.
 - Graphic display with Backlight (240 x 64 dots).
Very good visibility.
 - Weight and data display, 6 digits, h =15 mm.
 - > Data storage device (DSD) allow's operations' treacability and allows storing up to 28 000 records.
 - > Standard peripheral device management:
 - COM 1 : serial output RS 232 or RS 485 (selectable).
 - COM2 : 1 passive current loop output for RP75 remote display
 - 1 LPT output for parallel printer.
 - > Fully immunized against computer viruses.
 - > Options :
 - 4 I / 4 O board for loading on the weighbridge (in gross or net weight), for traffic lights and barriers in one way passage.
 - Memory extension module (1Million records).

Operation

Weighing type : The IDe 400 manages 4 weighing modes :

Weigh in / weigh out system : data entry can be user-defined during input weighing, output weighing or both.

During output weighing, the net weight is calculated and the ticket printed.

Gross/Tare/Net weighing with tare entry by the operator.

Gross/Tare/Net weighing with a programmable tare in a file.

Gross/Tare/Net weighing with semi-automatic tare function.

Files

The following files can be user-defined with the help of a computer and will be saved in the IDe 400 indicator's memory backed up with a lithium battery.

File no. 1 : (F1) This file, which can be assigned to customers or members, includes 856 records, each with a 6 digits code and a 15 character name.

File no. 2 : (F2) This file, which can be assigned to products or items, includes 225 records, each with a 6 digits code and a 15 characters name.

File no. 3 : (F3) This file, which can be assigned to transporters or vehicles, includes 225 records, each with a 6 digits code and a 15 characters name.

Tare file : The tare can be pre-recorded for 200 vehicles and assigned to the vehicle number: 6 digits with a 10 characters name (e.g. vehicle registration number).

The file of on site vehicles has a capacity of 60 vehicles.

Simple data

Six-digit data can be user-defined to characterise the transaction.

The operator disposes of 3 numerical references of 6 digits each and of 3 alphanumerical references of 16 characters each.

Printing

The weighing ticket can be user-defined with the following information:

- company name / date / time / weighing no. / file name and simple data – Gross / Tare / Net.
- End-of-ticket message.

Totalizing

8 types of different additions are available:

Simple addition of the file 1 (Total of weighings by customer)

Simple Addition of the file 2 (Total of weighings by product) Example: 1

Simple Addition of the file 3 (Total of weighings by carrier)

Crossed Addition of F1 / F2 (Total weighed by product for every customer) Example: 2

Crossed addition of F1 / F3 (Total weighed by carrier for every customer)

Crossed Addition of F2 / F3 (Total weighed by carrier for every product)

Crossed Addition of F3 / F2 (Total weighed by product for every carrier)

List of weighings sorted out by F1 / F2 containing the following information: customer, product, , DSD no, no. of vehicle, DS1 code and net weight. Example:3

Weighing diary, DSD

Only the codes of the files F1, F2, F3 and the simple data n°1 are stored in the DSD.

The diary can contain 28 000 weighings :

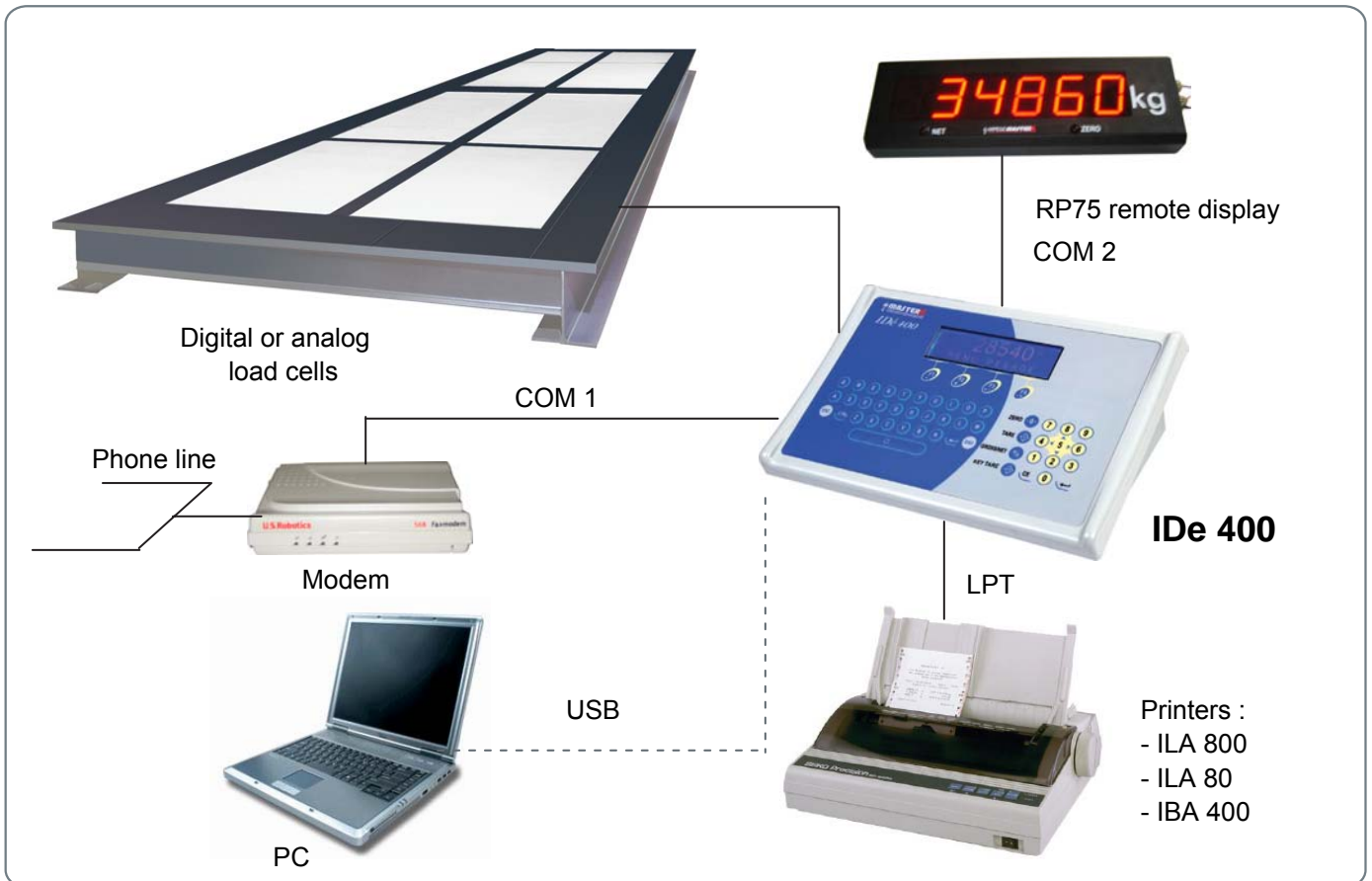
Date, Time, n° of vehicle, code F1, F2 et F3, DS1, Gross, Tare and Net

This diary can be printed or exported either by modem or by RS 232 link to a computer. With Windows Hyperterminal, the weighing diary can be edited directly in an Excel worksheet.

Totalizing

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>DATE : 05/12/2008</td> <td>TIME : 16:33</td> </tr> <tr> <td colspan="2">PRODUCT</td> </tr> <tr> <td colspan="2">From 10/06/2008 to 13/07/2008</td> </tr> <tr> <td>: 001 : SAND</td> <td>: 23 500 Kg :</td> </tr> <tr> <td>: 001 : GRAVEL</td> <td>: 9 920 Kg :</td> </tr> <tr> <td>TOTAL :</td> <td>32 420 Kg</td> </tr> </table> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2" style="text-align: center;">00002</td> <td rowspan="2" style="text-align: center; vertical-align: middle; font-size: 2em;">3</td> </tr> <tr> <td colspan="2" style="text-align: center;">SMITH & SON Ltd.</td> </tr> <tr> <td colspan="3">:PRODUCT 001 SAND</td> </tr> <tr> <td>:DSD #</td> <td>VEHICLE #</td> <td>REF. # 1</td> <td>NET</td> </tr> <tr> <td>: 000002</td> <td>1234ZZ69</td> <td>000000</td> <td>26 700 Kg</td> </tr> <tr> <td colspan="3">TOTAL :</td> <td>26 700Kg</td> </tr> <tr> <td colspan="3">:PRODUCT 001 SAND</td> </tr> <tr> <td>:DSD #</td> <td>VEHICLE #</td> <td>REF. # 1</td> <td>NET</td> </tr> <tr> <td>: 000004</td> <td>12338CC42</td> <td>000001</td> <td>28 470 Kg</td> </tr> <tr> <td colspan="3">TOTAL :</td> <td>28 470Kg</td> </tr> <tr> <td>TOTAL :</td> <td colspan="3">45 170 Kg</td> </tr> </table> | DATE : 05/12/2008 | TIME : 16:33 | PRODUCT | | From 10/06/2008 to 13/07/2008 | | : 001 : SAND | : 23 500 Kg : | : 001 : GRAVEL | : 9 920 Kg : | TOTAL : | 32 420 Kg | 00002 | | 3 | SMITH & SON Ltd. | | :PRODUCT 001 SAND | | | :DSD # | VEHICLE # | REF. # 1 | NET | : 000002 | 1234ZZ69 | 000000 | 26 700 Kg | TOTAL : | | | 26 700Kg | :PRODUCT 001 SAND | | | :DSD # | VEHICLE # | REF. # 1 | NET | : 000004 | 12338CC42 | 000001 | 28 470 Kg | TOTAL : | | | 28 470Kg | TOTAL : | 45 170 Kg | | | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>DATE : 05/12/2008</td> <td>TIME : 16:33</td> </tr> <tr> <td colspan="2">CLIENT / PRODUCT</td> </tr> <tr> <td colspan="2">From 10/06/2008 to 13/07/2008</td> </tr> <tr> <td colspan="2" style="text-align: center;">00001</td> </tr> <tr> <td colspan="2" style="text-align: center;">SMITH & SON Ltd.</td> </tr> <tr> <td>: 001 : SAND</td> <td>: 33 400 Kg :</td> </tr> <tr> <td>: 001 : GRAVEL</td> <td>: 28 340 Kg :</td> </tr> <tr> <td>TOTAL :</td> <td>60 740 Kg</td> </tr> <tr> <td colspan="2" style="text-align: center;">00002</td> </tr> <tr> <td colspan="2" style="text-align: center;">SMITH & SON Ltd.</td> </tr> <tr> <td>: 001 : SAND</td> <td>: 13 600 Kg :</td> </tr> <tr> <td>: 001 : GRAVEL</td> <td>: 14 200 Kg :</td> </tr> <tr> <td>TOTAL :</td> <td>27 800 Kg</td> </tr> </table> | DATE : 05/12/2008 | TIME : 16:33 | CLIENT / PRODUCT | | From 10/06/2008 to 13/07/2008 | | 00001 | | SMITH & SON Ltd. | | : 001 : SAND | : 33 400 Kg : | : 001 : GRAVEL | : 28 340 Kg : | TOTAL : | 60 740 Kg | 00002 | | SMITH & SON Ltd. | | : 001 : SAND | : 13 600 Kg : | : 001 : GRAVEL | : 14 200 Kg : | TOTAL : | 27 800 Kg |
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| PRODUCT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| : 001 : SAND | : 23 500 Kg : | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| : 001 : GRAVEL | : 9 920 Kg : | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TOTAL : | 32 420 Kg | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 00002 | | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SMITH & SON Ltd. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| :PRODUCT 001 SAND | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| :DSD # | VEHICLE # | REF. # 1 | NET | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| : 000002 | 1234ZZ69 | 000000 | 26 700 Kg | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TOTAL : | | | 26 700Kg | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| :PRODUCT 001 SAND | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| :DSD # | VEHICLE # | REF. # 1 | NET | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| : 000004 | 12338CC42 | 000001 | 28 470 Kg | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TOTAL : | | | 28 470Kg | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TOTAL : | 45 170 Kg | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 00001 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| : 001 : SAND | : 33 400 Kg : | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| : 001 : GRAVEL | : 28 340 Kg : | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TOTAL : | 60 740 Kg | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 00002 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| : 001 : SAND | : 13 600 Kg : | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| : 001 : GRAVEL | : 14 200 Kg : | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TOTAL : | 27 800 Kg | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Block diagram



Example of a complete Weighing Ticket

| | |
|---|---|
| MASTER-K ARPEGE | |
| <i>Company name</i> | 38 avenue des Frères Montgolfier BP 186 69 686 Chassieu Cedex |
| <i>Date/time of the first weighing.</i> | DATE : 17/05/2005 TIME : 09h29 |
| <i>Date/time of the weighing.</i> | DATE : 17/05/2005 TIME : 09h45 |
| <i>DSD number of the weighing</i> | WEIGHING No : 000004-IO |
| <i>Name of file 1 with its assigned code and label</i> | DSD No : 000001 |
| <i>Name of file 3 with its assigned code and label</i> | VEHICLE No : 1245ACC69 |
| <i>Name of the simple data n°2 with its assigned data</i> | CUSTOMER : 000078 GTP Construction |
| <i>Name of the simple data n°4 with its assigned data</i> | PRODUCT : 004 Sable fin |
| <i>Name of the simple data n°6 with its assigned data</i> | TRANSPORTER : 127 Transpomat |
| <i>GROSS/TARE/NET Weight</i> | Treatment : 110505 |
| <i>END OF THE TICKET</i> | Humidity in % : 012.500 |
| | Impurity in % : 002.500 |
| | Site : Stock GTP |
| | Distance : 45 Km |
| | Operator : E. LEGRAND |
| | GROSS : 38060kg |
| | TARE : 14440kg |
| | NET : 23620kg |
| | Observations: |
| | Signature : |

Characteristics

| characteristics | |
|---|--|
| Power supply Standard (please indicate it in the order) Option | Mains 110 or 220 VAC -10 +15%, 50-60HZ 12 VDC2 4 VDC |
| Power consumption EMC performance | 20 VA according to standard EN 45 501 |
| Standard load cell power supply Min. load impedance | 7.5 V AC square signal 45 ohms or 8x350 ohms load cells in parallel |
| MasterK smart load cell power supply | 12 V = |
| Operating temperature | -10/+40°C |
| Storage temperature | -20/+60°C |
| Timer drift | ± 1 min per month |
| data retention in RAM memory | 3 years by lithium battery |
| Traceability file capacity Optional 64 MB memory extension module | 28 000 weighing with date/time/ weighing No./gross/tare/net 1 million weighing |
| METROLOGICAL CHARACTERISTICS according to Standard EN 45 501 | |
| Max. weighing accuracy Internal resolution Min. approved scale division voltage value | 6000 scale divisions 60 000 divisions 0.75µV |
| Measurement rate | 10 to 180 measurements per second |
| EXCLUDING LEGAL METROLOGY | |
| Max. weighing accuracy Internal resolution | 10000 scales divisions 100000 divisions |