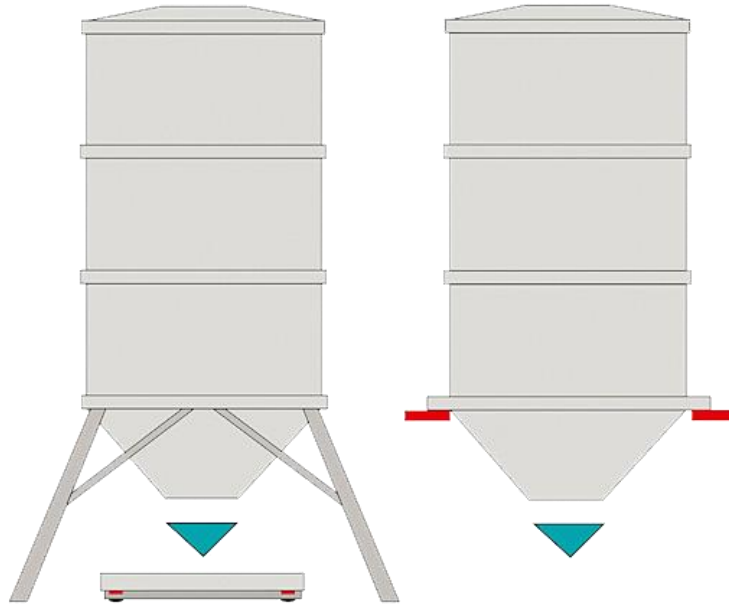# Firmware
1 Component Dosing FW-D1

Special firmware for OEM-systems for industrial automation, with the functions dosing and totalization.

Suitable for advanced applications, both weighing in loading mode and weighing in unloading mode, with weight totalization, formula weighing, data and print management.

Main features

- zeroing; gross/net selection; manual or automatic totalization;
- horizontal totalization (lot total), vertical totalization (recipe total), subtraction; with automatic tare
- tare by weighing, through preset (direct or computed); free automatic tare; database of 300 tares per weighing platform (up to 4 platforms); blocked / unblocked tare
- off-/on switchable keyboard functions
- 15 configurable and printable ID-texts of 32 characters each, f.i. code, lot, operator ID, shift number, etc.
- database of 1000 articles with 3 alphanumeric descriptions (2 lines each of 20 characters each), tare, linked tare
- database of 500 single-product formulas
- database of 200 Customers with alphanumeric description (5 lines of 30 characters each)
- selection of article, customer, tare from the database through bar code reader (option)
- 4 levels of zero settable totals printable in an independent way: partial total, general total, grand total, total by article
- calculator function: it is possible to add, subtract or multiply two values of up to 7 digits (entered through the keypad), print the result and apply it to the tare
- Data Entry Protocol: complete set of serial commands so that one can manage scale functions from PC, in order to easily accomplish even the most complex applications by guiding the operator during the process operations; the protocol allows to manage the scale displays (to interact with the operator), carry out all the weighing functions, read the data entered via keyboard, check the input/output, manage the databases and emulate the instrument keyboard
- programmable printout from keyboard of 30 print formats linkable to various functions (print key, totalization, article total, partial total, general total, grand total, first weigh heading); each print format may contain up to 512 positions which may be ASCII codes or preconfigured print blocks (f.i. company name, lot and weigh progressive numbers, gross weight, tare, net, added total, article description, date and time, etc. incl. preconfigured printing format)
- printing of the last 1000 weighings, printing of article database with customer, stocks (in weight)
- this firmware applies to our weight indicators of the types **HP(R)-Ultra**, **HP(R)-Touch**, **VPI-U** and **VPI-U-Advanced**
- see also the details of the respective weighing indicator

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Principle Diagram