

IND690fill

Application software

This flexible software package for precision industrial dispensing is intelligent enough to adapt the IND690 terminal's meet capabilities to requirements. Standalone, or incorporated into a system, it allows you to simply plug and play.



**Is cutting edge
dispensing a top priority?**

METTLER TOLEDO

Target weight achieved quickly and accurately.

The automatic IND690fill teaches itself – ensuring safe and reliable industrial dispensing.



Full or semi-automatic charging



Article No.

Job No.

Ident C

Ident D

Ident E

Ident F

- Rugged, sealed housing provides IP69K protection
- BIG WEIGHT® display – easy to read even from long distance
- Smooth membrane keypad for long life and ease of cleaning
- Compatible with 4 different scales for extremely accurate dispensing
- Codes A to F for clear identification of weighing data
- Interfaces allow easy connection of external systems

So many reasons for deciding on IND690fill

■ Quick and accurate dispensing

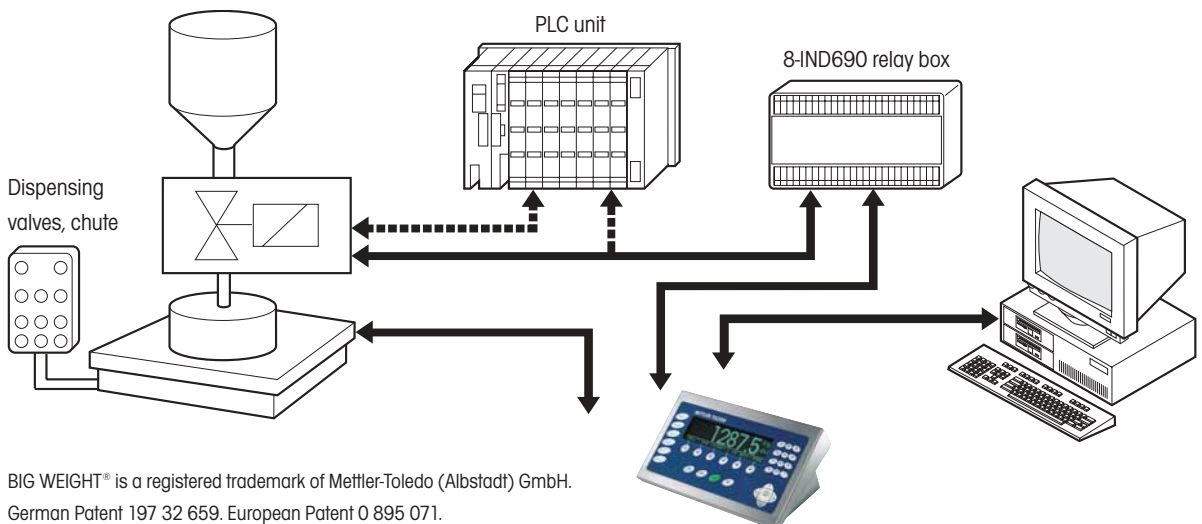
The combination of fast data transmission, adaptable filters for tough conditions and separate weighing and evaluation allows you to meter your formulas very quickly without sacrificing accuracy!

■ Learn mode

Just specify the target weight. The points at which the components are switched off are then determined automatically by the IND690fill. Getting the formula exactly right from the start avoids wasting time and materials.

■ Fully automatic dispensing

Upgrade from manual operation to the fully automatic dispensing system with IND690fill. Just connect coarse and fine feed valves to the two relay boxes and you are in business. Or activate the blow level nozzle control to avoid the need for the additional PLC for this technique.





IND690 means correct dispensing from the outset, without the labor and materials costs of extensive trials. It is equally effective for filling barrels or dispensing bulk goods.

CONPHARM Co.Limited
- Hampshire -

 DATE 09.05.05
 TIME 18.20.45

Article No. 756RT 34/K
Order No. Z 31 988.55

TARGET 20.000 kg
 LIMIT1 17.450 kg
 LIMIT2 19.748 kg
 TOLERANCE 0.160 kg

Actual v. 20.026 kg
 Tgt - Actual 0.026 kg
 1

Actual v.
 Tgt - Actual
 Items

 DATE 09.05.05
 TIME 18.21.29

Code No. 405241307891
Document No. DN 498288

Mean Value 20.0287 kg
 Std Dev. 0.0074 kg
 x min 20.023 kg
 x max 20.037 kg

XGross 60.713 kg
XNet 60.086 kg
Items 3



4 052413 078912

Typical printout shown actual size.

Safe filling

The IND690fill continuously controls material flow by monitoring dispensing. If the 8-690 relay box is ever cut off from the IND690, the relay box closes all outlets automatically within milliseconds. A multiplicity of other functions such as refill correction, correction threshold, acknowledgement, etc. ensure that an IND690fill monitored dispensing system is safe and reliable.

Customised dispensing

Switchable functions such as scale changeover, residue and fill quantity control, material leveling or manual correction cover requirements.

User-friendly

The clearly laid out, ergonomically designed keypad, together with a display that is easy to read helps you save time and avoid errors. Whether it's the oversized weight display, status display or DeltTrac bar graphs – you choose what you want to see.

Data printout

Print the data on control slips, labels, forms or cards using a strip or form printer. In clear text or barcodes for fast, accurate processing.

Recording and processing data

Optional interfaces can be fitted to integrate the IND690fill into your client-server architecture. Full remote operation is possible, if required.

Extremely simple materials handling

Weighing platforms come in an extremely wide variety of types and sizes, with different measuring ranges. Mountings for roller tracks and conveyor systems ensure ease of incorporation into the production line.

Consistently reliable

The rugged balances have generous overload protection. And the terminals can be replaced quickly in the case of an incident without upsetting calibration. Stainless steel industrial housings provide IP69K protection.



Function keys	
N	Enter item counter
TOTAL	Output/print total and statistics
MANUAL	Manual redispensing
LIMIT	Enter and print dispensing parameters
STOP	Interrupt or discontinue dispensing
START	Start or continue dispensing
IND690fill functions	
Dispensing	Automatic single-component filling to target weight. Coarse and fine feeding of liquid, viscous or loose materials. Tolerance checking with automatic redispensing and control of the point at which the fine feeding is switched off.
Application	Controlled above-level filling, below-level filling, or below-bung-hole filling, switchable nozzle and drip tray control by means of a second 8-type relay box. Dispensing nozzle contact detector.
Dispensing parameters	Entering of item name, target value, limits 0, 1 + 2, and permissible tolerance and tare ranges on the keypad in response to prompts, or retrieval from the 999 fixed value memories, or via serial interface or via network. Access to manual input, changing or retrieving dispensing parameters can be protected by a password.
Dispensing display	Clear text dispensing status display with status number; can be toggled between DeltaTrac analogue weighing-in guide and BIG WEIGHT® display with 35mm high digits or text.
Tare function	Automatic taring at the start of dispensing of the first component. Monitoring of container within defined tare range.
Learn mode	Automatic determination and optimization of points at which valves switch off. Automatic determination of the weighing tolerances in accordance with national calibration regulations.
Refill correction	Optimises the point at which fine feeding is switched off (limit 2).
Redispensing	Manual or automatic pulsed dispensing.
Application	Controlled above-level filling, below-level filling, or below-bung-hole filling, switchable nozzle and drip tray control by means of a second 8-type relay box. Dispensing nozzle contact detector.
Remote operation	IND690fill can be partially or fully remote controlled and monitored via serial interface or via network.
Operating mode	Manual or automatic dispensing OIML R51/OIML R76
Memory for characteristic data	For entering up to four items of job-related data (20 alphanumeric characters).

Auxiliary functions	
Totalization	Totaling (net) of all good/interrupted dispensing operations. Gross weight, item counter, standard deviation and mean, minimum and maximum value can be output to the GA46 printer or retrieved via the data interface.
Item counter	Start and end value of up to a maximum of 9999 can be preset for automatic filling of a certain lot size.
Pac start key, access protection	Interlocking of various keys prevents unauthorized operating steps.
Manual correction	Facility for bringing incorrectly dispensed individual components to target weight manually.
Material leveling	Switches a device for leveling or mixing the material dispensed. Can be controlled on weight and/or time basis.
Residue	Switches discharge device and residue control.
Fill quantity	Controls a top-up hopper when dispensing out.
Weighing platform changeover	Changes over from one weighing platform to another automatically or manually.
3 rd switching point	For rapid pre-filling before coarse and fine feeding.
Dispensing monitoring	If the rate of mass flow falls below a preset minimum value or a preset maximum flow rate is exceeded, dispensing is interrupted.
Acknowledgement	Acknowledgement of the next dispensing operation can be switched off (e.g. for pallet filling).
Coarse and fine	Option of using coarse feed signal to also control fine feed valve.
Start timer, end timer	Universal timer functions before/after the dispensing operation, actuated by a digital output.
Pre-dispensing	For reducing coarse feed opening pressure with fine feed, depending on time.
Print cycle	For cases in which the dispensing results do not have to be printed out after every filling operation.
Single-flow mode	Single-stage filling with fine feed below a variable weight limit.
Output 7	Sets output 7 as function of up to 30 programmable dispensing statuses.
FreeWeigh mode	Connection to FreeWeigh SQC system possible.
Analog mode	Pre-/coarse/fine stream can be output to an analog output under application of variable valves, optimal dispensing velocity for each dispensing parameter set or target value.

General functions	
Information functions	Simple retrieval of tare, actual and stored dispensing parameters, net total, item counter and characteristic data A to F (not during the dispensing process).
Control signals	Via two 4-1/O-690 interfaces and 4-690 relay box or one RS485/422-690 and 8-690 (accessories): Second 8-690 relay box is recommended if dispensing nozzle/drip tray control or start-end time signal is required.