# IT4000E
## *DOS*

# Simple Component Filling Controller for the Automatic Filling of Liquid and Solid Materials



Filling of liquids

Filling of bulk material

Printer

Serial / USB Ethernet

PC

Serial / Ethernet

**IT4000E *DOS*** is a universal W&M approved filling controller for use as non-automatic weighing instrument (NAWI) for the gravimetrical filling of liquid and solid material.

**IT4000E *DOS*** controls the filling process with fast and slow speed via screw or vibratory feeder or filling valve.

Target weights, tolerances and preact values can be stored in a product file.

Tare check and automatic taring of the empty container is possible.

Two different versions of the housing are available:

- **Compact stainless steel housing** (IP65) for desk-top / column-mount or wall-mount installation
- **Panel-mount housing** for installation in switch cabinet.

The most important features are:

- **High throughput** enabled by fast signal processing with powerful digital filtering.

- **Accurate fill control** through fast acting, trend-sensing preact optimization and tolerance check.

- **Recording of all data** pertaining to individual fill cycles or batches, optionally with printing or data transmission.

**Simple operation** via onscreen menus and softkeys ensures error-free operation and minimum training requirements.

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**Weighing electronics:**
- Integrated signal amplifier for connection of up to 16 strain gauge loadcells in 4- or 6- wire mode
- Calibration as single or multiple-range and as single or multi-interval scale.

**Fast and precise filling:**
- Fast signal processing (up to 800 updates per second)
- W&M approved resolution of 6,000d with a maximum preload of 80%, 524,000d internal resolution
- 1 or 2 speed feeding
- Automatic trend-sensing preact optimization.

**Security:**
- Flow rate check to monitor material flow
- Powerfail safe storage of data
- Password protection for access to data.

**Simple and secure operation:**
- Operator prompting on high-contrast TFT color display, data entry via numeric sealed membrane keyboard with multiple key assignment for alphanumeric entries or optional PC keyboard
- Display of number of fillings, average net weight and remaining fill weight
- Display of product name, target weight and bargraph showing approximation to target
- Error messages marked in red
- Operation via softkeys, i.e. the assignment of the function keys is indicated with clear text in the language of the country
- Up to 10 products with pertaining values for target weight, tolerance, etc. can be stored against a 2-digit product-No.

**Ethernet interface (option: WLAN):**
Integrated Ethernet interface with selectable IP address for data transmission and remote diagnosis over Internet.

**Integrated USB interface:**
To connect printer, scanner or PC keyboard.

**Serial interfaces**
- For printer (option)
- For data transmission to PC (option)
- RS232, 20mA CL, RS422 or RS485, protocol / baud rate selectable.

**Digital interfaces:**
Optoisolated inputs / outputs (24V) to connect relays / PLC or external relay module.

**Electrical connections:**
115 (–15%) – 240 (+10%) VAC; 50/60 Hz, option: 12–30VDC, power consumption max. 20 VA.

**Operating temperature:**
–10°C to +40°C, max. 95% relative humidity, non-condensing.

**Accessories:**
- Relay module with safe separation of inputs / outputs (24V, 3A)
- Remote display, etc.

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**Typical filling cycle:**
- Select product - enter target weight and number of batches
- System ready for start- start manually or through external signal
- Tare check and / or automatic taring
- 1- or 2-speed feeding with flow rate monitoring
- Tolerance check with preact optimization and automatic jog feeding if minus tolerance is detected
- Printing and transmission of gross, tare, net, date, time, consec.-No. and product-No.
- Message 'Done' and ready-for-start for the next cycle

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**Construction:**

| Desk/wall version | Panel-mount version |
|---|---|
|  |  |
| • Stainless steel housing, IP65<br>• For desk-top or wall-mount installation or with optional column for floor mounting<br>• Dimension WxHxD: 330x239x134mm | • Stainless steel housing, IP65<br>• Panel-mount installation<br>• Dimension WxHxD: 285x224x69mm<br>• Cut-out in panel: 268x207mm |

**Display / operation:**

| Start template for filling | Product file |
|---|---|
|  |  |
| Product selection, entry of target weight and number of fillings, start | Clearly structured file input masks |

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**Directives:** 2009/23/EG, 2004/108/EG, 2006/95/EG, 2004/22/EG

**Standards:** EN 45501, OIML R76-1, EN 61000-6-2, EN 61000-6-3, NAMUR NE21, EN 60950

CE — EC approval as non-automatic weighing instrument

ETL certified in compliance with UL 60950-1 and CSA C22.2 No. 60950-1

EMI compliance with FCC Part 15

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