



iTest 4-Parameter Tablet Tester

DUST-TIGHT «DT» OR CONTAINMENT «C» ≤ OEB3-4

The **iTest** is a fully automatic tablet testing system for integration with a tablet compression machine to perform automated in-process control (IPC). The system is intended for use either as a stand-alone equipment with its own HMI or in combination with a PharmaTechnology tablet deduster. The iTest offers premium analysis capabilities for weight, thickness, hardness and diameter - all in a compact dust-tight (DT) or containment OEB3-4 (C) design.

At the heart of the unit's design is an efficient elimination of dust and tablet fragments from the sampling stream, guaranteeing uninterrupted operation of the tablet tester and the overall tablet production line. Tablets are sampled directly from the tablet press' sampling gate and conveyed through a flexible hose to the tester using suction vacuum. This allows the tester to be positioned freely in the room and offers optimal tablet dedusting. The pinch valve placed at the inlet of the iTest, the optional H13 Hepa Filter and the light under pressure inside the tablet measurement area eliminate environmental disturbances during measurement and increase operator safety.

Sampled tablets are tested for each parameter against pre-programmed recipes. All measurement data is fed back to the tablet press control system for purposes of batch reporting and automated process control.

An utmost care has been taken to simplify the design for cleaning procedures. The tester design features a sealed separation between the contaminated product area and the electro-mechanical section of the machine.. All product contact parts are easily accessible and disassembled without the use of tools, allowing extremely fast cleaning and maintenance.

KEY BENEFITS

- Sealing between the tablet test section and electro-mechanical section underneath to avoid product contamination and minimize cleaning
- Precise measurement in a disturbance free environment without air flows and vibrations
- Pneumatic sample conveying by suction for optimal tablet dedusting
- Available in stand-alone version with local HMI, or HMI integrated in i-range PT tablet deduster
- Available in Dust-tight (DT) and Containment OEB3-4 (C) version
- Optional tablet alignment device in hardness tester for special shaped tablets
- CFR21 part 11 compliant software, including batch reporting and audit trail



Mass



Thickness



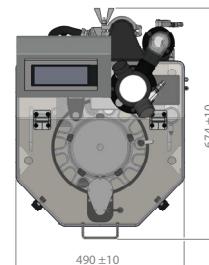
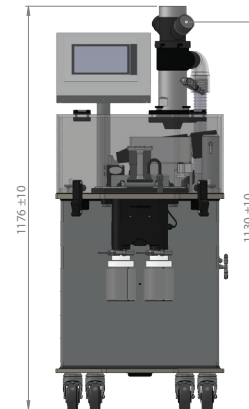
Diameter



Hardness

TECHNICAL SPECIFICATIONS

| Weighing Measurement | |
|--|--------------------------------|
| Weighing Cell | Sartorius WZA224-L |
| Weighing Unit | 1 mg / 0.1 mg (adjustable) |
| Weighing Range | 10 mg - 50 g |
| Weighing Accuracy | ±1 mg in stable environment |
| Thickness Measurement | |
| Drive | Stepper-Motor |
| Measurement Principle | Magnetic Sensor |
| Measurement Unit | mm or inch |
| Measurement Range | 3 - 18 mm |
| Measurement Accuracy | ±0.05 mm |
| Hardness Measurement | |
| Drive | Stepper-Motor |
| Force Measurement | Load measurement cell |
| Measurement Principle | Strain measurement strip (DMS) |
| Force Units | N (Kp, Sc) |
| Measurement Range | 4-400 N, extended 8-800 N |
| Measurement Accuracy | ±2 N (with 800 N ±4 N) |
| Force Increase | 250 N/sec |
| Work Speed (Pressure Jaw) | 0.35 mm/sec |
| Approach and Return Speed (Pressure Jaw) | 8.5 - 17 mm/sec adjustable |
| Diameter Measurement | |
| Drive | Stepper-Motor |
| Measurement Principle | Stepper-Motor |
| Measurement Unit | mm (inch) |
| Measurement Range | 3 - 25 mm |
| Measurement Range (Oblong) | 5 - 20 mm |



| Technical data | |
|--|--|
| Containment level | Standard "DT" Dust tight, or "C" ≤ OEB3-4 containment |
| Samples conveying | Dust-Tight vacuum suction (optional venturi if not sufficient vacuum at the customer location) |
| Requested air extraction | Between 150-200 m³/h |
| Dust extraction connection | Mini Flex Connect © |
| Requested Compressed air | min. 4 bar |
| Compressed air connection | QS8 |
| Power supply & Frequency | 110V/230V - 50 Hz/60 Hz |
| Polymer contact parts | PMMA - PX 280 FDA - POM C |
| Contact parts finishing | RA < 0.8 µ |
| Frame parts | Stainless steel 304 |
| Frame finishing | Mirror polished |
| Frame mounted on wheels | Yes |
| IQ-OQ protocol | Available |
| Material certificates | Available |
| Total height (A) (without HEPA filter) | 1176 mm |
| Inlet height (B) (Double inlet) | 1130 mm |
| Floor dimensions (Cx D) | 484 mm x 490 mm |
| Inlet chute | 4-P tester Flex Connect © |
| Outlet chute | 4-P tester TC DIN 32676 DN 50 |
| Packing | Box on 1US pallet |
| Net weight (4-P tester +/- 5 kg) | 75 kg |
| HMI | 7" Touchscreen Display |

