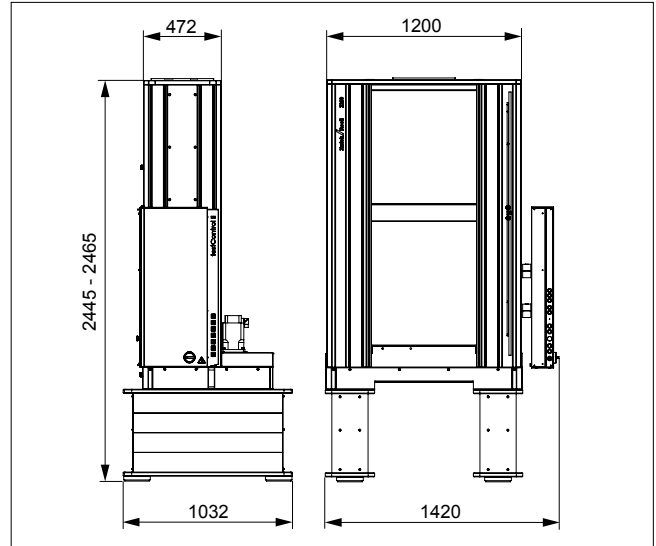


Product Information

AllroundLine Z250 SR materials testing machine



Compact materials testing machine with one test area inclusive base

The Z250 SR is a materials testing machine of the AllroundLine with one fixed lower test area. The packaging contains a safe base with shock absorbing elements which can be levelled. The base places the floor materials testing machine 505 mm higher and gives free space for the transport of the machine.

General advantages of AllroundLine with Zwick testControl II electronics

Modern load-frame design

- Drive is via maintenancefree, digitally controlled AC drive technology, which in combination with the innovative motor feedback system ensures excellent constant velocity properties, even at very low speeds.
- Robust component dimensioning and precise crosshead guidance ensure high machine stiffness and prevent undesired mechanical influences on the specimen.
- CE-compliant protective panes with mechanical interlocks protect the operator from specimen fragments and pinching
- Reliable test results are ensured by secure and precise mounting of the extensometer to the machine.

High level of operator convenience

- Ergonomic operation is the key feature of the new AllroundLine machine. Easily adjustable crossheads make it possible to bring the test area to an ergonomic height.

- The testing system's modular features, such as a second test area or the plug and T-slot system, make the workstation comfortable for the tester. Only one machine is required to quickly and easily accommodate the test task at hand.
- Base design features damping elements with leveling facility plus space for lift truck access - easily adapted to suit the installation site.

Innovative electronics

The new testControl II measurement and control electronics provide the ideal basis for precise, reproducible test results. Impressive features include new drive technology, high measured-value acquisition-rates and a high level of modularity (full details on Page 2).

Highest safety standards

The statutory safety requirements of the EC Machinery Directive are implemented in all AllroundLine machines, which then receive the EC Declaration of Conformity. Only the latest safety technologies and proven industrial components are used. A very high level of safety is guaranteed for user, test results, specimen material and testing system.

Future-proof

Modular design means that the testing system can be re-equipped or upgraded whenever required. Moreover, the testControl II control electronics are compatible with the future generation of Zwick software, with spare parts available for a minimum of ten years after the product has been discontinued.

Product Information

AllroundLine Z250 SR materials testing machine

Type	Z250 SR	
Item number	1035022 ⁽¹⁾	
Load frame	Test load F_N in tensile / compression direction	250 kN
	Height (with base) x Depth	2445 - 2465 mm x 1032 mm
	Width (with electronics console)	1200 (1420) mm
	Test area width x Test area height	640 x 1360 mm
	Overall weight with electronics (additionally base)	1250 (1550) kg
	Finish	RAL 7021 and RAL 7038
	Ambient temperature	+ 10 ... + 35 °C
	Air humidity (non-condensing)	20 ... 90 %
	Noise level at maximum speed	70 dB (A)
Drive system	Motor	AC servo-motor with concentrated windings Hiperface [®] motor feedback system
	Input signal, set-value preset	digital (real-time Ethernet, EtherCAT [®])
	Controller / Cycle time	adaptive / 1000 Hz
	Positioning, repetition accuracy on the crosshead	± 2 µm
	Crosshead speed up to 110% of test load (v_{min} ... v_{Nom})	0.00005 ... 600 mm/min
	Increased crosshead return speed (at reduced force)	1000 mm/min
	Drive system's travel resolution	0.19227 nm
Measurement & control electronic	Number of slots available for measurement and control modules	2 synchronized module bus slots (expandable to 5) ⁽²⁾ 1 synchronised PCIe slot
	Force measurement	grade 0.5 / 1 see load cell, to DIN EN ISO 7500-1, ASTM E4
	Calculated resolution (e.g. in tensile / compression direction)	24 bits
	Data acquisition rate, internal	400 kHz
	Test data transmission rate to the PC	500 Hz (optional 2000 Hz)
	Zero-point correction	automatically at measurement begin
	Measurement signal runtime correction for all channels	yes
	Interface for PC	Ethernet
	Eco Mode	yes, power section by default switched off (time adjustable)
	CE conformity	yes, according to machine guidelines 2006/42/EG
Power rating		
Mains frequency, electrical connection	50/60 Hz, 400V +/-10% (3Ph, N, PE)	
Power rating	6 kVA	

⁽¹⁾ The set of placing the base of the floor materials testing machines 505 mm higher is in the scope of supply of the Z250 SL included.

⁽²⁾ A high-quality DCSC measurement module for a load cell is included in delivery (occupies one module bus slot).

testControl II - options, e.g.

Description	Item number
Option testControl II plus: Expansion of electronics to 6 slots	1008208
2000 Hz Online test data transmission: Increasing the test data transmission from 500 Hz (standard) to 2000 Hz. The test data is transmitted to testXpert II, and is processed in real-time.	057860
Display remote control for testControl II for effective, ergonomic operation of the materials testing machine	057984

Options on request, e.g.: CE-compliant electrically lockable safety device, mounting platforms