

Product Information

Materials testing machine with hydraulic drive Z2000H / Z2500H



Figure: Materials testing machine with hydraulic drive Z2000H

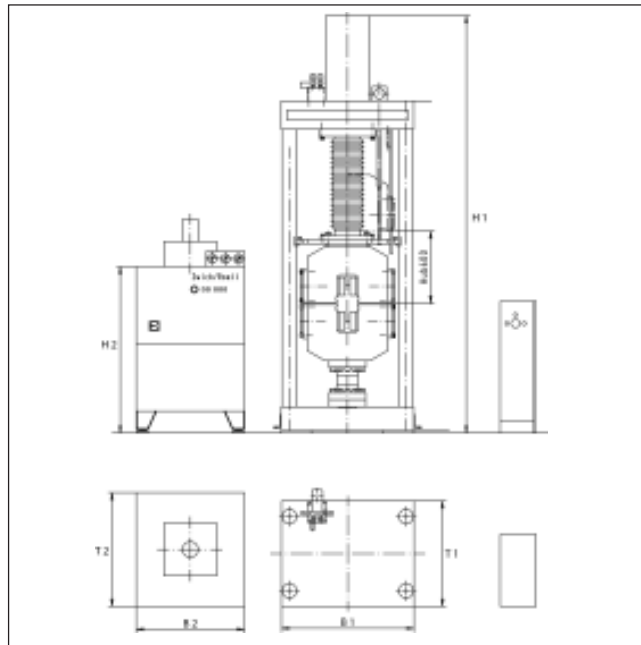


Figure: Drawing of Z2000H

Key benefits

All important functions of the set-up and testing operation for the Material Testing Machine is controlled via one central remote control.

Further advantages and features

- Exact determination of even small forces because of a large measurement range without changing equipment.
- Especially stiff load frame
- Exact and correct determination of the materials characteristics because of high resolution and channel synchronized measurement technology. Range changing is not necessary since the resolution of the force signal is available over the entire range.
- Standard testing with the Zwick testing software *testXpert*[®] reduces operating effort to a "one-button operation".
- Use of the entire Zwick accessories programme because of the modular construction of the entire system (e.g. attaching the most varied extension measurement systems, specimen grips and calibration tools using the T-slot or bolting system).
- "The customer specific machine": Adaptation of the testing machine to customer specific requirements, is possible at any time (e.g. test area dimensions, testing units, gripping elements, testing

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Type	Z2000H	Z2000H	Z2500H
Fmax [kN]	2000	2000	2500
Upper crosshead	Fixed	Adjustable	Fixed
Number of columns	4	4	4
Stiffness of the load frame at Fmax (without grips and load cell)	≤ 1	≤ 1	≤ 1
Maximum crosshead travel [mm]	600	600	600
Max. test speed [mm/min]	200	200	200
Dimensions of load frame			
H1 – Height [mm]	4200	max. 4600	5250
B1 – Width [mm]	1400	1455	1455
T1 – Depth [mm]	905	905	925
Width of test area [mm]	950	950	850
Weight			
without specimen grips [kg]	8000	8500	9250
with specimen grips [kg]	8000	8500	12850
Specific ground-bearing pressure [kg/cm ²]	3.5	3.6	4.0
Accuracy grade 1 (load cell) [kN]	≥ 8	≥ 8	≥ 8
Accuracy grade 0,5 (load cell) [kN]	≥ 40	≥ 40	≥ 40
Resolution of crosshead travel [μm]	5	5	5
Position accuracy [mm]	± 0,01	± 0,01	± 0,01
Item no.	• 358426	• 750749	• 010649
	(BPC-F2000HN.F15)	(BPC-F2000HN.M15)	(BPC-F2500HN.F22)

Environmental conditions			
Operating temperature [°C]	+10 ... +35	+10 ... +35	+10 ... +35
Storage temperature [°C]	-25 ... +55	-25 ... +55	-25 ... +55
Humidity range (not condensing) [%]	≤ 90	≤ 90	≤ 90
Electrical connection [V~/N/PE]	3 x 400	3 x 400	3 x 400
Mains frequency [Hz]	50	50	50
Power supply [kVA]	23	23	23
Fuse protection [A(t)]	40	40	40
Noise level in 1m distance [dB(A)]	67	67	67
Color coating of load frame	RAL7011 (iron grey) and RAL7038 (agate grey)		
Color coating of hydraulic power-pack	RAL7011 (iron grey) and RAL7038 (agate grey)		

Hydraulic power-pack			
Power supply [kW]	15	15	22
Flow rate [l/min]	28	28	38
Operating pressure [bar]	280	280	280
H2 – Height [mm]	1330	1330	1800
B2 – Width [mm]	900	900	1000
T2 – Depth [mm]	1220	1220	1200
Weight [kg]	900	900	1100
Reservoir capacity [l]	350	350	300
Revolutions per minute [U/min]	1450	1450	1450
Air-cooling	●	●	●
Cooling with water heat exchanger	○	○	○
Hydraulic fluid	Type HLPD 46 or equivalent approved fluid		

Description of symbols:

● standard

○ optional available