

ZwickMaterials Testing

Product Information

Zwick High Energy Drop Weight Testers DWT20 / DWT30 / DWT40



Figure: Zwick high energy drop weight testers DWT40 with 5 m drop height



 Testing of "Batelle-Specimen" according to ASTM-E 436-71T, API-RP 5 L3 and DIN EN 10274:
"Drop Weight Tear Test"

Advantages and features

- Modular design with six frame sizes and two drop heights
- Pneumatic specimen feeding and tools equipped outside of testing area
- Removable bending tools
- Electrical and mechanical safety devices with safety circuit - testing is possible only after check of all safety switches

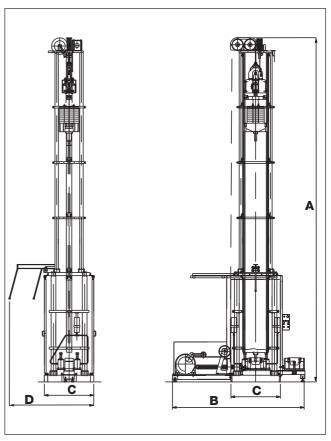


Figure: Drawing of Zwick high energy drop weight testers DWT40 with 5 m drop height

- Exclusive pneumatic safety ratchet for catastrophic failures
- Touch Screen Panel with electronic display of drop height, energy, drop weight and drop speed
- The stepless adjustable drop height is reached automatically after input of drop weight and energy
- Drop weight divided in individual weights, to adjust drop energy
- Four high capacity shock absorbers with accumulators for safety absorbtion of the drop weigth
- Controlled low temperature cooling device for accurate specimen temperature



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Technical data

Туре	DWT20-2.5 DWT20-5		DWT30-2.5 DWT30-5		DWT40-2.5 DWT40-5	
	20000 J	20000 J	30000 J	30000 J	40000 J	40000 J
Max. drop height [m]	2.5	5	2.5	5	2.5	5
Drop weight [kg]	820	410	1225	613	1632	816
Weight [kg]	6100	6350	6700	7050	7150	7450
Speed of drop [m/s]	7	9.9	7	9.9	7	9.9
Speed of weight lift						
fast [m/min]	18	18	18	18	18	18
slow [m/min]	3	3	3	3	3	3
A - Max. height approx. [mm]	5900	8000	5900	8000	5900	8000
B – Width approx. [mm]	3210	3060	3210	3060	3210	3060
C – Width approx. [mm]	1140	1140	1140	1140	1140	1140
D – Width approx. [mm]	1965	1965	1965	1965	1965	1965
Drive power [kW]	11	7	11	7	11	7
Air pressure [bar]	8	8	8	8	8	8
Air consumption [I/min]	600	600	600	600	600	600
Low temperature cooling device						
Temperature [°C]	-80	-80	-80	-80	-80	-80
Max. deviation of temperature	±1	±1	±1	±1	±1	±1
Number of specimens	3	3	3	3	3	3
Max. dimensions of						
specimens [mm]	50x77x305	50x77x305	50x77x305	50x77x305	50x77x305	50x77x305
Item no.	• 640064	• 640070	• 640071	• 640072	• 640073	• 640074
	(BX5102.00.20-001)	(BX5102.00.20-002)	(BX5102.00.30-001)	(BX5102.00.30-002)	(BX5102.00.40-001)	(BX5102.00.40-002)