



## 40-272-... Basic Vicat/HDT (up to 3 or up to 6 measuring stations)

### Standards

ASTM D 648, ASTM D 1525, BSI 2782 (method 120 C), BSI 2782 (method 121 C), DIN 53460, DIN 53461, DIN EN ISO 306, ISO 75, ISO 302, NT T 51-005, NT T 51-201, UNE 53075, UNE 53118



### Application

The Coesfeld Basic Vicat/HDT are test devices for determining the VICAT softening temperature of thermoplastics and the heat deflection temperature (HDT) of fibre-reinforced and filled thermosetting plastics, as well as of thermoplastics and hard rubber.

### Features

Vicat/HDT basic devices are manually operated testers. Control and measured value recording can be carried out with the help of the Coesfeld software. Depending on requirements, there are different device versions, with from 1 to 6 measuring stations. An optional external heat exchanger can be connected for quick cooling in addition to the standard heat exchanger water connection.

### Technical Data

Temperature range	from +20°C ... +300°C
Temperature gradient	50 K/h, 120 K/h or freely selectable
Start temperature	freely selectable
Digital displacement gauges, resolution	0.001 mm
Digital displacement gauges, accuracy	better than 0.01 mm
Displacement range	up to 13 mm
HDT support clearance	64 mm, 100 mm, 101.6 mm
Bath volume	approx. 18 l (Basic/A) / 26 l (Basic/B) heat transfer oil
Creep tests	possible






### Dimensions and Connection

	Basic/A - up to 3 measuring stations	Basic/B - up to 6 measuring stations
Dimensions (WxDxH)	440 x 500 x 500 mm	710 x 500 x 500 mm
Weight	30 kg (without accessories)	35 kg (without accessories)
Mains	230 V, 50 Hz	
Power	2000 VA	
Interfaces	RS232 output	
Air	n.a.	
Cooling	Water cooling (from 150°C to 23°C in approx. 90 min.); optional: external heat exchanger (from 300°C to 23°C in approx. 25 min.)	
Others	n.a.	





### Device configuration

incl.	Articlenumber	Description
-	40-272-009	Vicat/HDT Basic 300/1
-	40-272-010	Vicat/HDT Basic 300/2
-	40-272-006	Vicat/HDT Basic 300/3
-	40-272-005	Vicat/HDT Basic 300/4
-	40-272-008	Vicat/HDT Basic 300/5
-	40-272-007	Vicat/HDT Basic 300/6

### Accessories

incl.	Articlenumber	Description	
-	3-897-068	Transformator for Coesfeld devices; 110 V / 5000 KW	
-	3-897-065	Transformator for Coesfeld devices; 127 V / 5000 KW	
-	40-191	Vicat indenter	
-	40-192	HDT compression fin	
-	40-275	Vicat weights set 10 N and 50 N in accordance with ISO 306 and ASTM D 1525 (1 set required per measuring station)	
-	40-276	HDT weight set ISO 75-2, flatwise; for test samples 4 x 10 x 80mm for bending stresses of 1.8/0.45 or 8 MPa (1 set required per measuring station)	



-	40-277	HDT weight set ISO 75-2, edgewise; for test samples 4 x 10 x 120mm for bending stresses of 1.8/0.45 or 8 MPa (1 set required per measuring station)	
-	40-261	Universal weight set for Vicat/HDT test standards, consists of 21 stackable individual weights: 10x1g, 2x10g, 2x100g, 2x1000g, 1x20g, 1x50g, 1x200g, 1x500g, 1x2500g (1 set required per measuring station)	
-	40-194-001	HDT calibrating and centring tool for aligning the HDT compression fin (1 required per tester)	
-	40-240	Calibrating set for displacement sensor, for VICAT and HDT (1 required per tester)	
-	40-212-006	Heat transfer liquid (silicone oil, 5 l container)	
-	40-212-005	Heat transfer liquid (silicone oil, 10 l container)	
-	60-005-001	Recirculating cooler for Vicat/HDT water cooling (Volume water reservoir: 35 l; Cooling output at 25°C water outlet temp.: 4.70 kW)	
-	9-944-019	External heat exchanger for Vicat/HDT Basic Test Device	
-	40-210	Cutting pincers for 10x10 mm Vicat specimen preparation	