

Cold Bending Test Device TD-KB for the Determination of flexibility of roofingmaterials at low temperatures

The TD-KB series is designed for the determination of flexibility of bitumen sheets at low temperatures according to EN 1109 & SIA 281.

These easy-to-use units allows to perform tests in the temperature range from -45°C to +200°C and offers the pre-temper of up to 6 specimens at the same time.

The lower bending distance is adjustable and all parts that submerge into the cooling liquid are made from Cr-Ni Steel.



Test Description

The test can be carried out on the upper or lower face of the sheet either at a predetermined temperature or successively at different temperature steps to determine the cold bending temperature which represents a limiting temperature. Therefore, the test can be used to confirm a minimum cold bending temperature for a product or to determine the specific cold bending temperature for the product e.g. to determine the change of these properties as a result of artificial ageing. In the case of sheets with the same bituminous compound on both sides and where the reinforcement is placed in the cross section visually closer to the upper surface, the test is performed on the bottom face only. If the upper surface is covered with a non-woven (e.g. tissue, fleece etc.) or metal facing, the test is performed on the bottom side only. If the sheet on the upper surface is covered with permanent light surface protection and where the reinforcement is placed in the cross section visually closer to the upper surface, the test is performed on the bottom side only.

Technical Data		TD - KB
Specimen Dimensions	mm	50 x 140
Test Speed	mm/min	360 ± 10
Upper Rollers (rotateable)	mm	Ø 20 ± 0.1
Lower Semi-Circular Bending Punch	mm	Ø 30 ± 0.1
Temperature Range	mm	-45 up to +200 ± 0.5
Internal Dimensions of Bath W x D x H	mm	260 x 260 x 200
Overall Dimensions of Device W x D x H	mm	420 x 560 x 520 / 705
Power Requirements		230 V, 50 Hz