

CH 100 INSTRUMENT FOR HEAT STORAGE TEST AT 100 °C

Product Datasheet

The **CH 100** instrument is designed for thermal stability determination of smokeless powders and propellants during long-term isothermal heating. Thermal stability is assessed by means of visual inspection of appearance of the red fumes, which indicates the presence of decomposition gasses (oxides of nitrogen).

INSTRUMENT DESCRIPTION

The instrument consists of a heating block made of aluminium with 40 internal holes for glass tubes. The glass tubes with the tested samples are covered by a glass lid and inserted to the holes in a heating block. Each block contains 2 independent temperature sensors. The temperature of the block is controlled by a digital temperature controller. The controller unit contains an independent alarm circuit off the heating if the temperature accidentally increases above a specified safety limit (controlled by and the limit controller). Temperature in the heating blocks is controlled and corrected using calibrated mercury thermometers or calibrated digital thermometer.

This instrument enables measurement of up to 40 samples with individual time of exposure for each one, but further models of heating block with different number or dimensions of the holes are available on the request.

TECHNICAL PARAMETERS

Temperature range:	30 - 160 °C
Accuracy of temperature:	±0.1 °C
Typical sample weight:	10 g

STANDARD INSTRUMENT PARTS

CHS-HB-24	Heating block 40 holes (diameter 32 mm, depth 150 mm)
CHS-TC	Unit of temperature controller and limit controller

OPTIONAL ACCESSORIES

CHS-CMT	Mercury thermometer 100 °C / 0.2 °C
DIG-T200	Calibrated digital thermometer 0 - 200 °C / 0.1 °C

CONSUMABLES

CHS-GTT	Glass test tube O.D. (28 mm x 220 mm) with lid
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SHIPPING DATA

Package dimensions (W x L x H):	60 x 70 x 70 cm
Package gross weight:	145 kg
Custom code:	9027 80 97

INSTALLATION REQUIREMENTS

Space requirements (Heating block unit): D x H: 390 x 390 mm; Weight: 120 kg
Space requirements (Temperature controller unit): W x L x H: 210 x 300 x 140 mm; Weight: 2.5 kg
Electric power source: 230 V / 50 Hz, 500 W
Flameproof working desk for heating block unit
Fume hood or local exhaust for heating block unit