

FRG – Structural Cohesion Tester

Measurement method	Determination of the structural cohesion of gypsum products at high temperatures in accordance with DIN EN 520
Sample dimensions (L x W x D)	300 mm x 45 mm x 9.5 mm/12.5 mm/15.0 mm
Sample holder	Horizontally adjustable, with holder for clamping of the sample
Burner	2 Meker burners (facing each other) with control valves for fine adjustment of the flame
Burner gas	Propane: $\geq 95\%$ purity, gas pressure: 4.0 bar*
Thermocouples	2 NiCrNi Type K
Control	<ul style="list-style-type: none"> ▪ 1 main gas valve ▪ 1 adjustable gas pressure reducer with pressure display ▪ 2 fine adjustment valves for burner
Measuring instrument	<ul style="list-style-type: none"> ▪ Universal measuring instrument with 2 input sockets, 8 channels, internal functional channels (e.g., difference values) ▪ Memory for 100 measured values; can be retrieved and shown in the display ▪ High-resolution A/D converter, 16-bit, 10 MOPS ▪ More than 65 standard measuring ranges ▪ Generously dimensioned two-line static 7/16 segment display including units ▪ Easy and convenient to operate with 7 keys ▪ Measuring functions: Measured value, zero setting, sensor adjustment, saving of maximum/minimum values, memory for 100 measured values, cold-junction and temperature compensation ▪ Test functions: Segment monitoring, range monitoring, display of sensor break, battery voltage testing and display ▪ Power supply: 3 AA alkaline batteries
Set-up	Base plate of aluminum; aluminum mountings
Operating conditions	Temperature: 23°C ± 5 K, relative humidity: 50% $\pm 20\%$
Dimensions (L x W x H)	450 mm x 400 mm x 300 mm
Weight	37 kg
Scope of delivery	<ul style="list-style-type: none"> ▪ 1 base plate ▪ 2 Meker burners ▪ 1 digital temperature measurement device ▪ 2 NiCrNi thermocouples ▪ 1 sample holder ▪ 1 reducing valve ▪ 2 flow controllers ▪ 1 gauge for sample height ▪ 1 gauge for height of the weights ▪ 1 gauge for adjustment of the burner distance ▪ 3 weights: 250, 300, 350 g ▪ 1 manual, English

* Burner gas to be provided by the user