

## 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"> <li>▪ 1 main gas valve</li> <li>▪ 1 adjustable gas pressure reducer with pressure display</li> <li>▪ 2 fine adjustment valves for burner</li> </ul>
Temperature measuring instrument	<ul style="list-style-type: none"> <li>▪ Universal measuring instrument with 2 input sockets, 8 channels, internal functional channels (e.g., difference values)</li> <li>▪ Memory for 100 measured values; can be retrieved and shown in the display</li> <li>▪ High-resolution A/D converter, 16-bit, 10 MOPS</li> <li>▪ More than 65 standard measuring ranges</li> <li>▪ Generously dimensioned two-line static 7/16 segment display including units</li> <li>▪ Easy and convenient to operate with 7 keys</li> <li>▪ Measuring functions: Measured value, zero setting, sensor adjustment, saving of maximum/minimum values, memory for 100 measured values, cold-junction and temperature compensation</li> <li>▪ Test functions: Segment monitoring, range monitoring, display of sensor break, battery voltage testing and display</li> <li>▪ Power supply: 3 AA alkaline batteries</li> </ul>
Set-up	Base plate of aluminum; aluminum mountings
Operating conditions	Temperature: 23°C $\pm 5$ 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"> <li>▪ 1 base plate</li> <li>▪ 2 Meker burners</li> <li>▪ 1 digital temperature measurement device</li> <li>▪ 2 NiCrNi thermocouples</li> <li>▪ 1 sample holder</li> <li>▪ 1 reducing valve</li> <li>▪ 2 flow controllers</li> <li>▪ 1 gauge for height of the weights</li> <li>▪ 1 gauge for adjustment of the burner distance</li> <li>▪ 3 weights: 250, 300, 350 g</li> <li>▪ 1 manual, English</li> </ul>

\* Burner gas to be provided by the user