

Product Information

Device for G_iC tests on long-fiber-reinforced composites



Fixture for G1C tests on long-fiber-reinforced composites



Applications

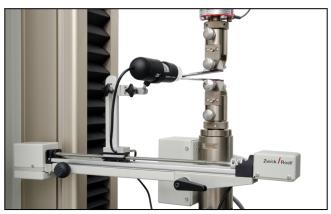
CTA: 61318 133025

These G_{IC} specimen-holders and loading blocks are used for measuring the energy release rates G_{IC} of long-fiber-reinforced composites in a DCB (Double Cantilever Beam) test arrangement. They are standardized according to the following standards:

- ISO 15024
- prEN 6033
- ASTM D 5528
- AITM 1-0005
- AITM 1-0053
- BSS 7273.

Function description

During test preparation the loading blocks are glued to the specimen. They are then hooked in the specimen holders via the Ø 8 mm connection hole.



Fixture for G1C tests with video recording option

Tensile force is applied via the loading blocks, which generates a crack opening.

Advantages and features

- Easy specimen change
- The fixture without the video recording option can be used over a wide temperature range from - 80°C to +250°C.

Video recording option:

- Visual crack tracking with video recording option.
- Traceable measurement results thanks to subsequent. precise evaluation of the test sequence in video.
- The video camera is moved on movable carriages throughout the entire test along the crack propagation.



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Technical data

Item no.	1001540		
Test load F _{max}	2.5	kN	
Upper connection	Ø 20	mm	
Lower connection	Ø 20	mm	
Ambient temperature	-80 to 250	°C	
Weight, approx.	0.21	kg	
Scope of delivery	1 pair of specimen holders in	1 pair of specimen holders incl. 1 pair of loading blocks	

Accessories required

Description	Item number
10 pair of loading blocks for G _I C specimen, Fmax 2.5 kN, mounting hole Ø 8 mm, specimen	1001542
width 25.4 mm, block height 15 mm, block width 15 mm	

Optional accessories

Description	Item number
For visual recording of the slow crack growth for display in the video in testXpert III - Video resolution 160 x 120 to 600 x 1200, 2 mega pixels - Max. camera travel 235 mm - installation height 127.5 mm, width 452 mm, depth 185 mm - Used at room temperature - INC module included	1007538