

Product Information

Mixed mode flexure test kit



Mixed mode flexure test kit with option Video Recording



Measurement of energy release rate under mixed Mode I and Mode II loading as per ASTM D6671

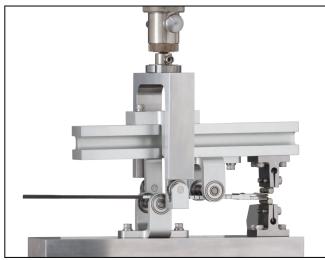
• Specimen material:

unidirectional fiber-reinforced composite laminates

Function description

The flexure test kit is used to measure the energy release rate of unidirectional fiber-reinforced composite laminates

Crack opening (Mode I) is generated by applying tensile force via hinges. In-plane shear (Mode II) is generated by flexural loading.



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The crack opening to shear ratio is adjusted by moving the lever arm force application point. It ranges from 100% Mode II loading to a significant Mode 1 superimposition.

Advantages and features

- Variable setting of the Mode I proportion of the load
- Ball-bearing-mounted anvils for prevention of friction



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Technical data

| Item No. | 062152 | |
|--|---------------------------------|----|
| Standards | ASTM D6671 | |
| Test load, max. (Fmax) | 1 | kN |
| Specimen size: | | |
| length | 120 to 185 | mm |
| width | 20 to 25 | mm |
| Span adjustment range, approx. | 84 to 103.5 | mm |
| Load application point adjustment range, approx. | 90 | mm |
| Anvil and upper anvil radius (R) | 4.75 | mm |
| Gripping areas, hinges | 0.8 to 2 | mm |
| Weight | 8 | kg |
| Ambient temperature | -70 to +120 | °C |
| Upper connection | mounting stud, Ø 8 mm | |
| Lower connection | supported on compression platen | |

Accessories required

• 1 compression platen (min. diameter 136 mm)