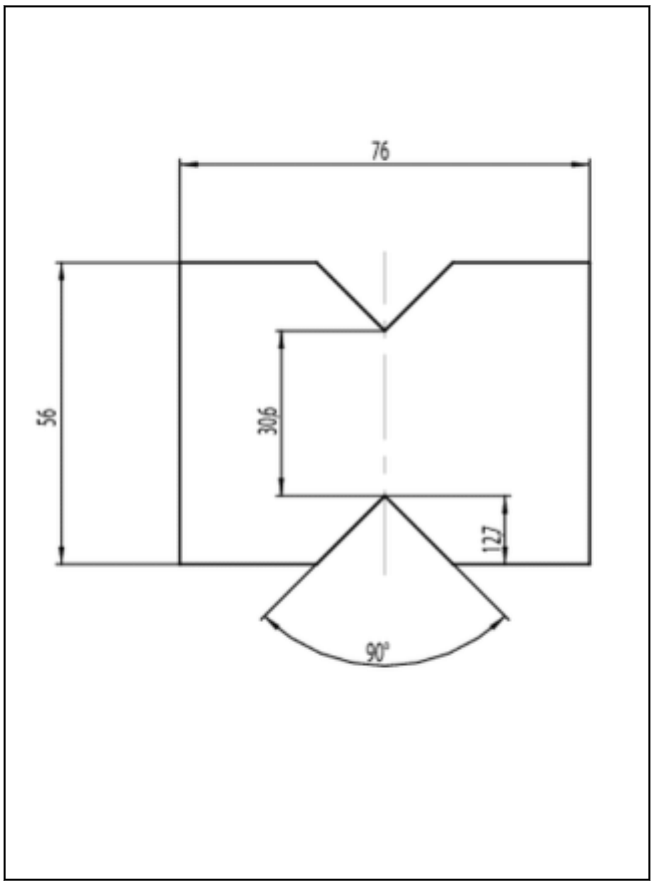
Zwick / Roell

Product Information

V-notched rail shear test device

CTA: 248237 149718

Shear test device to ASTM D7078



Specimen to ASTM D7078

Applications

The v-notched rail shear fixture is used to measure the shear properties of fiber composites according to ASTM D 7078.

The application area is designed for the following laminate forms:

- Unidirectional laminates with fiber direction 0° or 90°
- Unidirectional laminates with same layer count in 0° and 90° fiber direction
- Fabric laminate with a weft direction of 0° or 90°
- Short fiber-filled plastics in which the fiber direction is randomly distributed

The specimen has a V-notch to concentrate the shear zone. it is inserted into the shear test device laterally; non-positive clamping is employed.

Shear strain is measured via two strain gages applied at an angle of 45° to the shear plane.

Advantages and features

- In contrast to the Iosipescu method (V-notched beam shear fixture) to ASTM D5379 a larger specimen, clamped at the sides, is used with this device. This enables the application of higher shear forces.
- Easy attachment to testing system via threaded connection
- Temperature range from -70 to +300 °C
- Exact centering of the specimen using supplied, attachable spacers
- Alignment of jaws to each other via adjustable front and rear clamping jaws
- Rust-proof design for use in temperature chambers

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Technical data

Item No.	1088450	
Test load F_{max}	30	kN
Dimensions		
Height between the mounting studs, approx.	260	mm
Width	103	mm
Opening width	0 ... 10	mm
Version	Stainless steel	
Weight, approx.	8.3	kg
Ambient temperature	-70 ... +300 °C	°C
Connection, upper	Bolt Ø 36 mm	
Connection, lower	Bolt Ø 36 mm	
Scope of delivery		
V-notched rail shear fixture		
2 spacers for aligning the specimen and the fixture		

All data at ambient temperature.