

TECHNICAL SPECIFICATIONS

Conditional sensitivity according to TS-2 standard measure.






TS-2 is a plexiglass plate, on which the following artificial defects are milled:

- four through holes in the corners of the inner square of 130mm x 130mm for calibration of the coordinate measurement system;
- three artificial defects of different sizes: 20 x 20mm, 12 x 12mm and 7 x 7mm to the residual material thickness of 1.5 mm to check the defects area measure error
- eight artificial defects of 20 x 20mm to different residual thickness of the material (from 1 to 8 mm) to simulate material delamination

Characteristics	Value
Overall dimensions	87x157x29 mm; weight 300 g
Screen resolution	98x64 px
Protective construct	IP 54
Operating temperature range	-10 to + 50 degrees
Setting modes	light and sound
ADS automatic defect signalling	not less than 10 hours

TYPES OF MATERIALS SUITABLE FOR TESTING

Sample material	Material	Total thickness (mm)	Sheathing thickness (mm)	Area defects (mm ²)	Configuration defects	Depth of occurrence of defects (mm)	Cellular cell area (mm ²)	Recommended transducer
 <p>Imitation of defects such as bond failure between skin and honeycomb filler</p>	Glass fiber	44	2	150 (min)			65	PADI-8-SU
 <p>Bond failures due to grease</p>	Aluminum alloy	11	0,5	80 (min)			40	PADI-8-SU
 <p>Bond failure simulation</p>	Organic glass	8		49 144 400	Flat-bottom drilled hole	1.6		PADI-8-SU
 <p>Simulation of bond defects when gluing three thin metal sheets</p>	Aluminum alloy	2,5	0,83	150 (min)				PADI-8-SU
 <p>Imitation of defects such as bond failure between skin and honeycomb filler</p>	Aluminum alloy	10	0,8	100			48	PADI-8-SU
 <p>Imitation of defects such as bond failure between skin and honeycomb filler</p>	Stainless steel	26	0,6	100 (min)			56	PADI-8-SU
 <p>Imitation of defects such as bond failure between skin and honeycomb filler</p>	Glass fiber	20	0,7	100 (min)			40	PADI-8-SU

Sample material	Material	Total thickness (mm)	Sheathing thickness (mm)	Area defects (mm²)	Configuration defects	Depth of occurrence of defects (mm)	Cellular cell area (mm²)	Recommended transducer
 <p>Imitation of defects such as bond failure between skin and honeycomb filler</p>	Aluminum alloy, cellular filler is getinax (synthetic-resin bonded paper laminate)	10	0,8	100 (min)		8	48	PADI-8-SU
 <p>Helicopter blade fragment, imitation of bond failure between structural elements</p>	Aluminum alloy, rubber layer, steel bands							PADI-8-SU
 <p>Imitation of defects such as bond failure between skin and honeycomb filler</p>	Glass fiber	12	1,2	120 (min)			35	PADI-8-SU
 <p>Imitation of defects such as bond failure between skin and honeycomb filler</p>	Glass fiber	10			Wedge-shaped, parallel to the surface	5		PADI-8-SU
 <p>Imitation of defects such as bond failure between skin and honeycomb filler</p>	Aluminum alloy	24	2	120			49	PADI-8-SU