## **TECHNICAL SPECIFICATIONS**

- Low-frequency composite materials flaw detector DAMI-C supports impedance, eddy current and shock NDT methods.
- Detects defects in composite materials, honeycomb structures, detects foci of corrosion, surface and internal defects in non-ferromagnetic materials.
- Automates the process of determining the density and structure of the material.
- Uses dry point contact.
- Is multi-mode.

## **TECHNICAL PARAMETERS OF DAMI-C FLAW DETECTOR**

Working frequency range	1кHz - 1MHz
Control performance	not less than 500 measurements/s
Types of signaling the presence of a defect	sound and light
Support for pointing device "Slider M2"	all applications DAMI-C09
The maximum size of the S-image (S-scan)	500mm x 500mm
The error in determining the coordinates of the transducer	is not more than 1.5 mm
Built-in interface languages	russian and english
Screen type and resolution TFT color screen,	320 x 240 pixels
Modes of displaying graphic information on the screen	time base (A-scan); complex plane; C-scan in Cartesian (X, Y) coordinates
The archive of the device stores:	settings; control results; pictures of A-scans; complex plane images; C-scan images
Autonomy time from the built-in rechargeable battery	at least 8 hours
Operating temperature range	-10 °C to + 50 °C with humidity no more than 95%
The degree of protection against ingress of dust and water	IP54 in accordance with GOST 14254
Weight of the device with a built-in battery (without a power adapter, a scanner device and a set of transducers)	no more than 1 kg
Overall dimensions	no more than 135mm x 220mm x 50mm

## TYPES OF MATERIALS SUITABLE FOR TESTING

Sample material	Material	Total thickness (mm)	Sheathing thickness (mm)	Area defects (mm²)	Configu- ration defects	Depth of occurrence of defects (mm)	Cellular cell area (mm²)	Recom- mended transducer
Imitation of defects such as non-glue at great depth	Organic glass	25		200 300 400	Flat-bottom drilled hole	8		PADI-40-RS
Bond failures due to grease	Aluminum alloy	11	0,5	80 (min)			40	<u>PADI-8-SU</u> UDP-10-02
Bond failure simulation	Organic glass	8		49 144 400	Flat-bottom drilled hole	1.6		<u>PADI-8-SU</u> <u>UDP-10-02</u>
Imitation of delamination type defects	Carbon fiber	10			Клиновид- ная, парал- лельно поверхности	5		PADI-40-RS
Imitation of defects such as bond failure between skin and honeycomb filler	Aluminum alloy	10	0,8	100			48	<u>PADI-8-SU</u>
Imitation of defects such as bond failure between skin and honeycomb filler	Stainless steel	26	0,6	100 (min)			56	<u>PADI-8-SU</u> <u>UDP-10-02</u>
Imitation of defects such as bond failure between skin and honeycomb filler	Glass fiber	20	0,7	100 (min)			40	<u>PADI-8-SU</u> <u>UDP-10-02</u>

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Sample material	Material	Total thickness (mm)	Sheathing thickness (mm)	Area defects (mm²)	Configu- ration defects	Depth of occurrence of defects (mm)	Cellular cell area (mm²)	Recom- mended transducer
Imitation of defects such as bond failure between skin and honeycomb filler	Aluminum alloy; honeycomb getinax	10	0,8	100 (min)		8	48	<u>PADI-8-SU</u> <u>UDP-10-02</u>
Imitation of defects such as non-glue when gluing two metal sheets	Aluminum alloy	6	2,95	600 800 1000	Round		40	PADI-40-RS
Imitation of defects such as bond failure between skin and honeycomb filler	Carbon fiber	12	1,2	120 (min)			35	<u>PADI-8-SU</u> <u>UDP-10-02</u>
Imitation of defects such as bond failure between skin and honeycomb filler	Carbon fiber	10			Wedge- shaped, parallel to the surface	5		PADI-8-SU
Imitation of defects such as bond failure between skin and honeycomb filler	Aluminum alloy	24	2	120			49	<u>PADI-8-SU</u> UDP-10-02
Фрагмент лопасти вертолета, имитация непроклея между структурными элементами	Aluminum alloy, rubber layer, steel belts							PADI-8-SU PADI-40-RS UDP-10-02
Imitation of defects such as bond failure between skin and honeycomb filler	Carbon fiber	44	2	150 (min)			65	PADI-8-SU UDP-10-02
Imitation of defects such as non-gluing when gluing three thin metal sheets	Aluminum alloy	2,5	0,83	150 (min)				<u>PADI-8-SU</u> <u>UDP-10-02</u>

Sample material	Material	Total thickness (mm)	Sheathing thickness (mm)	Area defects (mm²)	Configu- ration defects	Depth of occurrence of defects (mm)	Cellular cell area (mm²)	Recom- mended transducer
Imitation of defects such as bond failure between skin and honeycomb filler	Carbon fiber	11	1	150 (min)			28	<u>PADI-8-SU</u> <u>UDP-10-02</u> <u>RS-1-02</u>
Imitation of defects such as non-gluing between the skin and the foam placeholder	Aluminum alloy, foam core	80	2	400 (min)			40	<u>UDP-10-02</u>
Imitation of defects such as non-gluing between the skin and the foam placeholder	Plastic, foam core	48	2	400 (min)				<u>UDP-10-02</u>