

LLC

SOLUTHERM

SOLIRT AI SYS HARDWARE AND SOFTWARE COMPLEX

OPERATIONAL NON-DESTRUCTIVE TESTING OF COMPOSITE STRUCTURES USING MACHINE LEARNING TECHNOLOGY



AREAS OF CONCERN

The hardware and software complex was created to provide operational diagnostics of the manufacturing quality of composite aircraft structural elements (production control), as well as defects and damage to composite aircraft structural elements during operation (operational control), which is necessary to maintain airworthiness and safe operation of aviation aircrafts.

UNIQUENESS

The hardware and software complex is mobile, significantly more compact, lightweight and ergonomic than foreign analogues that are not currently available in the Russian Federation, while surpassing a number of analogues in terms of basic technical characteristics. The technical decisions made during the creation of the hardware and software complex are based on the results of many years of R&D. The complex uses innovative defect recognition software using machine learning technologies.

CURRENT STATUS

Scientific research and design work has been carried out. Specialized software with machine learning elements, design and hardware design have been created and patented. The first sales of software and hardware complexes manufactured to meet customer requirements have started. Regular work is underway to increase the degree of localization. At the moment, the degree of localization exceeds 65%, the software is 100% domestic development.