

# **Nondestructive Testing of Honeycomb Type Composites by an Infrared Thermography Method**

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## **Abstract:**

Composites are formed by a connection of two or more types of different materials that provides a specific combination of properties which does not exist in particular source materials. An interesting thing of composite technologies is a possibility to design their structures to obtain required directional properties. For this reason composites are widely used now and their development trend is strong. The honeycomb type laminates belong to such group of composites. They consist of the honeycomb cells core covered by thin layers of different materials on both sides what results in their low weight and great mechanical resistance against mechanical charges. These composites are often used in space and aviation equipment, cars, boats and yachts. The separation of covering from the core, cracks in covering and defects of core are their typical defects. An experimental testing method for detection of defects in different honeycomb type composites by the infrared thermography is presented in the paper.

Keywords: infrared thermography, honeycomb composite material, nondestructive testing