

Title (en)
METHOD FOR TESTING CONNECTIONS OF METAL WORKPIECES TO PLASTIC COMPOUNDS FOR CAVITIES BY MEANS OF ULTRASOUND

Title (de)
VERFAHREN ZUR PRÜFUNG VON VERBINDUNGEN METALLISCHER WERKSTÜCKE MIT KUNSTSTOFFMASSEN AUF HOHLRÄUME MITTELS ULTRASCHALL

Title (fr)
PROCÉDÉ DESTINÉ À CONTRÔLER LA PRÉSENCE ÉVENTUELLE DE CAVITÉS DANS DES LIAISONS DE PIÈCES MÉTALLIQUES AVEC DES MATIÈRES PLASTIQUES AU MOYEN D'ULTRASONS

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Abstract (en)
[origin: WO2011072638A1] The invention relates to a method for testing connections of metal workpieces to plastic compounds for cavities by means of ultrasound, wherein the plastic compound is arranged between the workpiece as an intermediate layer or is connected to the workpiece on one side and the cavity is located within the plastic compound, wherein the cavity is connected to the workpiece by means of a remaining plastic layer or plastic skin and wherein the plastic compound is exposed to ultrasound signals of a certain test frequency and pulse length from the metal side of the workpiece by means of at least one ultrasonic probe, and in particular the ultrasound signals reflected by defects present in the plastic compound are detected by the same or another ultrasonic probe and converted into electrical signals that can be evaluated and subjected to a threshold observation. The test frequency of the ultrasound signals is set in a range of 1 to 10 MHz so that the damping of the sound after passing through the plastic skin is minimal.

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