

Technical Code DVS 2216-3

Ultrasonic joining of moulded components and semi-finished products of thermoplastic materials in large-scale production – Riveting and beading by shaping with ultrasound

DVS, Technical Committee, Working Group "Joining of Plastics"

This publication has been drawn up by a group of experienced specialists working in an honorary capacity and its consideration as an important source of information is recommended. The user should always check to what extent the contents are applicable to his particular case and whether the version on hand is still valid. No liability can be accepted by the Deutscher Verband für Schweißen und verwandte Verfahren e.V., and those participating in the drawing up of the document

Voransicht des Regelwerkes

Content:

1. **Scope**
2. **Forming with ultrasound**
 - 2.1. Process description
 - 2.2. Design information
 - 2.3. Types of rivet head
 - 2.4. Sonotrode versions
 - 2.5. Retention device
 - 2.6. Material and production influences
 - 2.6.1. Moisture
 - 2.6.2. "Frozen-in" stress
 - 2.6.3. "Crooked" rivet pins
 - 2.6.4. Injection moulding gates/connecting seams
 - 2.6.5. Additives in the plastic and demoulding aids
 - 2.6.6. Recyclates
 - 2.7. Production notes
 - 2.7.1. Frequency
 - 2.7.2. Amplitude
 - 2.7.3. Riveting time
 - 2.7.4. Triggering
 - 2.7.5. Application speed of sonotrode
 - 2.7.6. Joining force
 - 2.7.7. Hold time
 - 2.7.8. Holding force
 - 2.8. Quality criteria

Voransicht des Regelwerkes