

Update on FSW Standards

Presented at 9th FSW Licensees Meeting
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- AWS D17.3 standard
- ISO/DIS 25239 standard
- Other standards activities

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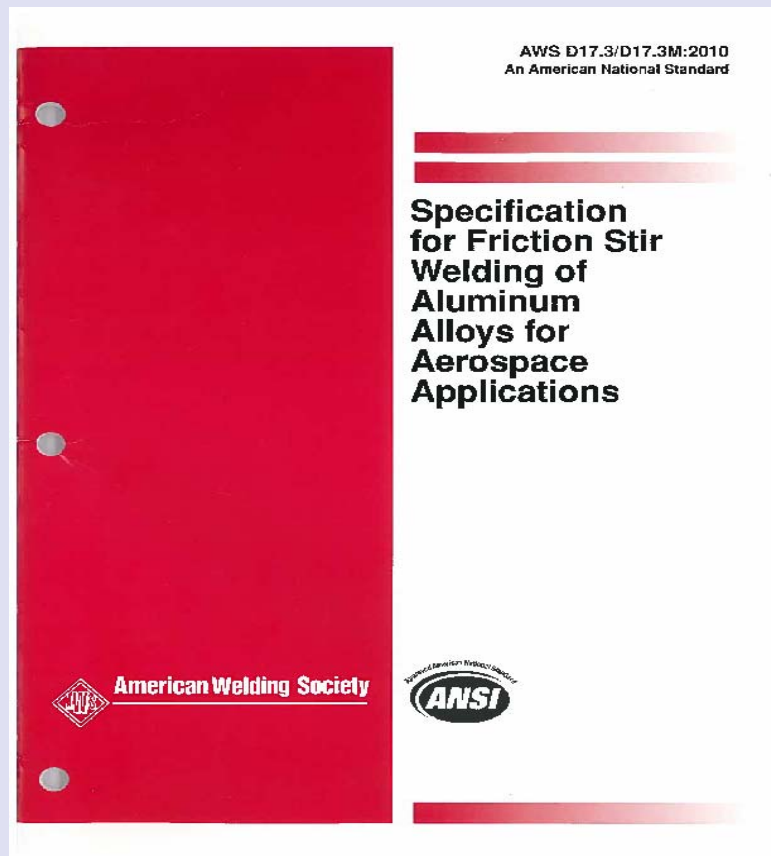


Technology Engineering

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Update on FSW Standards

AWS D17.3/D17.3M:2010 - US National Standard



- Standard completed and published
- Available now from AWS
- Defines requirements for FSW of Al alloys for aerospace applications
- Outlines approach for development of WPS via pWPS, WPQR and WPS, with examples of each

Update on FSW Standards

ISO/DIS 25239 draft standard - IIW Commission III

- IIW Comm. III working group developing ISO standard
- Based initially on AWS standard but now developed to cover general FSW applications in Al alloys
- 5 part document covering FSW vocabulary, design of joints, qualification of operators, specification of welding procedures and quality inspection requirements
- Issued in final draft form and passed IIW voting process
- Now undergoing final review/approval by CEN
- Should be approved and issued later this year

Update on FSW Standards

Other standards activities

- ASME section VIII, division 1, code case 2593 approved, FSW for corrugated bellows construction (specific case)
- ASME section IX case now being developed – more general coverage for FSW of pressure vessels. Draft proposal being written, in consultation with TWI
- IIW Sub-Commission III-B WG-B4 commencing work on standard for Friction Stir Spot Based Processes
- Activity led by Riftec, with team from GKSS, WSU, Lortek, H+W, Cenaero, TWI, Nippon Sharyo, Spirit, Sumitomo ...