DIN EN ISO/ASTM 52943-2:2024-09 (E)

Additive manufacturing for aerospace - Process characteristics and performance - Part 2: Directed energy deposition using wire and arc (ISO/ASTM 529 43-2:2024)

Contents

Page

European foreword ... **3**

Foreword ... **4**

1 Scope ... **5**

2 Normative references ... **5**

3 Terms and definitions ... **5**

4 Requirements for the feedstock ... **6**

5 Qualification of the machine operator ... **7**

6 Qualification of the DED machine ... **7**
6.1 Machine qualification ... 7
6.2 Machine requalification ... 8

7 Build platform/substrate requirements ... **9**

8 Environment requirements ... **9**
8.1 General ... 9
8.2 Facility environment ... 9
8.3 Process environment ... 9

9 Procedure qualification ... **10**
9.1 General ... 10
9.2 APS ... 10
9.3 Procedure requalification ... 12

10 Engineering documents ... **12**

11 Production documents ... **13**

12 Process monitoring ... **13**

13 Product acceptance testing ... **13**

14 Build documentation and traceability ... **14**

15 Delivery documentation ... **14**

Annex A (informative) **Operator test certificate for additive manufacturing machines by material application with directed energy deposition** ... **15**

Bibliography ... **17**