

# 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)

---

<b>Contents</b>	<b>Page</b>
European foreword.....	3
Foreword.....	4
<b>1 Scope</b> .....	<b>5</b>
<b>2 Normative references</b> .....	<b>5</b>
<b>3 Terms and definitions</b> .....	<b>5</b>
<b>4 Requirements for the feedstock</b> .....	<b>6</b>
<b>5 Qualification of the machine operator</b> .....	<b>7</b>
<b>6 Qualification of the DED machine</b> .....	<b>7</b>
6.1 Machine qualification.....	7
6.2 Machine requalification.....	8
<b>7 Build platform/substrate requirements</b> .....	<b>9</b>
<b>8 Environment requirements</b> .....	<b>9</b>
8.1 General.....	9
8.2 Facility environment.....	9
8.3 Process environment.....	9
<b>9 Procedure qualification</b> .....	<b>10</b>
9.1 General.....	10
9.2 APS.....	10
9.3 Procedure requalification.....	12
<b>10 Engineering documents</b> .....	<b>12</b>
<b>11 Production documents</b> .....	<b>13</b>
<b>12 Process monitoring</b> .....	<b>13</b>
<b>13 Product acceptance testing</b> .....	<b>13</b>
<b>14 Build documentation and traceability</b> .....	<b>14</b>
<b>15 Delivery documentation</b> .....	<b>14</b>
<b>Annex A (informative) Operator test certificate for additive manufacturing machines by material application with directed energy deposition</b> .....	<b>15</b>
<b>Bibliography</b> .....	<b>17</b>