

# DIN EN ISO/ASTM 52921:2017-01 (E)

## Standard terminology for additive manufacturing - Coordinate systems and test methodologies (ISO/ASTM 52921:2013)

---

<b>Contents</b>	<b>Page</b>
European foreword .....	3
1 Scope .....	5
2 Referenced Documents .....	5
3 Significance and Use .....	5
4 Terminology .....	5
5 Keywords .....	7
Annex .....	8
Figure A1.1 Generic (Upward Building) Additive Manufacturing Machine/System .....	8
Figure A1.2 Generic (Downward Building) Additive Manufacturing Machine/System .....	8
Figure A1.3 Right Hand Rule for Positive Rotations with Reference to the Build Volume Origin .....	9
Figure A1.4 Example of an Arbitrarily Oriented Minimum Bounding Box .....	9
Figure A1.5 Examples of Different Types of Bounding Boxes .....	10
Figure A1.6 Initial Build Orientation .....	11
Figure A1.7 Why is a Picture Normally Required to Communicate the Initial Build Orientation? .....	12
Figure A1.8 Orthogonal Orientation Notation .....	13
Figure A1.9 Examples of Bilateral Symmetry .....	14
Figure A1.10 Examples where Symmetry Allows Abbreviation of Orthogonal Orientation Notation ..	15
Figure A1.11 Part Location and Initial Build Orientation: Five Round Bar Specimens with Z Orientation .....	15
Figure A1.12 Part Location and Reorientation: Round Bars Oriented at B+45 from Z and B-45 from Z .....	16
Table A1.1 Description of Part Locations and Orientations .....	16
Table A1.2 Description of Part Locations and Orientations .....	16
Table X1.1 Task Group Contributors .....	17
Foreword .....	3