

ISO/ASTM 52924:2023-08 (E)

Additive manufacturing of polymers - Qualification principles - Classification of part properties

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Symbols and abbreviations	2
4.1	Symbols	2
4.2	Abbreviations	2
5	Classification system	3
5.1	Definition of the classes of part property	3
5.2	Typical classification of important material classes and usage of the classification system for part properties	4
6	Test specimens for determining the characteristic values for the classification system	6
6.1	General	6
6.2	Tensile properties	6
6.3	Dimensional accuracy	6
6.4	Density	6
6.5	Labelling	7
6.6	Orientation, grid arrangement, and distribution in the build space	7
6.6.1	General	7
6.6.2	Orientation and grid arrangement to be used	7
6.6.3	Distribution in the build space	7
6.7	Manufacturing	11
7	Determination of characteristic values and classification in the classification system	12
7.1	General	12
7.2	Mechanical properties	12
7.2.1	General	12
7.2.2	Determination of characteristic values	12
7.2.3	Classification in the classification system	13
7.3	Dimensional accuracy	13
7.3.1	General	13
7.3.2	Determination of characteristic values	13
7.3.3	Classification in the classification system	14
7.4	Relative part density	14
7.4.1	General	14
7.4.2	Determination of characteristic values	14
7.4.3	Classification in the classification system	14
7.5	Classification in classes of part properties	14
8	Initial classification and regular checking of the classifications	15
8.1	Standard classification procedure	15

8.2	Initial classification	15
8.3	Regular checking	15
8.4	Renewed determination of the classifications in case of replacement of relevant machine components	15
Annex A (informative) Form for part property classification in accordance with this document		17
Bibliography		18