

ISO/ASTM 52948:2026-01 (E)

Additive manufacturing of metals - Powder bed fusion - Classification of imperfections

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Classification of imperfections	4
4.1	General	4
4.2	Designation	5
4.3	Detailed classification of imperfections occurring in additive manufacturing	5
4.3.1	General	5
4.3.2	Crack	6
4.3.3	Porosity	6
4.3.4	Inclusions	6
4.3.5	Lack of fusion	6
4.3.6	Shape, dimensional and surface imperfections	6
4.3.7	Other imperfections	6
Annex A (informative)	Illustration of imperfections and associated visual and metallographic controls	22
Annex B (informative)	Imperfections deriving from issues related to the process or to the equipment	36
Annex C (informative)	Powder imperfections	40
Annex D (informative)	Imperfections appearing at subsequent production steps	41
Bibliography		42