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First edition
2015-01-15

Additive manufacturing — General principles —

Part 2: Overview of process categories and feedstock

Fabrication additive — Principes généraux —

Partie 2: Vue d'ensemble des catégories de procédés et des matières premières



Reference number
ISO 17296-2:2015(E)

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Published in Switzerland

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#)

The committee responsible for this document is ISO/TC 261, *Additive manufacturing*.

ISO 17296 consists of the following parts, under the general title *Additive manufacturing — General principles*:

- *Part 1: Terminology*¹⁾
- *Part 2: Overview of process categories, part types and feedstock*
- *Part 3: Main characteristics and corresponding test methods*
- *Part 4: Overview of data processing*

1) To be published.

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Introduction

Additive manufacturing is a versatile technology that can be used throughout the product development process. The additive manufacturing processes can be used to manufacture prototypes, tool and fully functional end-use parts. In addition to engineering, the application areas of this interdisciplinary technology now include fields ranging from e.g. architecture and medicine, to archaeology and cartography, as well as arts, toys, education, entertainment.

During its somewhat turbulent development, different terms and definitions have emerged which are frequently ambiguous and confusing. Moreover, there are various different processes available on the market and it is not always clear what opportunities and limitations they offer in terms of application.

This part of ISO 17296 aims to offer a description of the general working principles for the different process categories and the processing of feedstock material into the desired product geometry. This will enhance the understanding of the process and improve the communication between the customer and suppliers of products and services.

The principles and process categories described in this part of ISO 17296 refer to commercially available technology that has proven practically useful and viable on the market for several years.