

ISO/TS 13399-315:2018 (E)

Cutting tool data representation and exchange — Part 315: Creation and exchange of 3D models — Modelling of machine operated feed out tools

Contents

	Foreword
	Introduction
1	Scope
2	Normative references
3	Terms and definitions
4	Starting elements, coordinate systems, planes
4.1	General
4.2	Reference system (PCS — Primary coordinate system)
4.3	Coordinate system at the cutting part
4.4	Planes
4.5	Adjustment coordinate system on workpiece side
4.5.1	General
4.5.2	Designation of the coordinate system workpiece side
5	Design of the model
5.1	General
5.2	Necessary parameters for the feed out motion of the slides
6	Machine operated feed out tool with one linear slide for internal machining
6.1	General
6.2	Necessary properties
6.3	Location of coordinate systems
6.4	Assembled feed out tool with one linear slide for internal machining
7	Machine operated feed out tool with one linear slide for external machining
7.1	General
7.2	Necessary properties
7.3	Location of coordinate systems
7.4	Assembled feed out tool with one linear slide for external machining
8	Machine operated feed out tool with two linear slides for internal machining
8.1	General
8.2	Necessary properties
8.3	Location of coordinate systems and assembled feed out tool
9	Machine operated feed out tool with two linear slides for external machining
9.1	General
9.2	Necessary properties
9.3	Location of coordinate systems
9.4	Assembled feed out tool with two linear slides for external machining
10	Machine operated feed out tool with two linear slides for internal pull back machining
10.1	General
10.2	Necessary properties
10.3	Location of coordinate systems and assembled feed out tool
11	Machine operated feed out tool with one linear slide for external pull back machining
11.1	General

- 11.2 Necessary properties
- 11.3 Location of coordinate systems and assembled feed out tool
- 12 Machine operated feed out tool with one inclined slide
 - 12.1 General
 - 12.2 Necessary properties
 - 12.3 Location of coordinate systems and assembled feed out tool
- 13 Machine operated feed out tool with two inclined slides
 - 13.1 General
 - 13.2 Necessary properties
 - 13.3 Location of coordinate systems
 - 13.4 Assembled feed out tool with two inclined slides for internal machining
- 14 Machine operated feed out tool with one rotatory slide
 - 14.1 General
 - 14.2 Necessary properties
 - 14.3 Location of coordinate systems
 - 14.4 Assembled feed out tool with one rotary slide
- 15 Machine operated feed out tool with one swing slide
 - 15.1 General
 - 15.2 Necessary properties
 - 15.3 Location of coordinate systems
 - 15.4 Assembled feed out tool with one swing slide
- 16 Machine operated feed out tool with one peripheral swivelling slide
 - 16.1 General
 - 16.2 Necessary properties
 - 16.3 Location of coordinate systems
 - 16.4 Assembled feed out tool with one peripheral swivelling slide
- 17 Machine operated feed out tool with one central swivelling slide
 - 17.1 General
 - 17.2 Necessary properties
 - 17.3 Location of coordinate systems
 - 17.4 Assembled feed out tool with one central swivelling slide
- 18 Machine operated feed out tool with multiple slides
 - 18.1 General
 - 18.2 Necessary properties
 - 18.3 Location of coordinate systems
 - 18.4 Example of an assembled feed out tool with three slides
- 19 Components of machine operated feed out tools
 - 19.1 Flange adaptor
 - 19.1.1 General
 - 19.1.2 Necessary properties
 - 19.1.3 Example of a model of a flange adaptor
 - 19.2 Slide
 - 19.2.1 General
 - 19.2.2 Necessary properties
 - 19.2.3 Example of a model of a slide
 - 19.3 Cartridge carrier
 - 19.3.1 General
 - 19.3.2 Necessary properties
 - 19.3.3 Example of a model of a cartridge carrier
 - 19.4 Stator
 - 19.4.1 General
 - 19.4.2 Necessary properties
 - 19.4.3 Example of a model of a stator
- 20 Design of details
 - 20.1 Basics for modelling

20.2	Fixing threads for inserts
20.3	Contact/clamping surfaces — Orientation
20.4	Chamfers and roundings
21	Data exchange model
Annex A	(informative) Information about nominal dimensions

Page count: 40