

ISO/IEC 8803:2025-10 (E)

Information technology - 3D Printing and scanning - Accuracy and precision evaluation process for modelling from 3D scanned data

Contents

Page

- Foreword..... v
- Introduction..... vi
- 1 Scope..... 1**
- 2 Normative references..... 1**
- 3 Terms, definitions and abbreviated terms..... 1**
 - 3.1 Terms and definitions..... 1
 - 3.2 Abbreviations..... 2
- 4 Evaluation model..... 2**
 - 4.1 General..... 2
 - 4.1.1 Background..... 2
 - 4.1.2 Evaluation model..... 2
 - 4.2 Reference model – evaluation processes..... 4
 - 4.3 Stakeholders and roles..... 4
 - 4.3.1 General..... 4
 - 4.3.2 Provider..... 5
 - 4.3.3 Producer..... 6
 - 4.3.4 Customer..... 6
 - 4.3.5 Partner..... 7
 - 4.3.6 Policymaker..... 7
 - 4.4 Quality in the 3D printing..... 8
 - 4.4.1 Workflow and product quality..... 8
 - 4.4.2 Workflow and related stakeholders..... 8
 - 4.4.3 Modelling task..... 9
 - 4.4.4 Printing task..... 9
 - 4.4.5 Application task..... 10
 - 4.5 Support for the evaluation..... 10
- 5 Evaluation process..... 10**
 - 5.1 General requirements..... 10
 - 5.2 Documentation..... 10
 - 5.3 Establish the evaluation requirements..... 11
 - 5.3.1 General..... 11
 - 5.3.2 Establish the purpose of the evaluation..... 11
 - 5.3.3 Define the product quality requirements..... 12
 - 5.3.4 Identify tasks and phases to be included in the evaluation..... 12
 - 5.3.5 Define the stringency of the evaluation..... 13
 - 5.4 Specify the evaluation..... 13
 - 5.4.1 General..... 13
 - 5.4.2 Select quality measures (evaluation modules)..... 13
 - 5.4.3 Define decision criteria for quality measures..... 14
 - 5.4.4 Define decision criteria for evaluation..... 14
 - 5.5 Design the evaluation..... 15
 - 5.5.1 General..... 15
 - 5.5.2 Plan evaluation activities..... 15
 - 5.6 Execute the evaluation..... 16
 - 5.6.1 General..... 16

5.6.2	Make measurements.....	17
5.6.3	Apply decision criteria for quality measures.....	17
5.6.4	Apply decision criteria for evaluation.....	17
5.7	Conclude the evaluation.....	17
5.7.1	General.....	17
5.7.2	Review the evaluation result.....	17
5.7.3	Create the evaluation report.....	18
5.7.4	Review quality evaluation and provide feedback to the organization.....	19
5.7.5	Perform disposition of evaluation data.....	19
Annex A (informative) Tasks and phases.....		20
Annex B (informative) Evaluation report template.....		21
Annex C (informative) Comparison between 3D printing product evaluation process and SQuaRE evaluation process.....		23
Bibliography.....		25