

MTA Standards Update Booklet

The Manufacturing Technologies Association



Introduction

Standards are an agreed way of doing something. They are documents which contain technical specifications or other precise criteria, which are designed to be used consistently as a rule, guideline or definition. Consequently, standards ensure the quality and consistency of products and services and allow consumers to have confidence that their products are safe, reliable and of a good quality.

This booklet looks to provide the following information in relation to standards and the MTA's engagement with them:

- An overview of the standards update process.
- A summary of the BSI standard committees that the MTA is engaged with,
- A list of the standards that are being updated under each committee.

The intention is that the booklet will be updated every 3 months to provide the latest information on standards which are being updated.

If you are interested in participating in any of the committees listed in the booklet, would like to find out any information about any of the standards being updated, or have a suggestion on a technical area we should look to cover in a committee coverage please get in touch the MTA Technical team (contact details on final page).

Furthermore, all full members of the MTA are entitled to have access to the MTA BSI standards collection. This access allows MTA members to view a number of standards, as chosen by industry, at no cost. To access this collection please register on the BSI website (bsol.bsigroup.com) and get in touch for your access code (contact details on final page).



Standards Update Process

A new standard or one being updated goes through the same process which is represented in Figure 1:



Figure 1 – Standards Update Process

These update steps are as follows:

- New Work Proposal or Revision – at this stage a BSI committee will vote on whether to approve a project and submit comments. If appropriate experts will be nominated.
- Preparation (Drafting) – The standard will be drafted with the appointed expert providing specialist knowledge to the working group.
- Committee stage – The BSI committee have an opportunity to comment on the draft.
- Public Consultation – If the draft is approved by the committee the draft is sent out for 2 to 3 months for public comment (stage 40.20 on figure 2).
- Comment resolution – At the end of the consultation period all comments collated with the BSI committee deciding which to put forward in response.
- Approval stage – Once the consultation comments have been resolved the draft moves to approval stage where only editorial comments can be made.
- Publication – Following formal approval a standard will be implemented as a British Standard, with any conflicting standards being withdrawn.
- Review – To ensure a standard is required, it is periodically reviewed. The review considers if the standard should be retained, amended, withdrawn or revised.

Figure 2, on the next page, shows the in-depth stages of the standards update process. This can be used to understand which stage a standard is at the update process.

International harmonized stage codes

STAGE	SUBSTAGE						
				90 Decision			
	00 Registration	20 Start of main action	60 Completion of main action	92 Repeat an earlier phase	93 Repeat current phase	98 Abandon	99 Proceed
00 Preliminary stage	00.00 Proposal for new project received	00.20 Proposal for new project under review	00.60 Close of review			00.98 Proposal for new project abandoned	00.99 Approval to ballot proposal for new project
10 Proposal stage	10.00 Proposal for new project registered	10.20 New project ballot initiated	10.60 Close of voting	10.92 Proposal returned to submitter for further definition		10.98 New project rejected	10.99 Approval to New project approved
20 Preparatory stage	20.00 New project registered in TC/SC work programme	20.20 Working draft (WD) study initiated	20.60 Close of comment period			20.98 Project deleted	20.99 WD approved for registration as CD
30 Committee stage	30.00 Committee draft (CD) registered	30.20 CD study/ballot initiated	30.60 Close of voting/ comment period	30.92 CD referred back to Working Group		30.98 Project deleted	30.99 CD approved for registration as DIS
40 Enquiry stage	40.00 DIS registered	40.20 DIS ballot initiated: 12 weeks	40.60 Close of voting	40.92 Full report circulated: DIS referred back to TC or SC	40.93 Full report circulated: decision for new DIS ballot	40.98 Project deleted	40.99 Full report circulated: DIS approved for registration as FDIS
50 Approval stage	50.00 Final text received or FDIS registered for formal approval	50.20 Proof sent to secretariat or FDIS ballot initiated: 8 weeks	50.60 Close of voting. Proof returned by secretariat	50.92 FDIS or proof referred back to TC or SC		50.98 Project deleted	50.99 FDIS or proof approved for publication
60 Publication stage	60.00 International Standard under publication		60.60 International Standard published				
90 Review stage		90.20 International Standard under periodical review	90.60 Close of review	90.92 International Standard to be revised	90.93 International Standard confirmed		90.99 Withdrawal of International Standard proposed by TC or SC
95 Withdrawal stage		95.20 Withdrawal ballot initiated	95.60 Close of voting	95.92 Decision not to withdraw International Standard			95.99 Withdrawal of International Standard

Figure 2 – In-depth overview of standards update process

Committees and Standards Under Review

The following tables provide a list of the standards committees the MTA participates in, as well as the standards being updated under each of those committees.

AMT/4 – INDUSTRIAL DATA AND MANUFACTURING INTERFACES		
STANDARDS UNDER DEVELOPMENT		STAGE
ISO/DIS 8000-63	Data quality – Part 63: Data quality management: Process measurement	40.99
ISO/AWI 8000-64	Data quality – Part 64: Data quality management: Organizational process maturity assessment: Application of the Test Process Improvement method	20.00
ISO/AWI TS 8000-65	Data quality – Part 65: Data quality management: Process measurement questionnaire	20.00
ISO/AWI 8000-66	Data quality – Part 66: Part 66: Data quality management: Assessment indicators for data processing in manufacturing operations	20.00
ISO/AWI TS 8000-81	Data quality – Part 81: Data quality assessment methods: Profiling	20.00
ISO/DIS 8000-116	Data quality – Part 116: Master data: Exchange of quality identifiers: Application of ISO 8000-115 to authoritative legal entity identifiers	40.60
ISO/CD 10303-1	Industrial automation systems and integration – Product data representation and exchange – Part 1: Overview and fundamental principles	30.99
ISO/AWI TS 10303-15	Industrial automation systems and integration – Product data representation and exchange – Part 15: Description methods: SysML XMI to XSD transformation	20.00
ISO/AWI TS 10303-16	Industrial automation systems and integration – Product data representation and exchange – Part 16: Description methods: SysML XMI to EXPRESS transformation	20.00
ISO/AWI TS 10303-17	Industrial automation systems and integration – Product data representation and exchange – Part 17: EXPRESS to SysML XMI transformation	20.00
ISO/AWI 10303-59	Industrial automation systems and integration – Product data representation and exchange – Part 59: Integrated generic resource: Quality of product shape data	20.00
ISO/DIS 10303-113	Industrial automation systems and integration – Product data representation and exchange – Part 113: Integrated application resource: Mechanical design	40.00
ISO/NP 10303-209	Industrial automation systems and integration – Product data representation and exchange – Part 209: Application protocol: Multidisciplinary analysis and design	10.99
ISO/AWI 10303-210	Industrial automation systems and integration – Product data representation and exchange – Part 210: Application protocol: Electronic assembly, interconnect and packaging design	20.00
ISO/PRF 10303-235	Industrial automation systems and integration – Product data representation and exchange – Part 235: Application protocol: Engineering properties for product design and verification	50.20

AMT/4 – INDUSTRIAL DATA AND MANUFACTURING INTERFACES		
STANDARDS UNDER DEVELOPMENT		STAGE
ISO/AWI 10303-238	Industrial automation systems and integration – Product data representation and exchange – Part 238: Application protocol: Model based integrated manufacturing	20.00
ISO/AWI 10303-239	Industrial automation systems and integration – Product data representation and exchange – Part 239: Application protocol: Product life cycle support	20.00
ISO/DIS 10303-242	Industrial automation systems and integration – Product data representation and exchange – Part 242: Application protocol: Managed model-based 3D engineering	40.93
ISO/CD 10303-243	Industrial automation systems and integration – Product data representation and exchange – Part 243: Application protocol: For modelling and simulation information in a collaborative systems engineering context (MoSSEC)	30.99
ISO/DIS 15926-4	Industrial automation systems and integration – Integration of life-cycle data for process plants including oil and gas production facilities – Part 4: Core reference data	40.99
ISO/WD 15926-6	Industrial automation systems and integration – Integration of life-cycle data for process plants including oil and gas production facilities – Part 6: Methodology for the development and validation of reference data	20.20
ISO/DIS 15926-10	Industrial automation systems and integration – Integration of life cycle data for process plants including oil and gas production facilities – Part 10: Conformance testing	40.99
ISO/WD TR 15926-14	Industrial automation systems and integration – Integration of life-cycle data for process plants including oil and gas production facilities – Part 14: Data model adapted for OWL2 Direct Semantics	20.20
ISO/AWI 23247	Digital Twin manufacturing framework	20.00
ISO/AWI TS 23301	STEP Geometry Services	20.00
ISO/CD 23952	Quality Information Framework	30.99

AMT/8 – ADDITIVE MANUFACTURING		
STANDARDS UNDER DEVELOPMENT		STAGE
ISO/ASTM DIS 52900	Additive manufacturing – General principles – Fundamentals and vocabulary	40.99
ISO/ASTM FDIS 52902	Additive manufacturing – Test artefacts – Geometric capability assessment of additive manufacturing systems	50.20
ISO/ASTM FDIS 52903-1	Additive manufacturing – Standard specification for material extrusion based additive manufacturing of plastic materials – Part 1: Feedstock materials	50.00
ISO/ASTM DIS 52903-2	Additive manufacturing – Standard specification for material extrusion based additive manufacturing of plastic materials – Part 2: Process – Equipment	40.60

AMT/8 – ADDITIVE MANUFACTURING		
STANDARDS UNDER DEVELOPMENT		STAGE
ISO/ASTM CD 52903-3	Additive manufacturing – Standard specification for material extrusion based additive manufacturing of plastic materials – Part 3: Final parts	30.99
ISO/ASTM FDIS 52904	Additive manufacturing – Process characteristics and performance – Practice for metal powder bed fusion process to meet critical applications	50.20
ISO/ASTM DTR 52905	Additive manufacturing – General principles – Non-destructive testing of additive manufactured products	30.90
ISO/ASTM CD TR 52906	Additive manufacturing – Non-destructive testing and evaluation – Standard guideline for intentionally seeding flaws in additively manufactured (AM) parts	30.00
ISO/ASTM FDIS 52907	Additive manufacturing – Feedstock materials – Methods to characterize metal powders	50.20
ISO/ASTM AWI 52908	Additive manufacturing – Post-processing methods – Standard specification for quality assurance and post processing of powder bed fusion metallic parts	20.00
ISO/ASTM AWI 52909	Additive manufacturing – Finished part properties – Orientation and location dependence of mechanical properties for metal powder bed fusion	20.00
ISO/ASTM FDIS 52911-1	Additive manufacturing – Design – Part 1: Laser-based powder bed fusion of metals	50.20
ISO/ASTM FDIS 52911-2	Additive manufacturing – Technical design guideline for powder bed fusion – Part 2: Laser-based powder bed fusion of polymers	50.00
ISO/ASTM CD TR 52912	Additive manufacturing – Design – Functionally graded additive manufacturing	30.00
ISO/ASTM DIS 52915	Specification for additive manufacturing file format (AMF) Version 1.2	40.99
ISO/ASTM WD 52916	Additive manufacturing – Data formats – Standard specification for optimized medical image data	20.20
ISO/ASTM CD TR 52918	Additive manufacturing – Data formats – File format support, ecosystem and evolutions	30.00
ISO/ASTM CD 52921	Standard terminology for additive manufacturing – Coordinate systems and test methodologies	30.99
ISO/ASTM AWI 52924	Additive manufacturing – Qualification principles – Quality grades for additive manufacturing of polymer parts	20.00
ISO/ASTM WD 52925	Additive manufacturing – Qualification principles – Qualification of polymer materials for powder bed fusion using a laser	20.20
ISO/ASTM AWI 52931	Additive manufacturing – Environmental health and safety – Standard guideline for use of metallic materials	20.00
ISO/ASTM WD 52932	Additive manufacturing – Environmental health and safety – Standard test method for determination of particle emission rates from desktop 3D printers using material extrusion	20.20
ISO/ASTM DIS 52941	Additive manufacturing – System performance and reliability – Standard test method for acceptance of powder-bed fusion machines for metallic materials for aerospace application	40.00

AMT/8 – ADDITIVE MANUFACTURING		
STANDARDS UNDER DEVELOPMENT		STAGE
ISO/ASTM DIS 52942	Additive manufacturing – Qualification principles – Qualifying machine operators of metal powder bed fusion machines and equipment used in aerospace applications	40.00
ISO/ASTM CD 52950	Additive manufacturing – General principles – Overview of data processing	30.99

AMT/10 – ROBOTICS		
STANDARDS UNDER DEVELOPMENT		STAGE
ISO/CD 8373	Robotics – Vocabulary	30.60
ISO/CD 10218-1	Robots and robotic devices – Safety requirements for industrial robots – Part 1: Robots	30.99
ISO/CD 10218-2	Robots and robotic devices – Safety requirements for industrial robots – Part 2: Robot systems and integration	30.99
ISO/NP 11593	Manipulating industrial robots – Automatic end effector exchange systems – Vocabulary and presentation of characteristics	10.99
ISO/CD 18646-3	Robotics – Performance criteria and related test methods for service robots – Part 3: Manipulation	30.60
ISO/CD 18646-4	Robotics – Performance criteria and related test methods for service robots – Part 4: Lumbar support robots	30.60
ISO/CD 22166-1	Robotics – Part 1: Modularity for service robots – Part 1: General requirements	30.60
ISO/DTR 23482-1	Robotics – Application of ISO 13482 – Part 1: Safety-related test methods	30.60
IEC/FDIS 80601-2-77	Medical electrical equipment – Part 2-77: Particular requirements for the basic safety and essential performance of robotically assisted surgical equipment	50.20
IEC/FDIS 80601-2-78	Medical electrical equipment – Part 2-78: Particular requirements for basic safety and essential performance of medical robots for rehabilitation, assessment, compensation or alleviation	50.20

IST/33/1 – INFORMATION SECURITY MANAGEMENT SYSTEMS		
STANDARDS UNDER DEVELOPMENT		STAGE
ISO/IEC CD 15408-1	Information technology – Security techniques – Evaluation criteria for IT security – Part 1: Introduction and general model	30.6
ISO/IEC CD 18045	Information technology – Security techniques – Methodology for IT security evaluation	30.6
ISO/IEC CD 20547-4	Information technology – Big data reference architecture – Part 4: Security and Privacy	30.6
ISO/IEC WD TR 22216	Information technology – Security techniques – Introductory guidance on evaluation for IT security	20.2
ISO/IEC WD 27002	Information security controls	20.6

IST/33/1 – INFORMATION SECURITY MANAGEMENT SYSTEMS		
STANDARDS UNDER DEVELOPMENT		STAGE
ISO/IEC WD 27032	IT Security Techniques – Cybersecurity – Guidelines for Internet Security	20.6

MTE/1 – MACHINE TOOLS		
STANDARDS UNDER DEVELOPMENT		STAGE
ISO/CD 3408-2	Ball screws – Part 2: Nominal diameters and nominal leads – Metric series	30.60
ISO/DIS 14955-3	Machine tools – Environmental evaluation of machine tools – Part 3: Principles for testing metal-cutting machine tools with respect to energy efficiency	40.20
ISO/FDIS 14955-4	Machine tools – Environmental evaluation of machine tools – Part 4: Principles for measuring metal-forming machine tools and laser processing machine tools with respect to energy efficiency	50.20
ISO/DIS 14955-5	Machine tools – Environmental evaluation of machine tools – Part 5: Principles for testing woodworking machine tools with respect to energy supplied	40.20
ISO/FDIS 230-3	Test code for machine tools – Part 3: Determination of thermal effects	50.00
ISO 3875	Machine tools – Test conditions for external cylindrical centreless grinding machines – Testing of the accuracy	60.00
ISO 6480	Test conditions for horizontal internal type broaching machines – Testing of accuracy	60.00
ISO 6481	Test conditions for vertical surface type broaching machines – Testing of accuracy	60.00
ISO 6779	Test conditions for vertical internal type broaching machines – Testing of accuracy	60.00
ISO 10791-7	Test conditions for machining centres – Part 7: Accuracy of finished test piece	60.00
ISO/FDIS 13041-1	Test conditions for numerically controlled turning machines and turning centres – Part 1: Geometric tests for machines with a horizontal workholding spindle	50.20
ISO/FDIS 13041-2	Test conditions for numerically controlled turning machines and turning centres – Part 2: Geometric tests for machines with a vertical workholding spindle	50.20
ISO/DTR 17243-3	Machine tool spindles – Evaluation of machine tool spindle vibrations by measurements on spindle housing – Part 3: Gear-driven spindles with rolling element bearings operating at speeds between 600 r/min and 12 000 r/min	30.60
ISO/FDIS 17543-1	Machine tools – Test conditions for universal spindle heads – Part 1: Accessory heads for machines with horizontal spindle (horizontal Z-axis)	50.00
ISO/DIS 19744-1	Test conditions for numerically controlled broaching machines – Testing of the accuracy – Part 1: Vertical surface type broaching machines	40.60
ISO/WD 230-5	Test code for machine tools – Part 5: Determination of the noise emission	20.60

MTE/1 – MACHINE TOOLS		
STANDARDS UNDER DEVELOPMENT		STAGE
ISO/WD 7960	Airborne noise emitted by machine tools – Operating conditions for woodworking machines	20.60

MTE/1/1 – MACHINE TOOLS – SAFETY		
STANDARDS UNDER DEVELOPMENT		STAGE
ISO/DIS 16092-2	Machine tools safety – Presses – Part 2: Safety requirement for mechanical presses	40.99
ISO/DIS 16092-4	Machine tools safety – Presses – Part 4: Safety requirements for pneumatic presses	40.6
ISO/CD 28881	Machine tools – Safety – Electro-discharge machines	30.6

MTE/1/2 – MACHINE TOOLS – ACCURACY		
STANDARDS UNDER DEVELOPMENT		STAGE
ISO/FDIS 230-3	Test code for machine tools – Part 3: Determination of thermal effects	50.00
ISO 3875	Machine tools – Test conditions for external cylindrical centreless grinding machines – Testing of the accuracy	60.00
ISO 6480	Test conditions for horizontal internal type broaching machines – Testing of accuracy	60.00
ISO 6481	Test conditions for vertical surface type broaching machines – Testing of accuracy	60.00
ISO 6779	Test conditions for vertical internal type broaching machines – Testing of accuracy	60.00
ISO 10791-7	Test conditions for machining centres – Part 7: Accuracy of finished test piece	60.00
ISO/FDIS 13041-1	Test conditions for numerically controlled turning machines and turning centres – Part 1: Geometric tests for machines with a horizontal workholding spindle	50.20
ISO/FDIS 13041-2	Test conditions for numerically controlled turning machines and turning centres – Part 2: Geometric tests for machines with a vertical workholding spindle	50.20
ISO/DTR 17243-3	Machine tool spindles – Evaluation of machine tool spindle vibrations by measurements on spindle housing – Part 3: Gear-driven spindles with rolling element bearings operating at speeds between 600 r/min and 12 000 r/min	30.60
ISO/FDIS 17543-1	Machine tools – Test conditions for universal spindle heads – Part 1: Accessory heads for machines with horizontal spindle (horizontal Z-axis)	50.00
ISO/DIS 19744-1	Test conditions for numerically controlled broaching machines – Testing of the accuracy – Part 1: Vertical surface type broaching machines	40.60

PH/9 – APPLIED ERGONOMICS		
STANDARDS UNDER DEVELOPMENT		STAGE
ISO/TC 159/SC3	Anthropometry and biomechanics ISO/CD 11228-1 Ergonomics – Manual handling – Part 1: Lifting, lowering and carrying	30.99
ISO/TC 159/SC3	Anthropometry and biomechanics ISO/AWI TR 23076 Ergonomics – Recovery Model for cyclical industrial work	20.00
ISO/TC 159/SC3	Anthropometry and biomechanics ISO/AWI TR 23474 Safety of machinery – Ergonomic principles for the design of sorting cabins intended for the manual sorting of dry household and similar waste originating from selective collection	20.00
ISO/TC 159/SC3 -B105	Anthropometry and biomechanics ISO/AWI TR 23476 Ergonomics – Application of ISO 11228-1, ISO 11228-2, ISO 11228-3 and ISO 11226 in the agricultural sector	20.00

MTE/1/1 – MACHINE TOOLS – SAFETY		
STANDARDS UNDER DEVELOPMENT		STAGE
ISO/DIS 16092-2	Machine tools safety – Presses – Part 2: Safety requirement for mechanical presses	40.99
ISO/DIS 16092-4	Machine tools safety – Presses – Part 4: Safety requirements for pneumatic presses	40.6
ISO/CD 28881	Machine tools – Safety – Electro-discharge machines	30.6

MTE/1/2 – MACHINE TOOLS – ACCURACY		
STANDARDS UNDER DEVELOPMENT		STAGE
ISO/FDIS 230-3	Test code for machine tools – Part 3: Determination of thermal effects	50.00
ISO 3875	Machine tools – Test conditions for external cylindrical centreless grinding machines – Testing of the accuracy	60.00
ISO 6480	Test conditions for horizontal internal type broaching machines – Testing of accuracy	60.00
ISO 6481	Test conditions for vertical surface type broaching machines – Testing of accuracy	60.00
ISO 6779	Test conditions for vertical internal type broaching machines – Testing of accuracy	60.00
ISO 10791-7	Test conditions for machining centres – Part 7: Accuracy of finished test piece	60.00
ISO/FDIS 13041-1	Test conditions for numerically controlled turning machines and turning centres – Part 1: Geometric tests for machines with a horizontal workholding spindle	50.20

MTE/1/2 – MACHINE TOOLS – ACCURACY		
STANDARDS UNDER DEVELOPMENT		STAGE
ISO/FDIS 13041-2	Test conditions for numerically controlled turning machines and turning centres – Part 2: Geometric tests for machines with a vertical workholding spindle	50.20
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ISO/TC 159/SC3	Anthropometry and biomechanics ISO/AWI TR 23474 Safety of machinery – Ergonomic principles for the design of sorting cabins intended for the manual sorting of dry household and similar waste originating from selective collection	20.00
ISO/TC 159/SC3 -B105	Anthropometry and biomechanics ISO/AWI TR 23476 Ergonomics – Application of ISO 11228-1, ISO 11228-2, ISO 11228-3 and ISO 11226 in the agricultural sector	20.00

QS/1/2 – QUALITY MANAGEMENT SYSTEM STANDARDS		
STANDARDS UNDER DEVELOPMENT		STAGE
No standards under development		

For further information on any of the standards listed in this document, please don't hesitate to get in contact (contact details on final page).



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