Winner
2007 & 2021
Lawrence D. Eicher Leadership Award

TC 184/SC 4
Industrial Data

Celebrating 40 years!

Introduction & Welcome

October 23, 2024

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40 Years of Standardization!

RESOLUTION 1: (Gaithersburg - July 1984)

SC 4 recognizes the need for a new standard for the external representation of product model data. This standard will be based upon existing data exchange initiatives including the US IGES and PDDI, the French SET, the German VDA/BDMA-FS, and the UK NEDO.

RESOLUTION 2: (Gaithersburg - July 1984)

The SC adopts the following goal and objectives.

Goal: The creation of a standard which enables the capture of information comprising a computerized product model in a neutral form without loss of completeness and integrity, throughout the life cycle of the product.

Design Objectives: The standard must feature:

- Flexibility to permit expansion without invalidating existing portions of the standard.
- Efficiency for processing, communication and storage.
- Rigorous and formal documentation.
- The minimum possible set of data elements.
- Separation of data content from physical format.
- A logical classification of data elements.
- Compatibility with other existing relevant standards.

Near Term Objectives: The initial objective is to produce a Version 1 of standard for discrete mechanical parts including the following:

- A product model core to include:
  - * Geometry
    - 3-D wireframe/surfaces
    - Boundary representation
    - Constructive solid geometry
  - * Tolerances
  - * Features
  - * Bill of materials including: material, process specification, part identification, notes.
- Application data requirements or application influence on product model core from the following areas:
  - * Drafting
  - * Finite element modelling
  - * Machining
  - * Quality assurance.
  - * Data management
- A mechanism for standard parts
- Parametric design features.
- Data syntax and file structure independent of the above contents.

Drafting is to include existing national and international standard requirements. Where possible, common semantics will be defined for use with a flag identifying desired drafting standard to produce specific display information

More stable geometric forms of curves and surfaces preferred. Implementation guidelines should include conversion methods. Constructive and evaluated (result) forms of geometric entities are needed.

A draft proposal for Version 1 is required for ballot by SC 4 by the end of 1985.

RESOLUTION 5: (Gaithersburg - July 1984)

ISO/TC 184/SC 4 thanks Mr. Bradford Smith for providing his excellent work as chairman of this meeting and proposes to nominate Mr. Smith as Chairman of ISO/TC 184/SC 4 for a three-year term.

ISO/TC 184/SC 4: Industrial Data

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SCOPE:

Standardization of the content, meaning, structure, representation and quality management of the information required to define an engineered product and its characteristics at any required level of detail at any part of its lifecycle from conception through disposal, together with the interfaces required to deliver and collect the information necessary to support any business or technical process or service related to that engineered product during its lifecycle.

Note: Lifecycle includes recursive recycling to a terminal state.

ISO/TC 184/SC 4 Industrial Data

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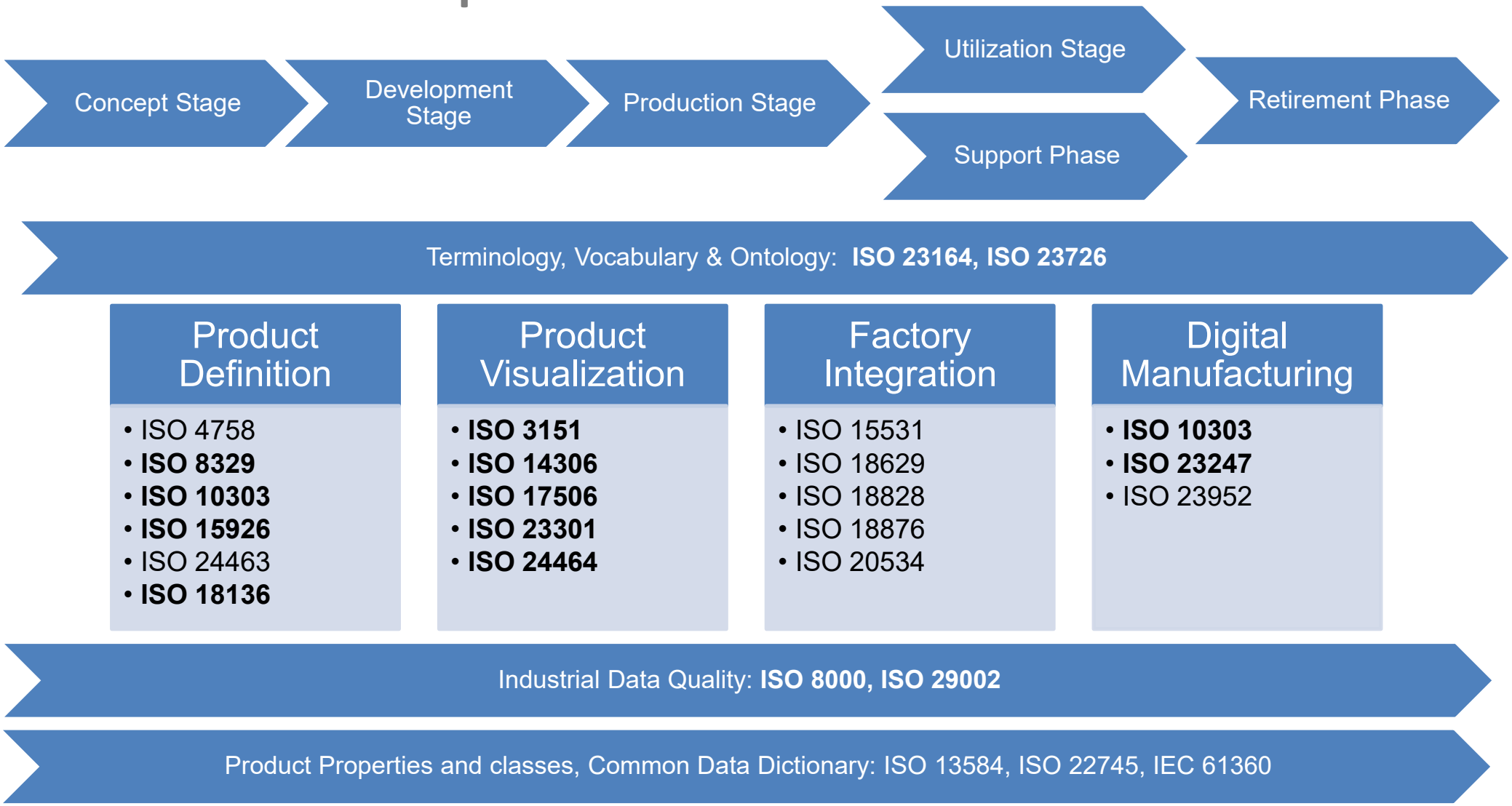
Scope of industrial data



Bold indicates active development.

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ISO/TC 184/SC 4

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