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Industrial automation systems and integration — Integration of life-cycle data for process plants including oil and gas production facilities —

Part 4: Initial reference data

Systèmes d'automatisation industrielle et intégration — Intégration de données de cycle de vie pour les industries de «process», y compris les usines de production de pétrole et de gaz —

Partie 4: Données de référence initiales



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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 Electro technical Commission (IEC) on all matters of electro technical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

In other circumstances, particularly when there is an urgent market requirement for such documents, a technical committee may decide to publish other types of normative document:

- an ISO Publicly Available Specification (ISO/PAS) represents an agreement between technical experts in an ISO working group and is accepted for publication if it is approved by more than 50% of the members of the parent committee casting a vote;
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ISO/TS 15926-4 was prepared by Technical Committee ISO/TC 184, Industrial automation systems and integration, Subcommittee SC 4, Industrial data.

ISO 15926 consists of the following parts, under the general title *Industrial automation systems and integration* — *Integration of life-cycle data for process plants including oil and gas production facilities*:

- Part 1: Overview and fundamental principles
- Part 2: Data model
- Part 4: Initial reference data [Technical Specification]

The following parts are under preparation:

- Part 3: Ontology for geometry and topology [Technical Specification]
- Part 7: Implementation methods for data exchange and integration [Technical Specification]

A complete list of parts of ISO 15926 is available from the Internet: <<u>http://www.tc184-sc4.org/titles/OIL_GAS_Titles.htm</u>>

ISO 15926 is an International Standard for the representation of process industries facility life-cycle information. This representation is specified by a generic, conceptual data model that is suitable as the basis for implementation in a shared database or data warehouse. The data model is designed to be used in conjunction with reference data, i.e. standard instances that represent information common to a number of users, production facilities, or both. The support for a specific life-cycle activity depends on the use of appropriate reference data in conjunction with the data model.

ISO 15926 is organized as a series of parts, each published separately. This part of ISO 15926 specifies the initial set of reference data items.

The structure of ISO 15926 is as follows:

- ISO 15926-1 provides an overview of ISO 15926;
- ISO 15926-2 contains a generic, conceptual data model that supports representation of all lifecycle aspects of a process plant;
- ISO/TS 15926-3¹ contains a reference data library for geometry and topology;
- ISO/TS 15926-4 contains a reference data library for physical objects, activities, properties and other reference data necessary to record information about a process plant;
- ISO 15926-5² specifies the procedures to be followed for the maintenance of the reference data library ISO/TS 15926-4;
- ISO $15926-6^3$ specifies the information that is recorded for reference data items of ISO/TS 15926-4;
- ISO/TS 15926-7⁴ specifies implementation methods for the integration of distributed systems.

¹ To be published.

² Under preparation.

³ Under preparation.

⁴ To be published.