ENTERPRISE-CONTROL SYSTEM INTEGRATION

Part 5: Business to Manufacturing Transactions

1. Scope

This ISA-95 Part 5 standard defines transactions in terms of information exchanges between applications performing business and manufacturing activities between Levels 3 and 4, and within Level 3. The exchanges are intended to enable information collection, retrieval, transfer and storage in support of enterprise-control system integration. This Part 5 is consistent with the ISA-95 Part 2 and Part 4 object models. This Part 5 also defines transactions that specify how to exchange the objects defined in Part 2, Part 4, and this Part 5. Other uses of the transaction model are not defined in this Part 5 standard.

The models covered in this standard are: Personnel Model, Equipment Model, Physical Asset Model, Material Model, Process Segment Model, Operations Capability Model, Operations Definition Model, Operations Schedule Model, Operations Performance Model, Resource Relationship Network Model, Work Capability Model, Work Definition Model, Work Schedule Model, Job List Model, Work Performance Model, Workflow Specification Model, and Work Alert Model.

2. Normative references

The following normative documents contain provisions that, through reference in this text, constitute provisions of this ISA-95 Part 5 standard. At the time of publication, the editions indicated were valid. All normative documents are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. Members of IEC and ISO maintain registers of currently valid normative documents.

ISO/IEC 19501-1 Information Technology – Unified Modeling Language (UML)—Part 1: Specification

ANSI/ISA-95.00.01-2010 (IEC 62264-1 Mod), Enterprise-Control System Integration – Part 1: Models and Terminology

ANSI/ISA-95.00.02-2010 (IEC 62264-2 Mod), Enterprise-Control System Integration – Part 2: Object Model Attributes

ANSI/ISA-95.00.04-2012, Enterprise-Control System Integration – Part 4: Objects and Attributes for Manufacturing Operations Management Integration

3. Definitions and abbreviations

3.1 Terms and definitions

3.1.1
application
an ordered set of physical and logical system processes, performed by a set of resources that conduct a set of transactions intended to accomplish a definite objective; information provider or information user performing the activity that is involved in a transaction