

# ISO 10303-1:1994-12 (E)

## Industrial automation systems and integration - Product data representation and exchange - Part 1: Overview and fundamental principles

---

Contents	Page
1 Scope .....	1
2 Normative references .....	2
3 Definitions and abbreviations .....	2
3.1 Terms defined in ISO 10303-31 .....	2
3.2 Other definitions .....	3
3.2.1 abstract test suite .....	3
3.2.2 application .....	3
3.2.3 application activity model (AAM) .....	3
3.2.4 application context .....	3
3.2.5 application interpreted model (AIM) .....	3
3.2.6 application object .....	3
3.2.7 application protocol (AP) .....	3
3.2.8 application reference model (ARM) .....	3
3.2.9 application resource .....	3
3.2.10 assembly .....	3
3.2.11 component .....	3
3.2.12 conformance class .....	3
3.2.13 conformance requirement .....	4
3.2.14 data .....	4
3.2.15 data exchange .....	4
3.2.16 data specification language .....	4
3.2.17 exchange structure .....	4
3.2.18 generic resource .....	4
3.2.19 implementation method .....	4
3.2.20 information .....	4
3.2.21 information model .....	4
3.2.22 integrated resource .....	4
3.2.23 interpretation .....	4
3.2.24 PICS proforma .....	4
3.2.25 presentation .....	4
3.2.26 product .....	4
3.2.27 product data .....	4
3.2.28 product information .....	4
3.2.29 product information model .....	5
3.2.30 protocol implementation conformance statement (PICS) .....	5
3.2.31 resource construct .....	5
3.2.32 structure .....	5
3.2.33 unit of functionality .....	5
3.3 Abbreviations .....	5
4 Overview of ISO 10303 .....	5
4.1 Purpose .....	5
4.2 Fundamental principles .....	6
4.2.1 Integrated resources .....	6
4.2.2 Support for applications .....	6
4.2.3 Implementation methods .....	7
4.2.4 Implementations .....	7
4.2.5 Conformance testing .....	7
4.3 Information object registration .....	7
5 Structure of ISO 10303 .....	8
6 Description methods .....	9
6.1 The EXPRESS language .....	9
6.2 Graphical presentation of models .....	9

<b>7 Integrated resources .....</b>	<b>10</b>
<b>8 Application protocols .....</b>	<b>11</b>
<b>8.1 Definition of application requirements .....</b>	<b>11</b>
<b>8.2 Information representation .....</b>	<b>11</b>
<b>8.3 Implementation methods .....</b>	<b>11</b>
<b>8.4 Conformance requirements .....</b>	<b>11</b>
<b>9 Conformance testing methodology and framework .....</b>	<b>12</b>
<b>9.1 Purpose of conformance testing .....</b>	<b>12</b>
<b>9.2 Procedures for conformance testing .....</b>	<b>12</b>
<b>9.3 Abstract test methods .....</b>	<b>12</b>
<b>10 Abstract test suites .....</b>	<b>13</b>
<b>11 Implementation methods .....</b>	<b>13</b>
<b>11.1 Purpose .....</b>	<b>13</b>
<b>11.2 Use of formal language .....</b>	<b>13</b>
<b>11.3 Mapping from EXPRESS to implementation method .....</b>	<b>13</b>
<b>11.4 Exchange structure implementation .....</b>	<b>14</b>
 <b>Annexes</b>	
<b>A Information object registration .....</b>	<b>15</b>
<b>B Bibliography .....</b>	<b>16</b>
<b>Index .....</b>	<b>17</b>