



INTERNATIONAL STANDARD ISO 10303-50:2002
TECHNICAL CORRIGENDUM 1

Published 2010-10-15

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

**Industrial automation systems and integration — Product data
representation and exchange —**

Part 50:

Integrated generic resource: Mathematical constructs

TECHNICAL CORRIGENDUM 1

*Systèmes d'automatisation industrielle et intégration — Représentation et échange de données de produits —
Partie 50: Ressources génériques intégrées: Constructions mathématiques*

RECTIFICATIF TECHNIQUE 1

Technical Corrigendum 1 to ISO 10303-50:2002 was prepared by Technical Committee ISO/TC 184,
Automation systems and integration, Subcommittee SC 4, *Industrial data*.

*The purpose of the modifications to the text of ISO 10303-50:2002 is to correct errors relating to incorrect
data types in EXPRESS entity and function definitions, and to update the normative references.*

Modifications to the text of ISO 10303-50:2001

Pages 1 and 2, Clause 2, Normative references

Replace the first, fourth, fifth and sixth normative references with the following:

ISO/IEC 8824-1, *Information technology — Abstract Syntax Notation One (ASN.1): — Part 1: Specification of basic notation*

ISO 10303-41, *Industrial automation systems and integration — Product data representation and exchange — Part 41: Integrated generic resource: Fundamentals of product description and support*

ISO 10303-42, *Industrial automation systems and integration — Product data representation and exchange — Part 42: Integrated generic resource: Geometric and topological representation*

ISO 13584-20, *Industrial automation systems and integration — Parts library — Part 20: Logical resource: Logical model of expressions*

Page 18, 4.4.6, maths_simple_atom

This SELECT type contains a repetition of maths_number where the intent was to include maths_integer. Delete the current EXPRESS definition of the SELECT type maths_simple_atom and replace with:

EXPRESS specification:

```
*)
TYPE maths_simple_atom = SELECT
    (maths_number,
     maths_real,
     maths_integer,
     maths_logical,
     maths_boolean,
     maths_string,
     maths_binary);
END_TYPE;
(*
```

Page 71, 4.5.49, listed_complex_number_data

Due to the behaviour of the EXPRESS real division operator the result of dividing an integer by 2 is of type REAL regardless of the value of the numerator. In order to produce the required integer result delete the current EXPRESS definition of the entity listed_complex_number_data and replace with:

EXPRESS specification:

```
*)
ENTITY listed_complex_number_data
    SUBTYPE OF (explicit_table_function, generic_literal);
    values : LIST [2:?] OF REAL;
    DERIVE
        SELF\explicit_table_function.shape : LIST [1:?] OF positive_integer :=
            [ SIZEOF(values) DIV 2 ];
    WHERE
        WR1:
            NOT ODD(SIZEOF(values));
    END_ENTITY;
(*
```