INTERNATIONAL STANDARD ISO 10303-111:2007
TECHNICAL CORRIGENDUM 2

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

Part 111:

Integrated generic resource:

Elements for the procedural modelling of solid shapes

TECHNICAL CORRIGENDUM 2

Systèmes d' automatisation industrielle et intégration – Représentation et échange de données de produits

- Partie 111 Ressources génériques intégrées: Éléments pour la modélisation procédurale des forms solides RECTIFICATIF TECHNIQUE 2

Technical Corrigendum 2 to International Standard ISO 10303-111:2007 was prepared by Technical Committee ISO/TC 184, *Automation systems and integration,* Subcommittee SC 4, *Industrial data.*

This Technical Corrigendum is intended to be used in conjunction with ISO 10303-111:2007/Cor.1:2008. The purpose of the modifications to the text of ISO 10303-111:2007 is to make minor changes in the information model to avoid an implementation problem

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Modifications to the text of ISO 10303-111:2007

Clause 4.4.2, edge_blended_solid*, pp. 11 - 12*

Replace the EXPRESS code on p. 12 with the following, in which **solid_with_variable_radius_edge_blend** *has been removed from the SUPERTYPE OF list:*

EXPRESS specification:

```
*)
ENTITY edge_blended_solid
  ABSTRACT SUPERTYPE OF (track_blended_solid ANDOR (ONEOF
                          (solid_with_constant_radius_edge_blend,
                           solid_with_chamfered_edges)))
  SUBTYPE OF (modified_solid);
  blended_edges : LIST [1:?] OF UNIQUE edge_curve;
END_ENTITY;
(*
```

Clause 4.4.3, track_blended_solid*, pp. 12 - 13*

Replace the entire entity definition by the following, in which the EXPRESS code and the descriptive text have been amended:

A **track_blended_solid** is a type of **edge_blended_solid** in which the edges to be blended form a continuous open or closed track. A WHERE rule is imposed to ensure this condition.

NOTE 1 A track is related to a **path** as defined in ISO 10303-42 in that it consists of a list of distinct edges connected end to end so that it is possible to traverse all the edges in the list continuously from an initial vertex to a final vertex. The initial and final vertices may be the same in the case of a closed track. The difference is that a **path** consists of instances of **oriented_edge**, so that there is a sense associated with the path as a whole. A track, by contrast, is made up of unoriented edges.

NOTE 2 Where appropriate, this ABSTRACT entity may be instantiated as a complex instance with **solid_with_constant_radius_edge_blend** or **solid_with_chamfered_edges**.

NOTE 3 Figure 4 in clause 4.4.5 shows an example of a **track_blended_solid**, in which the blended track is a sequence of five edges of the volume created by extruding a rectangle with two rounded corners. Since the blend is a constant radius blend, this solid can be represented by a complex instance of **track_blended_solid** and **solid_with_constant_radius_edge_blend**.

EXPRESS specification:

```
*)
ENTITY track_blended_solid
  ABSTRACT SUPERTYPE
  SUBTYPE OF (edge_blended_solid);
WHERE
  WR1: check_continuous_edges(SELF\edge_blended_solid.blended_edges);
END_ENTITY;
(*
```

