Indian Standard

MANIPULATING INDUSTRIAL ROBOTS — MECHANICAL INTERFACES

PART 2 SHAFTS

(First Revision)

1 Scope

This part of ISO 9409 defines the main dimensions, designation and marking for a shaft with cylindrical projection as mechanical interface. It is intended to ensure the exchangeability and to keep the orientation of hand-mounted end effectors.

This part of ISO 9409 does not contain any correlation of load-carrying ranges.

The mechanical interfaces specified in this part of ISO 9409 will also find application in simple handling systems which are not covered by the definition of manipulating industrial robots, such as pick-and-place or master-slave units.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of ISO 9409. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of ISO 9409 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 286-1:1988, *ISO system of limits and fits — Part 1: Bases of tolerances, deviations and fits*

ISO 286-2:1988, *ISO system of limits and fits — Part 2: Tables of standard tolerance grades and limit deviations for holes and shafts*

ISO 1101:—[1)], *Geometrical Product Specifications (GPS) — Geometrical tolerancing — Tolerances of form, orientation, location and run-out*

ISO 8373:1994, *Manipulating industrial robots — Vocabulary*

ISO 9409-1:1996, *Manipulating industrial robots — Mechanical interfaces — Part 1: Plates (form A)*

ISO 9787:1999, *Manipulating industrial robots — Coordinate systems and motion nomenclatures*