INTERNATIONAL STANDARD ISO 2905

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Modular units for machine tool construction — Spindle noses and adjustable adaptors for multi-spindle heads

Éléments standard pour la construction des machines-outils — Nez de broches et douilles de réglage pour têtes multibroches

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FOREWORD

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Draft International Standards adopted by the Technical Committees are circulated to the Member Bodies for approval before their acceptance as International Standards by the ISO Council.

International Standard ISO 2905 was drawn up by Technical Committee ISO/TC 39, *Machine tools*. It is a combination of drafts ISO/DIS 2905 and 2956, which were circulated to the Member Bodies in August 1972 and February 1973 respectively.

Draft ISO/DIS 2905 has been approved by the Member Bodies of the following countries :

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1 SCOPE AND FIELD OF APPLICATION

This International Standard specifies dimensions for spindle noses for use with adjustable adaptors and quick-change adaptors used in multi-spindle heads.

It specifies requirements for three types of adjustable adaptors for the receipt of taper shank drills, reamers and spot-facing cutters, used in multi-spindle heads.

2 REFERENCES

ISO 296, *Self-holding tapers for tool shanks.*

ISO 2901, *ISO metric trapezoidal screw threads — Basic profile and maximum material profiles.*[1)]

ISO 2903, *ISO metric trapezoidal screw threads — Tolerances.*[1)]

3 SPINDLE NOSES

3.1 Nominal sizes

The nominal size of the spindle nose shall be its nominal bore, which shall be identical with the nominal diameter of the adjustable adaptor with which it is to be used.

The range of nominal sizes is as follows :

8, 10, 12, 16, 20, 25, 28, 36 and 48 mm

3.2 Interchangeability

Spindle noses shall be capable of accepting adjustable adaptors manufactured in accordance with clause 4.

3.3 Dimensions

Dimensions shall comply with those given in table 1.

3.4 Locking screw

For reasons of safety, it is important that the locking screw when tightened does not protrude beyond the outside diameter of the spindle nose. Therefore, locking screws are to be reduced in length if necessary; this correction should be carried out when the position of the adjustable adaptor in the spindle nose corresponds with the maximum wear of the tool.

1) At present at the stage of draft.