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# INTERNATIONAL STANDARD



# 2964

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

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## Aircraft — Tubing outside diameters and thicknesses — Metric dimensions

*Aéronefs — Diamètres extérieurs et épaisseurs des tubes — Dimensions métriques*

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**Descriptors** : aircraft equipment, tubes, metal tubes, dimensions, diameters, thicknesses.

## FOREWORD

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO Member Bodies). The work of developing International Standards is carried out through ISO Technical Committees. Every Member Body interested in a subject for which a Technical Committee has been set up has the right to be represented on that Committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work.

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 2964 was drawn up by Technical Committee ISO/TC 20, *Aircraft and space vehicles*, and circulated to the Member Bodies in January 1973.

It has been approved by the Member Bodies of the following countries :

Australia	Germany	Romania
Austria	India	South Africa, Rep. of
Belgium	Italy	Spain
Brazil	Japan	Thailand
Canada	Mexico	Turkey
Czechoslovakia	Netherlands	United Kingdom
Egypt, Arab Rep. of	New Zealand	U.S.A.
France	Portugal	U.S.S.R.

No Member Body expressed disapproval of the document.

# Aircraft — Tubing outside diameters and thicknesses — Metric dimensions

## 1 SCOPE AND FIELD OF APPLICATION

This International Standard specifies the outside diameters and thicknesses of tubes, for all metallic materials, to be selected for all uses in aircraft structural and system design.

## 2 REFERENCE

ISO 497, *Guide to the choice of series of preferred numbers and of series containing more rounded values of preferred numbers*.

## 3 DIMENSIONS

The outside diameters and thicknesses of the tubes shall be selected from those specified in the table.

NOTE — The dimensions given in the table have been selected from the series of preferred numbers and rounded according to ISO 497. They are arranged in columns and lines in the order of the series of preferred numbers.

Whenever possible the tube size requirements shall be rationalized on the R10 series of dimensions. The R20 and R40 series of dimensions have been introduced to cater for the mainly structural problems of mating tubes and shall only be used when absolutely essential; the R20 series shall then be considered before the R40 series.

## 4 TOLERANCES

The tolerances shall be specified in the relevant standards appropriate to the material and intended application.