

Transformed

ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION

R 544

**DIAMETERS AND TOLERANCES FOR ELECTRODES
FOR MANUAL ARC WELDING
AND FILLER METALS FOR GAS WELDING**

1st EDITION

January 1967

COPYRIGHT RESERVED

The copyright of ISO Recommendations and ISO Standards belongs to ISO Member Bodies. Reproduction of these documents, in any country, may be authorized therefore only by the national standards organization of that country, being a member of ISO.

For each individual country the only valid standard is the national standard of that country.

Printed in Switzerland

Also issued in French and Russian. Copies to be obtained through the national standards organizations.

BRIEF HISTORY

The ISO Recommendation R 544, *Diameters and Tolerances for Electrodes for Manual Arc Welding and Filler Metals for Gas Welding*, was drawn up by Technical Committee ISO/TC 44, *Welding*, the Secretariat of which is held by the Association Française de Normalisation (AFNOR).

Work on this question by the Technical Committee began in 1949 and led, in 1953, to the adoption of a Draft ISO Recommendation.

In September 1957, this Draft ISO Recommendation (No. 179) was circulated to all the ISO Member Bodies for enquiry. It was approved, subject to a few modifications of an editorial nature, by the following Member Bodies:

Australia	Greece	Portugal
Belgium	India	Romania
Bulgaria	Israël	Spain
Burma	Italy	Sweden
Czechoslovakia	Japan	Switzerland
Denmark	New Zealand	United Kingdom
Finland	Norway	U.S.S.R.
France	Poland	Yugoslavia

Two Member Bodies opposed the approval of the Draft:

Netherlands
Republic of South Africa

The Draft ISO Recommendation was then submitted by correspondence to the ISO Council, which decided, in January 1967, to accept it as an ISO RECOMMENDATION.

**DIAMETERS AND TOLERANCES FOR ELECTRODES
FOR MANUAL ARC WELDING
AND FILLER METALS FOR GAS WELDING**

1. DIAMETERS

The diameters of electrodes for manual arc welding and filler metals for gas welding should have the following values, expressed in millimetres, taken from the series of preferred numbers R 10:

1 — 1.25 — 1.6 — 2 — 2.5 — 3.15 — 4 — 5 — 6.3 — 8 — 10 — 12.5

2. TOLERANCES

The tolerances on diameters of electrodes for manual arc welding and filler metals for gas welding should have the following values:

Electrodes for manual arc welding

± 3% of the diameter with a maximum of ± 0.1 mm.

Filler metals for gas welding

± 3% of the diameter.

—————