

ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION R 1106

RECOMMENDED PRACTICE FOR RADIOGRAPHIC INSPECTION
OF FUSION WELDED BUTT JOINTS FOR STEEL PLATES
UP TO 50 mm (2 in) THICK

1st EDITION

September 1969

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BRIEF HISTORY

The ISO Recommendation R 1106, *Recommended practice for radiographic inspection of fusion welded butt joints for steel plates up to 50 mm (2 in) thick*, 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 led to the adoption of a Draft ISO Recommendation.

In April 1967, this Draft ISO Recommendation (No. 1166) 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	Ireland	South Africa, Rep. of
Austria	Israel	Spain
Belgium	Japan	Sweden
Canada	Korea, Rep. of	Switzerland
Czechoslovakia	Netherlands	Turkey
Denmark	New Zealand	United Kingdom
Finland	Norway	U.S.A.
France	Poland	U.S.S.R.
Greece	Portugal	Yugoslavia
India	Romania	

One Member Body opposed the approval of the Draft :

Germany

The Draft ISO Recommendation was then submitted by correspondence to the ISO Council, which decided, in September 1969, to accept it as an ISO RECOMMENDATION.

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INTRODUCTION

The increasing use of X-rays and gamma-rays for the examination of welded joints has made it desirable to issue ISO Recommendations of a general character giving guidance on the application of these methods in order to attain satisfactory sensitivity in the test itself.

In the present state of knowledge of radiographic inspection of welds, it is undesirable to impose strict rules to be followed in order to obtain the best results; the final result depends upon many variables, for example the characteristics of the X-ray equipment or radioactive source, the characteristics of films and screens, and the characteristics and accessibility of welds.

However, it is possible, within certain limits, to assess the radiographic quality by means of such devices as image quality indicators (I.Q.I), which are specified in ISO Recommendation R 1027, *Radiographic image quality indicators – Principles and identification*.

1. SCOPE

This ISO Recommendation provides general guidance on the techniques of radiography with the object of enabling satisfactory results to be obtained and it enunciates some rules which are based on generally accepted practice and the fundamental theory of the subject.

2. FIELD OF APPLICATION

This ISO Recommendation relates to the examination of fusion welded butt joints in steel plate up to 50 mm (2 in) in thickness.

It should not be regarded as giving acceptance standards for joints and is concerned only with radiography as such.

3. DEFINITIONS

Definitions of the principal terms concerning radiographic techniques used in this ISO Recommendation are indicated in an Appendix published separately under the title *Explanations on the significance of the principal radiographic terms used in ISO Recommendations concerning welding*.