

# INTERNATIONAL STANDARD



# 3041

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

## Welding requirements — Categories of service requirements for welded joints

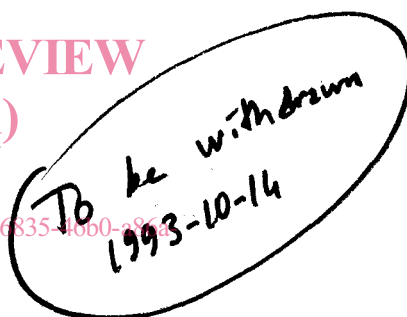
*Exigences relatives au soudage — Catégories d'exigences en service des joints soudés*

First edition — 1975-02-15

**STANDARD PREVIEW**  
(standards.iteh.ai)

[ISO 3041:1975](https://standards.iteh.ai/catalog/standards/sist/40acba6d-6835-4660-a863-592d98d56711/iso-3041-1975)

<https://standards.iteh.ai/catalog/standards/sist/40acba6d-6835-4660-a863-592d98d56711/iso-3041-1975>



UDC 621.791

Ref. No. ISO 3041-1975 (E)

**Descriptors :** welding, welded joints, specifications, operating requirements.

Price based on 1 page

## 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 3041 was drawn up by Technical Committee ISO/TC 44, *Welding*, and circulated to the Member Bodies in October 1973.

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

Australia	Germany	ISO 3041:1975
Belgium	India	South Africa, Rep. of
Bulgaria	Ireland	Spain
Chile	Israel	Switzerland
Czechoslovakia	Italy	Thailand
Egypt, Arab Rep. of	Japan	Turkey
Finland	Mexico	U.S.S.R.
France	Romania	Yugoslavia

The Member Body of the following country expressed disapproval of the document on technical grounds :

United Kingdom

The definition of requirements for welded joints should be such that it results in welded joints the level of quality of which is independent of the country in which they are made and/or of the inspecting authority inspecting them.

This International Standard on service requirements has been drawn up as one of a series of documents on the unification of welding requirements; its aim is to ensure that significant differences in the final welded connection will not arrive due to failure to specify the requirements adequately.

This document is not merely a list of service requirements but contains information to enable a body using the document to determine the relevance of each variable to the particular fabrication under its review.

The application committees should use these factors for guidance in the preparation of specifications for particular types of construction, for example pressure vessels, structures, handling and lifting appliances, shipbuilding, mechanical engineering, transport equipment, etc.

Although the contents are not mandatory, it would be the application committees' task to determine how far the items are relevant to the various welded connections under their consideration.

<https://standards.iteh.ai/catalog/standards/sist/40acba6d-6835-46b0-a86a-1975>

This International Standard contains no levels of acceptability, as such levels vary greatly according to the various applications. Such parameters should be specified by the application committees.

For further information, see ISO 3088, *Welding requirements – Factors to be considered in specifying requirements for fusion welded joints in steel (technical influencing factors)*.<sup>1)</sup>

1) At present at the stage of draft.

# **iTeh STANDARD PREVIEW** **(standards.iteh.ai)**

ISO 3041:1975

<https://standards.iteh.ai/catalog/standards/sist/40acbafd-6835-46b0-a86a-592d98d56711/iso-3041-1975>

# Welding requirements — Categories of service requirements for welded joints

iTeh STANDARD PREVIEW  
(standards.iteh.ai)

## 1 SCOPE

This International Standard defines four service requirements for welded joints depending on the severity of requirements to be ensured and on the importance of the consequences which might result from a failure.

## 2 FIELD OF APPLICATION

The service requirements listed apply to welded joints between metal parts.

## 3 FACTORS TO BE TAKEN INTO CONSIDERATION WHEN DEFINING SERVICE REQUIREMENTS

It is the responsibility of designers to fix the service requirement for each welded joint. These requirements depend on the following three main factors :

- a) the degree of certainty which must be obtained that the joint will perform satisfactorily for its design life;
- b) the consequences of failure;
- c) the factors influencing the performance of the joint.

## 4 CATEGORIES OF SERVICE REQUIREMENT

### 4.1 Service requirement Type 1

This concerns joints which must perform satisfactorily under most severe conditions and/or those the failure of which would have any catastrophic consequences.

### 4.2 Service requirement Type 2

This concerns joints which must perform satisfactorily under severe conditions (these are joints the failure of which would result in complete failure of the main operational function of the construction).

### 4.3 Service requirement Type 3

This concerns joints which must perform satisfactorily under average conditions (these are joints the failure of which would affect the efficient performance of the construction as a whole).

### 4.4 Service requirement Type 4

This concerns joints which must perform satisfactorily under non-critical conditions (these are joints the failure of which would not affect the efficient performance of the construction as a whole).