International Standard

ISO 7539-6

Fourth edition
2018-08

AMENDMENT 1
2024-04

Corrosion of metals and alloys — Stress corrosion testing —

Part 6: Preparation and use of precracked specimens for tests under constant load or constant displacement

AMENDMENT 1

Corrosion des métaux et alliages — Essais de corrosion sous contrainte —

Partie 6: Préparation et utilisation des éprouvettes préfissurées pour essais sous charge constante ou sous déplacement constant

AMENDEMENT 1

Reference number
ISO 7539-6:2018/Amd.1:2024(en)

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established 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. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

ISO draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). ISO takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, ISO had not received notice of (a) patent(s) which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at www.iso.org/patents. ISO shall not be held responsible for identifying any or all such patent rights.

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 156, *Corrosion of metals and alloys*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 262, *Metallic and other inorganic coatings, including for corrosion protection and corrosion testing of metals and alloys*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

A list of all parts in the ISO 7539 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Corrosion of metals and alloys — Stress corrosion testing —

Part 6: Preparation and use of precracked specimens for tests under constant load or constant displacement

AMENDMENT 1

3.7

Add the following Note 1 to entry:

The increase in V_{LL} (δV_{LL}) upon application of *load* (3.6) from zero load is the crack opening displacement produced at the loading line.

3.8

Add the following Note 1 to entry:

The increase in V_0 (δV_0) upon application of *load* (3.6) from zero load is the crack opening displacement produced at a location remote from the loading plane, e.g. at knife edges located at the notch mouth.

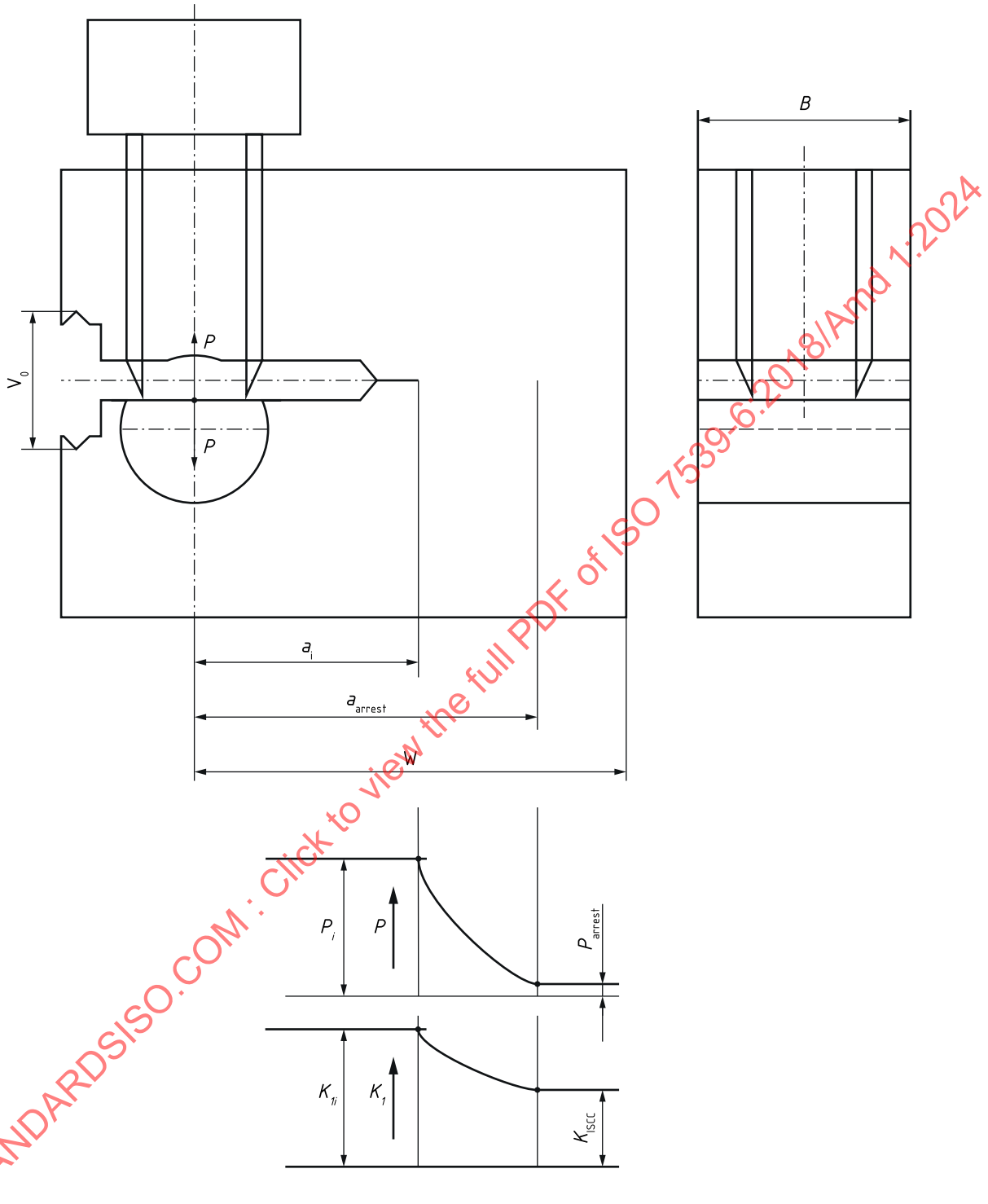
Figure 10

Replace the formula with the following:

$$K_I = \frac{\delta V_{LL} E H \left[3H(a+0{,}6H)^2 + H^3 \right]^{1/2}}{4\left[(a+0{,}6H)^3 + H^2 a \right]}$$

Figure 11

Replace Figure 11 with the following figure:



Add the following text below the superscript "[a]":

Where force is measured, the stress intensity factor is given by

$$K_I = \frac{YP}{B\sqrt{a}}$$