

**REPORT**

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**RAPPORT**

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**Destructive tests on welds in metallic materials -  
Etchants for macroscopic and microscopic  
examination**

**Essais destructifs des soudures sur  
matériaux métalliques - Réactifs  
pour examen macroscopique et  
microscopique**

**Zerstörende Prüfung von  
Schweißnähten an metallischen  
Werkstoffen - Ätzungen für die  
makroskopische und mikroskopische  
Untersuchung**

This CEN REPORT has been prepared by Technical Committee CEN/TC 121 "Welding" and has been approved by CEN on 1996-03-14.

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## **Foreword**

This technical report was prepared by the technical committee CEN/TC 121 "Welding", of which the secretariat is held by DS.

The technical committee agreed to publish this technical report.

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## 1 Scope

This technical report gives a non exhaustive list of etchants which can be used for the macroscopic and microscopic examination of welds in accordance with EN 1321 for the following groups of materials :

- carbon and low alloyed steels ;
- stainless steels ;
- nickel and nickel alloys ;
- titanium and titanium alloys ;
- copper and copper alloys ;
- aluminium and aluminium alloys.

## 2 Normatives references

This european technical report incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this european technical report only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

EN 1321	Destructive tests on welds in metallic materials - Macroscopic and microscopic examination of welds
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## 3 General

Where details of concentration or waters of crystallisation of reagents are not defined in the annexes, the table 1 apply. These should be confirmed by the suppliers of each etchant.