

CONTEC

Comissão de Normalização
Técnica

SC-27

Non Destructive Tests

**Alloys and Metal
- Identification - Photographic Standards**

Revalidation

Revalidated in 12/2010.

ALLOYS AND METAL - IDENTIFICATION - PHOTOGRAPHIC STANDARDS

Standardization

This Standard replaces and cancels its previous revision.

The CONTEC - Authoring Subcommittee provides guidance on the interpretation of this Standard when questions arise regarding its contents. The Department of PETROBRAS that uses this Standard is responsible for adopting and applying the clauses thereof.

Technical Requirement: a provision established as the most adequate and which shall be used strictly in accordance with this Standard. If a decision is taken not to follow the requirement ("non-conformity" to this Standard) it shall be based on well-founded economic and management reasons, and be approved and registered by the Department of PETROBRAS that uses this Standard. It is characterized by the verb forms "shall," "it is necessary...," "is required to...," "it is required that...," "is to...," "has to...," "only ... is permitted," and other equivalent expressions having an imperative nature.

Recommended Practice: a provision that may be adopted under the conditions of this Standard, but which admits (and draws attention to) the possibility of there being a more adequate alternative (not written in this Standard) to the particular application. The alternative adopted shall be approved and registered by the Department of PETROBRAS that uses this Standard. It is characterized by the verbal form "should" and equivalent expressions such as "it is recommended that..." and "ought to..." (verbs of a nonmandatory nature). It is indicated by the expression: **[Recommended Practice]**.

Copies of the registered "non-conformities" to this Standard that may contribute to the improvement thereof shall be submitted to the CONTEC - Authoring Subcommittee.

Proposed revisions to this Standard shall be submitted to the CONTEC - Authoring Subcommittee, indicating the alphanumeric identification and revision of the Standard, the clause(s) to be revised, the proposed text, and technical/economic justification for revision. The proposals are evaluated during the work for alteration of this Standard.

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Introduction

PETROBRAS Technical Standards are prepared by Working Groups – GTs (consisting of specialists from PETROBRAS and its Subsidiaries), are commented by PETROBRAS Units and PETROBRAS Subsidiaries, are approved by the Authoring Subcommittees - SCs (consisting of specialists from the same specialty, representing the various PETROBRAS Units and PETROBRAS Subsidiaries), and ratified by the CONTEC Plenary Assembly (consisting of representatives of the PETROBRAS Units and PETROBRAS Subsidiaries). A PETROBRAS Technical Standard is subject to revision at any time by its Authoring Subcommittee and shall be reviewed every 5 years to be revalidated, revised or cancelled. PETROBRAS Technical Standards are prepared in accordance with standard PETROBRAS N-1. For complete information about PETROBRAS Technical Standards see PETROBRAS Technical Standards Catalog.

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FOREWORD

This Standard PETROBRAS N-2508 REV. A MAY/2003 is the Standard PETROBRAS N-2508 AUG/93, with no alteration in its contents.

1 SCOPE

1.1 This Standard sets out a standardization method for photographic records of magnet and Spot Testing for alloys and metals.

1.2 This Standard applies to standardizations started from the date of its edition.

1.3 This Standard contains only Technical Requirements.

2 SUPPLEMENTARY DOCUMENTS

The documents listed below are mentioned in the text and contain valid requirements for the present Standard.

PETROBRAS N-1590	- Ensaio Não-Destrutivo - Qualificação de Pessoal;
PETROBRAS N-1591	- Ligas Metálicas e Metais - Identificação Através de Testes Pelo Imã e por Pontos;;
PETROBRAS N-1592	- Non-Destructive Testing - Identification of Materials.

Note: For documents referred in this Standard and for which only the Portuguese version is available, the PETROBRAS department that uses this Standard should be consulted for any information required for the specific application.

3 DEFINITIONS

For the purposes of this Standard the definitions this Standards PETROBRAS [N-1591](#) and [N-1592](#) are adopted.

4 IDENTIFIABLE MATERIALS

Classes of materials identified in this Standard are those set forth in Standard PETROBRAS [N-1591](#). The tests included in this Standard are the following:

- a) QS.01 – Nitric Acid Passivation Test;
- b) QS.02 – Ferrous Alloys Identification Test;
- c) QS.03 – Cast Iron Identification Test;
- d) QS.04 – Molybdenum Identification Test;
- e) QS.05 – Nickel Identification Test;
- f) QS.06 – Chrome Identification Test;
- g) QS.07 – Low Molybdenum Identification Test;
- h) QS.08 – Low Nickel Identification Test;
- i) QS.09 – Copper Sulphate Test;
- j) QS.10 – Copper Identification Test;