

CONTEC

Comissão de Normalização
Técnica

SC-08

Fired Heaters

Air Preheater - Data Sheet

Revalidation

Revalidated in 03/2017.

Air Preheater - Data Sheet

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 sections, subsections and enumerates 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 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 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 section, subsection and enumerate to be revised, the proposed text, and technical/economic justification for revision. The proposals are evaluated during the work for alteration of this Standard.

"The present Standard is the exclusive property of PETRÓLEO BRASILEIRO S.A. - PETROBRAS, for internal use in the Company, and any reproduction for external use or disclosure, without previous and express authorization from the owner, will imply an unlawful act pursuant to the relevant legislation through which the applicable responsibilities shall be imputed. External circulation shall be regulated by a specific clause of Secrecy and Confidentiality pursuant to the terms of intellectual and industrial property law."

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Introduction

PETROBRAS Technical Standards are prepared by Working Groups - WG (consisting specialized of Technical Collaborators from Company and its Subsidiaries), are commented by Company Units and its Subsidiaries, are approved by the Authoring Subcommittees - SCs (consisting of technicians from the same specialty, representing the various Company Units and its Subsidiaries), and ratified by the Executive Nucleus (consisting of representatives of the Company Units and its 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 PETROBRAS Technical Standard [N-1](#). For complete information about PETROBRAS Technical Standards see PETROBRAS Technical Standards Catalog.

Foreword

This Standard is the English version (issued in 01/2011) of PETROBRAS N-1554 REV. F 06/2010. In case of doubt, the Portuguese version, which is the valid document for all intents and purposes, shall be used.

1 Scope

1.1 This Standard standardizes two Data Sheet forms in the Annexes A and B for air preheater, to be used in the PETROBRAS designs.

1.2 This Standard applies to designs starting from its issue date.

1.3 This Standard only contains Technical Requirements.

2 Normative References

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

PETROBRAS [N-381](#) - Execution of Drawing and Other General Technical Documents;

PETROBRAS [N-1521](#) - Identification of Industrial Equipment;

PETROBRAS [N-1671](#) - Design and Fabrication of Fired Heater;

ABNT [NBR 10778](#) - Forno Tubular Sujeito a Chama;

[ISO 13705](#) - Petroleum, Petrochemical and Natural Gas Industries - Fired Heaters for General Refinery Service;

NOTE 1 The [ISO 13705](#) standard has identical contents to the [API STD 560](#) - Petroleum, Petrochemical and Natural Gas Industries - Fired Heaters for General Refinery Service.

NOTE 2 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 General Requirements

3.1 The [ISO 13705](#) data sheet forms based this Standard.

3.2 The Data Sheet in the Annexes A and B are used to record the purchaser's requirements and the design details of the supplier and, after filled out, it shall constitute a permanent document for the equipment.

3.3 The Data Sheet forms in the Annexes A and B are standardized in the A4 size as shown in the:

- a) Annex A: form with units in the Engineering System;
- b) Annex B: form with units in the International System of Units - SI.

3.4 The requirements of PETROBRAS [N-381](#) shall be met for filling out the heading and footnote of the Data Sheet in the Annexes A and B.

3.5 The applicable Annex of PETROBRAS [N-381](#) shall be used if additional space is required for continuing any item which does not fit in the Annex A or B here to.

3.6 The tag number of the equipment with air preheater shall be in accordance with PETROBRAS [N-1521](#) and inserted in the heading space reserved for the title Air Preheater, on the right hand corner.

3.7 PETROBRAS [N-1671](#) and ABNT [NBR 10778](#) shall be used for filling out the Data Sheet in the Annexes A and B.

3.8 In the filling of Data Sheet in the Annexes A and the B the following requirements shall be followed:

- a) to only fill the applicable fields, eliminating, with a horizontal trace, the not applicable fields to the specific project;
- b) in the blank lines, to add eventual complementary data of the specific project.

3.9 The Annexes A and B of this Standard are constituted by two forms conform 3.3. Primary reproduced forms can be supplied by CONTEC. These forms can be available in the site:

<http://nortec.engenharia.petrobras.com.br/formzip/NI-1554F.zip>