

Air-Cooled Heat Exchangers for General Refinery Service

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ISO 13706-1:2005, (Identical) Petroleum,
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Air-cooled heat exchangers



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Contents

	Page
API Foreword	ii
Foreword	v
Introduction	vi
1 Scope	1
2 Normative references	2
3 Terms and definitions	2
4 General	4
5 Proposals	5
6 Documentation	5
6.1 Approval information	5
6.2 Final records	6
7 Design	7
7.1 Tube bundle design	7
7.2 Air-side design	19
7.3 Structural design	30
8 Materials	35
8.1 General	35
8.2 Headers	36
8.3 Louvres	36
8.4 Other components	36
9 Fabrication of tube bundle	37
9.1 Welding	37
9.2 Post-weld heat treatment	37
9.3 Tube-to-tubesheet joints	37
9.4 Gasket contact surfaces	39
9.5 Thread lubrication	39
9.6 Alignment and tolerances	39
9.7 Assembly	39
10 Inspection, examination and testing	41
10.1 Quality control	41
10.2 Pressure test	42
10.3 Shop run-in	42
10.4 Equipment performance testing	42
10.5 Nameplates	42
11 Preparation for shipment	42
11.1 General	42
11.2 Surfaces and finishes	43
11.3 Identification and notification	43
12 Supplemental requirements	43
12.1 General	43
12.2 Design	43
12.3 Examination	44
12.4 Testing	44
Annex A (informative) Recommended practices	45
Annex B (informative) Checklist, data sheets and electronic data exchange	49

Annex C (informative) Winterization of air-cooled heat exchangers..... 66
Bibliography 115

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Foreword

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The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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ISO 13706 was prepared by Technical Committee ISO/TC 67, *Materials, equipment and offshore structures for petroleum, petrochemical and natural gas industries*, Subcommittee SC 6, *Processing equipment and systems*.

This second edition cancels and replaces the first edition (ISO 13706:2000), which has been technically revised.

Introduction

Users of this International Standard should be aware that further or differing requirements may be needed for individual applications. This International Standard is not intended to inhibit a vendor from offering, or the purchaser from accepting, alternative equipment or engineering solutions for the individual application. This may be particularly applicable where there is innovative or developing technology. Where an alternative is offered, the vendor should identify any variations from this International Standard and provide details.

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Petroleum, petrochemical and natural gas industries — Air-cooled heat exchangers

1 Scope

This International Standard gives requirements and recommendations for the design, materials, fabrication, inspection, testing and preparation for shipment of air-cooled heat exchangers for use in the petroleum and natural gas industries.

This International Standard is applicable to air-cooled heat exchangers with horizontal bundles, but the basic concepts can also be applied to other configurations.

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.

ISO 76, *Rolling bearings — Static load ratings*

ISO 281, *Rolling bearings — Dynamic load ratings and rating life*

ISO 286 (all parts), *ISO system of limits and fits*

ISO 1081, *Belt drives — V-belts and V-ribbed belts, and corresponding grooved pulleys — Vocabulary*

ISO 1459, *Metallic coatings — Protection against corrosion by hot dip galvanizing — Guiding principles*

ISO 1461, *Hot dip galvanized coatings on fabricated iron and steel articles — Specifications and test methods*

ISO 2491, *Thin parallel keys and their corresponding keyways (Dimensions in millimetres)*

ISO 3744, *Acoustics — Determination of sound power levels of noise sources using sound pressure — Engineering method in an essentially free field over a reflecting plane*

ISO 4183, *Belt drives — Classical and narrow V-belts — Grooved pulleys (system based on datum width)*

ISO 4184, *Belt drives — Classical and narrow V-belts — Lengths in datum system*

ISO 5237, *Belt drives — Narrow V-belts for the automotive industry — Fatigue test*

ISO 5290, *Belt drives — Grooved pulleys for joined narrow V-belts — Groove sections 9N/J, 15N/J and 25N/J (effective system)*

ISO 8501-1, *Preparation of steel substrates before application of paints and related products — Visual assessment of surface cleanliness — Part 1: Rust grades and preparation grades of uncoated steel substrates and of steel substrates after overall removal of previous coatings*