Soojusvahetid. Terminoloogia

Heat exchangers - Terminology



EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 247:1999 sisaldab Euroopa standardi EN 247:1997 ingliskeelset teksti.	This Estonian standard EVS-EN 247:1999 consists of the English text of the European standard EN 247:1997.
Käesolev dokument on jõustatud 12.12.1999 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.	This document is endorsed on 12.12.1999 with the notification being published in the official publication of the Estonian national standardisation organisation.
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English version

Heat exchangers Terminology

Echangeurs thermiques - Terminologie

Wärmeaustauscher - Terminologie

This European Standard was approved by CEN on 1997-01-10.

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Foreword

This European Standard has been prepared by Technical Committee CEN/TC110 "Heat exchangers", the secretariat of which is held by BSI.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by August 1997, and conflicting national standards shall be withdrawn at the latest by August 1997.

The document was implemented previously as a European Prestandard (ENV) in 1990 and no technical changes have been made.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

Introduction

This European Standard is one of a series of European Standards dedicated to heat exchangers.

Heat exchangers are found in an extremely wide variety of production facilities and applications in all fields of industrial activity.

This is the reason why, although a classification of heat exchangers is required, it is impossible to arrive at a classification that would take into account all the elements used in actual conditions. An analysis has therefore been carried out with regard to the fundamental criteria for designing and producing heat exchangers and this analysis has been used as a basis for this terminology.

The function of the heat exchanger in the system in which it is integrated is an important factor in heat exchanger design and a list is presented in annex A to illustrate a few fundamental functions of heat exchangers in certain technological fields.

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1 Scope

The scope of this European Standard is to establish heat exchanger terminology so that consistent terms are used.

For the purposes of this European Standard a heat exchanger is a device, the main function of which is to transfer heat between two fluids, with physical separation by a wall. Heat exchange between a fluid and a solid material (in the case of ovens in particular) is therefore excluded.

2 Definitions

For the purposes of this standard, the following definitions apply:

2.1 parallel flow arrangement: Arrangement in which fluids flow in parallel, in the same direction (see figure 1).



Figure 1: Parallel flow arrangement

2.2 counter flow arrangement: Arrangement in which fluids flow in parallel, in opposite directions (see figure 2).

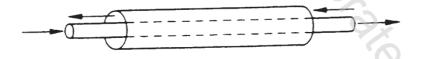


Figure 2: Counter flow arrangement