

IRISH STANDARD

I.S. EN 1473:2007

ICS 75.200

INSTALLATION AND EQUIPMENT FOR
LIQUEFIED NATURAL GAS - DESIGN OF
ONSHORE INSTALLATIONS

National Standards Authority of Ireland Glasnevin, Dublin 9 Ireland

Tel: +353 1 807 3800 Fax: +353 1 807 3838 http://www.nsai.ie

Sales

http://www.standards.ie

This Irish Standard was published under the authority of the National Standards Authority of Ireland and comes into effect on: 21 February 2007

NO COPYING WITHOUT NSAI PERMISSION EXCEPT AS PERMITTED BY COPYRIGHT LAW

© NSAI 2007 Price Code AC

Údarás um Chaighdeáin Náisiúnta na hÉireann

This is a free page sample. Access the full version online.

EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN 1473

January 2007

ICS 75.200

Supersedes EN 1473:1997

English Version

Installation and equipment for liquefied natural gas - Design of onshore installations

Installations et équipements de gaz naturel liquéfié -Conception des installations terrestres Anlagen und Ausrüstung für Flüssigerdgas - Auslegung von landseitigen Anlagen

This European Standard was approved by CEN on 25 November 2006.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: rue de Stassart, 36 B-1050 Brussels

EN 1473:2007 (E)

Contents		Page
Foreword		3
1 Scope		5
2 Normative referen	ces	5
3 Terms and definiti	ons	8
4 Safety and environ	nment	12
5 Jetties and marine	facilities	28
6 Storage and reten	Storage and retention systems	
7 LNG pumps		40
8 Vaporisation of LN	IG	41
9 Pipe-work		44
10 Reception/send or	ut of natural gas	55
11 Boil off recovery a	1 Boil off recovery and treatment plants	
12 Auxiliary circuits	and buildings	59
13 Hazard manageme	ent	64
14 Control and monit	oring systems	74
15 Construction, con	nmissioning and turnaround	78
16 Preservation and	corrosion protection	80
17 Training for opera	tions	80
18 Pre-operational m	arine training	81
Annex A (normative) Ther	mal radiation threshold values	82
Annex B (normative) Defin	nitions of reference flow rates	85
Annex C (informative) Seis	smic classification	89
Annex D (normative) Spec	cific requirements for LNG pumps	91
Annex E (normative) Spec	ific requirements for LNG vaporisers	97
Annex F (normative) Crite	ria for the design of pipes	103
Annex G (informative) Des	cription of the different types of onshore LNG installations	104
Annex H (informative) Def	inition of different types of LNG tanks	106
Annex J (informative) Free	quency ranges	113
Annex K (informative) Cla	sses of consequence	114
Annex L (informative) Lev	els of risk	115
Annex M (informative) Typ	ical process steps of liquefaction	117
Annex N (informative) Odd	ourant systems	126
Bibliography		129

EN 1473:2007 (E)

Foreword

This document (EN 1473:2007) has been prepared by Technical Committee CEN/TC 282 "Installation and equipment for LNG", the secretariat of which is held by AFNOR.

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 July 2007, and conflicting national standards shall be withdrawn at the latest by July 2007.

This document supersedes EN 1473:1997.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

EN 1473:2007 (E)

Introduction

The objective of this European Standard is to give functional guidelines for LNG installations. It recommends procedures and practices that will result in safe and environmentally acceptable design, construction and operation of LNG plants. It need not be applied retrospectively, but application is recommended when major modifications of existing installations are being considered.



The is a new provider i arenade and chare publication at the limit below	This is a free preview.	Purchase the	entire publication	at the link below:
--	-------------------------	--------------	--------------------	--------------------

Product Page

- Dooking for additional Standards? Visit Intertek Inform Infostore
- Dearn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation