

Institut luxembourgeois de la normalisation de l'accréditation, de la sécurité et qualité des produits et services

**ILNAS-EN ISO 22580:2021** 

Flares for combustion of biogas (ISO 22580:2020)

Torchères pour la combustion du biogaz (ISO 22580:2020)

Fackeln für Biogasanlagen (ISO 22580:2020)

#### **National Foreword**

This European Standard EN ISO 22580:2021 was adopted as Luxembourgish Standard ILNAS-EN ISO 22580:2021.

Every interested party, which is member of an organization based in Luxembourg, can participate for FREE in the development of Luxembourgish (ILNAS), European (CEN, CENELEC) and International (ISO, IEC) standards:

- Participate in the design of standards
- Foresee future developments
- Participate in technical committee meetings

https://portail-qualite.public.lu/fr/normes-normalisation/participer-normalisation.html

#### THIS PUBLICATION IS COPYRIGHT PROTECTED

Nothing from this publication may be reproduced or utilized in any form or by any mean - electronic, mechanical, photocopying or any other data carries without prior permission!

## EUROPEAN STANDARD ILNAS-EN ISO 22580:20 EN ISO 22580

# NORME EUROPÉENNE

### **EUROPÄISCHE NORM**

December 2021

ICS 27.190

#### **English Version**

#### Flares for combustion of biogas (ISO 22580:2020)

Torchères pour la combustion du biogaz (ISO 22580:2020)

Fackeln für Biogasanlagen (ISO 22580:2020)

This European Standard was approved by CEN on 29 November 2021.

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-CENELEC 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-CENELEC Management Centre has the same status as the official versions.

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



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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Contents	Page
European foreword	3

#### **European foreword**

The text of ISO 22580:2020 has been prepared by Technical Committee ISO/TC 255 "Biogas" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 22580:2021 by Technical Committee CEN/TC 408 "Natural gas and biomethane for use in transport and biomethane for injection in the natural gas grid" 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 June 2022, and conflicting national standards shall be withdrawn at the latest by June 2022.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

Any feedback and questions on this document should be directed to the users' national standards body. A complete listing of these bodies can be found on the CEN website.

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, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

#### **Endorsement notice**

The text of ISO 22580:2020 has been approved by CEN as EN ISO 22580:2021 without any modification.

# THERMATIONAL STANDARD

ISO 22580

First edition 2020-07

## Flares for combustion of biogas

Torchères pour les installations de biogaz





#### **COPYRIGHT PROTECTED DOCUMENT**

© ISO 2020

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office CP 401 • Ch. de Blandonnet 8 CH-1214 Vernier, Geneva Phone: +41 22 749 01 11 Email: copyright@iso.org Website: www.iso.org

Published in Switzerland

Contents		Page	
Fore	word		iv
Intr	oduction	1	<b>v</b>
1	Scope		1
2	Norm	ative references	1
3	Terms and definitions		
4		eviated terms	
5		ifications of flares for combustion of biogas	
6		n and construction of flares for combustion of biogas	4
	6.1 6.2	Efficiency of the flare  Pressure	
	6.3	Air supply and gas flow	
	6.4	Pilot burner	
	6.5	Treatment of the gas	
	6.6	Materials	
	6.7	Flame arresters	
	6.8	Burner control unit, ignition transformer, flame monitoring device	6
	6.9	Safety valves and other valves	
	6.10	Control system	
	6.11	Flow measuring and gas analysis	7
	6.12	Condensate removal	
	6.13	Insulation and heating	
	6.14	Heat protection	
	6.15 6.16	Buildings and cabinets	
	6.17	Strength and stability calculations	
	6.18	Distances to other objects	
7	Onera	ations and maintenance requirements	9
•	7.1	Operations and maintenance manual	9
	7.2	Testing of the flare	
	7.3	Operation of the flare	
	7.4	Maintenance and inspection of the flare	10
Bibl	iography	y	12