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jäätõrje/jäätumiskontrolliseadmed KONSOLIDEERITUD  
TEKST**

Aircraft ground support equipment - Specific requirements -  
Part 6: Deicers and deicing/antiicing equipment  
CONSOLIDATED TEXT

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 12312-6:2004+A1:2009 sisaldab Euroopa standardi EN 12312-6:2004+A1:2009 ingliskeelset teksti.

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English Version

## Aircraft ground support equipment - Specific requirements - Part 6: Deicers and deicing/antiicing equipment

Matériel au sol pour aéronefs - Exigences particulières -  
Partie 6: Dégivreuses, matériels de dégivrage et  
d'antigivrage

Lufffahrt-Bodengeräte - Besondere Anforderungen - Teil 6:  
Enteiser und Enteisungs-/Vereisungsschutzgeräte

This European Standard was approved by CEN on 24 March 2004 and includes Amendment 1 approved by CEN on 1 March 2009.

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EUROPEAN COMMITTEE FOR STANDARDIZATION  
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Management Centre: Avenue Marnix 17, B-1000 Brussels

# Contents

	page
Foreword.....	4
1 Scope .....	6
2 Normative references .....	6
3 Terms and definitions .....	7
4 List of significant hazards .....	8
5 Safety requirements and/or measures .....	8
5.1 General requirements.....	8
5.2 Spray system.....	8
5.3 Stability and strength .....	9
5.4 Safeguards and safety devices .....	10
5.5 Emergency systems .....	10
5.6 Operator's cabin .....	11
5.7 Controls, monitoring devices and displays .....	11
5.8 Lights .....	11
5.9 Fire protection.....	11
5.10 Protection against heat.....	11
5.11 Protection against poisoning .....	12
5.12 Special requirements for deicers .....	12
5.13 Operating speeds.....	12
5.14 Warning devices for stationary deicing/antiicing equipment .....	12
6 Information for use .....	13
6.1 Marking .....	13
6.2 Additional marking .....	13
6.2.1 Additional marking for deicers.....	13
6.2.2 Additional marking for stationary deicing/antiicing equipment .....	13
6.3 Instructions .....	13
7 Verification of requirements .....	14
Annex A (normative) List of significant hazards in addition to those of EN 1915-1 .....	15
Annex B (informative) Fluid system .....	17
B.1 General.....	17
B.2 Functional information.....	17
B.2.1 General.....	17
B.2.2 Size/design of deicing equipment.....	17
B.3 Recommendations for fluid systems .....	18
B.3.1 General.....	18
B.3.2 Fluid tanks .....	18
B.3.3 Pipe and pump system.....	18
B.3.4 Nozzle, spraying equipment .....	19
B.3.5 Heating.....	19
B.3.6 Mixing systems .....	19
B.4 Verification of fluid system functions .....	20
B.4.1 General.....	20
B.4.2 Verification of accuracy of a fluid mixing system .....	20
B.4.3 Verification of fluid system concerning degradation of Non-Newtonian (pseudoplastic) fluid .....	20
B.4.4 Verification of accuracy of a fluid metering system .....	21
Annex C (informative) Toxicological aspects of using deicing/antiicing equipment.....	22
C.1 General.....	22
C.2 Systems and training of operators .....	22
C.2.1 General.....	22
C.2.2 Design of the spraying equipment.....	23
C.2.3 Training of operators.....	23
C.3 Effects on humans.....	24
C.3.1 Toxicity of glycols .....	24

<b>C.3.2</b>	<b>Work environment considerations</b> .....	<b>24</b>
<b>C.3.3</b>	<b>Aircraft internal environment considerations</b> .....	<b>25</b>
<b>C.4</b>	<b>Recommendations</b> .....	<b>25</b>
<b>Annex D</b>	<b>(informative) Environmental aspects of deicing/antiicing at airports</b> .....	<b>26</b>
<b>D.1</b>	<b>General</b> .....	<b>26</b>
<b>D.2</b>	<b>Environmental protection</b> .....	<b>26</b>
<b>D.2.1</b>	<b>General</b> .....	<b>26</b>
<b>D.2.2</b>	<b>Collection of glycol</b> .....	<b>27</b>
<b>D.2.3</b>	<b>Treatment of glycol</b> .....	<b>27</b>
<b>D.3</b>	<b>Environmental effects of deicing/antiicing fluids</b> .....	<b>29</b>
<b>D.3.1</b>	<b>General</b> .....	<b>29</b>
<b>D.3.2</b>	<b>Effects on aquatic environment</b> .....	<b>29</b>
<b>D.3.3</b>	<b>Effects on soil environment</b> .....	<b>29</b>
<b>D.4</b>	<b>Recommendations</b> .....	<b>30</b>
<b>Annex E</b>	<b>(informative) Loading control</b> .....	<b>31</b>
<b>Annex ZA</b>	<b>(informative) Relationship between this European Standard and the Essential Requirements of EU Directive 98/37/EC, amended by Directive 98/79/EC</b> .....	<b>32</b>
<b>Annex ZB</b>	<b>(informative) <math>\square_{A1}</math> Relationship between this European Standard and the Essential Requirements of EU Directive 2006/42/EC <math>\square_{A1}</math></b> .....	<b>33</b>
<b>Bibliography</b>	.....	<b>34</b>

## Foreword

This document (EN 12312-6:2004+A1:2009) has been prepared by Technical Committee CEN/TC 274 "Aircraft ground support equipment", the secretariat of which is held by DIN.

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 October 2009, and conflicting national standards shall be withdrawn at the latest by December 2009.

This document includes Amendment 1, approved by CEN on 2009-03-01.

This document supersedes EN 12312-6:2004.

The start and finish of text introduced or altered by amendment is indicated in the text by tags  $\boxed{A_1}$   $\boxed{A_1}$ .

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association and supports essential requirements of EU Directive(s).

$\boxed{A_1}$  For relationship with EU Directive(s), see informative Annexes ZA and ZB, which are integral parts of this document.  $\boxed{A_1}$

The Parts of EN 12312 — Aircraft ground support equipment — Specific requirements — are:

- Part 1: Passenger stairs
- Part 2: Catering vehicles
- Part 3: Conveyor belt vehicles
- Part 4: Passenger boarding bridges
- Part 5: Aircraft fuelling equipment
- Part 6: Deicers and deicing/antiicing equipment
- Part 7: Aircraft movement equipment
- Part 8: Maintenance stairs and platforms
- Part 9: Container/Pallet loaders
- Part 10: Container/Pallet transfer transporters
- Part 11: Container/Pallet dollies and loose load trailers
- Part 12: Potable water service equipment
- Part 13: Lavatory service equipment
- Part 14: Disabled/incapacitated passenger boarding equipment
- Part 15: Baggage and equipment tractors
- Part 16: Air start equipment
- Part 17: Air conditioning equipment
- Part 18: Nitrogen or Oxygen units
- Part 19: Aircraft jacks, axle jacks and hydraulic tail stanchions
- Part 20: Ground power equipment

Annex A is normative. Annexes B, C, D and E are informative.

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.

## Introduction

This European Standard specifies health and safety requirements, as well as some functional and performance requirements, for deicers and equipment intended for deicing/antiicing of all aircraft types commonly in service in civil air transport. It contains functional and environmental aspects of deicing in the informative annexes B, C and D.

The minimum essential criteria are considered to be of primary importance in providing safe, serviceable, economical, and usable deicers and deicing/antiicing equipment. Deviation from the recommended criteria should occur only after careful consideration, extensive testing, risk assessment and thorough service evaluation have shown alternative methods or conditions to be satisfactory.

This document is a Type C standard as stated in  EN ISO 12100 .

The machinery concerned and the extent to which hazards, hazardous situations and events are covered are indicated in the scope of this document.

When provisions of this type C standard are different from those which are stated in type A or B standards, the provisions of this type C standard take precedence over the provisions of the other standards, for machines that have been designed and built according to the provisions of this type C standard.

## 1 Scope

This European Standard specifies the technical requirements to minimise the hazards listed in clause 4 which can arise during the commissioning, operation and maintenance of deicers and equipment designed exclusively for deicing and washing of aircraft with deicing/antiicing/washing liquids when carried out in accordance with the specifications given by the manufacturer or his authorised representative. It also takes into account some performance requirements recognised as essential by authorities, aircraft and GSE manufacturers as well as airlines and handling agencies.

NOTE Safety of aircraft in connection with deicing/antiicing operations is not dealt with in this European Standard. Any, even minor, aircraft deicing or antiicing operation directly affects flight safety on take-off. Prevention of aeronautical accidents resulting from in-flight icing principally concerns the fluids and methods used, but it may in certain cases also concern deicing or antiicing equipment design or operation. These aeronautical aspects are not covered in this European Standard (see also Joint Aviation authorities (JAA), Joint Aviation Regulations (JAR) JAR-OPS subpart D 1.345 and any associated material).

This standard applies to:

- self-propelled deicers with fixed platform or hinged boom;
- towable deicers with fixed platform or hinged boom;
- stationary deicing/antiicing equipment (e.g. fixed boom, gantry or tower cranes equipped with aircraft deicing/antiicing fluid systems).

This standard does not apply to:

- fixed installations, such as separate storage tanks or heating and filling stations, which are not an integrated part of the stationary deicing equipment;
- hydraulic control systems;
- pneumatic systems;
- flow generating systems as such.

This standard does not establish requirements for noise and vibration.

Noise and vibration are dealt with respectively in <sup>A1</sup> EN 1915-4 <sup>A1</sup> and <sup>A1</sup> EN 1915-3 <sup>A1</sup>.

This standard is not dealing with hazards in respect to a standard automotive chassis and the traffic on the apron.

This part of EN 12312 is not applicable to deicers and deicing/antiicing equipment which are manufactured before the date of publication by CEN of this standard.

<sup>A1</sup> This part of EN 12312 is intended to be used in conjunction with EN 1915-1, EN 1915-2, EN 1915-3 (for vehicles) and EN 1915-4. <sup>A1</sup>

## 2 Normative references

<sup>A1</sup> 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. <sup>A1</sup>

<sup>A1</sup> *deleted text* <sup>A1</sup>

EN 795:1996, *Protection against falls from a height — Anchor devices — Requirements and testing*

EN 1050:1996, *Safety of machinery — Principles for risk assessment*

☐<sup>A1</sup> *deleted text* ☐<sup>A1</sup>

EN 1915-1:2001, *Aircraft ground support equipment — General requirements — Part 1: Basic safety requirements*

EN 1915-2:2001, *Aircraft ground support equipment — General requirements — Part 2: Stability and strength requirements, calculations and test methods*

☐<sup>A1</sup> EN 1915-3, *Aircraft ground support equipment — General requirements — Part 3: Vibration measurement methods and reduction* ☐<sup>A1</sup>

☐<sup>A1</sup> EN 1915-4, *Aircraft ground support equipment — General requirements — Part 4: Noise measurement methods and reduction* ☐<sup>A1</sup>

☐<sup>A1</sup> EN ISO 12100-1:2003, *Safety of machinery — Basic concepts, general principles for design — Part 1: Basic terminology, methodology (ISO 12100-1:2003)* ☐<sup>A1</sup>

☐<sup>A1</sup> EN ISO 12100-2:2003, *Safety of machinery — Basic concepts, general principles for design — Part 2: Technical principles (ISO 12100-2:2003)* ☐<sup>A1</sup>

☐<sup>A1</sup> EN ISO 13850:2008, *Safety of machinery — Emergency stop — Principles for design (ISO 13850:2006)* ☐<sup>A1</sup>

☐<sup>A1</sup> ISO 4305 ☐<sup>A1</sup>, *Mobile cranes — Determination of stability*

☐<sup>A1</sup> ISO 11076:2006, *Aircraft — Ground-based de-icing/anti-icing methods with fluids* ☐<sup>A1</sup>

### 3 Terms and definitions

For the purposes of this European Standard, the terms and definitions given in ☐<sup>A1</sup> EN ISO 12100-1:2003 and EN ISO 12100-2:2003 ☐<sup>A1</sup>, EN 1915-1:2001 and ☐<sup>A1</sup> ISO 11076:2006 ☐<sup>A1</sup> and the following apply.

#### 3.1

##### **deicing/antiicing equipment**

piece of equipment, mobile or stationary, used for performing deicing/antiicing/washing operations on aircraft on the ground

#### 3.2

##### **deicer**

entire mobile unit, including the chassis and any structures mounted thereon

#### 3.3

##### **self-propelled deicer**

deicer able to move by an own power source and to operate without a constant connection to external energy or fluid supply

#### 3.4

##### **towable deicer**

deicer not able to move by an own power source

#### 3.5

##### **stationary deicing/antiicing equipment**

permanently installed equipment, e.g. gantry, fixed boom or other crane types

#### 3.6

##### **boom**

moveable hinged beam attached to the integral frame carrier to support the lifting/work platform