

STN	Stroje na točenú zmrzlinu. Výkon a hodnotenie spotreby energie.	STN EN 16764 14 2712
------------	--	--

Soft ice cream machines - Performance and evaluation of energy consumption

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 04/16

Obsahuje: EN 16764:2016

122815

Úrad pre normalizáciu, metrológiu a skúšobníctvo SR, 2016
Podľa zákona č. 264/1999 Z. z. v znení neskorších predpisov sa môžu slovenské technické normy rozmnožovať a rozširovať iba so súhlasom Úradu pre normalizáciu, metrológiu a skúšobníctvo SR.

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 16764

January 2016

ICS 67.260

English Version

**Soft ice cream machines - Performance and evaluation of
energy consumption**

Machines à glace à l'italienne - Performance et
évaluation de la consommation d'énergie

Automaten für Eiskrem - Bestimmung von
Leistungsmerkmalen und Energieverbrauch

This European Standard was approved by CEN on 21 November 2015.

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, 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: Avenue Marnix 17, B-1000 Brussels

Contents	Page
European foreword.....	3
1 Scope	4
2 Normative references	4
3 Terms and definitions	4
4 Performance characteristics.....	6
4.1 General.....	6
4.2 Initial freeze down.....	6
4.3 Production capacity	6
4.4 Production energy consumption.....	6
4.5 Idle energy consumption.....	7
4.6 Stand-by energy consumption.....	7
4.7 Pasteurization phase energy consumption	7
4.8 Product temperature (extrusion temperature).....	7
4.9 Overrun.....	7
5 Energy consumption test.....	7
5.1 Test room	7
5.1.1 General design, walls, floor and radiant heat	7
5.1.2 Thermal characteristics.....	8
5.1.3 Ambient temperature and humidity.....	8
5.2 Apparatus.....	8
5.3 Installation	8
5.4 Test cycle.....	9
5.4.1 Initial freeze down phase	9
5.4.2 Production phase	9
5.4.3 Idle energy consumption.....	10
5.4.4 Stand-by energy consumption.....	11
5.4.5 Pasteurization phase energy consumption	11
5.4.6 Overrun determination.....	11
5.4.7 Test evaluation.....	12
6 Reference test mix	12
7 Test report.....	13

European foreword

This document (EN 16764:2016) has been prepared by Technical Committee CEN/TC 44 “Commercial and Professional Refrigerating Appliances and Systems, Performance and Energy Consumption”, the secretariat of which is held by UNI.

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 2016, and conflicting national standards shall be withdrawn at the latest by July 2016.

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

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This European Standard specifies requirements and test conditions of soft ice cream machines for processing ice cream and similar frozen desserts.

It defines machines performance characteristics and energy consumption, measured under specified conditions and test methods, using a reference test mix.

This European Standard applies to the following types of soft ice cream machines: commercial ice cream, soft serve and shake freezers, which freeze and dispense frozen product (e.g. dairy, yogurt), included are conventional operation and pasteurization phase. The equipment may include separate refrigeration systems for the frozen product and fresh mix and may be either air-cooled or water-cooled.

The soft ice cream machines are evaluated for the following performance:

- maximum energy input rate, or maximum current draw,
- production capacity,
- overrun,
- initial freeze-down energy consumption and duration,
- production energy consumption,
- idle energy consumption,
- stand-by energy consumption,
- pasteurization energy consumption (if applicable).

2 Normative references

Not applicable.

koniec náhľadu – text ďalej pokračuje v platenej verzii STN