

NSF®

22

NSF International Standard / American National Standard

NSF/ANSI 6 - 2016

Dispensing Freezers

NSF International, an independent, notfor-profit, non-governmental organization, is dedicated to being the leading global provider of public health and safetybased risk management solutions while serving the interests of all stakeholders.

> This Standard is subject to revision. Contact NSF to confirm this revision is current.

Users of this Standard may request clarifications and interpretations, or propose revisions by contacting:

Chair, Joint Committee on Food Equipment NSF International 789 North Dixboro Road, P.O. Box 130140 Ann Arbor, Michigan 48113-0140 USA Phone: (734) 769-8010 Telex: 753215 NSF INTL FAX: (734) 769-0109 E-mail: info@nsf.org Web: http://www.nsf.org

NSF International Standard/ American National Standard for Food Equipment —

Dispensing freezers

Standard Developer **NSF International**

NSF International Board of Directors

Designated as an ANSI Standard March 9, 2016 **American National Standards Institute** Prepared by The NSF Joint Committee on Food Equipment

Recommended for Adoption by The NSF Council of Public Health Consultants

Adopted by The NSF Board of Trustees January 1959

Revised July 1970 Reaffirmed January 1975 Revised November 1982 Revised February 1989 Revised March 1996 Revised September 2002 Revised October 2005 Revised April 2007 Revised April 2009 Revised August 2012 Revised February 2015 Revised March 2016

Published by

NSF International PO Box 130140, Ann Arbor, Michigan 48113-0140, USA

For ordering copies or for making inquiries with regard to this Standard, please reference the designation "NSF/ANSI 6-2016."

Copyright 2016 NSF International Previous Editions, ©2015, 2012, 2009, 2007, 2005, 2002, 1996, 1989, 1982, 1975, 1970

Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from NSF International.

Printed in the United States of America.

Disclaimers¹

NSF International (NSF), in performing its functions in accordance with its objectives, does not assume or undertake to discharge any responsibility of the manufacturer or any other party. The opinions and findings of NSF represent its professional judgment. NSF shall not be responsible to anyone for the use of or reliance upon this Standard by anyone. NSF shall not incur any obligation or liability for damages, including consequential damages, arising out of or in connection with the use, interpretation of, or reliance upon this Standard.

NSF Standards provide basic criteria to promote sanitation and protection of the public health. Provisions for mechanical and electrical safety have not been included in this Standard because governmental agencies or other national standards-setting organizations provide these requirements.

Participation in NSF's Standards development activities by regulatory agency representatives (federal, local, state) shall not constitute their agency's endorsement of NSF or any of its Standards.

Preference is given to the use of performance criteria measurable by examination or testing in NSF Standards development when such performance criteria may reasonably be used in lieu of design, materials, or construction criteria.

The illustrations, if provided, are intended to assist in understanding their adjacent standard requirements. However, the illustrations may not include **all** requirements for a specific product or unit, nor do they show the only method of fabricating such arrangements. Such partial drawings shall not be used to justify improper or incomplete design and construction.

Unless otherwise referenced, the annexes are not considered an integral part of NSF Standards. The annexes are provided as general guidelines to the manufacturer, regulatory agency, user, or certifying organization.

¹ The information contained in this Disclaimer is not part of this American National Standard (ANS) and has not been processed in accordance with ANSI's requirements for an ANS. Therefore, this Disclaimer may contain material that has not been subjected to public review or a consensus process. In addition, it does not contain requirements necessary for conformance to the Standard.

This page is intentionally left blank.

Contents

1	General	1 1 1	
2	Normative references		
3	Definitions	2	
4	Materials	222	
5	Design and construction 5.1 General sanitation 5.2 Internal angles and corners 5.3 External angles and corners 5.4 Joints and seams 5.5 Fasteners 5.6 Insulation 5.7 Reinforcing and framing 5.8 Inspection and maintenance panels 5.9 Doors 5.10 Door tracks and guides 5.11 Door closers, handles, knobs, and pulls 5.12 Hinges 5.13 Covers 5.14 Openings into food zones 5.15 Louvers 5.16 Hardware 5.17 Latches and catches 5.18 Breaker strips 5.19 Equipment mounting 5.20 Legs and feet 5.21 Shelving 5.22 Casters, rollers and gliders 5.23 Temperature indicating devices 5.24 Breakable glass components 5.25 Tank valves 5.26 Springs 5.27 Food dispensing pumps 5.28 Remote product supply systems 5.29 Instruction plate 5.20 Heat treatment dispensing freezer	334445555566667777778999000000	
6	Performance 1 6.1 Cleaning and sanitization procedures 1 6.2 Product temperature 1 6.3 Heat treatment cycle – product heating 1 6.4 Heat treatment cycle – product cooling 1 6.5 Heat treatment cycle – heat treatment efficacy 1 6.6 Removal of residual food and chemical deposits from heat treatment dispensing freezers 1	12 13 14 15 16	

	pensing lockout verification – cycle completion pensing lockout verification – cycle frequency	
	pensing lockout verification – manual cleaning and sanitization frequency	
7 Product	literature	
7.1 For	machines with non pre-packaged product	
7.2 For	machines with pre-packaged product	
	note product supply systems intended for in-place cleaning	
Annex A		A1
Interpretatio	ns Annex	Interpretations - 1

Foreword²

The purpose of this Standard is to establish minimum food protection and sanitation requirements for the materials, design, construction, and performance of dispensing freezers and related components.

This edition of the Standard contains the following revision:

Issue 11

This revision affirmed changes to sections 5.23, 5.28, 6.1, 6.2 and 7.2 covering Remote Product Supply (RPS) systems.

This Standard was developed by the NSF Joint Committee on Food Equipment using the consensus process described by the American National Standards Institute.

Suggestions for improvement of this Standard are welcome. This Standard is maintained on a Continuous Maintenance schedule and can be opened for comment at any time. Comments should be sent to Chair, Joint Committee on Food Equipment at <u>standards@nsf.org</u>, or c/o NSF International, Standards Department, P.O. Box 130140, Ann Arbor, Michigan 48113-0140, USA.

² The information contained in this Foreword is not part of this American National Standard (ANS) and has not been processed in accordance with ANSI's requirements for an ANS. Therefore, this Foreword may contain material that has not been subjected to public review of a consensus process. In addition, it does not contain requirements necessary for conformance to the Standard.

This page is intentionally left blank.

NSF/ANSI International Standard for Food Equipment —

Dispensing freezers

1 General

1.1 Purpose

This Standard establishes minimum food protection and sanitation requirements for the materials, design, construction, and performance of dispensing freezers and their related components.

1.2 Scope

This Standard contains requirements for the following equipment: dispensing freezers that process and freeze previously pasteurized product (e.g., soft ice cream, ice milk, yogurt, malts, custards) and dispense it directly into the consumer's container; dispensing freezers that dispense premanufactured frozen product (e.g., ice cream) directly into the consumer's container; and batch dispensing freezers. The materials, design, and construction requirements of this Standard may also apply to items that are manufactured as a component of a dispensing freezer.

Dispensing freezer components and materials covered under other NSF or NSF/ANSI Standards or criteria shall also comply with the requirements therein. This Standard is not intended to restrict new unit design, provided that such design meets the minimum specifications described herein.

1.3 Alternate materials, design, and construction

While specific materials, design, and construction may be stipulated in this Standard, dispensing freezers that incorporate alternate materials, design, or construction may be acceptable when such equipment meets the intent of the applicable requirements herein.

1.4 Measurement

Decimal and SI conversions provided parenthetically shall be considered equivalent. Metric conversions and significant figure rounding have been made according to IEEE/ASTM SI 10.

2 Normative references

The following documents contain provisions that, through reference, constitute provisions of this NSF/ANSI Standard. At the time this Standard was balloted, the editions listed below were valid. All documents are subject to revision, and parties are encouraged to investigate the possibility of applying the recent editions of the documents indicated below. The most recent published edition of the document shall be used for undated references.

40 C.F.R. §180.940 Tolerance exemptions for active and inert ingredients for use in antimicrobial formulations (Food-Contact Surface Sanitizing Solutions)³

³ U. S. Government Printing Office Washington, DC 20402 <www.gpo.gov>.