

3-A[®] Sanitary Standard for Sight and/or Light Windows and Sight Indicators in Contact with Product Number 65-01

*Standards Developing Organizations
3-A Sanitary Standards, Inc. (3-A SSI)
In Collaboration With
United States Public Health Service (USPHS)/
United States Food and Drug Administration (USFDA)
United States Department of Agriculture (USDA)
European Hygienic Engineering & Design Group (EHEDG)*

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Note: The highlighted text denotes changes to the previous document.

TABLE OF CONTENTS

TITLE	i
DISCLAIMERS	iv
FOREWORD	iv
A SCOPE	1
B NORMATIVE REFERENCES	1
C DEFINITIONS	1
C1 Product	1
C2 Sight and/or Light Windows	1
C3 Sight Indicators	1
C4 Surfaces	1
C4.1 Product Contact Surfaces	1
C4.2 Nonproduct Contact Surfaces	2
C4.3 Flushing System	2
C4.4 Fusion Bonding	2
C5 Cleaning	2
C5.1 Clean-in-Place (CIP) Cleaning	2
C5.2 Clean-Out-of-Place (COP)	2
C5.3 Manual Cleaning	2
C5.4 Light Transmitting Product Contact Surface Flushing	2
C7 Flushing Media	2
C7.1 Flushing Media	2
C7.2 Safe Water	2
C7.3 Culinary Steam	2
C7.4 Clean Air	2
C8 Sanitizing or Sanitization	2
C9 Fittings	2
C9.1 CIP Fittings	2
C9.2 Manually Cleaned Fittings	2
C10 Regulatory Agency	2
C11 Solution	2
C12 Substantially Flush	3
C13 Inspectable	3
C14 Surface Treatments	3
C14.1 Surface Treatments	3
C15 Readily Removable	3
C16 Simple Hand Tools	3

D	MATERIALS	3
D1	Product, Solution, and Splash Contact Surfaces	3
D1.1	Metals.....	3
D1.2	Nonmetals	3
D1.3	High-Temperature Materials.....	3
D2	Nonproduct Contact Surfaces	3
E	FABRICATION.....	4
E1	Surface Texture	4
E2	Permanent Joints	4
E3	Cleaning and Inspectability.....	4
E4	Draining	4
E5	Flushing Systems	4
E6	Fittings and Connections.....	4
E7	Gaskets	4
E8	Radii	5
E9	Threads.....	5
E10	Sterilization Systems.....	5
E11	Nonproduct Contact Surfaces	5

APPENDIX

F	STAINLESS STEEL AND EQUIVALENT MATERIALS	6
G	PRODUCT CONTACT SURFACE FINISH	9
H	INSTALLATION OF SIGHT AND/OR LIGHT WINDOWS AND SIGHT INDICATORS.....	9
I	ENGINEERING DESIGN AND TECHNICAL CONSTRUCTION FILE.....	9

Disclaimers

3-A Sanitary Standards and 3-A Accepted Practices are developed through the efforts of experts, working on a volunteer basis, using science-based information and their professional experiences to reach consensus decisions on the sanitary (hygienic) criteria in these 3-A documents.

3-A SSI, its employees and its volunteer committees/working groups shall not incur any obligation or liability for damages, including consequential damages, arising from or in connection with the development, use, interpretation, or reliance upon this 3-A Sanitary Standard.

3-A Sanitary Standards and 3-A Accepted Practices do not include provisions for mechanical, electrical, or personnel safety. Such safety criteria are established by government regulations and other standards development organizations (SDOs). Other SDO standards may be referenced.

Drawings and illustrations contained herein are examples to assist in understanding the criteria in this 3-A Sanitary Standard [3-A Accepted Practice]. Appendix drawings and illustrations are not intended to show all variations of the equipment or system nor are they exclusive of alternate approved methods. Appendix drawings and illustrations are non-normative.

Foreword

This 3-A Sanitary Standard establishes minimum sanitary (hygienic) requirements for design, materials, fabrication, and/or installation of Sight and/or Light Windows and Sight Indicators.

This 3-A Sanitary Standard is for use on a voluntary basis by directly and materially affected organizations such as equipment and machinery fabricators, processors, regulatory agencies and by other SDOs to assure adequate public health protections exist for the equipment or systems and covered products. 3-A SSI uses these documents as its source of sanitary criteria for 3-A Symbol authorization.

This 3-A Sanitary Standard was developed jointly by 3-A SSI, the United States Public Health Service (USPHS))/United States Food and Drug Administration (USFDA), the United States Department of Agriculture – Dairy Programs (USDA), and the European Hygienic Engineering & Design Group (EHEDG).

It is our intent to encourage inventive genius and provide a forum to discuss new developments. Suggestions for improvement and new technology are welcome at any time for consideration by 3-A SSI. Please forward comments to 3-A SSI, 6888 Elm Street, Suite 2D; McLean, VA 22101-3829, USA or by fax: 703-761-6284, or by e-mail to: 3-ainfo@3-a.org.

A SCOPE

- A1 These standards cover the sanitary aspects of sight and/or light windows, sight and/or light window flushing systems when provided, and sight indicators, and begin and end at the fitting connections to the pipeline or equipment or at the flange welded to the pipeline or equipment. The flushing system begins at the shut off valve and ends at the delivery nozzle or pipe or tube. These standards do not cover external direct-reading gauges for tanks.
- A2 In order to conform to these 3-A Sanitary Standards, sight and/or light windows, flushing systems when provided, and sight indicators shall conform to the following in design, material and fabrication criteria.

B NORMATIVE REFERENCES

- B1 The following listed 3-A Sanitary Standards, 3-A Accepted Practices and other documents shall be considered as Normative References and the provisions of the referenced documents shall apply to this Standard.

B2 Doc. No. Title (3-A Sanitary Standard for:)

- | | |
|-----|---|
| 18- | Multiple-Use Rubber and Rubber-Like Materials |
| 20- | Multiple-Use Plastic Materials |
| 33- | Polished Metal Tubing |
| 58- | Vacuum Breakers and Check Valves |
| 63- | Sanitary Fittings |

B3 Doc. No. Title (3-A Accepted Practice for:)

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|------|--|
| 604- | Supplying Air Under Pressure in Contact with Product, and Product Contact Surfaces |
| 605- | Permanently Installed Product and Solution Pipelines and Cleaning Systems |
| 609- | Method of Producing Steam of Culinary Quality |

B4 Other References and Standards

- | Ref. No. | Title |
|----------|---|
| 1. | National Primary Drinking Water Regulation of the Environmental Protection Agency (EPA), The Code of Federal Regulations (CFR), Title 40, Parts 141, 142, and 143. For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Phone: (202) 512-1800. |

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| 2. | AISI Steel Products Manual, Stainless & Heat Resisting Steels, Table 2-1, American Iron and Steel Society, 410 Commonwealth Drive, Warrendale, PA 15086. Phone: (412) 776-1535. |
| 3. | Steel Founders Society of America, 780 McArdle Dr., Unit G, Crystal Lake, IL 60014, Phone: (815) 455-8240, Fax: (815) 455-8241, Internet: www.sfsa.org |
| 4. | ASTM specifications for Cast Grades A351/A351M, A743/A743M and A744/A744M. Available from ASTM, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959. Phone: (610) 832-9500. |
| 5. | American Society of Mechanical Engineers, 345 East 47th Street, New York, NY 10017-2392. Phone: (212) 705-7722. |
| 6. | Grade "A" Pasteurized Milk Ordinance http://www.cfsan.fda.gov/~ear/pmoO3toc.html . |
| 7. | AWS/ANSI D18.1 – Specification for Welding of Austenitic Stainless Steel Tube and Pipe Systems in Sanitary (Hygienic) Applications. Published by American Welding Society, 550 N.W. LeJeune Rd., Miami FL, Phone: (800) 443-3953, www.aws.org . |
| 8. | ASTM specifications for Wrought Grades A-276, A-582, and A-666. Available from ASTM, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, Phone: (610) 832-9500. |

C DEFINITIONS

- C1 **Product:** Milk, milk products or other food products.
- C2 **Sight and/or Light Windows:** Porthole assemblies through which light is admitted into equipment or through which the product may be observed.
- C3 **Sight Indicators:** In-line assemblies for installation in product pipelines through which product may be observed.
- C4 **Surfaces**
- C4.1 **Product Contact Surfaces:** All surfaces which are exposed to the product and surfaces from which splashed product, liquids or material may drain, drop or be drawn into the product.