



3-A Practice

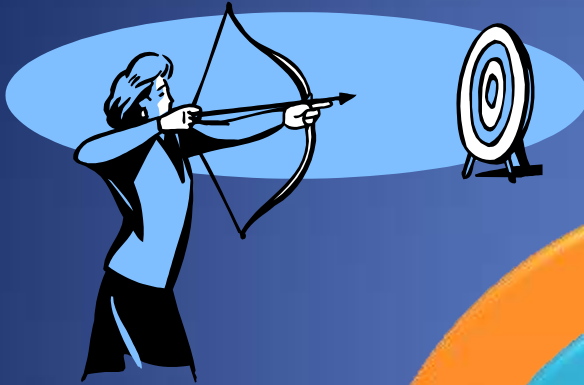


For Permanently Installed Product
and
Solution Pipelines
and
Cleaning Systems Used in Milk and Milk Product
Processing Plants, Number 605-04

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HITTING THE TARGET



Scope

Definitions

Fabrication

Installation

Welding

Requirements

KNOW EQUIPMENT



□ Determining which standards or practice to use.

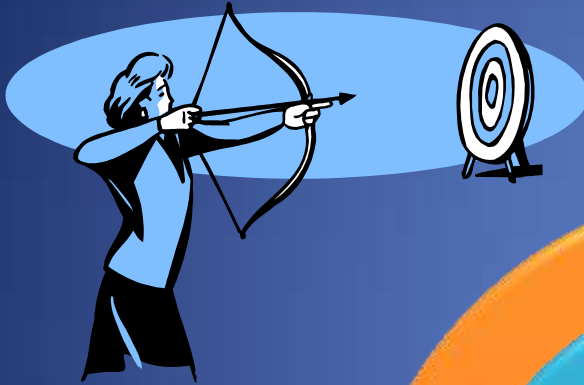
❖ 3-A Accepted Practices, 605-04

❖ If you wish to use 3-A Sanitary Standard or Practices

❖ Determine if the equipment fits the scope

❖ In this case it does

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Scope

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Fabrication

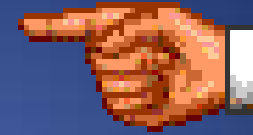
Installation

Welding

Requirements



SCOPE



1. The scope sets the parameters.

a) Installation & Cleaning of Rigid Pipelines

b) Specifies Materials & Fabrication

- ❖ Flange, clamp type fittings, valve, Clean In Place (CIP) units...

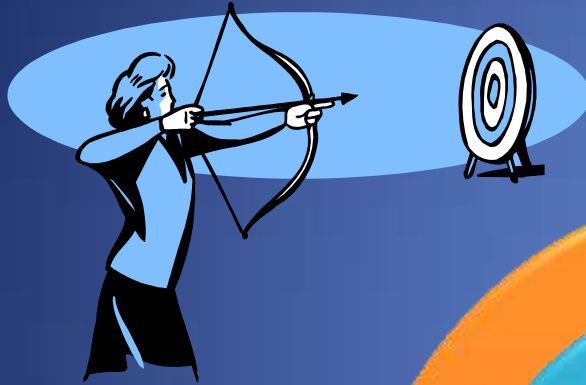
c) Product

- ❖ Dry, viscous, liquid, not used for dairy farms or large diameter piping for dry products...

d) Operations of equipment

- ❖ CIP, non CIP, enclosed, what function does the equipment perform...

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DEFINITIONS

1. The definitions establish unique usage of words and phrases & shall be appropriate for standard or practice.

a) Product

- ❖ Milk & milk products

- ❖ This will eventually include “and other related products”

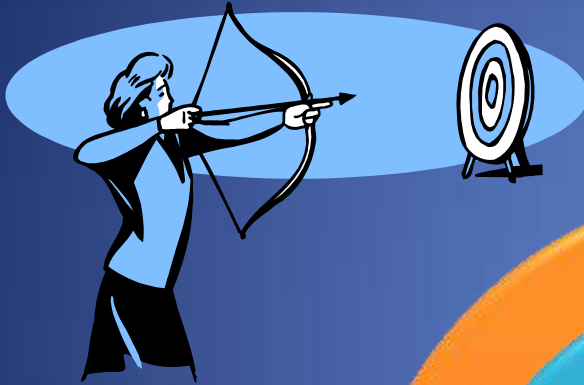
b) Type of cleaning

- ❖ For the most part CIP, other items according to their standard...

c) Access

- ❖ Not defined in this practice but there are requirements

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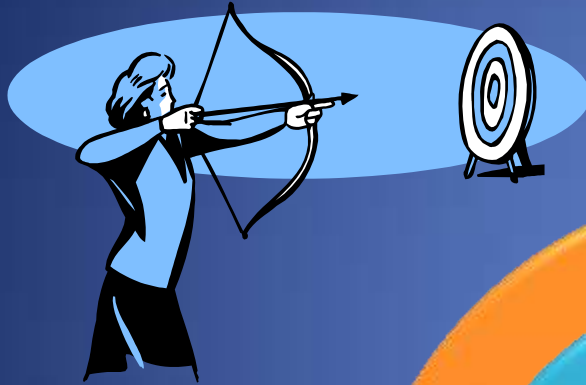
Welding

Requirements

FABRICATION SECTION D

1. The fabrication criteria of equipment included in the permanently installed product and solution pipelines for which there are applicable 3-A Sanitary Standards or Accepted Practices shall be those of the applicable 3-A Sanitary Standard or Accepted Practice. (D1)
2. Product and solution lines and equipment shall have permanently installed CIP fittings or welded joints. Gasketed CIP fittings shall be readily demountable for inspection. (D5)

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INSTALLATION SECTION D (CONTINUED)



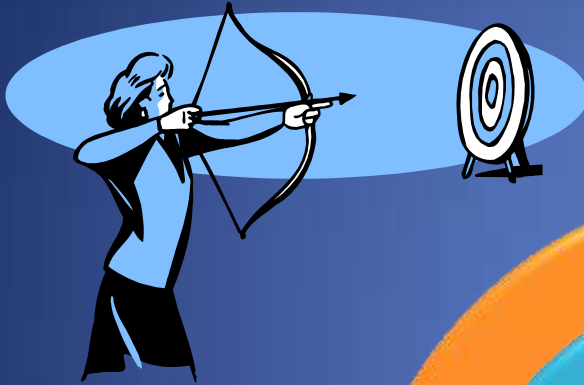
2. Non CIP appurtenances, such as plug valves, instrument fittings, sample cocks, pumps and parts having the same functional purposes which have product or solution contact surfaces **shall be readily demountable and easily disassembled for manual cleaning and sanitizing.** (D9)
3. All product contact and solution contact surfaces shall be cleanable, either when in an assembled position or when removed. **System appurtenances shall be accessible for inspection.** (D11)

INSTALLATION SECTION E



3. Each separate cleaning circuit, including product and solution lines, shall be provided with a sufficient number of access points, such as valves, fittings, or removable sections to make possible **adequate inspection** and examination of **representative interior surfaces**. (E2)
4. Pipelines shall be **drainable or self-draining** and **pitched to drain points**. (E3)

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WELDING SECTION G



5. Inert **back-up gas** shall be used to protect and control the interior of the weld. (G1.1)
6. Welding procedures shall assure uniform and **complete penetration of the weld** at all times. (E3)
7. All welds having pits, craters, ridges, or imbedded foreign materials **shall be removed** and the joints shall be properly re-welded. (E1.5)

WELDING SECTION G

(CONTINUED)

8. Internal and external grinding and/or polishing of pipeline welds is not required. If grinding and/or polishing of external weld surfaces is desired by either the installer or the user, such finishing shall be **delayed until after inspection and acceptance of the welding by the applicable regulatory agencies** unless internal weld surfaces are easily accessible for inspection. (E1.6)
9. An acceptable sample weld piece **shall be provided** when required. (E1.7)

WELDING SECTION G

(CONTINUED)

10. A **boroscope** or other acceptable inspection device shall be available to use to inspect representative welds. (G1.8)



Thank you for your kind attention