



NDDB
ANAND

MILK COLLECTION ACCESSORIES FOR
VILLAGE LEVEL MILK COLLECTION CENTRE

SPECIFICATION NO.
14 . 32 . 04 . 01 (R3, 2007)

General : The milk collection accessories shall be made from stainless steel conforming to AISI 304. Only TIG welding process shall be used wherever welding is required. All the accessories shall be free from sharp edges and cavities. Weld joints shall be ground smooth. The surface finishes shall be minimum 150 grit from inside as well as outside.

1. PLUNGER:

It shall be suitable for use at the milk collection centre for stirring of milk in the cans or any other vessel. The plunger shall be made out of Stainless Steel AISI 304 rod of diameter 8 mm and 850 mm long. One end of the rod shall be bent in triangular shape for holding, the other end of the rod shall be welded with a perforated convex disc of diameter 165 mm , having 6 holes, 14 mm dia each. The thickness of the disc shall not be less than 1.2 mm. There shall not be any sharp edge or cavity in the plunger. The disc and the rod shall be provided with minimum 150 grit finish. Welding of rod to disc shall be done with TIG welding only. (Ref. Drg. No. DCS - ACC 04 R2)

2. SAMPLER:

It shall be suitable for use at the milk collection centre for drawing milk sample from producer's milk vessel or from the can. The sampler shall be made out of Stainless Steel AISI 304 sheet 1.2 mm thick and SS rod of 4 mm dia. The sampler bowl shall be pressed in 50 ml conical bowl and 300 mm long SS rod shall be welded on outer side of the bowl for holding the sampler by TIG welding and finished smoothly. The other end of the rod shall be bent in U shape for holding purpose. The sampler shall have minimum 150 grit finish from inside as well as outside. (Ref. Drg. DCS - ACC 04 R2)

3. SS SAMPLE BOTTLE:

The sample bottles shall be suitable for use at the milk collection centre for collecting 50 ml sample from each producer's milk vessel. The bottle shall be made out of Stainless Steel AISI 304 sheet 1.2 mm thick. The bottle shall be made by pressing from blank. The diameter (OD) of the bottle shall be 42 mm so that it can be easily placed in bottle stand. The length of the bottle shall be 75 mm, with the top 5 mm height flared outward to make it suitable for a firm finger grip (Ref. Drg. DCS - ACC 04 R2).

4. SAMPLE BOTTLE STAND:

It shall be suitable for use at the milk collection centre for holding the SS milk sample bottles. The stand shall be made out of Stainless Steel AISI 304 sheet 1.2 mm thick. On the top plate, 24 nos. holes each 43 mm dia. shall be made for placing the sample bottles. All the bending of sides and edges shall be smooth & wrinkle free. Welding of the corner joint shall be done by TIG welding from both the sides and joints shall be ground smooth, free from any cavities. Finish of the stand from both the sides shall be minimum 150 grit. Sharp edges of the stand shall be rounded off. (Ref. Drg. DCS - ACC 04 R2) Typical dimensions of the sample bottle stand are mentioned below:

Material of construction: Stainless Steel AISI 304
Thickness of Sheet : 1.2 mm
Length of stand : 455 mm



Breadth of stand	: 180 mm
Height of stand	: 50 mm
No. of holes on top plate	: 24
Dia. of holes on top plate	: 43 +/- 0.5 mm

5. MILK MEASURES SET :

The set of milk measures shall be suitable for use at the milk collection centre for measuring milk received from the producers. The measuring set shall consist of 1 no. each of 2.0 lit. 1.0 lit. 500 ml, 200 ml & 100 ml capacity measures. The measures shall be made out of Stainless Steel sheet, conforming to AISI 304 grade, thicknesses as per the drawings attached. It shall be of pressed construction and handle welded on it. All the measures shall meet the requirement of Weights & Measures Department for dimension, sheet thickness, capacity, marking of capacity, stamping etc. Latest changes, if any, in the Weights and Measures rules/ requirement at the time of fabrication, should be incorporated and informed to NDDB. All inside as well as out side finishes shall be min. 150 grit finish. The measures should be stamped by the Weights & Measures Authority before dispatch (Ref. Drg. DCS - ACC 02 R1)

6. FUNNEL FOR CAN:

It shall be suitable for use at the milk collection centre for pouring of milk from producer's milk vessel to milk cans or balance tank. The funnel shall be made out of Stainless Steel AISI 304 sheet 1.2 mm thick. At the funnel's conical bottom, there shall be a removable type Stainless steel 40 mesh strainer for filtering extraneous matter in the milk. The SS filter shall be round in shape and properly fixed at the periphery by SS strip ring. The filter shall be rested in a grooved step in the funnel. The funnel shall be free from any sharp edges or cavity. The welding shall be done by TIG method only. Finish of the surface shall be minimum 150 grit. A ring shall be provided on the funnel for hanging it on wall, when not in use. (Ref. Drg. DCS - ACC 05 R1) Typical dimensions of the funnel are as mentioned below:

Top diameter	: 320 mm
Bottom diameter	: 127 mm +/- 2
Height	: 190 mm +/- 2
Strainer diameter	: 127 mm +/- 0.5
Material of construction	: Stainless Steel AISI 304
Funnel bowl thickness	: 1.2 mm

7.0 LACTOMETER CYLINDER

The lactometer cylinder will be used for dipping lactometer in milk. It shall be a cylindrical vessel made of 1.2 mm thick Stainless Steel sheet conforming to AISI 304 grade having the top finished off square and without a spout and having the internal diameter of 32 ± 2 mm and internal depth of 185 ± 5 mm. The cylindrical vessel shall stand vertically and firmly on its base on a horizontal surface. (Ref. Drg. DCS - ACC 04 R2)



8.0 Milk Collection Tray:

The tray made from stainless steel shall be manufactured by pressing from one piece of SS metal sheet

- .1 **Corner** - The corners of the milk collection trays shall be properly bent and free from any wrinkles.
- .2 **Spout** - The shape and size of the bore in the direction of flow shall be so formed as to provide no lodgment/retention of solid matter and shall be properly located.
- .3 **Outlet pipe** - There should be removable type outlet pipe of 38 NB, which will be fitted on to the outlet spout.
- .4 **Edge** - The edge of the milk collection tray shall be bending smooth from all sides.
- .5 **Material and other design & fabrication details** - The tray shall be made out of Stainless Steel sheet AISI 304, 1.2 mm thick metal sheet. The bottom of the tray may be pressed to form a step on all sides to impart strength to the tray from buckling or bending during handling or storage. All the bending of sides and edges shall be smooth and wrinkle free. Welding shall be done by TIG and joints shall be ground smooth, free from any cavities. Surface finish of the tray from both sides shall be minimum 150 grits. Sharp edges shall be rounded off.
- .6 **Drawing** - The tray shall be fabricated as per the details provided in the attached drawing no. DCS: ACC:07R2

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