Dairy Equipment Statistics Committee (DESC)

Product Definitions
(Revised September 2019)

In an effort to ensure that all participants are reporting product lines consistently, the following definitions have been developed. These definitions are for statistical reporting purposes only.

**Automatic Feed Pusher (MMFP)  *Not Currently Reported***
Mechanical device with self-contained drive system to push feed towards the feed bunk in an animal housing environment.

**Behavior Monitoring Devices (MMAD)**
Device that can be attached to a cow/calf either directly or with an attachment device such as a collar, leg band etc. that is able to monitor/interpret the activity.

Reporting Classifications: Based on Number of Units

**Bulk Milk Farm Tanks (MMBT)**
Milk-Cooling Tanks consist of a cylindrical or oval, stainless steel tank, designed for holding and cooling milk, on the dairy farm, prior to being hauled away for processing. A typical milk-cooling tank has a built-in refrigerant system, consisting of one or more evaporators (cooling plates) on the milk tank with "matching" condensing unit(s), motors and controls. Each milk tank should have at least one agitator and motor, which circulates the milk, keeping it at an even temperature. In addition, milk-cooling tanks are usually equipped with a washing system; however, small tanks may be washed manually.

The size of the Milk Tank refers to the maximum volume of milk (in gallons), that the unit is designed to store and cool. Most milk cooling tanks, up to about 10,000 gallons, rest horizontally and are either housed entirely inside of the milk room or are bulk-headed with the front head exposed into the milk room.

All milk tanks will be reported under one (and only one) of the following size classes:

- Less than 2000 gallon capacity, horizontal milk tank
• More than 2000, but less than 4000 gallon capacity, horizontal milk tank
• More than 4000 gallon capacity, horizontal milk tank
• Silo tanks stand on end (vertical tanks), usually outside the milk room.

Silo tanks, which are custom made, will usually be built to hold in excess of 10,000 gallons of milk, each.

Reporting Classifications: Based on Gallons

Chillers (MMCH)
Supplies a continuous flow of chilled liquid solution to a plate cooler which provides partial or total cooling of milk before it enters the bulk tank.

Reporting Classifications: Based on Number of Units

Condensing Units (MMCU)
Condensing units consist of a condenser/compressor (single or three phase) and may or may not include heat recovery equipment. Condensing units are used in the process of cooling milk at any stage, between the harvest and storage of milk, prior to dairy farm pick-up. Replacement parts are not reported.

Reporting Classifications: Based on Number of Units

Electronic Milk Yield Indicator (MMIN)
The Electronic Milk Yield Indicator consists of a non-ICAR approved control unit & display unit (which may be integral or separate), in which the milk weight of an individual cow is encoded as an electronic signal. The units may be either permanently mounted or portable and control detacher function or not.
### End of Milking Indicator (MMEM) (SUSPENDED)
A device that senses a reduction of milk flow and provides either an audible or visual alarm, indicating the end of milking. The sensing device and/or alarm may be fixed or adjustable. These units do not include automatic shut off or milking unit removal features.

### Energy Recovery Units (MMER)
Produces and stores free hot water by transferring the waste heat of a refrigeration system to cold water.

### Footbath (MMFB)
- Fabricated or permanently installed reservoir fitted for automatic filling and discharging through which an animal passes for treatment.

For reporting purposes: Footbath Controls are to be reported as one unit regardless of the number of Footbaths it controls.
Footbath Control (MMFC)
An automatic control for metering and dispensing chemicals used with automatic footbath(s).

Reporting Classifications: Based on Number of Units

Identification Transponders (MMCT)
Device that can be attached to a cow/calf either directly or with an attachment device such as a collar, leg band etceteras that emits a signal either passively or directly which upon capture automatically determines the distinct individual identification of that animal at the point the signal is captured. The device may or may not also supply additional information such as animal activity.

Reporting Classifications: Based on Number of Units

Milk Meters, Electronic (MMMM)
Electronic Milk Meters consist of an ICAR approved control unit & display unit (which may be integral or separate), in which the milk weight of individual cow is encoded as an electronic signal. The units may be either permanently mounted or portable. Units in the process of ICAR approval should be reported.

Reporting Classifications: Based on Number of Units

Milk Receiving Groups or Milk Releasers (MMRG)
Vessel for accumulation/capture of milk from the vacuum portion of the system which facilitates the transition to the non-vacuum portion of the system.
Parlor Stalls (MMPA)
Parlor stalls refer to stalls designed for holding a cow for milking, with the operator standing erect without the assistance of automated milking system, i.e. robotic arm managing the claw unit (elevated milking stalls). The parlor stall types reported are defined by the angle, or position in which the stall holds the cow relative to the operator.

Parallel Stall - Holds the cow perpendicular to the operator (milking unit is attached from behind the cows, between her back legs).

Herringbone or Parabone Stall - Any parlor stall holding the cow at an angle less than perpendicular but greater than horizontal to the operator.

Rotary Stall - Any stall on a moving platform, which revolves around a central axis. These stalls may be either a herringbone (cows milked from inside) or parallel (cows milked from the outside).
Stalls are reported on a cow place basis. For example, a Double 12 Herringbone or Parallel would be reported as 24 stalls.

* For reporting purposes, Robotic Stalls and All Others are not currently being reported.

**Pipeline Milking and/or Claw Units only (MMPM)**
A complete claw / unit (not including inflation shells or air tubes) that removes milk from the udder.

Pipeline Washers, Automatic (MMPW)
Automatic Pipeline Washers refer to the Control Box (including a timer) designed for rinsing, washing, & sanitizing a milk pipeline (may or may not include a pre-sanitizing option).

Plate Coolers (MMRR)
Device using a bank of flat plates for the reduction in temperature of milk by conductive heat transfer.

Pulsators of any Type (MMPS)
Pulsators refer to a device which is either pneumatically or electronically driven, that allows systematic, time-phased admissions of air (via air tubes) to enter between the shell and the liner on a milking unit (the "rest phase" of milking).

These units may be alternating or single phase, permanent mount or removable, adjustable or "fixed" ratio.
Reporting Classifications: Based on Number of Units

Removal Units, Automatic (all types) (MMRU)

Stationary Detachers - A permanently mounted detacher that automatically detaches the claw at the end of milking. These can be either air or vacuum operated and are mostly found in conventional and rotary style parlors.

Portable Detachers - A portable mounted detacher that automatically detaches the claw at the end of milking. These can be air or vacuum operated and are mostly found in stanchion or tie stall barns as well as some flat barn parlors.

For reporting purposes, milk meters should be recorded separately or additionally to an Electronic Milk Yield Indicator or an End of Milking Indicator. Based on Number of Units.

Software: Automatic Milking Data Collection (MMSD)
A component of a complete milk data collection system that integrates milk meters to a cow management system. This can be a network controller or a type of interface card.
Reporting Classifications: Based on Number of Units.

Vacuum Pumping Outfits and/or Units Only (MMVP)
Devices for removal of air from a closed system creating a vacuum. The device can be any one of the following products/technologies, rotary vane, lobe blower, or water ring. The actual vacuum generating device, commonly referred to as a head, to be counted whether sold with or without a motor or other complementing accessory.

For reporting purposes, this category includes vacuum pumps for robotic systems.

Reporting Classifications: Based on Number of Units.

Variable Frequency Drive (VFD) for Vacuum Pumps (MMDS)
Device that is able to automatically control/moderate the vacuum capacity of a vacuum pump by modifying the electrical input (Hertz) to the drive motor based on the sensing of the air pressure (vacuum level) of the system.

Reporting Classifications: Based on Number of Units.

Backflushing Units (MMBU) *Not Currently Reported
Device which automatically facilitates the flushing of the milker unit with a solution for the purpose of killing or reducing bacteria between cows. NOTE: Report discontinued in 2002.

Robotic Attaching System (code TBA) *Not Currently Reported
Technology that automatically prepares a cow for milking and then attaches claws for the milking procedure.
Robotic Milker (MMRM)
Robots are reported by the number of stalls that are automatically attached for Milking.

*Reporting Classifications: Based on Number of Units.*

Robotic Stalls/Boxes (MMRB) *Not Currently Reported*
Stalls that are utilized to hold cows during the milking process from technology that automatically attaches claws to the cows’ teats.

Sort Gate (MMSG)
A device capable of automatically sorting individual cows into one of at least two walkways based on their electronic identity. (The reporting quantity is one per electronic reader).

*Reporting Classifications: Based on Number of Units.*

ISO Parlor Identification System (MMPI)
A system to identify cow position in the milking parlor via passive electronic tags which transmit at 134 kHz. (The reporting quantity of the system is one per milking parlor or one per robotic milking installation).

*Reporting Classifications: Based on Number of Units.*

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