## Housing For Milking Robots

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Housing facilities for automatic milking systems (AMS) or robotic milking systems (RMS) have similar requirements as any other system. Cows must be kept clean, dry and comfortable (CDC). Ventilation, freestall, and walking surface requirements are all familiar to us. Cow cleanliness, including feet and lower legs is essential because at this time robots cannot determine the cleanliness of the cow. The milking robot will use the same, consistent cleaning and preparation routine for all cows. After this procedure the milking units are attached, clean teats or not. Therefore a housing system that fosters clean cows is essential.

Robots milk cows all day, so cows will be found in all parts of the housing system at all times. Therefore, the manure removal system must be able to operate while cows are present. Alley scrapers and slotted floors are most common. Stall maintenance and bedding addition are other important chores that must be done while cows are present. If stall maintenance is inadequate, dirty cows will result.

To encourage regular visits to the robot by the cows, a short convenient path to the robot is necessary. A robot location that the cow must pass before getting to the feed area is normal. In some instances, one-way gates will force the cow to visit the robot before she can gain access to the feed area (forced cow flow). Because cows visit the robot on an individual basis, there may be less group activity. This may mean that less feed space is required per cow because they are less likely to all be eating at one time. It's too early to tell if this is true.

The milking side of the robot needs to be in a well ventilated, non-freezing, fly free area. This area can be considered an extension of the milk room. Operator access between the milk room and the robot must be manure and mud free. A short distance to the milk room is desirable to minimize milk line length. For those wanting to use existing facilities the same rules apply. The cow must be kept clean, dry and comfortable. The more costly it is to achieve proper housing conditions the less desirable the existing facilities are. DWD (dirty, wet and disturbed) cows are not conducive to automatic milking systems. Remember, milking robots will milk dirty cows!

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