

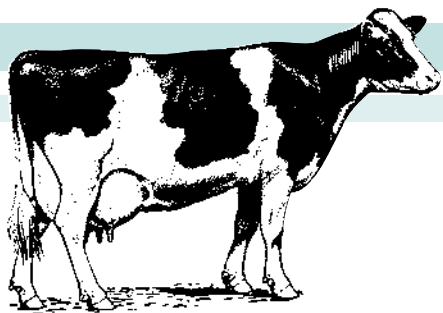


# Planning a Milking Center

John F. Smith  
Extension Specialist, Dairy  
Kansas State University

Dennis V. Armstrong  
Extension Specialist, Dairy  
University of Arizona

Mike J. Gamroth  
Extension Specialist, Dairy  
Oregon State University



Kansas State University  
Agricultural Experiment Station and  
Cooperative Extension Service

*The milking center is approximately one-third to one-half the total cost of dairy cattle housing. Therefore, its design, type, size, and degree of mechanization is important. This guide discusses factors important in planning present and future expansion.*

## Number of Cows

A milking parlor has a life expectancy of 10 to 20 years. Therefore, consider not only the present number of cows, but also the total herd size for the next 10 to 20 years. If future herd expansion will be completed within five years, it is usually more economical to design the expansion into the parlor when it is constructed.

## Total Hours of Use and Milking Frequency

A milking parlor sized for use only 4 to 5 hours a day will be more expensive to build per cow than if the parlor operates 18 to 20 hours per day. For example, a 250-cow dairy, milking two times a day, could be milked in a double-4 herringbone parlor in a 6-hour shift, or milked in a double-10 herringbone in a 3-hour shift. The cost of a double-4 is approximately \$90,000, while a double-10 is \$180,000. Fewer hours of use may be desirable if farm personnel also have other duties, such as crop production, feeding, animal health, and raising replacements. The milking parlor can be used 20 to 21 hours a day to milk cows. Allow time to milk fresh cows and hospital cows, if a hospital barn is not available. Plan total milking time to accommodate present needs and future expansion; it is much easier to plan for future expansion versus remodeling an existing barn.

## Number of Operators

The number of operators may be influenced by the availability of personnel or the pre-milking hygiene routine management desires. Most small herringbone parlors D-4 to D-8, and even a few D-12 to D-16, are operated by one operator. One-person parlors are more efficient in the number of cows per labor hour. The disadvantage of one-operator parlors is the milking has to stop between groups of cows to allow for group change.

Two-or-more-operator parlors have the advantage of continuous operation even during group change, when one operator is late for the milking shift, or when a short emergency requires one operator to leave the parlor. The disadvantage is that it is more difficult for the owner to assess poor operator performance or quality standards, and the number of cows per labor hour will be less.

## Personal Preference

Dairy owners usually have a personal preference for a certain parlor type. Many times this personal preference conflicts with the number of cows to be milked, length of the milking shift, and financial resources. Dairy producers should visit as many types of parlors as possible and make a final decision after having an opportunity to