

Making Successful Decisions on Robotic Milking Technology?

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ISU Extension is on a mission to help producers make successful decisions on robotic milking technology to help producers stay in business and reduce their risk of financial difficulties resulting from poor decisions. Robots are a huge investment and making the right decision can improve their propensity to stay in business which in turn can help support our local economies.

Robots are being implemented at a rapid rate in Iowa and around the world for two simple reasons—Cows and people like them. Robots do not impair the welfare of cows and robots can improve the financial and physical welfare of people, depending upon particular situations. At World Dairy Expo this year, five companies had their robots on display and each is unique. Costing around \$200,000 per unit to milk 55-65 cows, these robots do more than just milk cows. They heat detect by measuring activity; find sick cows by measuring weights and production; and manage SCC by measuring milk conductivity and clarity.

Producers can choose “free flow” or “guided flow” systems for the cows to enter the robot as cows are enticed to enter using high quality, pelleted feeds. The robots range from 140-190 milkings per day with 2.4-3.3 milkings on average per cow per day that equates to 3,000 – 6,000 pounds of milk per robot per day. These robots are proving successful in grazing, freestall or bedded pack operations. Robots are pretty efficient at putting the milkers on.

The big question to answer: Will my milk production go up or go down with use of a robot versus my present system. It could go up on 2x milking 3-15% and make it a great value. It could go down from 3x milking 1-9% and make a producer wish he had never seen one. Point is, the success or loss may be pretty specific to your particular operation. Each farm has many variables that will change if robots are incorporated and these variables need to be carefully analyzed by producers.

For producers interested in more information, there are some publications available from ISU Extension and Outreach listed below to help producers answer questions. Our Extension dairy team is also available to help producers analyze the decision and the many variables at work with robotic milking systems. Since cows and people like them, one thing is highly probable—a robot may be milking cows on a farm near you within the next few years.

The Economics of Automatic Milking Systems

http://www.extension.iastate.edu/NR/rdonlyres/B090C051-8602-4456-B3D6-1ED769C2D495/160454/EconomicsofAutomaticMilkingSystems11232011_FINAL.pdf

The Economics of Automatic Milking Systems Spreadsheet Analysis

http://www.extension.iastate.edu/NR/rdonlyres/B090C051-8602-4456-B3D6-1ED769C2D495/160468/EconomicsofAMS2011_11_9Spreadsheet.pdf

Automatic Milking Systems--A Deal or No Deal for Your Dairy?

<http://www.extension.iastate.edu/NR/rdonlyres/B090C051-8602-4456-B3D6-1ED769C2D495/160455/Oct2011AutomaticMilkingSystemsFactsheetUpdated.pdf>