

New Dairy Research Facility of the University of Guelph, Engineering Highlights

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ABSTRACT The new facility uses the existing infrastructure at the Elora Research Station totalling about 172 000 square feet. It includes animal holdings, laboratories and research facilities, offices and equipment storage and will house a milking herds of 230 to 240 animals.

In addition to the lactating cows, the facility has room for 48 dry cows as well as 300 calves and heifers. It also features a 24-stall climate controlled room to enable researchers to do intensive work on individual cows, including collection of fluid samples. There is a 24-stall rotary parlour that accommodates robotics. There is also an individual robotic milking unit for about 60 animals.

The facility will be devoted to "cow-side research, looking at things like cow comfort, nutrition and animal health.

The aim of this conference paper is to highlight the innovative engineering progresses.

Keywords: Dairy barn, Research Facility, Innovation.