

DESIGN SUMMARY

- 12 robots, three per group
- Large, 720-cow capability (four pens of 180 cows) Guided-flow cow traffic to maximize robot capacity
- Centralized milking center
- Centralized, post-milk, long-term separation pens
- 6-row freestall bed cross-vent, three rows per group
- Extra alley added to maintain complete milk-first, guided-cow traffic flow

1 ISOMETRIC RENDERING
NOT TO SCALE

COMMITMENT PEN

- 20 feet clear in front of robots to minimize congestion and ensure frequent visits
- 40 to 45 square feet per cow
- Sized for six cows per robot, 18 cows maximum occupancy, 720 to 810 square feet

POST-MILK EXIT PEN

- Waterer here so post-milk cows can take a drink
- 1-way finger gate to minimize congestion at robot exit
- No feed access here so cows move on to feed lane

UTILITY ROOMS

- Storage for chemicals and teat dip
- Location of vacuum pumps
- Accessible from clean walkway between head-to-head stalls
- Small herd management "touchdown station"
- Herd Navigator and vet supplies near separation pens

WATERERS

- Initial cost only
- Running cost low
- Provide as many and as much as possible

COW BRUSH

- 1 per robot
- Located where they do not cause congestion or poor cow flow
- Because these cows are spoiled and deserve it!

ENTRY SMART SORT GATE

- Only cows with milk permission permitted into robot
- Located in crossover to keep alleys clear
- Good location for mister, all cows cooled
- Rotated 45° for smooth cow entry

CENTRALIZED ROBOT ROOM

- 12 robots
- Minimum milk transport and service distance
- 28-inch-deep pit for easy udder viewing and teaching teat positions on new cows

MILK HOUSE WITH BREEZEWAY TO MILKING BARN

- Narrow breezeway allows for better ventilation
- Access to tank room from exterior
- Main herd management office, equipment room and conference room
- Change rooms with showers for workers

SEPARATION PEN

- Automatic sorting after milking
- Beds with feed access for long-term stay if needed
- Automatic return to robot

PRIMARY ACCESS TO ROBOT ROOMS

- Bridge over alleys with grating surface
- Maintain clear alleys
- Clean access to robots

EXIT SMART SORT GATE

- Directs assigned or abnormal milk cows to separation pen
- Possible location of footbaths, all cows pass through and automatically
- Allows for cows to be circled back into commitment pen if incomplete milking

