

CASE STUDY

PORK

(402) 331-8010 • (800) OMAHA NE • millardmfg.com

MILLARD *SideKick™* – Classifier Line – Loin Auto Scaling

Problem:

An industry leading Pork Processor needed a faster, safer, automated line to sort Pork Loins while improving sanitation and providing a cost reduction.

could not weigh and sort Loin cuts fast enough by hand

- Note: This concept can be modified to fit Ham, Rib, and Belly lines too.

 The current classifier line was a "Bottleneck Process" where they
 - Safety Issue: Lifting and twisting motions required to move Loins (17-24lbs/each)
 - Unreliable accuracy of loin weight due to hurried manual processing
 - Standard production time was not available for modifying and troubleshooting this process. Replacement process testing and troubleshooting had to be done offline.



Solution:

Millard designed and developed an innovative new machine, the MILLARD *SideKick*™, and then integrated it into a dual-lane Classifier Line that automatically weighs, measures, and sorts Pork Loins at higher speeds.

- R&D driven custom designed SideKick™ using a new air clutch for reliability and torque
- Food Safety: "In-House" Passivation for Sanitary durability
- Safety Guarding on all pinch points and moving parts
- Sanitary wash-down design
- (2) separate lines with (3) SideKicks™ per line in series
- Scale Conveyor with integrated load cells for weighing the Loins on each line prior to the SideKicks™
- Integrated with MMC sanitary conveyor lines
- Walk-over stairs and platform between the SideKicks™ with fiber plate steps
- Factory Acceptance Testing (F.A.T.) at MMC for both mechanical and electrical functions including programming parameters
 - Allen Bradley logic
 - (4) customer personnel on site
 - Actual meat products (loins) used in testing
 - 2-day run off
- Heavy Duty Stainless Steel Construction

Results:

- Increased line capacity from 2,400 to 3,000 pcs/hr
- · Increased yields from proper product mix
- Increased Productivity on Boning Lines and Special Make Lines
- Reduction in Manpower of 4-5 personnel over 2-shift operation
- Food Safety: Increased sanitation by reducing human handling
- · Established reliable traceability by weight of Loins
- Factory Acceptance Testing (F.A.T.) and programming allowed the line to be installed over two weekends with little to no downtime incurred by customer