



# CASE STUDY: EVERY 1/10TH OF A SECOND COUNTS FOR HOG PROCESSOR

### Problem:

- A major international meat processing company measures downtime in tenths of seconds.
- Production is sacred – downtime costs thousands of dollars per minute due to throughput rate.
- Processes 10,300 hogs per day at one plant, producing ham, pork, and processed pork products.
- Stainless steel #30 to #80 roller chain drives in cut floor, boning area, and in-house designed process conveyors required daily preventive maintenance and frequent downtime for repairs.
- Company spending over \$100,000/year on roller chain drives and supplies.
- Equipment is washed down three times daily during 24/7 operation.
- Highly corrosive, aggressive disinfectants, bactericides, and cleaners known as “quats” (industry term for quaternary compounds) are used for washdowns.

### Solution:

- Used Gates Design Flex® and Design IQ™ for drive design.
- Converted 500+ roller chain drives to Poly Chain® drives with stainless steel sprockets and bushings.
- Poly Chain drives mostly 8mm applications (some 14mm) at 20 hp or less, 1 foot to 150 feet in length.
- Unique drives include a variety of backside idlers, serpentine configurations, reducers, and gears.

### Benefits:

- Plant reduced roller chain spending by 90% to \$10,000 – total Poly Chain spending of \$22,000 represents significant drive acquisition savings.
- No lubrication or adjustments necessary with Poly Chain drives.
- Estimate over 2,000 maintenance hours and downtime saved with Poly Chain belts and stainless steel sprockets and bushings.
- Quat compounds have no affect on Poly Chain belts, sprockets, and bushings.