

Application Profile

Subject: Improved Bearing Lubrication

**Application: Lunch Meat Slice/Packaging Line
(Custom Designed Machinery)**

Manual Method: A large Midwest meat producer experienced extremely high operating cost in the lunchmeat process area, where large cooked meat portions were automatically sliced, stacked, portioned and fed to vacuum packers. Maintenance was responsible for daily lubrication of over 2000 bearings. The equipment was sanitized daily with 140 degree foam. Many bearings were not accessible and some bearings did not have grease fittings installed. Bearing life averaged three months. Labor to lubricate, bearing replacement and unscheduled downtime were major cost factors.

Automated Method: In 1999 the plant the plant installed Lincoln Centro-Matic systems to automate the greasing process for 1,000 lubrication points. The systems have eliminated the need for maintenance workers to lubricate daily, tripled bearing life and reduced downtime. Since the initial installation the systems have been expanded to include 2,000 lubrication points.

According to maintenance: "The lube system saved our plant a considerable amount of money and our equipment performs better than ever. We are considering additional installations to further reduce our operating costs."



Return on Investment

Annual labor to lubricate bearings (15 hr./day) (\$40/hr X 15 hr/day X 250 days)	=	\$150,000
Annual bearing replacement (\$100/brg. X 3000 brgs.)	=	\$300,000
Unscheduled downtime (10% failures) (\$250/hr X 300 hrs)	=	\$ 75,000
TOTAL COST	=	\$525,000

Annual savings - Labor to lubricate (\$150,000 X 90%)	=	\$135,000
Annual savings - Bearing replacement (\$300,000 X 75%)	=	\$225,000
Annual savings - Downtime (\$75,000 X 75%)	=	\$ 56,250
TOTAL SAVINGS	=	\$416,250

Investment - Lincoln Centro-Matic system (Installed)	=	\$150,000
---	---	-----------

INVESTMENT RETURNED IN 4 MONTHS