



**Customer**  
Beverage manufacturer

**Industry**  
Food & Beverage

**Application**  
Conveying — beverage  
container lines

**Rexnord Solution:**  
Ultramite UB Gear Units

**Total Annual Savings**  
\$51,079

For a detailed cost analysis  
for your application,  
contact your local  
Rexnord Representative.

## Beverage Manufacturer Nearly Cuts Costs in Half with Ultramite UB Gear Units

### Challenge

A beverage manufacturer was dealing with repeated failures of the motors on its container lines due to the wet and often sticky environment. A competitor was supplying up to 100 helical-bevel motor-dependent gearmotors for each of the manufacturer's container lines. To the manufacturer, every motor failure also meant replacing the gear unit:

- When a motor failed, which typically happened after one to two years of service, the manufacturer could only go back to the competitor for their special integral motor.
- Because the gear unit was dependent on the motor, the entire gearmotor had to be removed from the line just to change the motor.
- The motor closed the gear unit and had the high speed pinion attached to the rotor shaft. This means the lubricant drained out of the unit, the unit split open and the gearmotor had to be rebuilt.
- Outsourcing the repair was generally more expensive than replacing the entire gearmotor.
- The manufacturer, like most users, wasn't aware that there is an alternative to these dependent gearmotors.

### Rexnord Solution

Rexnord proposed installing Ultramite® UB gear units, designed to drop in the same footprint as the currently installed motor-dependent gearmotors, but in a standard C-face arrangement.

- The C-face arrangement makes the gear unit motor-independent, allowing the manufacturer to standardize on any motor design and brand.
- Changing the motor never requires the gear unit to be taken off the shaft; the motor can be changed out in place. The motor unbolts from the Ultramite C-face, never requiring the unit to be opened up.
- These gear units can be standardized to 1 or 2 sizes and 1 or 2 ratios when used with VFD equipped motors, reducing sourcing complexity, SKUs, maintenance and inventory cost.

### Rexnord Solutions and Savings in Action

Since installing this Rexnord solution, the customer has:

- Reduced the total captured replacement cost of the gearmotor by enabling the gear units to remain in service while the motors are replaced.
- Cut maintenance expenses and downtime, because the motors can now be changed out in place.
- Decreased inventory costs, due to the gear unit's compatibility with standard motors.

### Calculating the Annual Total Cost of Ownership (TCO)

Rexnord worked with the customer to determine the current costs compared to the TCO using the Rexnord solution. Factors considered were:

- Acquisition costs.
- Installation costs.
- Maintenance costs.
- Spare parts inventory costs.

### Annual Cost Analysis Breakdown (in \$USD)

Acquisition Costs	Purchase Price	Expected Life (years)	Units Installed	Total
Current helical-bevel motor-dependent gearmotor	\$1,294	2	100	\$64,700
Ultramite UB Gear Unit	\$2,050	7	100	\$29,286
<b>Annualized Savings</b>				<b>\$35,414</b>

Installation Costs	Installation Cost	Installation/Year	Units Installed	Total
Current helical-bevel motor-dependent gearmotor	\$70	0.5	100	\$3,500
Ultramite UB Gear Unit	\$35	0.14	100	\$500
<b>Annualized Savings</b>				<b>\$3,000</b>

Maintenance Costs	Events/Year	Maintenance Resources	Maintenance Cost/Event	Total
Current helical-bevel motor-dependent gearmotor	-	-	\$0	\$0
Ultramite UB Gear Unit	50	1 person, other costs	\$329	\$16,450
<b>Annualized Savings</b>				<b>-\$16,450</b>

### Inventory Reduction

Standardization in gear units, ratios and size, utilizing independent VFD motors to control the speed

Current helical-bevel motor-dependent gearmotor	Cost/Year	\$38,820
Ultramite UB Gear Unit	Cost/Year with 75% Reduction	\$9,705
<b>Annualized Savings</b>		<b>\$29,115</b>

### Rexnord Solution Annual Savings Summary

Total current cost	\$107,020
Total proposed cost	\$55,941
Total savings	\$51,079
TCO reduction percent	48%

**Total Cost of Ownership Annual Savings: \$51,079**