



Value Recognition Report - Protein Conversion Plant -

Account History: This is a Protein Conversion Plant The cost of downtime is estimated at \$300 per minute.

Certified Labs' Objective: Develop a reliability partnership to reduce downtime, lower maintenance & operating expenses, and drive proactive maintenance procedures for continuous improvement.

Reduced Lubricant Consumption & Inventory

- Reduced Grease and Oil Consumption by Approximately 63%
- Reduced the quantity of hydraulic oils and gear oils by 50%

Annual Savings - Parts Repair, and Replacement

- Reduced Cooker Bearing Replacements By 88 % Per Year
By Using CCL-500 Grease:..... **\$6,988**
- Reduced Gearbox Repairs and Replacements By 63% Per Year
By Using Certop Gear Oil..... **\$120,400**
- Reduced 40hp Fan Bearing Failures by 75% Per Year by
Using Premalube Grease :.....**\$210**
- Reduced Hammermill Bearing Failures by 75% Per Year
By Using Premalube Xtreme Grease:.....**\$930**
- Reduced Pump repairs by 96% & replacements by 66%
By Using :.....**\$Value Unknown**

Annual Savings - Lubricant Related Downtime

- Reduced 40hp Fan Bearing Failures resulted in
Downtime Savings:..... **\$54,000**
- Reduced Cooker Bearing Failures resulted in
Downtime Savings:.....**\$151,200**

Annual Savings - Waste Expense

- Before Using Certified's Returnable Bulk Storage Tanks,
Disposed Of 284 Empty Drums @ estimated \$25 Each: ...**\$7,100**

Value Added Contributions

- 4 Plant Surveys: Typical Charge of \$1800/each
- 2 Lubrication Training Seminars: Typical Charge \$1375/ea
- 24 Certified Representative Service Visits
- 2 Grease Pumps Provided @ No Charge \$4,400

Savings Summary

**Parts Repair
& Replacement\$128,528**

**Lubricant Related
Downtime\$205,200**

Waste Expense\$7,100

Total Annual Savings \$340,828

Additional Value

Plant Surveys\$7,200

Training Seminars\$2,750

Equipment\$4,400

Total Value \$14,350

Total Annual Savings \$340,828

Total Savings Over 10 Year Relationship \$3,408,280





Value Recognition Report

- Protein Conversion Plant -

Cost Reductions Calculations:

Lubricant Consumption & Inventory Reduction

Annual Grease usage reduced from 41,600Lbs to 15,000Lbs. Hydraulic Oil and Gear Oil annual usage reduced from 15,600 Gal. to 5,610 Gal. Lubricants lasting 63% longer. Inventory reduced from 2 hydraulic oils to 1 hydraulic oil, reduced from 4 gear oils to 2 gear oils.

Parts Repair and Replacement Cost Reduction

- Reduced cooker bearing failures from 3+ per year to 0.4 per year (only 2 failures in 5 years) by switching to CCL-500 grease. **Savings of \$6,988 per year in reduced parts and repair costs:** 2.6 less bearings replaced or repaired @ 1968 each = \$5116. 2.6 less bearings replaced or repaired = \$1872 (4 men x 12 hours each @ \$15Hr)

- Reduced gearbox repairs by 63% and replacements by 64%. **Savings of \$120,400 per year:** Before – Replaced 28 gearboxes per year @ \$3500 each = \$98,000 (parts & labor) Now – Replace 10 gearboxes per year @ \$3500 each = \$35,000 (parts & labor) **Savings of \$63,000.** Before – Repaired 258 gearboxes per year @ \$350 each = \$90,300 (parts & labor), Now – Repair 94 gearboxes per year @ \$350 each = \$32,900 (parts & labor): **Savings of \$57,400.**

- Reduced 40hp fan motor bearing failures by 75%. Savings of \$210 per year: Before – Replaced 2+ fan motor bearings per year @ \$140 each = \$280 (parts & labor). Now – Replace 0.5 per year @ \$140 each = \$70 (parts & labor): **Savings of \$210.**

- Reduced Steadman hammermill bearing failures by 75%. Savings of \$930 per year: Before – Replaced 8 hammermill bearings per year @ \$155 each = \$1240 (parts & labor). Now – Replace 2 per year @ \$155 each = \$310 (parts & labor): **Savings of \$930.**

Before – Replaced 3 pumps and repaired 208 pumps per year. Now – replace 1 pump per year and repair 8 pumps per year. **Savings information not provided**

Lubricant Related Downtime Reduction

- Reduced 40hp fan motor failures by 75% , \$54,000 Downtime Savings (downtime calculated at \$300 min. Average downtime to replace 1 bearing is 2 hr or \$36,000). Before – Downtime of Replaced 2+ fan motor bearings per year @ \$36,000 each = \$72,000 (parts & labor). Now – Replace 0.5 per year @ \$18,000 each = \$18,000 (parts & labor): **Savings of \$54,000.**

- 86% reduction in Cooker Bearing replacement & repair. (downtime calculated at \$100 min. because only one third of production is lost. Average downtime to replace 1 bearing is 12 hr or \$72,000). Before – Downtime related to 2.6 cooker bearings replaced or repaired per year @ \$72,000 each = \$187,200 (parts & labor). Now – Replace 0.5 per year @ \$36,000 each = \$36,000 (parts & labor): **Savings of \$151,200.**

Waste Expense Reduction

Before - This plant paid \$7,100 per year to dispose 284 empty drums @ \$25 each. Now – Certified provides lubricants in returnable tote tanks. This plant now pays \$0 drum disposal. **Savings of \$7100.**

Now - **PPC generated 6,272 gallons less waste oil** because oils are lasting 63% longer.



2003 Value Recognition Report

- Poultry Kill Plant -

Account History: This is a Poultry Kill Plant. Cost of downtime is estimated at \$350 per minute.

Certified Labs' Objective: Develop a reliability partnership to reduce downtime, lower maintenance & operating expenses, and drive proactive maintenance procedures for continuous improvement.

Reduced Lubricant Consumption & Inventory

- Reduced Grease and Oil Consumption by Approximately 50%
- Reduced Quantity of Different Greases and Oil Inventoried by 33%

Annual Savings - Parts Repair, and Replacement

- Reduced Lift Truck Bearing Replacements By 70% Per Year
By Using Premalube Red Grease:..... **\$4,273**
- Reduced Picker Hub Bearing Replacements By 78% Per Year
By Using Premalube Xtreme #1 Grease: **\$10,046**
- Extended Motor Oil Change Intervals 100% From 250
Hours to 500 Hours By Using Strata XL Motor Oil:.....**\$900**
- Reduced Gearbox Repair & Replacement Costs 63% Per Year
By Using Certop Gear Oil :..... **\$40,307**
- Reduced Hydraulic Pump Replacements by 94%
By Using Hi-Top Hydraulic Oil:.....**\$14,273**

Annual Savings - Lubricant Related Downtime

- Reduced Hydraulic Pump Failures 94% Resulted in
Downtime Savings:..... **\$39,200**

Annual Savings - Waste Expense

- Before Certified Installed Returnable Storage Tanks This Plant
Paid \$25 Each to Dispose of 200 empty drums per year...**\$5,000**

Value Added Contributions

- 4 Plant Surveys: Typical Charge of \$1800/each
- 2 Lubrication Training Seminars: Typical Charge \$1375/ea
- 24 Certified Representative Visits Each Year.
- \$6800 of Dispensing Equipment and Storage Tanks Provided.

Savings Summary

**Parts Repair
& Replacement\$69,799**

**Lubricant Related
Downtime\$39,200**

Waste Expense\$5,000

Total Annual Savings \$113,999

Additional Value

Plant Surveys\$7,200

Training Seminars\$2,750

Equipment\$6,800

Total Value \$16,750

Total Annual Savings \$113,999

Estimated Savings Over 4 Years \$455,996





Value Recognition Report

- Poultry Kill Plant -

Cost Reductions Calculations:

Lubricant Consumption & Inventory Reduction

Overall lubricant usage reduced by 50% per year, average lubricant lasting 50% longer. Inventory consolidation: reduced from 3 hydraulic oils to 2 hydraulic oils, 3 gear oils to 2 gear oils, and 3 greases to 2 greases.

Parts Repair and Replacement Cost Reduction

- Reduced Lift Truck Bearing Replacements By 70% Per Year By Using Premalube Red Grease. **Savings of \$4,273 per year.** (364 less bearings used @ \$7.49 each = \$2,726, 364 less bearings replaced @ 17 minutes repair time @ \$15Hr. repair rate = \$1547).
- Reduced Picker Hub Bearing Replacements By 78% Per Year By Using Premalube Xtreme #1 Grease. **Savings of \$10,046 per year.** (364 less bearings used @ \$12.60 each = \$4,586. 364 less bearings replaced @ 1 hour repair time @ \$15Hr. repair rate = \$5,460)
- Extended Motor Oil Change Intervals 100% From Every 250 Hours to 500 Hours By Using Strata XL Motor Oil and Oil Analysis. **Savings of \$900 maintenance labor per year.** (60 less motor oil changes @ 1 hour each @ \$15 per hour = \$900)
- Reduced Gear Box Costs 63% Per Year By using Certop Gear Oil. Plant spent \$63,275 on gear boxes in 2001 before using Certop. Plant spent \$22,968 in 2003 with Certop. **Savings of \$40,307.**
- 94% Reduction of Hydraulic Pump Replacements By Using Hi-Top Hydraulic Oil. Reduced hydraulic pump failures from 4 per year @ \$3,800 each plus \$30 labor to 1 failure every 4 years @ \$950 per year plus \$7.50 labor. \$15,250 - \$957 = \$14,273. **Savings of \$14,273 per year**

Lubricant Related Downtime Reduction

Downtime Savings From Reduced Hydraulic Pump Failures. Average downtime when hydraulic pump fails is 30 Minutes. Reduced annual pump downtime from 120 minutes to 8 Minutes. $120 \times \$350 = \$42,000$. $8 \times \$350 = \$2,800$. $\$42,000 - \$2,800 =$ **Savings of \$39,200.**

Waste Expense Reduction

Before Certified installed oil storage tanks this plant paid \$5,000 per year to haul off 200 empty drums @ \$25 each. **Savings of \$5,000 per year.**

Equipment Provided

4 oil pumps and 4 storage tanks provided at no charge. **Savings of \$6,800.**



