

Southwestern Petroleum Corporation GREASED BEARING LUBRICATION COST IMPROVEMENT ANALYSIS

With a very small amount of information, we can show you in dollars and cents what a switch to Southwestern Petroleum Corporation's superior SWEPCO Brand Lubricants can mean to your operation. The actual cost of the lubricant is a very small portion of the story. Frequency of lubrication, waste lubricant disposal costs, lube labor, repair parts and labor, equipment service life, replacement cost, fuel or energy usage and cost of downtime must all be considered to reveal the <u>total cost of lubrication</u>. Knowing all of these factors permits today's maintenance professional to make good business decisions. Thank you.

Department: Zip/Postal Code: unty: Zip/Postal Code: k: ()
unty: Zip/Postal Code: x: ()
x: ()
idual Unit Being Analyzed Manufacturer: Model No: Manufacturer: Model No:
Manufacturer: Model No: Manufacturer: Model No:
Manufacturer: Model No:
and/Weight:
d O High Load O High Shock O Water/Steam Contamination
of Similar Units:
on Related Costs (Green Items Required)
7. What is your average hourly cost for downtime (lost revenue, productivity, wages, penalties, etc)?
 What is your average energy/fuel usage rate for this unit (kw/hr or gal/liter per mile or hour)?
What is your average cost for energy/fuel (per kwhr/gal/liter)?
10. How many hours/miles do bearings and seals last?
11. How long do bearing/seal replacements or rebuilds take the unit out of service?
12. What was your last cost for bearing/seal replacement or rebuild parts?

Phone Number: (_____

GREASED BEARING LUBRICATION COST IMPROVEMENT ANALYSIS

Company: Sweeney Manufacturing

Bearing Description: Timken Tappered Roller Bearings on Pelletizer

SECTION 1 CURRENT MAINTENANCE INFORMATION			
How many average hours/miles per week is this bearing in service?	80	Hours/Miles per W	/eek
How much grease is used when regreasing this bearing?	0.01875	Pounds/Kg	
What is this bearing's current greasing cycle in hours/miles?	8	Hours/Miles	
How long does a routine greasing take?	0.15	Hours	
What is your hourly cost for maintenance labor (including benefits, taxes, shop overhead, etc)?	\$53.24	Per Hour	
/hat is your average hourly cost for downtime (lost revenue, productivity, wages, penalties, etc)?	\$150.00	Per Hour	
SECTION 2 CURRENT ENERGY/FUEL COST INFORMATION			
What is your average energy/fuel usage rate for this unit?	400.00	KW/Hr or Gal/Liter	r per Mile or H
What is your average cost for energy/fuel?	\$0.0480	Per Gal/Liter/KWH	łr
SECTION 3 CURRENT REPAIR COST INFORMATION			
How many hours/miles do bearings and seals last?	200	Hours/Miles	
How long does bearing/seal replacement or rebuilds take the unit out of service?	2.00	Hours	
What was your last cost for bearing/seal replacement or rebuild parts?	\$240.00	Per Set	
SECTION 4 LUBRICATION COST ANALYSIS	Current Supplier	SWEPCO	
Projected Greasing Interval	100.00%	200.00%	Of Current
Projected Usage At Each Regreasing	100.00%	20.00%	Of Current
Projected Bearing Life	100.00%	300.00%	Of Current
Projected Energy/Fuel Savings	0.00%	0.25%	Of Current
Cost of Grease Per Pound/Kg	\$1.10	\$4.30	
In Service Hours/Miles Per Year	4,160	4,160	
Regreasings Per Year	520.00	260.00	
Bearing/Seal Replacements Per Year	20.80	6.93	
Annualized New Grease Costs	\$10.73	\$4.19	
Annualized Labor Costs	\$6,367.50	\$2,814.62	
Annualized Parts Costs	\$4,992.00	\$1,664.00	
Annualized Cost of Downtime	\$6,240.00	\$2,080.00	
Annualized Energy/Fuel Usage	\$79,872.00	\$79,672.32	
THE BOTTOM LINE TOTAL ANNUALIZED GREASED BEARING OPERATING COST	\$97,482.23	\$86,235.13	
Projected Yearly SWEPCO Savings In Dollars		\$11,247.10	<
Projected Yearly SWEPCO Savings As A Percent		11.54%	←
CONSIDER THE IMPACT OF THIS TYPE OF SAVINGS ACROSS YOUR ENTI	RE EQUIPMENT IN	VENTORY	
Number of Similar/Identical Bearings		50	
		\$562 354 76	

Total Potential Annual Savings

\$562,354.76