

Sumitomo Drive Technologies

MOBILE SHC™ GEAR HI-SHOCK® IS IT WORTH THE MONEY?

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Mobil SHC™ Gear Hi-Shock (“Hi-Shock”) 150 Synthetic Oil – Is it worth the money?

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Imagine, your new car can run up to 2~3X the current mileages before needing an oil change, will run at a lower temperature, and can get an extended warranty from your dealership – all possible, by using your dealer’s newly formulated and enhanced engine oil at twice the cost of your current oil.... Will you go for this offer?

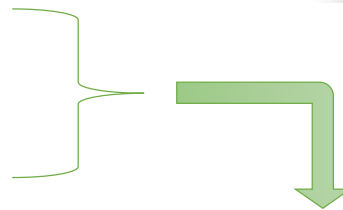
While this is a hypothetical scenario, the users of the Mobil SHC™ Gear Hi-Shock® 150 Synthetic Oil (“Hi-Shock”) are actually seeing these benefits with their Cyclo industrial gearmotors and speed reducers (or simply “gear unit”).

Since the 2019 launch of Hi-Shock® oil, which was jointly developed by ExxonMobil and Sumitomo, customers that have adapted this enhanced lubricant have experienced **on average 10 °F lower running temperature and up to 2~3X longer oil life** with their Cyclo® units. Unsurprisingly, their testimonial correlates with our field-tested data from the Hi-Shock development.

This means to the customers is that their Hi-Shock® oil filled units will have a significantly increased service life with longer maintenance intervals – this is a big deal and more sustainable!

In simple terms – by extending the oil life and decreasing the heat generated in the gear unit this will result in:

- decreasing the wear on discs, bearings, seals
- decreasing the number of oil changes
- decreasing the oil consumption
- decreasing the production downtime
- decreasing the maintenance labor costs

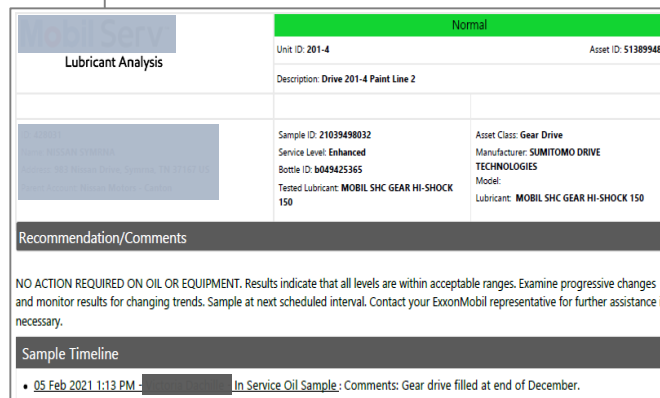


and all of the above benefits ultimately means one important thing – **increased savings!**



Don't take our word for it...

When something sounds too good to be true, then it must be proven true before we can believe it, and this is certainly the right approach that many conservative customers took. Many of them had established validation programs to compare Hi-Shock’s performance to their current oils before making the changeover – which is a perfectly cautionary and logical process that we recommend everyone to pursue.






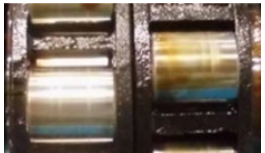




One of these customers is Company “N”, a reputable automotive manufacturer headquartered in Asia with plants worldwide. The sample report shown here is their oil analysis of the Hi-Shock after one month

of Cyclo® unit operation. The overall status indicates that all aspects of the

oil analysis, e.g., wear, contaminant count, and etc. were well within their acceptable levels and thus received a green light/normal status.

When we compared the conditions of the oils and the critical gearing components from our field testing during the Hi-Shock development and observed an impressive result as shown below. The Hi-Shock® oil barely changed color and the gearing parts looked fresh even after running continuously for six months!

	Cyclo Gear Unit Discs	Eccentric Bearing	Oil	Oil Tank
Hi-Shock synthetic oil ISO 150 (after 6 months)				
Other brand synthetic oil ISO 220 (after 300 hours)				

Show me the money you say...

In addition to the technical evaluations the interested customers would also analyze their financial impact before adapting the new oil. To illustrate the potential saving that Hi-Shock could contribute we will use Company "F" as an example.

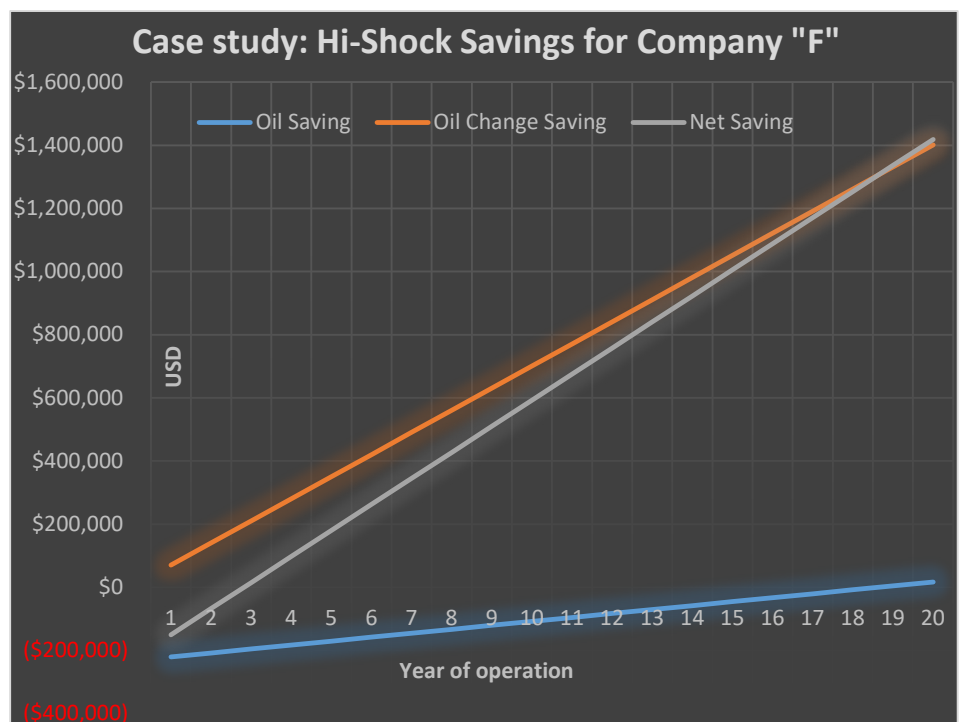
Case Study

Company "F" is a well-known parcel-handling & LTL freight company headquartered in the US with operations worldwide. They have recently standardized on Hi-Shock, and now requiring that all of their new Sumitomo Cyclo units to be filled with this oil. Company "F" has many facilities scattered across the country to support both ground and air transport operations. For the ease of our number crunching illustration, we'll make some generalized assumptions, and they are as follows:

Assumptions

- 40 hubs in the USA
- 250 conveyors/hub
- Half of the conveyors are driven a Cyclo® unit each
- Oil volume 1.8 gal/gear unit
- 24/7 running operation all year round
- Oil change time 0.5 hr/ unit
- 20-year minimum service life
- Labor rate for oil change \$16/hr
- Current oil initial change 500 hrs
- Current oil subsequent change 2500 hrs
- Hi-Shock® initial change 1000 hrs
- Hi-Shock® subsequent change 5000 hrs

Based on these assumptions, we can plot the results to show the financial impact. If Company "F" switches from a mineral oil to the synthetic Hi-Shock oil, looking only



at the oil expenditures, the added cost per unit of the synthetic Hi-Shock® out weights the decreased oil usage and they would not see a saving until the nineteenth year which is an unreasonable payback period (blue line). However, the labor saving associated with needing fewer oil changes would yield an immediate gain from the first year (orange line), and finally and most importantly, combining both oil and labor savings, overall they would see a return on the investment only after two-and-half years with a steep positive trend (grey line). In addition to the added equipment life, with this huge saving opportunity, we understand why Company F decided to switch over to the Hi-Shock® oil.

The bottom line, longer equipment life at lower operating costs are realized by converting Cyclos® to Hi-Shock®!

The Hi-Shock® oil is available from both Sumitomo and ExxonMobil's authorized distributors, and Sumitomo offers optional extended warranties for gear units shipped with Hi-Shock. If you would like to get more information about the Hi-Shock oil or Sumitomo products, then please visit: <https://us.sumitomodrive.com/en>