Moe Race Engines Dyno Shootout

TriboDyn® Engine Oil verses Mobile 1, Valvoline, Brad Penn, Castrol Edge, & Penrite

Each test was performed on our SuperFlow - Powermark Engine Dyno. Our room is second to none as it was designed and built under directions by Rob Benson from Hendricks Motorsport USA.

Each test we performed we made sure we had the following parameters in check at all times for true and consist results.

- Water Temperature
- Lambda readings
- BMEP Readings
- Ramp rates
- Dyno Water Temperature in
- Dyno Water Temperature out
- Water pressure into absorber
- Oil Temperature
- Oil pressure

- Humidity
- Barometric Pressure
- Correction factor
- Wet Bulb
- Dry bulb
- Stoichiometric
- EGT Exhaust Gas Temperature
- BSFC
- Turbine AFR

All parameters were checked and testing was performed on the same day and within three hours.

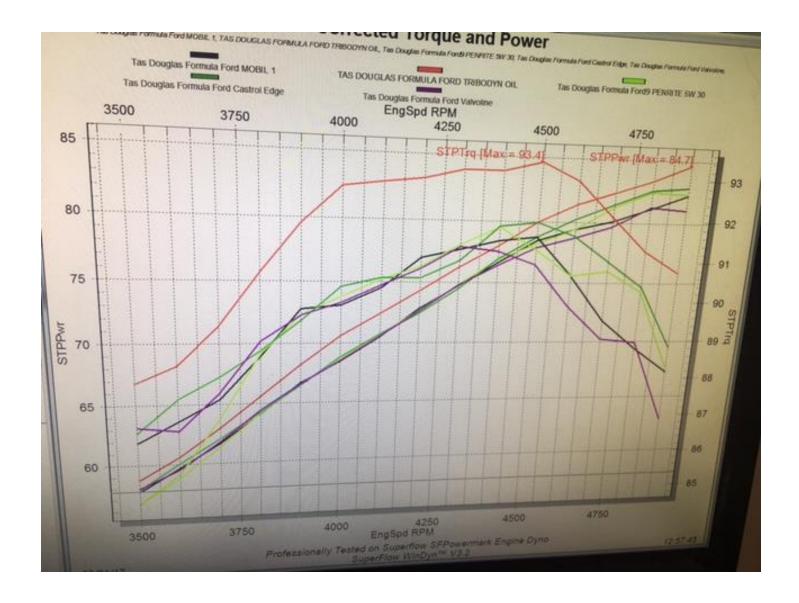
These are three engines that have been properly run in and base lined before any testing was done. Here is what we found.

We found the TriboDyn oil outperformed the other oils consistently. Friction was obviously reduced and each engine in the end accepted less fuel to produce better results in torque and HP using TriboDyn.

We calculated a minimum of **5.5 percent better fuel economy** and **less emissions** resulting in better efficiency. This test was performed by Moe Race Engines in Moe Victoria, Australia, under the supervision of Brian Cassar.







This Dyno test was on a TAS Douglas Formula Ford engine using 5W-30 oil.

Four of the torque curves follow the same pattern up until 4,300 rpms. Mobil 1, Castrol Edge, Valvoline, and Penrite. The Castrol Edge continued slight higher. TriboDyn outperformed the other oils with a maximum torque at 93.4 lb-ft to Castrol Edge at 92.0 lb-ft. This is a 1.5% increase in torque.

The maximum power for the TriboDyn oil was 84.7 hp. TriboDyn compared to the Castrol Edge at 83.0 hp which is a 2.0% increase.

The TriboDyn torque and power curves where above the other oil products throughout the rpm range.

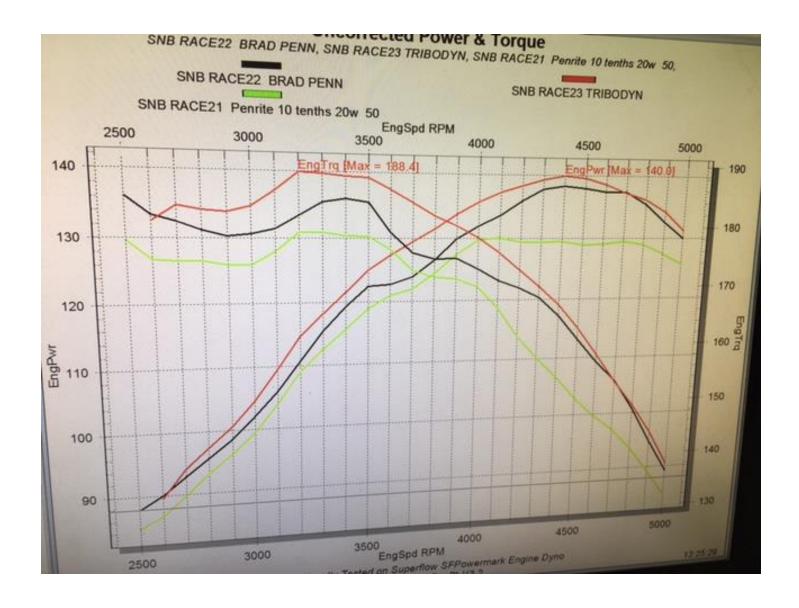




This Dyno test shows the maximum torque was 562 lb-ft and power was 590 hp. TriboDyn & Mobil 1 outperformed Castrol Edge by a substantial margin. TriboDyn exceed the 555 lb-ft and 582 hp of the Mobil 1 by 1.3% and 1.4% respectively.

The power curve for the Mobil 1 appears to flatten at the end of the run while TriboDyn continues to increase.





This Dyno test was on a SNB Race engine using 20W-50 oil. www.snbracing.com.au

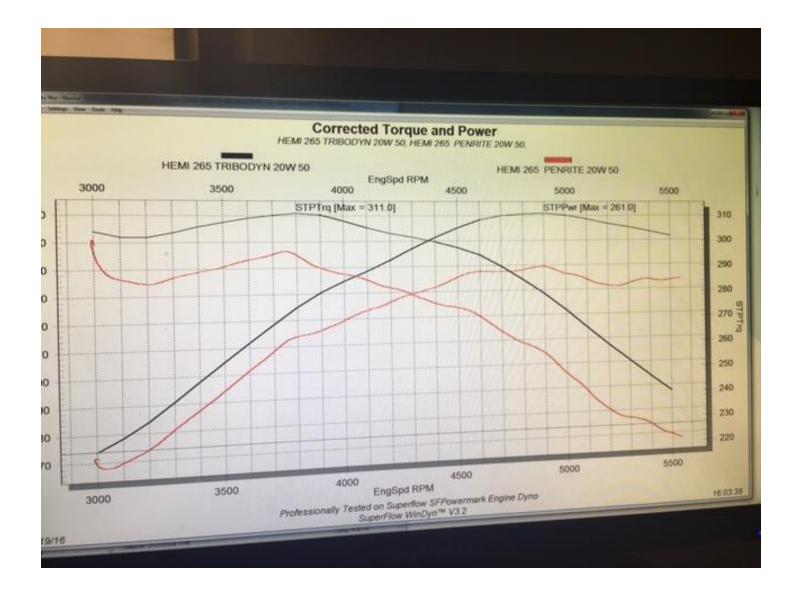
The numbers: TriboDyn 188 lb-ft and 140 hp

Brad Penn 184 lb-ft and 138 hp

Improvement 2.2% and 1.4%

What jumps out the most on this test is how smooth the TriboDyn curves are compared to the other oils. A smooth curve is represents a well running engine. The larger horse powered engines will show a smoother curve due to the power exceeds the friction. The smaller engines are more obvious where there is higher fiction through the power range. Both Brad Penn and Penrite has a substantial drop in torque at 3,500 rpms. Where TriboDyn has a smooth transition.





This Dyno test was on a HEMI 265 engine using 20W-50 oil.

Another example of TriboDyn smoothing the torque and power curve.

The numbers: TriboDyn 311 lb-ft and 261 hp

Penrite 297 lb-ft and 240 hp

Improvement 4.7% and 8.8%

This engine had the most impressive improvements using TriboDyn oil. The torque and power curves are smoother throughout the test.

The standard engine produces 262 lb-ft of torque at 2,800 rpm and 203 hp at 4,600 rpm. This engine has been built to increase the horse power and TriboDyn oil took it to a new level of performance.

