



엔진닥터큐

ENGINE Dr.Q



ENGINE Dr.Q

Gasoline Engine Oil  
Diesel.LPG Engine Oil  
Motor Bike Engine Oil  
Engine Coating Treatment  
Manual Transmission Oil  
etc.



**엔진닥터큐**  
ENGINE Dr.Q



2016  
it Award  
Design

# Beyond the limits of the technology

## Global Partner moving on to the world

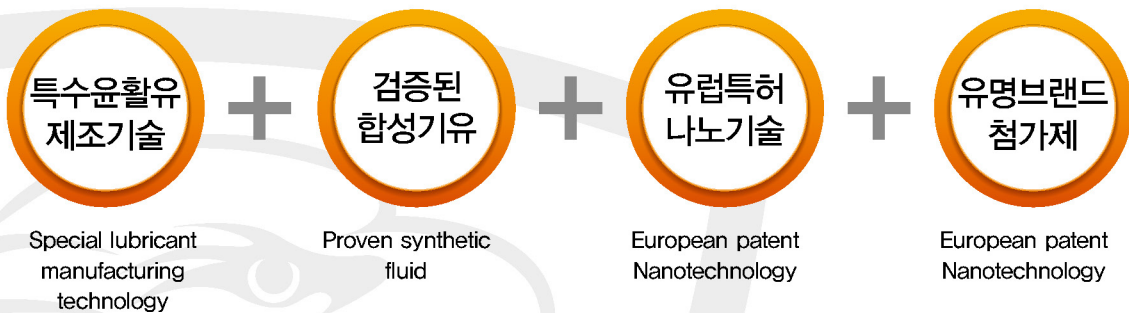
Based on 20 year special lubricant manufacturing technologies—Lubchem Korea,

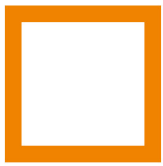
ENGINE Dr.Q is a brand with commitment of providing new lubrication solutions for automotive and industrial engines.

Besides proven synthetic base fluid and famous brand additive package,

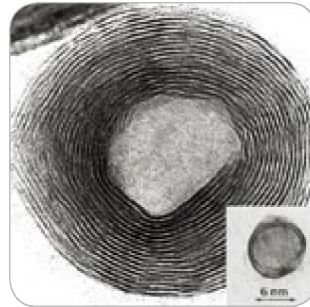
ENGINE Dr. Q sets a new standard in the field of lubricants as appropriately blended special additives,

In particular, European patent nanotechnology has been applied to engine oil and engine coating agents,





## Features and Advantages of WS<sub>2</sub>



Engine oil and coating agents of ENGINE Dr.Q are different from general-purpose mineral oil and synthetic engine oil and contain nano-additive WS<sub>2</sub> applying Nobel Prized nano fullerene that has been invented by Israel Weisman Institute.

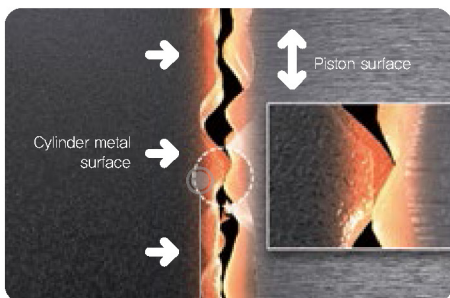
In Korea, our company not only owns patent related to lubricant blending of nano tungsten disulfide (Nano-WS<sub>2</sub>) material but also engine coating agents, produces lubricating greases, industrial oil, and engine oil additives.

WS<sub>2</sub> fullerene of spherical nano acts like a ball-and-roller bearing under normal conditions and promotes the lubricity of the lubricants, however, if there is damage of metal surface, when the multi-layer structured fullerenes are in the presence of constant temperature and pressure, the tribo-film releases and it forms a multi-layer coating films on the metal surface.

Unlike surface regeneration coating agents based on nano metal which it is widely distributed in the market, nano WS<sub>2</sub> material has a very low coefficient of friction (0.03) performance by forming a strong coating.

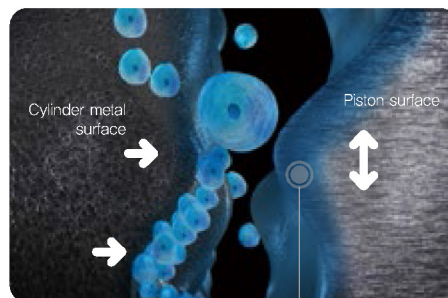
## The principle of Engine coating

- 1** In case of applying general oil  
Surface friction and abrasion occurrence figure



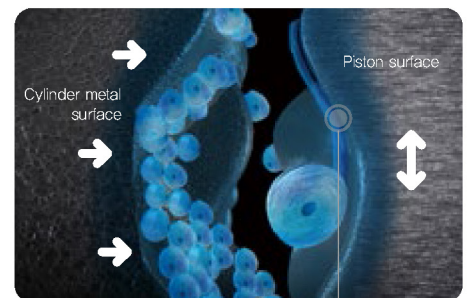
Continuous surface friction and abrasion occurrence

- 2** Primary lubricating coating film formation figure by special additives



Primary lubricating coating film formation

- 3** Special additive lubrication coating film formation and surface regeneration effect feature by WS<sub>2</sub>



Tribo films permeate damaged inner part and protects engine and prolongs lifespan

# Engine oil | For GASOLINE & LPG engine



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use for  
all car  
models



## Q9 S PAO 0W30/0W40

| Synthetic engine oil + Nano WS<sub>2</sub>

- Class : API SM, A3/B4, C3 • Main component : PAO 100% + WS<sub>2</sub>
- Finest excellent engine protection capacity • Extending engine life
- Damaged surface regeneration, exhaust reduction, fuel efficiency improvement
- Color : grayish black

Product name	Use	Volume	Filling ratio
Q9 S PAO 0W30	Use for all car models	1Lt	Each vehicle to be checked
Q9 S PAO 0W40	Use for all car models	1Lt	Each vehicle to be checked



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## Q7 5W30/10W30 | Use for both gasoline & LPG |

| Synthetic engine oil + Nano WS<sub>2</sub>

- Class : API SN, GF-5 • Main component : 100% of synthetic fluid + WS<sub>2</sub>
- Excellent engine protection capacity • Extending engine life
- Damaged surface regeneration, exhaust reduction, fuel efficiency improvement
- Color : grayish black

Product name	Use	Volume	Filling ratio
Q7 5W-30	Gasoline, LPG cars	1/4/20/200Lt	Each vehicle to be checked
Q7 10W-30	Gasoline, LPG cars	1/4/20/200Lt	Each vehicle to be checked

\* SRV coefficient of friction (M)Test(undiluted solution) : 0.06 / Disk ball, 80°C, 400N, 2MM, 50HZ, 10 minutes



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## Q5 5W30/10W30 | Use for both gasoline & LPG |

| Synthetic engine oil

- Class : API SN, GF-5 • Main component : 100% of synthetic fluid
- Extending engine life • Engine surface regeneration effect
- Fuel improvement, exhaust reduction • Color : light yellow

Product name	Use	Volume	Filling ratio
Q5 5W-30	Gasoline, LPG cars	1/4/20/200Lt	Each vehicle to be checked
Q5 10W-30	Gasoline, LPG cars	1/4/20/200Lt	Each vehicle to be checked



# Engine oil | For DIESEL engine



## Q7 10W30/15W40 | For diesel car |

| Synthetic engine oil + Nano WS<sub>2</sub>

- Class : API CI-4
- Main component : 100% of synthetic fluid + WS<sub>2</sub>
- Excellent engine protection capacity
- Extending engine life
- Damaged surface regeneration, noise reduction, Fuel efficiency improvement
- Color : grayish black

Product name	Use	Volume	Filling ratio
Q7 10W-30	Passenger car diesel,SUV,truck	1/4/20/200Lt	Each vehicle to be checked
Q7 15W-40	Medium and large trucks Engine oil	20/200Lt	Each vehicle to be checked

\* SRV coefficient of friction (M)Test(undiluted solution) : 0.10 / Disk ball, 80°C, 400N, 2MM, 50HZ, 10 minutes



## Q7 5W30/5W40 | For diesel car |



| Synthetic engine oil + Nano WS<sub>2</sub>

- Class : API CJ-4
- Main component : 100% of synthetic fluid + WS<sub>2</sub>
- Excellent engine protection capacity
- Extending engine life
- Damaged surface regeneration, noise reduction, fuel efficiency improvement
- Color : grayish black

Product name	Use	Volume	Filling ratio
Q7 5W-30	Passenger car diesel ,SUV,RV Engine oil	1/4/20/200Lt	Each vehicle to be checked
Q7 5W-40	Passenger car diesel ,SUV,RV Engine oil	1/4/20/200Lt	Each vehicle to be checked

\* SRV coefficient of friction (M)Test(undiluted solution) : 0.10 / Disk ball, 80°C, 400N, 2MM, 50HZ, 10 minutes



## Q7 10W40 | For diesel car |



| Synthetic engine oil + Nano WS<sub>2</sub>

- Class : API CJ-4
- Main component : 100% of synthetic fluid + WS<sub>2</sub>
- Extending engine life
- Engine surface regeneration effect
- Fuel efficiency improvement, exhaust reduction
- Color : grayish black

Product name	Use	Volume	Filling ratio
Q7 10W-40	SUV, Medium and large trucks Engine oil	1/4/20/200Lt	Each vehicle to be checked

\* SRV coefficient of friction (M)Test(undiluted solution) : 0.10 / Disk ball, 80°C, 400N, 2MM, 50HZ, 10 minutes

# Engine coating products



For both gasoline • LPG car



## EN-POWER GS

| Nano WS<sub>2</sub> New generation synthetic engine performance improver, engine coating agents

- Main component : Ester + WS<sub>2</sub> • Engine oil additives for internal combustion engine
- Immediate fuel efficiency improvement and friction reduction effect
- Surface regeneration effect • Engine oil supplement effect • Color : grayish black

Product name	Use	Volume	Filling ratio
EN-POWER GS(Gasoline,LPG)	Gasoline, LPG car Engine coating agents	400ml	A pail of 400ml per 5lt of engine oil

**Note :** If the engine oil is fully charged shown on the engine oil gauge, please discharge about 200ml and then feed it.

Use for three of Passenger diesel • SUV • truck



## EN-POWER DS

| Nano WS<sub>2</sub> Next generation synthetic engine performance improver, engine coating agents

- Main component : Ester + WS<sub>2</sub> • Engine oil additives for internal combustion engine
- Immediate fuel efficiency improvement and friction reduction effect
- Surface regeneration effect • Engine oil supplement effect • Color : grayish black

Product name	Use	Volume	Filling ratio
EN-POWER DS(디젤)	Passenger diesel, truck vehicle engine coating agents	400ml	A pail of 400ml per 5lt of engine oil

**Note :** If the engine oil is fully charged shown on the engine oil gauge, please discharge about 200ml and then feed it.



## EN-POWER CL

| Additives for improving engine performance of using both cars gasoline • diesel

- Main component : Ester + special additives
- Engine oil additives for internal combustion engine
- Purpose of fuel efficiency improvement • Fast metal surface coating effect
- Engine oil supplement effect, output increase • Color : light yellow

Product name	Use	Volume	Filling ratio
EN-POWER CL	Engine performance improvement	250ml	A pail of 250ml per 5lt of engine oil

# Other products

※Feed into fuel inlet



## Q-POWER for gasoline/Diesel vehicles

| For vehicle fuel additives (Internal engine cleaner)

- Component : Poly hydrocarbon derivatives
- Cleanliness maintain function by cleaning inner parts of engines
- Engine performance improvement, output increase, fuel efficiency improvement, noise reduction
- In case of diesel vehicles, it's excellent for cleaning carbon dirt • Color : Colourless

Product name	Use	Volume	Duty cycle
Q-POWER GS	Gasoline vehicles	500ml	1 bottle Per 10,000km
Q-POWER DS	Diesel vehicles	500ml	1 bottle Per 10,000km



## EN-50 Multipurpose lubrication, anti-rust spray

| Odor-free premium lubrication, anti-rust additives

- component : Mineral base oil • Flexible continuity film-type formation
- Prevention of steel corrosion, give lubricity on metal friction surface
- Remove moisture of various electrical system with 'excellently changing nature of water'
- Remove various pollutant • Maintenance and lubrication of general house wares and tools
- Lubrication, anti-rust, fusion solution of bolts, nuts and various mechanical parts
- Color : colorless

Product name	Use	Volume	Way of use
EN-50	Multi-purpose lubrication, anti-rust additives	360ml	After shaking fully, spray on the desired area

\* Korea Gas Safety Corporation proper goods / Please use it after checking warning signs according to ISHA(Industrial safety and health act) Article 41 Regulation.



## Manual transmission oil RITMO 80W90

| RITMO manual transmission and gear oil

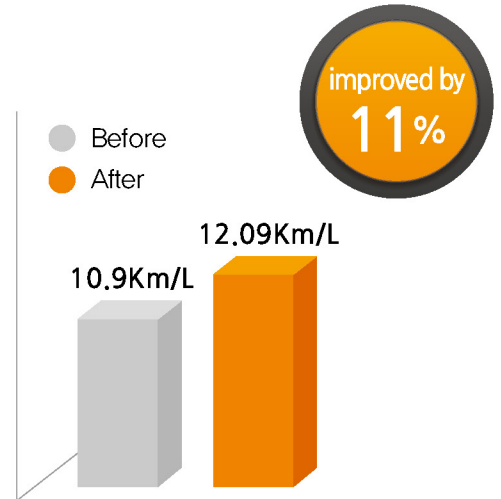
- Class : GL5 • Main component : GROUP II mineral oil + WS<sub>2</sub>
- Vehicle manual transmission oil • Damaged metal surface regeneration effect
- Gear efficiency increase and abrasion decreasing effect
- Color : Grayish black

Product name	Main component	Volume	Use
RITMO 80W90	Mineral oil + WS <sub>2</sub>	1Lt / 4Lt	Vehicle manual transmission oil



# ENGINE Dr.Q Road Test

／ KIA K7 3000 LPI Change of Fuel Efficiency



Models	Used oil and additives	Vehicle year and accumulate mileage	Test mileage
Hyundai TG Grandeur 2700 LPI, Automatic 5 transmission (Official mileage 7.6KM/L)	S-OIL synthetic oil 5W30 → + EN-POWER GS	2009, 202,000Km	152.8Km x twice
KIA K7 3000 LPI, Automatic 6 transmission (Official mileage 8.6KM/L)	Aral synthetic oil 5W40 → Blando 10W30 exchange	2013, 35,000Km	67.4Km x twice
KIA Opirus 3300 Gasoline, automatic 5 transmission (Official mileage 9.0KM/L)	Synthetic oil → + En-POWERGS	2008, 205,650Km	76.5Km x twice
KIA Opirus 3300 Gasoline, automatic 5 transmission (Official mileage 9.0KM/L) Secondary test	Synthetic oil → +EN-POWER GS	2008, 205,650Km	76.5Km x twice
Hyundai Equus 3800 Gasoline, Automatic 6 transmission (Official mileage 9.3KM/L)	Hyundai genuine product → +EN-POWER GS	2010, 116,600Km	152.8Km x twice
KIA K7 2700 LPI, automatic 6 transmission (Official mileage 8.2KM/L)	GS Calltex → +EN-POWER GS	2010, 95,000Km	305.6Km x twice
Hyundai HG Grandeur 3000 LPI, Automatic 6 transmission (Official mileage 8.6KM/L)	Hyundai genuine product → +EN-POWER GS	2013, 107,000Km	152.8Km x twice
KIA K3 1400 Diesel, Automatic 6 transmission (Official mileage 16.2KM/L)	Hyundai genuine product → +EN-POWER DS	2015, 20,000Km	152.8Km X twice
Hyundai Tucson IX 2000 Diesel, Automatic 6 transmission (Official mileage based on expressway 14/6KM/L)	Hyundai genuine product → +EN-POWER GS	2015, 2,000Km	152.8Km X twice



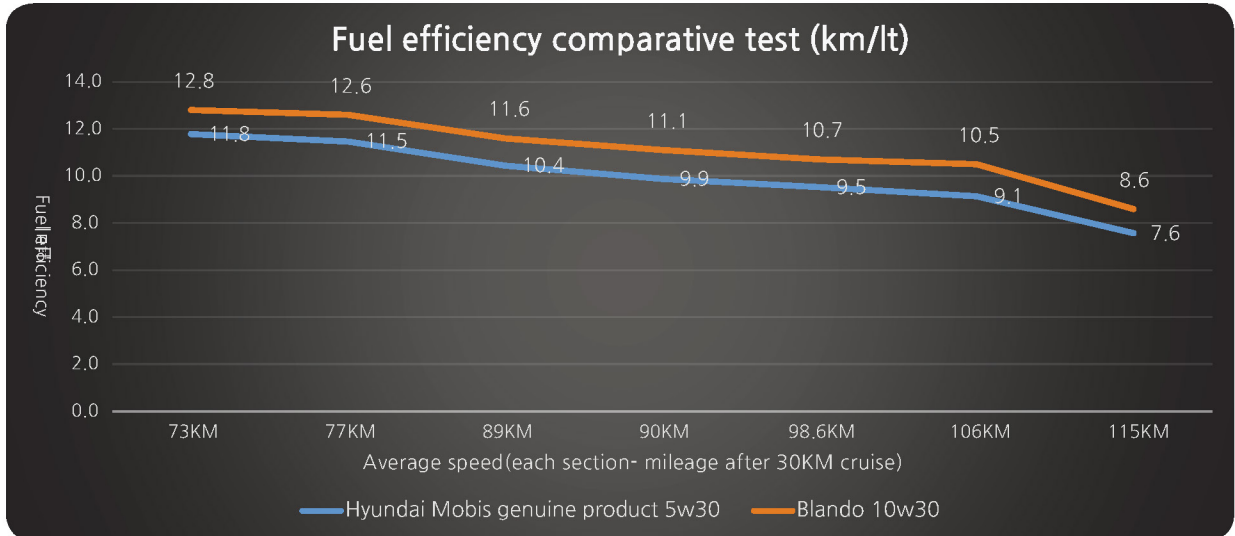


Average traveling speed (Based on navigation)	Driving section	Change of fuel efficiency Improvement rate		Improvement rate
		Before	After	
95Km/h	Daegu – Pohang expressway	10.3 Km/L	11.00 Km/L	<b>Improved by 6.8%</b>
100Km/h	Daegu – Kimcheon Gyeongbu expressway	10.9 Km/L	12.09 Km/L	<b>Improved by 11%</b>
95Km/h	Daegu – Pohang expressway	9.6 Km/L	10.09 Km/L	<b>Improved by 5.1%</b>
95Km/h	Daegu – Pohang expressway Rechecked 1week after feeding EN-POWER	9.6 Km/L	10.10 Km/L	<b>Improved by 5.2%</b>
90Km/h	Daegu – Pohang expressway	10.02 Km/L	10.5 Km/L	<b>Improved by 4.8%</b>
95Km/h	Daegu – Pohang expressway	10.6 Km/L	11.24 Km/L	<b>Improved by 6%</b>
95Km/h	Daegu – Pohang expressway	10.20 Km/L	10.65 Km/L	<b>Improved by 4.4%</b>
95Km/h	Daegu – Pohang expressway	22.05 Km/L	23.20 Km/L	<b>Improved by 5.2%</b>
100Km/h	Daegu – Pohang expressway	14.5 Km/L	15.41 Km/L	<b>Improved by 6.3%</b>

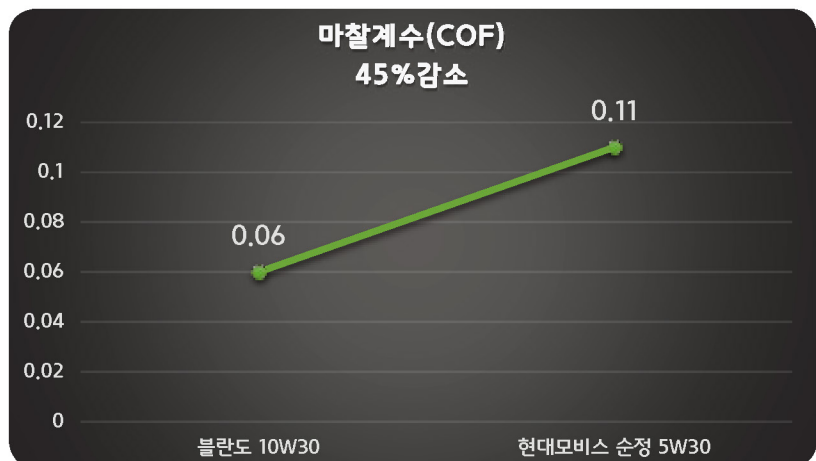
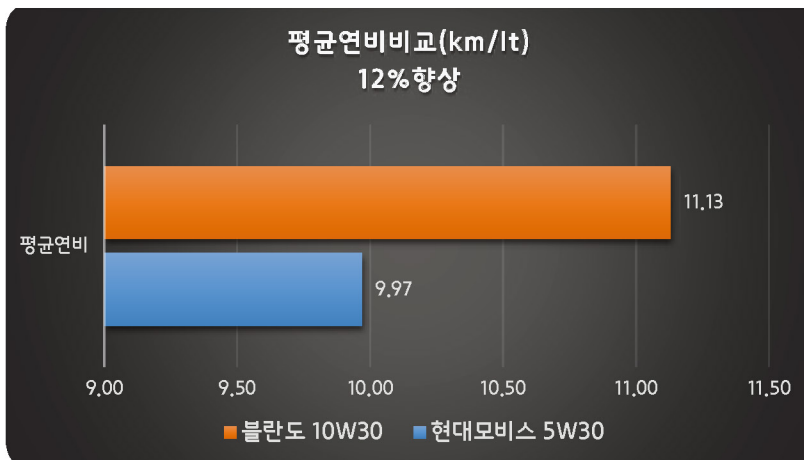


# ENGINE Dr.Q Performance Test Data

Fuel efficiency comparative test of Blando synthetic engine oil 10W30

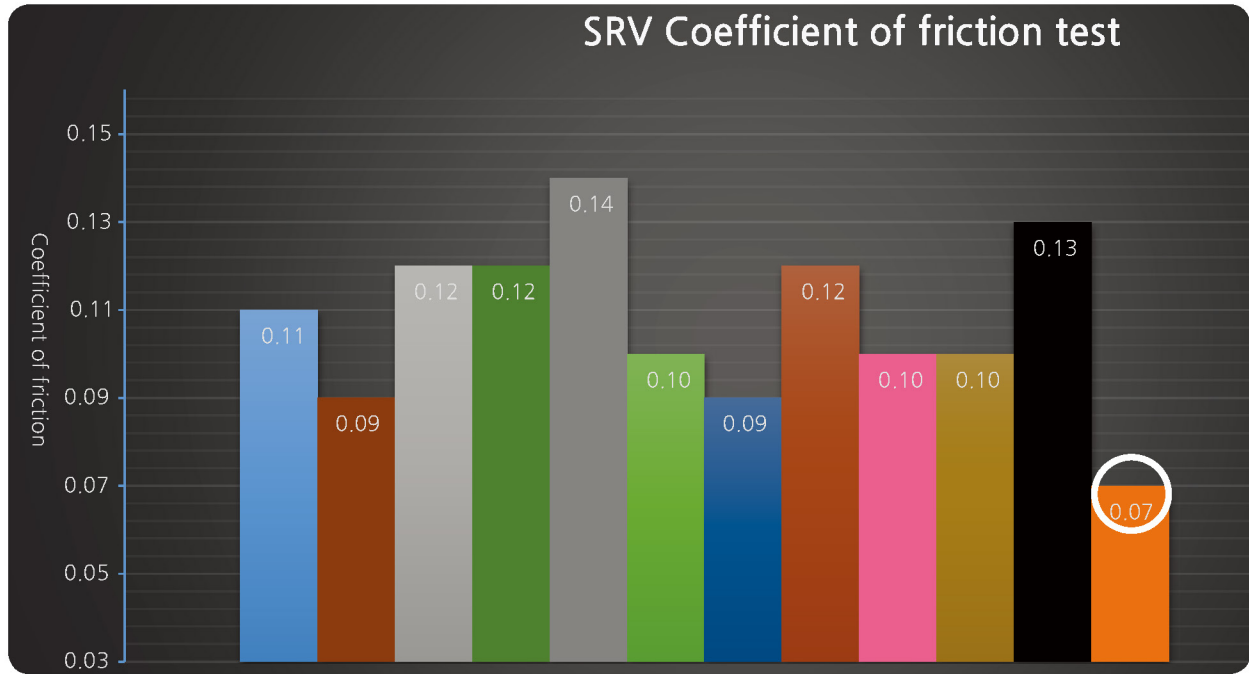


K7 2013, LPI 3000cc(Official mileage 8,2KM) As the data has been written after real driving with a device for measuring the mileage of vehicle, Monster gauge in the same section of expressway at a cruise with cars, the oil used for the test was Hyundai genuine product oil 5W30 and Blando synthetic engine oil 10W30. In the whole sections, products of Blando have been made fuel efficiency improvement rate by average 12%.



Coefficient of friction( $\mu$ ) test through SRV test : The friction has been decreased by 45% comparison to Hyundai genuine oil.

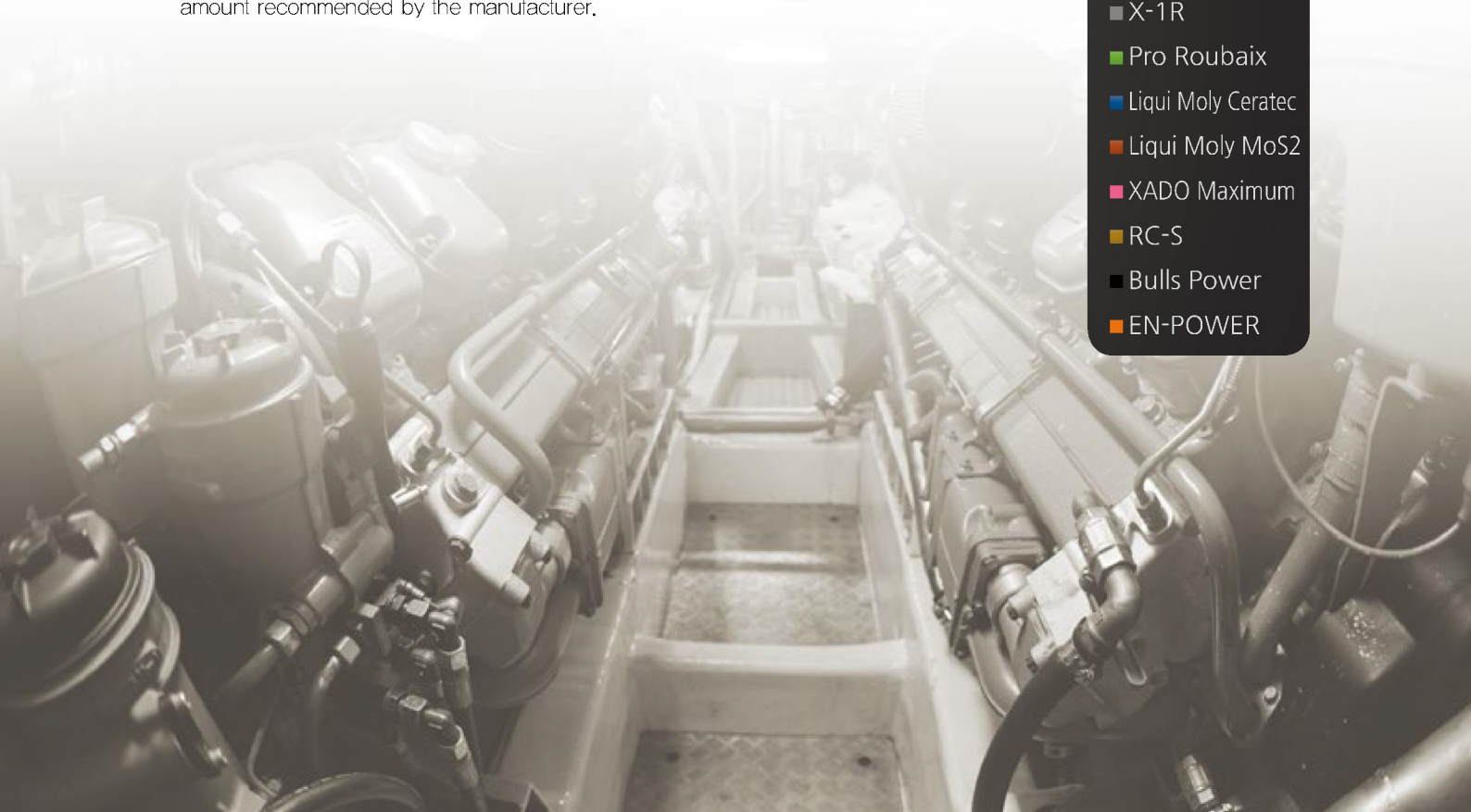
／ Coefficient of friction( $\mu$ ) comparative test between EN-POWER/RC-S and items SRV distributed in the markets



This is the result chart of SRV Coefficient of friction( $\mu$ ) test which is an indicator of fuel efficiency improvement of engine coating agents commissioned by the authorized agency. The products of ENGINE Dr. Q EN-POWER indicates the most excellent performance.

- Test condition : Test after diluting with Disk ball, 80°C, Stroke 2mm, Load 400N, time 10 minutes, frequency 50Hz, Hyundai Mobis genuine oil 5W30 in compliance with use standard amount recommended by the manufacturer.

- Daelim KAM
- Soengbogen-Q PTS
- Mobis Nano Dr.
- Nano Doctor power
- X-1R
- Pro Roubaix
- Liqui Moly Ceratec
- Liqui Moly MoS2
- XADO Maximum
- RC-S
- Bulls Power
- EN-POWER





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