

OLIO MOTORE ALVIT altamente vitaminizzato

Spiderman Inviato - 14 Jan 2004

Nell'ultimo fascicolo dell'enciclopedia sulla manutenzione del boxer, Ezio dice che è consigliabile mescolare olii diversi.

Io ho sempre fatto così, solo per pigrizia, ma mi chiedevo: quale sostegno ha questa teoria???

Antonich_gs Inviato - 14 Jan 2004

L'olio Total che ho comprato dice testualmente sulla confezione "particolarmente adatto ad essere miscelato con altri olii".

Ezio ti dice che si può, io ti ho sempre detto che si può, la Total ti dice che si può....se non sei convinto....

como Inviato - 16 Jan 2004

Mischiare diverse marche d'olio oggi come oggi non è più un rischio, sono tutti di buon livello e compatibili tra loro (sempre con la stessa gradazione) sia minerali che sintetici...

Se non trovi l'olio che monti, meglio uno diverso che andar senza olio.

Alvit Inviato - 16 Jan 2004

Sono sempre del parere che quella di Ezio51 sia la migliore idea, anche perchè chi fa da sè quasi sempre fa per TRE se non di più!

Il mischiare gli olii, più che una scelta a volte è una necessità che si deve fare non trovando quel dato olio.

Quanto al non cambiare mai l'olio, credo sia vero, anche perchè di progressi ne sono stati fatti parecchi. L'olio lo si cambia per abiti mentali ormai acquisiti.

Oltre a "Quattroruote", anche altri importanti magazines hanno fatto esperimenti del genere.

"Consumer Report" che non ospita NESSUNA pubblicità è arrivata alle stesse conclusioni: un paio di anni fa testò sette otto marche di olii su Taxi di New York, ebbene tutti ne vennero fuori brillantemente, gli unici a fallire furono i cosiddetti super special additivi promettimiracoli!!!!

Quale fabbrica di lubrificanti può mai consigliare di non cambiare l'olio tanto è lo stesso?

Insomma bisogna arrivare a ragionare col proprio di cervello e non con quello degli uomini marketing.

Certo gli olii Agip per me sono un po' scarsini, persino la Ferrari non andava quando li usava ed è dovuta tornare alla Shell.

Facendone una personale classifica ai primi posti metterei Shell Castrol e Mobil a cui aggiungerei ultimamente MOTUL ma gli altri sono praticamente a ridosso.

Quello che conta sono le specifiche API. Leggetele bene. Tutti quelli sotto i 40W sono ecologizzati (sono praticamente acquetta), fatti nel tentativo di risparmiare l'ambiente facendo consumare meno carburante opponendo meno resistenza ma alla fine facendo cambiare prima l'auto

Quindi per una moto più alto e il W meglio è, tant'è che ci sono olii per aerei a pistoni che arrivano a W60 probabilmente dovuto al fatto che fanno pochi giri.

Puoi usare Shell, Castrol, Mobil, Motul e Qualsiasi altro pari o superiore a quanto ti prescrive il libretto uso e manutenzione.

E' un po' come la benzina. Se è prescritta la normale, la super va bene ma è uno spreco.

Se invece è prescritta la super, la normale farebbe danni.

In Italia ti consiglio vivamente, se non hai amicizie presso qualche ditta che usa oli per i propri mezzi (non dal mecca quindi), di andare al super market e vedere se trovi il Carrefour sintetico 5W50.

Cerca nel vecchio forum i post di Luigi, ne parla molto bene, lui a quest'ora ha passato abbondantemente i 200k kilometri.....

Il trucco è evitare gli olii specifici per moto che sono ottimi ma purtroppo hanno un prezzo da olio "firmato". La scusa è che con quello non possono raggiungere i numeri di quello per auto, e perciò il marketing relativo lo fa costare di più.

Ultimamente in quelli da auto hanno dovuto modificare dei componenti per via delle benzine verdi e le marmitte catalitiche. Ergo qualche marca d'olio può dare problemi alle frizioni, quelle a bagno d'olio, per la BMW non ci sono problemi perchè a secco.

Ormai da qualche anno qui in USA tra i motociclisti vanno gli oli per grossi diesel, Shell Rotella T in testa, che stranamente si guardano bene dal vendere in Europa. Vedi il sito www.rotella.com . Sulla scia del successo di quest'olio, che va veramente bene per le moto, sono arrivati anche gli altri Chevron, Mobil e pure Castrol, ma pare non siano la stessa cosa.

La caratteristica è che sono 15W/40, e oltre alle specifiche API C hanno anche quelle S sino all'ultima SL.

Oggi gli olii sono tutti buoni, la battaglia si svolge sul prezzo che per un buon 80% è determinato dal marketing!

Per i Diesel, per sopportare alle specifiche API C (C = compression = diesel) hanno provato con le specifiche S per i benzina (S = spark = benzina) e li hanno superati molto facilmente.

Dato che c'è un consumo enorme per i mezzi pesanti, marini, da cantiere, ecc... ne producono in quantità enormi da cui ne deriva un prezzo più abbordabile.

A riprova di ciò, cioè di quanto valgano gli oli per diesel, si legge nel manuale Harley Davidson: in caso di aggiunta d'olio che non sia il "nostro" usare olio per motori diesel.

Purtroppo, credo che ci stiamo facendo fuorviare dal mondo delle corse.

Un olio che va bene per la competizione ha esigenze opposte a quelle per un'auto o una moto da turismo. Quell'olio andrà alla ricerca dell'ultima frazione di cavallo che il motore può dare, a discapito della durata di quel motore, tanto dopo la gara sarà smontato e revisionato se non buttato!!!!

Concludendo, se con gli olii diesel si fanno milioni di miglia, spero di farne qualche centinaio con la mia moto!!!!!!

Giulibar Inviato - 16 Jan 2004

A proposito del non cambiare l'olio, una mucca come la mia, che dopo 15.000 Km consuma ancora 300 g d'olio ogni 1000 Km, in 10.000 Km consumerà almeno 3 Kg.

Quindi a forza di rabbocchi l'olio resta sempre come nuovo.

Alvit Inviato - 16 Jan 2004

Se c'è consumo d'olio, nella norma, è una cosa BUONA.

Rabboccandolo si rigenera il rimanente, e praticamente si può andare avanti NON cambiando l'olio. Bisogna sapere bene cosa si ha nella coppa....per esempio lo Shell Elix sintetico puoi tranquillamente provare a NON cambiarlo mai ma solo rabboccarlo!

Il filtro però va cambiato, e qui si entra nel REAME FILTRI che non sono tutti uguali.

Ezio51

A 30.000 km è ora di passare al sintetico.

Il Mobil 5W50 è il migliore che esista, valido per temperature estreme sia d'inverno che estate.

Però se lo comperi al supermercato lo paghi la metà ed è lo stesso sotto un altro nome, il 5W50 lo fa solo la Mobil.

E ti chiedi ancora se potrebbe andare bene?

Anonimo

Ho sentito dire che:

"Ho letto l'ultimo topic sull'olio in cui consigli il Mobil... da comperare al supermercato dove si chiama diversamente.

La mia moto (R1150RT) ha 20.000 km. Mi dici esattamente COSA devo comperare: nome, marca modello!!!

Grazie ma di meccanica ne capisco veramente poco e comperare l'olio dal conce mi secca un po'!!!!"

Ezio51

Non ho consigliato il Mobil, e se si è inteso questo me ne scuso perché non voglio fare torti a nessuno.

Ho detto che va bene qualsiasi olio di tipo automobilistico, non capisco perché vorresti sapere esattamente nome, marca, modello.

Se proprio interessa io preferisco e sto usando un CARREFOUR sintetico 5W50. Proprio lui. 5,85 Euri al litro.

Ezio51

A forza di farmi fregare dagli altri, va a finire che faccio di testa mia.

Quando facevo fare i tagliandi al conce BMW, mi metteva l'AGIP SINT2000.

Poi improvvisamente ha cambiato con l' ELF RATIO4.

Perché hanno cambiato? Perché una circolare BMW consigliava la messa al bando dell'AGIP SINT 2000 in quanto mancante di alcuni additivi importanti non specificati.

Avevo supposto trattarsi di additivi antischiuma, perché il Sint2000 faceva moltissima schiuma.

Non avendo trovato l'ELF RATIO4 perché introvabile in commercio, e nemmeno il conce me lo voleva dare (molto strano questo...), avevo ripiegato sul CASTROL GPS, quello rosso.

Ma poi mi sono accorto che il CASTROL GPS era troppo fluido, sembrava acqua, e il consumo d'olio era notevolmente aumentato. Appena spegnevo la mukka, l'olio scendeva immediatamente nella coppa e potevo leggere immediatamente il livello nella finestrella. Troppi additivi antischiuma o una porcheria d'olio?

Avevo adottato due tipi di olio reputati tra i migliori, e non si sono rivelati all'altezza.

Morale della favola: esistono oli buoni e oli cattivi, anche nella grandi marche.

Quali siano i buoni e quali i cattivi non è certo.

Ma se mischio oli diversi ottengo un olio di qualità media, ne buona ne cattiva, ma sono almeno sicuro che non sarà cattivo.

E' una mia opinione personale. Voi fate come meglio credete.

Attualmente, dopo aver miscelato oli diversi con successo (AGIP, CASTROL, SHELL, MOBIL, CARREFOUR) sto usando un solo tipo d'olio: il CARREFOUR 5W50 sintetico. Mi sembra OK.

Lo compero al supermercato, lo pago la metà, e mi sono stufato di farmi imbrogliare dai rivenditori specialisti.

Alessandro S Inviato - 28 Aug 2004

CIRCOLARE BMW 1998 SULL'OLIO MOTORE SJ

Ho recuperato questa circolare tecnica dove BMW non approva l'uso di oli lubrificanti di tipo api sj per qualsiasi motociclo. Ecco il link: http://www.gunsmoke.com/scot/k12/sj_oil.html

In sostanza si dice che l' SJ non possiede in maniera sufficiente tutta una serie di additivi(calcio, magnesio, zinco) per la protezione del motore.



BMW Motorcycles Service Bulletin

Bulletin Date 11/25/98 Bulletin #2855 Main Group: 11 Engine For USA Only

Subject: SJ Engine Oil - Not Approved

Distribution: BMW NA Operating, Manager Sales, Manager Accessory, Manager Parts, Manager Service, Manager Set-Up, Workshop.

Specification: BMW provides specific recommendations for fuel and lubricants in the Service and Technical Booklet for each model motorcycle, or in the Rider's Manual on older model motorcycles. These recommendations are based on specific knowledge of the engine requirements and thorough endurance testing.

Recommendation: The current recommendation is as follows:

Brandname HD oil, API classification SF, SG or SH; CD or CE suffixes are permissible; alternatively, brand-name HD oil. CCMC classification G4 or G5; suffix PD2 is permissible.

Not Approved: The API specification SJ is not approved for use in any BMW motorcycle. This latest API classification does not guaranty the required levels of wear protective additives such as Calcium, Magnesium, Zinc, etc. as with most prior API specifications.

Customer Interaction: We suggest that you council with your customers regarding the oils being used in their motorcycle. Most oils found in commercial discount and automotive supply stores are now API SJ classification, which means that they should not be used. Use this opportunity to create in store displays and promote the full range of approved BMW motorcycle lubricants.

Very truly yours,

Frank Stevens
After Sales Manager

Motorcycle Group Pat Raymond
Service Organization Manager

gb.iannozzi Inviato - 28 Aug 2004

Ma scusate che significa solo per USA mi volete dire che gli americano hanno un mercato ed una classificazione tutta loro? la frase interessante è a mio parere quando parla dell'olio reperibile nei super che spesso è SJ. Comunque sul mio K ci ho messo un po' di tutto e si è sempre digerito tutto

Alessandro S Inviato - 28 Aug 2004

Anch'io non credo che la circolare sia solo per il mercato USA, ci saranno anche le analoghe comunicazioni scritte nelle relative lingue.

Questo divieto (notate che è del 1998) è ragionevole pensare si possa estendere anche alla classificazione API SL, cioè quella dell'attuale MOBIL1 SUPERSYN 5W50.

Pensavo che, visto che QDE è una realtà consolidata nel panorama dei BMWisti italiani, potrebbe essere interessante formare una sorta di comitato tecnico e provare relazionarsi con BMW Italia.

Spero che questo genere di informazioni almeno le diano, o anche le circolari sugli oli sono segreto di stato ad uso esclusivo delle officine autorizzate che poi, magari, sono le prime a buttarle in un cassetto senza neanche leggerle?

carbold Inviato - 29 Aug 2004

Vecchia storia questa dell'SJ, ne abbiamo parlato a lungo.

La più esauriente spiegazione del perchè BMW non vuole che si utilizzino oli SJ la trovate qui:

<http://www.ibmwr.org/otech/oilreport.html>

Is This The Right Oil For My Bike?

By Jeffrey P. Di Carlo September, 1999

Introduction

This report seeks to answer questions concerning use of the latest grade of motor oils in motorcycles. Motor oil standards have changes recently and some concerns have been raised, specifically by BMW, about use of this new oil grade in motorcycles. BMW, like many other engine manufacturers, sells a self-branded oil through its dealer network. To some, this raises the question of BMW's objectivity. Mobil 1, long a favorite of motorcyclists, has introduced a line of motorcycle-specific oils. They avoid the latest, questionable API rating, but at a price of double the already pricey automotive Mobil 1. What about old stand-bys like Castrol GTX and the bike-friendly Golden Spectro? They've been used for years. Are they still good? Have they actually changed at all? What's a biker to do?

In this study, the American Petroleum Institute (API) specifications are examined to determine what exactly has changed in the standards. Analysis was performed on a range of motor oils to quantify their additive packages. These packages were compared to the specifications and to each other to determine which were providing protection for engines, which had been depleted by the new specs, and which were selling snake oil.

If the optimum protection for your motorcycle is of interest to you, read on.

What's in this stuff?

To understand what all this fuss is about, one needs to know a little about motor oil. For purposes of this report, we will start with the base stock. This is the base oil formulation to which the oil company mixes in its chosen additive package. The additive packages are determined by the desired performance characteristics, weighed against cost of the additives, and as we shall see,

limited by industry standards. For the purpose of this report, we will focus on the anti-wear and anti-corrosion additives.

Zinc and phosphorous are the prime anti-wear additives in today's motor oils. These additives provide protection from metal-to-metal contact on surfaces such as cam lobes and followers, as well as piston walls. They also protect at bearing surfaces when oil pressure is too low to build up a protective film, such as during engine cranking.

Sulfur is present in the gasoline we burn. During the combustion process, this sulfur can combine with oxygen to form sulfur dioxide, or sulfuric acid. This, along with other corrosive nasties, works its way past the piston rings and into the motor oil where it is pumped throughout the engine. To prevent these acids from destroying the internal machined surfaces, oil companies mix in anti-corrosion additives. These are typically magnesium, calcium (much like your favorite stomach antacid) and boron. These additives neutralize the acids being pushed into the oil and keep our engine innards nice and shiny.

Why are these API guys messing with my oil?

The American Petroleum Institute is an industry organization that, amongst other things, issues standards for petroleum products including motor oils. Oil companies agree to label their products with the appropriate API standard. This allows your motorcycle manufacturer to tell you that you need, for example, SH oil. Without such standards, they have to say you need an oil that passes ASTM D 2887 volatility test at 700 degrees with less than 18% loss. Imagine trying to compare all those test results while standing in the oil aisle at WalMart!

API has been grading oils for years. Chart A shows the progress of grades from the original SA to the latest SJ. Oils intended primarily for use in diesel engines are graded on a separate scale, ranging from CA up to the current CH.

To find what API grade your oil is, look for the "donut" on the bottle. The oil's viscosity is listed in the center of the donut. The API grade is listed on the upper half. The new fuel saving oils have "Energy Conserving" posted on the lower half of the donut.

Why is this new oil any different?

Despite the best effort of your piston rings and valve seals, some of your oil gets into the air flowing through your engine. In cars, and some bikes, this leads it straight through a catalytic converter. All those additives that are so great for protecting your engine are not so great for the catalyst. The Environmental Protection Agency has asked for a reduction of the anti-wear additive phosphorous due to its life-shortening effect on catalysts. When the new API oil grade, SJ, was released in 1996, phosphorus levels had been lowered from a maximum of 0.12% down to 0.10%.

But the reduction was only specified for oil viscosity of 0W-20 through 10W-30 (yes, there is a zero viscosity oil). The thicker oils were not required to meet this phosphorus level. That is not to say that they won't. Additives cost the oil companies money. If they can get by with less, they might be inclined to do so. Standardizing the additive packages across all viscosity would also simplify their lives.

Given this reduced level of phosphorous in some SJ oils, and the potential for it in others, BMW issued a service bulletin to address the issue. It said that SJ oils were not approved for use in BMW motorcycle engines. BMW recommended oils with API specifications of SF, SG, or SH. These are the previous grades which, in API's mind, had been superseded by the new SJ. BMW

did not consider it a supersedure and threatened to void warranties if the SJ oils were used.

Confusion reigned in the world of BMW riders. Were not their engines, especially in K bikes, very much like automotive engines: four cylinders, water cooled, dry clutch, separate transmission oil? BMW allowed SJ oils in their cars, why not the bikes? Other motorcycles manufacturers didn't object to SJ oil, what was the difference?

BMW finally attempted to clarify the issue by stating that the SJ rating was acceptable, if the oil was additionally rated at one of the previous SG and/or SH grades.

Problem solved, what's the big deal?

While it may have hoped that this answered the concerns of its customers, BMW actually raised more questions than they answered. Remember that the phosphorous levels are listed as a maximum allowable level. Any amount under the maximum, under 0.10% for SJ oil, is acceptable to API. So for an oil to be rated SH and SJ it still needs to be under the tighter SJ limit. Being additionally rated SH doesn't provide any more phosphorous! BMW's logic here is questionable.

In the course of this testing, the author spent a lot of time reading oil bottles. Of all of the oils in this test, and all the oils scanned in auto supply houses, none were rated SJ alone. All the SJ oils had additional grading of SH or SG. So if all oils have a multiple rating, what oil is BMW trying to protect us from?

Some questions obviously arise here. Your author set out first to find the right questions.

So what do we want to know?

When starting any kind of testing, it's always a good idea to have specific questions in mind. This gives focus to the test and allows you to discard the superfluous data that distracts from your purpose. Questions like "what's the best oil" and "is synthetic better than petroleum oil" are great for starting bar fights, but are a bit too vague for the scope of this testing.

A survey was done of the internet BMW riding community. Their favorite oils were listed and whittled down to a manageable number. With these specific oils in mind, focused questions could be generated. Some that will hopefully be answered here include:

Was the phosphorous level actually dropped from SH to SJ oils?

Are BMW's own bike oils better than automotive oils?

What about the new Mobil 1 motorcycle oil? Is it better than Mobil 1 automotive?

Is there any difference between \$1 per quart oil and \$4 oil?

Read on, and you too can amaze your friends with trivial oil facts!

How was this testing done?

The testing reported here is the result of chemical analysis of new oils. The oil samples were submitted to National Tribology Services, Inc., of Peabody, Mass. NTS is a contracted lab that routinely does chemical analysis for industry. For oils, they use Rotrode Filter Spectroscopy for their investigations. Through a rather complex mechanism, a film of the subject oil is zapped with an electric arc, causing the oil to vaporize. The light emitted by the arc is read by the spectrograph. The wavelengths of the light specify the constituents of the oil.

This analysis method is commonly used for monitoring of engine conditions. Fleet operators interested in knowing if their engines' bearings are wearing, submit samples of used oil. The tests

that detect traces of bearing bronze in used oil also work to identify the levels of phosphorous and zinc in new oils.

So the sample oils were tested for their levels of anti-wear and anti-corrosion additives. Analysis of the base oils and retention of additives or viscosity in used oils was beyond the scope of this testing. These issues are pertinent to a full understanding of motor oils, however, and may provide a good basis for some follow-on testing.

The Contestants

The oils included in this test are on Chart B. Its make-up may need a little explanation. The choice of BMW synthetic and petroleum oils is obvious. Castrol GTX is a favorite of many riders for many years. The selection of GTX 10W-30 and 20W-50 allows a comparison of an oil regulated by the API's SJ rating, and one exempted.

The Gulf Super Duty and the Valvoline Premium Blue are both primarily diesel oils. Note the CF and CG ratings. These were included to address the rumors that diesel oils offer better protection, specifically anti-corrosion protection, than do automotive oils.

Spectro Oils has made motorcycle specific oil for years. Its Golden Spectro has a strong following in the BMW community. The bottle of BMW petroleum oil says that it is formulated for BMW by Spectro Oils. Are they really the same oil?

The Mobil 1 oils present an interesting study by themselves. The motorcycle rated SG/SH oil (at \$8 per quart!) could be contrasted to the automotive grade. Availability of an older automotive SH allowed for comparison to the newer SJ grade. And the Energy Conserving 10W-30 Mobil 1 would illustrate if Mobil varies their additive packages as they vary viscosity.

The Pennzoil GT and Valvoline Racing are popular oils available at discount stores at close to \$1 per quart. Is the user sacrificing the life of his bike by saving a few bucks on these oils?

The Data

Chart C lists the levels of additives in the test oils. The numbers are in parts per million (PPM). Those of you that spent your time in math class doodling pictures of hot bikes will want to know that the 0.10% in the API specification translated to 1000 PPM, 0.12% equals 1200 PPM.

While all the answers lie in this chart, it is often easier to see trends by graphing specific data. Of prime interest is the levels of phosphorous in the samples. Graph D shows that the Golden Spectro Blend and the BMW petroleum SG oils contain the highest levels of phosphorous. The high viscosity Mobil 1 oils are closely grouped at 1050 to 1100 PPM. Note that the two Energy Conserving SJ oils, the Castrol GTX 10W-30 and the Mobil 1 10W-30 are both below 1000 PPM. This is in keeping with the API's 0.10% spec.

Graph E combines the zinc with the phosphorous levels. While the level of additive increases, note that the relationship between the oils stays the same. This is likely because the oil industry adds zinc and phosphorous as one chemical, ZDDP.

Graph F shows the level of acid neutralizing anti-corrosion additives in the oils. Here the pack is led by the synthetic oils, the Mobil 1 and BMW SH. This may well be related to extended change intervals used by some synthetic customers. The longer an oil is run in an engine, and some synthetics are going a long way, the more acid they need to neutralize.

So what about the Mobil 1 oils? Are they all the same? Graph G compares only the four Mobil oils for each of the five additives. Note that the first three oils, the higher viscosity ones, are all closely grouped. It is the opinion of the author that the additive packages in the old Mobil 1 SH, the current SJ, and the new motorcycle-specific SG/SJ are all the same. The Energy Conserving Mobil 1 SJ has lower levels of all additives with the exception of magnesium.

How about the BMW oils? How do they compare, and are they the same as the Golden Spectro? Graph H highlights the two BMW oils, synthetic SH and petroleum SG, against Golden Spectro's synthetic blend. BMW's SG and the Golden Spectro have the most phosphorous and zinc anti-wear additives, respectively. BMW SH has far more calcium, while the other two lead in the other anti-corrosion additives. From this chart, it appears that the BMW SG oil is not a rebottled Golden Spectro.

And finally, do you get what you pay for? Are there differences between the cheaper oils and the costlier ones? The BMW SH, at \$3.56 per quart, was chosen as having a good additive package. Graph J compares it to the "K Mart" oils that ranged from \$1.29 to \$1.89 (and are often available for less). There is an obvious difference in the approach to corrosion resistance, BMW favoring magnesium, most of the others choosing calcium. No obvious advantage here. But note the anti-wear additives. The BMW oil has far more zinc and phosphorous. It is also interesting to note that the cheaper oils contain near or below the 0.10% phosphorous mandated by API, despite their higher viscosity exempting them from the standard.

This chart also suggests that Castrol uses the same additive package in its 10W-30 Energy Conserving oil that it does in the 20W-50 more likely used by motorcyclists. This is an ominous sign for us all. Discussions with industry insiders reveal that the API's phosphorous specification for the Energy Conserving oils will drop again within the next few years. If oil producers continue to use a standardized additive package, these drops will further impact the oils we run in our bikes.

Summary - Did we answer anything?

Recalling the questions posed at the start of this report, lets see what has been learned.

Did the phosphorous levels drop with the new API specs? Not having examples of pre-spec oils to compare with all the current spec oils, this question can not be definitively answered. Where a comparison can be made, the Mobil 1 SH verses SJ, there appears to be no change. But those are 15W-50 oils that are exempted from the spec. In the cases of the thinner oils where the API spec applies, all complied with the low phosphorous standard.

Are BMW's oils better than the automotive oils? For anti-wear, the BMW SG oil is tough to beat. It has been shown to be better than the cheaper automotive oils, and ahead of Mobil 1 in wear fighters.

Mobil 1 motorcycle oil: is it worth buying? The viscosity of this bike oil has been changed from Mobil 1's standard 15W-50 to 20W-50. This just happens to be what Harley specs for their bikes. If you smell a marketing ploy here, you may want to trust your nose. The additive package appears the same amongst all the 50 weight Mobil 1 oils.

Is there a difference between \$1 per quart and \$4 oils? This appears to be a case where you do get what you pay for. The cheaper oils need to target their automotive customers, and can't afford

additives that may only be needed by the fringe motorcycle market.

And what about the diesel oils and their rumored added protection? The rumors were not substantiated by this testing. Gulf Super Duty and Valvoline Premium Blue rated mid-field or lower on both anti wear and anti corrosion packages.

Future Activity

There is already work underway to establish an industry standard specifically for motorcycle oils. This was prompted not just by BMW's wear concerns, but by the Japanese manufacturers. Their wet clutch bikes are having slippage problems with some new oils. Expect to hear more of these new oils within a year. What is in them will make an interesting follow-on investigation.

As mentioned previously, there is a new API standard being prepared for automotive oils, likely to be called SK. It will reportedly lower phosphorous levels further, from SJ's 0.10% down to 0.08. A repeat of the type of testing done here may be justified at that time.

CHART A - API OIL CLASSIFICATIONS, Gasoline Engines

Category	Status	Service
SJ	Current	Introduced in the API Service Symbol in 1996. For all automotive engines presently in use.
SH	Obsolete	For model year 1996 and older engines. Valid when preceded by certain C categories.
SG	Obsolete	For model year 1993 and older engines.
SF	Obsolete	For 1988 and older engines.
SE	Obsolete	For 1979 and older engines.
SD	Obsolete	For 1971 and older engines.
SC	Obsolete	For 1967 and older engines.
SB	Obsolete	For older engines. Use only when specifically recommended by the manufacturer.
SA	Obsolete	For older engines; no performance requirement. Use only when specifically recommended by the manufacturer.

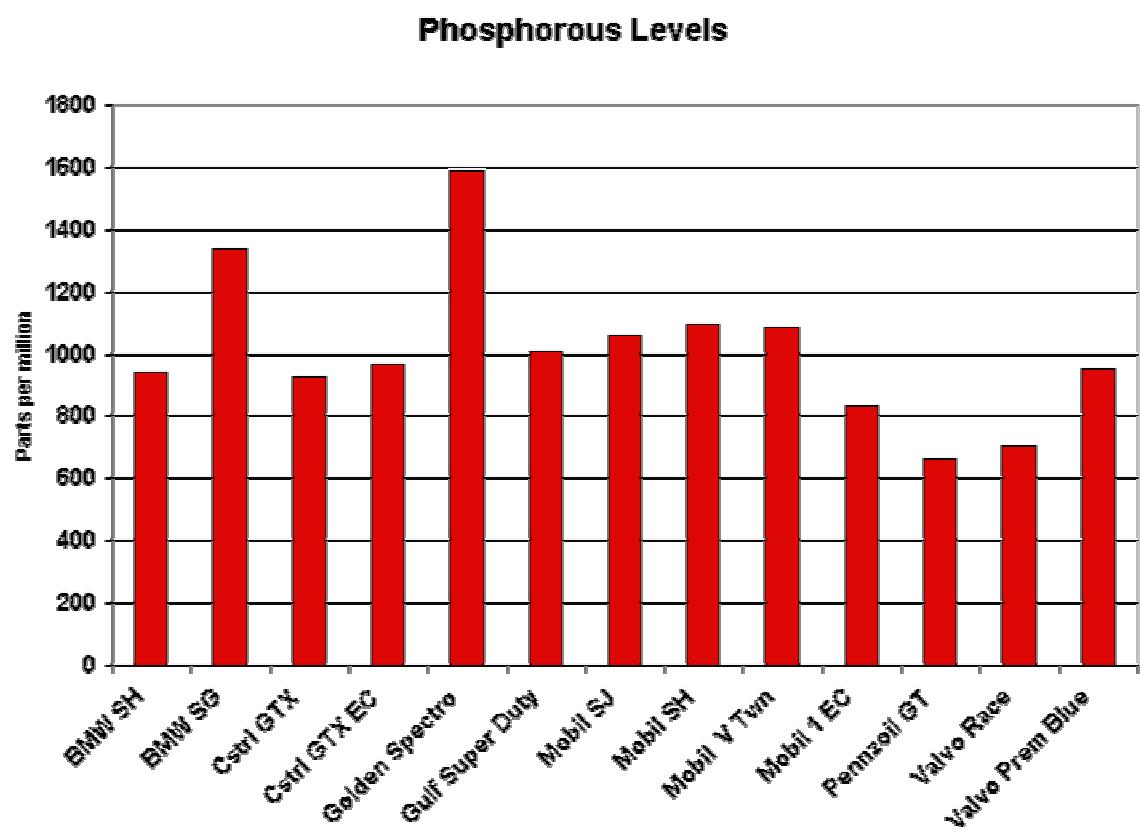
CHART B - Listing of Oils Included in Analysis

Brand	Type	API Rating	Additional Ratings	Viscosity	Cost/qt
BMW SH	synth	SH	none	15W-50	\$6.08
BMW SG	petro	SG	none	20W-50	\$3.56
Castrol GTX	petro	SJ	SH	20W-50	\$1.37
Castrol GTX Energy Cons.	petro	SJ	SH	10W-30	\$1.29
Gulf Super Duty	petro	CF, CF-2	SJ/SH	30	NA
Golden Spectro 4	blend	SF/SG	none	20W-50	\$5.36
Mobil 1 SJ	synth	SJ	SH	15W-50	\$3.99
Mobil 1 SH	synth	SH	SG	15W-50	\$3.99
Mobil 1 V-Twin motorcycle	synth	SG/SH	none	20W-50	\$7.99
Mobil 1 Energy Cons.	synth	SJ	SH/CF	10W-30	\$1.29
Pennzoil GT Performance	petro	SJ	SH/SG	20W-50	\$1.39
Valvoline Racing	petro	SJ	SH	20W-50	\$1.89
Valvoline Premium Blue	petro	CG-4	SH	15W-40	NA

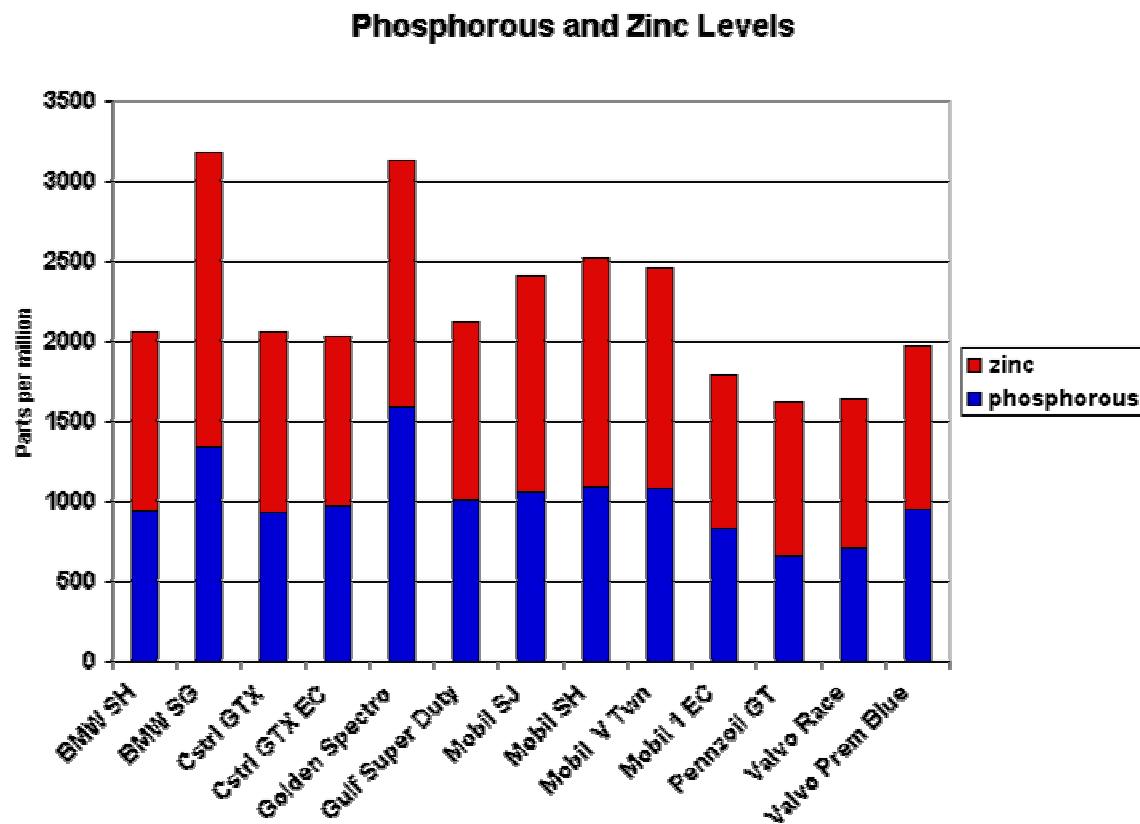
CHART C - Listing of Test Results

Brand	Phosphor.	Zinc	Boron	Magnesium	Calcium
BMW SH	941	1,115	107	579	1,616
BMW SG	1,339	1,843	162	1,000	356
Cstrl GTX	928	1,133	0	259	1,163
Cstrl GTX EC	967	1,066	1	303	1,521
Golden Spectro	1,587	1,548	132	842	320
Gulf Super Duty	1,007	1,116	88	923	898
Mobil SJ	1,058	1,348	163	521	1,717
Mobil SH	1,095	1,427	169	553	1,714
Mobil V-Twin	1,084	1,377	176	499	1,561
Mobil 1 EC	835	955	100	1,497	820
Pennzoil GT	665	951	77	678	652
Valvo Race	707	936	90	522	1,546
Valvo Prem Blue	954	1,019	85	479	875

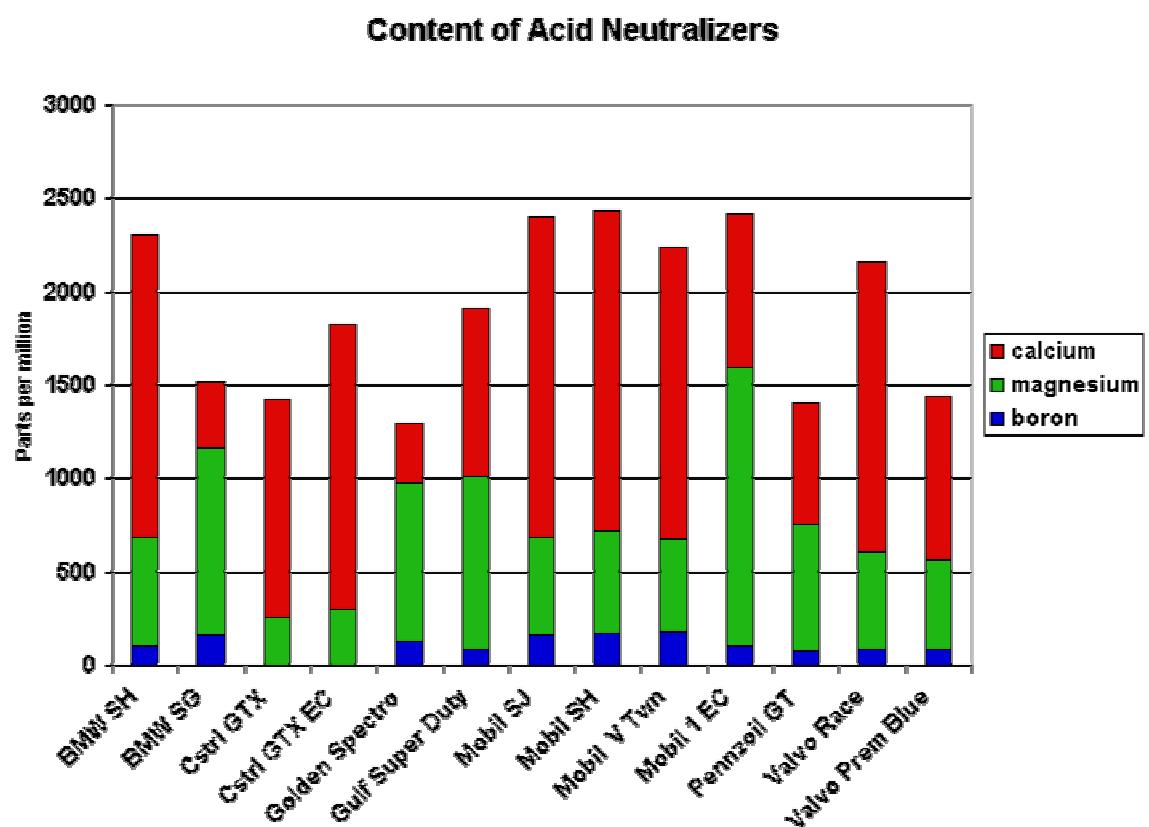
GRAPH D - Phosphorous Levels



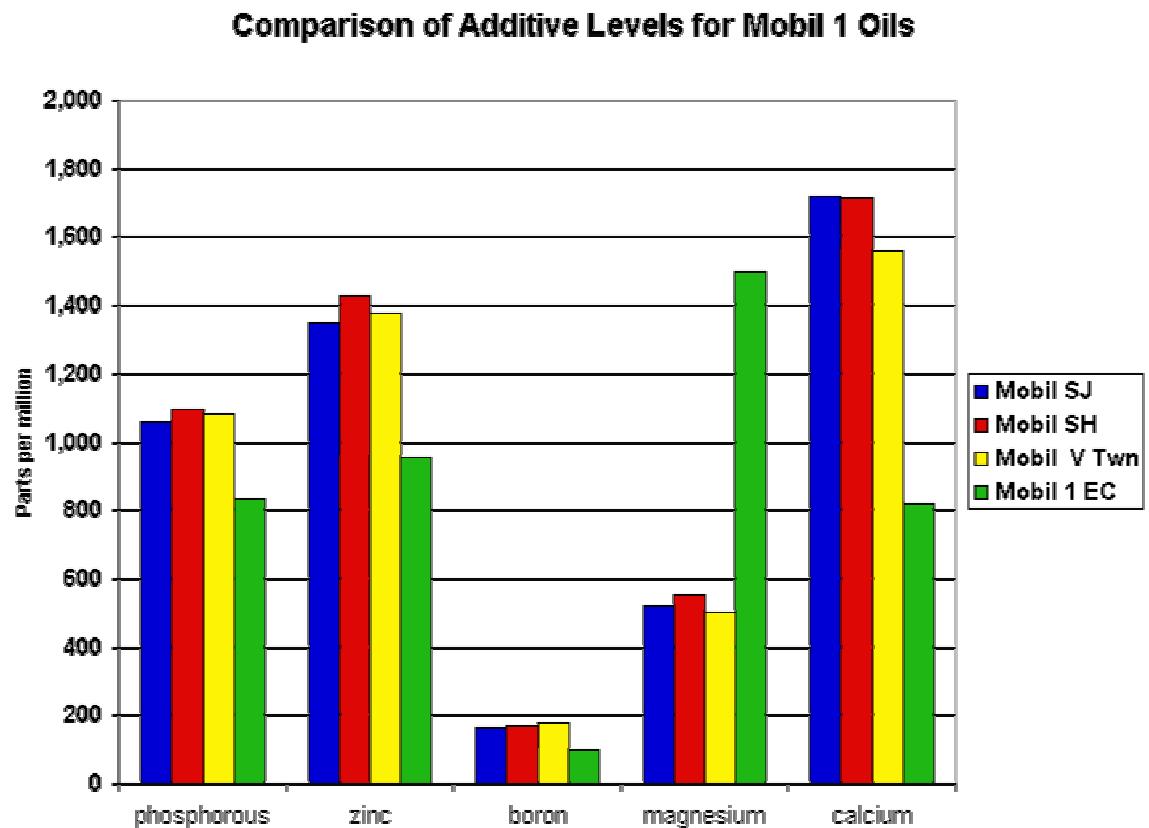
GRAPH E - Phosphorous and Zinc Levels



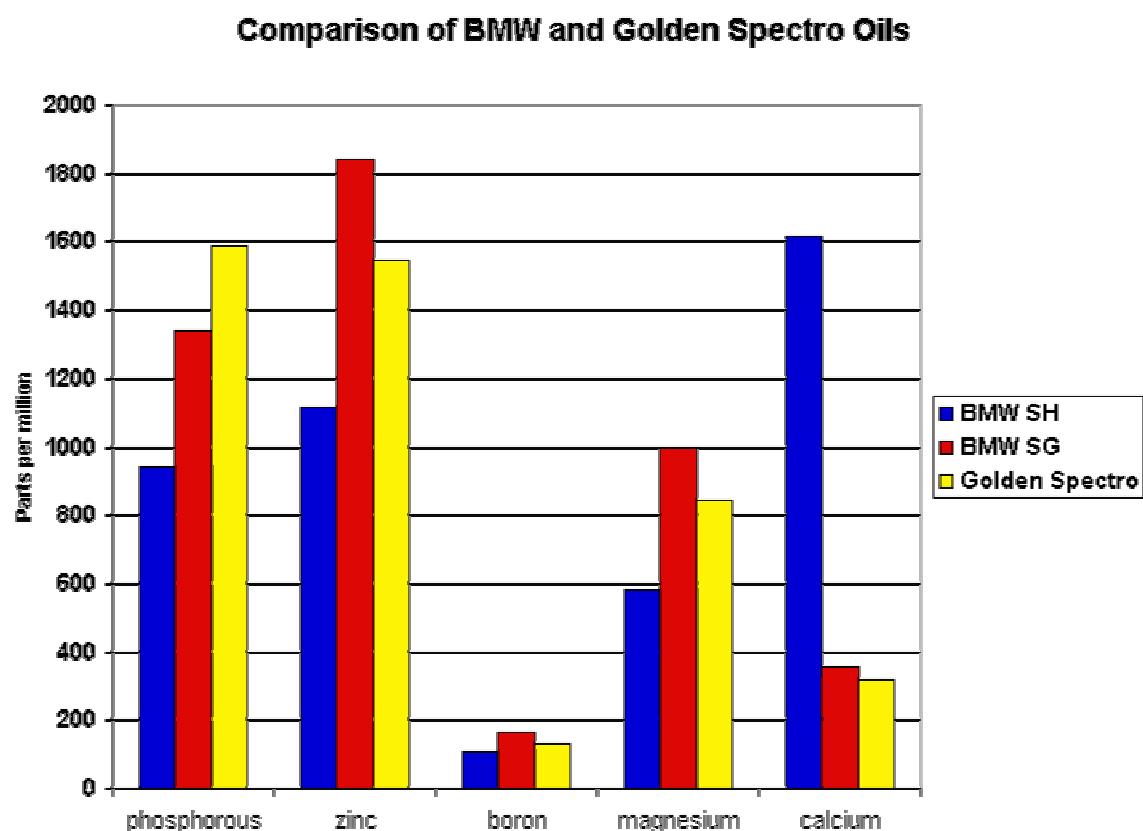
GRAPH F - Content of Acid Neutralizers



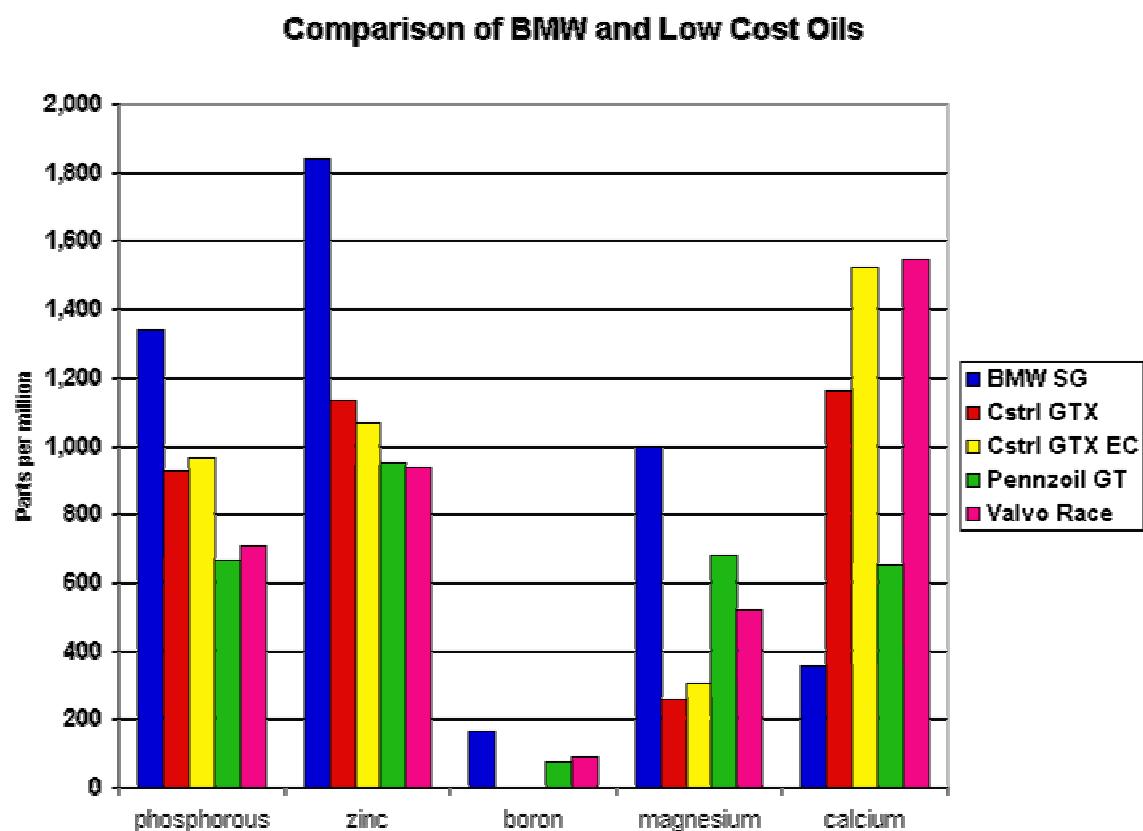
GRAPH G - Comparison of Additive Levels for Mobil 1 Oils



GRAPH H - Comparison of BMW and Golden Spectro Oils



GRAPH J - Comparison of BMW and Low Cost Oils



Ezio51 **Inviato - 28 Aug 2004**

Che confusione! Io ho capito che:

- La circolare BMW in oggetto è vecchia (1998) e non si applica ai modelli successivi.
- Dopo il 1998 sono state introdotte le marmitte catalizzate le quali non gradiscono troppi additivi, e gli oli SJ hanno ridotto gli additivi proprio per questa ragione.
- La circolare BMW in oggetto è destinata al solo mercato americano, dove BMW vende il proprio olio. E' logico che per vendere il proprio tenda a minacciare la perdita della garanzia... palle già viste da noi in numerose occasioni.
- Quasi tutti gli olii attualmente in commercio sono classificati SJ.
- Gli olii SJ generalmente coprono anche le classifiche precedenti.
- Tutte le automobili catalizzate usano olio SJ, perché non noi?
- E' importante cambiare l'olio non oltre le scadenze prescritte (10.000 km o 1 anno) altrimenti diventa troppo acido.
- C'è chi sta usando il Carrefour 100% sintetico SJ da anni superando i 200.000 km e la mukka va ancora a meraviglia. Voglio superare anch'io i 200.000 km.
- Continuerò ad usare l'olio sintetico SJ, e magari il nuovo sintetico SL (se la Carrefour lo farà).

Boro **Inviato - 28 Aug 2004**

Il mio conce mi ha messo dell'olio SL, x cui mi sa che delle due l'una, o la circolare è una boiata oppure in conce è incompetente.

Alvit **Inviato - 5 Sep 2004**

Siamo sempre alle solite....la BMW USA come pure la H.D. "vorrebbero" che il cliente usasse SOLO il loro olio, per evidenti motivi di profitto....le discussioni e le minacce si sono calmate ultimamente quando le altre case hanno suggerito ai loro clienti che in caso di rogne si facessero rilasciare una lettera, nero su bianco, che il problema era dovuto al loro olio!!!!!!

Ora SE la BMW raccomandava di NON usare l'olio SJ e lei NON aveva un olio suo, le cose erano diverse, ma così stando i fatti, they sucks too much.

Per quanto riguarda il ONLY FOR USA, è perchè la BMW in USA l'olio se lo fa fare dalla Spectre, che fa da anni costosi oli "da moto" mentre in Europa NON può permettersi altrettanto per via dello sponsor Castrol.