# LUBRI THE OFFICIAL MORRIS LUBRICANTS

NEWSLETTER

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# £3 Million Production Facility Fully Operational

After years of planning, designing, and scheduling the new production facility at Morris Lubricants has been completed, tested and is now fully operational.

Developed as part of the future growth plans and in response to customer requirements, over £3 million has been invested in this new production facility. Morris Lubricants now believes it has one of the most technologically advanced and flexible oil blending capabilities in Europe. This investment demonstrates Morris Lubricants' commitment to manufacturing and producing high quality oils and lubricants for customers around the world.

As well as the increased efficiency, reduced energy use and optimised workflow, one of the major benefits of this new facility is the increased flexibility. This means that smaller volumes of high-quality products can be manufactured to the specifications expected by customers, demanded by the OEMs and stipulated by industry regulations.



The View From Underneath The Product Storage Tanks















# The Importance **Of Quality: Inside The Morris** Lubricants **Quality Control** Laboratory

Choosing and using the correct quality oil, lubricant and grease is vitally important to ensure your car, truck, tractor, motorcycle, machinery or any other mechanical piece of equipment works as it should.

With the many different products manufactured by Morris Lubricants, how does the company maintain product quality and product performance? The answer lies in the company's commitment to product testing, measurement, analysis and the processes that are conducted in the dedicated Quality Control Laboratory.

Morris Lubricants has very high-quality standards and continues to invest in the latest testing equipment that is used in its laboratory situated within the manufacturing facility in Shrewsbury.

The laboratory is equipped with the latest and arguably some of the best testing equipment available, designed to make sure the oils and lubricants manufactured on site maintain the highest quality standards.

The Morris Lubricants laboratory is maintained at a constant cool temperature to ensure that various computer systems and pieces of scientific equipment operate at optimum efficiency, especially when you consider there are over 5,000 tests processed every month.

"As lubricant specifications become more complex, these tailored product formulations often dictate test methods which require new and expensive equipment," says Morris Lubricants' Technology Manager, Adrian Hill

"Morris Lubricants has always invested in the latest equipment because consistent product quality is key to the success of the company, and without it you cannot guarantee the highest quality oils and lubricants. This dedicated equipment allows us to keep up to date and compliant with new and evolving industry and manufacturer requirements, formulations and customer demands."



X-Ray Fluorescence (XRF) Analyser



Inductively Coupled Plasma (ICP) Test







Laboratory Team

A recent capital investment has been in the ability to test High-Temperature High-Shear (HTHS) capability, a measure of an engine oil's ability to provide fuel efficiency improvements.

Further investment has recently been made, including new Fourier Transform Infrared Spectrometers (FTIR) which are used to identify organic materials and also the addition of the latest generation X-Ray Fluorescence (XRF) analyser, which measures elemental content to confirm the integrity of the finished product.





The chemists process incoming product samples throughout the working day. Adrian adds: "We test empty tankers as well as deliveries to make sure they are free from moisture and are clean. Our products are tested throughout the manufacturing process from raw materials arriving on site, to blending, to filling the finished product, guaranteeing quality to the end user."

"An extensive test matrix is deployed throughout the manufacturing process, in order to meet or surpass the customer's expectations. Certain products have a high number of raw materials that combine to meet specifications, so it is vital that we get this right.

Methods of testing can range from a simple 'appearance' assessment that evaluates a lubricant's clarity, colour, texture and smell within minutes, to more complex test methods that can take up to three days. These more extensive tests include pour point checks, running viscosity checks establishing corrosion protection and many more. Only then, once everything has passed the tests, we can deliver the finished product to customers knowing that it's going to meet or exceed requirements, and excel in the application that it is designed for. With much of the Laboratory team's work taking place behind the scenes, customers and end users are unaware of the hard work that goes into maintaining Morris Lubricants' product quality. To explain this in more detail, Morris Lubricants Technology Manager, Adrian Hill showed the company's ambassador Guy Martin, some of the critical tests that were performed in the Quality Control Laboratory.



You can watch three dedicated specials, where Adrian Hill shows Guy Martin the latest laboratory testing equipment by visiting morrislubricants.co.uk.

# Emissions and the critical role of engine lubricants

In the world of road transport, the path to reduced emissions is a challenging one, but new technologies and the latest innovations continue to deliver significant improvements. However, there are many pieces to this 'emissions' jigsaw and each must be in place, for the true benefits to be realised.

Since the 1990s, continued legislation has driven vehicle emissions down and down, but to achieve this, engine and exhaust system modifications have had to be made. A variety of emission reduction technologies have been introduced to control the levels of NOx gases and particulate matter (harmful solid debris in the exhaust gas stream). The use and continued effectiveness of these systems have always depended strongly on the quality and performance of the engine oils used.

NOx gases can be controlled using Exhaust Gas Recirculation (EGR) and Selective Catalytic Reduction Systems (SCR) (AdBlue). EGR creates a severe engine environment, with spent exhaust gases being directed back into the intake manifold. This reduces the amount of free oxygen available to convert free nitrogen in the air to NOx compounds. However, the side effect is incomplete combustion, which creates a large amount of abrasive soot.

Soot is not only abrasive, but also affects the flow properties of the engine oil. Without the correct level of oil

performance, the engine will experience accelerated wear and oil thickening, which could lead to catastrophic failure. Correctly formulated engine oils control wear and thickening due to soot and will allow the engine to run at optimum efficiency, helping to reduce emissions.



The SCR (AdBlue) systems rely on the effectiveness of a catalyst fitted to the exhaust system. AdBlue, a solution of urea, is sprayed into the exhaust gas stream and is carried into the catalyst, where a chemical reaction takes place to remove NOx gases by creating nitrogen and water vapour. However, when the engine oil lubricates the compression rings, valve stems and valve guides, a small amount of oil is burnt, releasing sulphur and phosphorous from certain compounds.

As the engine runs, these elements find their way into the catalyst and poison the active sites where the reaction takes place, making the catalyst unusable.

## Engine oils must be formulated correctly to ensure the additive chemistry provides suitable levels of wear protection without affecting the catalyst.

A poorly functioning catalyst will not only be unable to control emission levels, but engine management systems may put the vehicle into reduced power mode (or limp mode) until the situation has been remedied.

Diesel Particulate Filters (DPFs) are installed in the exhaust system to catch particulate matter (soot) and to prevent it from entering the atmosphere where it can cause health and environmental issues. Sensors monitor the working pressure across the unit and when it drops to a defined value, a regeneration cycle is initiated. This usually involves unburnt fuel entering the unit, causing a temperature spike that oxidises the soot (solid) to carbon dioxide (gas). Carbon dioxide flows out and the unit is good to go again.



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As mentioned previously, a small amount of oil is burnt during this process, and this creates a metallic ash that is swept into the DPF. However, the metallic ash that is generated remains behind and eventually the DPF will be unable to reach normal pressure ranges. Again, the vehicle will click into reduced power mode.

Using the correct engine oil with the correct formulation will protect the engine components, and also help to ensure that the DPF has the best possible service life. When the DPF is working at its optimum levels then particulate emissions are controlled more effectively.

To reduce emissions even further, efforts have been focused on improvements in fuel efficiency. New engine hardware architectures, designs and technologies are emerging that embrace multiple innovations.



There's no doubt that engine downsizing, in terms of the number of cylinders employed, will continue. 8-cylinder engines, with the odd exception (such as Scania), have already been moved down to 6 cylinders in numerous cases and with the adoption of variable geometry turbochargers, to give tailored boost depending on demand, power outputs have been maintained.

Variable valve timing helps to ensure maximum fuel efficiency under a wide range of loads and operating conditions. Different construction materials are starting to come into play. For example, steel pistons are being used to cope with higher peak cylinder pressures and allowing the top compression ring to be moved closer to the crown, reducing the crevice volume where burn inefficiencies can occur.

On top of these modifications, the aftertreatment devices are continuing to improve in design and effectiveness. Two stage AdBlue injection aims to improve NOx conversion, relying on

a tailored engine oil formulation to ensure catalyst longevity. DPFs are removing even smaller particles and will remain effective longer by using the correct type of low ash engine oil.



Another strategy to reduce emissions is to improve fuel efficiency. If less fuel is used, then emissions are also reduced. Improvements in fuel efficiency can be made by using engine oils that produce thinner oil films in the bearings and where the compression ring travels along the cylinder liner area. These thinner oil films result in less drag and therefore offer more useable energy that can be used by the wheels.

To ensure that component integrity is not compromised, these thinner engine oil films are fortified with polymer chemistry to ensure there is no metal-to-metal contact. Polymers are essential when formulating 5W-30, 5W-20 and 0W-20 engine oils for the commercial vehicle sector.

The modern heavy-duty diesel engine is complex and is still evolving. These new architectures, technologies and fuelling strategies produce real world emission reductions, but they will only achieve this if they are fitted with new generation engine oils, which are as critical as any other component.



The choice of the correct lubricant can be complicated and a little confusing. The Versimax range of heavy-duty diesel engine oils from Morris Lubricants, have been formulated to work with the various aftertreatment devices, as well as reduce downtime, improve fuel efficiency, and of course contribute to the reduction in engine emissions.

This range of engine oils is used by fleet operators, maintenance technicians, mechanics, and drivers, to help rationalise usage where mixed fleets of vehicles and engine technologies are in operation.

Engine oil choice should not be taken lightly, and the original equipment manufacturer's guide should always be followed. The mixing of different types of oil must always be approached with caution, as using an inferior oil could cause damage or premature failure. As always, seek professional advice if there is any doubt.

If you are unsure which oil will suit your needs, call the Morris Lubricants Technical Helpline on 01743 237 541 or visit morrislubricants.co.uk

# ANTIFREEZE COOLANTS: The Importance of Being Cool

For anyone running a vehicle with an Internal Combustion Engine (ICE), an antifreeze coolant is essential, but it does a lot more than the name would suggest.

#### HIGH TEMPERATURE OPERATION

The best cooling medium is water. However, when the engine reaches running temperature it will exceed the boiling point of water, which is 100°C. If the water boils away catastrophic damage can occur in the engine. To combat this, the addition of



Monoethylene Glycol (MEG) elevates the boiling point up to around 108°C.

#### LOW TEMPERATURE OPERATION

If the engine has been at rest and the ambient temperature falls below 0°C, water freezes, and the ice formed expands. This is a big issue in the engine cooling system as there is nowhere for the expansion to go. As the water freezes, high internal



pressures are generated that can crack heads, cause splits in cylinder liners, make hoses leak, fracture radiators, and break water pumps. By incorporating Monoethylene Glycol (MEG) to the water it reduces the freezing point, potentially driving it down to -35°C.

### INHIBITORS

Another important function of an antifreeze coolant is to prevent any metallic components from rusting or corroding, such as the engine block, water pump, gaskets etc. It is therefore essential that the antifreeze coolant uses the correct chemistry in its formulation to stop this.



Rusting and corrosion are prevented by an inhibitor package, which is a combination of chemical compounds chosen to optimise its ability to protect the cooling system. This chemistry is referred to as either Inorganic or Organic Acid Technology (OAT). Inorganic chemistry is extremely active and will seek out all materials in the cooling system, whether susceptible to rusting or corrosion or not. This constant level of activity results in it becoming depleted after around 2 years. At this point it should be drained and changed.



Organic Acid Technology (OAT) only targets materials where rusting

or corrosion is starting to take place. This chemistry is selective and does not become depleted as quickly and will work for up to 5 years. Some manufacturers may require a combination of these technologies and 'hybrid' antifreezes are available for specific engine designs.

### THERE IS MORE!

Additional chemistry may also be added to the formulation of antifreeze coolants such as antioxidants to stop corrosive acid formation as well as additional compounds to pH Control Antifoam Antioxidants

prevent hard water deposits and extra pH buffering agents to maintain an optimum pH level (around 8). The formation of foam can also inhibit the properties of the antifreeze coolant, therefore an antifoaming agent may be added to the formulation to prevent foam developing within in the cooling system.

### COLOUR

The language of antifreeze coolants tends to be based on their colour. But be aware,



colour is not an indication of quality or performance and is purely cosmetic having no impact on how the antifreeze coolant performs in terms of engine protection.

### CHOOSING THE CORRECT ANTIFREEZE COOLANT

As engine designs become more complex and engines are manufactured from different metals and composite materials, the correct antifreeze coolant must be used. If not, the

antifreeze coolant will damage the engine and reduce its efficiency. When choosing the correct antifreeze coolant, you need to make sure it meets the specifications set by the engine manufacturer.



### SUMMARY

Antifreeze coolants perform in the engine all year round and do not just cover the winter months. Selecting the correct antifreeze coolant is vital and choosing a product based on colour should be avoided. Best practice is to select the antifreeze coolant based on the engine manufacturer's specification. If there is any doubt as to which antifreeze coolant is required, check with the engine manufacturer, seek independent technical advice, or use online tools such as whatoildoineed.com.

## New Antifreeze Coolant Range

Morris Lubricants is proud to launch a new range of antifreeze coolants that is suitable for 169 industry standards and engine specifications. This new antifreeze coolant range has been designed for use in a vast number of vehicles in the automotive, commercial vehicle, agricultural and off-highway sectors.





Selecting Coolants Based On Colour



CHECK Engine Manufacturer's Specification



technicalhelpdesk@ morris-lubricants.co.uk

whatoildoineed.com

CONSULT Independant Technical Advice

# How Oil Is Used With Guy Martin: Off-Highway Edition

Guy Martin is an experienced mechanic spending many years working with trucks, tractors and a wide variety of heavy goods vehicles (HGVs). In the new 'How Oil is Used' series of videos Morris Lubricants' Technology Manager, Adrian Hill takes Guy into a quarry to look at some of the largest vehicles in the Off-Highway industry.

As these vehicles work in such extreme environments, Adrian and Guy discuss why it is so important to select the correct quality oils, lubricants, fluids and greases for offhighway vehicles & plant equipment to make sure they stay working in the quarry and not stuck in the workshop.

In this new video series, Guy and Adrian discuss the important elements of the off-highway industry. Episode one reviews why you need to select the correct specification for 'engine oils.' Episode two looks at the various requirements of 'gear and transmission oils.' Episode three discusses the use of quality 'hydraulic oils' and why cheap is not always better, episode four Adrian and Guy chat about the importance of 'antifreeze coolants', and the final episode looks at the wide variety of 'greases' available.



# EPISODE I: ENGINE OILS

EPISODE 2: GEAR & TRANSMISSION OILS

EPISODE 3: HYDRAULICS OILS

EPISODE 4: ANTIFREEZE COOLANTS

EPISODE 5: GREASES





# Want to learn more?

You can watch this series on morrislubricants.co.uk or by looking for the videos on the Morris Lubricants social media and YouTube channels.

## MORRIS LUBRICANTS' CYLINDER OILS HELP MAINTAIN BLACK FIVES



Riley & Son Ltd (Rileys) has praised the quality cylinder oils from Morris Lubricants for helping maintain and operate its Black Five fleet on the West Highland Extension. Morris Lubricants has provided specialist oils to increase the mechanical life of the locomotives by reducing the wear on the engines.

Rileys, based in Rochdale, offers a complete range of locomotive and component overhaul, repair, and replacement for heritage steam engines. The business runs three Black Fives - 45407, 44871, and 45212 - on the Fort William to Mallaig line, which is a notoriously difficult route, and the engineers were finding it a challenge to maintain the locomotives effectively.

The oils and lubricants used previously meant there was a continued strain on various parts of the locomotives, and Rileys found it had to renew parts of the engine that had been worn on a regular basis, which was costly and time consuming.

To decrease the wear of the engines, Rileys needed to make a change and switched to Mainline 1000 Steam Cylinder Oil from Morris Lubricants. This resulted in less need to rebore the cylinders and valves or renew the pistons, decreasing time in the workshop, reducing costs and extending the running time of the locomotives. Colin Green, Director at Rileys, explains: "In the heritage steam industry we are looking to protect our history so we can teach and educate young people, and reminisce with the older generation. It's vital to run these engines to give them exposure, and the correct lubrication is key when it comes to maintenance.

"After experiencing costly wear and tear using alternative lubrications, we decided to make the switch to Morris Lubricants' Mainline 1000 Steam Cylinder Oil product. After a year, we pulled the engines apart and found the wear and tear was phenomenally reduced, indicating the excellent performance of the product.

"The cylinder boring was reduced, the wear and tear on the bearings was also reduced, and the axle boxes have all run sufficiently for the year with no elevated temperatures.

"This means we don't have to renew the valves and the pistons or rebore the cylinders as frequently, as the mechanical life of the components is increased. When it comes to winter maintenance, we can just change the piston rings – even though this wasn't necessary on all of them this year due to the limited wear."

The key to the success of the Mainline 1000 Steam Cylinder Oil is its non-staining, robust formulation that can withstand high piston speeds and superheat temperatures. Plus, it can impart rust resistance during



operation and long after shutdown by using unique, highly efficient surface additives.

Simon Holroyd, Heritage Account Manager at Morris Lubricants, added:

"Here at Morris Lubricants we understand the importance of the heritage steam industry and its role in education and enjoyment for the public.

"We have a passion for ensuring that locomotives with great historical value, like the Black Fives, keep steaming on the tracks. I'm so glad to be working with the Rileys team. The work they do in the heritage steam industry is outstanding, and I'm glad we can help extend the life of these treasured locomotives."

For more information on the Mainline 1000 Steam Cylinder Oil, visit the heritage and steam section of the Morris Lubricants website.





# MORRIS LUBRICANTS TEAM TAKE ON LONGMYND HIKE CHARITY CHALLENGE FOR HOPE HOUSE

A team from Morris Lubricants took on the 50-mile Longmynd Hike competition over the weekend of October 7<sup>th</sup> and 8<sup>th</sup>, which involved climbing more than 8,000 feet, covering eight summits, in under 24 hours, to support Hope House & Tŷ Gobaith Children's Hospices.

Chief Operations Officer Owen Lloyd, was joined by Kim Marmaras from the manufacturing site, Russell Fox who is one of Morris Lubricants' long-distance delivery drivers and Joe Fox from the logistics planning team.

The route was not for the faint hearted and followed a set figure-of-eight over the rugged countryside of South Shropshire and the Welsh Marches, covering eight summits. The start at Church Stretton was at Ipm on Saturday 7<sup>th</sup> October and the objective was to complete the course in under 24 hours.

Andrew Goddard, Morris Lubricants' Executive Chairman, said: "The Longmynd Hike is a phenomenal undertaking by the four men. If 50 miles in 24 hours was not enough, you also have to factor in the unforgiving terrain and the weather conditions." "The money they raised on this challenge will go towards the company's continuing support for Hope House, an organisation that provides such important care to children, young people and their families."

Bekki Fardoe, area fundraiser for Hope House, said: "We are extremely grateful for the continued support that we have received from Morris Lubricants since partnering together as their chosen charity for 2022/23."

"Employees from Morris Lubricants have taken part in various fundraising activities and are always up for a challenge in order to raise money for the seriously ill children and families that we care for."

"They have raised the bar again with the 50-mile Longmynd Hike challenge! It was an incredibly tough challenge, both mentally and physically, but I had no doubt they would conquer it. Everyone at Hope House and Tŷ Gobaith is grateful of their fantastic effort."

## **CHARITY FOOTBALL MATCH**

Colleagues from around Morris Lubricants continued their annual traditional by lacing up their football boots and heading to the football pitch, to raise money for charity. The Morris Lubricants players took on a team from Greenhous, a car and emergency vehicle franchise dealer, also based in Shrewsbury to raise money for Hope House & Tŷ Gobaith Children's Hospices. The game was hosted at Salop Unison Club, with the sun shining down as a good omen for all who played. It was a tightly fought game, and after a high tempo 90 minutes the honours were shared with a 4 - 4 draw.





## SUPPORT FOR FINAL MOMENTS MATTER CAMPAIGN

Morris Lubricants were proud to support Hope House & Tŷ Gobaith Children's Hospices in their 'Final Moments Matter' campaign.

Alongside our sister company, Morris Leisure Touring Caravan And Holiday Home Parks, a donation was made to their 36-hour campaign, where every  $\pounds I$  donated was matched (up to  $\pounds 275,000$ ). This meant that the total from both companies reached a fantastic  $\pounds I0,000$ .

The campaign in total raised an incredible grand total of  $\pounds 611,162$  to help provide the best possible end-of-life care to every child and their family, from symptom management and final wishes, through to bereavement support.

# Morris Lubricants Gives David's Ukrainian Mercy Mission A £500 Boost

Kind-hearted benefactor David Pryce was given a £500 boost by Morris Lubricants for his eighth mercy mission to help vulnerable young and elderly people in Ukraine.

David, 59, from Wellington, launched his Trikes for Ukraine campaign early in 2023, and had initially collected 35 trikes for disabled children and young adults in Ukrainian orphanages.

In addition, he had also collected 400 blankets with waterproof undersheets for vulnerable people living in a hospice and residential homes for the elderly and 70 soft beds for dogs.

David had used his own Sprinter van on his seven previous mercy missions, when he delivered medical and pet aid, but this time he needed a much larger vehicle to transport all the items he had collected.

Morris Lubricants' executive chairman Andrew Goddard said:

"Total respect to David for the wonderful work he is doing to support vulnerable young and elderly people in Ukraine. We are delighted that, as a company, we can contribute towards such a fantastic cause."

What makes the mercy missions even more remarkable is that David lives with cerebral palsy and has always refused to let it define him as a person. Married with a daughter, David runs his own transport consultancy business, Transportwise and has funded most of his previous trips to Ukraine himself.

He was inspired to help the people of Ukraine because one of his grandmothers was an evacuee herself. She was evacuated from London to Shropshire to escape German bombing raids during the Second World War.



"One of the things I became aware of when I began the aid missions to Ukraine last year was the massive number of disabled children becoming orphaned as a result of the war," explained David, who has also transported UK visa-ready families with disabilities back to this country.

"I found a televised news clip featuring an orphanage and spotted a young girl aged around nine who has cerebral palsy, like I have, and she was clearly helping the staff with support for others in a respectful way. I saw in that person what I believe are my qualities."

As a child, David found great independence and freedom from riding a bike with his friends, so he launched a campaign to raise money and bought 21 trikes which were delivered to three Ukrainian orphanages in March 2023.

"I was so emotionally affected by what I saw that knew I had to go back" he added. "I have bought 35 second hand tricycles, many of which are specifically adapted to support riders with posture and positioning needs.

"I have never done anything as significant as this before. One of the things I learned about myself during the Covid lockdowns is that I am resourceful and can make things happen, which is what I am doing now."

He praised the support he had also received from Oswestry haulage and cold storage company Pentons whose director Gary Penton introduced him to Andrew Goddard at Morris Lubricants.

"I am very grateful for the amazing support from Morris Lubricants," added David. "It's a real privilege to be associated with a company that I have known throughout my career."

## Morris Lubricants Sponsors Shrewsbury Rugby Club For 2023 – 2024 Season

Morris Lubricants have continued their sponsorship of Shrewsbury Rugby Club for the 2023 – 2024 Season.

Having sponsored the club for over 15 years, the company are delighted to continue the partnership as shirt sponsor, who's First team compete in the Counties 1 Midlands West (North) Division.

As well as the First team, the club have a Second team, Third team, a Touch team and Junior teams ranging from Under 18s to Under 13s, with mini teams from the age of Under 6s to Under 12s.

Andrew Goddard, Executive Chairman for Morris Lubricants, commented "It's fantastic to work with local sports clubs and we have had a long-association with Shrewsbury Rugby Club for over 15 years. Today as club sponsor it is great to help promote sport, fitness and wellbeing to players, club members and supporters in the local area."



Andrew Goddard, Executive Chairman of Morris Lubricant with Glyn Jones, President of Shrewsbury Rugby Club



## Another Successful Season For 'Man In Black' Dave Jenkins

It has been another fantastic season in the British Truck Racing Championship from Morris Lubricants' ambassador Dave Jenkins. With many twists and turns in another competitive year Dave finished the season in 3<sup>rd</sup> place and only a few points off 2<sup>nd</sup>. There were many highlights over the season but a moment to remember was when Dave Jenkins was on top of the podium at Snetterton alongside fellow Morris Lubricants' ambassador Simon Reid. Both with Morris Lubricants' quality oils flowing through their trucks and showing why using the correct quality oils and lubricants in their vehicles is essential.

# NEW VIDEO SERIES COMING SOON: How Oil Is Used - Automotive Edition

Adrian Hill and Guy Martin have recently filmed the next installment of How Oil Is Used. This time the duo are focussing on the Automotive sector. Ade and Guy chat about the various oils, antifreeze coolants and other ancillary products that help to keep cars running smoothly.



# A Continuing Commitment To Sustainability

Over several years, Morris Lubricants has been developing an action plan in a continued effort to become more sustainable and cement the company's commitment to minimising its impact on the environment.

The company, which has been manufacturing quality oils and lubricants since 1869, had previously achieved an EcoVadis Bronze rating in sustainability in 2022. Through hard work and improvements throughout the business focusing on the EcoVadis categories such as: environment, labour & human rights, ethics and sustainable procurement, Morris Lubricants has improved on last year's assessment. The company is therefore proud to announce that it has now achieved the Silver award rating for 2023.

Morris Lubricants' Executive Chairman, Andrew Goddard, is an established voice in the oil and lubricants industry following a 2-year period as President of the UK Lubricants Association (UKLA) and is very proud of the latest Ecovadis award. Andrew was keen to state

"The lubricants industry must be seen as part of the solution and not part of the problem as the world evolves to a greener, more sustainable future."

Andrew has warned that the lubricants industry faces significant challenges to its products, customers and markets in the near future but backed the sector's record of innovation to evolve with the changing times to create new ideas and opportunities.

This amongst others is one of the key reasons that Morris Lubricants continue to develop an action plan and strategy to operate and manufacture in a more sustainable manner.



Andrew continues,

"There is a need to continue to rise to the challenge and aim to surpass our recent achievements. We therefore have a strong emphasis on continuous improvement, so that Morris Lubricants progresses its achievements year on year. Businesses need to be flexible and forwardthinking when

discussing aspects of sustainability and future strategy.

Morris Lubricants and its employees are committed to change and so I have no doubt that we will see progress in the future".

After achieving the Silver award, the company has already begun working hard to attain the gold award in 2024.

# **NEW PRODUCT**



Morris Lubricants has launched Multivis ECO VA 0W-30, a new synthetic engine oil designed to improve fuel economy performance and provide enhanced protection for the latest petrol and diesel car engines.

Multivis ECO VA 0W-30 has been formulated to protect after-treatment devices such as particulate filters and catalytic converters, as well as coping with the severe demands of turbocharger protection and the tough environment of exhaust gas re-circulation.

The new Multivis engine oil can be used in a variety of car brands where the following manufacturer's specifications are required: ACEA C3, VW 504.00/507.00, MB 229.52, BMW Longlife 04 and Porsche C30.

Ryan Woolley, Technical Support Engineer at Morris Lubricants discusses the many benefits of the new Multivis ECO VA 0W-30:

"Over recent years, we have seen the move to thinner oils to suit new engine technologies designed to deliver improvements in fuel efficiency. This has two clear benefits for vehicle owners who can not only play their part in reducing harmful emissions but also travel further on a tank of fuel. "The new Multivis ECO VA 0W-30 engine oil is available now in 205 litre barrels and is formulated to prioritise fuel economy performance coupled with outstanding wear protection and cleanliness under various driving conditions."

#### HELP FOR RAPID COLD START WEAR AND IMPROVED FUEL ECONOMY

As well as providing excellent protection for after-treatment devices, Multivis ECO VA 0W-30 is also formulated to improve fuel efficiency when the engine is started from cold. The advanced thinner oil film generates less resistance to flow and has less mechanical drag. This means more power is available to drive the wheels. The other major benefit of the new engine oil is its rapid circulation of oil around the engine from cold, providing a protective film that reduces engine component wear at this critical time.

#### REDUCES HIGH-TEMPERATURE DEPOSITS PLUS ADDED ANTI-SLUDGE CONTROL

At high temperatures, hard lacquers and varnishes can form on engine components and effect engine operation. This results in reduced efficiency, higher fuel consumption and an unwanted increase in emissions. This new advanced engine oil is formulated to keep components free of these harmful deposits. Also at lower temperatures, sludge can form which can again impact on how the engine operates and can cause issues with lubricant circulation. The new Multivis ECO VA 0W-30 is formulated to help prevent the formation of sludges to maintain engine efficiency and prolong component life.

### Ryan Woolley continues:

"With such a wide array of new engine technologies and specifications being released by car manufacturers, selecting the correct oil is vital to ensure optimum fuel economy and reduced emissions, as well as preventing unnecessary wear and tear.

With our 150-year history, we are a trusted source of advice to original equipment manufacturers (OEMs), mechanics, vehicle workshops and owners across the UK, offering a premium service for oils, lubricants and greases that prioritises engine performance and meets the latest regulatory requirements.

Ryan Woolley, Morris Lubricants' Technical Support Engineer

# **The Multivis Range**

Multivis is a range of superior quality automotive engine oils suitable for petrol, diesel and hybrid engines that use the latest synthetic technology products and oil formulations required in the operation of low emission engine designs and specifications. The chemical formulations in the Multivis range are tailored carefully to ensure maximum aftertreatment device compatibility.

With the ever-increasing complexity of exhaust aftertreatment devices, such as particulate filters and catalysts, coupled with the extra demands for increased fuel economy, the Multivis range of engine oils offers the maximum levels of component protection to ensure operating efficiency is always maintained.



# **PRODUCT UPDATE**



Morris Lubricants has updated the formula for its proven Terrain LS 80W-90 off-highway gear oil, to satisfy the demands of limited slip differentials (LSDs) as well as wet (oil-immersed) brake systems in one universal product.

Part of the proven Terrain range of oils and lubricants, designed specifically for the rigours of off-highway vehicle and equipment operation, the new Terrain LS 80W-90 is a truly innovative 2-in-1 universal gear oil – enabling customers to reduce oil stock levels considerably, save money and keep machinery running at peak performance.

Traditional oil formulations are designed to either protect components against high shock loads or to ensure positive engagement in wet brake systems. The new Terrain LS 80W-90 does both and its formula combines high levels of extreme pressure protection and optimised frictional performance in a single gear oil – making it a true 2-in-1 universal gear oil for the off-highway sector.

### PURPOSE-BUILT FOR HIGH DIFFERENTIAL LOADINGS

Morris Lubricants' new Terrain LS 80W-90 is designed to work in various operating conditions. In particular, where LSDs need to provide balanced power distribution to the wheels in environments where traction may be an issue, such as in deep mud or on loose aggregate.

As the drive system detects traction issues, the axles are locked, equalising the power and allowing the vehicle to manoeuvre. This action creates a high shock load and gear oils for LSDs are formulated to offer high levels of component protection under these conditions.

This is where the benefits of Terrain LS 80W-90 are seen clearly. The product is formulated to very high standards and exceeds API GL-5 gear oil specifications for arduous environments, offering superior extreme pressure protection, under these high shock loads.

If you are unsure which oil suits your needs, call the Morris Lubricants Technical Helpline on 01743 237 541, or use the company's whatoil lubricant lookup feature on the website at morrislubricants.co.uk. Simply enter a registration number or search a wide variety of vehicles by entering the age, make and model and the ideal oil is shown.



#### **PROTECTION FOR WET BRAKES**

The second important performance attribute of the new Terrain LS 80W-90 is its ability to cope with the exacting frictional demands of wet brake systems. Due to the hard off-highway operating environments, this type of brake system is essential to prevent abrasive contamination that would have a severe impact on the longevity and effectiveness of components.

Terrain LS 80W-90 is formulated using friction modifier chemistry to ensure positive engagement of clutch pack materials. This enables the system to stop the vehicle smoothly and safely. 'Squawk and chatter', which is associated with the stick/slip of clutch materials resulting in noise and vibration can also be eliminated using Terrain LS 80W-90.

#### COST EFFECTIVE INVENTORY RATIONALISATION

As a 2-in-I product, Terrain LS 80W-90 can also offer inventory rationalisation and avoid stocking more products than are needed. It can be used in standard axles and differentials where a basic API GL-5 80W-90 gear oil is required.

Adrian Hill, Technology Manager at Morris Lubricants, explains: "In the off-highway sector, the gear oil must fulfil a number of demanding jobs, and traditionally, chemistry in the oils used for LSDs and friction modification for wet brakes don't complement each other.

"Our new Terrain LS 80W-90 is capable of these two very different jobs, reducing downtime and providing operators with peace of mind. With superior shock loading protection and modified friction performance, Terrain LS 80W-90 can be used throughout the drive axle without compromise.

"In selecting this 2-in-1 universal gear oil, operators can not only reduce stock levels and costs, but also improve component longevity, helping to minimise downtime on site."

The new Morris Lubricants' Terrain LS 80W-90 Off Highway Gear Oil is available now in 25 litre, 205 litre and bulk IBC containers.



Adrian Hill, Morris Lubricants' Technology Manager

# WORKSHOP PRO



#### WORKSHOP PRO TRAFFIC FILM REMOVER

# Is your vehicle dirty and hard to get clean?

Morris Lubricants' Workshop PRO Traffic Film Remover can make light work of the dirty work when cleaning a car, van, truck, motorbike, tractor, digger or any type of filthy vehicle.

With a mix of surface active agents, sequestrants and alkaline builders, Morris Lubricants Workshop PRO Traffic Film Remover is formulated to remove road film from vehicles. Developed in Scandinavia, it will decrease the need for mechanical agitation. The product rapidly lifts road film, dirt and grime from paintwork, metal surfaces, glass and rubber.

Morris Lubricants Workshop PRO Traffic Film Remover is simple to use, effective in hard and soft water areas and is biodegradable.

### WORKSHOP PRO ALL SEASONS SCREEN WASH

### Is your windscreen clear enough to see through?

Workshop Pro All Seasons Screen Wash is highly concentrated and can be used neat or diluted to suit precise weather conditions. It is not just for the winter months - as the name suggest it can be used all year round! This professional screen wash is highly effective and will cut through dirt, mud and grime to leave a clean smear-free windscreen. The special formula also helps wiper blades glide smoothly over the screen and eliminates annoying judder. Don't let a dirty windscreen impede your vision!



To find out more about the Workshop Pro range of ancillary products, scan the QR code or visit the Morris Lubricants website: morrislubricants.co.uk



# Agrimax Range on Show at LAMMA 2024

Morris Lubricants are delighted to showcase the Agrimax range of agricultural oils and lubricants at LAMMA 2024, NEC Birmingham.

The Agrimax range of oils and lubricants is specifically developed for the farming and agricultural sectors. Applications for these lubricants include engines, gearboxes, hydraulics, cooling systems, oil immersed brakes and general maintenance in a wide range of agricultural equipment, including tractors, combine harvesters, mini diggers, all terrain vehicles and a variety of other agricultural machinery.

See you at Stand 11.602 at NEC on 17<sup>th</sup> – 18<sup>th</sup> January 2024





Visit morrislubricants.co.uk to view the Agrimax product range