

Q8  **Oils**

ENERGY

Q8Oils

High performance oils for steam and gas turbines



www.Q8Oils.com



Q8Oils as your turbine oils partner

*For **more than 35 years**, Q8Oils has been developing high-performing products for the energy industry, which provide solutions and real benefits for our customers and their operations.*

*Our products are based on an unique combination of **high-quality base oils** and an **in-house developed** additive package, which makes us stand out in the market.*

Choose Q8Oils and you also choose...

Own Research and Development

Q8Oils' R&D teams develops customised formulations and specialised additive packages for high performance turbines.

Due to their unique formulations and high quality components, both van Gogh and Volta product ranges meet the highest requirements of all major OEM's.

Lower total cost of ownership

Benefit from high-performance products that withstand high pressure and extreme temperatures to increase productivity, limit downtime and give you a competitive advantage.

Our turbine products are characterized by outstanding oxidative and thermal stability, protecting the equipment from varnish and sludge forming, while providing a longer drain interval compared to competitor products.

Peace of Mind

As a global player with high-performance products and an excellent support service, we give our customers peace of mind.

Drivers in the market



In various applications, turbines are providing more than 80% of the world's electricity while energy demands are increasing with 5% per year on average.

Rapid urbanization

The ever increasing urbanization in emerging economies comes with a massive energy consumption.

Increasing demand for electrical energy from durable sources

Concerns over the climate impact of non-renewable energy sources are encouraging the shift towards more durable ways to generate electricity, in which turbines play a significant role.

Competitive landscape and demanding applications

Today's gas and steam turbine market is dominated by a few major players with which Q8Oils maintains strong relationships.

The often complex and challenging circumstances in which gas turbines operate come with extremely high temperatures which are the main cause of premature turbine oil failure - owing to oxidation.

Our Q8 Van Gogh and Q8 Volta ranges for gas, steam and hydro turbines offer outstanding oxidation stability and resistance against varnishing to ensure a reliable operation.

Our product range

	PRODUCT	DESCRIPTION	APPLICATIONS
NON-GEARED GAS-AND STEAM TURBINES	Q8 van Gogh	Q8 van Gogh is a high performance turbine oil, fitting in Q8Oils' clean technology program. It meets the challenges of latest generation turbines, making it suitable for all operating conditions.	<ul style="list-style-type: none"> • Industrial steam- and gas turbines • Hydroelectric turbines • Circulation systems where R&O type turbine oil is required • Centrifugal- and axial pumps, and turbo-compressors, where R&O type turbine oil is recommended
	Q8 Volta	Q8 Volta is a ultra-high performance turbine oil, fitting in Q8Oils' clean technology program. It meets the challenges of latest generation turbines, making it suitable for all operating conditions.	<ul style="list-style-type: none"> • Industrial steam- and gas turbines • Hydroelectric turbines • Circulation systems where R&O type turbine oil is required • Centrifugal- and axial pumps, and turbo-compressors, where R&O type turbine oil is recommended
GEARED GAS-AND STEAM TURBINES	Q8 van Gogh EP	Q8 van Gogh EP is a high performance turbine oil, fitting in Q8Oils' clean technology program. It meets the challenges of latest generation turbines, making it suitable for all operating conditions.	<ul style="list-style-type: none"> • Industrial steam- and gas turbines, including geared turbines and combined cycle operations • Hydroelectric turbines • Circulation systems where turbine oil quality is required • Centrifugal- and axial pumps, and turbo-compressors, where turbine oil quality is recommended
	Q8 Volta EP	Q8 Volta EP is a ultra-high performance turbine oil, fitting in Q8Oils' clean technology program. It meets the challenges of latest generation turbines, making it suitable for all operating conditions.	<ul style="list-style-type: none"> • Industrial steam- and gas turbines, including geared turbines and combined cycle operations • Hydroelectric turbines • Circulation systems where turbine oil quality is required • Centrifugal- and axial pumps, and turbo-compressors, where turbine oil quality is recommended

	FEATURES	VISC.	SPECS & APPROVALS
Q8 van Gogh	<ul style="list-style-type: none"> Long trouble free service life, excellent turbine protection and outstanding resistance against ageing Outstanding formulation in order to protect the turbine against corrosion and to minimize the build-up of deposits and lacquer in the turbine Specifically developed with excellent protection against the formation of varnish 	<ul style="list-style-type: none"> 22 32 46 68 100 150 220 	ASTM D 4304, Type I British Standard 489 DIN 51515-1 L-TD ISO 6743-5 L-TGA/ 6743-5 L-TSA TG 02-0171-E00000/B
Q8 Volta	<ul style="list-style-type: none"> Superior oxidative stability, guaranteeing long oil life under continuous and severe operating conditions Engineered with superior air release properties, exceptional anti-foaming performance and rapid water separation to ensure problem-free service One product that combines exceptional thermal stability as needed for severe duty gas turbines as well as superior water separability for high performance steam turbine operations 	<ul style="list-style-type: none"> 32 46 	ASTM D 4304, Type I Alstom Power HTGD 90117 British Standard 489 DIN 51515-1 L-TD/ 51515-2 L-TG GE Energy GEK 107395/ GEK 32568 ISO 6743-5 L-TGA/ 6743-5 L-TGB/ 6743-5 L-TGSB/ 6743-5 L-TSA/ 8068 JIS K 2213 Type 2 MAN Turbo SPD 10000494596 Siemens TLV 9013 04/ TLV 9013 05 Westinghouse M-Spec 55125Z3 TG 02-0171-E00000/B
Q8 van Gogh EP	<ul style="list-style-type: none"> Long trouble free service life, excellent turbine protection and outstanding resistance against ageing Developed with outstanding anti-wear/ extreme pressure protection to meet the load carrying requirements of geared turbines Specifically developed with excellent protection against the formation of varnish 	<ul style="list-style-type: none"> 32 46 68 100 150 	ASTM D 4304, Type II (EP) British Standard 489 DIN 51515-1 L-TDP/ 51515-2 L-TGP GE Energy GEK 28143 GE Thermodyn ISPSH901SDI ISO 6743-5 L-TGE/ 6743-5 L-TSE/ 8068 JIS K 2213 Type 2 Siemens MAT812108/ TLV 9013 04/ TLV 9013 05 Westinghouse M-Spec 55125Z3 Solar Turbines ES 9-224 (Class I) Turbomach ES 9-224 (Class I) TG 02-0171-E00000/B
Q8 Volta EP	<ul style="list-style-type: none"> Superior oxidative stability, guaranteeing long oil life under continuous and severe operating conditions Engineered with superior air release properties, exceptional anti-foaming performance and rapid water separation to ensure problem-free service One product that combines exceptional thermal stability as needed for severe duty gas turbines as well as superior water separability for high performance steam turbine operations 	<ul style="list-style-type: none"> 32 46 	ASTM D 4304, Type II (EP) Alstom Power HTGD 90117 British Standard 489 DIN 51515-1 L-TDP/ 51515-2 L-TGP GE Energy GEK 101941/ GEK 107395/ GEK 121608/ GEK 28143/ GEK 32568/ GEK 32568h/ GEK 46506 ISO 6743-5 L-TGE/ 6743-5 L-TGF/ 6743-5 L-TGSE/ 6743-5 L-TSE/ 8068 JIS K 2213 Type 2 MAN Turbo SPD 10000494596 Siemens MAT812108/ TLV 9013 04/ TLV 9013 05 Westinghouse M-Spec 55125Z3 Solar Turbines ES 9-224 (Class II) Turbomach ES 9-224 (Class II) TG 02-0171-E00000/B

Complementary products

PRODUCT	DESCRIPTION	APPLICATIONS	FEATURES	SPECIFICATIONS & APPROVALS
Q8 Verne 46	Q8 Verne is ISO HFDR fire-resistant hydraulic fluid based on high quality Tri-Aryl Phosphates. The product is recommended for use in Electrohydraulic governor control systems (EHC) of turbines.	Fire-resistant hydraulic fluid for EHC systems of turbines	<ul style="list-style-type: none"> Superior product which is inherently fire resistant Superior quality that exceeds the requirements of major gas- and steam turbine manufacturers Exceptional air release properties and superior filterability characteristics to ensure safe and reliable operations 	ASTM D 4293 GE Energy GEK 46357; ISO 12922/ 5598 HFDR; Siemens TLV 9012 02

Why choose Q8 Van Gogh or Volta?

Oxidation & thermal stability



Q8 Van Gogh



Q8 Volta

Anti-Varnishing



Q8 Van Gogh



Q8 Volta

Long oil life



Q8 Van Gogh



Q8 Volta

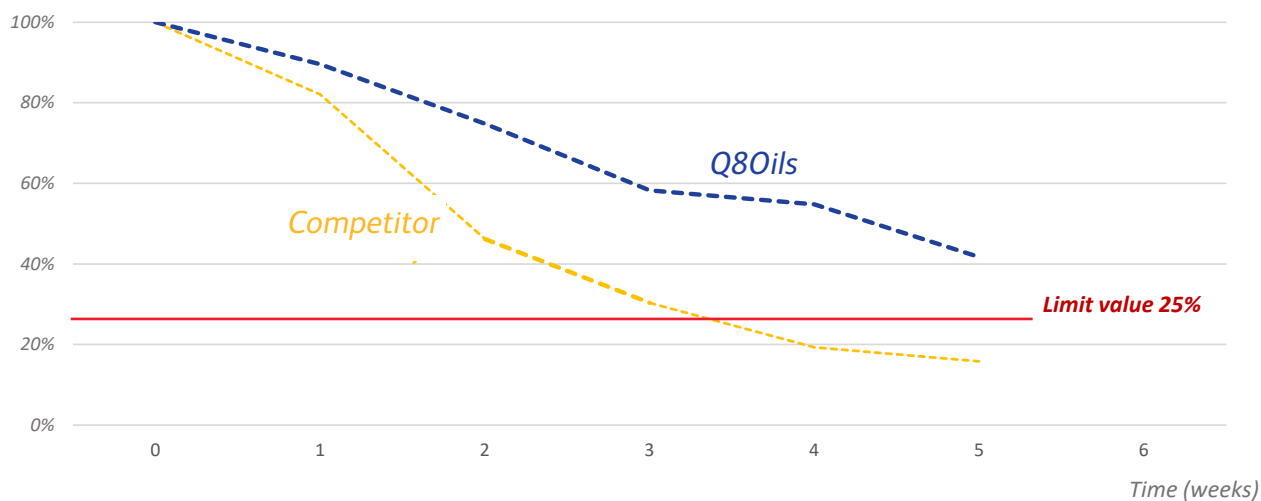


Our customers testify...

Anti-oxidant depletion: RPVOT oxidation stability over time.

Artificial laboratory ageing of sample in % vs fresh oil value.

THE GRAPH BELOW SHOWS Q8 VOLTA CHEMISTRY
VERSUS COMPETITOR CHEMISTRY

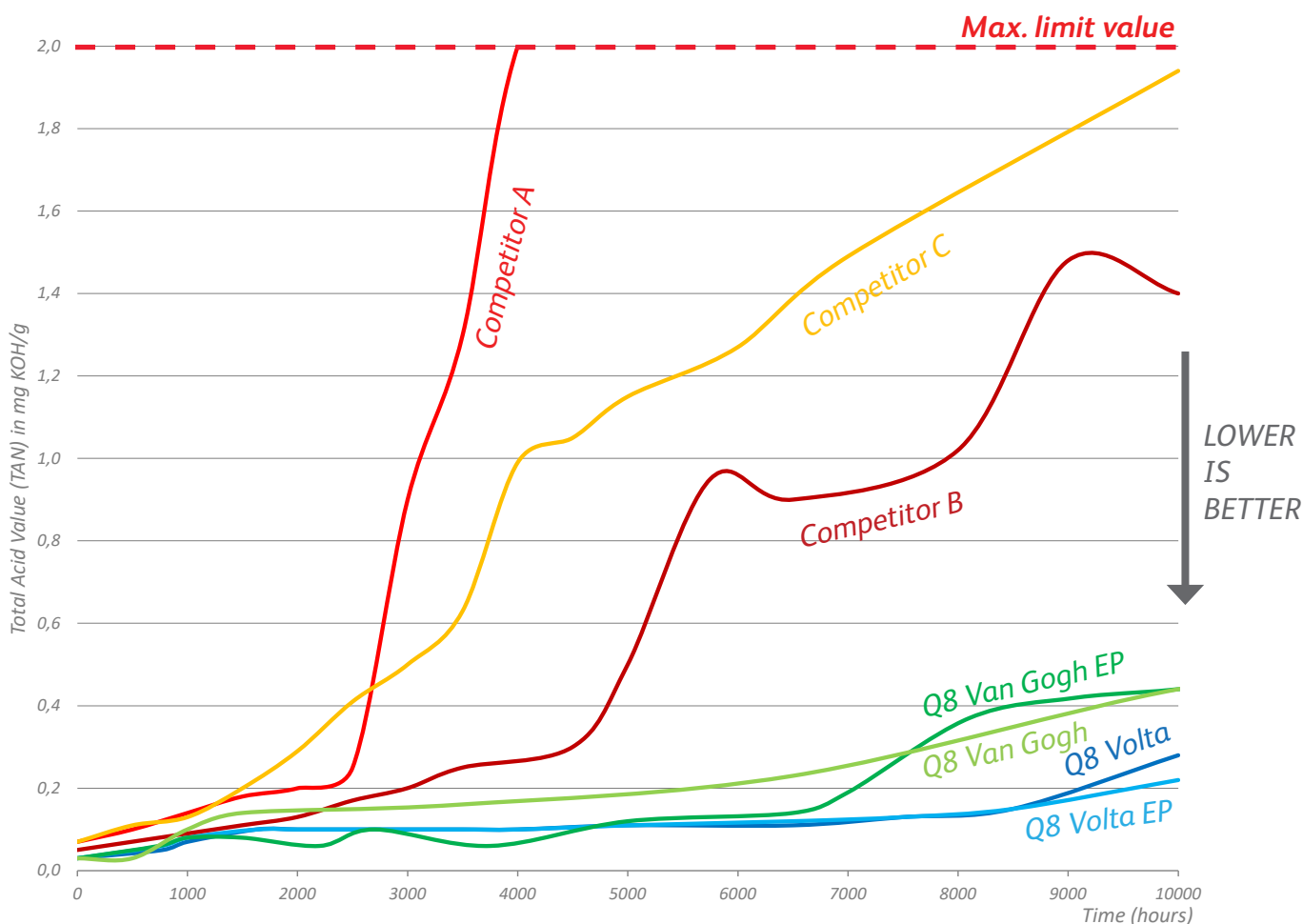




Anti-oxidant reserve: Q8 Van Gogh & Volta TOST testing

The TOST ageing test (Turbine Oil Stability Test) is an oxidation test to determine the ageing behaviour of turbine oils. The test method exposes the oil to extreme conditions using high temperatures, oxygen, water and metallic catalyst components. Due to the very long testing periods (of over 10.000 hr) the TOST is an excellent simulation of a fluid's service life. Based on the results you can draw conclusions about the oxidative stability and therefore the oil life.

RESULTS CONFIRM THAT Q8 VANGOGH, Q8 VANGOGHEP, Q8 VOLTA AND Q8 VOLTA EP HAVE EXCELLENT PERFORMANCE IN THE TOST TEST, THEREFORE GUARANTEEING LONG AND TROUBLE FREE SERVICE LIFE.



Q8Oils brand

Q8Oils products, services and solutions are designed to increase the profitability and sustainability of our customers' businesses.

We develop, blend and deliver a comprehensive portfolio of more than 1,000 technology enhanced lubricants to suit every application, from the smallest engine to the largest machine.

Based on extensive R&D activities in our European laboratories, we manufacture an extensive range of oils in our own blending plants. We use high-quality base oils and the latest technological innovation to guarantee products of the highest quality, approved by all major OEMs.

Our mission is to develop products that exceed the highest performance requirements, fulfil customer needs and meet our responsibility to protect the environment.

Easy to do business with Q8Oils

Customers from more than 90 countries worldwide choose Q8Oils for the quality of our products and because it is easy to do business with us. We offer a single supply solution for many applications across the automotive, energy, metalworking and general industry sectors.

Thanks to our strong customer centric approach based on product and service innovation, technical expertise and support, Q8Oils is the top choice lubricant supplier for market leading companies internationally.



Part of a strong group

Q8Oils is a subsidiary of **Kuwait Petroleum Corporation (KPC)**, which is ranked as one of the world's top ten energy conglomerates. KPC helps meet the world's vital oil and gas needs via diverse business activities which span all aspects of the hydrocarbon industry, from onshore and offshore exploration, to production and refining, petrochemicals, marine transportation and retailing.



مؤسسة الكويت
Kuwait Petroleum Corporation

Own research and development



Quality and innovation have always been at the heart of Q8Oils' business. We invest strongly in technical research and product development. Through our research & development programme we continuously improve existing products and develop innovative new lubricants to meet specific customer requirements.

Many of the additives we use in our lubricants are the result of our own formulations. This enables us to offer custom-made solutions for every challenge with outstanding product quality and performance.

Our R&D team also enhances production, product application and quality control by supporting customers with important information on safety, security, health and environmental issues.

Key facts

- 50 years' experience of petroleum research & development
- 40+ scientists and support staff
- ISO 9001, OHSAS 18001, ISO 14001 certified
- 50,000 samples tested and 350,000 analyses every year

What we do

- Consultancy services
- Product development and services
- Training
- Laboratory and engine testing



Committed to quality and sustainability

Seeking quality and continuous improvement in everything we do, Q8Oils is compliant with and certified to the following international standards and quality systems:

OEM approvals

Original Equipment Manufacturer approvals are part of our quality standards. Through our strong relationships with manufacturers, we are able to offer official OEM approvals and stay at the forefront of innovation to develop the highest performing lubricants.

EELQMS

The European Engine Lubricants Quality Management System is a series of development protocols, test methods, production standards and codes of practice that is widely recognised as the gold standard.

ISO 9001

The criteria for certification of this quality management system include strong customer focus, top management commitment, a process approach and continuous improvement. It ensures the highest standard of quality for lubricants around the world.

Get in touch!

A dedicated team of technical specialists providing support for customers and end users is ready to answer all of your questions.

Q8Oils PALUB: technical support with a human face

Product Applications LUBricants, is the technical service of Q8Oils. Here you can find five enthusiastic experts with a passion for the industry. Do not hesitate to contact them for information concerning product applications, specifications, safety requirements, and much more.

The PALUB team works closely with local technical specialists in the UK, Italy and Sweden/Denmark and answers can be provided in Dutch, French, English, German, Bulgarian, Russian and Arabic.

Contact them via palub@Q8Oils.com

What do they do?

Provide Advice

First and foremost, this service is obviously designed to provide advice where necessary. The team has extensive knowledge of the current product portfolio, new products that are being introduced, as well as the existing and upcoming market specifications. They also often provide extensive advice on the oil analyses (QRAS and LIMS) that have been carried out.

Intermediary

In addition, this service also acts as an intermediary between the development laboratory (KPR&T) and the customer. The service allows knowledge from the laboratory to be shared with the customer, and market information from the customer to be shared with the development laboratory. This is a clear case of cross-pollination.

Sales Support

They also support the sales team when visiting companies and distributors. This is the main reason that PALUB team members are often on the road to meet a customer. In this case, the telephone service is staffed by a colleague.

Training

The PALUB team provides training to direct customers and distributors, as well to the customer service. They do this at the home locations in BPA (Blending Plant Antwerp) and KPR&T, as well as during local sales meetings, or at the customer's location. This involves training on new products and/or applications, as well as providing training to newcomers in the oil market.

Maintenance

Next, there is a technical area within the scope of PALUB: the maintenance of certain tools that also are available for the customers: Olyslager Lis, Cross list, Technical IRIS and Q8Oils University. Do you have any questions about these tools? Please do not hesitate to contact them.

Marketing Support

The marketing department can also count on the knowledge found within PALUB: this service can support Product Data Sheets, the development of brochures, translations (FR, NL, DE), and the creation of labels for large packages.

Visit our website
www.Q8Oils.com

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