



Natural gas value chain

TCO* enhanced
lubricants

Optimizing your efficiency
from Gas Wells to Gas
compressors



TotalEnergies

Summary

- OEM specifications & approvals
- Natural gas industry
- Gas engine oil range
- Turbine oil range
- Gas compressor oil range
- Heat transfer fluid
- Five good reasons for choosing TotalEnergies Lubrificants

Natural gas industry

Your challenges

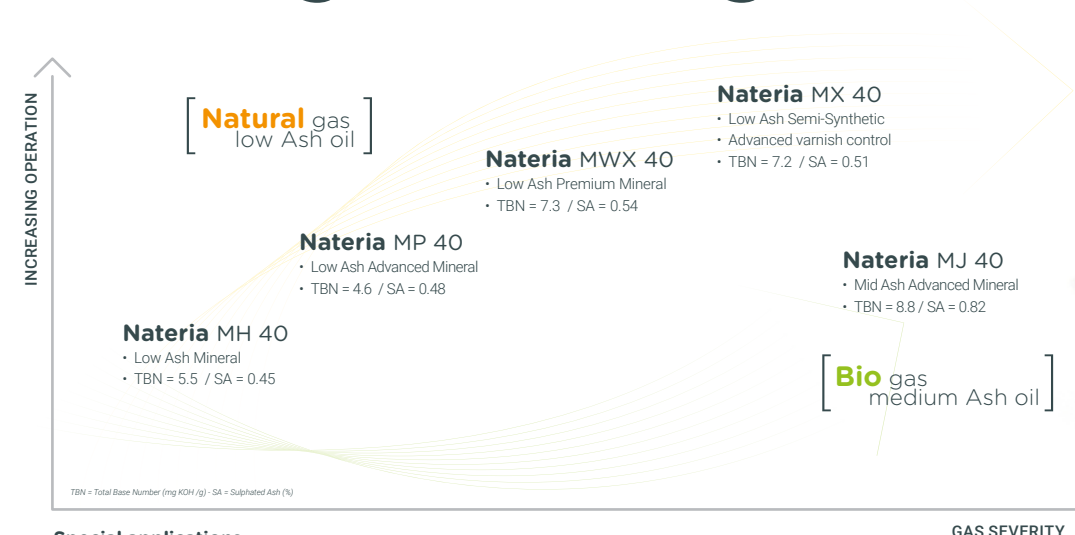
- Reduce downtime
- Optimize the lube oil life
- Operate at high and low pressures
- Reduce overhead and consumables cost

Our solutions

- With our carefully selected base oils and additives meeting leading **equipment manufacturers' requirements**, we keep your equipment reliable in any conditions by providing:
- OEM approved and qualified products
 - Optimize total cost of ownership (TCO)
 - Higher reliability
 - Optimized mean time between failures

Simplified version of natural gas value chain

Gas engine oil range

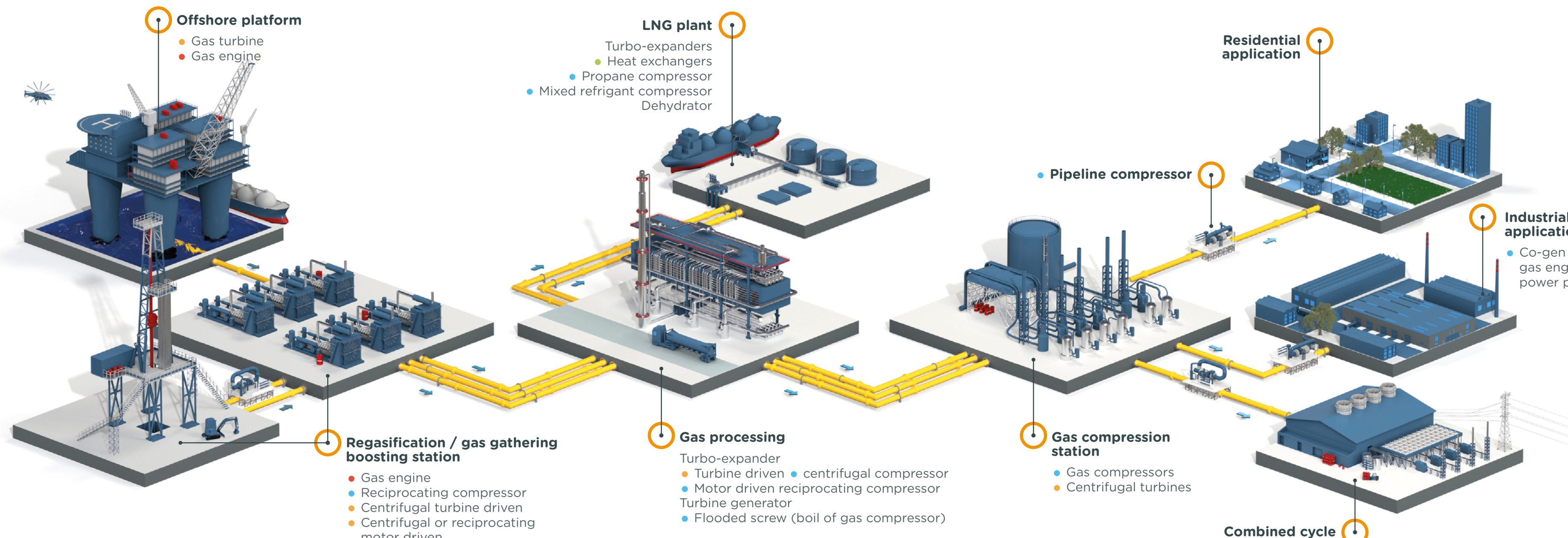
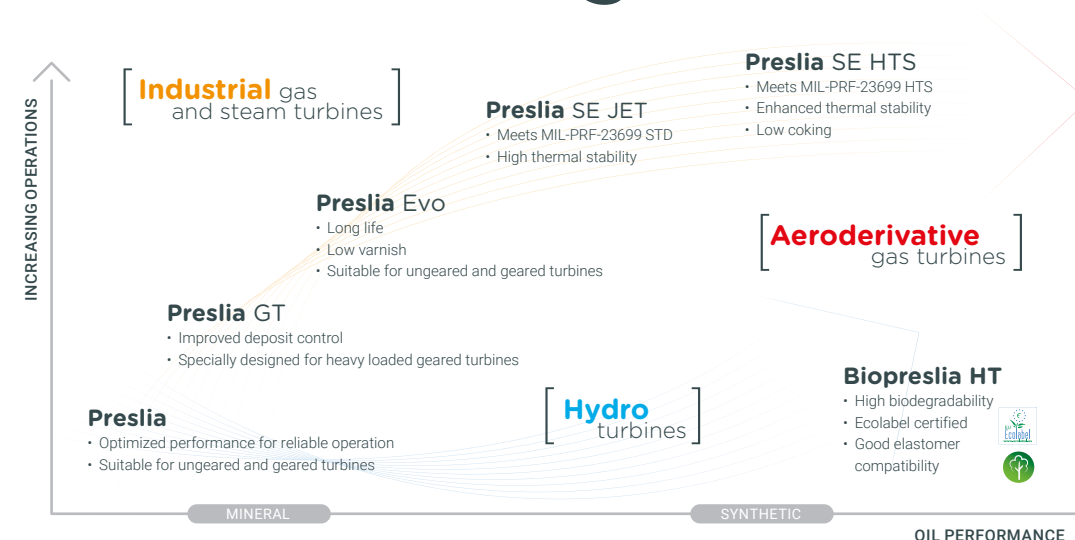


Special applications

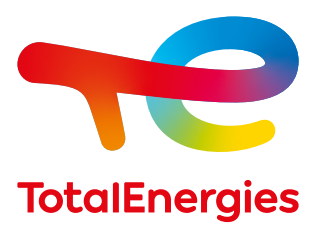
Nateria MP 50
• Advanced gas engine oil suitable for natural gas or dual fuel engines operating in hot environments
• Approved by MAN Energy Solutions for 55/44 and 51/60 engine series when a SAE 50 is required
• Improved cooling efficiency and engine protection at high temperatures

Nateria V 40
• Ashless mineral gas engine oil for use in 2-cycle and 4-cycle gas engines as well as gas compressors

Turbine oil range



- Legend:
- Gas engine oil range
 - Turbine oil range
 - Gas compressor oil range
 - Heat transfer fluid



Gas compressor oil range

Select based on PSIG and gas stream

GAS STREAM	< 1000	1000 to 2000	2000 to 3500	3500 to 5000	> 5000
Pipeline quality including CNG (Dry)	Cortis MS 150 (NC) Dacnis LPG 150	CortisMS150-220(NC) Dacnis LPG 150	Cortis MS 220 (NC) Dacnis LPG 220	Cyl C 320-460 (C) Dacnis LPG 220	Cyl C 460-680 (C)
Natural gas, water saturated and/or heavy hydrocarbons where SG > 0.7	Cortis MS 150-220 (NC) Dacnis LPG 150	Cortis MS 220-320 (NC) Danis P 220 CD (C) Dacnis LPG 150	Cyl C 460-680 (C) Dacnis LPG 220	Cyl C 680 (C)	
Natural gas, water saturated and carbon dioxide > 2 to 10 %	Cortis MS 150-220 (NC) Dacnis LPG 150	Cortis MS 220-320 (NC) Danis P 220 CD (C) Dacnis LPG 150	Cyl C 460-680 (C) Dacnis LPG 220	Cyl C 680 (C)	
Natural gas, water saturated and carbon dioxide > 10 %	Cortis MS 150-220 (NC) Dacnis LPG 150	Cortis MS 220-320 (NC) Danis P 220 CD (C) Dacnis LPG 150	Cyl C 460-680 (C) Dacnis LPG 220	Cyl C 680 (C)	
Natural Gas, water saturated and H2S > 2 % to 30 %	Cortis MS 150 (NC) Dacnis LPG 150	CortisMS150-220(NC) Dacnis LPG 150	Cortis MS 220 (NC) Dacnis LPG 220	Cortis MS 320 (NC) Dacnis LPG 220	Cyl C 460-680 (C)
Natural Gas, water saturated and H2S > 30 %	Cortis MS 150 (NC) Dacnis LPG 150	CortisMS150-220(NC) Dacnis LPG 150	Cortis MS 220 (NC) Dacnis LPG 220	Cortis MS 320 (NC) Dacnis LPG 220	Cyl C 460-680 (C)
Air or gas mixtures with > 4 % oxygen content	Diester or POE ISO 100 Dacnis LPG 150	Diester or POE ISO 150 Dacnis LPG 150	Consult TotalEnergies	Consult TotalEnergies	Consult TotalEnergies
Nitrogen	Cortis MS 150 (NC) Dacnis LPG 150 (P)	CortisMS150-220(NC) Dacnis LPG 150	Cortis MS 220 (NC) Dacnis LPG 150	Cortis MS 320 (NC) Dacnis LPG 150	Cyl C 460-680 (C) Dacnis LPG 220
Propane (refrigerant)	Cortis MS 150 (NC) Dacnis LPG 150	Cortis MS 150 (NC) Dacnis LPG 150	Consult TotalEnergies	Consult TotalEnergies	Consult TotalEnergies

* C : Compounded / NC : Non-compounded

Heat transfer fluid

PRODUCT	OPERATING TEMPERATURE	VISCOSITY
Seriola AB	Process temperature -30 to +300 °C (+320 °C in the film)	Viscosity at 40 deg - 20 mm2/s
Seriola 32, 100	Process temperature 0 to +310 °C (+330 °C in the film)	Viscosity at 40 deg - 32, 100 mm2/s
Seriola ECO2	Process temperature 0 to +300 °C (+320 °C in the film)	Viscosity at 40 deg - 34 mm2/s

* For refrigeration compressor - please consult TotalEnergies



A major player

With our production, supply chain and commercial presence in more than 160 countries, we deliver a full range of lubricants.

Support and partnership

Thanks to local technical presence, we provide a high level of service to optimize your Total Cost of Ownership.

References & OEMs

TotalEnergies Lubrificants cooperates with equipment manufacturers to create high-technology products for optimal performance and production of your machinery.



Innovation & Research

TotalEnergies Lubrificants invests in biotechnologies to find the most suitable components to reach energy efficiency through formulations designed in our Research Centers.

Quality and environment

TotalEnergies Lubrificants ISO 9001 and 14001 certifications are the guarantee of a long term commitment to quality and environment. From the initial design stage, our R&D teams seek to develop products that minimize toxicity risks and environmental impact.



TotalEnergies



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Safety Data Sheets are available at ms-sds.totalenergies.com



TotalEnergies Industry Solutions