

# Enhanced Coverage with EHC™ Group II/II+ Base Stocks

Expanding our business to grow with yours in Europe

**ExxonMobil**



# Meeting your evolving needs – the first world-scale Group II/II+ production in Europe

The ExxonMobil Rotterdam refinery expansion was completed in early 2019, making us the first company with world-scale Group II/II+ base stocks production in Europe. Our advanced Group II/II+ EHC™ base stocks enable lubricant manufacturers across Europe, Africa, Middle East and beyond to develop new sales opportunities with advantaged formulations. We help to meet growing technical demand for Group II/II+ base oil. This investment also demonstrates ExxonMobil's long-standing commitment to the base stocks industry and to supporting our customers' evolving needs globally, now and in the future.









# Advantaged lubricants begin with advanced base stocks

ExxonMobil Basestocks is committed to delivering an advanced product slate designed to help you formulate better. Our Group II+ EHC™ 50, Group II EHC 120 and Group II EHC 340 MAX base stocks are part of our global Group II base stock slate for efficient formulation of automotive lubricants.

EHC base stocks are smartly designed to be used in industrial and driveline applications where formulations can benefit from increased oxidation stability and superior low-temperature performance.\* The addition of innovative EHC 340 MAX into the product range expands coverage to very high-viscosity lubricants up to ISO 460 with full Group II base stocks.

EHC 50, EHC 120 and EHC 340 MAX base stocks can be used together to meet the requirements of most high-quality ACEA automotive lubricants. This capability provides blenders with increased formulation flexibility and a broad blending range, helping to reduce or even eliminate the need for Group III base stocks in many cases.



## EHC™ 50

- Group II+
- Excellent low-temperature performance
- Excellent volatility & high saturates
- Reduces Group II usage in SAE 5W-30 Heavy Duty and Passenger Car Engine Oils
- Formulates SAE 10W-XX engine oils with no Group III corrector base stocks



## EHC™ 120

- Group II
- Superior low-temperature performance\*
- Low volatility
- High saturates



## EHC™ 50, EHC™ 120 and EHC 340 MAX™

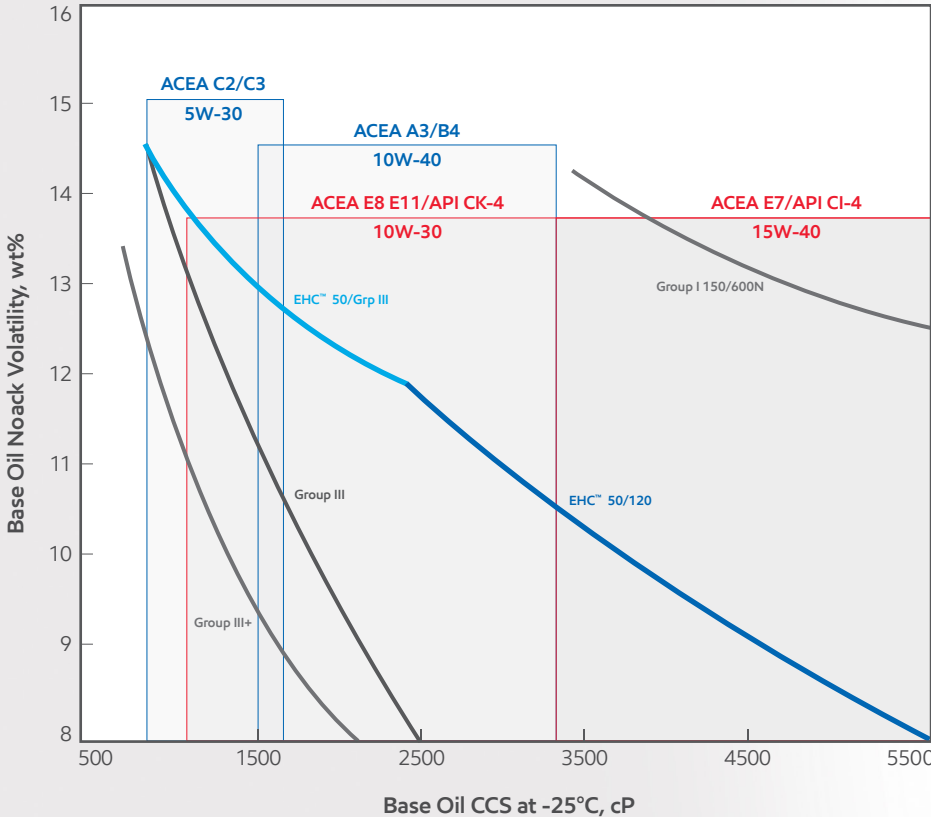
- Smart design, working together to meet market needs with 3 base stock cuts
- Enable global formulations through intra-slate exchange with EHC 45, EHC 65 and EHC 110
- Innovative EHC 340 MAX in global formulations available in 2025 worldwide
- Designed to cover most API, ACEA and industrial lubricants

\*vs. Group I base stocks



# Smart product design

EHC™ 50 and EHC 120 base stocks can be used together to meet the requirements of the most prevalent ACEA lubricants. This outstanding capability provides blenders with increased flexibility and a broader blending range, helping to reduce or eliminate the need for Group III base stocks in certain applications.



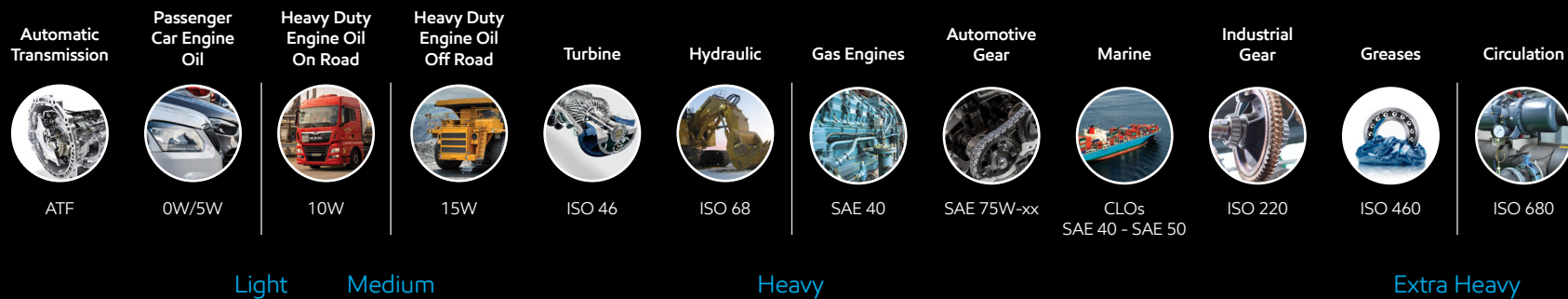
EM assessment of CCS and Noack properties of main base stocks blend currently available in Europe compared to base oil requirements for specific European engine oils.





# EHC™ Group II/II+ base stocks comprehensive lubricants coverage

Modern manufacturing for scalable high-quality base stocks production to meet increasing efficiency needs across all sectors. EHC Group II extended coverage provides superior performance in the entire viscosity range.



Group II/II+



EHC 50

EHC 120

EHC 340 MAX™

Group I  
(equivalent nominal viscosity)



CORE 150

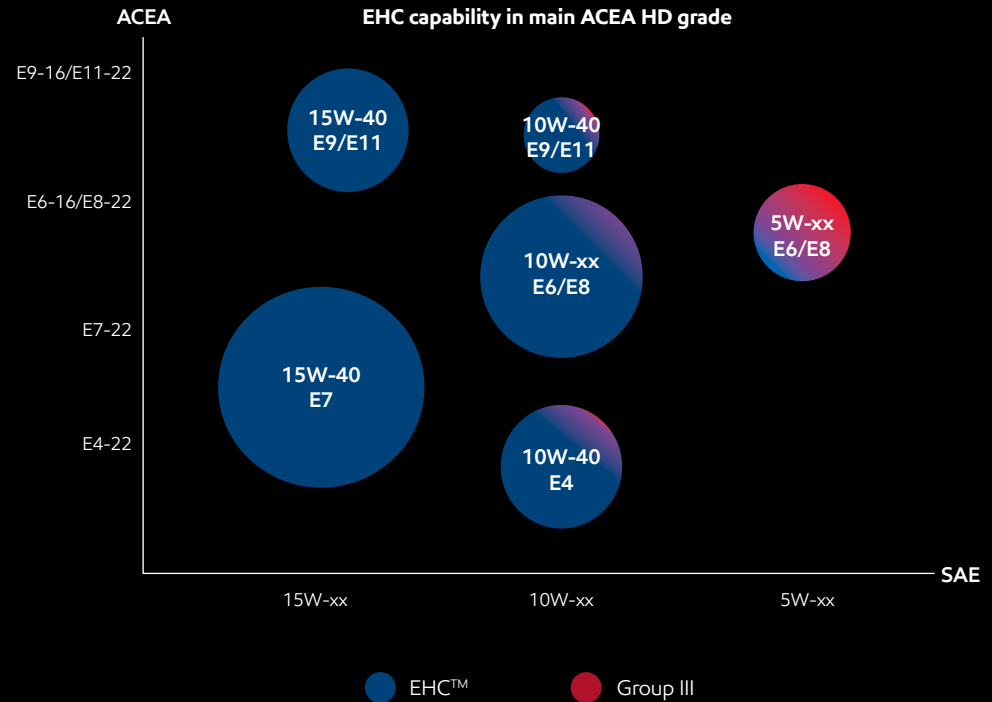
CORE 600

CORE 2500

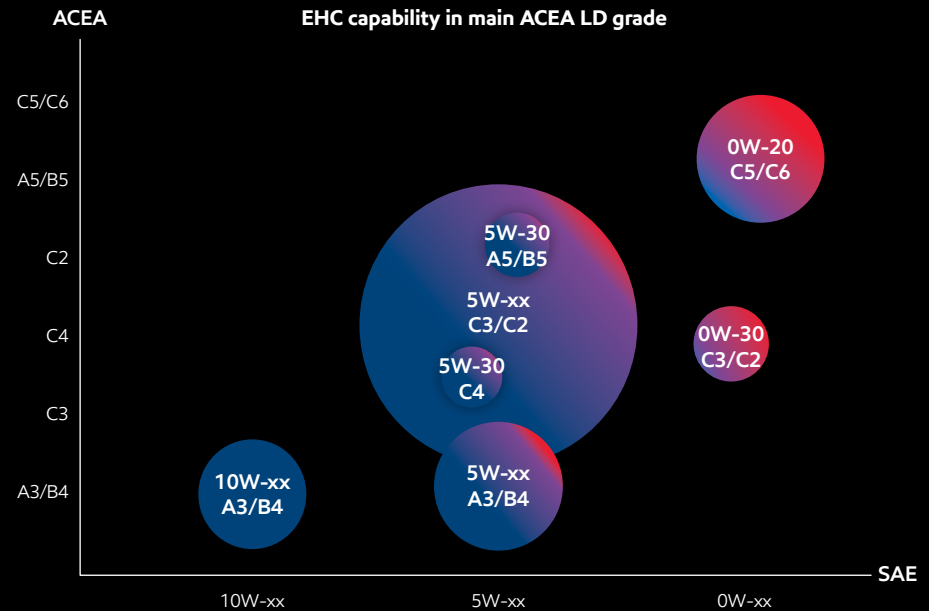


# EHC™ offers wide Heavy Duty formulation coverage

EHC 50 and EHC 120 base stocks can be used together to meet the requirements of most high-demand ACEA lubricants. This capability provides blenders with increased formulation flexibility and a broad blending range, helping to reduce or even eliminate the need for Group III base stocks in some cases.



# EHC™ reduces Group III in Light Duty formulation












EM assessment based on commercially available formulations, subject to deviations. The lubricant blender is responsible for making own assessment and obtaining appropriate approvals and/or licensing of formulations.

© 2024 ExxonMobil. All trademarks used herein are trademarks or registered trademarks of Exxon Mobil Corporation or one of its subsidiaries.



# EHC™ offers Broad Driveline & Industrial Applications Coverage

	Automatic Transmission Fluid	R&O Oils	Hydraulic	Universal Tractor Transmission Oil and Super Tractor Oil	Manual Transmission Fluid/Axle	Gas Engine Oil	Marine	Industrial Gear	Grease
									
	EHC 50				EHC 120		EHC 340 MAX™		
Viscosity Grade	6 - 7 cSt KV 100	ISO 32 to 46	ISO 32 to 68	10W, 15W SAE 30 to 60	75W-80/90 80W-90 85W-140 SAE 80/90/140	SAE 40	SAE 50 CLO SAE 30 to 40 TPEO SAE 20 to 40 SO	ISO 100 to 680	
OEM Approvals	Ford GM Global JASO	AGMA British Standard DIN Fives Cincinnati GEK Indian Standard JIS Siemens AG	DIN 51524 Bosch Rexroth China Standard Eaton Fives Cincinnati GM ISO JCMAS Parker Dennison SAE SEB Swedish Standard US Steel ZF	API Alison Case New Holland Ford J.I. Case John Deere Kubota Volvo Massey Ferguson	API GL-4/5 Daimler MAN SAE J2360 Scania Volvo ZF	INNIO- Waukesha	MAN WinGD	AGMA DIN David Brown Fives Cincinnati GM ISO Siemens Flender US Steel	

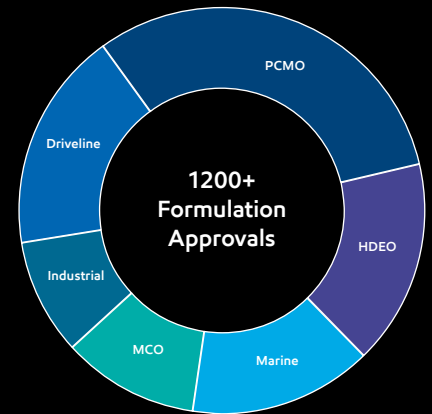




# Got a lubricant formulation question? Ask **BOB**.

BOB is our Blend Optimization Book, a digital proprietary resource designed to help you find the right lubricant formulation to meet your evolving needs. It contains a comprehensive range of formulation approvals with ExxonMobil base stocks, broadly covering key lubricant applications with major additive suppliers.

Today's lubricant market requires faster development and approval of more specialized formulations than ever before. BOB can help you meet these challenges.



**BOB** is designed to help you



Boost formulation percentage



Simplify operational logistics



Enable new market opportunities



Improve operational efficiency and speed to market







For more information, contact your local  
representative or visit our website  
**[exxonmobil.com/basestocks](http://exxonmobil.com/basestocks)**

ExxonMobil Petroleum & Chemical, BV Hermeslaan 2  
1831 Machelen Brussels, Belgium

Email: [EAMENewbusiness@exxonmobil.com](mailto:EAMENewbusiness@exxonmobil.com)

# Why ExxonMobil base stocks?

## Manufactured in Europe supporting a unique global network

- Products designed to meet European lubricant manufacturers' needs
- Local production reducing production transportation impacts for key grades

## Operational excellence

Our Brand and Product Integrity Management System aims to ensure that you receive:

- Products with consistent quality and performance in application
- Products that meet local market regulations
- A consistent experience across all products, services and customer touchpoints

We support this consistency through six foundational pillars:



### Quality

You can rely on our products to be manufactured according to stringent specifications



### Performance

We are committed to producing products that meet all stated performance properties



### Representation

You can trust that what we say about our products is accurate and truthful



### Regulatory Compliance

We are committed to complying with all applicable laws and regulations where we sell our products



### Customer Experience

You can rely on us to provide what you need, where and when you need



### Brand Identity

You can trust that our brands offer an assurance of quality products and services