

Spotlight SYSTEMPRO on: TECHNOLOGY™

VECTON® with System Pro Technology™

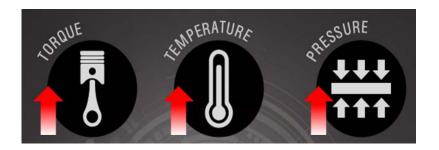
- New engines bring new challenges for your oil
- VECTON can give you confidence to take on these challenges
- System Pro Technology means longer useful oil life
- VECTON has minimal viscosity change over 80,000 mile field trial
- Field trial oil analysis at 80,000 miles shows little build-up of wear metals
- Outstanding TBN retention ensures protection against corrosive wear





New engines bring new challenges for your oil

Modern trucks can generate up to 30% higher torque and this is accompanied by increasing temperatures and pressures



This increase in the harshness of conditions requires the engine oil to work harder to maintain its level of performance and continue to protect the engine

Accelerated oxidation, increased build-up of deposits and rapid depletion of the oil's corrosion resistance can be the consequence, <u>all of which can</u> reduce the ability of the oil to protect the engine





VECTON® can give you confidence to take on these challenges



Up to

45%

extra performance reserve*

Confidence to safely extend your drain interval

Formulated to go <u>above and beyond industry standards</u> in order to give you results that you can see in your oil analysis, drain intervals, and profits.

*Average of percentages by which VECTON exceeds the industry standard requirement limits in API CK-4 and ACEA E9-16 engine tests for viscosity maintenance, heat protection, deposit control, minimum oil limits, and acid neutralization. In API CK-4 tests only, the VECTON performance reserve is 37%.





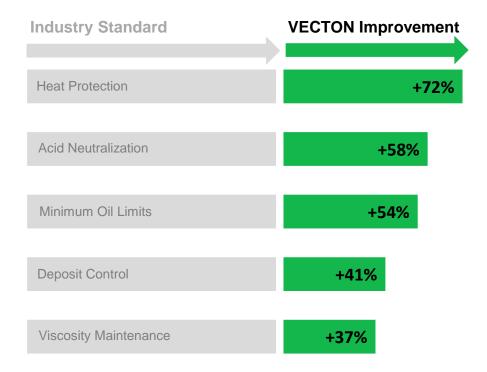
System Pro Technology™ means longer useful oil life



Up to

45%

extra performance reserve* for longer useful oil life



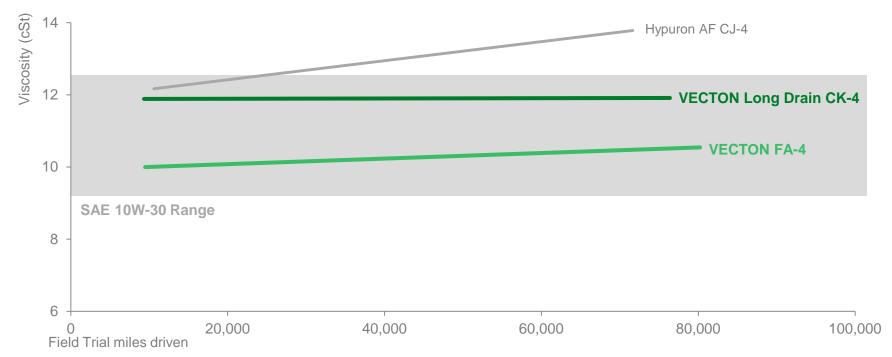
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VECTON® has minimal viscosity change over 80,000 mile field trial

Vecton Long Drain 10W-30 CK-4 has <1% viscosity change Vecton 10W-30 FA-4 has 6% viscosity change



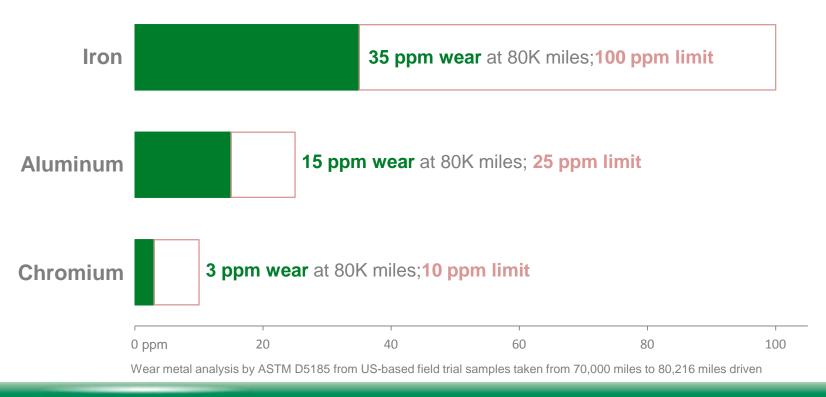
Measurement of viscosity (cSt) at 100C during US-based field trials with distances measured in miles driven. SAE 10W-30 range is 9.3-12.5 cSt.





Field trial oil analysis at 80,000 miles shows little build-up of wear metals

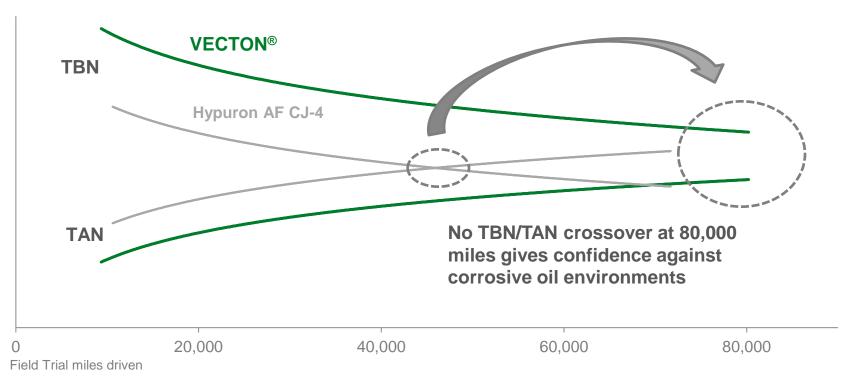
During US field trial, System Pro TechnologyTM keeps wear under control; key wear metal values remain <u>well under typical used oil limits</u>







Outstanding TBN retention ensures protection against corrosive wear



Total base number measured by ATSM D4739, Total acid number measured by ASTM D664 from samples taken during US-based field trial





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VECTON



SYSTEMPRO TECHNOLOGY**

Appendix – System Pro Category Definitions

Viscosity Maintenance: Parameters related to shearing, oxidative viscosity increase and soot thickening

Heat Protection: Resistance to oxidation and high-temperature deposit formation

Deposit Control: Resistance to deposit formation, such as piston deposits, sludge and engine varnish

Minimum Oil Limits: Parameters used by OEMs as approved test limits in field trials; also, parameters noticeable to a vehicle operator, such as oil pressure

Acid Neutralization: Parameters related to TBN retention and prevention of corrosive wear





Appendix – OEM Approvals

Vecton Long Drain 10W-30 CK-4 & Vecton 15W-40 CK-4	Vecton 10W-30 FA-4
API CK-4 JASO DH-2 CAT ECF-3 Cummins CES 20086 DDC DFS 93K222 Deutz DQC III-10-LA Ford WSS-M2171-F1 Mack EOS-4.5 RVI RLD-4 Volvo VDS 4.5	API FA-4 Cummins 20087 DDC DFS 93K223





Appendix – VECTON[®] with System Pro Technology[™] Brand 1-2-3

1

THE PROBLEM SET-UP

Modern trucks use new technologies to make as much as 30% higher torque, but that also brings higher engine temperatures and pressures. This punishes the oil, pushing it closer to breakdown, reducing its useful life.

2

THE REASON TO BELIEVE

Castrol VECTON's System Pro Technology™ has an extra performance reserve that fights oil breakdown and also adapts to higher temperatures. That means longer useful oil life, giving you confidence in your maximum drain interval.

3

THE UNIOUE SELLING POINT

Maximize Your Drain Intervals. Maximize Profits.



