

## TITAN GT1 EVO SAE 0W-20 Most modern Engine Oil for BMW LONGLIFE-14 FE+

Dear Sirs,

We would like to inform you, that we will shortly launch our TITAN GT1 EVO SAE 0W-20.

TITAN GT1 EVO SAE 0W-20 is a Premium Performance Engine Oil based on our well known XTL®-Technology. Fuchs, who was a pioneer of SAE 0W-20 engine oils with the predecessor TITAN GT1 SAE 0W-20 (already launched in the late 90s), consequently developed the additive technology and adapted the oil especially for the requirements of highly stressed and downsized engines.

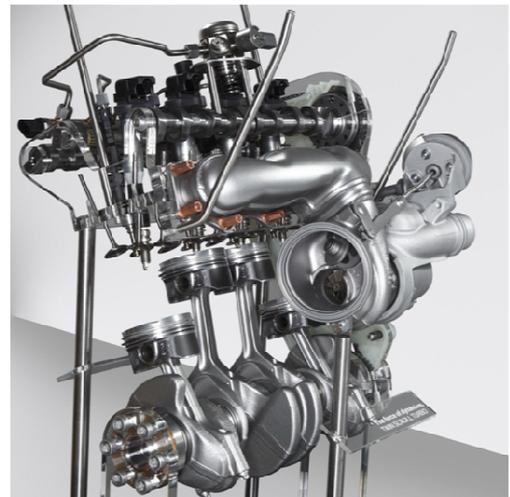
TITAN GT1 EVO SAE 0W-20 is the first product in the aftermarket qualified with the latest BMW-approval BMW LONGLIFE-14 FE+ and therefore best suited for the newest developments.

### What is behind the BMW LONGLIFE-14 FE+?

In 2011 BMW developed a new 4-cylinder gasoline engine, called BMW N20. This 2.0L-engine (1997 cm<sup>3</sup>) with 245 hp is the successor of the N53 and N52 6-cylinder engines.

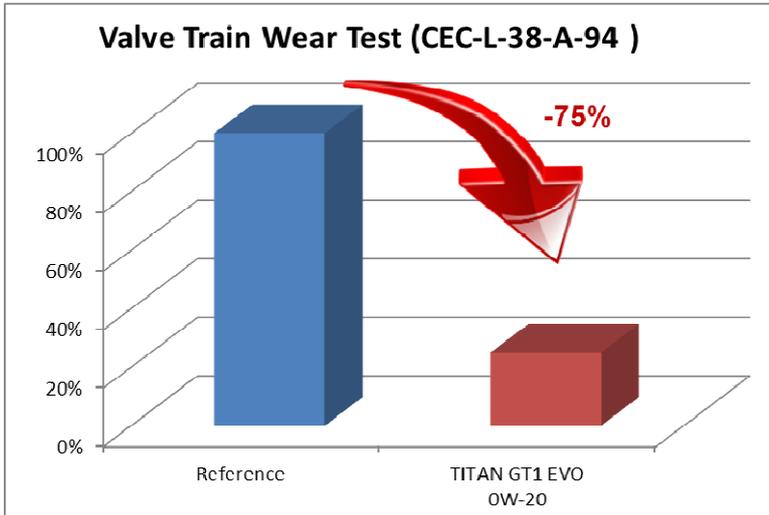
The new engine is a component of the Efficient Dynamics-concept. In the NEDC a fuel saving of 15% was achieved with the X1 xDrive28i with 7.9L/100km. Today the engine is used in the entire BMW model range with power output between 156-245 hp.

To keep the measured fuel savings even after the oil change, the use of our TITAN GT1 EVO SAE 0W-20 according to BMW Longlife-14FE + is necessary.



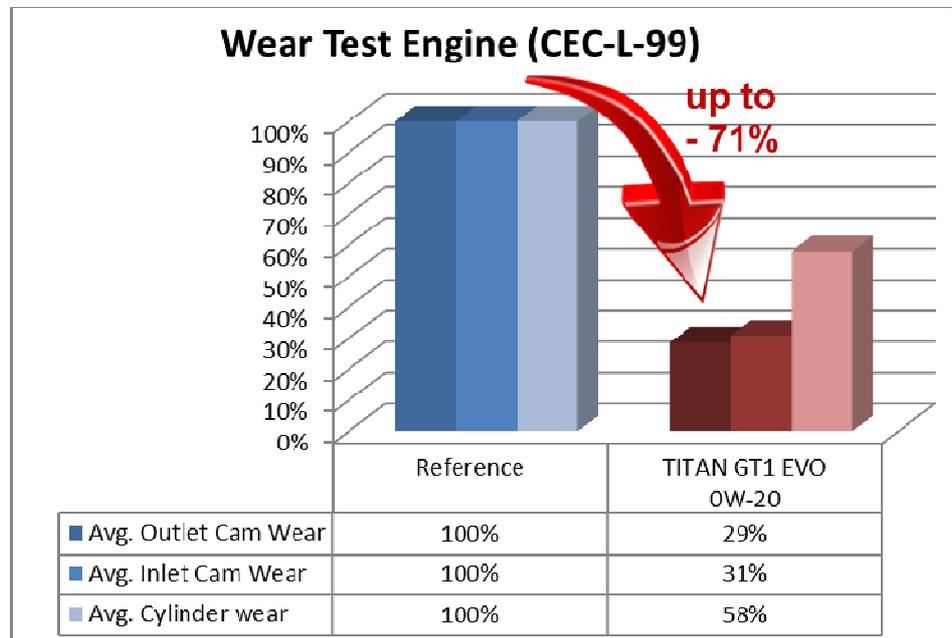
### Doesn't a viscosity of SAE 0W-20 automatically cause higher wear?

Contrary to the generally widespread opinion that a low (HTHS) viscosity leads to massive engine wear, our TITAN GT1 EVO SAE 0W-20 could prove in several tests that this must not be the case at all.



The valve train wear test (CEC-L-38-A-94 in the TU3M engine) was 75% below the limit (see the graph showing the valve train wear test).

The relative wear in the engine on the cams and the cylinder could be reduced by up to 71% as well (see second graph).



Further tests show:

- The increase of viscosity at 40°C could be reduced by 60% compared to the reference oil (CEC-L-88-T-02).
- No bore polishing was found in the cylinder bore (CEC-L-99).
- Despite the low viscosity, the evaporation loss is nearly 20% below the limit (according to

CEC-L-40-A-93 (Noack)).

TITAN GT1 EVO SAE 0W-20 provides the following performance profile:

<u>Specifications</u>	<u>Approvals</u>	<u>FUCHS Recommendations</u>
ACEA A1 / B1	BMW LONGLIFE-14 FE+	TOYOTA HONDA

We summarized the advantages of our TITAN GT1 EVO SAE 0W-20 for you:

- Very short engine starting time
- Very fast oil circulation in the engine even at extremely low temperatures due to XTL®
- Significantly lower fuel consumption caused by XTL® and by lower dynamic viscosity at 150°C
- Less CO<sub>2</sub> emissions
- Lower oil consumption offered by XTL®-technology
- Extreme shear stability
- Can be used for extended drain intervals
- Improved ageing stability due to XTL®-Technology also in high speed driving and high outside temperatures
- Best wear protection at all operating conditions

TITAN GT1 EVO SAE 0W-20 will be available in the following pack sizes :

- 1L 600930622
- 4L 600930646
- 60L 600930561
- 205L 600930585



The product launch is expected to be completed at the end of March. The product can be delivered from then on.

We kindly ask you to inform your sales team and customers accordingly.

Your FUCHS Team