

## 2 / OFF-ROAD: PUBLIC WORKS



⇒ **TOTAL DEVELOPS LUBRICANTS SUITED TO CONSTRUCTION, MINE AND QUARRY MACHINERY.**

A complete range of special products to satisfy all international standards and approvals required in this segment.

**TOTAL CONCEPT TP STAR** has been developed for customers wishing to simplify lubrication for their equipment fleet.



## RANGE PRESENTATION

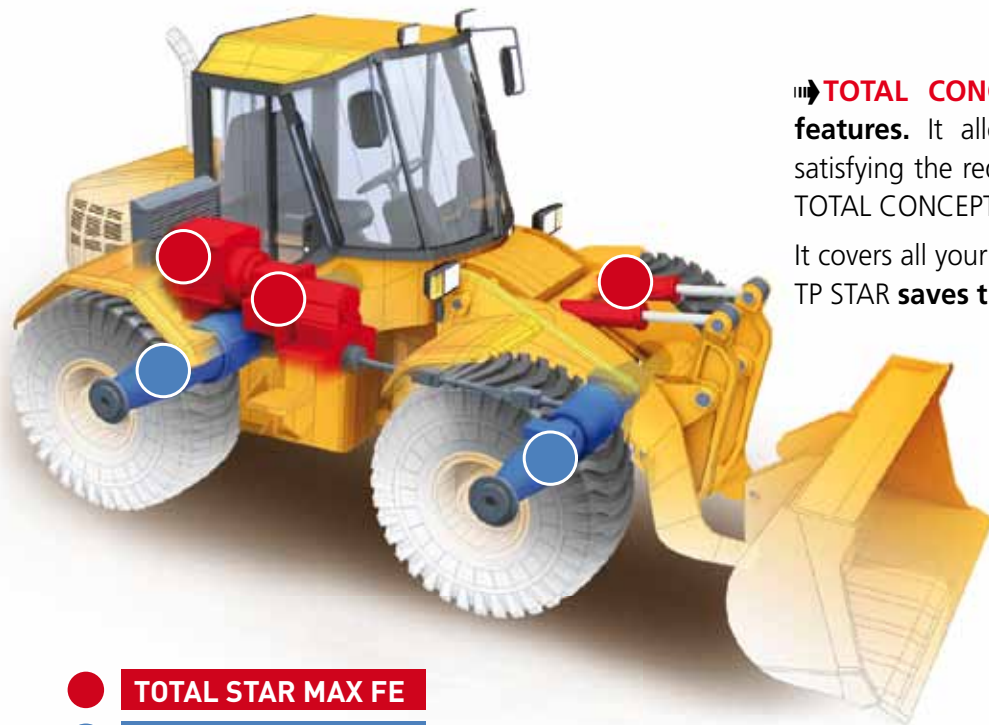
<p><b>TOTAL CONCEPT TP STAR</b></p>		<ul style="list-style-type: none"><li>• <b>TOTAL CONCEPT TP STAR</b> allows you to combine <b>high technical performance</b> with <b>ease of use</b>.</li><li>• Two versions are available, one for temperate countries and the other for the tropics.</li></ul>
<p><b>Special products</b></p>		<ul style="list-style-type: none"><li>• The TOTAL range of special public works products covers <b>a large number of applications</b>.</li><li>• TOTAL supplies lubricants for engines, transmissions, hydraulic systems, gearboxes, final axle reduction drives and greases suited to the specific needs of public works machinery.</li></ul>



### FOCUS

### TOTAL CONCEPT TP STAR

## SUSTAINABLE INNOVATION.



● TOTAL STAR MAX FE

● TOTAL STAR TRANS

⇒ **A PATENT HAS BEEN FILED FOR TOTAL STAR MAX (FE AND HT) OILS BASED ON THEIR AUTO-ADAPTIVE CAPACITY.**

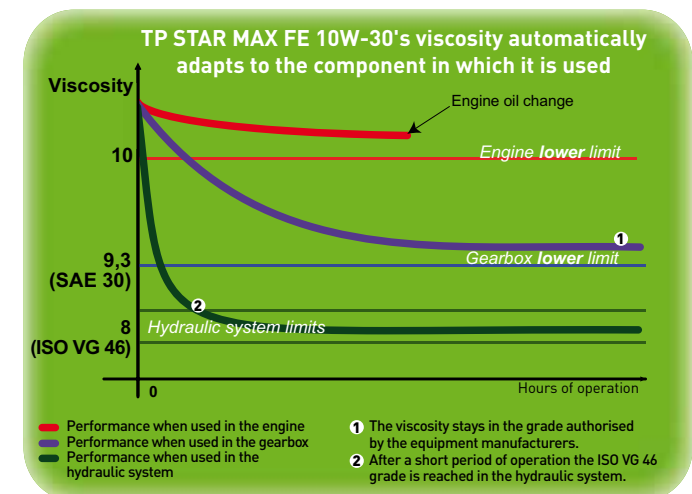
This unique property means that these lubricants are able to adapt very quickly to the requirements of engines, mechanical gearboxes and powershifts, as well as hydraulic circuits. In addition, **TOTAL STAR MAX FE** engine lubricant for use in temperate countries provides:

- **Lower fuel consumption due to its Fuel Economy formula,**
- **Extended life for the particulate filter due to its Low SAPS formulation.**

⇒ **TOTAL CONCEPT TP STAR** offers you a complete set of **exceptional performance features**. It allows all the components of worksite machinery to be lubricated while still satisfying the requirements of the leading equipment manufacturers and international standards. TOTAL CONCEPT TP STAR means **just two lubricants for your entire fleet of machinery**.



It covers all your needs as well as guaranteeing optimum technical performance. TOTAL CONCEPT TP STAR **saves time and reduces costs**. The advantages are numerous:

- Less risk of stock outages
- Simpler ordering, procurement and storage of lubricants
- Less risk of product mix-ups when servicing equipment
- Lower transport costs
- Savings on servicing and the management of used oil and packaging





# TOTAL CONCEPT TP STAR FOR TEMPERATE COUNTRIES

	GRADE		ADVANTAGES		MANUFACTURER APPROVALS
<b>TOTAL STAR MAX FE</b>	<b>Engines</b> <b>10W-30</b>  <b>Gearboxes</b> <b>SAE 30</b>  <b>Hydraulic fluids</b> <b>ISO VG 46</b>	<ul style="list-style-type: none"> <li>- Engines</li> <li>- Hydraulic circuits (work or travel)</li> <li>- Gearboxes (mechanical or powershift)</li> </ul>	  <ul style="list-style-type: none"> <li>- FE Formula</li> <li>- Compatible with Diesel Particulate Filters (DPF)</li> <li>- Rapid machinery start-up (most importantly in winter)</li> <li>- Optimized oil change intervals</li> <li>- Auto-adaptive formulation</li> </ul>	<b>Engines</b> <ul style="list-style-type: none"> <li>• API CJ-4 / CI-4 plus/ CI-4</li> <li>• ACEA E9/E7/E5</li> <li>• JASO DH-2</li> </ul> <b>Gearboxes</b> <ul style="list-style-type: none"> <li>• API GL-4</li> </ul>	<b>Engines</b> Meets the requirements of: <ul style="list-style-type: none"> <li>• CATERPILLAR</li> <li>• CUMMINS</li> <li>• KOMATSU</li> <li>• DAIMLER-MB</li> <li>• MAN</li> <li>• MTU</li> <li>• VOLVO</li> </ul> <b>Gearboxes</b> Meets the requirements of: <ul style="list-style-type: none"> <li>• ALLISON C4</li> <li>• CATERPILLAR TO-4</li> <li>• KOMATSU Clutch</li> </ul> <b>Hydraulic systems</b> <ul style="list-style-type: none"> <li>• JCMA</li> <li>• CASE</li> <li>• KOMATSU</li> </ul>
<b>TOTAL STAR TRANS</b>	<b>80W-110</b>	<ul style="list-style-type: none"> <li>- Hypoid and reduction axles</li> <li>- Autoblocking differentials with limited slip discs</li> <li>- Oil-immersed brake systems</li> </ul>	<ul style="list-style-type: none"> <li>- High-technology chemistry</li> <li>- Resistance to pressure and shock</li> <li>- High friction performance</li> <li>- Special "Limited Slip" additivation</li> </ul>	Meets the following requirements: <b>Axles and final reduction drives</b> <ul style="list-style-type: none"> <li>• API GL-5 LS</li> </ul> <b>Gearboxes and immersed brakes</b> <ul style="list-style-type: none"> <li>• API GL-4</li> <li>• API MT-1</li> </ul>	<b>Axles and final reduction drives</b> Meets the requirements of: <ul style="list-style-type: none"> <li>• CATERPILLAR FD-1 ( SAE 50)</li> </ul> <b>Gearboxes and immersed brakes</b> Meets the requirements of: <ul style="list-style-type: none"> <li>• CATERPILLAR TO-4</li> <li>• KOMATSU Clutch</li> </ul> <b>Limited slip differentials</b> <ul style="list-style-type: none"> <li>• CASE</li> <li>• VOLVO</li> <li>• LIEBHERR</li> </ul>

APPLICATIONS

STANDARDS

**TOTAL CONCEPT TP STAR FOR THE TROPICS**

GRADE		ADVANTAGES		MANUFACTURER APPROVALS
<p><b>Engines</b> <b>15W-40</b></p> <p><b>Gearboxes</b> <b>SAE 40</b></p> <p><b>Hydraulic fluids</b> <b>ISO VG 68</b></p>	<ul style="list-style-type: none"> <li>- Engines</li> <li>- Hydraulic circuits (work or travel)</li> <li>- Gearboxes (mechanical or powershift)</li> </ul>	<ul style="list-style-type: none"> <li>- Enhanced viscosity</li> <li>- Usage up to +50°C</li> <li>- Enhanced chemical formula for greater resistance to all diesel qualities</li> <li>- Optimized oil change intervals</li> <li>- Auto-adaptive formulation</li> </ul>	<p><b>Engines</b></p> <ul style="list-style-type: none"> <li>• API CI-4 / CH-4</li> <li>• ACEA E7/E5</li> <li>• GLOBAL DHD-1</li> <li>• JASO DH-1</li> </ul> <p><b>Gearboxes</b></p> <ul style="list-style-type: none"> <li>• API GL-4</li> </ul>	<p><b>Engines</b> Meets the requirements of:</p> <ul style="list-style-type: none"> <li>• CATERPILLAR</li> <li>• CUMMINS</li> <li>• KOMATSU</li> <li>• DAIMLER-MB</li> <li>• MAN</li> <li>• MTU</li> <li>• VOLVO</li> </ul> <p><b>Gearboxes</b> Meets the requirements of::</p> <ul style="list-style-type: none"> <li>• ALLISON</li> <li>• CATERPILLAR TO-4</li> <li>• KOMATSU Clutch</li> </ul> <p><b>Hydraulic systems</b></p> <ul style="list-style-type: none"> <li>• JCMA</li> <li>• CASE</li> <li>• KOMATSU</li> </ul>
<p><b>85W-110</b></p>	<ul style="list-style-type: none"> <li>- Hypoid (and final reduction) axles</li> <li>- Autoblocking differentials with limited slip discs</li> <li>- Oil-immersed braking systems</li> </ul>	<ul style="list-style-type: none"> <li>- Usage up to +50°C</li> <li>- High-technology chemistry</li> <li>- Resistance to pressure and shock</li> <li>- Friction performance</li> </ul>	<p>Meeting the following requirements:</p> <p><b>Axles and final reduction drives</b></p> <ul style="list-style-type: none"> <li>• API GL-5 LS</li> </ul> <p><b>Gearboxes and immersed brakes</b></p> <ul style="list-style-type: none"> <li>• API GL-4</li> <li>• API MT-1</li> </ul>	<p><b>Axles and final reduction drives</b> Meets the requirements of:</p> <ul style="list-style-type: none"> <li>• CATERPILLAR FD-1 (SAE 50/60)</li> </ul> <p><b>Gearboxes and immersed brakes</b> Meets the requirements of:</p> <ul style="list-style-type: none"> <li>• CATERPILLAR TO-4</li> <li>• KOMATSU Clutch</li> </ul> <p><b>Limited slip differentials</b></p> <ul style="list-style-type: none"> <li>• CASE</li> <li>• VOLVO</li> <li>• LIEBHERR</li> </ul>
<p><b>APPLICATIONS</b></p>		<p><b>STANDARDS</b></p>		



# THE ENGINE OIL RANGE

## SPECIFICATIONS



Fuel ECO



Low SAPS


		SPECIFICATIONS		MANUFACTURER APPROVALS	
<b>TOTAL RUBIA WORKS 2000 FE</b>	<b>10W-30</b>	●	●	<ul style="list-style-type: none"> <li>• JASO DH-2</li> <li>• ACEA E9 / E7 (E5)</li> <li>• API CJ-4 / CI-4 plus / CI-4 / SM</li> </ul>	<ul style="list-style-type: none"> <li>• DAIMLER MB-Approval 228.31</li> <li>• DEUTZ DQC III-LA-10</li> <li>• VOLVO VDS-4</li> <li>• MAN M 3575</li> <li>• MTU Category 2.1</li> <li>• CUMMINS CES 20081</li> <li>• RENAULT RLD-3</li> </ul> <p>Meeting the requirements of:</p> <ul style="list-style-type: none"> <li>• CATERPILLAR ECF-3 / ECF-2 / ECF-1a</li> <li>• KOMATSU EO-DH</li> </ul> <p>• Suitable for the engines of: HITACHI, ISUZU, MITSUBISHI, DEERE, PERKINS, CASE NEW-HOLLAND, LIEBHERR, JCB, etc.</p>
<b>TOTAL RUBIA WORKS 1000</b>	<b>15W-40</b>			<ul style="list-style-type: none"> <li>• JASO DH-1</li> <li>• ACEA E7 / E5</li> <li>• API CI-4/SL</li> </ul>	<ul style="list-style-type: none"> <li>• DAIMLER MB-Approval 228.3</li> <li>• DEUTZ DQC III-05</li> <li>• MAN M 3275-1</li> <li>• MTU Category 2</li> <li>• CUMMINS CES 20078</li> <li>• VOLVO VDS -3</li> <li>• RENAULT RLD-2</li> </ul> <p>Meeting the requirements of:</p> <ul style="list-style-type: none"> <li>• CATERPILLAR ECF-1a, ECF-2</li> <li>• KOMATSU EO-DH</li> </ul>

GRADE

STANDARDS

**A bio version is available.**  
**You can find all the details in the "Biolubricants" category of the catalogue.**

### THE TRANSMISSION OIL RANGE: POWERSHIFT GEARBOXES

		SPECIFICATIONS		MANUFACTURER APPROVALS	
			Fuel ECO		
<b>DYNATRANS VX FE</b>		●	API GL-4	Meeting the requirements of: • VOLVO • JOHN DEERE • KUBOTA • MASSEY FERGUSON • AGCO/Allis • CNH • CASE • NEW HOLLAND • FORD • VALTRA • Mc CORMICK • KOMATSU	
<b>DYNATRANS MPV</b>			API GL-4	• MASSEY FERGUSON : CMS M 1145 / 1143 • VOLVO CE : WB 101 • ZF: TE-ML 03E / 05F / 06K / 17E  Meeting the requirements of: • JOHN DEERE • CNH • CASE • NEW HOLLAND • FORD • Mc CORMICK, etc.	
<b>DYNATRANS AC</b>	<b>SAE 30</b>			• ZF: TE-ML 03C • ALLISON: C4 - N° 33122010  Meeting the requirements of: • CATERPILLAR TO-4 • KOMATSU	
<b>DYNATRANS FR</b>			API GL-4	Meeting the requirements of: • RENAULT AGRICULTURE • MASSEY FERGUSON • NEW HOLLAND • FORD	
	<b>GRADE</b>		<b>STANDARDS</b>		

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## THE TRANSMISSION OIL RANGE: AXLES AND REDUCTION DRIVES

	GRADE		MANUFACTURER APPROVALS
<b>DYNATRANS LS</b>	<b>20W-40</b>	API GL-4	<ul style="list-style-type: none"> <li>• ZF TE-ML 05F / 06K / 17E</li> </ul> Meeting the requirements of: <ul style="list-style-type: none"> <li>• CASE • HANOMAG • HITACHI • KOMATSU</li> </ul>
<b>DYNATRANS DA</b>	<b>80W-90</b> <b>85W-140</b>	API GL-5-LS MIL.L. 2105D	<ul style="list-style-type: none"> <li>• ZF TE-ML 05C / 12C / 16E / 21C</li> </ul> Meeting the requirements of: <ul style="list-style-type: none"> <li>• LIEBHERR • TEREX • VOLVO • CASE • JCB, etc.</li> </ul>
<b>TRANSMISSION TM</b>	<b>80W-90 / 85W-140</b>	API GL-5	
<b>STANDARDS</b>			



## THE TRANSMISSION OIL RANGE: AUTOMATIC TRANSMISSIONS

	GRADE		MANUFACTURER APPROVALS
<b>TOTAL RUBIA C4</b>	<b>15W-40</b>	ACEA E2 API CH-4	<ul style="list-style-type: none"> <li>• ALLISON C4 - n°31932006</li> </ul>
<b>FLUIDE XLD FE</b>			<ul style="list-style-type: none"> <li>• Voith H55.6336 • DAIMLER MB-Approval 236.6</li> <li>• MAN 339 Type V2 &amp; Z2 • Allison C4</li> <li>• ZF TE- ML 04D, 14B, 16L, 17C • VOLVO 97341</li> </ul>
<b>FLUIDE G3</b>			<ul style="list-style-type: none"> <li>• ALLISON C4 - n°30582005</li> <li>• DEXRON® III G level and Ford MERCON®</li> <li>• ZF TE-ML 03D, 04D, 09, 14A, 17C</li> <li>• VOITH H 55.633535</li> <li>• MAN 339 type V-1 (ex MAN 339 Type F)</li> <li>• MAN 339 type Z-1 (ex MAN 339 Type F)</li> <li>• MB-Approval 236.5 and 236.9</li> </ul>
<b>STANDARDS</b>			

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