

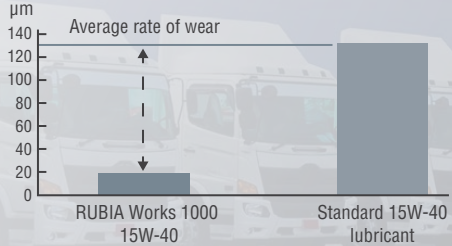
## BENEFITS OF TOTAL RUBIA WORKS 1000 15W-40



### Optimum engine protection under the most extreme conditions

- The anti-wear performance of Rubia Works 1000 15W-40 provides optimum protection for the engine components
- Field trials conducted in the Middle East have shown **5-7 times** lower wear rates

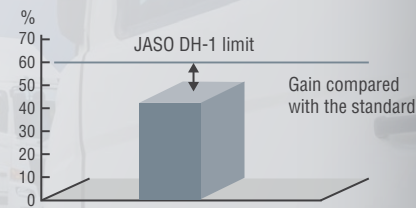
#### Camshaft wear test



### Detergency piston cleanliness

- As demonstrated by tests carried out to obtain JASO approval, RUBIA WORKS 1000 15W-40 prevents piston deposits and is **5 times more resistant** than standard lubricants.

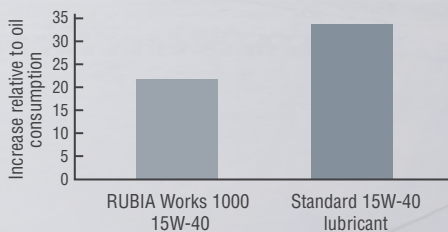
#### Piston deposits (TGF test)



### Reduce oil consumption

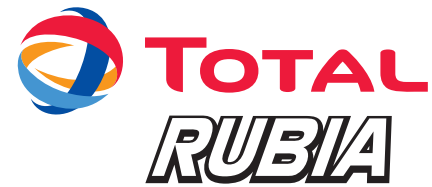
- Tests carried out on the CATERPILLAR C13 engine have shown that when RUBIA WORKS 1000 15W-40 is used, **nearly 50% less oil is required** compared with the benchmark lubricant evidence of its perfect piston ring sealing and maximum engine efficiency.

#### Oil consumption reduction test



### Superior oxidation stability

- RUBIA WORKS 1000 15W-40 successfully passed Komatsu's stringent independent test, which tests the oil's ability to resist oxidation and deposit formation - a critical factor given Komatsu's **500-hour oil drain interval**.



# RUBIA WORKS 1000 15W-40 ADVANCED DIESEL ENGINE OIL FOR EXTREME CONDITIONS



**TOTAL RUBIA WORKS 1000 15W-40** is a multigrade diesel engine oil formulated to meet the **API CI-4** service level and is certified in accordance with American, European and Japanese specification.

Total Rubia Works 1000 15W-40 is designed for engines operating under the most extreme conditions – full load, long periods, dusty and hot atmosphere, stop & go driving.



Field trials and evaluation done in the Middle East have proven that Total Rubia Works 1000 15W-40 can offer drain intervals of

**750+ Hours in off-road equipment and 20,000+ KMs in on-road vehicles\***

\*please contact your Total representative to conduct field trials for your specific fleet and operating conditions

## SPECIFICATIONS

RUBIA WORKS 1000 15W-40 conforms to the below international standards

- ▶ API CI-4/CH-4/CF/SL
- ▶ ACEA E7/E5
- ▶ JASO DH-1 (Approved D033TOL601)

OEM APPROVALS:

CUMMINS CES 20078, DEUTZ DQC III-10, MTU Category 2, MERCEDES BENZ APPROVAL 228.3, MAN M 3275-1, VOLVO VDS 3, RENAULT RLD-2, MACK EO-N, ISUZU, ALLISON TES 439

Recommended for **KOMATSU, HITACHI, CASE NEW-HOLLAND, JOHN DEERE, KUBOTA, LIEBHERR, MITSUBISHI, PERKINS, DAF, SCANIA, IVECO**

## RANGE POSITIONING

Rubia WORKS 1000 15W-40 is one of the premium mineral based heavy duty diesel engine oils in the Total Rubia Range.

**RUBIA WORKS 1000**

**RUBIA TIR 7400**

**RUBIA TIR 6400**

## APPLICATIONS

Total Rubia WORKS 1000 15W-40 is primarily designed for extreme conditions encountered in off-road earthmoving and mining equipment.

Total Rubia WORKS 1000 15W-40 is recommended for off-road engines meeting Euro IIIA or US EPA Tier 3 emission standards and Euro 5 or US EPA-07 and previous on-road emission standards (where DPFs are not installed).

The product also covers the approvals of on-road heavy-duty diesel engines and hence, can cover fleet requirements of mixed brands (American, European and Japanese manufacturers).



**Maximum oil change intervals**

The formation of soot in the engine contaminates the lubricant and reduces its efficiency. RUBIA WORKS 1000 has undergone tests in order to meet the ACEA E7 standard. This lubricant enables the maximum oil change intervals.

Field trials in the Middle East have depicted a drain interval of



**750+**

Hours in earth moving equipment

**20,000+ KMs**

in on-road vehicles with the oil physical properties still being in satisfactory condition.