

**TEST REPORT**

of atomic metal conditioner Maximum for Diesel Truck with XADO 1 STAGE revitalizant in D 2866 diesel engine of MAN TGA truck

**1. Test objective:**

To define the action of atomic metal conditioner Maximum for Diesel Truck with XADO 1 STAGE revitalizant on change of operating parameters of D 2866 turbocharged diesel engine, operated in MAN TG-A truck, year of manufacture – 2000, AX 4493 AT license number plate, Transservis LLC enterprise, Kharkov, Ukraine.

**2. Test objects:**

2.1 Atomic metal conditioner Maximum for Diesel Truck with XADO 1 STAGE revitalizant (950.0 ml package), manufacturer XADO-Technology Ltd, 23 Avgusta lane, 4, Kharkov, Ukraine.

2.2 SD 2866 diesel engine of MAN TG-A truck.

Engine performance data:

- turbocharged diesel engine;
- in-line six-cylinder engine;
- cylinders displacement 11,967 cm<sup>3</sup>;
- oil system capacity 43.0 L;
- engine capacity is 410 horsepower;
- total mileage is 743,800 km;
- engine complete overhaul has not been conducted.

### 3. Test subject:

To define change of compression rate (maximum compression pressure) and compression variation between cylinders after the introduction of atomic metal conditioner Maximum for Diesel Truck with XADO 1 STAGE revitalizant (950.0 ml package) in lubrication system of D 2866 engine of MAN TG-A truck.

### 4. Testing procedure:

Tests were conducted in the period from 19<sup>th</sup> of March to 28<sup>th</sup> of May 2013.

4.1 Before the introduction of atomic metal conditioner Maximum for Diesel Truck with XADO 1 STAGE revitalizant in the motor oil of D 2866 engine of MAN TG-A truck at temperature of 74 °C measurements of compression rate in all cylinders have been taken with the help of MOTORMETER diesel compression meter.

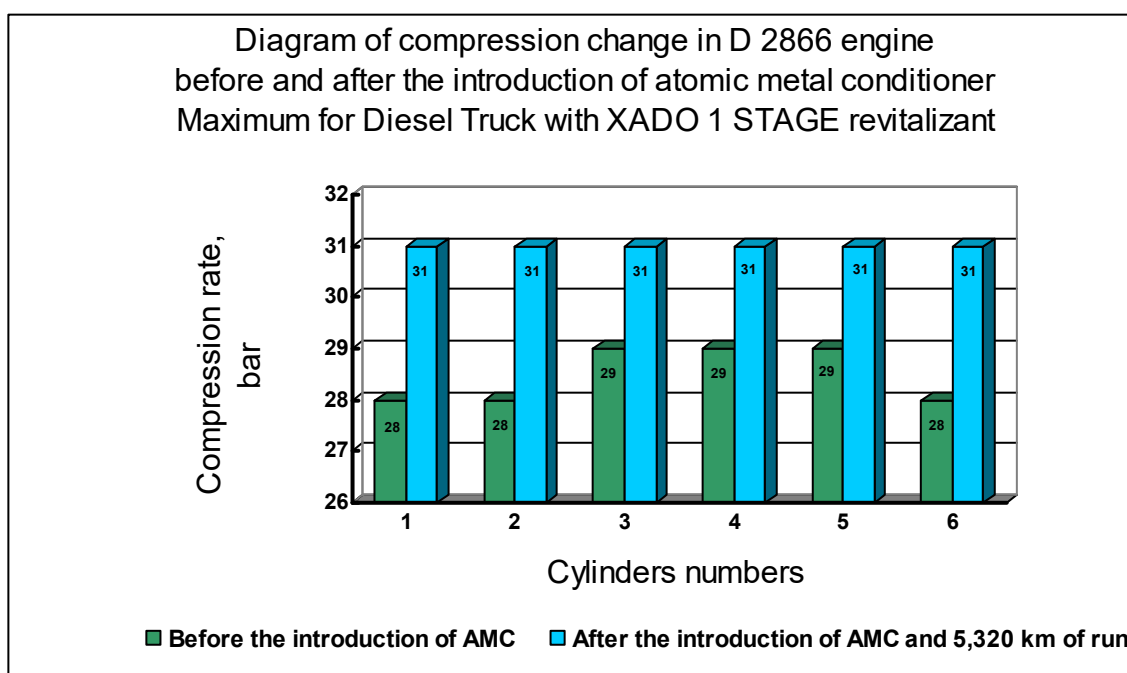
4.2 After the introduction of atomic metal conditioner Maximum for Diesel Truck with XADO 1 STAGE revitalizant in engine lubrication system of D 2866 engine the truck was operated in regular operation modes of cargo transportation in Ukraine and Eastern Europe countries within 5,320 km of total run.

4.3 After the 5,320 km of run the repeated measurements of compression rate have been taken in engine cylinders at temperature of 76 °C.

Values of compression rate before the introduction of atomic metal conditioner Maximum for Diesel Truck with XADO 1 STAGE revitalizant and after 5,320 km of run are set out in Table 1 and illustrated in Picture 1.

Table 1 – Compression rate in cylinders

Parameter name	Cylinder number in engine						Average compression rate, bar	Compression variation between cylinders, bar
	1	2	3	4	5	6		
Compression rate before the introduction, bar	28.0	28.0	29.0	29.0	29.0	28.0	28.5	1.0
Compression rate after the introduction and 5,320 km of run, bar	31.0	31.0	31.0	31.0	31.0	31.0	31.0	0



Picture 1 – Diagram of compression change in cylinders

## 5. Conclusions:

5.1 D 2866 engine of MAN TG-A truck before the introduction of atomic metal conditioner Maximum for Diesel Truck with XADO 1 STAGE revitalizant was in

normal technical condition: compression rate made 28-29 bar, compression variation between cylinders within the limits of 1.0 bar, oil consumption didn't exceed the limit, which testifies full operational capability of this engine.

5.2 However, the introduction of atomic metal conditioner Maximum for Diesel Truck with XADO 1 STAGE revitalizant in diesel engine lubrication system of MAN TG-A truck after 5,320 km of total run allowed increasing compression rate in all engine cylinders. The average compression rate has been increased by 8%.

5.3 The compression variation between cylinders before the introduction of atomic metal conditioner Maximum for Diesel Truck with XADO 1 STAGE revitalizant made 1.0 bar, after 5,320 km of run there is no compression variation between cylinders, which perfectly allows balancing the specific load on engine shaft, increase engine service life without parts replacement and regular repair.

**Note:** *Technical report on results of the application of metal conditioner AMC Maximum for Diesel Truck with XADO 1 STAGE revitalizant in D 2866 engine of MAN TG-A truck, AX 4493 AT license number plate is enclosed.*