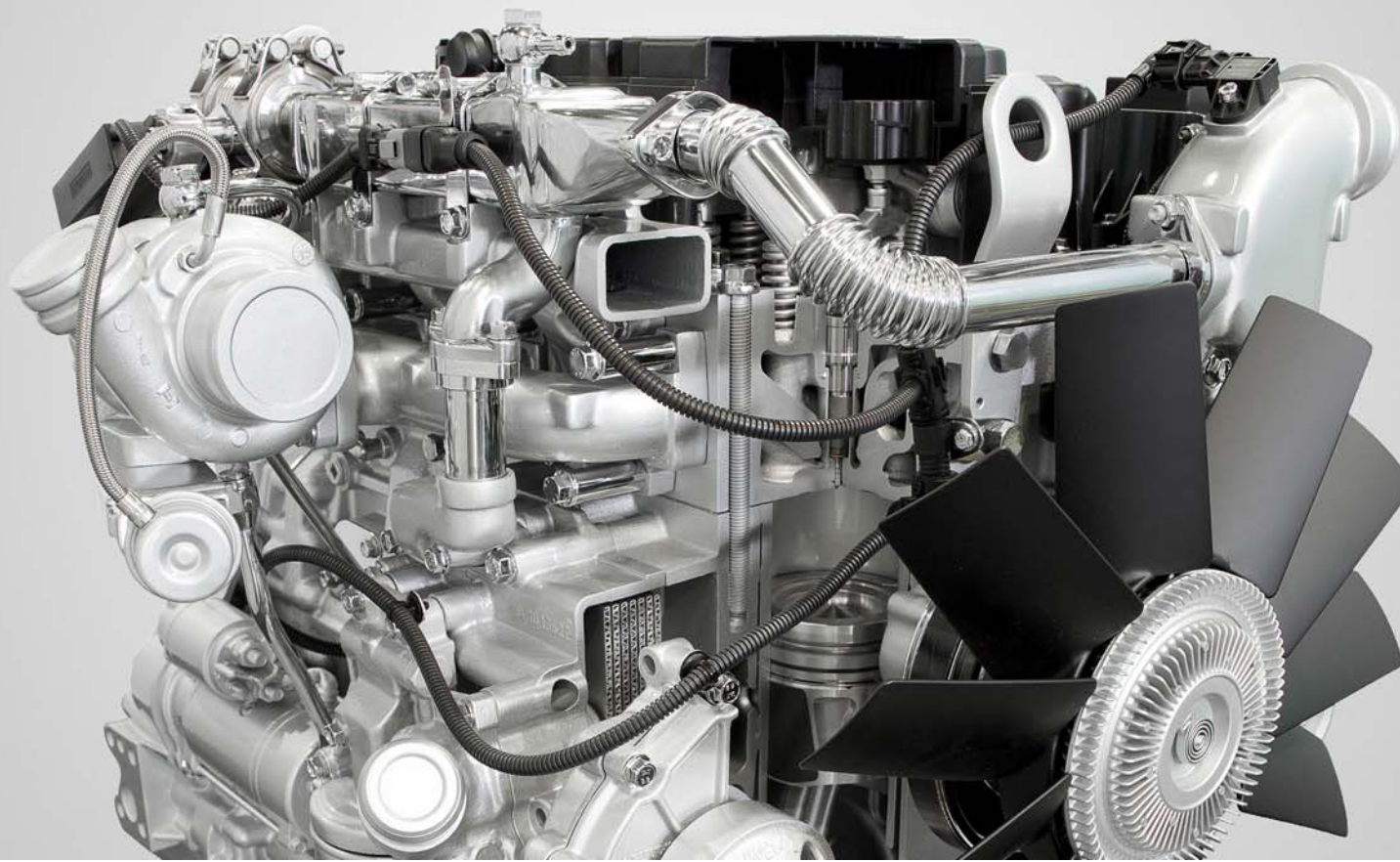
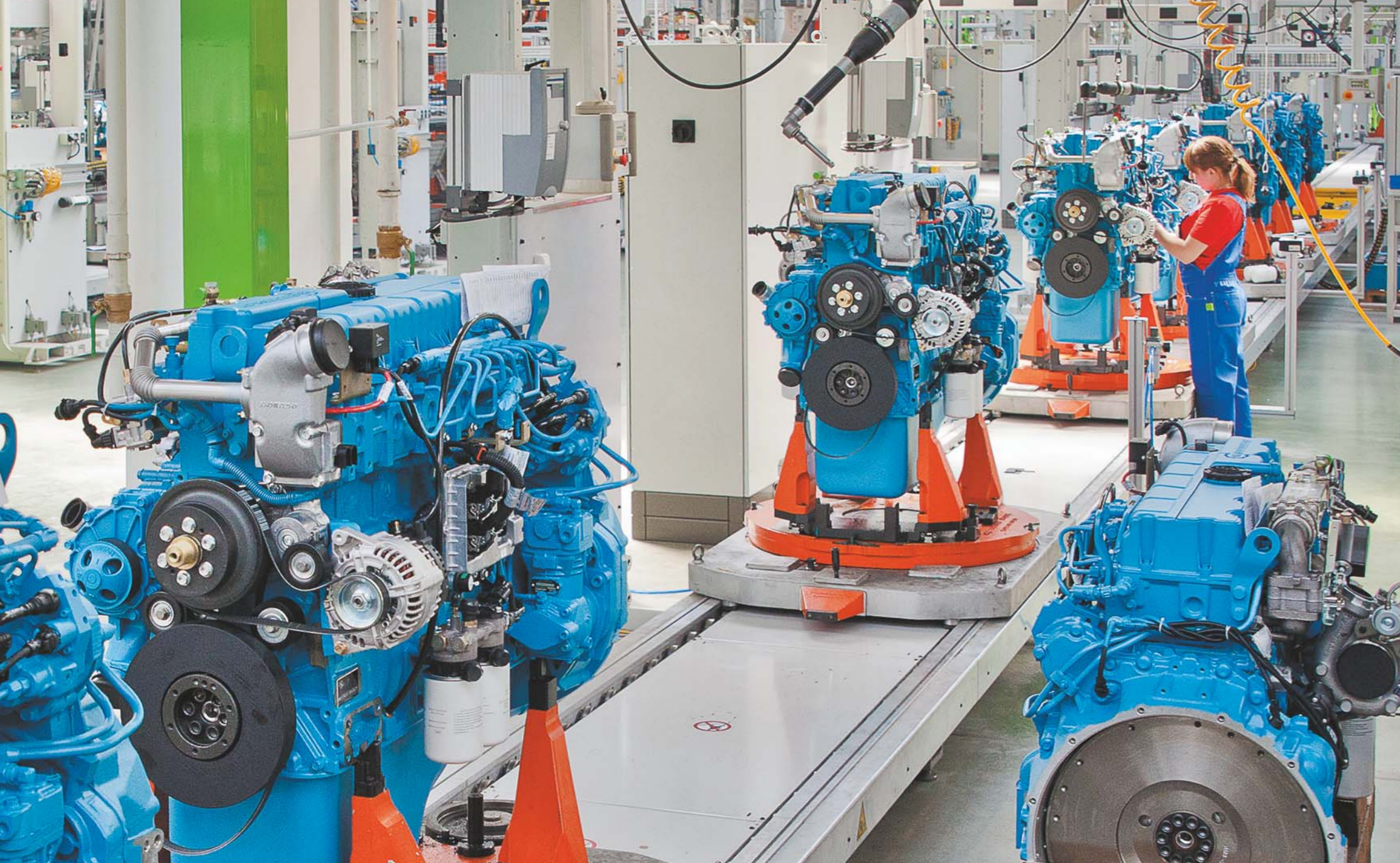


# POWERTRAIN

YAWZ



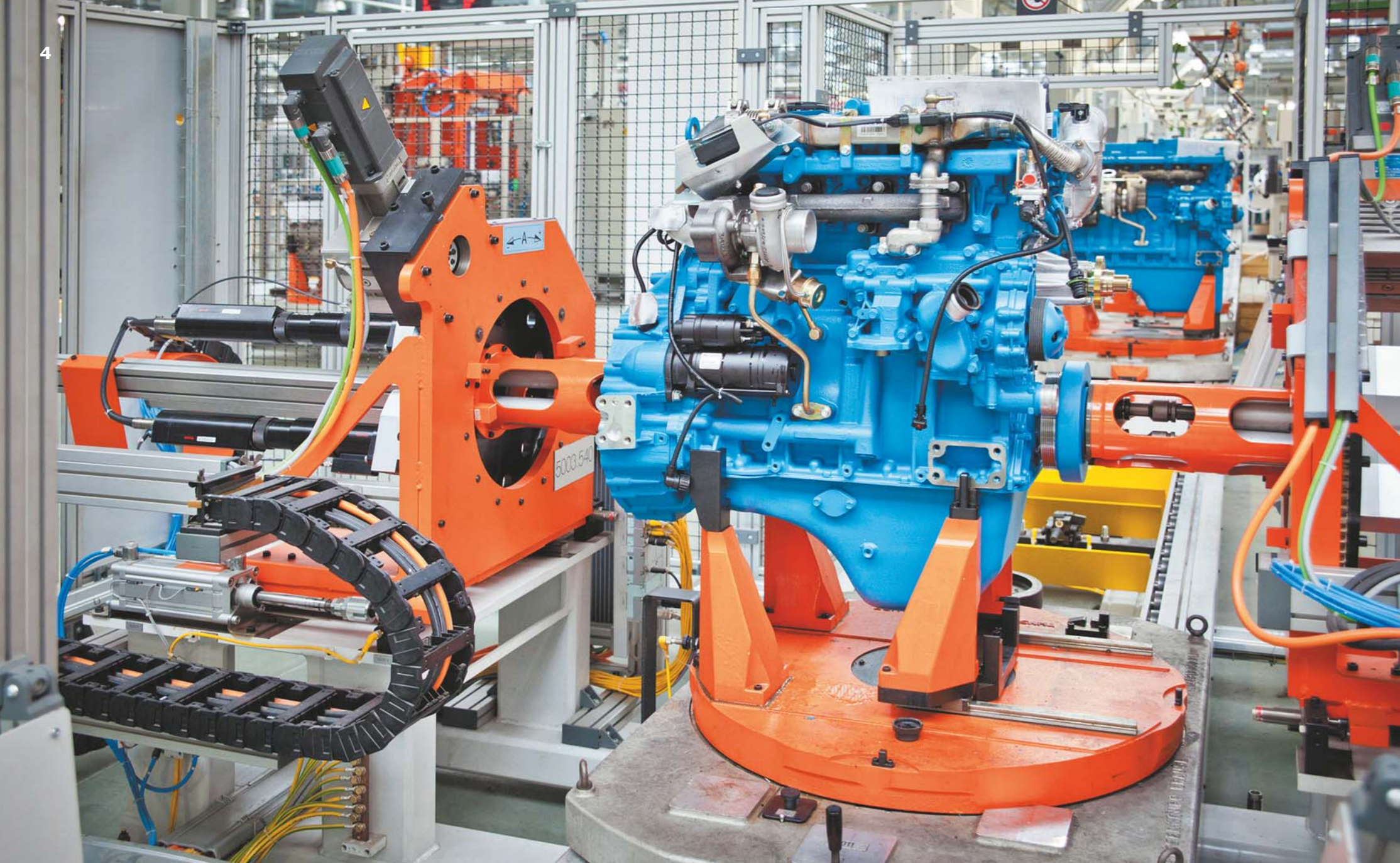


1916  
THE YEAR OF FOUNDATION

GAZ Group produces YMZ diesel and gas engines, YaZDA fuel injection systems for diesel engines, diesel-generator sets and YMZ gearboxes.



YMZ multi-purpose engines are the basic ones for the assembly of more than 300 types of machinery of leading manufacturers in Russia and CIS countries, installed on trucks, line-haul trains, mine dump trucks, buses, tractors, combines, road building vehicles, as well as diesel-generator sets.



## YMZ 530 PRODUCTION

(YAROSLAVL MOTOR PLANT)

### 2012

START  
OF SERIAL  
PRODUCTION

### 350 millions \$

INVESTMENTS  
INTO THE YMZ-530  
PROJECT

100%

OF TECHNOLOGICAL EQUIPMENT  
OF THE WORLD LEADING  
MANUFACTURERS

The production site of medium inline engines YMZ-530 is one of the best enterprises of engine-building industry in Europe.

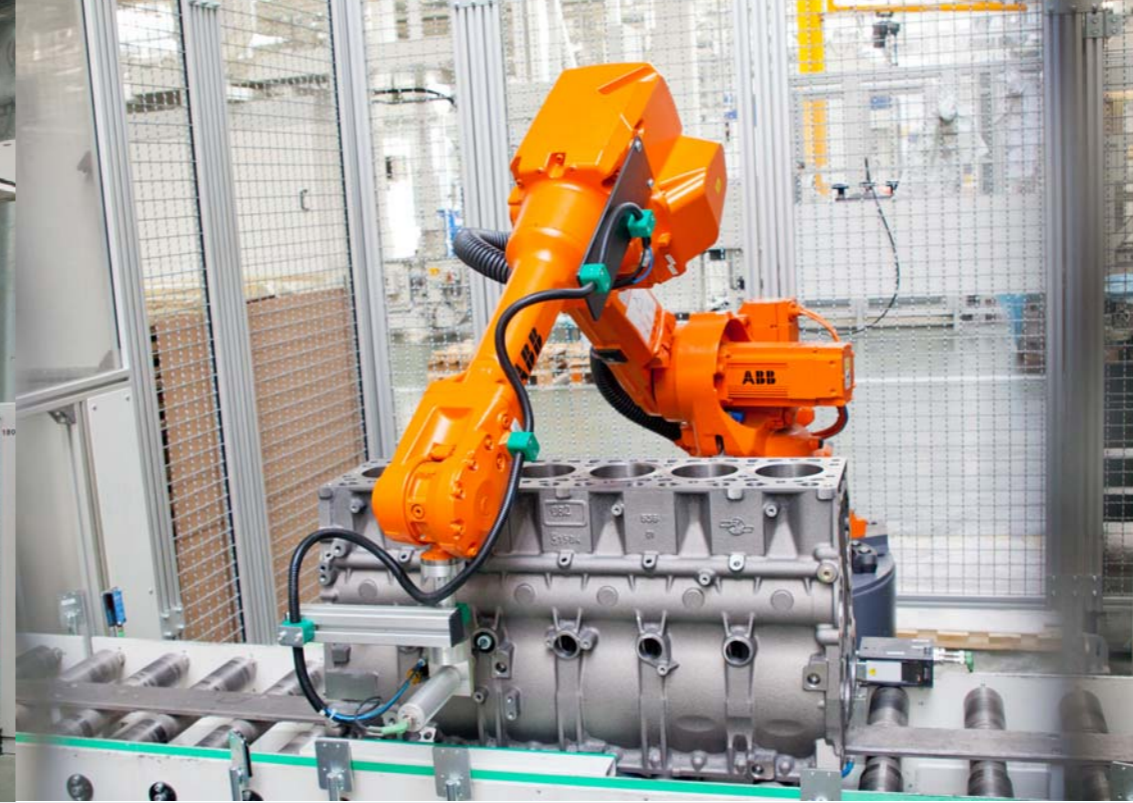
The product engineering was done jointly with the world suppliers of components and systems, the design finalizing of the basic versions – together with AVL List GmbH (Austria); technological concepts were worked out with Camau by the support of major suppliers and engineering organizations



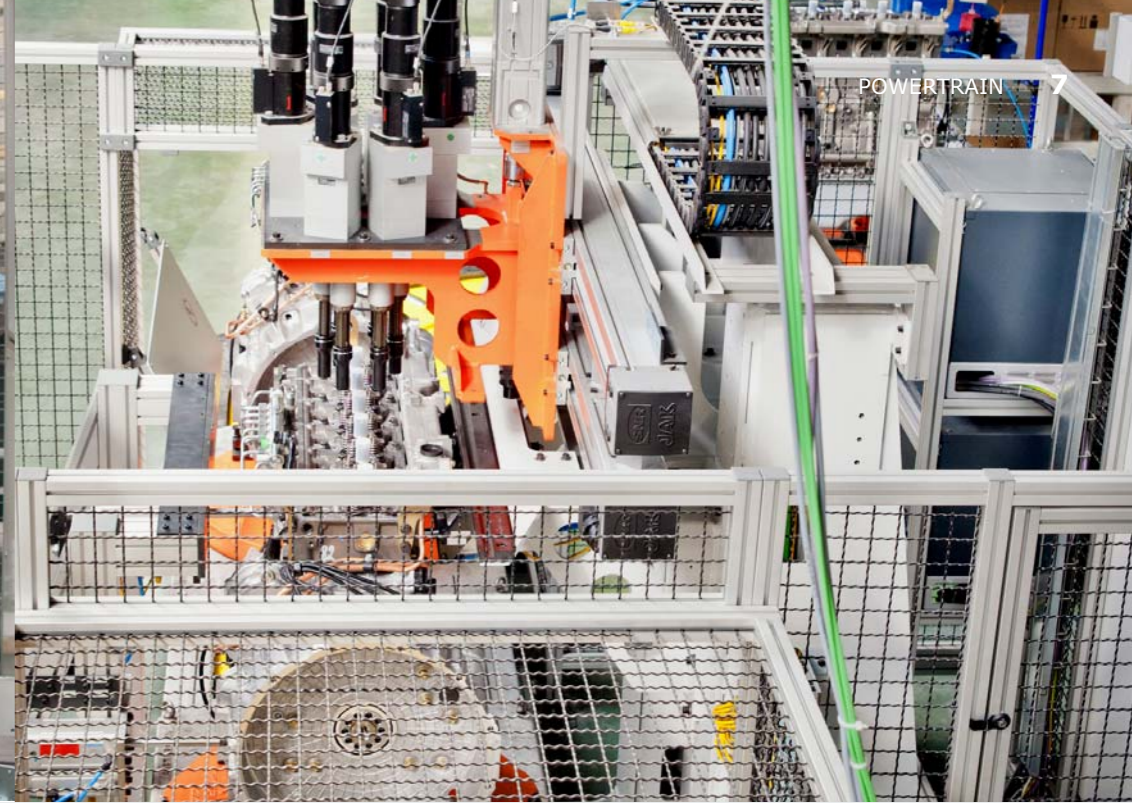
6  
The modern high-performance technological equipment of leading foreign manufacturers with a high degree of automation has sufficient flexibility and is focused on the continuous development of the model range.



Today, at the production site more than 60 versions of diesel and gas engines for more than 200 types of machinery are manufactured and assembled in a single technological cycle.



The production site of medium diesel engines YMZ-530 is the first engine-building production organized in the Russian Federation for the last 40 years.



POWERTRAIN 7  
The engines comply with Euro-5 and Euro-6 environmental standards.

## V-TYPE ENGINES PRODUCTION

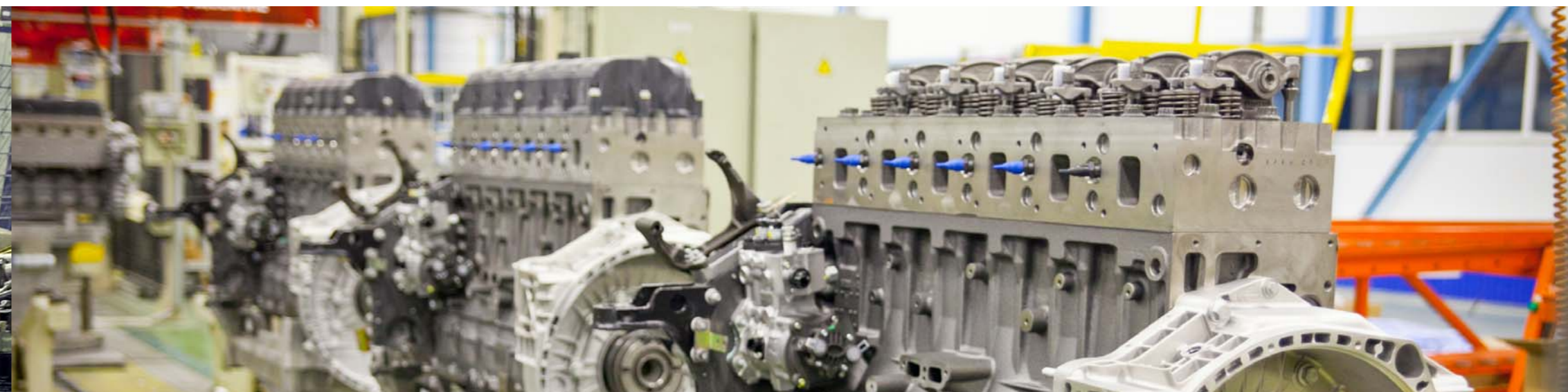


The powerful production base integrates the assembly and testing production of engines and gearboxes using automatic and flow lines, press forging with mechanical crank presses up to 2500 t and forming lines with hammer equipment; galvanic and painting production on the basis of automatic and mechanical lines; foundry of castings from steel, cast iron, aluminum and non-ferrous metals; thermal process, etc.

Products: 6-, 8-, 12-cylinder V-type diesel engines, gearboxes, clutches and more than 2500 positions of components and original spare parts.

Expanded capacity range of basic V6, V8 versions – up to 450 hp and higher, increased service life up to 1 million km. of vehicle run, compliance with ecological standards up to Euro 5.

## HEAVY-DUTY ENGINES PRODUCTION



The heavy-duty diesel engines of YMZ-650 family are manufactured based on the technological license of Renault Trucks (start of serial production - 2007) using modern automatic equipment. The production structure of YMZ-650 project includes the assembly and testing production of engines at the modern automatic line Comau; the machining production, incl. machining of the cylinder block.

Products: 6-cylinder engines of YMZ-650 family correspond to the world trends in engine building; ensure compliance with Euro-3, -4, -5 environmental standards. The YMZ-650 engines are intended for operation as a part of vehicles, truck-tractors, chassis, line-haul trains, dump trucks, and are used in diesel-generator sets.

# YMZ-530 FAMILY

## MEDIUM INLINE DIESEL ENGINES



YMZ-534

Number of cylinders	<b>L4</b>
Displacement, l	<b>4,43</b>
Capacity, hp	<b>136-240</b>
Weigt, kg	<b>460</b>
Service life, km	<b>up to 900 000</b>
Ecological standard	<b>Euro-5</b>

### MODEL RANGE



YMZ-53403 Euro-5



YMZ-53443 Euro-5



YMZ-53441 Euro-4



YMZ-53411 Euro-4



YMZ-53415



YMZ-53405



YMZ-53416



YMZ-5348



YMZ-536

Number of cylinders	<b>L6</b>
Displacement, l	<b>6,65</b>
Capacity, hp	<b>220-330</b>
Weigt, kg	<b>640</b>
Service life, km	<b>up to 1 000 000</b>
Ecological standard	<b>Euro-5</b>

### MODEL RANGE



YMZ-53603 Euro-5



YMZ-53663 Euro-5



YMZ-53601 Euro-4



YMZ-536111 Euro-4



YMZ-53625



YMZ-53646



YMZ-53642



YMZ-53602



# YMZ-530 FAMILY

## MEDIUM INLINE GAS ENGINES



YMZ-534 CNG

Number of cylinders	<b>L4</b>
Displacement, l	<b>4,43</b>
Capacity, hp	<b>150-170</b>
Weigt, kg	<b>460</b>
Service life, km	<b>up to 900 000</b>
Ecological standard	<b>Euro-5</b>



### MODEL RANGE



YMZ-53414 Euro-5    YMZ-53424 Euro-5    YMZ-53444 Euro-5



YMZ-536 CNG

Number of cylinders	<b>L6</b>
Displacement, l	<b>6,65</b>
Capacity, hp	<b>260-312</b>
Weigt, kg	<b>640</b>
Service life, km	<b>up to 1 000 000</b>
Ecological standard	<b>Euro-5</b>



### MODEL RANGE



YMZ-53604 Euro-5    YMZ-53614 Euro-5



# YMZ-650 FAMILY

## HEAVY-DUTY DIESEL ENGINES



Number of cylinders	<b>L6</b>
Displacement, l	<b>11,12</b>
Capacity, hp	<b>362-422</b>
Weigt, kg	<b>970</b>
Service life, km	<b>up to 1 000 000</b>
Ecological standard	<b>Euro-5</b>



### MODEL RANGE



YMZ-653 Euro-5



YMZ-651 Euro-4



YMZ-652



YMZ-6503

# YMZ V6 FAMILY

## HEAVY-DUTY V-TYPE DIESEL ENGINES



Number of cylinders	<b>V6</b>
Displacement, l	<b>11,15</b>
Capacity, hp	<b>150-300</b>
Weigt, kg	<b>1015</b>
Service life, km	<b>up to 800 000</b>
Ecological standard	<b>up to Euro-5</b>



### MODEL RANGE



YMZ-6566 Euro-4



YMZ-65654



YMZ-6563



YMZ-2365E2



# YMZ V8 FAMILY

HEAVY-DUTY V-TYPE DIESEL ENGINES



Number of cylinders	<b>V8</b>
Displacement, l	<b>14,86</b>
Capacity, hp	<b>180-450</b>
Weigt, kg	<b>1250</b>
Service life, km	<b>up to 800 000</b>
Ecological standard	<b>up to Euro-5</b>

## MODEL RANGE



YMZ-6586 Euro-4



YMZ-6585



YMZ-65656



YMZ-7514



YMZ-7E846

750-930 hp



# YMZ V12 FAMILY

HEAVY-DUTY V-TYPE DIESEL ENGINES



Number of cylinders	<b>V12</b>
Displacement, l	<b>26,86</b>
Capacity, hp	<b>440-800</b>
Weigt, kg	<b>2050</b>

## MODEL RANGE



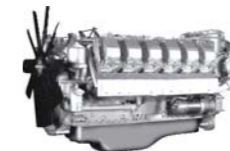
YMZ-8401



YMZ-850



YMZ-8502



YMZ-8503



## DIESEL-GENERATOR SETS

BASED ON YMZ ENGINES



**40-440<sup>kW</sup>**

“Avtodizel” produces a wide range of diesel-generator sets (DGS) of the AD series with a capacity range from 40 to 440 kW.

Serial sets are produced based on YMZ engines. The products are intended to be used as the main or standby power stations with a three-phase electric current of 400 V, 50 Hz. All the basic components of AD sets have been adapted, passed a full cycle of tests, and are optimally combined with each other to ensure the most effective work of the final product.

## GEARBOXES

FAMILY OF 5- AND 9-STAGE GEARBOXES

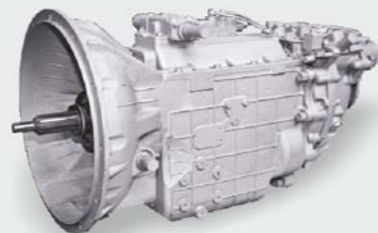


5-stage GEARBOXES  
YMZ-0905  
YMZ-1105  
YMZ-1205

The maximum input torque is 930 Nm

The weight with a crankcase 245 kg

Universal-joint flange  
ISO8667-T180



9-stage GEARBOXES  
YMZ-1809  
YMZ-1909

The maximum input torque is 1900 Nm

The weight with a crankcase 370 kg

Universal-joint flange  
ISO8667-T180

## YMZ SPARE PARTS

UNIQUE ADVANTAGES OF THE ORIGINAL

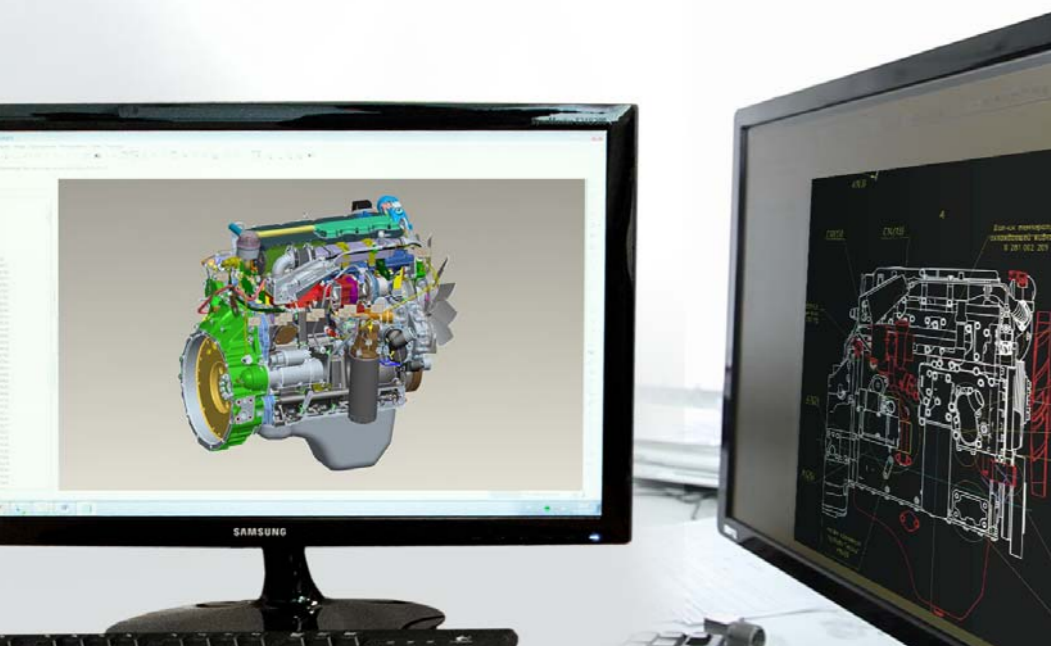


**5300<sup>POSITIONS</sup>**  
OF ORIGINAL SPARE PARTS UNDER «YMZ» BRAND

- System reliability
- Assembly quality
- Safety, reliability and high service life
- Deficiency rates less than 1%
- Corrosion preventing treatment and conservation
- Branded packaging

The originality and a high quality level of all the YMZ parts for the assembly line and into the spare parts are determined by the effective development of the QMS based on international standards, by the improvement of technology and the quality scoring system of the approved supplier's products.

The original spare parts are performed on the modern technical level, taking into account the maximum requirements for the quality of workpieces, the chemical compound, the heat treatment conditions, the quality of coating and machining.



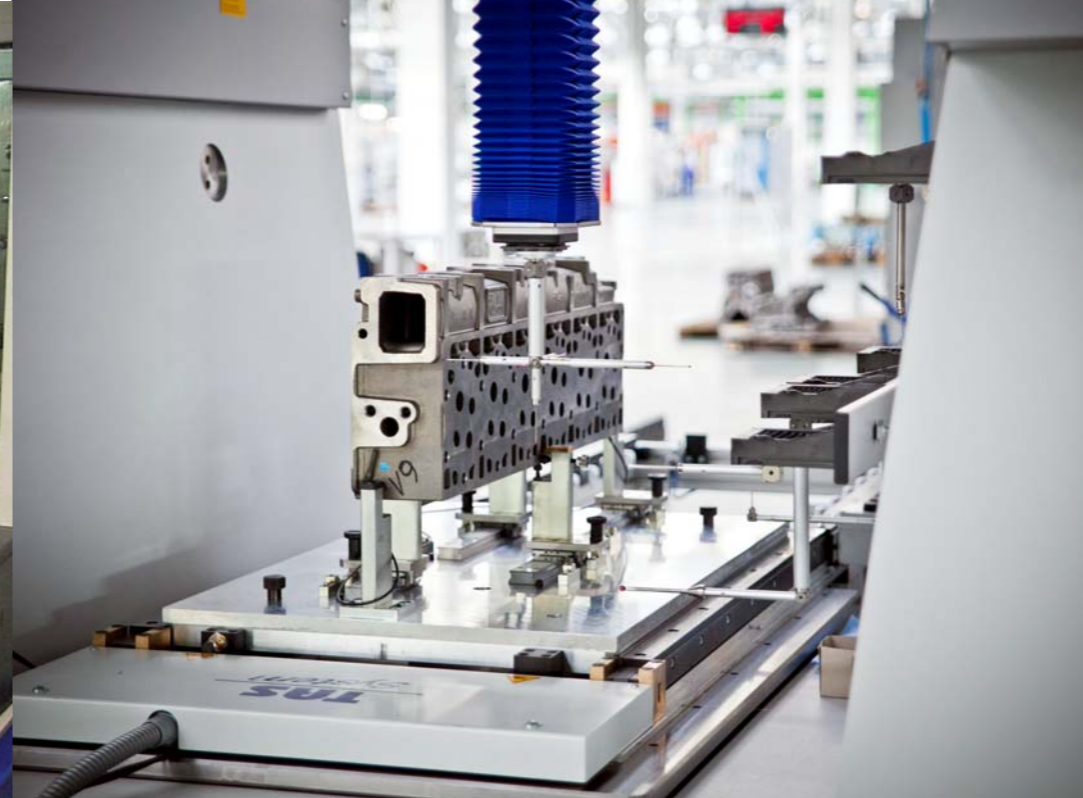
## ENGINEERING CENTER

The unique design school, experimental production and the specialized testing base allow us to develop new versions, models, and YMZ product families, to upgrade, improve and finish the most important units.



## TESTING BASE

The modern test benches ensure control and a high degree of accuracy in the performance of YMZ diesel and gas engines, including environmental parameters up to the level of Euro-5, and -6



## INTERNATIONAL STANDARDS OF QMS

The Quality Management System (QMS) complies with the requirements of the ISO 9001 standard, annually confirmed by the "Russian Register" Association (St. Petersburg), ISO / TS 16949 standard. The enterprise successfully passed the DQS (Germany) certification audit.



# SERVICE



# 358

SERVICE CENTERS  
IN RUSSIAN FEDERATION  
AND ABROAD

All service centers use modern diagnostic equipment, tools and original spare parts; qualified personnel carry out service and repair work.

# SALES GEOGRAPHY

## SALES NETWORK



■ sales regions of «YMZ» brand products



# 160

DEALERS  
IN RUSSIAN FEDERATION  
AND ABROAD

# >40

COUNTRIES ALL OVER  
THE WORLD ARE SALES REGIONS  
OF «YMZ» BRAND PRODUCTS

Sales geography of YMZ products - all regions of Russia, CIS countries and far abroad. The company has a developed dealer network, which allows making prompt and effective maintenance of products at all stages of operation.

