





## **LLC Tochmash-avto**

# car-and-tractor electric accessories production for Russian and CIS countries manufactures

**D-U-N-S® Nummer: 50-306-1949** 

## LLC Tochmash-avto activity data

LLC Tochmash-avto was established on the basis of automotive manufacture VPO Tochmash on 24<sup>th</sup> of December, 2010.

The competition basis is the manufacture of car-and-tractor electric accessories.

LLC Tochmash-avto produce following groups of auto accessories: understeering and central switches (the largest product line group), gasoline tank units, relay and fuse blocks, circuit elements, switches, etc. The total number of product line SKUs is about 100.

The company carries out sales of products to more than 60 counterparties, including leading car manufacturers such as AVTOVAZ PJSC, GAZ Motor Works, JSC LADA West TLT, etc.

Automotive components produced by the company, are also exported to Belarus, Azerbaijan and Kazakhstan

#### Basic Information on the Enterprise



Year of foundation	2010
Production area, m2	10 504
Number of personnel	232
Productivity, thousand RUB	1158
Average wage, RUB	28161
Volume of sales, mln. RUB per year	268

#### Activity area:

- Designing, development and manufacturing of truck and tractor electric equipment for Russian automotive manufacturing plants and motor vehicle parts markets
- Development and manufacturing of parts and units by cold-pressing, intrusion molding, etc. techniques under orders of the parent company ("VPO Tochmash" JSC) and third-party organizations.

#### **Purposes:**

- Development and bringing to market of the products needed by the consumers
- Preservation of the lead position among the suppliers of the leading automotive manufacturing plants of Russia and the post-Soviet countries.
- Improvement of manufactured products.
- Increasing marketability of production.
- Provision of services for organizations and customers.

#### **Geographical Position**

The production site of Tochmash-Avto Ltd. is in the city of Vladimir. The Vladimir region is located in the centre of the European part of Russia. It is in the Central Federal Area. The Vladimir region has favourable geographical position in the centre of Russia. It is located at the intersection of transport systems connecting west and east of Russia, the Urals, southern regions and the north of the country.



#### Main business objects















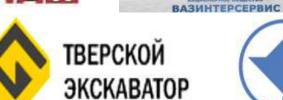
























#### Main products of LLC Tochmash-avto

#### Main products developed at the Company's own design office:

1. Relay and fuse blocks, 2. Gasoline tank units 3. Switches, 4. Circuit elements, 5. Understeering and central switches, 6. Relays



## Our contribution to every car

































### Company's own design office

## Designing is done using Pro/ENGINEER and Kompas-3D three-dimensional modeling system





The company is ready to master and introduce into production any component of electrical equipment for automotive and automotive equipment

## Products developed at the Company's own design office in 2019-2020









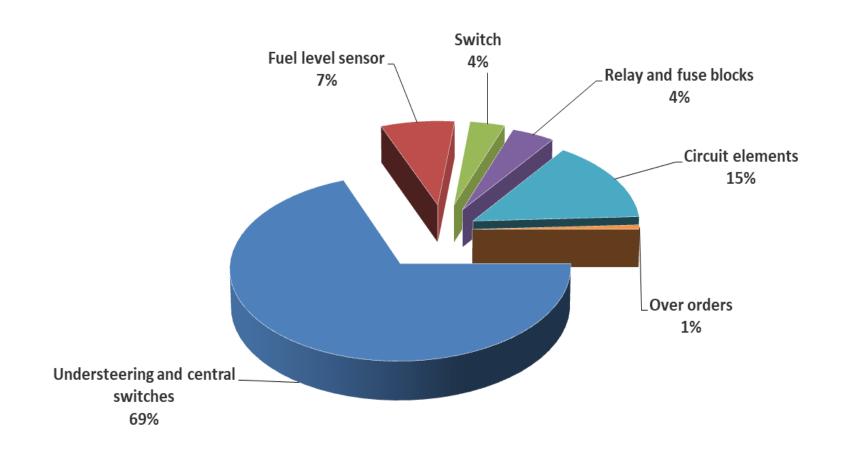








#### Revenue mix in 2019



## Production









## Lean Manufacturing Based on Toyota System

#### 1. In accordance with the Toyota requirements the principle of U-shaped work cells has been implemented



22,000 m2 of working areas have been optimized, components movements have been reduced, the operators' movements have been minimized.

#### 3. Activity analysis has been introduced



Identification of losses and elimination of the root cause of them have been carried out

#### 2. Part presentation to the assembly area is carried out by pull system



Part presentation to the area by a signal (empty containers) has been introduced

#### 4. Logistic system



Finished product is packed in the customer's container and is delivered directly to the work position of the conveyor in accordance with the customer's order

#### Outcome



## The Toyota production system has been introduced













#### certification IATF 16949:2016, ISO 14001, ISO 45001



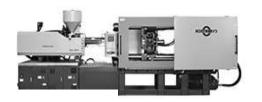
**PPM Index** 

PPM Index has been reduced from 2500 to 40





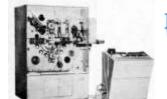
### Production possibilities



#### PLASTICS MOLDING







**DIE FORGING** 



PRESS FORGING





ASSEMBLY PRODUCTION



METALS CUTTING



LASER ENGRAVING





**PAINTING** 



**TAMPOGRAPHY** 



PACKAGING PRODUCTION

#### Our Advantages



The whole range of services – from product development to serial delivery is provided



The beginning of production strictly in accordance with project schedule is quaranteed



We implement challenging objectives.
We have a lot of experience



Transparent pricing and joint investing of funds in the project with the customer are carried out



Process approach at all stages of the production cycle in accordance with IATF 16949: 2016, ISO 14001, ISO 45001



All standard and special methods and tools for quality assurance are used



We have perfect logistics. Shipment of goods is carried out in accordance with the customers' orders



We have successfully launched projects with first-tier suppliers AVTOVAZ PJSC, GAZ Motor Works, JSC LADA West TLT



We are customer-oriented, display individual approach and loyalty



The image of our company as a reliable manufacturer of quality production is maintained

#### Contact details

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