



COLLABORATION GROUP

Autocomponent Engineering-2 (AE-2) (Russia)

AV-EL (Italy)

Group activity:

• Design, engineering and production of thermoplastic materials for technical and aesthetical parts (including equipment and moulding devices), according to advanced production techniques and technologies.



Group companies

Company	Description		
AV-EL S.r.I.	Italian company focused on production of technical and aesthetical parts through injection moulding of thermoplastic materials		
AE-2 L.L.C.	Russian company focused on production of technical and aesthetical parts through injection moulding of thermoplastic materials		



Autocomponent Engineering-2 (AE2)

Russia, Samara Region, Oktyabrsk



Russian company focused on production of technical and aesthetical parts through injection moulding of thermoplastic materials



The company activity spelt out as: "Production of plastic parts through injection moulding, as well as plastic materials processing for the automotive industry and for other industrial sectors".

Our company was originally established to supply PSC «AVTOVAZ» and only since the second half of 2011 we started looking for the opportunities to supply other car makers and customers in TIER2.

Technical and commercial relations are currently been established with: PSC «AVTOVAZ», VALEO, FAURECIA, U-SHIN, RENAULT-NISSAN, UAZ, GAZ, NAMI.

Currently, AE-2 works only for the automotive sector.



History of company

AE2 was established in August of 2007 in Moscow. AE2 is totally owned and managed by citizen of Italy (100%).

AE2 was established in order to collaborate with a related party (AV-EL Italy) in order to supply painted outside door handles for Avtovaz PRIORA. AE2 entered into a long term contract with Avtovaz as a manufacturer of items.

Design, engineering, tooling and equipment with know-how technology adoption, launching of tooling on stage PT1, PT2 and other equipment, personnel training and internships were provided by AV-EL Italy.

In 2011, AE2 acquired the Oktyabrsk production plant. The manufacturing building has been refurbished to enable AE2 to reach high technological, organizational and production levels. In the new production plant it was possible to merge the technological expertise and the know-how of AV-EL Italy, which are AE2 related party (owned by the same sole shareholder Mr.Verduci).



Layout of the plant

• Production area: 3 233 sqm;

• Warehouses: 1 714 sqm;

Offices (3 floors): + utility rooms (1 floor):
 1 650 sqm;

• Other buildings (to be renewed): 2 404 sqm.



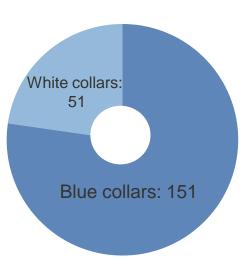


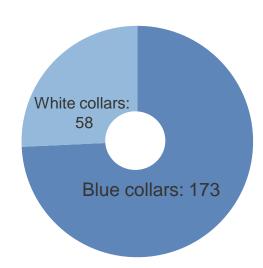


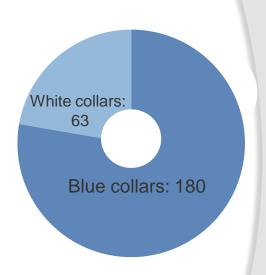
2017

2018

2019







Total: 202

Total: 231

Total: 243

Previous years:

2015 year 35 + 119 = 154 emp. 2016 year 44 + 127 = 171 emp.



Nº	Item	Ton, kN	Country of origin	Purchase date	Additional equipment
1	NEGRI BOSSI	3700	Italy	2010	
2	NEGRI BOSSI	2500	Italy	2010	
3	NEGRI BOSSI	2100	Italy	2010	
4	NEGRI BOSSI	2100	Italy	2010	\
5	NEGRI BOSSI	5800	Italy	2011	\
6	NEGRI BOSSI	1600	Italy	2011	\
7	NEGRI BOSSI	1100	Italy	2011	\ \
8	ENGEL	4200	Austria	2012	
9	ENGEL	2500	Austria	2012	
10	ENGEL	2500	Austria	2012	
11	ENGEL	1500	Austria	2012	
12	ENGEL	1100	Austria	2012	
13	ENGEL	1100	Austria	2012	
14	ENGEL	500	Austria	2013	
15	ENGEL bi-injection	3500	Austria	2013	Robot
16	ENGEL bi-injection	3500	Austria	2014	Robot
17	ENGEL	800	Austria	2015	
18	Haitian	1600	China	2015	
19	Haitian	1200	China	2015	
20	Haitian	3200	China	2016	Robot + gas injection equipment
21	Haitian	6500	China	2016	Robot
22	Haitian	3600	China	2018	Robot + gas injection equipment
23	Haitian	6500	China	2018	Robot
24	NEGRI BOSSI	2500	Italy	2019	



Installed equipment

24 molding machines (including 2 bi-component) from 50 to 650 tons.

1 tampo printing machine.

1 hot-stamping equipment.

7 robots.

Manufacturers of injection molding machines: ENGEL (Austria); NEGRI BOSSI (Italy); HAITIAN (China).





Production

5 assembly lines

1 Hot-stamping shop.

1 tampo printing shop.

1 gas injection

(nitrogen)





Hot-stamping

TECNOFOIL NP2025.

Max. parts dimensions 200x250 mm.

Printing plate dimensions 200x250 mm.

Head print travel range 50 mm.

Production capacity 652.000 pcs./year. 70% free today.

Lead time for purchasing additional hotstamping machines 3 months from order.















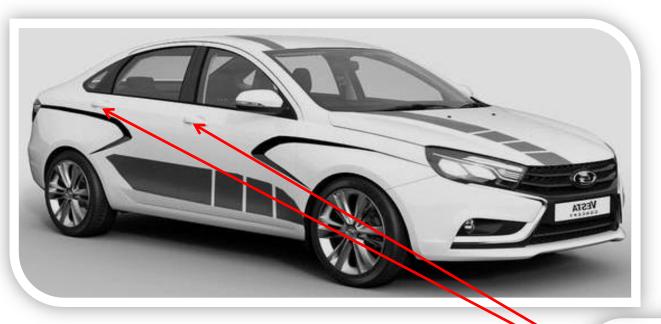


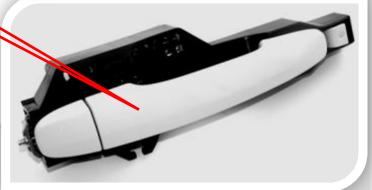
AE2 has developed a wide range of products with support of the Italian related company AV-EL:

- ROOF LUGGAGE RAILS
- INSIDE DOOR HANDLES
- PAINTED OUTDOOR HANDLES
- PAINTED INTERIOR CAR PARTS
- AIR VENTS
- AIR FLAPS
- HOUSINGS
- COVERS
- WHEEL BLOWERS
- DASHBOARDS AND CONSOLES
- DIFFERENT INTERIOR PARTS

- LEATHER FINISHED PARTS
- VENEER FINISHED PARTS
- FLOCK FINISHED PARTS
- CHROME MAT PARTS















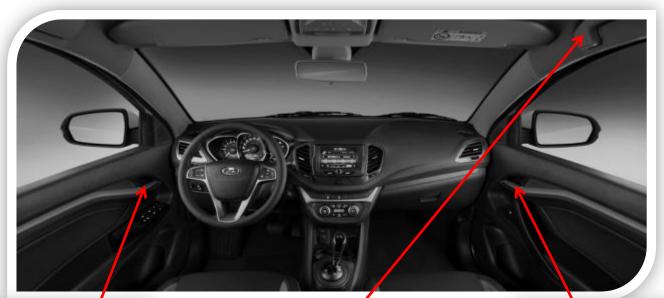




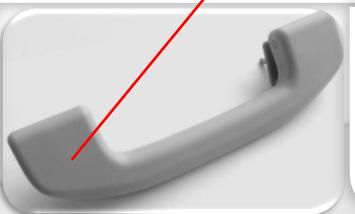


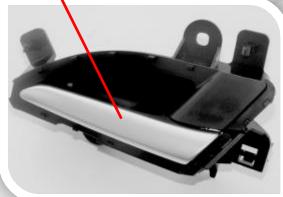










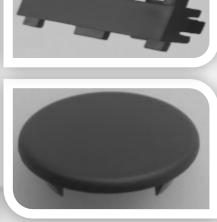


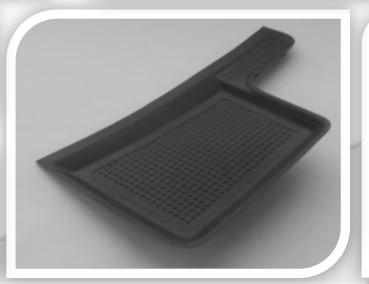








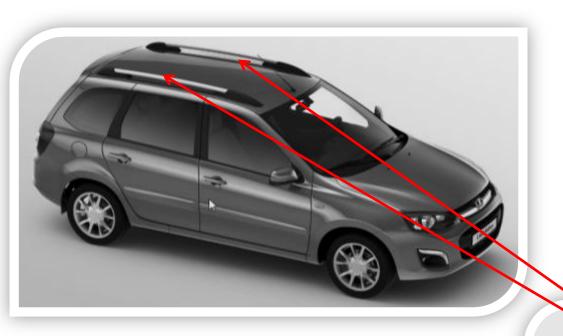








AVTOVAZ – LADA KALINA





AVTOVAZ – LADA KALINA



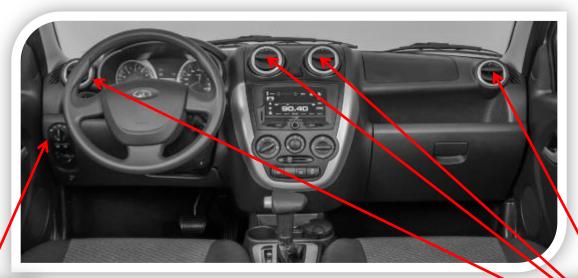








AVTOVAZ – LADA GRANTA







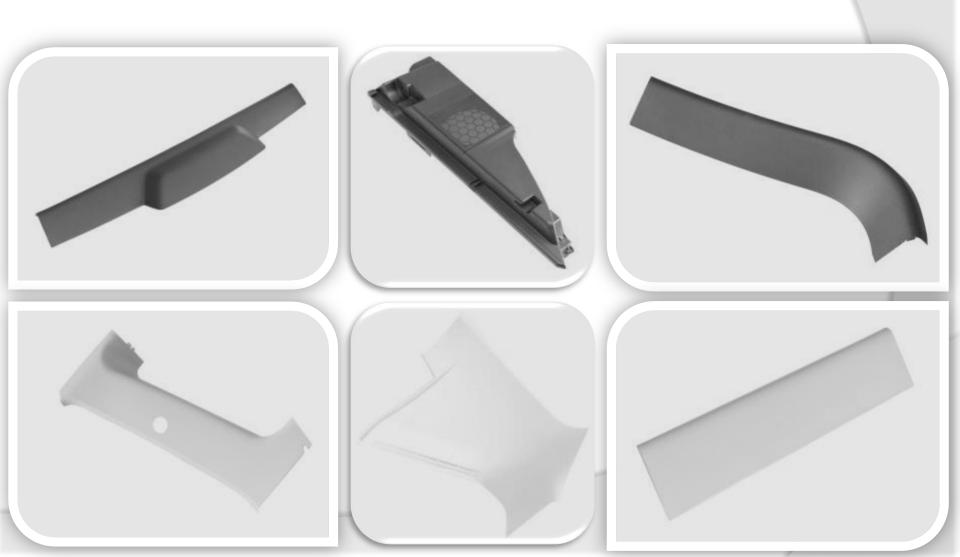


AVTOVAZ – LADA PRIORA





AVTOVAZ – LADA PRIORA















RENAULT-NISSAN











LLC «VSR» **(VALEO) X90**















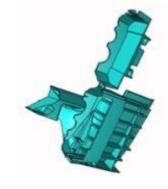


LLC «VSR» (VALEO) X52





















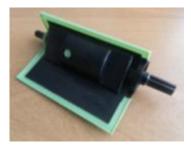


LLC «VSR» (VALEO) CMF1



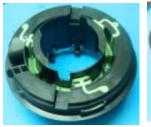








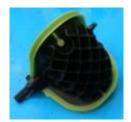




























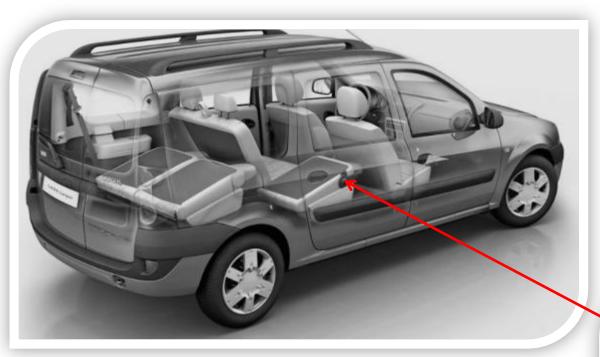


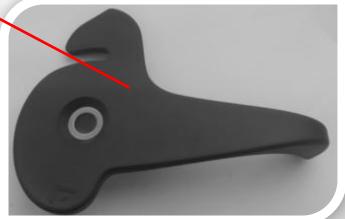






FAURECIA - LADA LARGUS



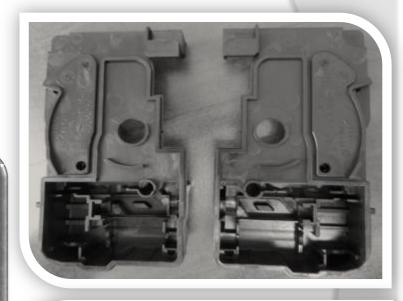


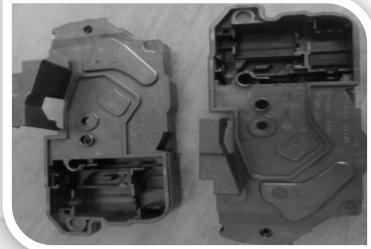


U-SHIN – LADA GRANTA, LADA VESTA













Development and production of car interiors project AURUS (a single Modular Platform)





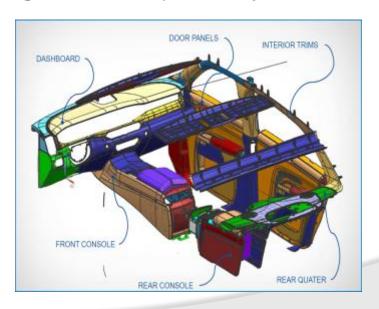






Development and production of car interiors project AURUS (a single Modular Platform)

Italian and Russian Companies work together for the development of some new vehicles for the Russian Presidential Office and NAMI (Interior of vehicle: Engineering, Prototypes, Tooling, Pre-series production, Industrial Production, Veneering, Leather Upholstery, Assembling)





Development and production of car interiors project AURUS (a single Modular Platform)





Development and production of car interiors project AURUS (a single Modular Platform)

Responsibility range:

- 1. Interior parts (sedan, limo, MPV, cabrio, SUV);
- 2. Door handles int.;
- 3. Door handles ext.;
- 4. Fuel flap cover assy;
- 5. HVAC;
- 6. Passive safety systems (airbags);
- 7. Floor and trunk sill trims.



Certificate

Certificate IATF 0300435 Certificate SGS TR13/0001 SGS

The management system of

Ltd "Autocomponent Engineering-2"

Anceova Str. 7 Oktyabrsk City, RUS-445244, Samara Region, Russian Federation

Has been assessed and certified as meeting the requirements of

IATF 16949:2016

Fritten 1

For the following activities

Manufacturing of plastic parts by injection molding and assembly of plastic parts.

EXCLUSIONS: 8.3 product Design

3 Year certification is valid from 19 April 2018 until 18 April 2021 and remains valid subject to satisfactory surveillance audits Version no. 5 Current version updated 19 April 2018

Authorised b



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Contracted Office: SGS United Kingdom Ltd, Station Pool, Oldows, 869 4UK, UK. a wolf Net HoldState core

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- AVTOVAZ
- NAMI
- UAZ
- GAZ
- VALEO
- RENAULT-NISSAN
- FAURECIA
- U-SHIN

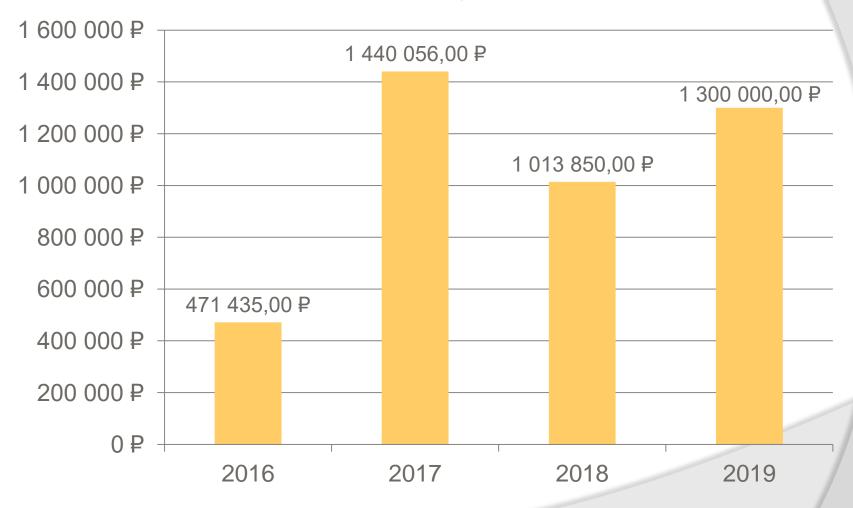


Main suppliers

- POLYPLASTIC raw material;
- RUSPLAST (Moscow) raw material;
- SUNFLEX (Moscow) raw material;
- ULTRAPOLYMERS (Moscow) raw material;
- COVESTRO (Moscow) raw material;
- DuPont (Moscow) raw material;
- RESINEX RUS (Moscow) raw material;
- TELKO (Saint-Petersburg) raw material;
- NPF BARS-2 (Samara) raw material;
- AV-EL (Italy)- semi finished products;
- VMK (Zhigulevsk) semi finished products.



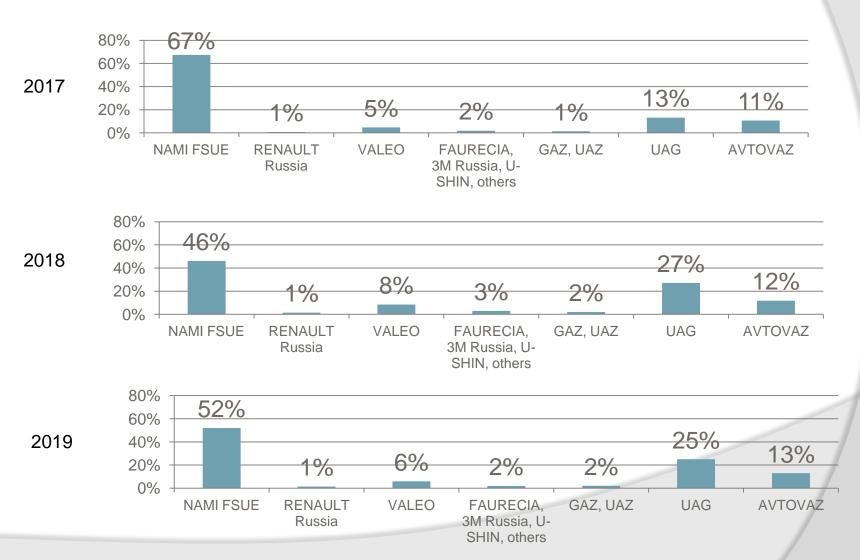
Turnover, 000 Rub.



Planned for 2020 year – **1.5 bln**.



Sales divided by Customers, (%)





Investments

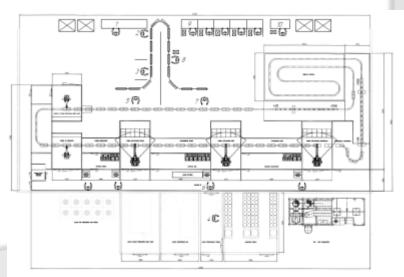
Year	Description
2010	4 injection machines end various equipment
2011	3 injection machines, equipment and other laboratory instruments
2012	7 injection machines, machines for treatment of raw materials, facilities for assembly
2013	1 bi-component injection machine 350 tons
2014	1 bi-component injection machine 350 tons
2015	3 injection machines
2016	IMM Haitian JUPITER II JU6500 II/4500, IMM Haitian MARS II International MA 3200 II /1700, Robots HILECTRO XTA, moulds
2017	The compressor of high pressure for the preparation and supply of nitrogen in the injection-molding machine, peripheral equipment, new warehouse.
2018	Haitian Jupiter 6500, Haitian Mars 380, Hot Stamping equipment.
2019	IMM NegriBossi serie CANBIO ST, model V250/1600.



Future investments

Year	Description	
2020	Construction of the new production facility for NAMI project (veneer, flock upholstery operations, assembling)	
2020	Purchasing of new injection molding machines for automotive components	
2020 +	Painting line for small and middle size parts (details see on the next slide)	





NAMI facility Painting line



Painting line



Painting line made in Italy.

Production capacity 55.000 sq.m.

Max. plastic parts size: 800x300x1200 mm.

Expected capacity rate:

Current AE-2 projects 26 %, current UAG projects 21%, future nominations 24%, other Clients 29%.

The main condition for starting painting line activities is nomination for above mentioned UAG and future projects!

Lead time from green field to SOP = 9 months.



Contacts

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Your success is our success Our success is your success