



emmax
laboratory

What is E-Max Laboratory



DEVELOPMENT AND DESIGN of new generation electric vehicles.



ELECTRONIC COMPONENTS TUNING with innovative heat withdraw compounds.

DEVELOPMENT of new software and components

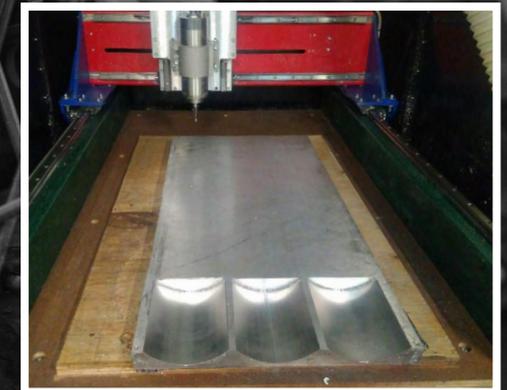
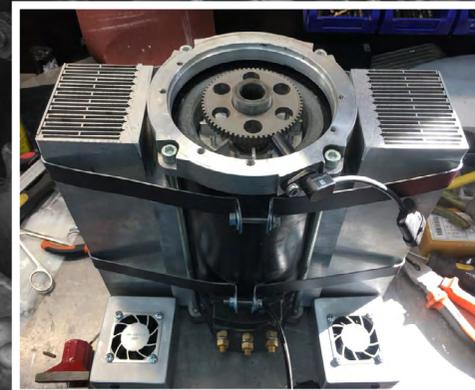
PERMANENT SEARCHING AND TESTING of power electronics for electric systems operation

ENERGY STORAGE DEVELOPMENT for households and mobile application.

Gasoline vehicles CONVERSION

New production technologies DEVELOPMENT

Objectives



ELECTRIC TRANSPORT:

- ELECTRIC TRANSPORT
- ELECTRIC ENERGY STORAGES
- ELECTRIC AUTO AND MOTO EQUIPMENT FOR SPORT AND LEISURE

Achievements

Creation and mass production of an electric motorcycle.
New model accumulates many unique decisions implemented by engineering team of E-max lab, including latest generation lithium batteries and own electronic control system.
Technical characteristics of the bike out-top many world famous brands.



Mass production will see three modifications of the bike (different frame size, power and battery capacity).



Achievements



Successful participation in “Africa Eco Race 2017” on the electric bike developed and assembled by E-max lab team.



Achievements

Snow bike functioning concept of a Snow bike.



Achievements



Developed and assembled, ready mass production, a mono-block motor and innovative battery for GoKart.
Mono-block provides possibility to convert gasoline GoKarts with minimum adjustments and changes.



Achievements

- Lead-acid batteries have been changed into lithium batteries what provides more power, reliability and economy.
- With lithium batteries driving distance has increased from 50 to 130 kilometers.
- On the other hand charging time has decreased from 10 to 2 hours.



- Conversion into electric.
- Zero emission transport, nature friendly.
- No exhaust , no smell.
- Noiseless water rides.

Achievements



Smart

- Conversion into electric
- 200 + per one charge
- Zero emission and unhealthy exhaust

ATV

- Conversion into electric.
- Increased torque.
- Range per one charge 100+ km
- No noise and nature friendly.



Achievements

Technologically advanced high-strength aluminum profile has been developed for the manufacture of lightweight supporting structures, tested in extreme conditions on sports vehicles.



Production of a mono-block: motor and power electronics, started for further usage in sports, leisure and training cars in karting, ATVs and motorcycles and other vehicles.

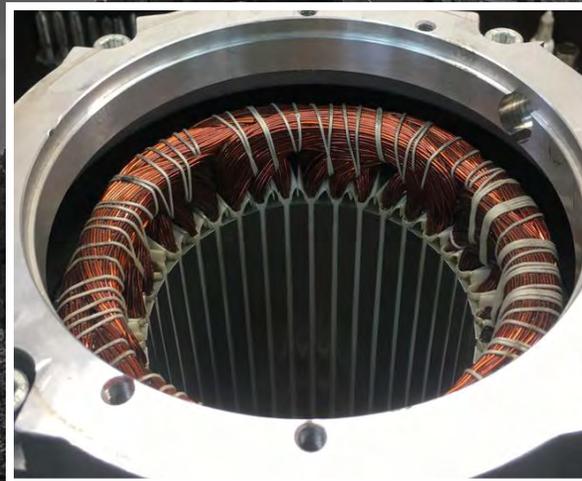


Battery assembly based on advanced lithium-ion imported components has begun.

CNC processing of aluminum and high-tech coatings



Standard motor



After completion by E-max laboratory



Achievements



In 2019, a strategic partnership agreement was signed with the Institute of Problems Management in the name of V.A. Trapeznikov Russian Academy of Sciences.

Areas of cooperation:

Development of experimental platforms for testing and implementing intelligent technologies for powerplant control of electric vehicles.

Research work and joint participation in scientific grants.

Formation of proposals for the modernization of the laws, regulatory legal acts and documents in the field of operation of vehicles with electric drive.



Prospects

- Mass production.
- Development of technologies.
- Availability for consumers in the Russian and CIS countries markets and import substitution.
- Development of new, strategically important tasks.
- Manufacturing of long-life maintenance-free energy storages.
- Manufacturing of innovative products: transport, special equipment.



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**Manufacturing and equipping modern buildings
with energy-saving systems based on lithium batteries.**

Prospects

**Energy saving is achieved by accumulating cheaper
electricity at night as well as the accumulation of energy
from renewable sources, such as: solar panels, windmills,
water turbines.**



**Using energy storage devices created by EMAX, expected to
reduce the cost of electricity of the building up to 50%**

Further development

- Job creation and the search for new highly qualified specialists.
- Automated assembly line for finished products.
- Power electronics assembly line.
- Re-equipment (test center and metric laboratory).
- A cold anodizing workshop for aluminum.
- Purchase of equipment for the production of lithium battery cells, power electronics and electric motors.
- Construction of premises for the further development of production.