



JSC «LZM»

Lyuberetskiy zavod MONTAZHAVTOMATIKA

PRESENTATION OF
JSC «Lyuberetskiy Zavod MONTAZHAVTOMATIKA»
Minister of Economy, Trade and Industry



経済産業省

Ministry of Economy, Trade and Industry

09th November 2016



JSC «LZM»

Company core businesses: production of transformers, converters, electric motors, generators, transformer substations, switch gear, power electronics for railways, power distribution, mining, gas and oil industries.

- territory - 3,5 ha
- production facilities - 36 thou. m²
- administrative and auxiliary facilities – 9 thou. m²
- planned number of employees – 400 people



TRANSFORMERS

DRY TYPE 6-35 KV



OIL IMMERSED 6-35 KV



TRACTION
TRANSFORMERS



SUBSTATIONS AND SUBSTATION EQUIPMENT

TRANSFORMER
SUBSTATIONS



TRACTION
SUBSTATIONS



HV & LV
DISTRIBUTION GEAR





JSC «LZM»

List of currently produced equipment

CONVERTER EQUIPMENT

**TRACTION AND AUXILIARY
CONVERTERS**



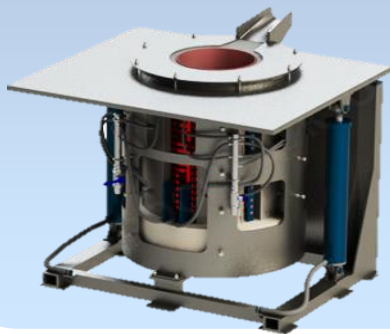
**AIRCRAFT GROUND
POWER SUPPLY UNITS**



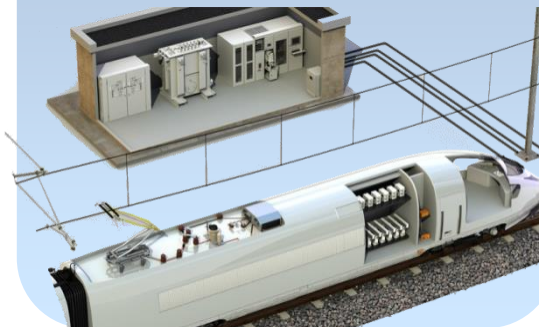
**CONVERTERS FOR SHIPS AND
WATERCRAFT**



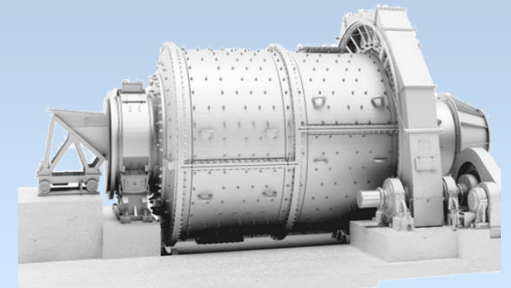
**INDUCTION HEATING
EQUIPMENT**



TRACTION SUBSTATIONS



MV AND HV DRIVE

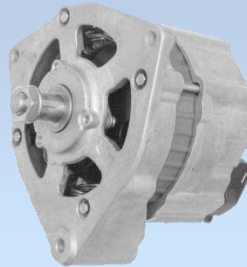


ROTATING ELECTRICAL MACHINES

TRACTION MOTORS



GENERATORS



ELECTRIC PUMPS



INDUSTRIAL COMPONENTS

COOLING TOWERS



LOCOMOTIVES
ON-BOARD SYSTEMS



ELECTRONIC
COMPONENTS



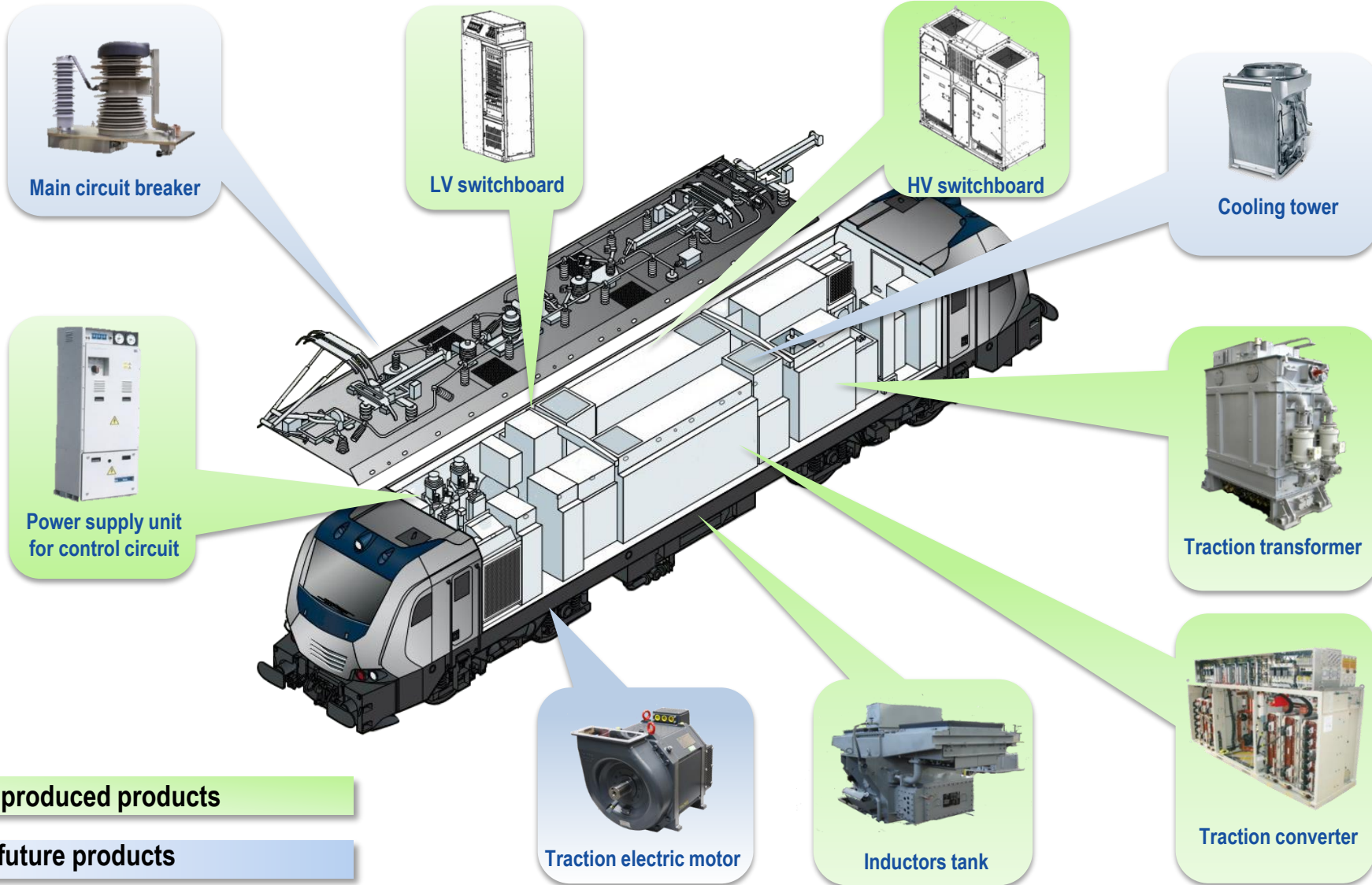
- Switches
- Induction boxes
- Inductive shunt
- High-speed circuit breakers
- Contactors for locomotives electric locomotives
- Notch speed rheostats and individual-contactors
- Pantograph





JSC «LZM»

Provide the whole electrical system for locomotive



Driver for development Japan-Russia business and trading relations

1. TECHNOLOGY TRANSFER

Supporting the initiative of Russian Ministry for Trade and Industry, we offer together with Japanese partners, to develop "pilot" projects on the basis of our enterprise for creation a production centers, primarily, but not limited by:

1. Production of power and traction transformers
2. Production of traction, auxiliary, and linear motors
3. Production of converter equipment and IGBT transistors
4. Production of rolling stock electrical equipment.

Driver for development Japan-Russia business and trading relations

2. SYNERGY OF BUSINESS AND TECHNOLOGY

To ensure the improvement of each product, service offered, applied technologies and design, it is necessary to create synergies between Japanese and Russian business and technology through a comprehensive analysis of existing and emerging technologies, products and services.

As a result we will enhance company responsiveness to customers' business challenges and needs by innovatively combining Japanese and Russian technologies, products, systems, and services. Through these efforts, we will garner even greater customer recognition in existing business fields while developing new businesses and markets.

Driver for development Japan-Russia business and trading relations

3. PIONEERING NEW MARKETS

Through localization in Russian and creating synergies with Japanese partners we crave to pioneer new markets with high quality product in different industries.

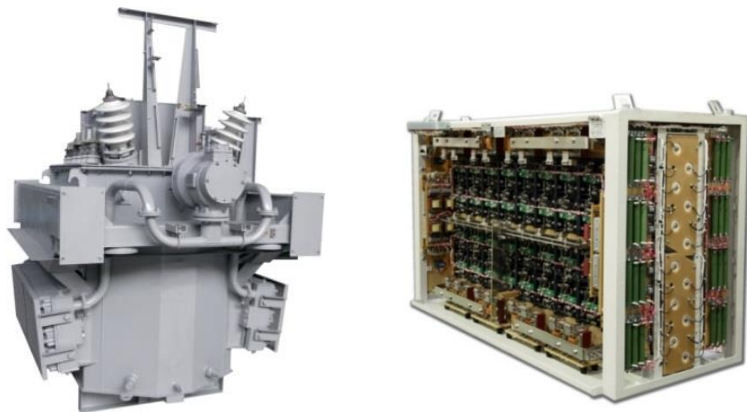
Focusing on these drivers, the Group will expand its operations in markets worldwide, ranging from Russia and CIS to Asia-Pacific region and hopefully to offer competitive product to Japanese market. As it moves forward, our company will continue to create and provide new products and services to satisfy the needs of each market to obtain appreciation of customers, thereby securing sustainable growth.



JSC «LZM»

Experience in project implementation

Developed and put into serial production traction transformers and inverters for serial main line freight locomotives.



Developed and put into serial production traction transformers and inverters for serial passenger locomotives.





JSC «LZM»

Experience in project implementation

Developed and now in the process of passing experimental operation traction converter with regulation of traction force at each axle for modernized serial electric locomotives 3ES5KM



Traction converter 4000kVa



Developed and put into serial production rectifier units for power supply of locomotive 2TE116U traction motors.



Traction converter 3000kVa

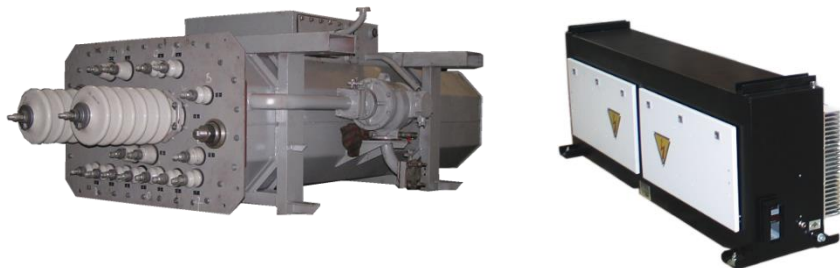




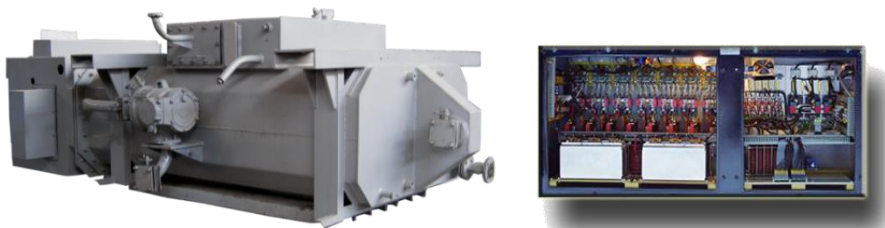
JSC «LZM»

Experience in project implementation

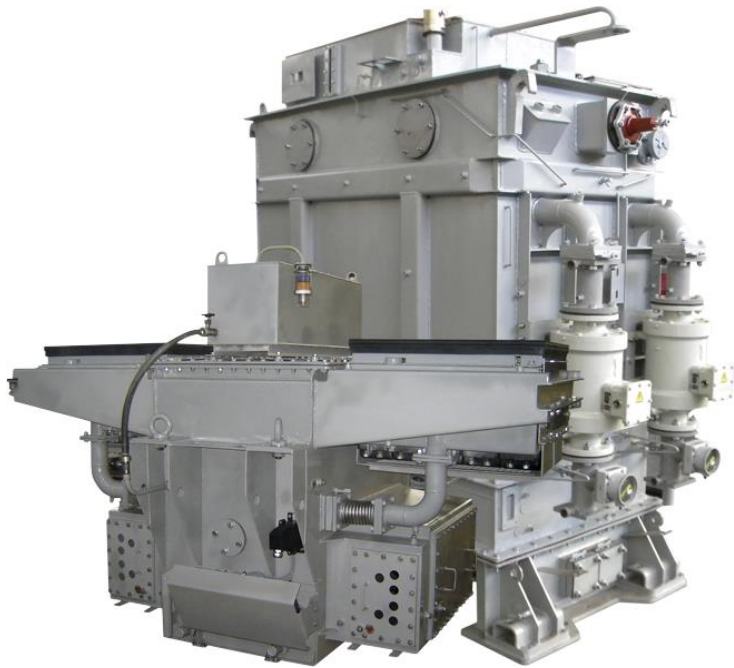
Developed and put into serial production traction transformers and for suburban trains ED9M



Developed and put into serial production traction transformers for suburban trains ED9E



Prototypes of the traction transformer with induction box were developed, manufactured and tested in DNV-KEMA and CESI-LPS certification centers for the first Russian dual-system electric locomotive EP20, developed by ALSTOM Transport.

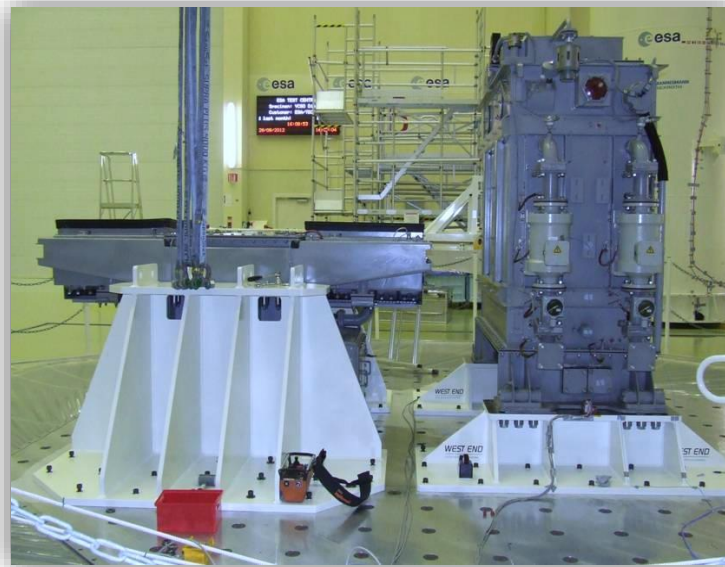


10kVA traction transformer



In the process of realizing the project of developing a transformer with inductors tank for EP20 locomotive:

- Developed design documentation validated by ALSTOM
- Developed design documentation validated by ALSTOM
- Manufactured prototypes of products under supervision of ALSTOM engineers
- Performed a complex of acceptance tests
- Specification was approved by Russian Railways acceptance commission
- Performed certification of the product

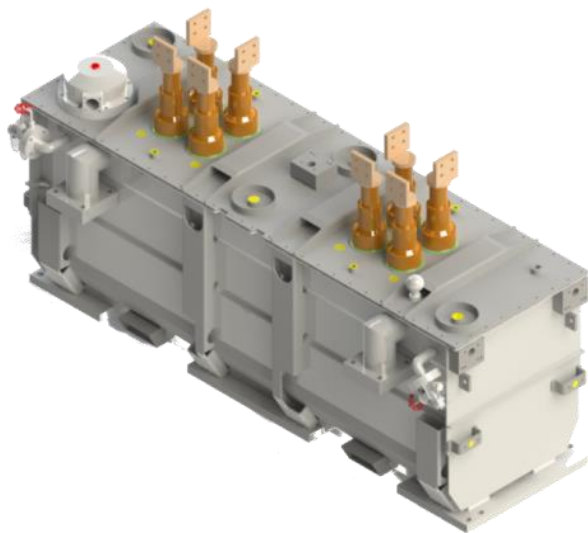




JSC «LZM»

Experience in project implementation

Developed, manufactured and tested prototype of line filter inductors tank for electric locomotives Green Cargo Rc2 of Bombardier Company.



TRAXX Sa 21Eb
3kV DC – 25kV / 50Hz





JSC «LZM»

Experience in project implementation

Developed and put into serial production AC and DC IGBT auxiliary power supply units for powering control systems and charging batteries of metro and freight locomotives.





JSC «LZM»

Experience in project implementation

Elaboration of upgraded modular transformer substations of universal modular structure 35 and 110 kV Voltage class. The first substation of this type is mounted for external power supply of Dengizkul gas field owned by LUKOIL Operating Co.



Construction of modular transformer substation 2MITS-63000/110/6/6 «Profile-cast New» completed with two transformers TRDN-63000/110/6 for LLC PC «Bezhitsk steel-casting foundry».



Designed and put into serial production of Ground Power Units for aircraft power supply during pre-flight maintenance in the airport or aircraft hangar. Units successfully operate in International Airports of Rome, Bari, Pau, Toulouse, Paris, Moscow, Almaty, at Final assembly lines Airbus A320 and A380 and assembly lines of Sukhoi and Mil aircrafts.



Starting and controlling engine rotation speed of synchronous MV and HV drive with power of up to 50 000 kW. Our drives are installed at major mining and extracting companies of Russian.





Russian railways



Ukrainian railways



Finish railways



Polish railways



Latvian railways



Estonian railways



Railway company of Uzbekistan



Serbian railways



JSC «LZM»

INNOTRANS-2010



INNOTRANS-2012



INNOTRANS-2014





JSC «LZM»

Certification plans

Quality management system of the enterprise is certified for compliance with the international standard 9001-2008 and state standard specification GOST ISO 9001-2011 by Bureau Veritas Certification Body.

Management of quality in welding is certified for compliance with the Welding Quality Management Scheme EN ISO 3834 Part 2

Certification of system of industrial and fire safety and labor protection OHSAS 18001:2007 is in the process of fulfillment, as well as certification of system of ecological management on ISO 14001 international standard.

Preparation for certification of our enterprise for compliance with International Railway Industry Standard – IRIS – has been started.



1. LZM have many years of experience in the development and delivery of the electro-technical equipment for different industries in Russia, CIS and Europe.
2. The absence of localized in Russia production of major manufacturers of electric motors, high voltage drives, special application transformers and other high quality electro technical equipment.
3. At LZM facilities it is possible to organize separate completely autonomous business unit with separate production and offices. LZM ready at its own expense to carry out the purchase of equipment for assembly and production of electro-technical equipment.
4. Availability of production areas for the starting new product lines.
5. LZM independent dynamically developing industrial company with production sites in Russia and Estonia. Construction and purchase of equipment were carried out without the involvement of loans.
6. LZM hope to become a reliable and trustworthy partner deeply integrated in Russian railway market.



JSC «LZM»

Tank you for your attention!
ご清聴ありがとうございます



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