



TECHVAGONMASH - package solutions for industrial engineering



## History of the enterprise

Research and production enterprise TECHVAGONMASH has a forty-year experience of design and manufacturing of special process equipment for enterprises of transport machine building.



1965 – Establishment of a special design-engineering department of the equipment of the Ukrainian SSR State Planning Committee.

1972 – Establishment of the all-union scientific research and design technology institute of railway car building (VNIPTIvagon).

1982 – Putting into operation of a VNIPTIvagon pilot plant.

1988 – Establishment of a scientific and production association consisting of three institutes (VNIPTIvagon, VoroshilovgradPTIMASH, PTIMASH Kharkov and a pilot plant.

1972 - 1991 – VNIPTIvagon made designs as well as equipped almost all the railway car building enterprises of the USSR with special process equipment during this period of time.

1994 – Establishment of Techtransmash JSC

2003 – Establishment of RPE TECHVAGONMASH LLC

2005 – Putting into operation its own production complex.



## ABOUT THE COMPANY MAIN CUSTOMERS

Our customers are large-scale enterprises of transport engineering, metal ware manufacture plants, power engineering enterprises. During the last years our company has developed a number of projects and has taken part in equipping of all railroad car building plants which are under construction.



### Rail car manufacturing

Special technological equipment for the production of railcars



### Rail car repair

Special processing equipment for the repair of rail cars



### Boiler construction

Special technological equipment for the production of tanks and vessels



### Automobile manufacturing

Machinery for the manufacturing of trailers and attachments for commercial vehicles



### Metallurgy

Special technological equipment for pipe production



### Military-industrial complex

Complex projects for the production facilities for the repair of military equipment, artillery and small arms





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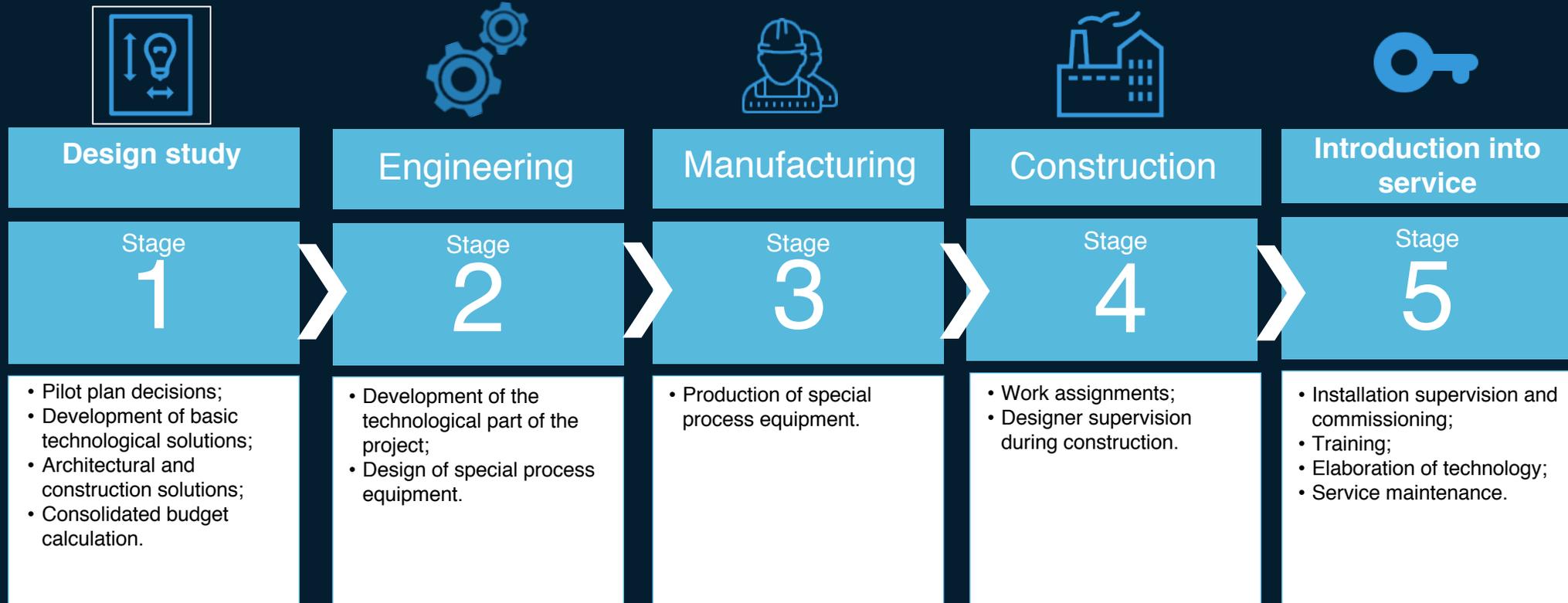
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## TURN-KEY PROJECTS

One of our competitive advantages is the fact that the company provides a full range of services: from the design to the installation supervision and commissioning, including the production of special process equipment.





## ABOUT THE COMPANY POLICY IN QUALITY SPHERE

Company's policy in the sphere of quality assurances aimed at meeting the highest requirements of the customers, and it is based on overall observation of national and international quality standards, on production certification and all product types certification.





## ABOUT THE COMPANY

## MANUFACTURING CAPABILITIES

The production capabilities of the enterprise allow working with both black and stainless steel, along the full cycle of metal products production: from task setting and design to mechanical assembly and painting of the final product.

The enterprise received certificates confirming the compliance of the production of welded metal structures with the requirements of the European standard EN 1090 and the international standard ISO 3834.





## ABOUT THE COMPANY

## FULL CAPACITY



### Design engineering department

All development and design works of the manufactured equipment are computer-based – with the use of the most up-to-date CAD-systems.

These systems allow to carry out the analysis of strain, loss of stability, optimization, frequency and thermal analyses, vibration and shock strengths calculations.



### Process engineering department

Process engineering department deals with design and research work. It performs engineering services on technology development and production organization, reconstruction, technical re-equipment of transport and heavy engineering enterprises.



## THE MAIN AREAS OF THE COMPANY'S ACTIVITY



Special process equipment



Robotic welding centers



Utility vehicles



Mechanization of transport for pipe production



## THE MAIN AREAS OF THE COMPANY'S ACTIVITY



Automated storage systems



Shotblasting, shotpeening equipment



Paint booths



Painting lines

## Automated storage systems



Automated storage systems



## Shotblasting equipment



Shotblasting equipment



## Automated rack-type storage systems



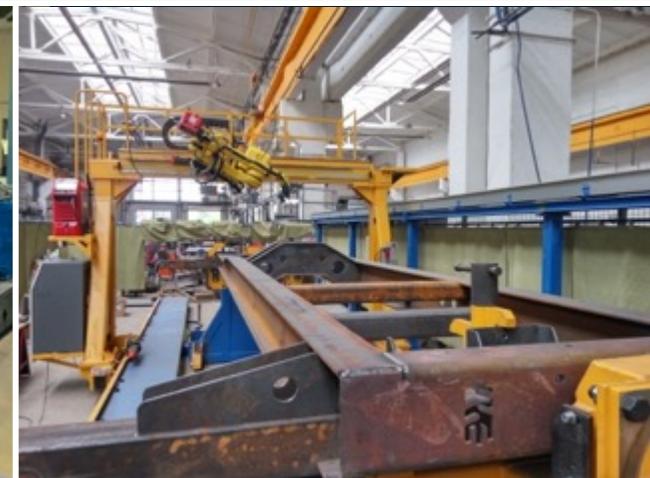
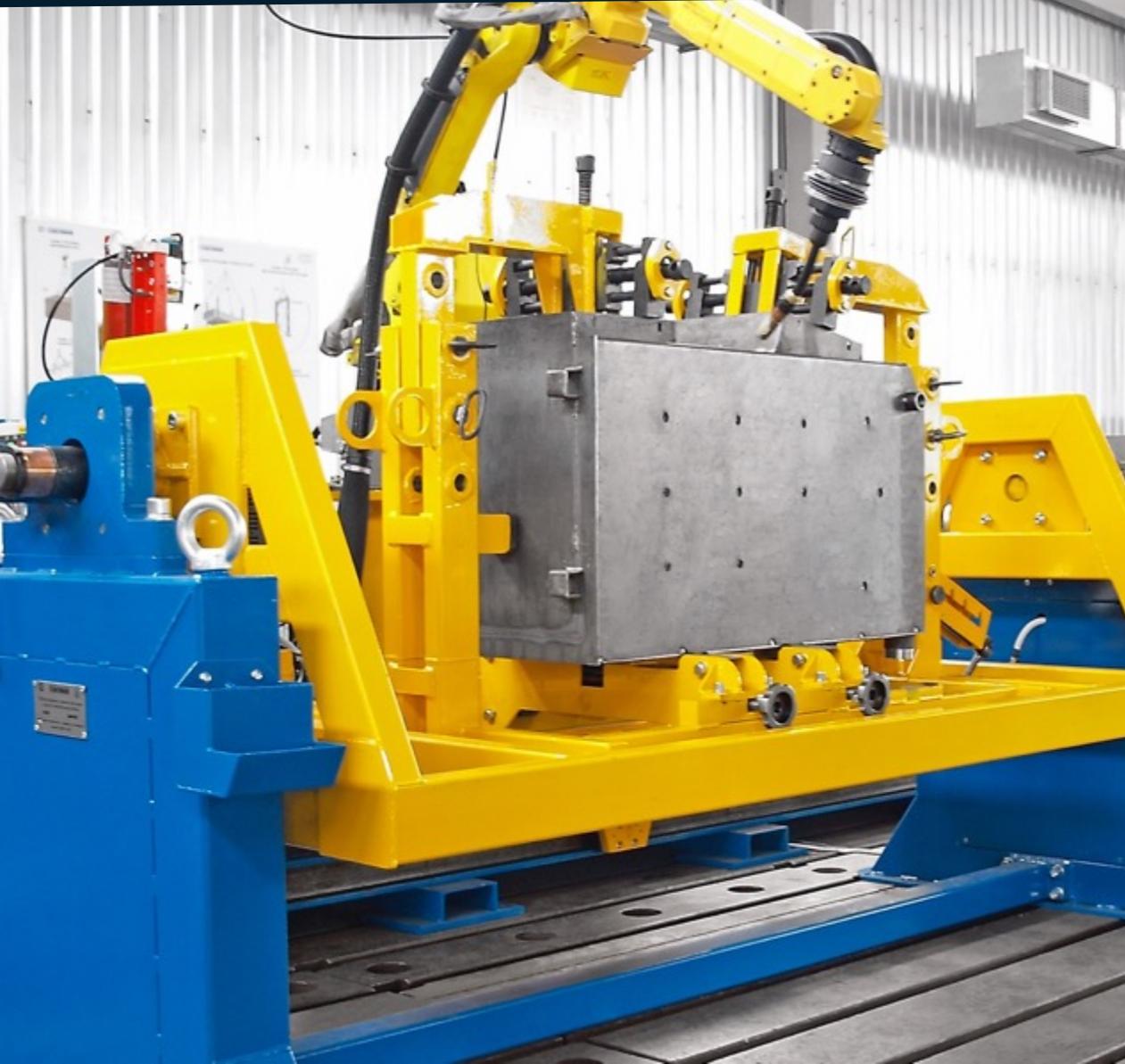
Automated rack-type storage systems



## Painting lines



## Robotic welding systems

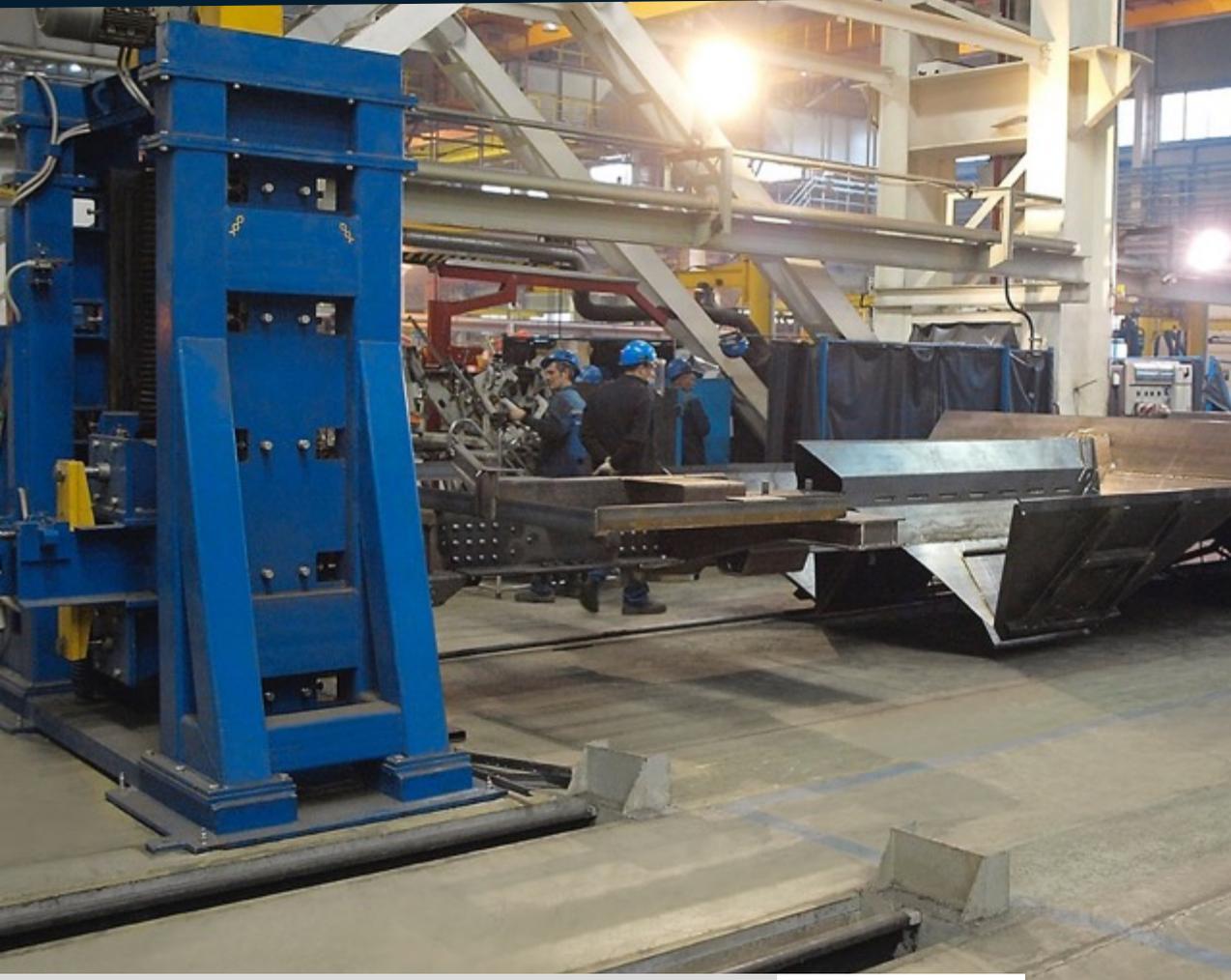


## OUR PRODUCTS

Equipment for freight cars manufacturing

Products | Equipment for the manufacturing of freight cars

## Horizontal welding rotators



15 t welding rotator



4 t welding rotator



Welding rotator for gondola car body



10 t welding rotator

Horizontal welding rotators



Products | Equipment for the manufacturing of freight cars

## Welding rotators



Welding rotators



Products | Equipment for the manufacturing of freight cars

## Riveting equipment



Products | Equipment for the manufacturing of freight cars

## Assembly and welding stands



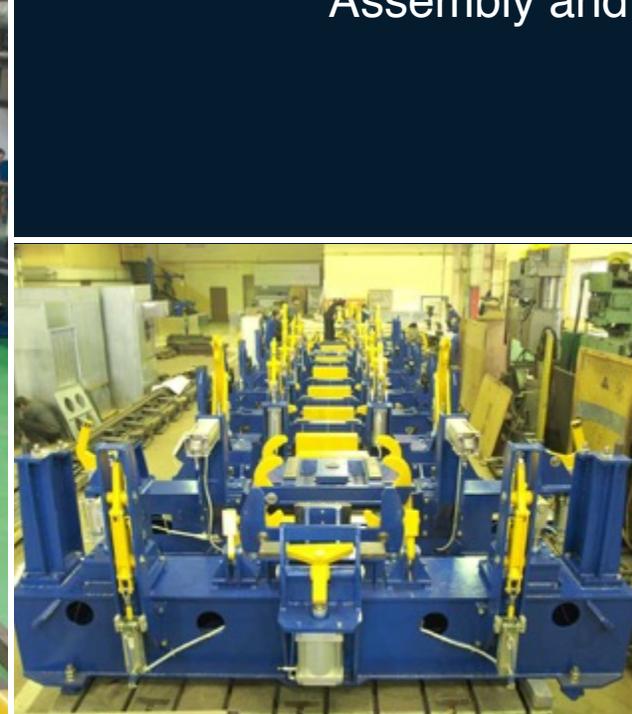
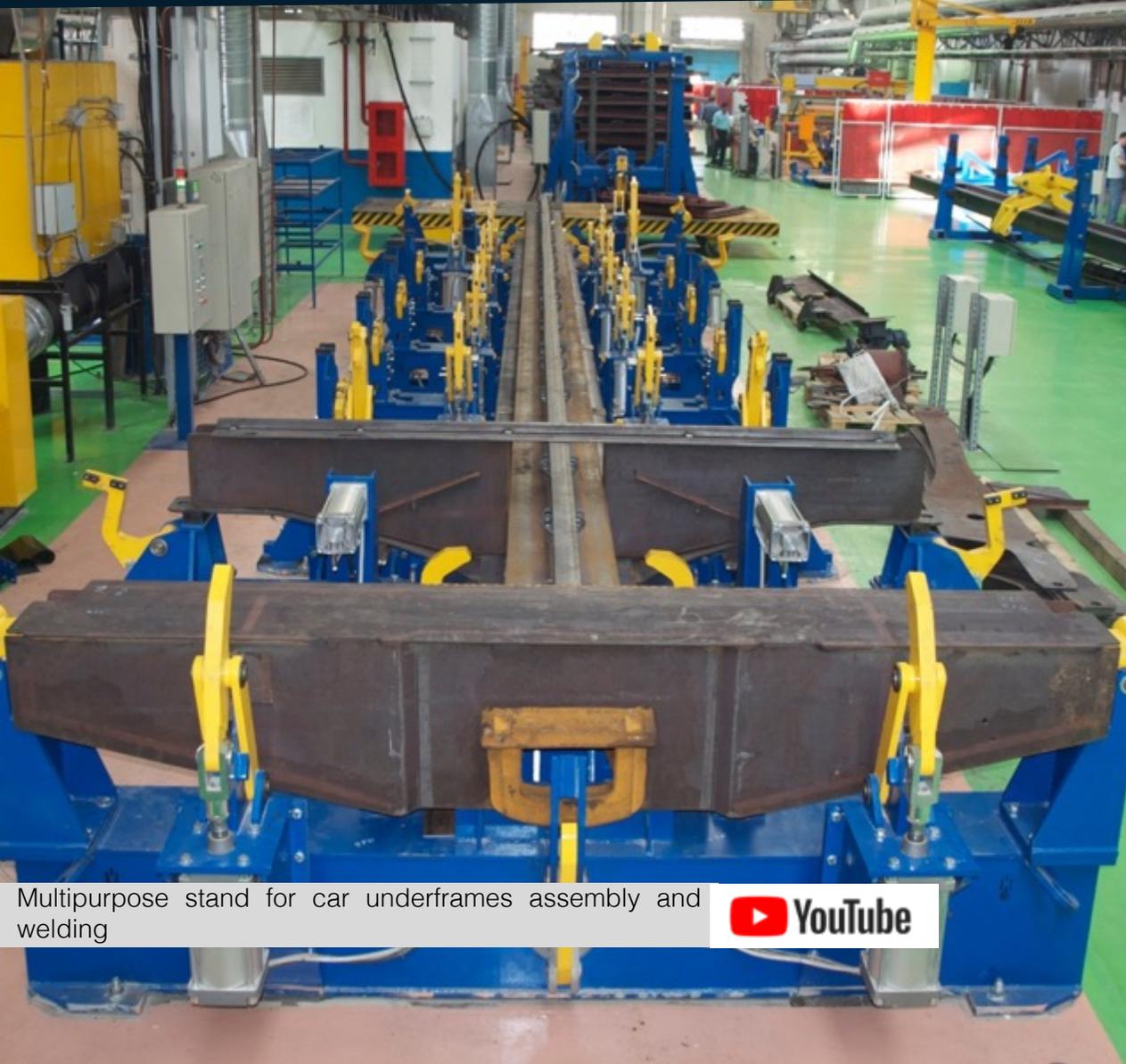
Products | Equipment for the manufacturing of freight cars

## Assembly and welding stands



Products | Equipment for the manufacturing of freight cars

Assembly and welding stands



Multipurpose stand for car underframes assembly and welding



Products | Equipment for the manufacturing of freight cars

## Assembly and welding stands



Line for vessels assembly and automatic welding



Products | Equipment for the manufacturing of freight cars



Robot-aided stand for end walls assembly and welding

Products | Equipment for the manufacturing of freight cars



Robotic and automatic center for freight car center sills assembly and welding

Products | Equipment for the manufacturing of freight cars



Plant for assembly and automatic welding of gondola car side walls

Products | Equipment for the manufacturing of freight cars



Automated drilling center for freight cars center sills

Products | Equipment for the manufacturing of freight cars



Automated drilling center for freight cars center sills

## OUR PRODUCTS

EQUIPMENT FOR THE  
MANUFACTURING OF UTILITY  
VEHICLES

Products | Equipment for the manufacturing of utility vehicles

## Horizontal welding rotators



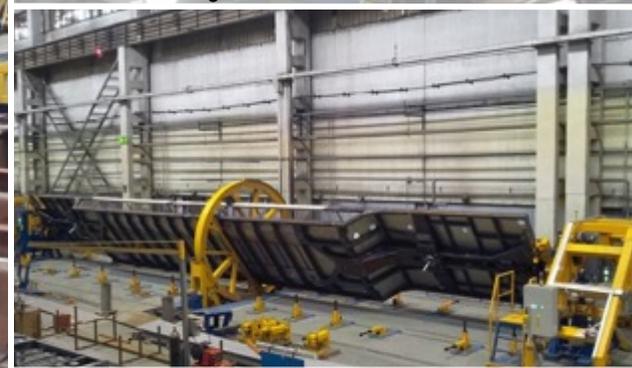
Multipurpose positioner for metro cars frames welding



Positioner for bogie frame



Positioner for frames of double-deck carriages



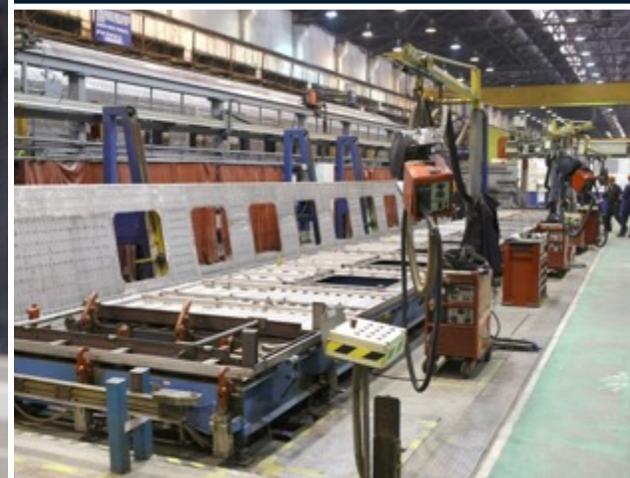
Positioner for frames of double-deck carriages



Rotator for car roof covering sections

Products | Equipment for the manufacturing of utility vehicles

## Assembly and welding stands



Products | Equipment for the manufacturing of utility vehicles



Elevating access platforms

Products | Equipment for the manufacturing of utility vehicles



Multipurpose stand for metro coach roof assembly

Products | Equipment for the manufacturing of utility vehicles



Universal welding machine for automatic welding of metal section on the car roof

Products | Equipment for the manufacturing of utility vehicles



Robotic center for metro car roof welding

Products | Equipment for the manufacturing of utility vehicles



Robotic complex for assembly and welding of sidewalls of metro carriage body

Products | Equipment for the manufacturing of utility vehicles



Multipurpose positioner for welding the frames of double-deck passenger carriages

## OUR PRODUCTS

Equipment for manufacturing of  
traction rolling stock



Products | Equipment for manufacturing of traction rolling stock



Horizontal welding rotator

Products | Equipment for manufacturing of traction rolling stock



Horizontal welding rotator

Products | Equipment for manufacturing of traction rolling stock



Transfer table for electric locomotives

Products | Equipment for manufacturing of traction rolling stock



Turn-table for electric locomotives

Products | Equipment for manufacturing of traction rolling stock



Shotblasting chamber

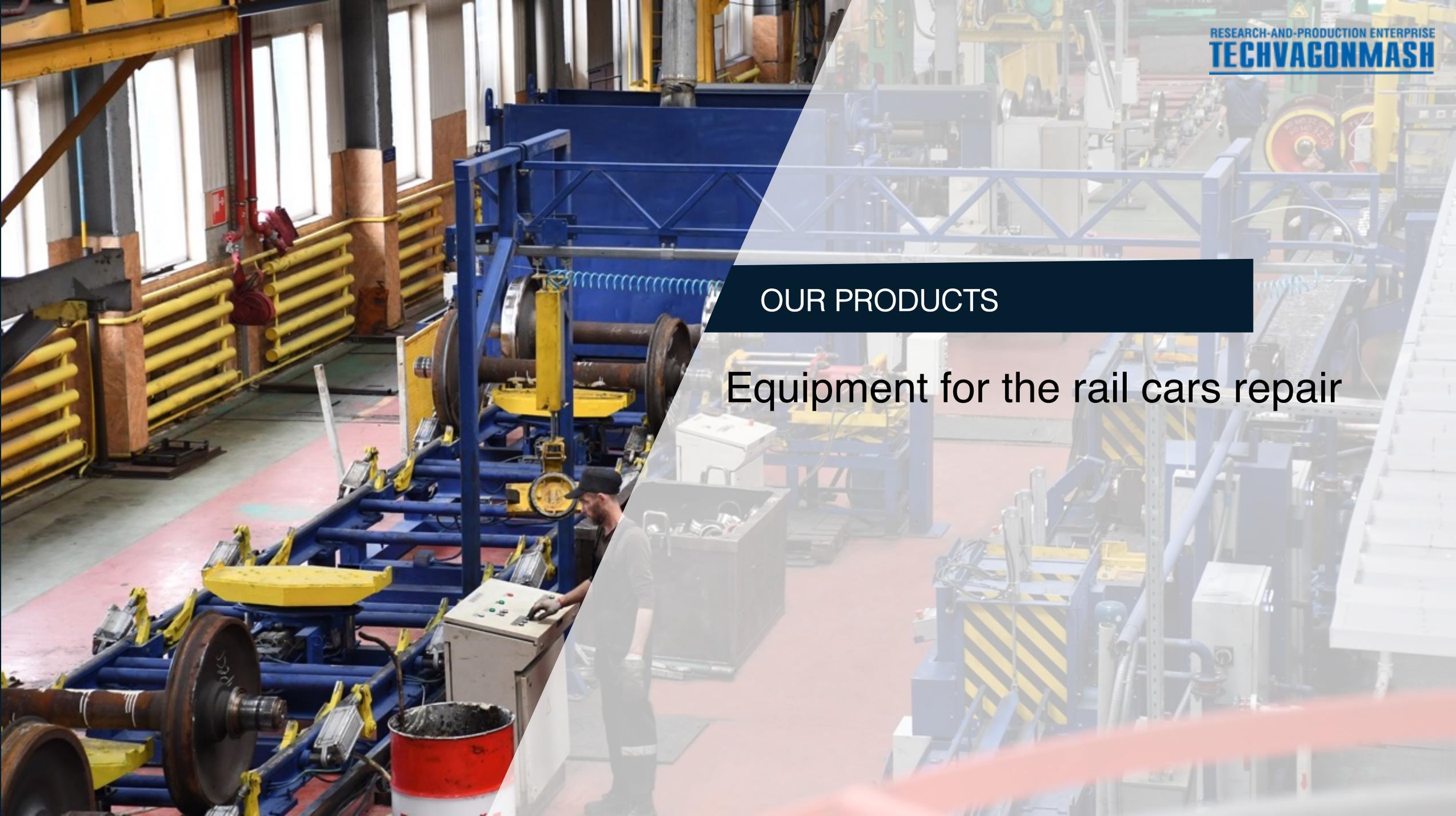
Products | Equipment for manufacturing of traction rolling stock



Elevating access platforms

## OUR PRODUCTS

Equipment for the rail cars repair



Products | Equipment for the repair of rail cars

## Axle-box unit and bearings dismantling and washing system



## Our products

Equipment for the manufacturing of  
trailed and attached machinery for  
commercial vehicles

Products | Equipment for the manufacturing of trailed and attached machinery for commercial vehicles

## Horizontal welding rotators

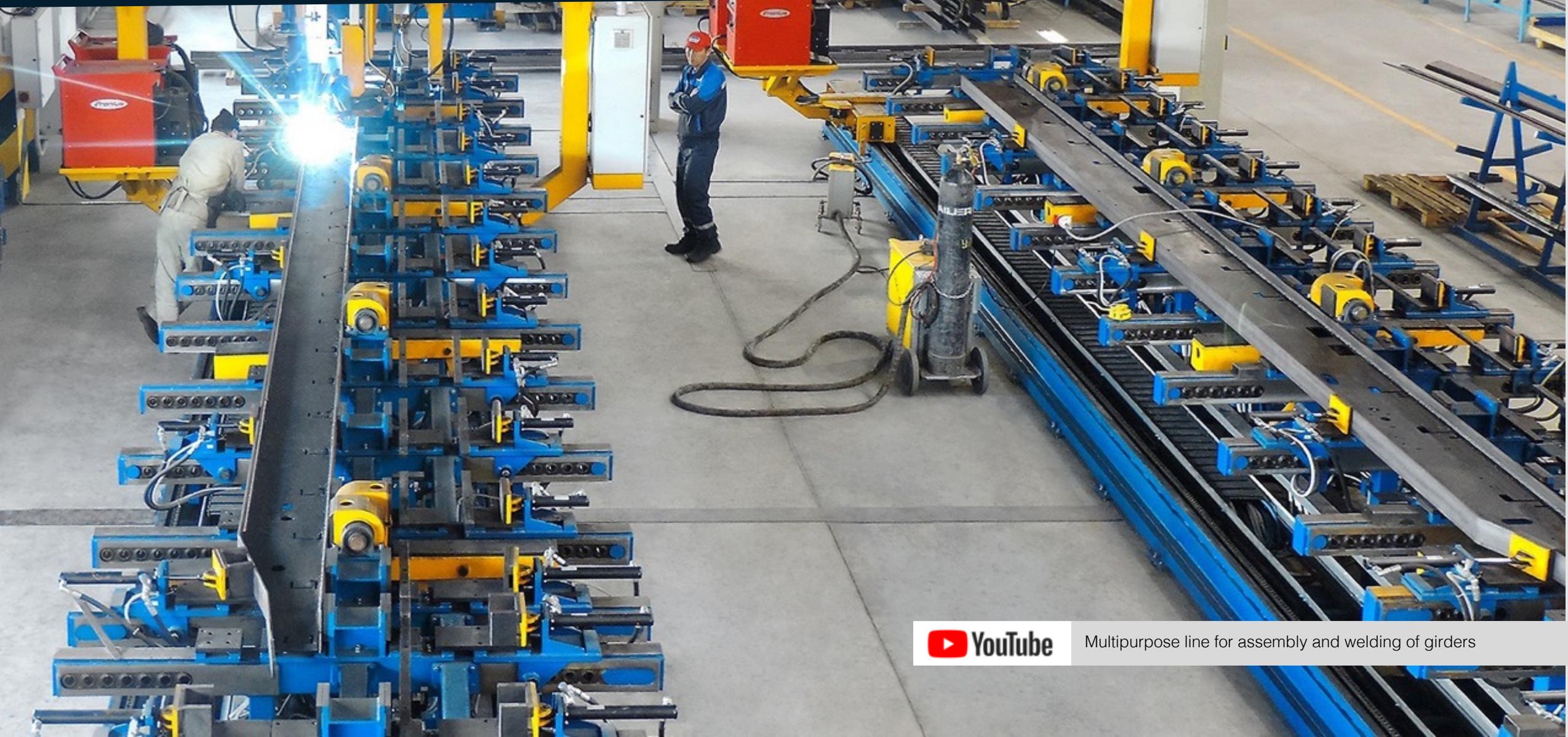


Products | Equipment for the manufacturing of trailed and attached machinery for commercial vehicles



Stand for insulated bodies assembly

Products | Equipment for the manufacturing of trailed and attached machinery for commercial vehicles



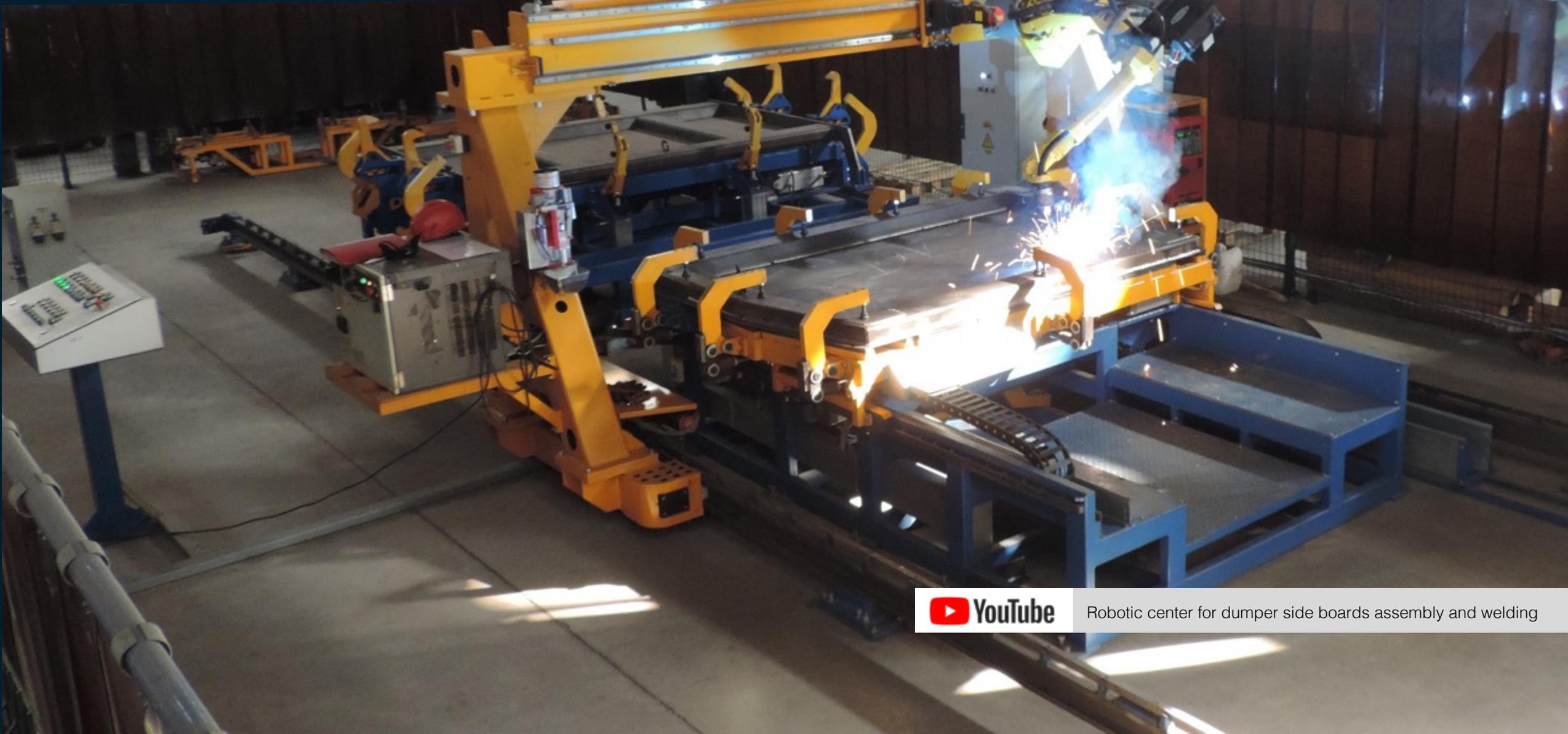
Multipurpose line for assembly and welding of girders

Products | Equipment for the manufacturing of trailed and attached machinery for commercial vehicles



Robotic center for assembly and welding of a dump truck back door

Products | Equipment for the manufacturing of trailed and attached machinery for commercial vehicles



Robotic center for dumper side boards assembly and welding

Products | Equipment for the manufacturing of trailed and attached machinery for commercial vehicles



Paint booth

Products | Equipment for the manufacturing of trailed and attached machinery for commercial vehicles



 **YouTube** Multipurpose stand for dump trucks assembly

## OUR PRODUCTS

Equipment for metallurgy

Products | Equipment for metallurgy



Integrated automated line for weighing, length measuring, stamping and marking of pipes



Inspection rack for inspection and acceptance of pipes

Products | Equipment for metallurgy



Railway wheels painting line



Railway axles coating line

Completed projects |



Wheel set painting line

## COMPLETED PROJECTS

- LLC LTG Cargo - arrangement of production of freight cars.
- LLC UzAutotrailer - arrangement of production of trailers and attachments for commercial vehicles.
- JSC Tikhvin Freight Car Building Plant - a set of equipment for the production of center girders and frames for freight gondola cars.
- ALC Popasna Railway Car Repair Works - arrangement of production of freight cars.
- LLP Kazakhstan Carriage Building Company - arrangement of production of freight cars.
- CJSC Mogilev Carriage Works - arrangement of production of freight cars.
- CJSC Osipovichi Transport Engineering Plant - arrangement of production of freight cars and tank containers.

Completed projects | Freight car building

## Organizing the freight car building

**Customer:** LLC LTG Cargo

### **Competences of RPE TECHVAGONMASH:**

- Development of design and working documentation for a new plant.
- Development of technology for products planned for manufacturing.
- Development of design documentation, manufacture and supply of special process equipment and tooling.
- Installation, commissioning, training of the Customer's personnel how to operate the equipment.
- Adjusting technology and the release of the first batch of products.
- Warranty and post-warranty maintenance of equipment.

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**Performance period:** 2020-2021.  
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Completed projects | Automobile building

## Arrangement of manufacture of trailers and attachments for commercial vehicles

**Customer:** LLC Uzautotrailer

### Competences of RPE TECHVAGONMASH

- Development of design and working documentation for a new plant.
- Development of manufacturing technology for products planned for release.
- Supply of standard equipment.
- Development of design documentation, manufacture and supply of special process equipment and tooling.
- Construction support.
- Installation supervision, commissioning, training of the Client's personnel how to operate the equipment.
- Adjusting technology and the release of the first batch of products.
- Warranty and post-warranty maintenance of equipment.

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**Performance period:** 2013-2015.  
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Completed projects | Freight car building

## Arrangement of manufacture of gondola cars

**Customer: ALC Popasna Railway Car Repair Works**

### Competences of RPE TECHVAGONMASH:

- Development of design and working documentation for a new plant.
- Development of manufacturing technology for products planned for release.
- Supply of standard equipment.
- Development of design documentation, manufacture and supply of special process equipment and tooling.
- Installation supervision, commissioning, training of the Client's personnel how to operate the equipment.
- Adjusting of technology and release of the first batch of products.
- Warranty and post-warranty maintenance of equipment.

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**Performance period: 2010-2011.**  
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Completed projects | Freight car building

A complex of equipment for the manufacturing of center beams and frames for freight gondola cars

**Customer: JSC Tikhvin Freight Car Building Plant**

### **Competences of RPE TECHVAGONMASH:**

- Development of design and working documentation for a new plant.
- Development of manufacturing technology for products planned for release.
- Supply of standard equipment.
- Development of design documentation, manufacture and supply of special process equipment and tooling.
- Installation supervision, commissioning, training of the Client's personnel how to operate the equipment.
- Adjusting of technology and release of the first batch of products.
- Warranty and post-warranty maintenance of equipment.

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**Performance period: 2013-2014.**  
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Completed projects | Freight car building

## Arrangement of gondola cars manufacture

**Customer:** LLP Kazakhstan Carriage Building Company

### Competences of RPE TECHVAGONMASH:

- Development of design and working documentation for a new plant.
- Development of manufacturing technology for products planned for release.
- Supply of standard equipment.
- Development of design documentation, manufacture and supply of special process equipment and tooling.
- Installation supervision, commissioning, training of the Client's personnel how to operate the equipment.
- Adjusting of technology and release of the first batch of products.
- Warranty and post-warranty maintenance of equipment.

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**Performance period:** 2010-2011.  
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Completed projects | Freight car building

## Arrangement of manufacture of freight cars

**Customer:** CJSC Mogilev Carriage Works

### Competences of RPE TECHVAGONMASH:

- Development of manufacturing technology for products planned for release.
- Development of design documentation, manufacture and supply of special process equipment and tooling.
- Installation supervision, commissioning, training of the Client's personnel how to operate the equipment.
- Warranty and post-warranty maintenance of equipment.

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**Performance period:** 2008-2010.  
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Completed projects | Freight car building

Arrangement of manufacture of freight wagons  
and tank containers

**Customer: CJSC Osipovichi Transport Engineering Plant**

**Competences of RPE TECHVAGONMASH:**

- Development of manufacturing technology for products planned for release.
- Development of design documentation, manufacture and supply of special process equipment and tooling.
- Installation supervision, commissioning, training of the Client's personnel how to operate the equipment.
- Adjusting of technology and release of the first batch of products.
- Warranty and post-warranty maintenance of equipment.

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**Performance period: 2008-2010.**  
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