

*TO BECOME MONGOLIAN ECONOMY PILLAR AND  
THE POWER OF DEVELOPMENT*





## ABOUT US

### Railway Transportation

- ▶ Railway freight
- ▶ Logistic service
- ▶ Transshipment terminal
- ▶ Road transport terminal

### Rolling Stock Maintenance

- ▶ Locomotive depot
- ▶ Wagon depot

### Railway Infrastructure

- ▶ Road rail damage inspection wagon
- ▶ Road diagnostic wagon-laboratory

### Projects

- ▶ Completed projects
- ▶ Ongoing projects

### Controlling and Monitoring

### Railway design



GOVERNMENT OF MONGOLIA



66%

Shareholders



MONGOLIAN RAILWAY

34%



Owner

### COMPANY INTRODUCTION

“Tavantolgoi Railway” LLC was established on August 08, 2018 and is Mongolian specialized railway engineering company, which carries out complex activities in the field of construction, operation, transportation, repair of infrastructure and rolling stock.

We are implementing railway operations and project management in accordance with the national interests, quality, safety and international standards.

“Tavantolgoi Railway” Co., Ltd. aims to become the best national enterprise providing “Complex Railway Operation and Transportation Services” domestically as well as internationally, based on our experience, specialized team, operational advantages and accumulated resources.

### WE ARE INTRODUCING INTERNATIONAL STANDARDS

We have simultaneously introduced international standards to strengthen corporate governance and bring our operations up to the world standards in the short term.



Environment management  
ISO 14001



Quality management  
ISO 9001



Occupational health and safety  
ISO 45001



Information security management  
ISO 27001



Guidance on Project Management  
ISO 21500

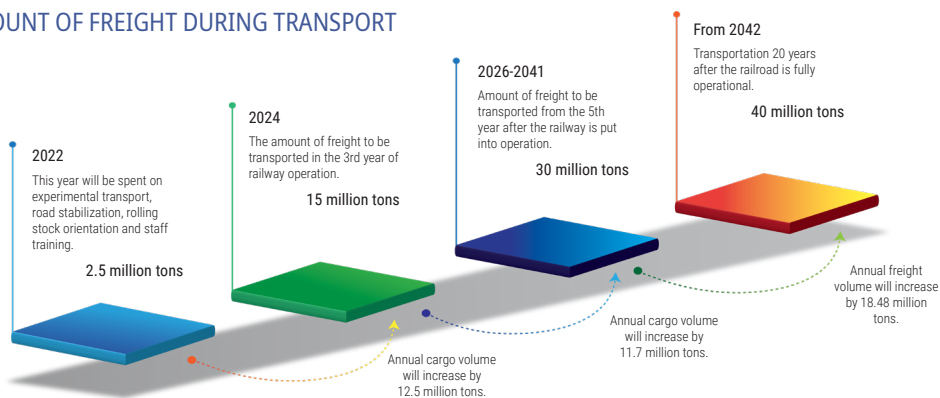
# RAILWAY FREIGHT

## ALL TYPES OF RAILWAY FREIGHT TRANSPORTATION SERVICES

Our company providing 24-hours transportation services in the following directions:

- ▶ Tavantolgoi - Gashuunsukhait
- ▶ Tavantolgoi - Tsogttsetsii – Zuunbayan
- ▶ Tavantolgoi - Tsogttsetsii – Zuunbayan
- ▶ Tavantolgoi – Tsogttsetsii – Khangii
- ▶ Gashuunsukhait – Tavantolgoi
- ▶ Gashuunsukhait – Tavantolgoi – Tsogttsetsii – Zuunbayan
- ▶ Gashuunsukhait – Tavantolgoi – Tsogttsetsii – Khangii

### AMOUNT OF FREIGHT DURING TRANSPORT



Source: "Railway Transport Development Plan 2050" approved by Resolution No. 03 of February 2021 of "Tavantolgoi Railway" LLC.



## TAVANTOLGOI STATION

Tavantolgoi station is open to all types of freight transportation with 24 hours operation. The station has 12 receiving and sending rails with a useful length of 1317-2587 m and is capable of processing 1400 wagons and 90,000 tons of freight per day when working at full capacity. The station has DJU brand - 1 dynamic, SC-150 brand - 1 static, 2 wagon weigher, 1 changeover carriage and 156 wagons serving in 3 branch rails to process 10,000 tons of cargo per day.



## GASHUUNSUKHAI STATION

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Gashuunsukhait station is with 24-hours, open to all types of freight operations. The station has 7 receiving and sending rails with a useful length of 1659-2486 m and is capable of processing 1000 wagons and 64000 tons of freight per day at full capacity.



## GASHUUNSUKHAI TRANSSHIPMENT TERMINAL

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The total area of Transshipment terminal is 30 hectares and based on Gashuunsukhait Border Port and it is capable of processing 24.9 million tons of freight a year with its full operation. The terminal carries out loading, unloading, storage and weighing of all types of freight in 2 places. The two places are railway terminal and road transport terminal.

## ROAD TRANSPORT TERMINAL

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**In railway terminal:** 600 containers, 19.5 thousand tons of freights are processing per day and 2100 TEU containers can be stored.

**In road transport terminal:** 400 containers, 14 thousand tons of freights are processing per day and 800 TEU containers can be stored.





## LOGISTIC SERVICES

“Freight forwarder” services for railway and multimodal transportation:

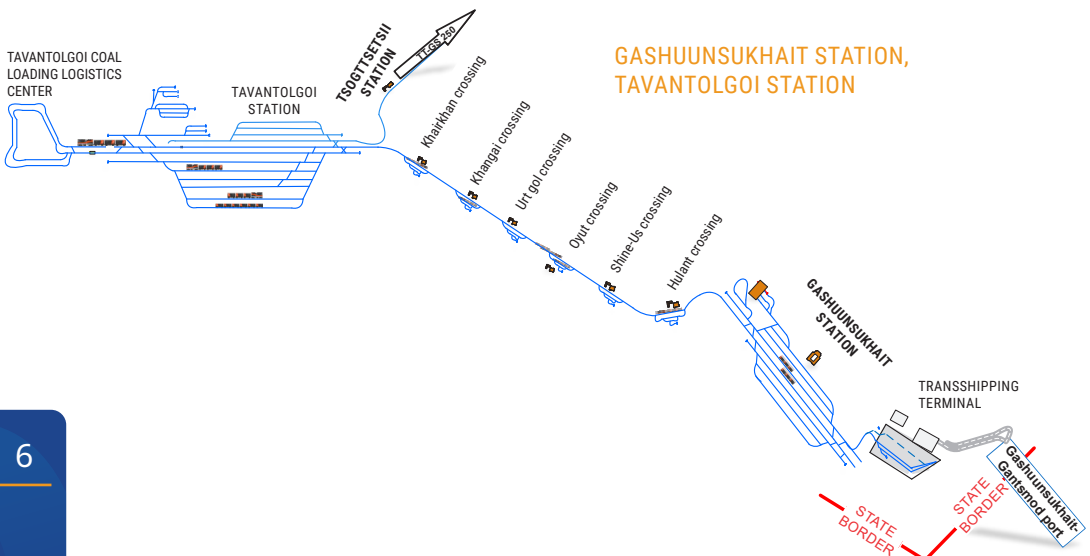
- ▶ International freight services
- ▶ Domestic railway and multimodal freight forwarder
- ▶ Project logistics

All types of railway freight transportation services:

- ▶ “Use of the infrastructure of the Railway network” service
- ▶ Dangerous goods freight
- ▶ Multimodal transportation of mining products
- ▶ All type of container transportation
- ▶ Over-sized or super heavy cargo transportation by open top rolling stock

Terminal and logistic services:

- ▶ Services of loading, unloading and securing all types of cargo from one vehicle to another
- ▶ Storage of all types of containers, machinery and equipment at Tavantolgoi and Gashuunsukhait stations
- ▶ All types of document processing in transportation and logistics
- ▶ Customs clearance, freight declaration services
- ▶ Transshipment of containers and all types of freight from all types of vehicles





## ROLLING STOCK MAINTENANCE

### LOCOMOTIVE

Locomotives Transportation will be carried out on the Tavantolgoi-Gashuunsukhait railway line with 16 maintrack SD70ACe/LW series locomotives of the US company "Progress Rail A Caterpillar" and one shunting 2GS16C series locomotive of the "National Railway Equipment" company. Specifications of SD70ACe/LW series locomotives:

- ▶ Towing a train weighing 5000 tons
- ▶ Power rating of 3355 kW (4500 BHP)
- ▶ Traction system AC-DC-AC
- ▶ Engine electronic unit injection
- ▶ HTRC model radial Bogie system
- ▶ Meets the requirements of EU Stage IIIA Emission compliant
- ▶ Easy maintenance and operation costs
- ▶ Optimized with high reliability construction

### LOCOMOTIVE DEPOT

The Locomotive Depot was the first depot built for maintenance, routine maintenance and overhaul of American locomotives and has three main components:

1. A twin track shed for fuel, coolant, oil and sand for the locomotive
2. Minor repair shop with one track canal
3. Overhaul workshop with two track canal

Locomotive depots and sheds are fully equipped with the following technological equipment:

- ▶ Overhauled 45 tons overhead crane
- ▶ 10 tons bridge crane with minor repairs
- ▶ The Underfloor Wheel Lathe is a fully automatic base machine with the latest German technology SNS control
- ▶ Wheelset Replacement Unit is a fully automatic machine with CNC control made of latest technology
- ▶ 4 Jacks of 40 tons are installed
- ▶ Fully equipped with German mechanical tools
- ▶ Charging the locomotive on the track of the station without removing it from the train with the latest technology equipment.
- ▶ The equipment of sand preparation, distribution and storage engineering facilities is fully automatic.



## WAGON

For railway freight transportation we were received one passenger motorcar GCY300 from People's Republic of China and four types of 811 wagons in total from the Tikhvin wagon factory, Russia, including 400 gondola model 12-9853, 390 flat car model 13-6724, 8 box car model 11-6874, 13 multi-purpose platform wagon model 13-6851-04.



## WAGON REPAIR DEPOT

Wagon repair depot is equipped with the most modern equipment in Mongolia, has 6 main workshops, 2 repair tracks with 4 departments, 6 sets of jacks, 104 types of semi and fully automated equipment, hand tools and devices. It has the capacity to repair more than 1,500 freight wagons.

### Wagon depot composition:

- ▶ Disassembly repair workshop
- ▶ Bogie repair shop
- ▶ Wheel repair shop
- ▶ Auto brake department
- ▶ Coupler and supporting devices repair department
- ▶ Mechanical equipment workshop
- ▶ Non Destructive Testing Department
- ▶ Opening repair department
- ▶ Side chassis and beam repair department
- ▶ Brake triangle repair department





We are working to ensure the safety of Tavantolgoi-Gashuunsuhait and Tavantolgoi-Tsogttsetsii railway lines in the areas of railway superstructure, signalling, communication and energy.

Our company conduct the following activities in the field of railway infrastructure:

- ▶ Assembling railway superstructure, automatic telemechanics and communication facilities;
- ▶ Assembling the infrastructure of the railway;
- ▶ Repair the infrastructure of the railway;
- ▶ Build infrastructure;

The wagons are being used in the operation for diagnosis, control and analysis of railway infrastructure, designed to ensure the safety of train traffic, manufactured by “FIRMA-TBEMA” company in Moscow, Russia with modern advanced technology.

## RAILWAY INFRASTRUCTURE

## RAILWAY INFRASTRUCTURE



**“Road rail damage inspection wagon VD-UMT-2”** can monitor the following indicators.

- ▶ Monitoring railways with contact and non-contact systems
- ▶ Monitor the appearance of the road with the help of high-resolution cameras.
- ▶ The railway damages detected more accurately and image looks completely clear.

**“Road diagnostic wagon-laboratory Decart No. 1106”** can monitor the following indicators.

- ▶ The technical status of the railway and its results will be automatically assessed and combined with the assessment system of the CP-515 instruction in force in Mongolia.
- ▶ Road gauge and level will remotely connect to the measuring device of the wagon
- ▶ Diagnose gauge, level, direction and subsidence by contact and non-contact systems and video diagnostics
- ▶ Diagnose with a non-contact system at high speed and with main geometric dimensions of the road





### Tavantolgoi-Gashuunsukhait Railway Complex Project

The Tavantolgoi-Gashuunsukhait railway will cover the territory of Tsogttsetsii, Bayan-Ovoo and Khanbogd soums of Umnugovi province and with length of 233.6 km from the Tavantolgoi mine to the Gashuunsukhait port. Within the framework of the project, for the first time in Mongolia, a first-class, heavy haul railway with a capacity of 30 million tons of coal per year is built, and new innovations are introduced in all areas such as signaling, interlocking system, flash butt welding technology, and rolling stock. Transportation of the railway began on September 9, 2022, and the infrastructure of the project was put into permanent use in May 2023.

### 21,9 km railway connection of Tavantolgoi-Gashuunsukhait and Tavantolgoi- Zuunbayan

The Tavantolgoi-Gashuunsukhait Railway is connected to the 416.1 km rail line Tavantolgoi-Zuunbayan by a 21.9 km rail line, thus connecting the port of Gashuunsukhait to the unified rail network of Mongolia and allowing rail transportation to Russia and China. It also opened the second railway crossing between Mongolia and China.



## ONGOING PROJECTS

### Cross-Border railway project of Gashuunsukhait-Gantsmod port

This project will cover the territory of Khairkhan bag, Khanbogd soum, Umnugobi province and our Tawantolgoi-Gashuunsukhait railway will be connected with the China Gantsmod-Wanshuichuan railway. The main works to be carried out under the project include (1) cross border narrow and wide gauge bridge structure (2) In addition to the construction of a standard gauge station, complex engineering facilities such as border and customs control areas will be created. The implementation of this project will create a second rail link between Mongolia and the People's Republic of China.

### Tavantolgoi Coal Loading Logistics Center Project (TCLLC)

Tavantolgoi Coal Loading Logistics Center Project is a fully automatic and complex development that receives coal transported from the West and East Tsankhi mines with a grain size of 1000 mm, crushes it with a roller crusher, and mixes it to a size of no more than 300 mm and loads it into wagons. With the completion of the project, 135 new jobs will be created and it will have the capacity to transport 20 million tons of coal per year.

This facility for loading coal into wagons and containers is the first project in Mongolia, and it has the unique and advantageous feature of automatic loading of trains in the middle of movement.

### Gashuunsukhait Transshipment Terminal (GTT)

Gashuunsukhait Transshipment Terminal is a one-stop 24 hours operating platform services for transshipment of containerized cargo transported by rail from Tavantolgoi Group of deposits from wagons to cars, from wagon to wagon, storage in the field, preparation of documents related to export transportation and payments. The entire terminal area will be a customs control zone, creating 167 new jobs and after the terminal area fully operational, it has the capacity to handle 24.9 million tons of freight per year.







## Monitoring and Controlling Projects

Our company team of professional engineers monitoring and controlling the Contractors in the implementation of EPC contract for the ongoing projects. Engineers and technical officers who are implementing the monitoring and controlling have an international experience in their field. We have a field laboratory with complete tools and equipment to carry out soil analysis, stone, cement and cement-reinforced foundation analysis of road and railway substructures, measuring instruments, equipment and professional software, licensed. Also use a specialized software in operations and monitoring of quantity and construction stages.

### We are conducting the following activities

- ▶ To supervise the preparation of technical documents for the design of the lower and upper structures of the railway
- ▶ To monitor the implementation of construction project's "Master Plan"
- ▶ To monitor, control and verify the Interim Payment Certificate (IPC)
- ▶ To control bridges, pipelines and drainage ditches and their design and execution
- ▶ Quality and customer monitoring the construction of the lower and upper structures of the railway
- ▶ Geodetic monitoring of engineering facilities being built on the project

### Biggest Projects done in the field of monitoring

- ▶ "Tavantolgoi-Zunbayan - 416.1 km railway"
- ▶ "Tavantolgoi-Gashuunsukhait 233.6 km railway complex"
- ▶ "21.9 km railway connecting Tavantolgoi-Gashuunsukhait and Tavantolgoi-Zuunbayan"
- ▶ "Gashuunsukhait Transshipment Terminal"
- ▶ "Tavantolgoi Coal Loading Logistics Center"

# RAILWAY DESIGN

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We are implementing the railway exploration, design development and integrated cartographic operations in accordance with the goals, objectives, requirements and standards of the railway projects implemented by the company and newly planned railway projects in the territory of Mongolia.

- ▶ Exploration, measurement and research work
- ▶ Development of technical design and feasibility study
- ▶ Development of work design (detailed engineering design)
- ▶ Phased development of carrying capacity of infrastructure in use
- ▶ Develop a design for the newly built basic structure based on the regional characteristics and prospects based on the modern railway technique and technological progress
- ▶ Development of railway superstructure work plan, probability analysis, major repair and planned repair technology
- ▶ Development of design plans and calculations for railway stations, crossings and planning
- ▶ Designing and designing artificial structures for the passage of water on railway tracks, terminals and loading areas
- ▶ Development of extension design related to increase in carrying capacity of old roads
- ▶ Making small, medium and large-scale topographic maps of roads and railway

## We have been completed the following railway design works

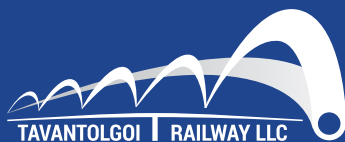
- ▶ “Feasibility study” design development of connection of Tavantolgoi-Gashuunsukhait and Tavantolgoi-Zuunbayan railways
- ▶ “Feasibility study” design development of Gashuunsukhait Transshipment Terminal
- ▶ Design development of Temporary Loading Area in front of Tavantolgoi station ring road
- ▶ Research design and basic research of Cross-border railway




## OUR COOPERATION

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- ▶ Since 2018, we are expanding our cooperation with railway company of the People's Republic of China, Russian Federation, United States of America and South Korea in the field of to strengthen human resources, spare parts of locomotives and wagon, and their maintenance work, to develop feasibility study for our large projects.
- ▶ We are expanding our cooperation with Tikvin Wagon Factory of Moscow, Russian Federation, "TVEMA" LLC and "ENERGOS" Group in the field of transportation, locomotives, wagon, spare parts and maintenance work.
- ▶ We are continuing our cooperation by signing a Memorandum of Understanding (MOU) to receive 16 main track SD70ACe/LW locomotives of the US company "Progress Rail A Caterpillar" and one shunting 2GS16C series locomotive of the "National Rail Equipment" company.
- ▶ We still continuing our cooperation with "China Energy International" LLC and "China Energy Bashing Railway" LLC by signing a Memorandum of Understanding (MOU) to intensify the construction of the Cross-border railway of Gashuunsukhait-Gantsmod port.



Please scan the QR to get more information

 11<sup>th</sup> Floor, Union Bulding, 1<sup>st</sup> Khoroo,  
13<sup>th</sup> Khoroolol, 62 Sun Road, Sukhbaatar  
District, Ulaanbaatar City 14230, Mongolia  
 976 7777727  
 ttrailway@ttz.mn  
 www.ttz.mn



**TAVANTOLGOI RAILWAY LLC**