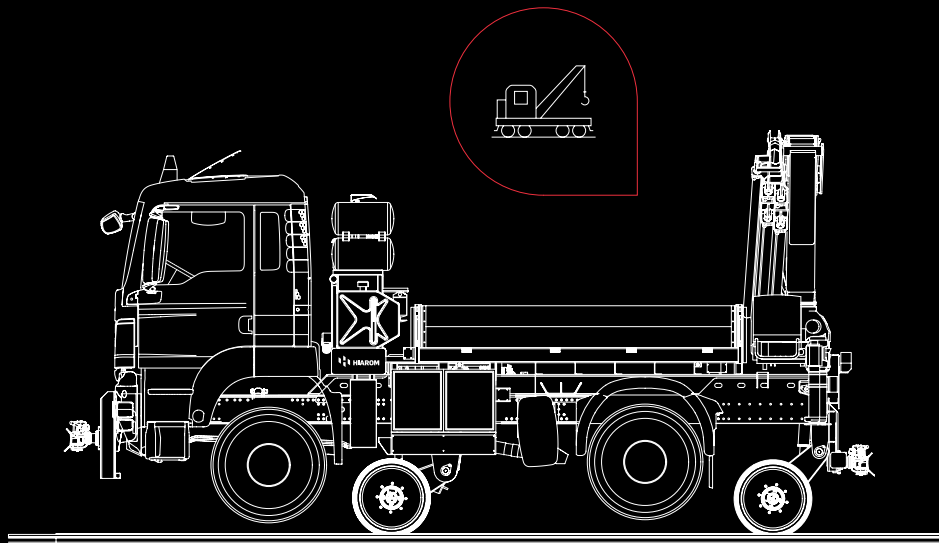




RAILWAY

INNOVATING SIMPLICITY



▶ HIAROM INVEST SRL
VIDEO PRESENTATION



ABOUT US

Success needs a strong driving force and a reliable partner: Hiarom Railway, Hiarom Invest's railway division, offers you the best dynamics and optimum efficiency so that you can cope with the challenges of our times. Rely on our innovative technologies, maximum economic efficiency and attention to safety. We try to help accelerate the development of advanced efficiency technologies that are not currently available on the market.

OUR VISION

We shape tomorrow's customers mobility.

OUR MISSION

To inspire and influence the engineering community, supporting technology innovation to meet the needs of business partners.

OUR CORPORATE CULTURE

We combine technical excellence and fresh thinking.

CUSTOMER SATISFACTION IS OUR FIRST PRIORITY

We have a highly efficient culture that focuses on the added value activities that benefit our customers. We seek continuous improvement and we work with professionalism to meet our objectives. We are responsible for what we do and we have mechanisms that guarantee the control of our operations and results.

INNOVATION IS ALL ABOUT PEOPLE

High flexibility and competence in production give us an important competitive advantage. Our employees are our company's most important resource. Innovation is all about people. People with passion and perseverance can creatively improve

processes and products, they can invent new ones that make the organization better. It's about doing the right things quickly and accurately in response to continuous changes.

OUR PRODUCTS

Hiarom Railway's main activity is to design, build and repair of railway machinery like road-rail trucks in different configurations, self propelled wagons, multiservice vehicle for tunneling, rail conversions for excavators and working platforms, road-rail shunters.

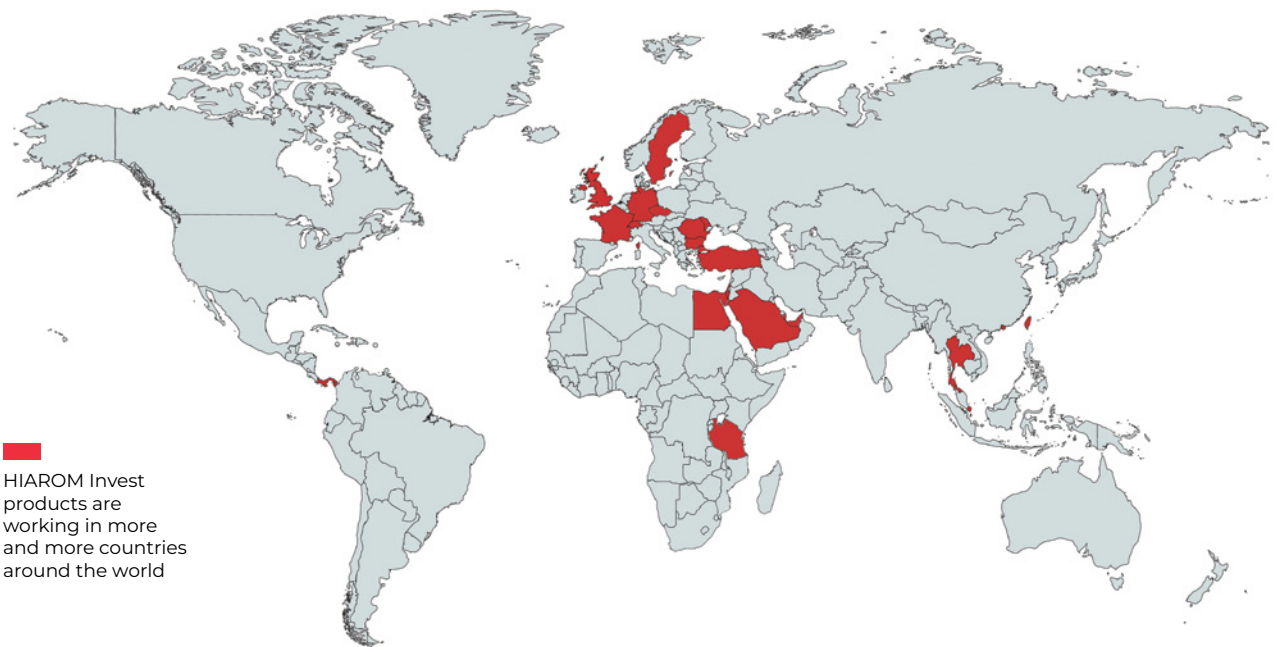
The machines are used for various applications in construction and maintenance works for railway.

CONSULTING - ENGINEERING

Here at Hiarom Invest, we don't just build machines, we build ideas, your ideas! Either you know exactly what you want and we just make it happen in the most efficient way or you are not really sure what would be best for you and our engineers can offer their full professional support, you can rest assured that Hiarom Invest is the place where all is possible. Over time, we have come up with optimum solutions for railway construction in track work, infrastructure, catenary, PLC software and automation systems.

We are using the latest design methods like 3D Drafting, FEA Analysis and Motion Simulation. We are also capable of developing PLC software and automation systems for railway construction machines. We are in line with the latest European Provisions in Machinery Construction. Our team of engineers can help you with FEA computation, design, drafting and prototyping.

Hiarom Railway stands for innovative, reliable and cost-effective custom-made solutions for railway machinery industry.





ROADRAIL TRUCKS

Since 2009 we have been developing road-rail vehicles that can be used in various types of activities and are able to perform multiple tasks, that's why our products are used in some of the most prestigious companies worldwide. We are known for our small and large workload projects, easy rerailling and transfer.

Road-rail trucks are complex and versatile machines that can be driven on public roads, like a normal truck, but also directly on the railway. We are producing road-rail equipment based on original chassis produced by renown brands (Man, Mercedes, Volvo etc.) with two types of traction: tire friction and hydrostatic transmission.

In order to achieve the highest level of safety, we make the conversion according to EC regulations and EN 15746 standard. We offer a broad range of additional equipment, such as: cranes, elevated working platforms, rail manipulators, generators, sweepers etc.

The construction industry is very demanding and to keep up with the competition you need top quality, almost immediate results, without jeopardizing the level of safety, and an equipment that can face any task that it was designed for. At Hiarom Railway we can give you that, while assuring the best rate between the product's life cycle and its cost of maintenance.

SPECIFICATIONS

- Weight: from 3.5 t to 44 t
- Towing capacity: on rail up to 200 t
- Operational temperatures: -20° to +50°
- Operation speed on rail: up to 40 km/h
- Min. curve radius: 80 m
- Different axels configuration: from 4x2 to 8x6 trucks
- Tire friction or hydrostatic drive
- Different rail gauges available

ADVANTAGES

ROAD-RAIL TRUCKS:

- Ability to move both on road and tracks
- Easy on/off railing
- Many configurations available
- No rail traffic occupancy
- Good off-road performance
- Low cost of ownership

OPERATION:

- High flexibility in maneuvering
- Simple rerailling
- Radio Remote Control
- Easy to operate and service

ENVIRONMENT:

- Low fuel consumption
- Low emission; up to EURO6
- Low noise level

CONTROL:

- Ergonomically designed control panels
- Intuitive HMI with big color touch-screen
- Fail-safe controls





MULTISERVICE VEHICLE (MSV)

The purpose of a multiservice vehicle is to transport heavy loads in complex and narrow environments. Tunnel construction requires a reliable and intelligent logistical support. The MSV's are the workhorses of the tunnel works.

The MSV is a low-bed vehicle, with a maximum weight of 50 tones, used for different jobs on construction sites, like carrying sleepers, rails, concrete, workers and more. The MSV has 2 available models: "rail and road" and "rail or road". The base machine can have 2 or 4 axels and train vehicles up to 16 axels can be produced. The MSV is equipped with 2 cabins, one on each direction, in this way driving in reverse in the tunnel being avoided. The standard models are: platform and platform with crane. On the standard models different modules like concrete mixer, workers transport, rail supports, working platforms can be added.

We are confident that our products are the best, because we use the latest technology engines that are 100% compliant with the most restrictive emission provisions, powerful all-wheel hydrostatic transmission fully automated, reliable safety systems and modern combined braking technology. Also, Hiarom offers options such as: rail supports, twist-locks, sliding floor, closed cabin and two-seater cabin.

SPECIFICATIONS

- Tailored vehicles
- High agility
- All-terrain mobility
- Powerful solution for efficient and flexible supply
- High load capacity
- Length: 15-22 m
- Width: from 1.0 m to 2.5 m
- Payload: up to 28 t on a single VMS

ADVANTAGES

- MSV:**
- Can be used on rail or concrete surface
 - All wheels drive and steering
 - Radio remote control driving
 - Very configurable, custom modules available

- OPERATION:**
- High flexibility in maneuvering
 - Simple rerailing

- ENVIRONMENT:**
- Low fuel consumption
 - Low emission
 - Engine start/stop

- CONTROL:**
- Ergonomically designed control panels
 - Double traffic direction
 - Different steering configurations
 - Possibility to drive from remote control





FLASH BUTT WELDING TRUCK

A Flash Butt Welding Truck is more cost effective and economical in operation in the long run if it meets the customer's specifications exactly. Therefore, a collaboration project always begins with a detailed assessment of requirements.

Hiarom Invest is producing Rail Welding Trucks in direct cooperation with the welding equipment manufacturer. We can either integrate the complete solution or we can supply only the truck prepared for the Welding Machine. Here, at Hiarom Invest, the maximum gross vehicle weight we can offer is 42,000 kg, which makes these trucks the biggest in our production range. In order to meet the customer's equipment needs, we provide both tire friction and hydrostatic transmission configuration.

In order to achieve the highest level of safety, we make the conversion according to EC regulations, EN 15746 and EN14587-2 Standards. In order to provide the best results, we work in close cooperation with Contrail Machinery, which are experts in rail welding technology. The design of our FBW machines considerably simplifies their manufacture, service, repair and overall operation. Their reliability, efficiency and cost effectiveness are constantly increased over the entire life cycle. Customers are reaching their goals timely, economically and in complete safety.

SPECIFICATIONS

- High-quality components are standard
- Supply of the complete welding package, power unit and welding machine manipulator
- Fully compliant with EN14587-2
- Truck type: 8x4
- GVW: 32 t, 36 t, 40 t or 42 t
- Tire friction or Hydrostatic drive
- Max speed on rail: 30 km/h
- Operating temperature from -20° to +50°
- Different rail gauges available

ADVANTAGES

WELDING:

- Ability to move both on road and tracks
- Easy on/off railing
- Extremely high-performing
- No rail traffic occupancy
- Reliable joining technology for track construction
- Lowest failure frequency

OPERATION:

- High flexibility in maneuvering
- Simple rerailling
- Radio Remote Control
- Easy to operate and service

ENVIRONMENT:

- Low fuel consumption
- Low emission, up to EURO6
- Low noise level

CONTROL:

- Ergonomically designed control panels
- Intuitive HMI with big color touch-screen
- Fail-safe controls





SELF-PROPELLED WAGON

The self-propelled wagons are On Track Machinery that can carry out different activities related to rail construction or maintenance. They are autonomous machines but they can also be towed in train formation. Also, for your convenience, travelling on rail can be controlled from the cabin, from the lifting platform or from the crane remote control.

The vehicle can be used for transporting different goods or equipment on the transport platform. HIAROM's self-propelled wagon offers a spacious cabin which can accommodate up to 12 persons. In order to better meet our customer's needs, we provide a variety of cabin configurations.

The self-propelled wagon can be equipped with a Hiab loader crane or/and a MEWP (mobile elevating work platform). Using the Hiab loader crane you will be able to load and unload, lift and work with different tools specially designed to be used in conjunction with the equipment (sleeper grab, rail grab, auger, bulk load grab).

SPECIFICATIONS

- Custom vehicles
- Own Weight: from 10 t to 25 t
- Payload: depending on the optional equipment, from 10 t to 20 t
- Length: up to 20 m
- Width: 2.5 m or 3 m
- Min. curve radius: 80 m
- Max. speed: 80 km/h
- Towing capacity: up to 100 t
- Engine type: Diesel
- Engine power: up to 395 kW
- Transmission: hydrostatic
- Various optional equipment: knuckle boom Hiab crane, scissor lift, cable drum gantries

ADVANTAGES

SELF-PROPELLED WAGON:

- Spacious insulated cabin with all the comfort facilities
- Different configurations available 2 or 4 axels
- Remote access for troubleshooting
- Can tow another wagon or rail trolleys

ENVIRONMENT:

- Low fuel consumption
- Low emissions, Stage V available
- Low noise level

CONTROL:

- Ergonomically designed control panels
- Wide screen color display with touch screen and user-friendly HMI
- From the cabin, lifting platform and crane remote control





RAIL TROLLEY

The Rail Trolley was designed for transporting different materials on the construction site. When a transport of cable drums is made, the trolley can also be equipped with a gantry. The gantry is bolted on the trolley platform so it can be easily removed in order to allow other applications. The trolley can be towed by a road-rail truck, a self-propelled wagon or a locomotive. We've designed our trolleys in such a way that up to 6 can be linked together.

The rail trolleys are equipped with an air actuated brake, a 15 l air tank and a braking valve with manual selector "loaded-unloaded". For transporting long rails, the trolley can be equipped with a turntable and two trolleys can be linked together.



SPECIFICATIONS

- Own weight: 2.1 t
- Payload: 10 t
- Platform length: 4.5 m or 6.2 m
- Platform width: 2,400 mm
- Platform height from TOR: 500 mm
- Track gauge: 1,435 mm
- Min. radius of horizontal curve: 100 m
- Max. allowed speed on rail: 25 km/h



HAND RAIL TROLLEY

The hand pushed rail trolleys are used in any railway construction site for caring different materials and small equipment on short distances. They can be installed and removed from rail very fast with the help of only 2 workers.



SPECIFICATIONS

- Own weight: 75 kg
- Payload: 1,500 kg
- Platform length: 1,000 mm
- Platform width: 1,800 mm
- Platform height from TOR: 160 mm
- Max. slope with max load: 6%
- Max. allowed speed on rail: 5 km/h
- Corrugated aluminum deck or plywood deck
- Lightweight
- Roller bearings Long Life SKF XT
- Insulated wheels
- Automatic handbrake acting on two wheels
- Lashing points (4 pcs)
- Lifting handles
- Demountable handrail and brake lever



RAIL CONVERSIONS

Hiarom is adapting various equipment to be used on railways. Specially we are converting wheeled excavators and elevated working platforms. The conversion means not only to adapt railway wheels, a lot of railway related safety issues are covered. Also, a lot of railway specific options are available.

We are producing road-rail excavators starting from a standard base machine. We are cooperating with different excavator brands and we are converting different excavator sizes. Normally a wheeled excavator is used but we can convert also a tracked excavator.

Options like double cabin, compressed air system for controlling wagon brakes, slewing limiter, height limiter, different railway specific working tools are available.

Regarding rail traction two options are available: tire friction or hydrostatic drive.



ADVANTAGES

ROAD-RAIL EXCAVATOR:

- Own weight: from 12 to 21 t
- Simple or double cabin
- Three part boom as standard
- As an option shunting possibility
- Min. radius of horizontal curve: 80 m
- Max. allowed speed on rail: 30 km/h

ROAD-RAIL PLATFORM:

- Working height: from 16 m to 26 m
- Hydrostatic drive
- Min. radius of horizontal curve: 80 m
- Max. allowed speed on rail: 10 km/h





S.C. HIAROM INVEST S.R.L.
Dragomirești-Vale Village, Măceșului 8 Street,
Ilfov, Romania, 077095
T: +40 318 053 890 | F: +40 314 053 481
office@hiarom.ro | www.hiarom.com