HIAROM









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

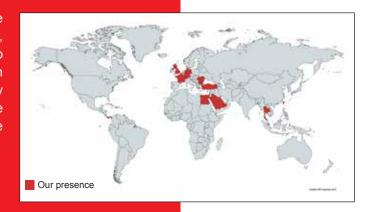
We combine technical excellence and fresh thinking.

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.













Hiarom Railway's main activity is the design, construction, installation and repair of road-rail trucks with welding equipment, special rail transport vehicles, excavator equipped with railway rolling stock and welding equipment, as well as self-propelled carts for the transport of workers.

The machines are used for various applications: loading and unloading wagons with various materials, equipments, beams, rails, towing wagons, etc.



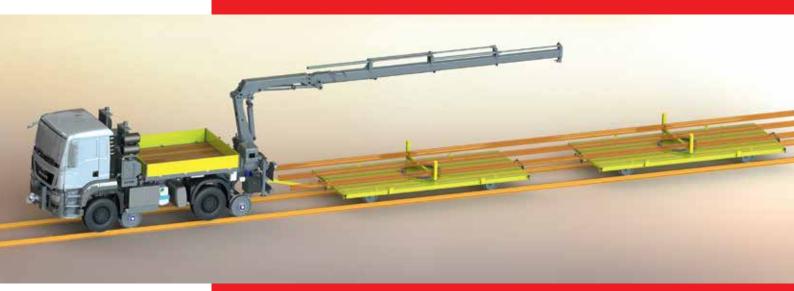
CONSULTING - ENGINEERING

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 protoptyping.

Hiarom Railway stands for innovative, reliable and costeffective custom made solutions that apply to the automotive - and railway industry.







Road-Rail 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 rerailing 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.

- Weight: from from 3.5t to 44t
- Towing capacity: on rail up to 200t
- 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



Road-Rail Trucks:

- · Circulation on all types of field
- Transfer trips on road and rail
- Extremely high-performing
- No rail traffic occupancy
- Reliable joining technology for track construction
- Lowest failure frequency

Operation:

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

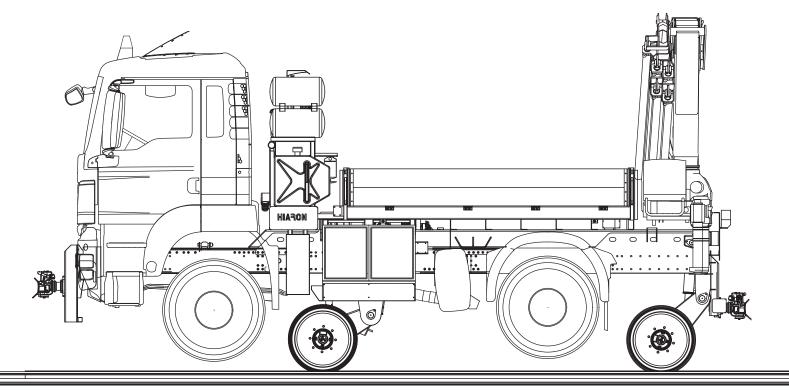
Environment:

- Low fuel consumption
- Low emission. Up to EURO6
- Low noise level

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









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 42000 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 of the vehicle, so our customers may use them at full capacity while reaching their goals timely, economically and in complete safety.

- 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: 32t or 42t
- Operational weight: from 32t to 36t
- · Tire friction or Hydrostatic drive
- Max speed on rail: 25 km/h
- Operating temperature from -20° to +50°
- Different rail gauges available



Welding:

- · Circulation on all types of field
- Transfer trips on road and rail
- Extremely high-performing
- No rail traffic occupancy
- Reliable joining technology for track construction
- Lowest failure frequency

Operation:

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

Environment:

- Low fuel consumption
- Low emission. Up to EURO6
- Low noise level

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











Multiservice Vehicle (VMS)

The purpose of a multiservice vehicle is to transport heavy loads in complex and narrow environments. Tunnel construction requires a complex and intelligent logistical support so, in order to assure this, in **November 2013**, **Hiarom's experienced designers build the first MSV in Romania**.

The MSV is a low-bed vehicle, with a maximum weight of 34 tones, used for different jobs on construction sites, like carrying sleepers, rail material, concrete mixers and more. The MSV has 2 available models: "rail and road" and "rail or road". In order to avoid U-turns in the tunnel, the MSV is equipped with 2 cabins, one on each side, which can be driven in any needed way. The standard models are: platform, platform with crane, concrete mixer, platform with demountable crane and demountable concrete mixer.

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.

- Tailored vehicles
- · High agility
- All-terrain mobility
- Powerful solution for efficient and flexible supply
- High load capacity
- Length: 15-20m; no limitations on request
- Width: from 1.0m to 1.9m
- Payload: up to 34t on a single VMS



MSV:

- Circulation on all types of field
- Extremely high-performing
- No rail traffic occupancy
- · Automatic transfer from road to rail and vice versa

Operation:

- High flexibility in maneuvering
- Simple rerailing

Environment:

• Low fuel consumption

- Ergonomically designed control panels
- Double traffic direction
- Different steering systems
- Very tight turning radius













Road-Rail Shunters

Our shunters, due to continuous variable hydrostatic transmission, offer a smooth start with zero friction clutch that makes service and maintenance easy and budget friendly. Starting from our standard model, we can build custom versions that fulfil the individual needs of our clients

Hiarom is producing a range of rail-road shunters which are used for moving railway wagons, locomotives or carriages. These are not railway conversions but specially designed machines for shunting.

They have the advantage of moving very easy on both rail and road, which assures a great mobility. Because of the greater friction coefficient of rubber on rail, they can carry out shunting tasks of a locomotive 3 to 4 times heavier and with an important cost saving. The traction is fully hydrostatic with wheel motors in each wheel, which means no gearbox or cardan-shafts are used.

Because of the hydrostatic transmission the machine configuration is very versatile and so we can provide a variety of models. Basically, we can configure a machine that complies to each specific customer need. The control of transmission is fully automatic with a dedicated computer. This assures very high traction capabilities and efficiency from the very start and at very low speeds while also providing good protection against mechanical shocks.

- Weight: from 10t to 20t
- Draw bar pull: from 30kN to 120kN
- Towing capacity: from 400t to 2,000t
- Engine power: between 120HP and 250HP
- Engine type: Diesel
- Transmission: Hydrostatic
- Traction: 4WD
- Steering: 4WS, 3 modes
- · Max. speed: 20km/h
- Length: 6,100mm
- Width: 3,300mm
- Wheelbase: 3,150mm

Shunting:

- Smooth start off with particularly favourable slip limit due to absence of peak forces
- Extremely high-performing
- No rail traffic occupancy
- · Automatic transfer from road to rail and vice versa

Operation:

- High flexibility, maximum mobility
- Short set-up times
- Simple rerailing

Environment:

- Low fuel consumption
- Low emissions, Tier 4f engines available
- Low noise level

Control:

• Ergonomically designed control panels













Self-Propelled Wagon

The self-propelled wagon was designed for railroad use and it can carry out different activities related to rail construction or maintenance. Together with its associated equipment it is autonomous so you will not have to worry about any external power supply. Also, for your convenience, travelling on rail can be controlled from the cabin, the lifting platform and 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 5 persons (including the 2 drivers). 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 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).



- Custom vehicles
- Own Weight: from 10t to 13t;
- Payload: depending on the optional equipment, from 12t to 15t;
- Length: up to 12.9m;
- Width: 2.5m;
- Min. curve radius: 100m;
- Max. speed: 25 km/h;
- Towing capacity: 40t;
- Engine type: Diesel;
- Engine max. power: 95 kW @ 2200rpm
- Engine max. torque: 516 Nm @ 1500 rpm
- Transmission: hydrostatic;
- Various optional equipment: knuckle boom Hiab crane, scissor lift, cable drum gantries.

Self-Propelled Wagon:

- Spacious insulated cabin which can accommodate 2 drivers and 3 passengers;
- Different configurations available;
- Optional 4WD;
- Remote access for troubleshooting.
- Can tow another wagon or rail trolleys.

Environment:

- Low fuel consumption;
- Low emissions, Tier 4f engines available;
- Low noise level.

- 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 15l 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: 4.5m or 6.2m

• Platform width: 2400 mm

• Platform height from TOR: 500 mm

• Track gauge: 1435 mm

• Min. radius of horizontal curve: 100 m

• Max. allowed speed on rail: 25 km/h







Hand Rail Trolley

Corrugated aluminum deck or plywood deck

- Lightweight
- Roller bearings Long Life SKF XT
- Insulated wheels
- Automatic handbrake acting on two wheels
- Lashing points (4pcs)
- Lifting handles
- · Demountable handrail and brake lever

- Own weight: 75kg;
- Payload: 1500kg;
- Platform length: 1000mm;
- Platform width: 1800mm;
- Platform height from TOR: 160mm;
- Max. slope with max load: 9%;
- Max. allowed speed on rail: 5 km/h;
- Max. speed on rail when passing turnouts or
- crossings: 5 km/h.









www.hiarom-railway.com

www.hiarom.ro

Phone: +40 31.805.38.90 Fax: +40 31.805.38.91