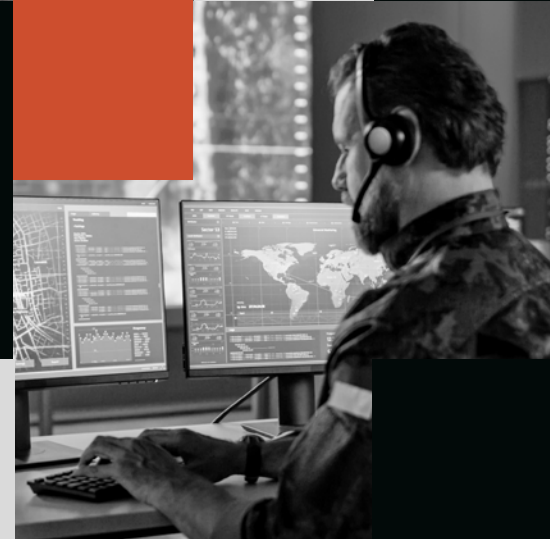




Providing inventive security

Creating high-mobile defence
systems to enhance combat
resilience



High-mobile defence systems – what is it?

It is a custom designed, manufactured and equipped deployable shelter system. The goal is to facilitate faster responsiveness, better cost efficiency and lower environmental impact compared to the traditional “bricks and mortar” infrastructure.

The system allows to transport defence services close to the defence action operatively – in minutes – and gather all the defence tactical needs where they were not feasible before, creating possibilities for new defence strategies and innovation to be implemented.

Our systems support the defence capacity by increasing the sense of security of the defence forces, with providing back security with first aid and recovery facilities, food and ammunition supplies.

MOBILITY FACTS AND FIGURES:

SPEED

70 km/h

ON REGULAR TRUCK

DEPLOYMENT SCOPE RADIUS IN 10–12 h

>600 km ON TRUCK

>1500 km BY HELI-TRANSPORT

ON-SITE DEPLOYMENT TIME

10–20 minutes

STAFF TO SETUP

1–2 person

SELF LIFTING AND
LEVELLING CAPABILITY

The life path of a MARU Defence System

We maintain our products throughout their life cycle. This means we also improve them, if necessary, and finally recycle them.



MARU Defence design

Our high-mobile systems are a constantly evolving toolbox, with which we can test and develop an infrastructure and service solution for goals, no matter how complex or unusual.

Therefore we offer not only ready-made systems, but design system solutions for any need or vision that the client needs to cover.

We believe in co-creation, inventing together with the defence forces, their direct experience and vision, shaping the most suitable and innovative solution.

With the help of partners, we equip and furnish the system exactly as designed.

HARDWARE BUILDING BLOCKS

Core shelter

Lifting and levelling systems

Transportation equipment

Connection corridors

Tents

Light hangars in custom sizes

Supportive structures
custom-built on site





EQUIPMENT BUILDING BLOCKS

Power generation and grid power supply

Air conditioning

Water and sewage solutions

Insulation and interior finishing

Communication networks

Heating and cooling

Vehicle

Medical equipment

Communication equipment

Surveillance equipment

Radar system; etc

MARU Defence is a part of the MARU Group

MARU Group holds strong knowledge and experience in the fields of construction, building design, general contracting, project management since 1991.

MARU Defence uses the parent company's strengths to complement its high-mobile solutions and to deliver any kind of infrastructure anywhere.

More than 430 employees are working in the MARU Group that has a turnover of more than 90 MEUR.



Tactical systems C4ISR

Fully equipped working space for any C4ISR need. Starting from small communication center in 10 or 20 ft container to large open planning area in expandable shelter. All systems preinstalled to facilitate fast start-up time.

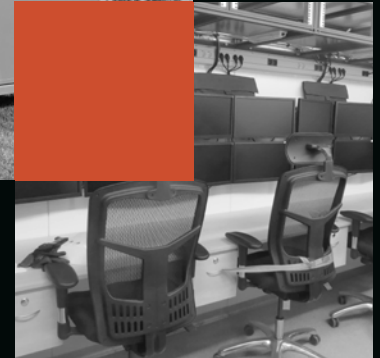
- Expanded area ca 32 m².
- Can be assembled in 30 minutes by two people.
- Transportable with all bigger types of transport .

CAPABILITIES:

The command center ensures the means to work in a crisis situations round the clock. They up to 16 work-stations, all of which are equipped with technology and tools, according to the needs and role of the workers.

TECHNOLOGY AND EQUIPMENT:

- Power generation and UPS functions taylored as per need of the solution.
- Climate control optimized for the deployment region and needs.
- Up to 4 different level networks all pre-installed for the operator to plug and play.



Medical Systems

We design and manufacture mobile medical units and relocatable, modular medical units. Our competences in this field reach from big military field hospitals to small, versatile cancer screening trailer units. Thanks to our experience we can offer a wide range of medical solutions.

The medical units offer various integrated technology and equipment solutions. The capabilities can include high-end X-ray machinery, surgery rooms and other medical

applications. Medical gas pipelines, already seemingly integrated, can be installed even in the expanding walls. Autonomy is ensured by diesel generators or a combination of solar, battery and diesel power.

The key advantage of the unit is the very high set up speed and mobility of our medical solutions.

From our portfolio you will find small mobile non-expanding truck solutions with offroad capability, completely functioning turnkey ready field hospitals, and everything in between.



Mobile Infrastructure

DESCRIPTION:

All the needed mobile infrastructure elements can be tailored for the specific needs of the end user. From power generation to water purification and also hybrid solutions where multiple functions are integrated to one shelter to add functionality and to simplify logistics.

CAPABILITIES:

Dressing and shower container, toilet container, sauna container and all with the integrated power generation, climate control and other elements needed for the smooth operation.

TECHNOLOGY AND EQUIPMENT:

Depends on the client's wishes.



Light hangars

DESCRIPTION:

A PVC hangar is the most common type of uninsulated warehouse. We offer standard and custom designed warehouses. Custom design offers the best solutions for complex applications.

We have built over 200 000 m² of PVC hangars. Our largest single hangar to date is over 16 000 m².

All hangars designed by us meet the regulatory snow and wind loads characteristic of the installation location.

MOST COMMON OPTIONS:

- With an extra interior PVC cover.
- Bridge cranes, column mounted cranes.
- Retaining walls for bulk storage.
- Different shelving options with warm interior office blocks or machining rooms.

We are ready to provide any special option to meet clients needs.



Customer Specific solutions

DESCRIPTION:

No challenge is too difficult for us. We are a reliable partner even if the project starts from the idea on single A4. Examples include special security control station, shelter for military K9 kennels and the Damage Repair and Wave Simulation Unit – a unique development that ensures naval crew has the necessary skills trained when it matters. Allows to practice as much as needed to get to the desired level.

COMPETENCES:

Team of designers for 3D modelling and certified quality assurance system covering design, production, testing and after-sales management.



Golden Hour MMH mobile modular field hospital

Golden Hour MMH is a new generation rapid deployment mobile modular field-hospital which consist of 2 in 1 and 3 in 1 container modules transportable via air, sea or land as standard 20 ft containers.

New-generation field-hospital MMH has developed in cooperation with Estonian Defence Industry and Estonian Defence Forces.

Modules can be used independently or as a part of modular hospital for disaster management. Several defence forces are using Golden Hour MMH solution since 2015.

All modules have **20 min deployment and repack time**, all-included solution, 72 h independent capability in +50 °C to -40 °C.

Every module is self-deployable without crane or other support. It needs only normal 20 ft container capability truck, which makes solution unique, no need for extra logistics and staff.

Every module has all-in solution, all necessary technology and equipment is inside container and ready-to-use within 20 min.

It has experienced NATO annual military exercises Vigorous Warrior 2017 in Berlin and Vigorous Warrior 2019 in Romania. Also Estonian Defence Forces military and medical exercises such as SILL, Spring Storm and Sparrow Strike.

Our field hospitals have already proven themselves in combat conditions. As of April 2023, three

field hospitals have been delivered and are currently operational in the Armed Forces of Ukraine.

MEDICAL SERVICES INCLUDE:

- gtm general treatment module
- dtm dermatological treatment module
- rem resource module
- orm operating room module
- erm emergency room module
- icm intensive care module
- stm sterilization module
- glm gynegolocigal module
- dsm dental and stomatological module
- bcm blood collecting module
- utm urological treatment module
- vim vaccination/ immunization module

See the delivery of a field hospital to Ukraine here:





Rolling Unit Lightweight fold out vehicle

This unique lightweight fold out vehicle offers more expandable space without compromising interiorspace in transport. It serves as an alternative for big, heavy expensive truck trailers and traditional slide outs.

Helps to save costs in purchase and maintenance. Offers up to 25 m² of usable space on car trailer or van without the need for a lorry.

- Allows for more expandable space than a traditional slide-out, without decreasing the usable space inside.
- Can be driven on car or van license, no professional truck driver licence required.
- Less back and forward logistics when compared to multiple small trailers, saves time and costs.
- Excellent insulation due to sandwich panel construction – usable all year.
- Better maneuverability compared to long trailers or trucks.
- Shelter can be detached from the vehicle – lifetime of the super-structure is not limited by the vehicle.
- Thanks to the container and subframe, construction can be attached to any kind of chassis. The construction is not dependant on the base vehicle.
- Flush floor.
- Easy and reliable to use with no complex mechanics.
- Made from long lasting materials and hardware.
- Quick and easy set up.
- Lightweight – long empty 3-in-1 shelter weighs only 1700 kg.
- Option for a walkable roof.
- Highly customisable.
- Eye catching and innovative product.
- Small footprint when it's not used and it's just standing.





Look into our other
services at
mdsc-systems.com



Golden Hour MMH

