

ONE RoboJET

INFINITE SOLUTIONS



The RoboJET platform is usable in UHP, Cargo Hold Cleaning and Grit-Blasting applications. Convertable for all these applications with expansion kits and accessories.

CONFIGURE YOUR ROBOT FOR THE BEST PERFORMANCE YOU NEED

General Specs



Cleaning width
up to **2.000 mm**

Dimensions
768 X 552 X 683 mm

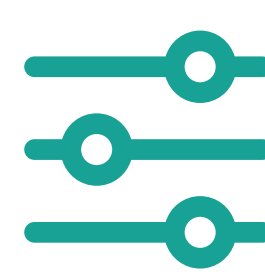
Total Weight
92 kg



Transform the mode in minutes for different applications



Ready to use all in one solutions



Easy adaptation for your specific applications

ULTRA HIGH PRESSURE APPLICATION

For the removal of paint

Pressure
Max. 3,000 bar @ 40 l/min

Nozzles
Self rotating bar with 12 x M10 nozzles

Average production rate
65 - 80 m²/h

CLEANING APPLICATION

For the Cargo Hold cleaning

Pressure
Max. 250 bar @ 48 l/min

Nozzles
4 x Turbo nozzles

Average production rate
700 - 800 m²/h

GRIT BLASTING APPLICATION

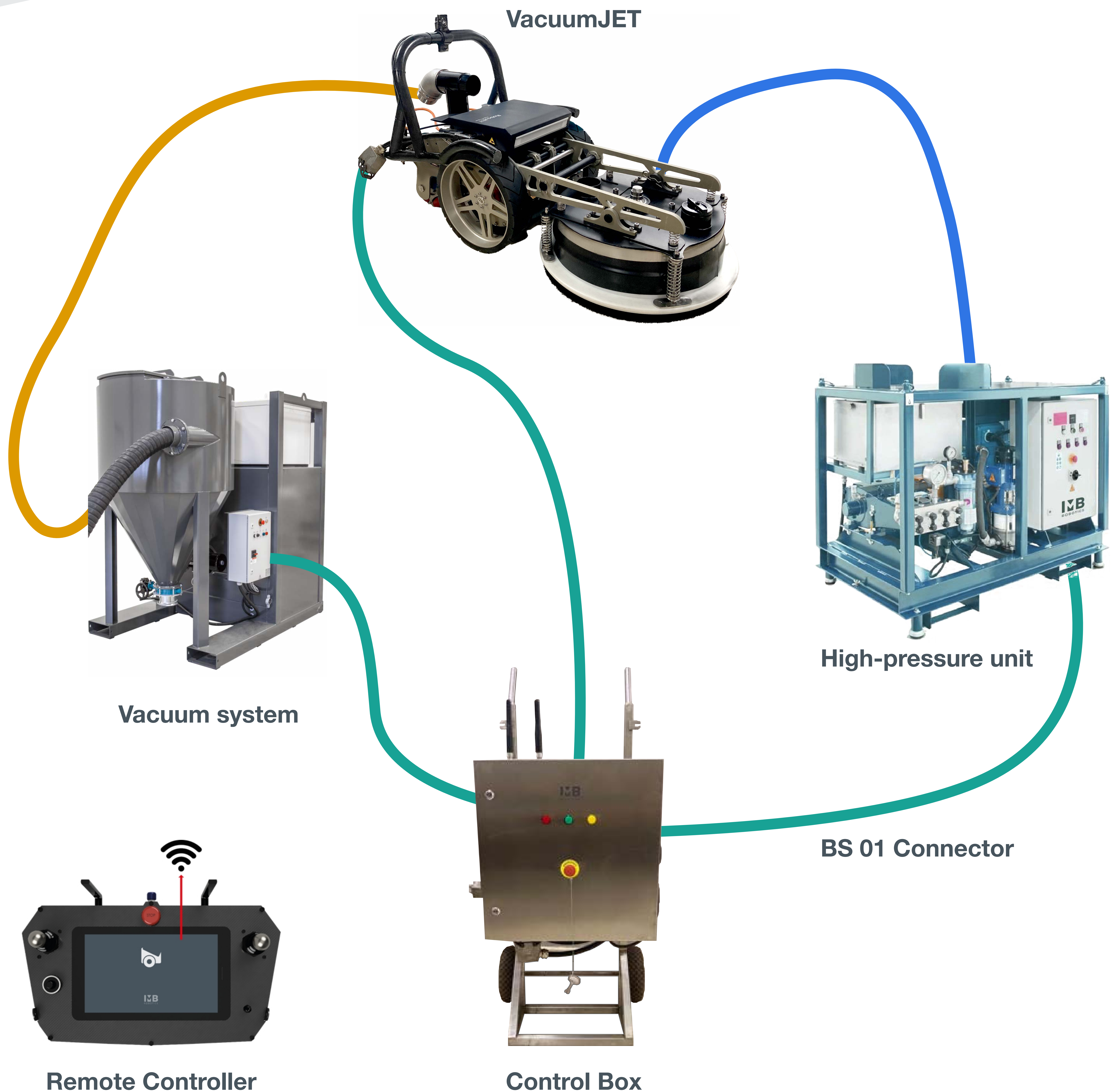
For the removal of paint

Nozzles
Two grit-blasting nozzles.

Average production rate
30 - 40 m²/h

RoboJET

SYSTEM CONFIGURATION



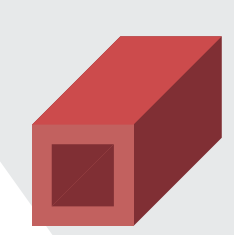
Control all your equipments from one system.

ArmJET-G

For abrasive blasting



DRY/WET ABRASIVE BLASTING



WORKS ON STEEL SURFACES
IN ALL ORIENTATIONS



SAFE, ROBUST, CLEAN
AND EFFICIENT

Accuracy

With BLDC motor and motor drivers, RoboJET provides highly accurate and precise motion. You can adjust the movement of the robot in milimetric scales.

Safer & More Detailed

The RoboJET is developed to be controlled by just one operator remotely. The operator can stay safely on the ground while the robot does all the work. RoboJET will typically blast approximately 85%-90% of a storage tank. Hand blasting will still be required to touch up difficult areas, stairs, rails, or welds possibly under-blasted due to the angle of the nozzles. RoboJET has also automatic-brake system for electricity cuts.

Always Convertable

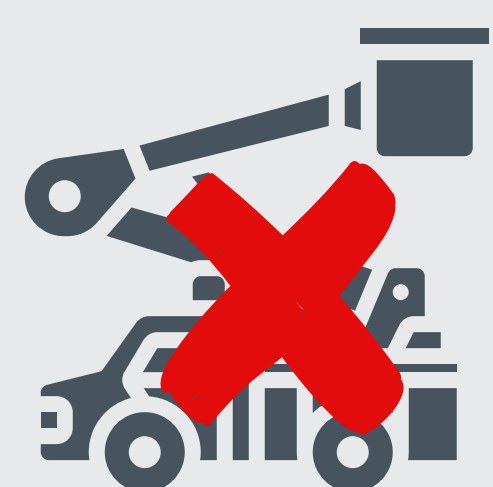
The RoboJET was designed to execute a variety of jobs on steel surfaces, such as grit-blasting, hydro-blasting and cleaning. The robot sticks to the surface with powerfull permanent magnets under the body without effecting motion parts and electronical parts. This feature allows it to work stably on Vertical, horizontal and upside-down.

UP TO **60** M²
PER HOUR

x3
MORE BLASTERS

x8
MORE PRODUCTIVE

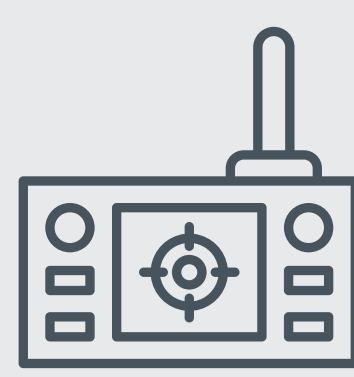
%80
COST REDUCTION



no need for
scaffolding or
cherry pickers



turns the work
into a one-man
operated job



monitor remotely,
stay safely on the
ground

Up To 90%
Surface Coverage



ROI < 5.000 M²



ATEX Zone 2



ONE RoboJET INFINITE SOLUTIONS

TECH SPECS

GRIT-BLASTING APPLICATIONS

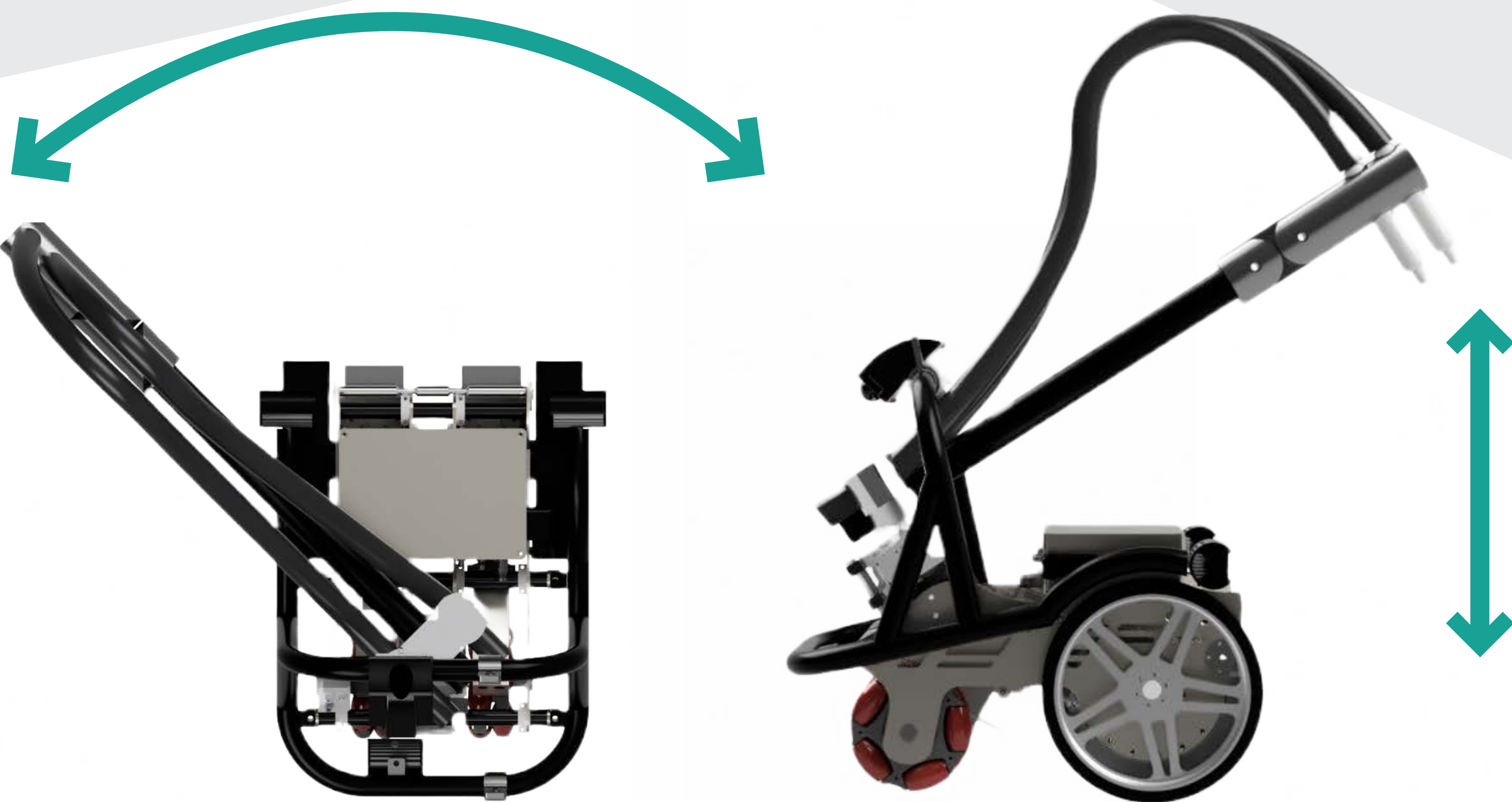
For the removal of paint

Working heights Up to 30m	Plate thickness 8mm min.
Nozzles Up to three 8# sandblasting nozzles.	Storage tank diameter 5m min.
Average production rate 60 m²/h	Energy efficiency 96%
Cleaning width 2000mm - 77"	Useful load capacity 100 kg
Daily maintenance 2 min. eyes check only	
Wireless control 5GHz or 2.4GHz, range up to 100 m	

ADVANCED WIRELESS CONTROLLER



The AWC is built on rugged 7" Industrial PC. And it has all-weather IP65 dust and water-resistant carbon fiber design. This enables the AWC to work even in the most restrictive conditions. The AWC is a universal and radio agnostic ground control station. It is a well-proven, secure, and reliable solution which is easily adaptable to your hardware and software requirements. You can easily control all your equipments from one system.



The ArmJET robot has optional 2 axis multi-purpose robotic arm for swing and up-down movements for wide application area like Cargo Hold cleaning, open-loop UHP blasting and grit-blasting

RoboJET is permanent magnetic, So you cannot use steel grit or shot. It will quickly coat the magnet and eventually cause it to dislodge from the surface.

Recommended Setup

Nozzles
2 x Long Venturi Style 1 ¼" Thread
1 inch Entry Rubber Jacketed Sandblast Nozzle

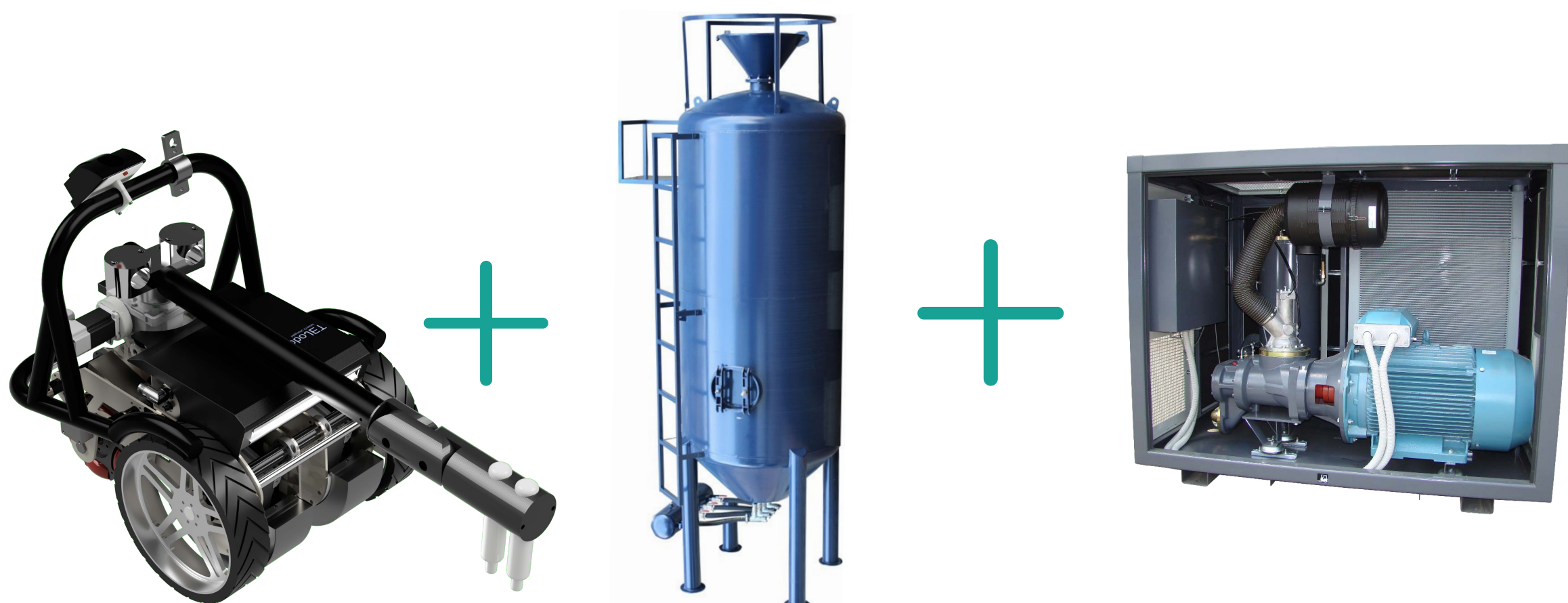
Nozzle Holders
Nozzle Holder, Hep-3/4, (Nylon) 1"1/4 Thread

Blasting Hose
1.1/4", 12 Bar Working Pressure

Compressor for 2 nozzles
8 bar 18m3 110kW

Silo
2-4 Ports 7m³ Silo (8-10 Tons)

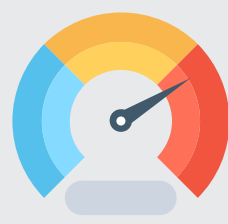
People
1 person for operating robot,
1 person onsite to be with the blasting equipment



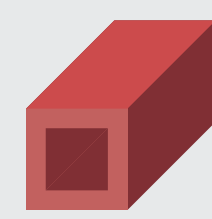


VacuumJET

For the removal of paint



ROBOT FOR ULTRA HIGH PRESSURE WORKS



WORKS ON STEEL SURFACES IN ALL ORIENTATIONS



SAFE, ROBUST, CLEAN AND EFFICIENT

Edge Design

In VacuumJET, the drive wheels placed directly behind the high-pressure water tool enables a particularly narrow construction with a large working width. This makes the VacuumJet great for removing coating from intermediate surfaces or working around narrow contours and on edges.

Convertible Design

The RoboJET was designed to execute a variety of jobs on steel surfaces, such as hydro-blasting, cleaning and grit-blasting. The robot sticks to the surface with powerful permanent magnets under the body without effecting motion parts and electronical parts. This feature allows it to work stably on vertical and horizontal steel surfaces.

Safer & More Detailed

The RoboJET is developed to be controlled by just one operator remotely. The operator can stay safely on the ground while the robot does all the work. Also, operator can monitor surfaces remotely with the help of camera and advanced remote controller. There is no need for crane assistance or cherry pickers. The Design allows you to operate 24/7 thanks to the lighting system on the robot. RoboJET has also automatic-brake system for electricity cuts.

65 M²

PER HOUR

x12

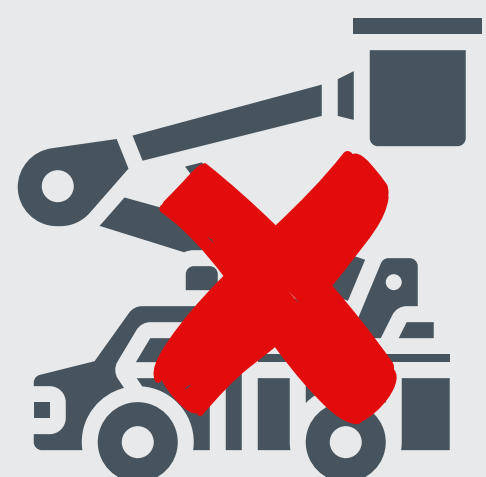
FASTER THAN MANUAL WORK

x9

MORE EFFICIENT

%90

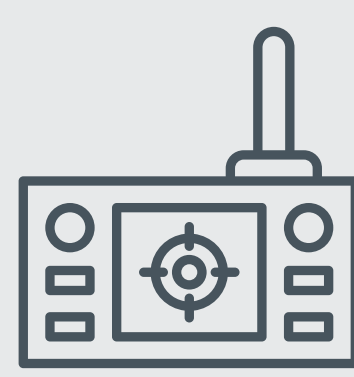
COST REDUCTION



no need for scaffolding or cherry pickers









turns the work into a one-man operated job



monitor remotely, stay safely on the ground

SAMPLE CASE: 5,000 m² SURFACE TREATMENT
TIME SPAN: 3 WEEKS

	MANUAL	RoboJET		
TIME	12 x 		x 9	LESS WORKING HOURS
MANPOWER	7 x 		%85	LESS DIRECTLY INVOLVED PEOPLE
COSTS	9 x 		%91	COST REDUCTION After initial setup cost

ONE RoboJET MANY POSSIBILITIES

TECH SPECS



Environmentally Friendly
Closed Loop Systems

ULTRA HIGH PRESSURE APPLICATION

For the removal of paint

Pressure
Max. 3,000 bar @ 40 lpm

Nozzles
Self rotating bar with 12 x M10 nozzles

Average production rate
65 - 85 m²/h

Cleaning width
19", ~480 mm

Energy efficiency
96%

Daily maintenance
2 min. eyes check only

Useful load capacity
90 kg

Wireless control
5GHz or 2.4GHz, range up to 100 m

The VacuumJET robot has environmentally friendly closed-loop design to work on surface preparation operations. With the help of vacuum system, you can collect 99% of the waste.

ADVANCED WIRELESS CONTROLLER



The AWC is built on rugged 8" android tablet. And it has all-weather IP65 dust and water-resistant design. This enables the AWC to work even in the most restrictive conditions. The AWC is a universal and radio agnostic ground control station. It is a well-proven, secure, and reliable solution which is easily adaptable to your hardware and software requirements. You can easily control all your equipments from one system.

Addons



FULL HD CAMERA

- 1080p 60 FPS
- IP67
- Night vision



LED LIGHTS

- 3 x 24V Homogen



FALL ARREST

- 140 kg payload
- 40° holding angle



EXTRA CABLE

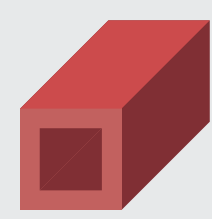
- Up to 100m

ArmJET-U

For the removal of paint and cleaning



ROBOT FOR UHP,
CLEANING & GRIT-BLASTING WORKS



WORKS ON STEEL SURFACES
IN ALL ORIENTATIONS



SAFE, ROBUST, CLEAN
AND EFFICIENT

Accuracy

With BLDC motor and motor drivers, RoboJET provides highly accurate and precise motion. You can adjust the movement of the robot in milimetric scales.

Convertible Design

The RoboJET was designed to execute a variety of jobs on steel surfaces, such as hydro-blasting, cleaning and grit-blasting. The robot sticks to the surface with powerful permanent magnets under the body without effecting motion parts and electronical parts. This feature allows it to work stably on vertical and horizontal overhead steel surfaces.

Safer & More Detailed

The RoboJET is developed to be controlled by just one operator remotely. The operator can stay safely on the ground while the robot does all the work. Also, operator can monitor surfaces remotely with the help of camera and advanced remote controller. There is no need for crane assistance or cherry pickers. The Design allows you to operate 24/7 thanks to the lighting system on the robot. RoboJET has also automatic-brake system for electricity cuts.

65 M²

PER HOUR

x8

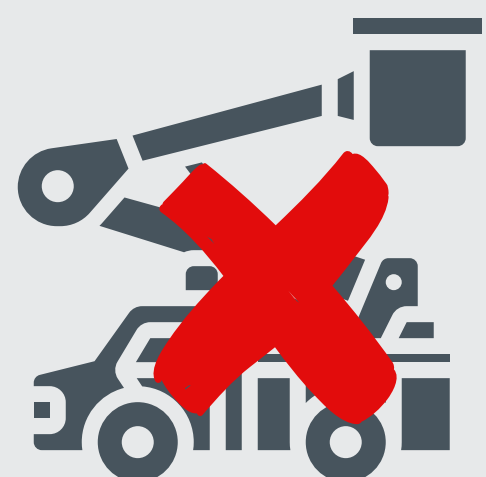
FASTER THAN
MANUAL WORK

x8

MORE EFFICIENT

%95

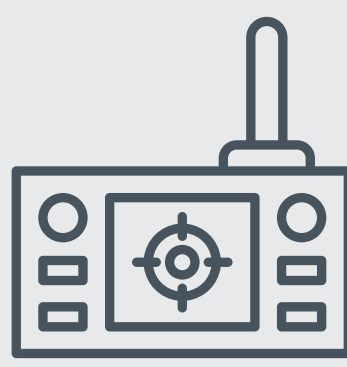
COST REDUCTION



no need for
scaffolding or
cherry pickers









turns the work
into a one-man
operated job



monitor remotely,
stay safely on the
ground

SAMPLE CASE: 5,000 m² SURFACE TREATMENT
TIME SPAN: 3 WEEKS

	MANUAL	RoboJET		
TIME	8 x 		x8	LESS WORKING HOURS
MANPOWER	6 x 		%84	LESS DIRECTLY INVOLVED PEOPLE
COSTS	9 x 		%95	COST REDUCTION After initial setup costs

ONE RoboJET INFINITE SOLUTIONS

TECH SPECS



UHP, GRIT-BLASTING AND CLEANING APPLICATIONS

For the removal of paint and cleaning

Pressure
Max. 3,000 bar @ 40 lpm

Nozzles
Self rotating bar with 10 x M10 nozzles
Two nozzle grit-blasting nozzles.
Two turbo nozzles for Cargo Hold cleaning

Average production rate
60 - 70 m²/h

Energy efficiency
96%

Cleaning width
1,500

Useful load capacity
100 kg

Daily maintenance
2 min. eyes check only

Wireless control
5GHz or 2.4GHz, range up to 100 m

The ArmJET robot has 2 axis multi-purpose robotic arm and 1 actuator for wide application area like Cargo Hold cleaning, open-loop UHP blasting and grit-blasting

ADVANCED WIRELESS CONTROLLER



The AWC is built on rugged 8" android tablet. And it has all-weather IP65 dust and water-resistant design. This enables the AWC to work even in the most restrictive conditions. The AWC is a universal and radio agnostic ground control station. It is a well-proven, secure, and reliable solution which is easily adaptable to your hardware and software requirements. You can easily control all your equipments from one system.

Abrasive Blasting



Cleaning width
2,000

Average production rate
30 - 40 m²/h

Semi-autonomous
Automatic arm swing and drive options

2 Axis
Multi-purpose swing arm with 2 axis

Accuracy
Milimetric scales

Adjustable distance
Adjustable position towards surface

Nozzle
Two nozzle holders, suitable for mounting grit blasting nozzles.

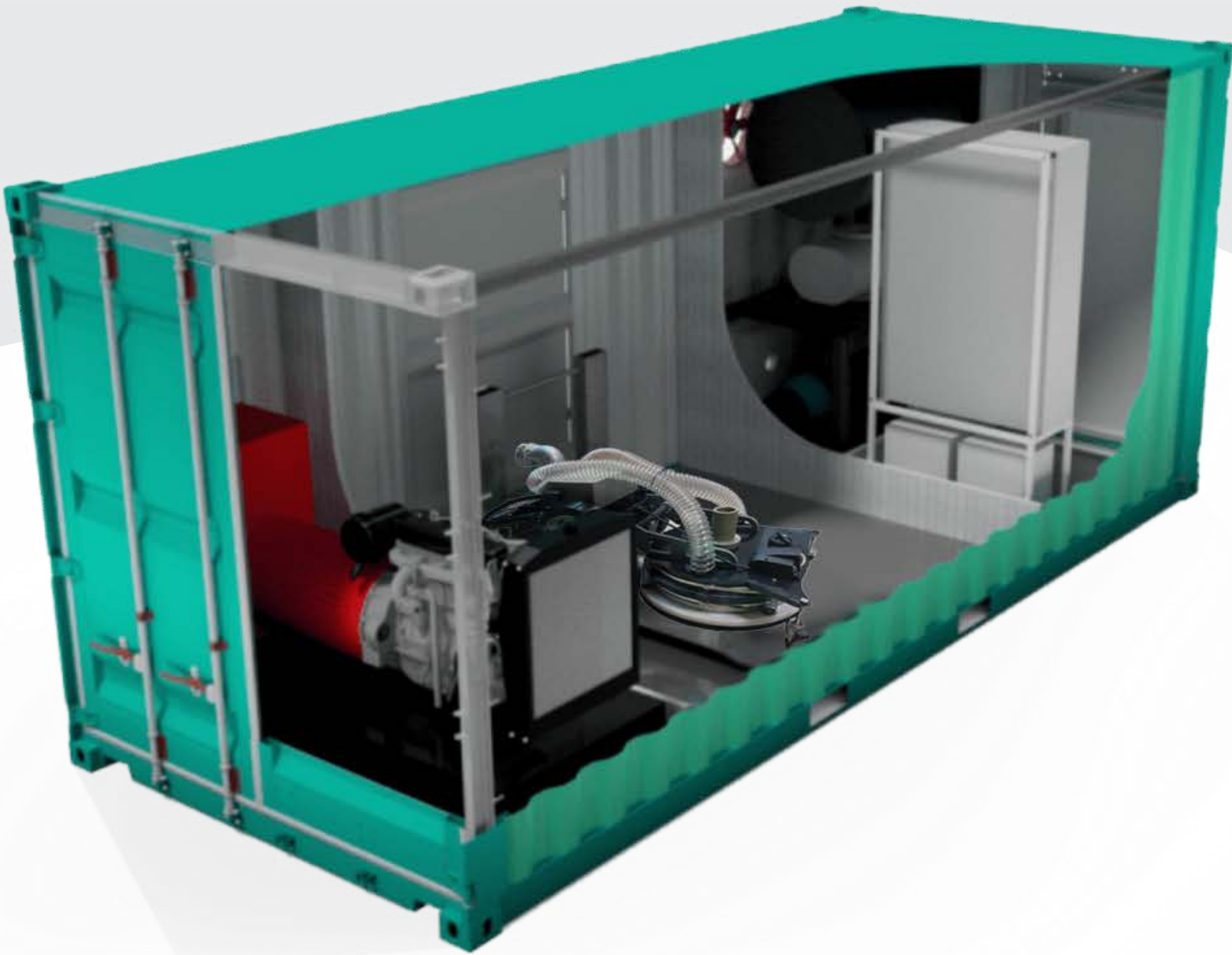


STORE & TRANSPORT

CONTAINER

All in one solution

IMB provides a fully equipped container that contains the components that control the robot on the steel surface and vacuums the paint and water after coating is removed by the robot. The wastewater with paint residue and all particulates are sent to the holding tank.



Specs

- RoboJET Robot
- Vacuum System
- 2500 bar UHP Jet
- Relief valves

TRANSPORT SYSTEM

For all the kits and addons you have.



The transport system is designed to carry all the kits and addons with its multi purpose frame to mount control cabinet and wind power cables or hose.

DOLLY

Mobile control panel



The Dolly allows you to work in every hard-to-reach areas without the need for crane or cherry-pickers.

WATER JET & VACUUM SYSTEM

WATER JET

Integrated manegement

RoboJET is compatible with 3rd party technologies. For a safer work, we provide fully robot control integrated 21 lpm to 38 lpm UHP waterjet units .



Specs

- 2500 bar
- 21lpm to 38lpm
- Diesel or electirical units
- AWC integrated

VACUUM SYSTEM

Complete solution all of things



IMB provides ready to work components that you need as well as vacuum system for your setup.

Specs

Maximum vacuum:
-500 mbar

Vacuum generator:
Roots-type blower

Electric motor:
22 kW

Suction hopper

Contents:
4 m³

IMB ROBOTICS

OTHER PROJECTS

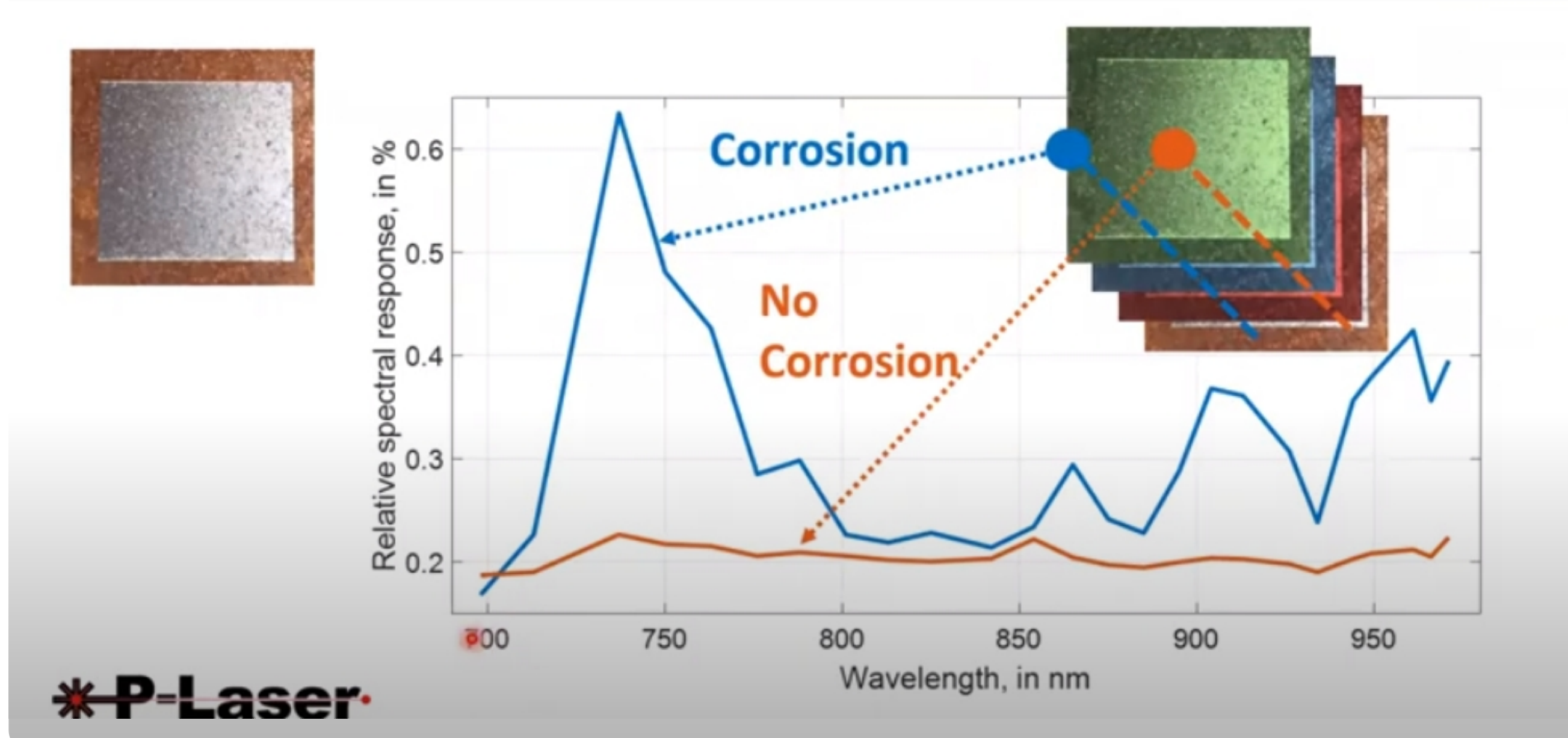
Explorer 101

A Magnetic Climbing Robot for Marine, Oil & Gas and Energy industries.

Explorer 101 provides reliable flaw detection and fast inspection. An ideal solution for surface inspections and treatments.



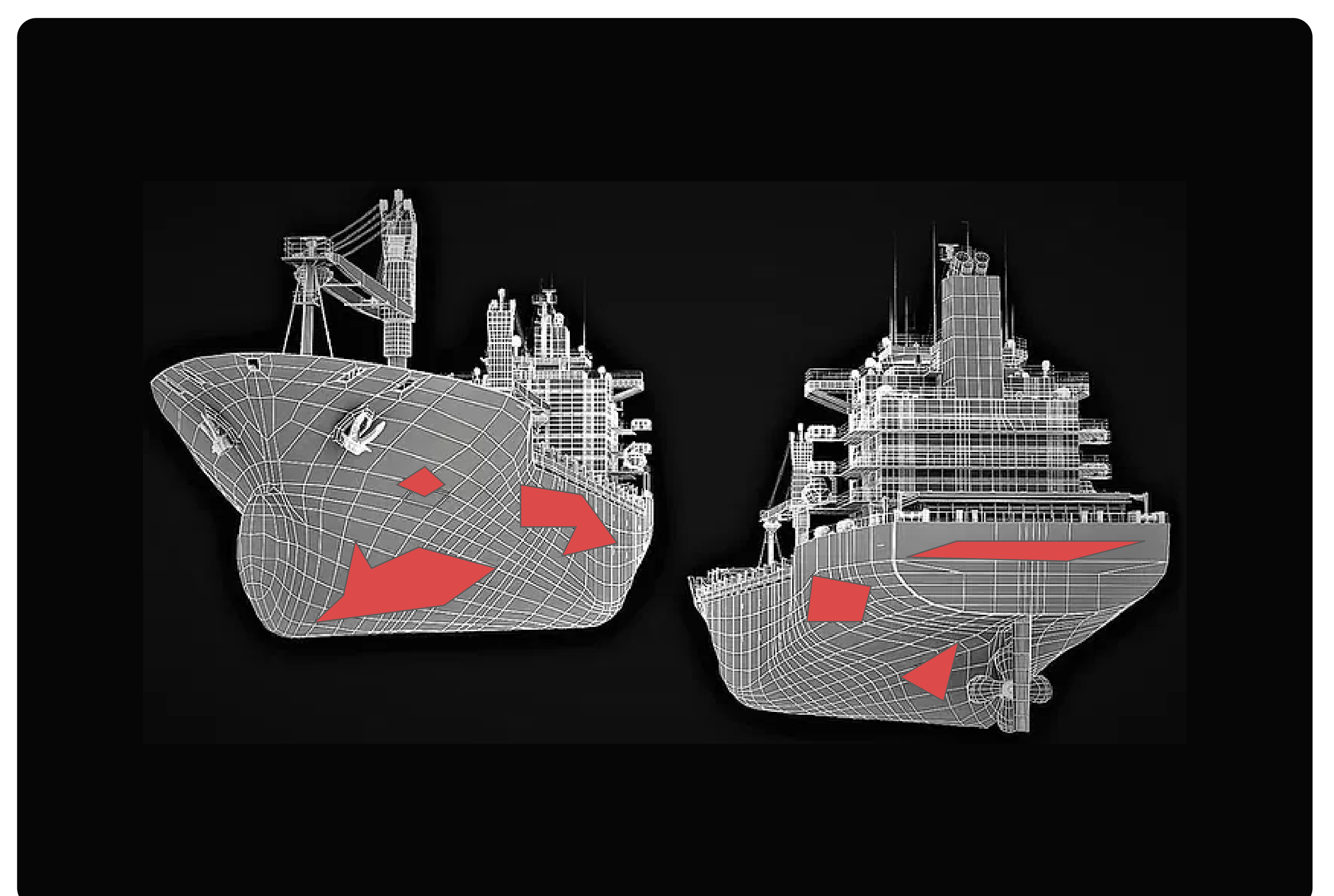
Hyperspectral and IR cameras for efficient assessment of coatings



IMB, together with OGUZKAGAN defence company starting a new project on the use of hyperspectral and infrared cameras for the inspection of coatings, the detection of corrosion and the quality control of material treatments.

3D Laser Scanning and Modeling

We aim to model all ships before they enter the shipyards and to estimate defects and maintenance costs before work begins.



IMB ROBOTICS

OUR SERVICES

We provide industrial automation solutions for surface treatment applications, monitoring systems and manufacturing automation processes.

Industrial IoT

We develop custom Industry 4.0 solutions to enable established companies across industries to increase efficiency, reduce risks and increase profits through automation and digitalization of their business.



The systems that can monitor, collect, exchange, analyze, and deliver. These insights will create smarter, faster business decisions for industrial companies.

RTLS Solutions - You can transform your business into a highly efficient, powerful and streamlined operation. Using technology based on ultrawideband TDoA, you will have more productive, cost-effective and safe industrial operations.

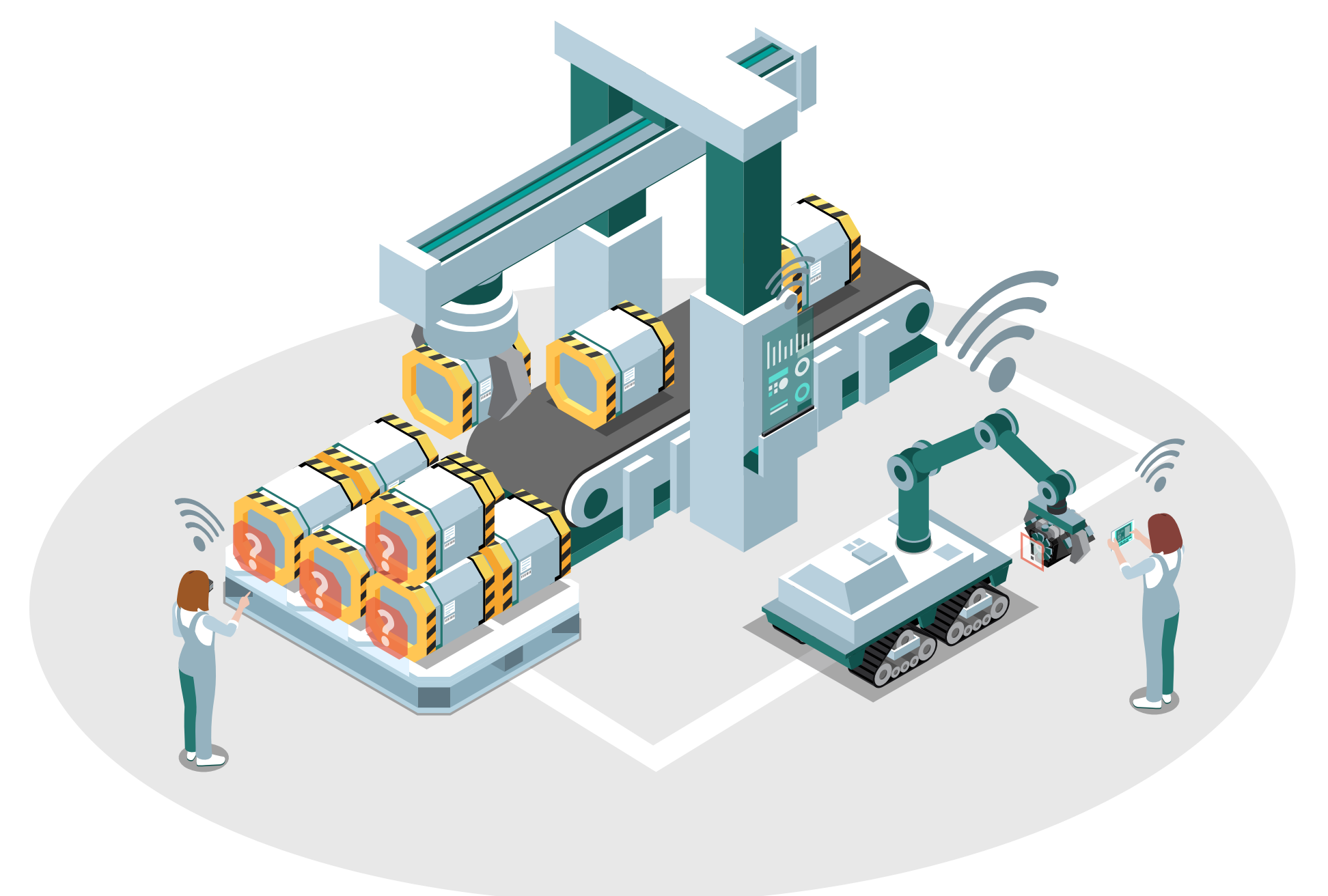
Cloud-based Data Management Systems - Collecting, processing and analyzing data is the basis for predictive maintenance. You will be able to detect weaknesses in the process early and can respond directly.

Mobility Concepts

We know that electrical vehicles will play a key role in the future of mobility. But it depends crucially on how smart they are.

We design and develop of autonomous or semi-autonomous UGVs and AGVs

- Innovative charging stations for use in both commercial and rugged environments.
- Cloud-based operating services for convenient set-up, usage, maintenance and administration.
- Bi-directional data transfer for smarter systems.



Custom Solutions

With the help of our experienced project teams, we provide custom solutions depending on what your needs are.

A total package: from evaluation to the concept and to implementation

- Innovative charging stations for use in both commercial and rugged environments.
- Cloud-based operating services for convenient set-up, usage, maintenance and administration.
- Bi-directional data transfer for smarter systems.

