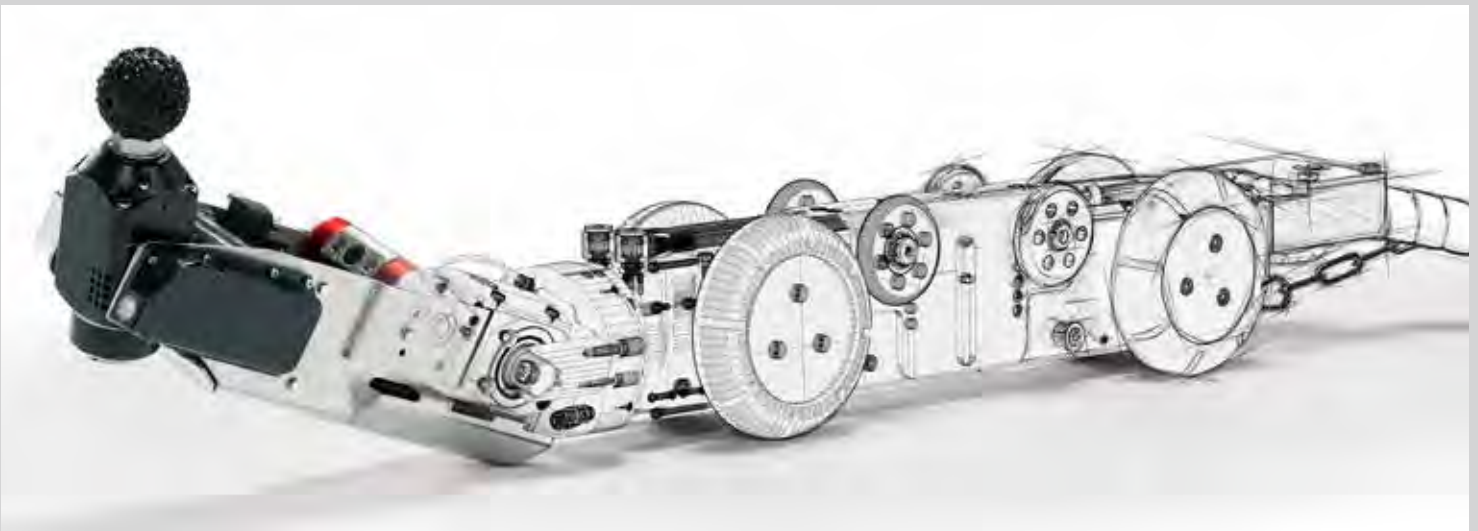


IMS

ROBOTICS

Our solutions for your sewer
rehabilitation challenges



ims-robotics.de

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The IMS Robotics Group at a glance

The IMS Robotics Group specialises in the development, manufacturing and worldwide distribution of sewer rehabilitation robots and UV curing systems. The final assembly of the complex products takes place at our headquarter in Ottendorf-Okrilla near Dresden in Germany.

The company is broadly positioned with subsidiaries and associated companies in Germany, Europe and around the world. In addition, IMS Robotics maintains a large network of reliable and highly professional partner companies in development,

manufacturing and international sales. This allows for product diversity and vertical range of manufacture as well as successful global marketing of our highly efficient and reliable systems.

We have made it our mission to offer our customers the perfect solution for all sewer rehabilitation needs. This is reflected in our extensive product range. If you require a solution to work in house connection pipes, main sewers or an UV curing system, mobile or permanently installed in a vehicle – we provide solutions for all requirements.

You have questions or would like to know more about us and our products? You can reach us by phone on +49 (0) 35205 75550 or by e-mail at contact@ims-robotics.de.



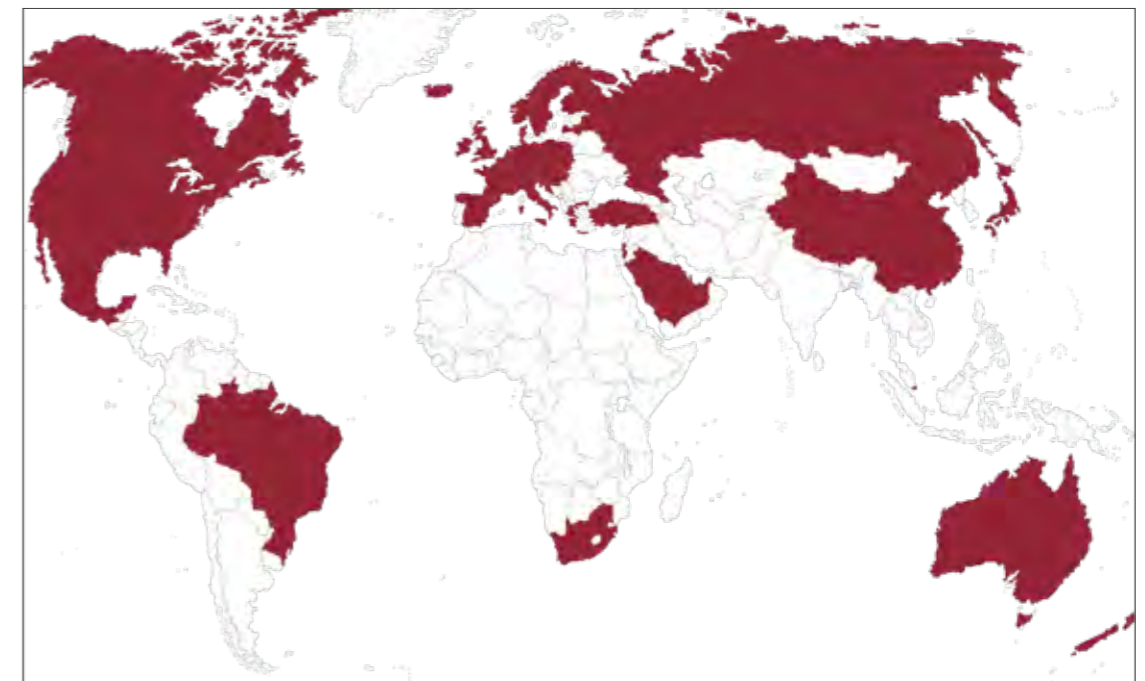
Our service commitment

Due to the special demands and stresses placed on our equipment in daily use, we focus not only on manufacturing quality but also on service. We offer you comprehensive services, provided both in our factory at the headquarters in Ottendorf-Okrilla and via our selected external partners. This enables us to ensure the highest possible availability and quality of service.

Our services at a glance:

- Comprehensive training on IMS devices
- Fast and precise repairs and maintenance
- Replacement equipment to minimise downtime
- Remote maintenance
- Implementation of software updates
- Personal contact persons for all matters

Do you have questions about the comprehensive IMS Robotics service? Then simply call us under +49 (0) 35205 755525 or send your request via e-mail to service@ims-robotics.de or.



Technical Specifications	NANOeasy	MICROlight	MICROlight plus	MICROautomatic	MICROautomatic plus	MICROpremium	MICRO S light	MICRO S light plus	MICRO S automatic	MICROpremium flex
Flexibility 90° bend in DN 100 / 4" (inner diameter)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Range of operation in mm / inch	70 - 150 / 2.8" - 6"	80 - 250 / 3" - 10"	80 - 250 / 3" - 10"	80 - 250 / 3" - 10"	80 - 250 / 3" - 10"	80 - 250 / 3" - 10"	75 - 250 / 2.9" - 10"	75 - 250 / 2.9" - 10"	80 - 250 / 3" - 10"	80 - 250 / 3" - 10"
Length supply hose in m / ft optional extension m / ft	15 / 49 25 / 82	30 / 98	30 / 98	30 / 98	50 / 164	50 / 164 70 / 230	30 / 98 50 / 164	30 / 98 50 / 164	50 / 164	50 / 164 70 / 230
Remote control hand held (1 Joystick)	—	✓	✓	✓	✓	—	—	—	—	—
Remote control professional box (2 Joysticks)	—	—	—	—	✓	—	✓	✓	✓	✓
Remote control with touchpanel	—	—	—	—	—	✓	—	—	—	✓
Colour camera with LED and permanent air cleaning	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Water cleaning for camera	—	—	—	✓	✓	✓	—	—	✓	✓
Pneumatic bracing bladder (numbers)	1	1	1	2	2	2	1	1	2	2
Feeding function in mm / inch	—	—	50 / 2"	100 / 4"	100 / 4"	100 / 4"	—	100 / 4"	100 / 4"	100 / 4"
Creeping/Climbing function	—	—	—	✓	✓	✓	—	✓	✓	✓
Nitrogen monitoring	—	✓	✓	✓	✓	✓	✓	✓	✓	✓
Weiteres										
Supply hose	soft	soft	soft	soft	integrated push rod	integrated push rod	integrated push rod	integrated push rod	integrated push rod	integrated push rod
Weight of the system (approx.)	38 kg	47 kg	47 kg	55 kg	71 kg	71 kg / 78 kg	62 kg / 68 kg	62 kg / 68 kg	68 kg	81 kg
Dimensions (L x B x H)	495 x 770 x 877 mm 19" x 30" x 35"	660 x 550 x 800 mm 26" x 22" x 32"	660 x 550 x 800 mm 26" x 22" x 32"	660 x 550 x 800 mm 26" x 22" x 32"	790 x 630 x 1050 mm 31" x 25" x 41"	790 x 630 x 1050 mm 31" x 25" x 41"	850 x 510 x 1200 mm 34" x 20" x 47"	850 x 510 x 1200 mm 34" x 20" x 47"	850 x 510 x 1200 mm 34" x 20" x 47"	790 x 630 x 1050 mm 31" x 25" x 41"
Optionen										
Meter counting	—	—	—	—	—	✓	✓	✓	✓	✓
Expansion in mm / inch	150 / 6"	250 / 10"	200 / 8" 250 / 10"	200 / 8" 250 / 10"	200 / 8" 250 / 10"	200 / 8" 250 / 10"	200 / 8" 250 / 10"	200 / 8" 250 / 10"	200 / 8" 250 / 10"	200 / 8" 250 / 10"
Extension for remote control	5 m / 16 ft	5 m / 16 ft 10 m / 33 ft	5 m / 16 ft 10 m / 33 ft	5 m / 16 ft 10 m / 33 ft	5 m / 16 ft 10 m / 33 ft	5 m / 16 ft	5 m / 16 ft 10 m / 33 ft	5 m / 16 ft 10 m / 33 ft	5 m / 16 ft 10 m / 33 ft	5 m / 16 ft

MICRO S light

DN 75 - 250 / 2,9" - 10"

- Flexible applicable cutting system with usual high cutting power
- Excellent flexibility in pipe bends (90° in DN 100 / 4", inner diameter)
- Maximum mobility, endless rotation of the cutting head
- 30 m (98 ft) or 50 m (164 ft) supply hose on cable reel
- Cutting module with radial bracing bladder
- Integrated colour camera with permanent air cleaning and optional water cleaning
- Outer diameter of the cutter module is just 60 mm
- Supply hose with integrated push rod



MICRO S light plus

DN 75 - 250 / 2,9" - 10"

- Flexible applicable cutting robot with usual high cutting power
- Excellent flexibility in pipe bends (90° in DN 100 / 4", inner diameter)
- 30 m (98 ft) or 50 m (164 ft) supply hose on cable reel
- Maximum mobility
- Cutter with radial bracing bladder and approx. 100 mm axial feed for creeping function
- Integrated colour camera with permanent air cleaning and optional water cleaning
- Outer diameter of the cutter module is just 60 mm
- Supply hose with integrated push rod



MICRO S automatic

DN 80 - 250 / 3" - 10"

- Usable in vertical pipes
- Automatic and manual feed, climbing and creeping function (100 mm / 4" axial feed)
- Outer diameter of the cutter module is just 60 mm
- 50 m (164 ft) supply hose on cable reel
- Integrated colour camera with permanent air cleaning and additional water cleaning
- Powerful air-operated cutting motor (also usable for stone and concrete)
- Very precise control of the cutter by optional 2 Joysticks
- Expansions DN 200 / DN 250 included
- Mini PC and video software included
- Water equipment included



Options MICRO S light / MICRO S light plus

- Expansions DN 200 / DN 250
- Mini PC and video software
- Water equipment
- 5 m / 10 m extension cable for control unit
- Meter counting

Options MICRO S automatic

- 5 m / 10 m extension cable for control unit
- Meter counting



Control case MICRO S light plus



Control case MICRO S automatic

MICROpremium flex - the modular system

In addition to its modularity, MICROpremium flex boasts short conversion times, space saving and an excellent price-performance ratio.

One cable drum and one control unit for milling/cutting work, ultra-high water jetting and rehabilitation operations – this is unique.

Our systems with CLEANER are used by customers throughout Europe and are successfully deployed on a variety of construction sites.



- 50 m (164 ft) or 70 m (230 ft) supply hose on cable reel
- Stable protection case for control unit with Video-PC, HDMI-display and touch screen (2 multifunctional joysticks)
- Pneumatic and electrical lead-through and manual brake

Option MICROpremium flex
- 5 m (16 ft) extension cable for control unit

Cutting module MICROpremium

DN 80 - 250 / 3" - 10"

- Excellent flexibility in pipe bends (90° in DN 100 / 4", inner diameter)
- Automatic and manual feed, climbing and creeping function (100 mm / 4" axial feed)
- 400° turning movement and approx. 90° swivelling movement with stops
- Permanent camera cleaning with air and connectible water flushing
- Colour camera with LED



Option MICROpremium
- Expansions for DN 200 and DN 250

Cutting module MICROmotion

DN 150 - 400 / 6" - 16"

- 400° electrically driven rotation/servo-pneumatic cutting lift arm approx 200 mm
- Cornering by articulated joint
- Self-propelled carriage with pneumatic stabilizer
- Colour Camera with LED and additional lightning



High-pressure head CLEANER

DN 100 - 250 / 4" - 10" , up to 2500 bar

- Flexibility in bends in PVC pipe from DN 125 (depending on the pipe condition)
- Rotating-Swivelling-Drive, endless rotation, swivelling movement 45°, speed adjustable
- Colour camera with adjustable LED and wiper



Option CLEANER
- Bracing unit for CLEANER

MICROautomatic DN 80 - 250 / 3" - 10"

- Usable in vertical pipes
- Excellent flexibility in pipe bends (90° in DN 100 / 4", inner diameter)
- Automatic and manual feed, climbing and creeping function (axial feed approx. 100 mm/4")
- 30 m (98 ft) supply hose on cable reel
- Intergated colour camera with LED (cleaning with permanent air and additional water flushing)
- Powerful air-operated cutting motor (also usable for stoneware and concrete)
- Flexible cable remote control with detachable monitor and joystick for precise control



MICROautomatic plus DN 80 - 250 / 3" - 10"

- Powerful air-operated cutting motor (also usable for stoneware and concrete)
- Excellent flexibility in pipe bends (90° in DN 100 / 4", inner diameter)
- 50 m (164 ft) or 70 m (230 ft) supply hose on cable reel
- Automatic and manual feed, climbing and creeping function (axial feed approx. 100 mm / 4")
- 400° turning movement and approx. 90° swivelling movement with stops
- Precise cutting control by 2 Joysticks
- Colour camera with LED (permanent air cleaning and connectible water flushing)



MICROpremium DN 80 - 250 / 3" - 10"

- 50 m (164 ft) or 70 m (230 ft) supply hose on cable reel
- Automatic and manual feed, climbing and creeping function (axial feed approx. 100 mm / 4")
- Powerful air-operated cutting motor (also usable for stoneware and concrete)
- Excellent flexibility in pipe bends (90° in DN 100 / 4", inner diameter)
- 400° turning movement and approx. 90° swivelling movement with stops
- Cable remote control „IMS Touch“ with 2 Joysticks and transport case
- Camera cleaning with permanent air and additional water flushing



Options MICROautomatic / MICROautomatic plus

- Expansions DN 200 / DN 250
- 5 m / 10 m extension cable for control unit
- MICROautomatic additionally with 30 m hose extension and integrated push rod 11 mm / 50 m
- MICROautomatic plus additionally with vehicle installation option

Options MICROpremium

- Expansions DN 200 / DN 250
- 5 m / 10 m extension cable for control unit
- Meter counting



Control case MICROpremium



Remote control MICROautomatic

IMS Technology for the house connection

NANOeasy

DN 70 - 150 / 2,8" - 6"

- Mobile cutting system for small pipes in the indoor installation
- Excellent flexibility in pipe bends (90° in DN 100 / 4", inner diameter)
- Optionally with 15 m / 49 ft or 25 m / 82 ft supply hose
- Internal camera with permanent air cleaning
- Manual control by movable steering wheel along the supply hose
- Bracing bladder for vertical operations
- Powerful air-operated cutting motor (also usable for stone and concrete)



Option NANOeasy

- Expansion DN 150 / 6"

MICROlight

DN 80 - 250 / 3" - 10"

- Excellent flexibility in pipe bends (90° in DN 100 / 4", inner diameter)
- 400° turning movement and approx. 90° swivelling movement with stops
- Also usable in vertical pipes
- 30 m (98 ft) supply hose on cable reel
- Integrated colour camera with permanent air cleaning
- Powerful air-operated cutting motor (also usable for stone and concrete)
- Flexible cable remote control with detachable monitor and joystick for precise control



Options MICROlight

- Expansions DN 200 / DN 250
- 5 m / 10 m extension cable for control unit
- Integrated push rod 11 mm / 50 m
- Upgrade package to MICROautomatic

MICROlight plus

DN 80 - 250 / 3" - 10"

- Excellent flexibility in pipe bends (90° in DN 100 / 4", inner diameter)
- 400° turning movement and approx. 90° swivelling movement with stops
- Also usable in vertical pipes
- Cutter with radial bracing bladder and approx. 50 mm axial feed for creeping function
- 30 m (98 ft) supply hose on cable reel
- Integrated colour camera with permanent air cleaning
- Powerful air-operated cutting motor (also usable for stone and concrete)
- Flexible cable remote control with detachable monitor and joystick for precise control



MICROlight plus

- Expansions DN 200 / DN 250
- 5 m / 10 m extension cable for control unit
- Integrated push rod 11 mm / 50 m



Remote control NANOeasy



Remote control MICROlight and MICROlight plus

IMS Technology for the main sewer

DRIVE

DN 150 - 400 / 6" - 16"

- Very robust and mobile cutting system for small and medium sized sewers with 120 mm outer diameter
- Powerful air-operated cutting motor
- Up to 150 m supply hose
- Accurate cutting control with cable remote control with 2 joysticks for swivelling/turning and driving
- Electrically powered turning movement 400° / servo-pneumatic cutting arm swivelling approx. 200 mm
- Integrated colour camera with LED and additional lightning (with permanent air cleaning)



DRIVEplus

DN 150 - 600 / 6" - 24"

- Mobile cutting system for small and medium sized sewers with 135 mm outer diameter
- Equipped with 2 exchangeable air-operated cutter motors
- Up to 150 m supply hose
- Integrated position sensors
- Swiveling camera with LED lighting
- Supply hose reel with pneumatic and electrical lead-through, manual brake and hand crank
- Pneumatic pressure rail for better stability and traction
- Control with 2 multifunctional joysticks and touchpanel



TURBO 3

DN 200 - 800 / 8" - 31"

- Powerful air-operated cutting motor
- Outer diameter 180 mm
- Self-propelled carriage with 3 speed levels
- Carriage combinable with rehabilitation system MULTISAN
- Integrated position sensors
- Pneumatic pressure rail for better stability and traction
- Swiveling camera with LED lighting and wiper blades
- Front headlight, reversing sensor and backup camera
- Supply hose with 100 m
- Water equipment included



TURBO 4

DN 200 - 800 / 8" - 31"

- Powerful air-operated cutting motor for vehicle installation
- Water equipment included
- Automatic cable reel
- Integrated sensor technology for position display of carriage, cutting arm and cutting motor
- Pneumatic pressure rail for better stability and traction
- Swiveling camera with 2 high-power LED and wiper
- Data input unit with meter counting
- Rear-view backeye camera with LED lighting



Options DRIVE

- 5 m extension cable for control unit
- Water equipment
- Meter counting
- Automatic reeling and much more

Options DRIVEplus

- Expansion DN 450 / DN 600
- 5 m extension cable for control unit
- Meter counting
- Backeye camera
- Water equipment
- Connection to rehabilitation packers and much more

Options TURBO 3

- Expansion DN 450 / DN 600
- Expansions for egg-shaped sections DN 250 / 375 - DN 500 / 750
- Data input unit with meter counting
- Connection to rehabilitation packers and much more

Options TURBO 4

- IMS high-pressure technology IMS CLEANER
- Expansion carriage DN 700 / DN 800
- Expansions for egg-shaped sections DN 400 / 600 - DN 600 / 900
- Connection to rehabilitation packers and much more

Rehabilitate side connections from the main sewer like a pro

The satellite system, which already won the ISTT No-Dig Award in 2015, is used for preparatory rehabilitation work of the lateral connection. Only one opening is required for this - in main sewers with nominal diameters of DN 200 to DN 400. From there, the system

transports the house installation cutting robot into the laterals with nominal diameters between DN 100 and DN 150. The system can be used with the TURBO main sewer cutting robot and the MICROautomatic plus or MICROpremium cutting robot.



- House installation / lateral DN 100 to DN 150
- Main sewer from DN 200 to DN 400
- Coupling elements with nominal widths DN 200 to DN 400 for connection to the main sewer cutting robot TURBO
- TURBO Universal control unit
- Nitrogen monitoring

- An electric hose drive with different wheel sets for the nominal widths DN 200 to DN 400
- Transport pipe for MICROautomatic plus or MICROpremium
- Rear view camera with lighting incl. holder for cutter IMS TURBO

Cutting tools (not only) for IMS cutting robots

For every application the right tool, individual developments possible!

Diamond tools for synthetic materials (PVC, felt liner)



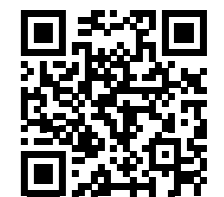
Diamond tools for concrete, stoneware und GRP



Brush tools for lime, roots, synthetic materials, foil scraps



Grinding tools for iron and steel



kardiam.de/en

UV 5200

DN 150 - 600 / 6" - 23"

8 x 400 / 650 watts

- 5200 watts power
- Up to 210 m / 689 ft cable length
- Temperature-resistant hybrid cable: with connectors on both sides
- Power dimmable / selectable
- Industrial control unit with touch operating panel
- Temperature resistant colour camera



UV 7800

DN 150 - 1200 / 6" - 47"

8 / 12 x 650 watts

- 7800 watts power
- Up to 210 m / 689 ft cable length
- Temperature-resistant hybrid cable: with connectors on both sides
- Power dimmable / selectable
- Industrial control unit with touch operating panel
- Temperature resistant colour camera
- Lamp operating hours counter



UV 8000 Compact

DN 150 - 1500 / 6" - 59"

8 x 400 / 650 / 1000 watts

- 8000 watts power
- Up to 180 m / 590 ft cable length
- Temperature-resistant hybrid cable: with connectors on both sides
- Power dimmable / selectable
- Industrial control unit with 10" touch operating panel
- Temperature resistant colour camera
- Air conditioning for cooling the cable drum



UV 12000 Compact

DN 150 - 1600 / 6" - 63"

12 x 400 / 650 / 1000 watts

- 12000 watts power
- Up to 180 m / 590 ft cable length
- Temperature-resistant hybrid cable: with connectors on both sides
- Power dimmable / selectable
- Industrial control unit with 10" touch operating panel
- Temperature resistant colour camera
- Lamp operating hours counter



Options UV 5200

- Basis and packerset
- Light source 8 x 400 / 650 watts
- Upgrade to IMS curing system UV 7800
- Construction site support incl. technical instruction / training

Options UV 7800

- Basis and packerset
- Light source 8 x 400 / 650 watts
- Light source extension 4 x 400/650 watts (lamps 9 to 12)
- Light source core 4 x 3 x 400 / 650 watts
- Construction site support incl. technical instruction / training

Options UV 8000 Compact

- Basis and packerset
- Light source 8 x 400 / 650 watts
- Light source core 2 x 4 x 1000 watts
- Monitors for front control unit
- Construction site support incl. technical instruction / training

Options UV 12000 Compact

- Basis and packerset
- Light source 8 x 400 / 650 watts
- Light source core 3 x 4 x 650 watts
- Monitors for front control unit
- Packer camera



Light source 8 x 400 / 650 watts



Light source and extension 12 x 400 / 650 watts



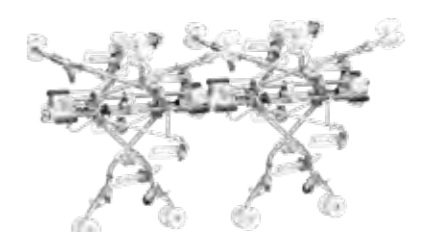
Light source extension 4 x 400 / 650 watts



Light source core 4 x 3 x 400 / 650 watts



Light source core 3 x 4 x 1000 watts



Light source core 2 x 6 x 1000 watts

We ensure your mobility during sewer rehabilitation and work with you to configure vehicles according to your expectations. You can choose from vehicle models of all size and weight classes, equipped with our high-quality systems depending on the intended

use. Milling and cutting, rehabilitation and UV curing – the choice is yours. Of course, we also take into account additional equipment in the operating and workshop area as well as convenience features.

Expansion options:



3,5 t vehicle with cutting system

- With control room
- Cutting system DRIVE / DRIVEplus / TURBO 3



7,49 t renovation truck with UV curing system

- Iveco Daily 7,2 t or Fuso Canter 7,49 t
- UV 5200 or UV 7800



16 t truck with UV curing system

- Mercedes Benz Atego 16 t
- UV 12000 Compact

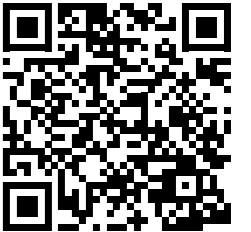


16 t truck with cutting system

- Mercedes Benz Atego 16 t
- TURBO 4 system

We have over 100 sewer rehabilitation devices for short-term and long-term hire available for our clients. The portfolio ranges from the entry-level house connection model to the fully equipped rehabilitation truck with cutting robot or UV curing system. Accessories for all areas and further peripherals are also available.

You want to make a rental enquiry or find out more about our offers? Please call under **+49 (0) 35205 755530** or send an e-mail to miete@ims-robotics.de.



Whether mobile or installed in a vehicle – we will find the right solution for you.

The IMS fleet is also being continuously expanded and includes fully equipped vans and trucks.

Rental of IMS equipment with operator:

You can not only rent the technology from IMS Robotics, but also request one of our experienced operators to support you. This means that your construction sites can be managed and new areas of work opened up even in the event of a staff shortage. Whether you need in-depth training, support on jobs, or effective work on a construction site, we will find the right solution for you, including equipment and operators.



IMS

ROBOTICS

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