

EXPERIENCE THE POWER OF WATER

THE ULTIMATE TOOL FOR
PIPELINE MAINTENANCE



SEWER
ROBOTICS

POWERFUL SEWER REHABILITATION TECHNOLOGIES & SOLUTIONS

Sewer Robotics is the proud manufacturer of this modular, single system solution that features a multi functional crawler and various job-specific modules for underground pipe inspection, cleaning, cutting and rehabilitation.

One system, highly effective and cost-efficient, removing root intrusions, cutting protruding taps, reinstating lateral connections, installing spot repair systems and removing heavy grease, overpoured concrete and years of calcium and scale build-up from 150 – 1000mm (6-40") underground pipes and service lateral connections.

This brochure was carefully designed to introduce the different applications, system configurations and components of the Sewer Robotics' system.



SEWERROBOTICS	+31 174 289 475	[TEL]
ABC-Westland 197	+1 503 504 8474	[USA]
2685 DB, Poeldijk	www.sewerrobotics.com	
the Netherlands	info@sewerrobotics.com	

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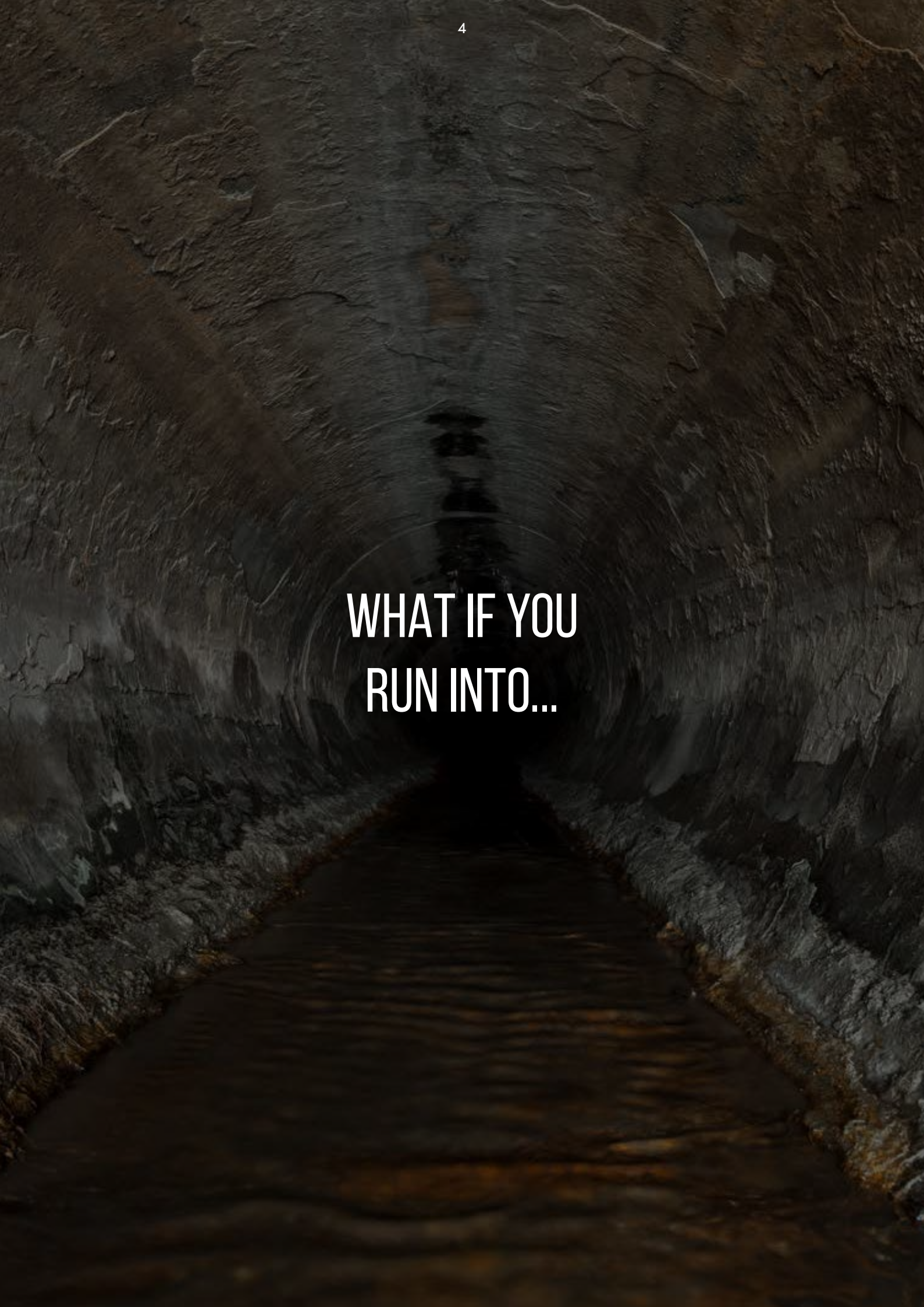


SEWER ANALYTICS

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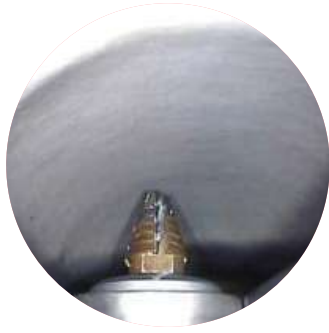
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A dark, narrow tunnel with a path leading into the distance. The walls are rough and textured. A circular ripple effect is centered in the middle of the tunnel, creating a sense of depth and movement. The text "WHAT IF YOU RUN INTO..." is overlaid in white, bold, sans-serif font.

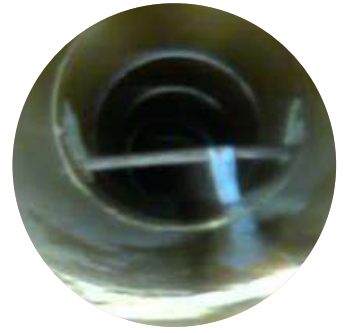
**WHAT IF YOU
RUN INTO...**



INTRUDING TAPS



CIPP LINER



REBAR



ROOTS & FAT



GREASE



TUBERCULATION



CEMENT



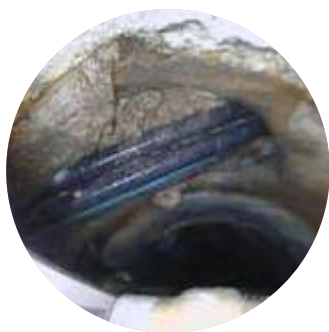
MINERALS



CONCRETE



INFILTRATION



STRUCTURAL DEFECTS



COLLAPSED PIPELINE

**ONE MULTIFUNCTIONAL CRAWLER
WITH VARIOUS JOB-SPECIFIC MODULES
FOR MULTIPLE APPLICATIONS**



REINSTATEMENT CUTTER

THE SR-SERIES

THE ULTIMATE TOOL FOR
PIPELINE MAINTENANCE



PRECISION WATER JET

**OUR ROBOTS ARE EASILY TRANSFORMED FROM A POWERFUL
REINSTATEMENT CUTTER TO A WATER JET CUTTER, JUST BY
SWAPPING MODULES IN LESS THAN 60 SECONDS.**

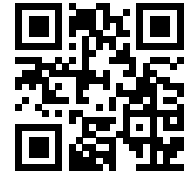


SCAN FOR VIDEO

“FAST AND CONTROLLED BREAKDOWN OF SOLID OBSTRUCTIONS”

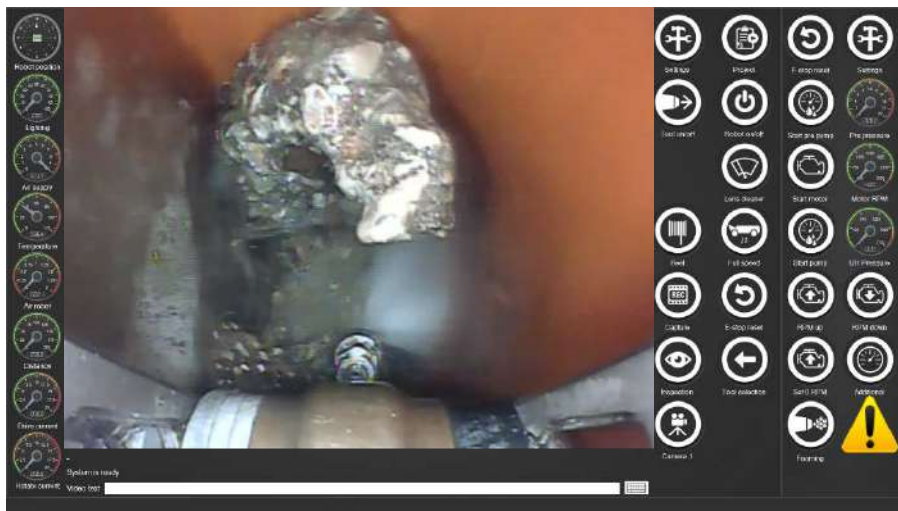


UHP PRECISION WATER JET CUTTING HOW DOES IT WORK?



SCAN FOR VIDEO

Precision water jet cutting applies a continuous adjustable high pressure/ low volume water blast from a special designed crawler, with precisely steerable nozzle and CCTV camera module, for controlled removal of deposits settled and solid obstructions from within 150 - 1000mm (6- 40") pipes and their lateral connections.



PROS

- EYES ON THE JOB
- POWERFUL
- CONTROLLED
- VERSATILE

Eyes on the job and continuous adjustment of water pressure, angle with the pipe and distance to the material enable the operator to achieve the breakdown and elimination of various obstructions without adding damage to the pipe structure.



WITH UP TO 3000BAR (43,500PSI)
PRECISION WATER JET CUTTING
REMOVES: FOG, DEBRIS, ROOTS,
CEMENT, SCALE, TUBERCULATION,
GROUT, CALCIUM & CONCRETE.



WATER JET CUTTING ROBOTS



SCAN FOR VIDEO

Our 15 years of UHP water jet cutting experience can be recognized in the designs and features of our precise and reliable directional cutting robots that are easy to operate and easy to service.

Made from durable stainless steel and with enough freedom of movement to apply a powerful water blast, directly to the material, under the right angle and with constant camera supervision in pipelines of varying diameters.



	WJ125	WJ180	WJ200	WJ250
Pipe ø	150 – 600mm (6-24")	200 – 500mm (8-20")	250 – 750mm (10-30")	300 – 1000mm (12 –40")
Max. pressure	3000bar (43,500psi)	3000bar (43,500psi)	3000bar (43,500psi)	3000bar (43,500psi)
Ram lift	210mm (8")	N/A	270mm (11")	520mm (20")
Nozzle tilt	110°	90°	100°	90°
Compatible Robot	R125	R160	R160	R250
More info	P 50	P 55	P 56	P 59

***"IN 30 MINUTES MORE MATERIAL WAS
REMOVED THAN WHAT 5 OTHER COMPANIES
HAD REMOVED TOGETHER IN 3 WEEKS"***

***“TARGET THE SPECIAL
JOBS WITH HIGH RATES
& LOW COMPETITION”***

DURABLE STAINLESS BODY

Without delicate exterior parts and with a diameter of only 100mm (4”).

Its durable and short design provides ease of deployment from tight manholes and sufficient clearance to reach far inside pipes.



ADJUSTABLE SPEEDS

Of the electric movements (driving and rotating) allow operators to drive to the job fast. Then reduce the speed to maximize precision.

TWIST-AND-LOCK MECHANISM

Convert the UHP water jet cutter into a powerful lateral reinstatement cutter- or CCTV inspection robot within 60 seconds. The available, purpose-build, modules widen the robot’s application range.

PRO'S

VERSATILE – convert into a reinstatement cutter in just 60 seconds

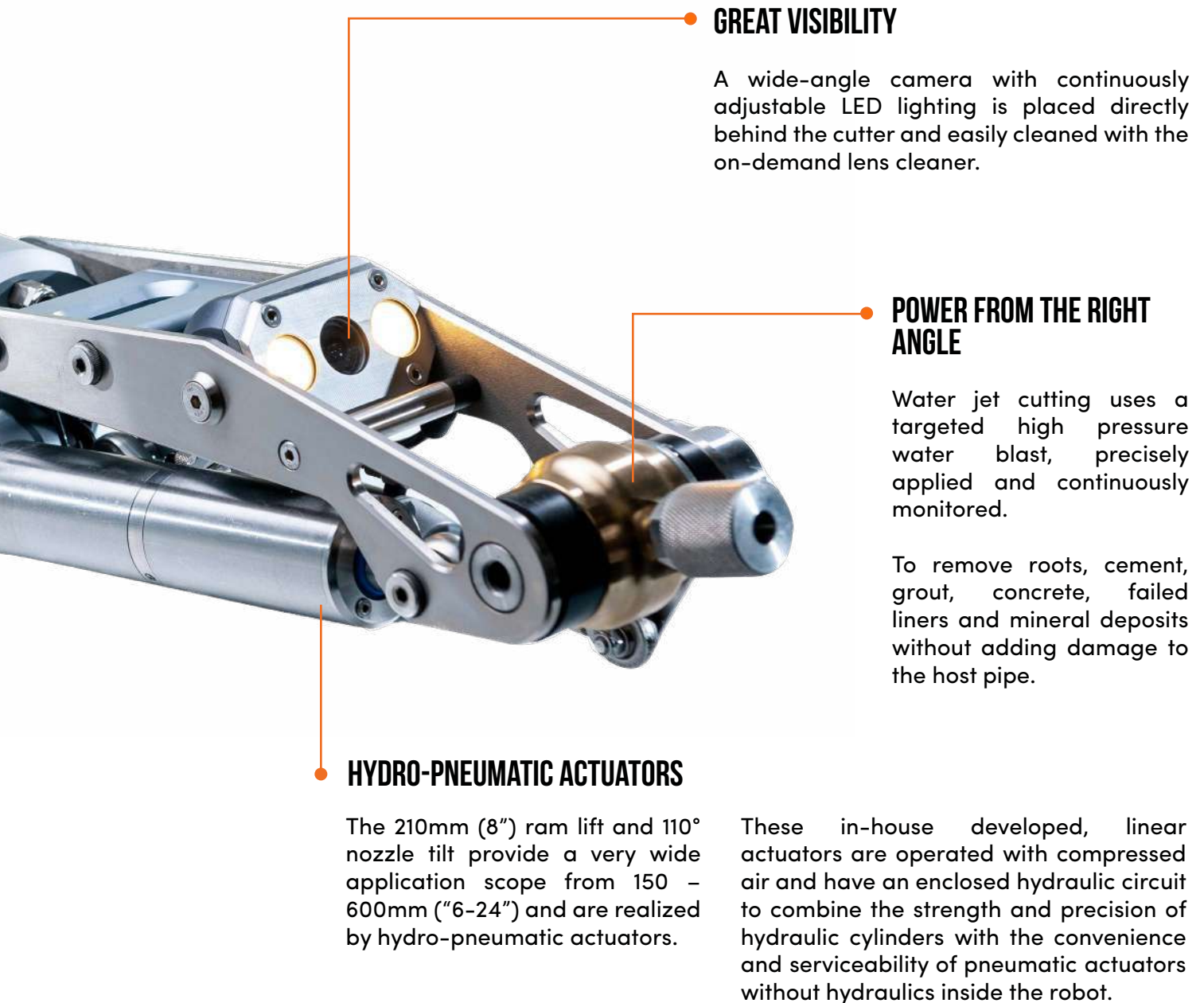
POWER & PRECISION – to remove FOG, roots, cement, calcium & concrete

WIDE SCOPE OF USE – from 150 – 600mm (6-24")

EASY SERVICEABLE – with personal assistance and clever maintenance kits

RELIABLE – build tough, from durable materials

ACCESSIBLE PARTS – reasonably priced parts ,shipped the same day



GREAT VISIBILITY

A wide-angle camera with continuously adjustable LED lighting is placed directly behind the cutter and easily cleaned with the on-demand lens cleaner.

POWER FROM THE RIGHT ANGLE

Water jet cutting uses a targeted high pressure water blast, precisely applied and continuously monitored.

To remove roots, cement, grout, concrete, failed liners and mineral deposits without adding damage to the host pipe.

HYDRO-PNEUMATIC ACTUATORS

The 210mm (8") ram lift and 110° nozzle tilt provide a very wide application scope from 150 – 600mm ("6-24") and are realized by hydro-pneumatic actuators.

These in-house developed, linear actuators are operated with compressed air and have an enclosed hydraulic circuit to combine the strength and precision of hydraulic cylinders with the convenience and serviceability of pneumatic actuators without hydraulics inside the robot.



SEWER ROBOTICS was the first company to introduce UHP water jet cutting from a specialized crawler to remove solid obstructions and deposits settled. Our customers worldwide have removed many different materials and saved lots of pipes from replacement over the course of 15 years. Some examples:



Aggregate concrete removal from a 200mm (8") Vitrified Clay Pipe with the WJ125 water jet at 1500bar (21,750psi).



The WJ125 at 1000 bar (14,500psi) removing tuberculation from this 300mm (12") pipe, as if it was butter.



The capacity of this pipe was restored in a few hours, using 1000bar (14,500psi) to remove the mineral build-up.



15 YEARS OF UHP WATER JET CUTTING



SCAN FOR VIDEO



A huge amount of natural wax got into the sewer and storm lines after a factory fire. The obstructions were removed rapidly with the 500 bar (7,250psi) water jet.



This calcium carbonate had built up in a tunnel over many years. It took various night shifts and 2500 bar (36,250psi) to remove it.



The calcium in this coated VCP 300mm (12") sewer pipe blocked more than half of the pipe and was broken into smaller pieces with the WJ180 at 1000bar (7,250psi).



LOMBARDY, IT



After various failed attempts of different nozzles and cutters, Sewer Robotics was invited to remove the concrete that has been blocking this 400mm (16") sewer main line for the past 10 years.

The R125 robot with WJ125 water jet module was used at 1000bar (14,450psi) to cut the concrete into small pieces. In the first few hours, the flow was restored by removing about one linear meter of 100% blockage, exposing cross-bores as the possible entry point of the deposits. The remaining concrete on the bottom was removed after.

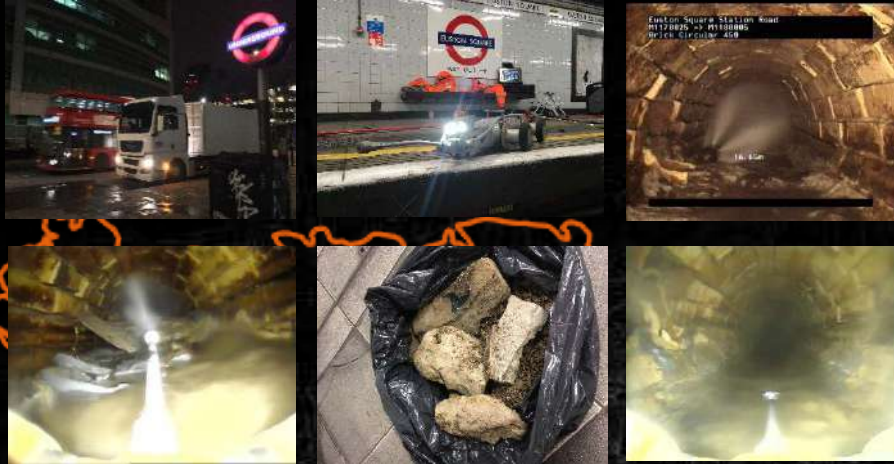
SWISS ALPS, CH



Limescale, the crystallized mineral deposits often found in sewer pipelines of hard water areas, has been successfully removed from multiple sewer pipelines in the Swiss Alps with the Sewer Robotics system.

The calcium carbonate had build up over many years and required up to 2500bar (36,250psi) to remove.

LONDON UNDERGROUND, UK



The Sewer Robotics mobile cable reel and control unit were successfully used to remove over 5m (15ft) of concrete from an antique 500mm (20") brick storm water pipeline inside one of London's oldest subway stations.

The truck with installed water supply and remotely controlled, diesel engine driven, 2800bar (40.600PSI) high pressure pump was parked outside, with hoses laid out over a total length of 320 meters (1,000ft) from pump to robot.

LOS ANGELES, USA



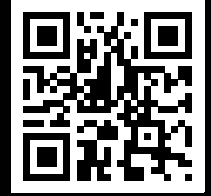
Concrete slurry with aggregate was poured into 250mm, 375mm and 450mm (10", 15", 18") sewer mainlines after boring into an unmarked sewer line during ground stabilization work in a coastal condo development near Los Angeles. The solid obstructions were blocking the sewage flow from a nearby residential area towards the treatment plant and threatening the progress of the construction project.

With eyes on the 1000bar (14,500psi) water blast, the operators cut their way through the concrete, breaking it into smaller pieces. It took multiple weeks to clear all concrete blockages from the three main sewer lines and saved the building project as construction could continue.

**“CUTTING POWER & PRECISE CONTROLS
FOR FAST REINSTATEMENT
AND SMOOTH CUTS”**



GRINDING, MILLING AND CUTTING



SCAN FOR VIDEO

Sewer Robotics reinstatement cutters feature precise movements and can be used with water driven cutter motors for extremely powerful and fast reinstatement or cutting intruding taps of any material.

Designed durable and user-friendly, with maximum clearance and a wide scope of applications, easy to service, and easy deployment from tight manholes.



	HA125	HA195	HA250
Pipe ø	150 – 500mm (6-20")	250 – 750mm (10-30")	250 – 1000mm (10 –40")
Compatible cutter motor	Water, Pneumatic, Electric	Water, Pneumatic, Electric	Water, Pneumatic, Electric
Ram lift	205mm (8")	270mm (11")	325mm (13")
Cutter pivot	90°	90°	90°
Lens cleaner	Compressed air Water	Water On-demand Wiper	Water On-demand Wiper
Compatible Robot	R125	R160	R250
More info	P 51	P 57	P 60



CUTTING A CAST IRON TAP



CIPP LATERAL REINSTATEMENT

“THE HA 125, CONTRACTORS’ PREFERRED CUTTER”

DURABLE STAINLESS BODY

Without delicate exterior parts and with a diameter of only 100mm (4”).

Its durable and short design provides ease of deployment from tight manholes and sufficient clearance to reach far inside pipes.



ADJUSTABLE SPEEDS

Of the electric movements (driving and rotating) allow operators to drive to the job fast. Then reduce the speed to maximize precision.

TWIST-AND-LOCK MECHANISM

Convert the reinstatement cutter into a UHP Water jet cutting- or CCTV inspection robot within 60 seconds.

The available, purpose-build, modules widen the robot’s application range, while UHP water jet cutting provides access to a niche market with high rates and low competition.

PRO'S

VERSATILE – to target the 'special' well-paid jobs

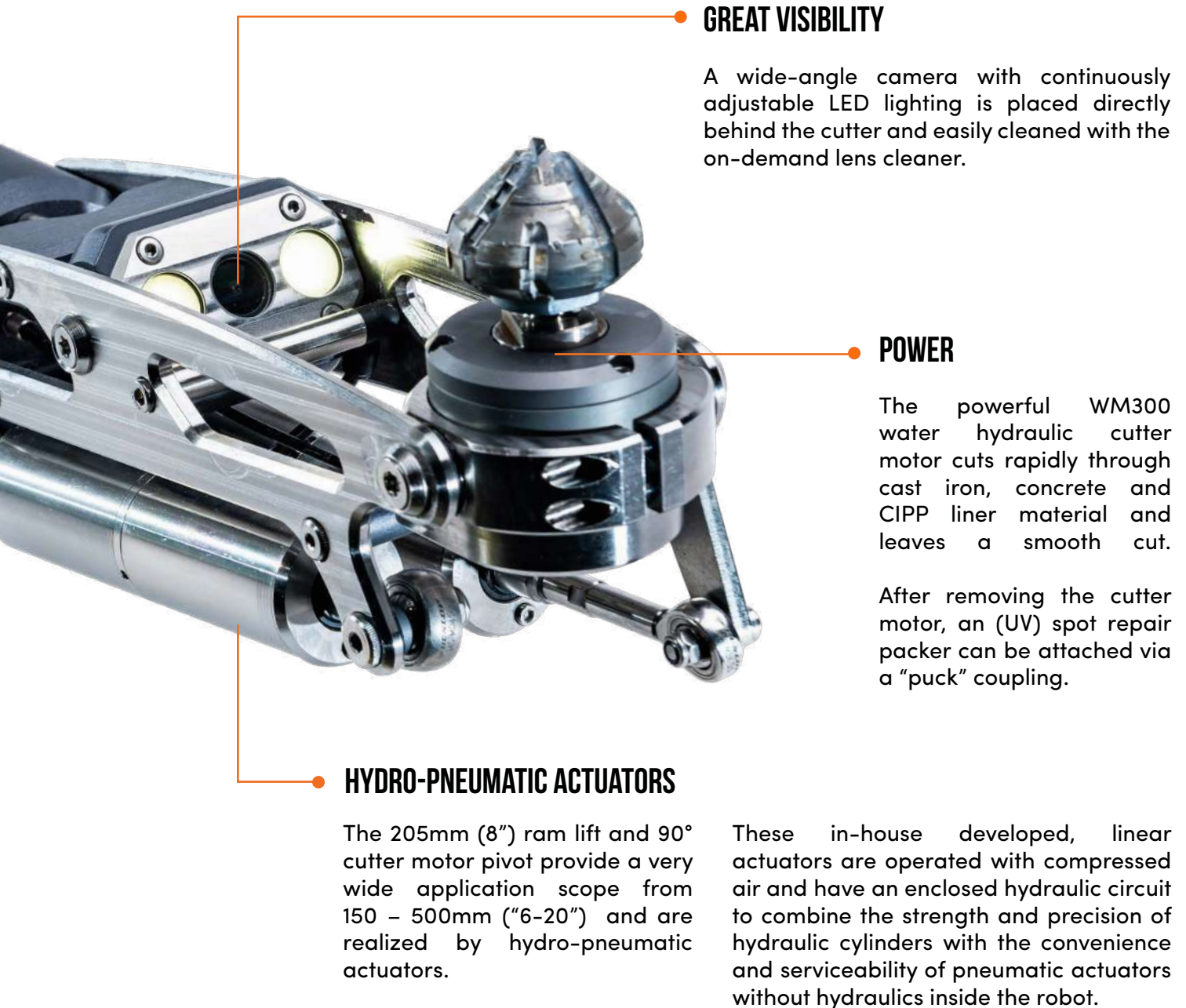
POWER & PRECISION – get a quality job done fast

WIDE SCOPE OF USE – from 150 – 500mm (6-20")

EASY SERVICEABLE – with personal assistance and clever maintenance kits

RELIABLE – build tough, from durable materials

ACCESSIBLE PARTS – reasonably priced parts, shipped the same day



● GREAT VISIBILITY

A wide-angle camera with continuously adjustable LED lighting is placed directly behind the cutter and easily cleaned with the on-demand lens cleaner.

● POWER

The powerful WM300 water hydraulic cutter motor cuts rapidly through cast iron, concrete and CIPP liner material and leaves a smooth cut.

After removing the cutter motor, an (UV) spot repair packer can be attached via a "puck" coupling.

● HYDRO-PNEUMATIC ACTUATORS

The 205mm (8") ram lift and 90° cutter motor pivot provide a very wide application scope from 150 – 500mm ("6-20") and are realized by hydro-pneumatic actuators.

These in-house developed, linear actuators are operated with compressed air and have an enclosed hydraulic circuit to combine the strength and precision of hydraulic cylinders with the convenience and serviceability of pneumatic actuators without hydraulics inside the robot.

WATER, AIR, OR ELECTRIC CUTTING?

Although most contractors appreciate the added power, low maintenance costs and easy upgrading to water jet cutting, there might be jobs where a water supply is not desired or silence more appreciated.




SEWER ROBOTICS cutters can be used with powerful water driven, pneumatic or silent electric cutter motors.



WM300



WM500

DRIVE	MOTOR	CUTTER	BENEFITS
 Water	WM300 WM500	HA125 HA195 HA250	+ Extreme power + Low maintenance costs + Upgrade to water jet cutting
 Air	PM300 PM500	HA125 HA195 HA250	+ No water supply required
 Electric	EM300 EM500	HA125 HA195 HA250	+ Single cable + Silent

CCTV INSPECTION & SPOT REPAIR



CCTV mainline (pre- and post) inspections without the requirement for an additional CCTV inspection robot system on site?

The R125 and R160 crawlers are compatible with the CAMTRONICS ZRK70 HD Pan & Tilt inspection camera for High-Definition pre- and post inspections.

This CCTV inspection module features a pan & tilt camera and a pressure adjustable air coupling at the front, operated from the control unit to connect with most available spot repair packers in the market.

PRO'S

- Compatible with the same robot that is used for grinding and water jetting
- Compatible with SEWER ANALYTICS WEB
- Automatic web synchronization
- Auto-horizon adjustment
- Single button joint inspection
- Air coupling for spot repair packers
- Camera compatible with push cable for inspection of 4" (100mm) pipeline



CAM125 > P49
150-375mm (6-15")



CAM160 > P54
150-375mm (6-15")



UV Patching > P62
150- 400mm (6-16")



**SERVICE &
MAINTENANCE**

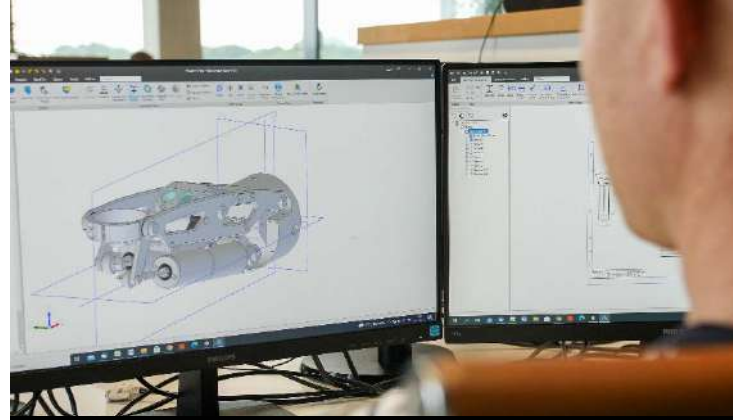
EASY SERVICE AT FAIR COSTS

Our equipment is built as tough as can be, with a slim, stainless-steel body and without delicate external parts, wiring and cables.

But as we know, anything can get broken in this industry and home-owners need to be able to use their toilets at the end of the day.

Therefore, we design our equipment so that it is easy to service, complete with service kits and training.

Our spare parts are reasonably priced and shipped the same day (if ordered before noon). Factory repairs are usually shipped back within 48 hours from arrival at our factory. And, we have loaner equipment available (also for when your project requires an additional or different robot or module than what you have already).



PRO'S

- PERSONAL ASSISTANCE
- SELF REPAIR POSSIBILITY
- REMOTE SYSTEM DIAL-IN
- FAIR PRICED PARTS
- WEBSHOP FOR PARTS & ACCESSORIES
- LOANER EQUIPMENT



CABLE REPAIR
SET



CUTTER MOTOR

CABLE RETERMINATION

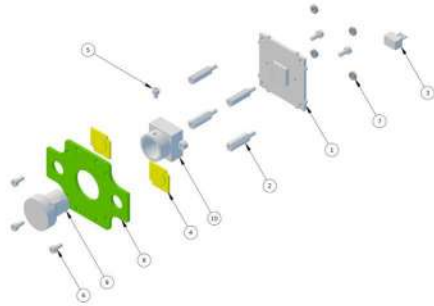
The robot's strain relief is designed so, that a single operator can do a cable retermination in the field within 90 minutes with our cable repair kit and instruction video.



CABLE REPAIR
VIDEO

CUTTER MOTOR REBUILD

When our cutter motors lose power after long and intense usage, they do not need to be exchanged. Instead, the ceramic bearings of the cutter motor can be replaced within 15 minutes in the field.



- 0 Camera module CT40
- 0 1 - 1/3" 700 tvl Color CCTV Board Camera
- 0 2 - Brass Spacer Stud, metric, internal/external WA-SBR1E
- 0 3 - 3pin small Cable 50mm
- 0 4 - 18V LED
- 0 5 - HEXAGON SOCKET HEAD CAP SCREW FULLY THREADED DIN Ece912 STAINLESS STEEL A2 RIGHT 70 M2X3
- 0 6 - HEXAGON SOCKET HEAD CAP SCREW FULLY THREADED DIN Ece912 STAINLESS STEEL A2 RIGHT 70 M2X5
- 0 7 - HEXAGON NUT DIN 934 STAINLESS STEEL A2 RIGHT 70

SPARE PARTS



Search products...

Product categories

Cutter bits (37)

Filter by price

Price: —



PRO Tapered milling cutter with tungsten carbide tip (Diameter 28-18 mm / Height 45 mm)

€549.00

[Add to Wishlist](#)



PRO Ball milling cutter (Diameter 40 mm / Height 36 mm / 12 segments)

€475.00

[Add to Wishlist](#)



PRO Tapered milling cutter with tungsten carbide tip (Diameter 30-18 mm / Height 35 mm)

€469.00

[Add to Wishlist](#)



Premium Ball milling cutter (Diameter 50 mm / Height 46 mm / 19 segments)

€249.00

[Add to Wishlist](#)



Premium Inlet milling cutter (Diameter 68 mm / Height 33 mm / 16 segments)

€240.00

[Add to Wishlist](#)



Premium Tapered milling cutter (Diameter 52-42 mm / Height 40 mm / 9 segments)

€240.00

[Add to Wishlist](#)

ACCESSORIES



SCAN FOR SHOP

A man in a white polo shirt is working in a warehouse. He is reaching into a grey plastic bin on a metal shelving unit. The shelving unit has many bins, and some are filled with white bags. The man is looking down at the bin he is reaching into. The background shows more shelving units and a white bag hanging from one of them.

**WEBSHOP FOR
PARTS & ACCESSORIES**


WHAT PRESSURE DO YOU NEED?

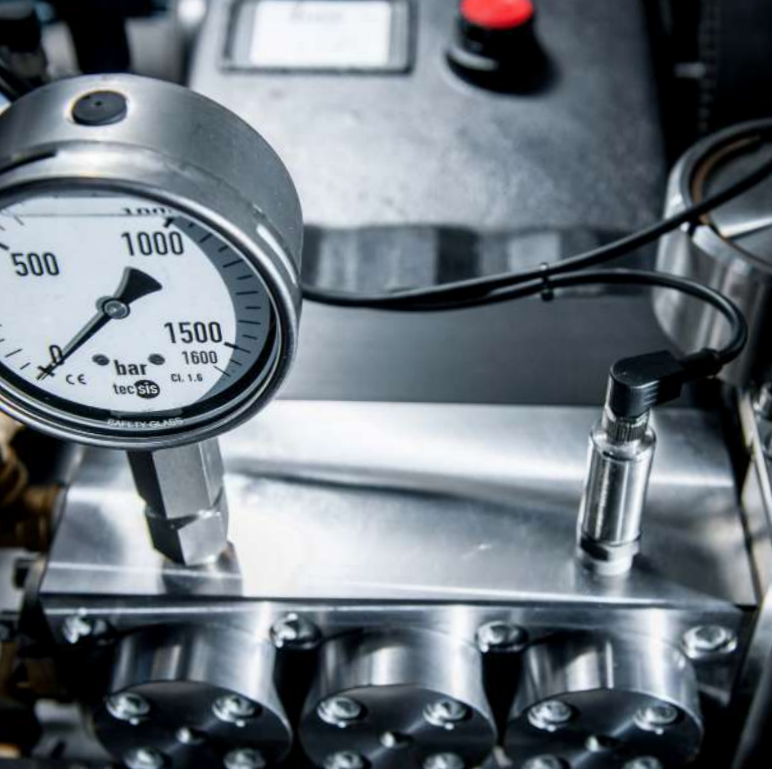
Continuous pressure adjustment of Sewer Robotics high pressure units allow the operator to adapt immediately to different materials and ever changing conditions from the control unit.

High pressure units are available with a maximum pressure of:

- 500BAR (7,250PSI)
- 1500BAR (21,750psi)
- 3000BAR (43,600PSI)

GETTING THE JOB DONE REQUIRES THE RIGHT WATER PRESSURE

APPLICATION	MATERIAL	REQUIRED MAX. WATER PRESSURE
REINSTATEMENT, CUTTING & GRINDING	 <p>CIPP LINER, PVC, BRICK, VITRIFIED CLAY, CONCRETE, CAST IRON, & STAINLESS STEEL</p>	500 BAR (7,250PSI)
PRECISION WATER JET CUTTING	 <p>ROOTS & GREASE</p>	500 BAR (7,250PSI)
PRECISION WATER JET CUTTING	 <p>CEMENT, CORROSION, SCALE, GROUT & CIPP LINER</p>	500 – 1500 BAR (7,250-21,750PSI)
PRECISION WATER JET CUTTING	 <p>CALCIUM, CONCRETE AND OTHER EXTREMELY HARD MATERIALS</p>	1500 – 3000 BAR (21,750-43,500PSI)

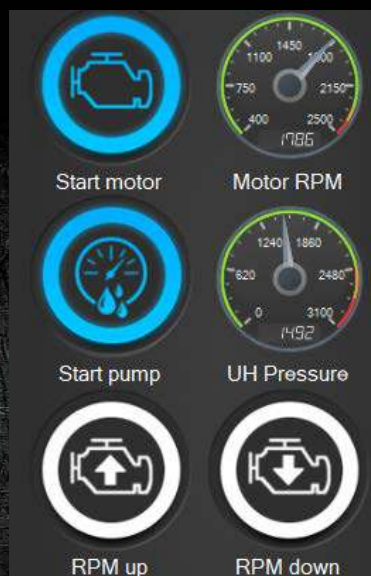


HIGH PRESSURE UNITS

SEWER ROBOTICS high-pressure units are available with maximum pressures ranging from 500bar (7,250psi) to 3000bar (43,500psi) and can be driven by a combustion engine, electric motor or the vehicle's engine via the Power Take Off (PTO).

DIGITAL CONTROLS

SEWER ROBOTICS high pressure units are built with digital controls and sensors for continuous pressure adjustments and immediate pump operation without leaving the robot controls. Digital pressure reading can be used for training and reporting.



PUMP CONTROL SOFTWARE

PRO'S

- FUEL-EFFICIENT
- IN CONTROL — WITHOUT HAVING TO LEAVE THE CONTROL UNIT
- CONTINUOUS ADJUSTMENT OF PRESSURE - TO ADAPT TO DIFFERENT MATERIALS AND EVER-CHANGING CONDITIONS
- ALL IMPORTANT OPERATING DATA DIGITAL & AT A GLANCE

PETROL, DIESEL OR PTO PUMP

SEWER ROBOTICS (Ultra) high pressure units are available for a wide variety of applications and at different investment costs.



HDMD19 CART



HDMD160 CANOPY

COMBUSTION (HDM) HIGH-PRESSURE UNIT

The combustion engine driven high-pressure unit features a Diesel or Gasoline motor to drive the pump.

PRO'S

- Stand-alone
- Compact
- Sound-proof
- Diesel emission: Up to Tier 4 final & Stage V



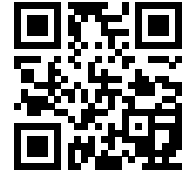
HDMD37 – HDMD55 CANOPY



HDMD115 - 2800BAR (40,600PSI)

AVAILABLE HIGH-PRESSURE UNITS

HP-UNIT	TYPE	PRESSURE/FLOW	POWERED	WEIGHT	DIMENSIONS LXWXH	VEHICLE GVWR
HDMP19	Cart	500bar (7,250psi) 15LPM (4.0gpm)	Petrol Engine	220kg (484lbs)	1064x500x1125mm (32x20x42")	3500kg (7,715lbs)
HDMD19	Cart	500bar (7,250psi) 15LPM (4.0gpm)	Diesel Engine (TIER4 / Stage V)	320kg (705lbs)	1064x500x1125mm (32x20x42")	3500kg (7,715lbs)
HDMD19	Cart	750bar (10,900psi) 13LPM (3.4gpm)	Diesel Engine (TIER4 / Stage V)	320kg (705lbs)	1064x500x1125mm (32x20x42")	3500kg (7,715lbs)
HDMP30	Cart	800bar (11,600psi) 18LPM (4.7gpm)	Petrol Engine	280kg (620lbs)	1064x500x1125mm (32x20x42")	3500kg (7,715lbs)
HDMD37	Canopy	1000bar (14,500psi) 20LPM (5.3gpm)	Diesel Engine (TIER4 / Stage V)	975kg (2,150lbs)	2014x750x1150mm (80x30x45")	12000kg (26,450lbs)
HDPTO37	PTO	1000bar (14,500psi) 20LPM (5.3gpm)	Truck PTO Direct	250kg (5,50lbs)	Installed under chassis	>5000kg (>11,000lbs)
HDMD55	Canopy	1500bar (21,750psi) 19LPM (5.6gpm)	Diesel Engine (TIER4 / Stage V)	975kg (2,150lbs)	2014x750x1150mm (80x30x45")	>12000kg (>26,450lbs)
HDPTO70	PTO	1500bar (21,750psi) 23LPM (5.6gpm)	Truck PTO Hydraulic	975kg (2,150lbs)	Installed under chassis	>8000kg (>17,600lbs)
HDPTO115	PTO	2800 bar (40,600psi) 23LPM (5.6gpm)	Truck PTO Direct	1000kg (2,205lbs)	Installed on chassis	>16000kg (>35,270lbs)
HDMD115	Canopy	2800 bar (40,600psi) 23LPM (5.6gpm)	Diesel Engine (Stage V)	2500kg (5,510lbs)	70x1080x1856mm (105x43x73")	>16000kg (>35,270lbs)
HDMD160	Canopy	2500 bar (36,260psi) 32LPM (8.5gpm)	Diesel Engine (Stage V)	2500kg (5,510lbs)	70x1080x1856mm (105x43x73")	>16000kg (>35,270lbs)



SCAN FOR VIDEO

MOBILE CONFIGURATION

This economic mobile system configuration is compatible with all SEWER ROBOTICS CRAWLERS and job-specific modules for UHP water jet cutting, lateral reinstatement and CCTV inspection inside 150 - 1000mm (6-40") pipelines.

The cable- and hose reels have a small footprint for easement work or installation into any type of vehicle.



HH100 HYBRID CABLE REEL AND CP3DP MOBILE CONTROL UNIT
WITH HA195 CUTTER AND WJ125 WATER JET

CP3DP SUITCASE CONTROL UNIT

- PC : 15.6" (1.920 x 1.080) Touch Screen Panel
- Joysticks : Dual, 6-axis, responsive joysticks
- Interfaces : Robot power supply, communication interface & video interface
- Camera : Photo and video capturing with text overlay
- Power : 100-230V, 50-60Hz
- Dimensions : 540x410x225mm (21.3x16.1x8.7") – closed
- Weight : 18kg (40lbs)

HH100 CABLE & HOSE REELS

- Max. lengths : 120M (400ft)
- Max. pressure : 1500bar (21,750psi)
- Dimensions : 620x440x620mm (24.4x17.3x24.4") each – Stackable
- Weight : 80kg (175lbs) each
- Compatible Robots : R125, R160, R250, R600, TWK300E

***“SMALL INVESTMENT,
GREAT PERFORMANCE”***



MOBILE CONFIGURATION INSIDE ALUMINUM SHIPPING BOX
WITH HA125 CUTTER AND 500BAR (7,250PSI) POWERPACK

PRO'S

- **COST-EFFICIENT**
- **POWERFUL WITH ACCESS TO NICHE MARKETS**
- **RUGGED SUITCASE CONTROL UNIT**
- **CABLE AND HOSE REELS 120M (400FT)**
- **COMPATIBLE WITH ALL ROBOTS & MODULES**
- **SMALL FOOTPRINT**
- **MINIMAL INVESTMENT**

EASY-TO-USE SOFTWARE AND ERGONOMIC CONTROLS

The ID-RIS operating software runs from a touch screen computer, displays live video and system data and allows remote control and continuous pressure adjustment of the pump.

All movements of the crawler, job specific modules and reels are operated from two programmable 6-axis joysticks.



PRO'S

- CONTINUOUS PRESSURE ADJUSTMENT FROM CONTROL UNIT
- TWO 6-AXIS JOYSTICKS
- CUSTOMIZABLE JOYSTICK SETTINGS
- PHOTO- AND VIDEO CAPTURING
- COMPATIBLE WITH NASSCO PACP CERTIFIED POSM AND WINCAN SOFTWARE

HYBRID CABLE & HIGH PRESSURE HOSE REELS

MH200R - MH200HD

The MH200R and MH200HD Hybrid Cable and High Pressure Hose Reels are installed in heavy duty stainless steel frames with standard 150m (500') and maximum 250m (820') cable and high pressure hose. The reels feature cross-lead spindles, adjustable speeds, distance measurement and can be controlled individual or simultaneous from the reels, the control unit or a remote control.

HYBRID CABLE REEL

The Kevlar protected hybrid cable holds wiring for power, video and communication around an air supply hose for the pneumatic movements and positive pressure inside the transporter and modules.

HIGH PRESSURE HOSE REEL

The high-pressure hose supplies water under pressure for precision water jet cutting and reinstatement cutting operations. The MH200HD has an UHP swivel for pressures up to 1500bar (21,750psi).

*Individual Ultra high pressure hose segments are available for pressures up to 3000bar (43,500psi).



SPECIFICATIONS

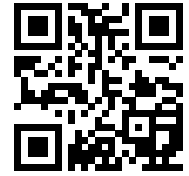
- Standard length : 150m (500')
- Max. length : 250m (820')
- Max. pressure : 1500bar (21,750psi)*
- Dimensions : 820x500x1020mm (33x20x40") each
- Weight : 220kg (485lbs) each

FEATURES

- Controlled from reels, control unit or remote control
- Distance measurement
- Cross lead spindle
- Adjustable speeds
- Torque regulated synchronization
- Loop detection sensor
- Stainless steel frame
- Double wired remote control with emergency stop

VAN & TRAILER

SKID



SCAN FOR VIDEO

This plug-and-play skid offers a convenient and affordable solution for integrating SEWER ROBOTICS' lateral reinstatement and precision jet cutting robot systems in vans, trailers and other vehicles.

With a 1000L (264gal) water tank, 3000W power inverter, operator desk with flush mounted joysticks and 27" touch screen PC, rear view camera, and robot storage drawer, it only needs to be anchored inside the vehicle and connected to the vehicle's batteries.



SKID WITH HA195 CUTTER ROBOT

SPECIFICATIONS

- Compatible reels : HH100 - 120m (400')
: MH200 - 250m (820')
- Control unit : Flush mounted CP3D joystick panel & 27" Touchscreen PC
- Compatible vehicles : Vans, trailers and trucks
- Water supply : 1000L (264gal) or more
- Power supply : 3000watt 100-230V, 50-60Hz inverter (12-24VDC)
- Dimensions : D2400xW1400xH1620mm (94.5x55.2x64")
- Weight : 340kg (750lbs) (empty tank)
- Vehicle GVWR : 3500kg (7,716lbs) with empty tank - or heavier
- Compatible Robots : R125, R160, R250, R600, TWK300E

FEATURES

- CCTV Vicinity camera system
- Robot storage drawer
- Electric pre-pressure pump

***“FROM OUR SHOP,
STRAIGHT TO YOUR JOB”***



SKID WITH MH200 REELS AND HA125 CUTTER INSIDE A COMPACT TRAILER

PRO'S

- PLUG-AND-PLAY
- CONVENIENT OPERATOR DESK
- 27" TOUCH SCREEN PC
- 1000L (264GAL) WATER SUPPLY
- ROBOT STORAGE DRAWER
- COMPATIBLE REELS

: HH100 — 120M (400')

: MH200 — 250M (820')



SKID CONTROL SIDE
FROM SIDE ACCESS DOOR



***“WHEN YOU SPEND JUST AS MUCH TIME
ON THE JOB AS YOU DO AT HOME,
YOU NEED EQUIPMENT THAT
LOOKS AND FEELS GOOD ”***

SPECIAL PURPOSE VEHICLE

Sewer Robotics box installations have everything exactly at the right place. Reels, robot storage and a workbench in the equipment compartment. Convenient touch screen controls and customizable joysticks, cabinetry with sufficient storage in a laboratory alike control studio and a powerful high-pressure unit with water- and power supplies in the engine room.

EQUIPMENT COMPARTMENT

- 1. BEACONS OR STROBE LIGHTS**
 - 2. WORK LIGHT**
 - 3. REAR VIEW CAMERA**
 - 4. RETRACTABLE WATER & AIR REELS WITH CLEANING GUNS**
 - 5. JIB CRANE WITH ELECTRIC HOIST**
 - 6. LED LIGHTING**
 - 7. ADDITIONAL MONITOR**
 - 8. HYBRID CABLE REEL**
 - 9. HIGH-PRESSURE HOSE REEL**
 - 10. ROBOT STORAGE DRAWERS**
 - 11. HEATING RADIATOR**
 - 12. SLIDING DOOR TO ACCESS OPERATOR STUDIO**
 - 13. CLEAN WHITE WALL LINING**
 - 14. HAND SANITIZER**
 - 15. WORKBENCH WITH POWER RECEPTACLES**
 - 16. TOOLS & EQUIPMENT STORAGE**
 - 17. COATED FLOOR**
 - 18. STEP BUMPER**
 - 19. UNDER CARRIAGE STORAGE BOXES**
- YOUR CUSTOM REQUIREMENTS**



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OPERATOR STUDIO

1. CABINetry
 2. LED LIGHTING
 3. CCTV VICINITY CAMERA SYSTEM
 4. POWER RECEPTABLES
 5. 27" TOUCH SCREEN PC CONTROL UNIT
 6. OPERATOR DESK WITH FLUSH MOUNTED JOYSTICKS
 7. EMERGENCY STOP, LIGHTING AND SYSTEM POWER BUTTONS
 8. AIR CONDITIONER
 9. HEATING RADIATOR
 10. COATED FLOOR
 11. CLEAN WHITE WALL LINING
- YOUR CUSTOM REQUIREMENTS



ENGINE ROOM

- SIDE ACCESS DOOR
 - CABINETRY
 - LED LIGHTING
 - HIGH-PRESSURE UNIT
 - WATER SUPPLY TANK & FILTERS
 - POWER SUPPLIES
 - CLOSED CIRCUIT RADIATOR HEATING SYSTEM WITH THERMOSTAT
 - AIR COMPRESSOR
- YOUR CUSTOM REQUIREMENTS**

***“PLUG-AND-PLAY,
BOX INTEGRATED SYSTEMS”***

SPECIAL PURPOSE

BOX INSTALLATION

Sewer Robotics box installations are built in our factory, with all bells and whistles, to meet our quality standards and your (custom) requirements. Such box integrated system is easily shipped inside a container and installed on a suitable chassis anywhere in the world.



SEWER ROBOTICS BOX INSTALLATION WITH HDM55 UHP UNIT

INTEGRATION ACCESSORIES





JETTING CAPACITY

By adding a jetting pump with hydraulic reel, the same precision cutting vehicle and crew can flush removed materials from the obstruction back to the manhole to increase production.

The jetting pump and hose reel can be driven by the same engine or PTO that drives the Ultra High Pressure pump.

CUSTOM IS OUR SPECIALTY

We understand the importance to stand out from competition and invite you to share your ideas and custom requirements, so that our engineers can make your ideal equipment or vehicle integration reality.



PACKER CONTROLS

A third joystick and pneumatic (top-hat) packer controls can be added to enhance operator convenience.



PERMANENT VAN INTEGRATION

With sufficient cabinetry, desk-integrated control unit and 27" Touch screen monitor in a laboratory alike operator studio.

SINGLE CABLE ELECTRIC CUTTING

SEWER ROBOTICS electric cutter robots can be used in combination with a single hybrid cable to reach far inside the pipe.





SPECIFICATIONS

MULTI-FUNCTIONAL CRAWLER



SCAN FOR VIDEO

R125 150 - 600MM (6-24")

The multi-functional and heavy-duty, stainless steel, R125 crawler has a very slim 100mm (4") body for maximized clearance inside 150mm (6") pipelines.

The R125 features the twist-and-lock mechanism to exchange various job-specific equipment modules within 60 seconds and is compatible with SEWER ROBOTICS' mobile and vehicle integrated control units, cable- and hose reels.

APPLICATIONS

- UHP water jet cutting for the removal of solid obstructions and deposits settled
- Lateral reinstatement & cutting protruding taps
- Installation of Top Hats and other (UV) spot repair patches
- Removing rocks and other items from pipelines with the gripper
- CCTV Inspection



WJ125 WATER JET CUTTER



HA125 REINSTATEMENT CUTTER

SPECIFICATIONS

Scope of use	: 150 - 600mm (6-24")
Drive	: AWD - Electric
Rotation (pan)	: Infinite - Electric
Length	: 405mm (16")
Body diameter	: 100mm (3.9")
Weight	: 15kg (33lbs)

COMPATIBLE MODULES

- WJ125 Water jet cutting
150 - 600mm (6-24")
- HA125 Lateral reinstatement
150 - 500mm (6-20")
- CCTV Inspection150
500mm (6-20")
- Gripper
150 - 600mm (6-24")

FEATURES

- Twist-and-lock-mechanism
- Heavy-duty stainless steel
- Roll and Pitch sensors (x-y)
- Continuously pressurized
- Pressure sensor
- Rotation sensor
- Temperature sensor

ACCESSORIES

- Wheels and spacers
- Additional weights
- Custom developed modules
- Descaling (or circumferential cutting) tool with adjustable rotating lances

HIGH DEFINITION CCTV INSPECTION

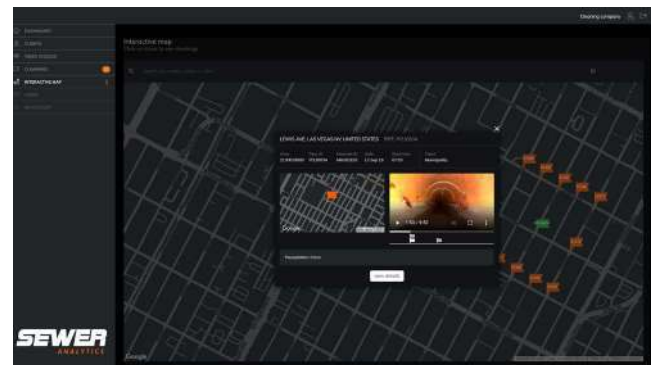


SCAN FOR VIDEO

CAM125HD 150 - 500MM (6-20")

The CAM125 module connects the CAMTRONICS ZRK70 HD Pan & Tilt inspection camera with the Sewer Robotics R125 crawler for quick High-Definition pre- and post inspections.

The CAM125 module features a pan & tilt camera and a pressure adjustable air coupling at the front, operated from the control unit to connect with most available spot repair packers in the market.



SEWER ANALYTICS web app



SPECIFICATIONS

Scope of use	: 150 - 500mm (6-20")
Video	: Analog HD : 1080p, 30fps (recorded)
Internal storage	: 32 GB
Drive	: AWD - Electric
Camera pan	: Infinite
Camera tilt	: 230°
Focus	: Manual
Lighting	: Intensity adjustable LEDs
Location transmitter	: 512 Hz
Inspection software	: SCS (NEN EN 13508) : WINCAN (WRc, NASSCO) : POSM (NASSCO)
Air pressure	: Max. 10 bar (145psi)
Length	: 158mm (6.2")
Weight	: 1,6kg (3.6lbs)

FEATURES

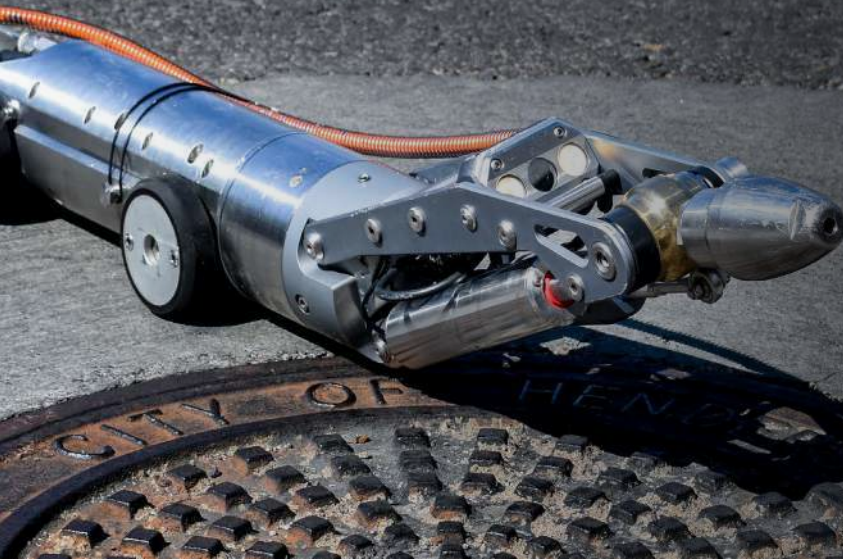
- Compatible with R125 crawler
- Compatible with SEWER ANALYTICS WEB
- Automatic web synchronization*
- Auto-horizon adjustment
- Single button joint inspection
- Air coupling for spot repair packers
- Camera compatible with push cable for inspection of 100mm (4") pipeline

ACCESSORIES

- Push cable reel for inspections inside 100mm (4") pipelines
- Laser crack measurement
- 512Hz Locator receiver

* Internet connection required

UHP PRECISION WATER JET CUTTING



SCAN FOR VIDEO

WJ125 150 - 600MM (6-24")

High-pressure water jet cutting is the best and most efficient solution for removing solid obstructions and deposits settled.

Water jet cutting uses a targeted high pressure water blast, precisely applied and continuously monitored, to remove roots, cement, grout, concrete, failed liners and mineral deposits without adding damage to the host pipe.



WJ125 WATER JET CUTTER

*"REMOVE ROOTS, CEMENT, GROUT,
CONCRETE, FAILED LINERS AND
MINERAL DEPOSITS"*



UHP CONCRETE REMOVAL

SPECIFICATIONS

Scope of use	: 150 – 600mm (6-24")
Max. pressure	: 3000 bar (43,500 psi)
Movements	: 4-axis
Drive	: AWD – Electric
Rotation (pan)	: 500° – Electric
Ram lift	: 210mm (8")
	: Hydro-pneumatic
Nozzle pivot (tilt)	: 110° – Hydro-pneumatic
Camera rotation	: Manual
Lighting	: Intensity adjustable LEDs
Lens cleaner	: Compressed air
Length	: 350mm (13.7")
Weight	: 5kg (11lbs)

FEATURES

- Compatible with R125 crawler
- Heavy duty materials
- Speed adjustable movements
- Wide angle color camera with Sapphire protection lens
- Twist-and-lock mechanism

ACCESSORIES

- Rotary- and pinpoint nozzles with extensions
- Fluid lens cleaner for concrete cutting
- Mixing unit to add root foaming or grease dissolving, additives
- Gripper

LATERAL REINSTATEMENT CUTTING



SCAN FOR VIDEO

HA125 150 - 500MM (6-20")

The HA125 reinstatement cutter has a decent clearance inside relined 150mm (6") pipelines and can be used inside pipelines up to 500mm (20") with its 205 mm (8") ram lift.

The 90-degree cutter motor pivot and ram lift are hydro-pneumatically actuated for maximized durability, force and precision without hydraulics inside the robot.

The durable R125 is easy to service and features a powerful cutter motor, great camera visibility with lens cleaner and very precise and operator friendly controls.

*"THE MOST POWERFUL 150MM (6")
CUTTER ON THE MARKET!"*



CUTTING A CAST IRON TAP

SPECIFICATIONS

Scope of use	: 150 – 500mm (6-20")
Cutting motor	: WM300 - Water : PM300 - Pneumatic : EM300 - Electric
Cutter shaft	: M14 thread
Movements	: 4-axis
Drive	: AWD - Electric
Rotation (pan)	: 500° - Electric
Ram lift	: 205mm (8") : Hydro-pneumatic
Cutter pivot (tilt)	: 90° - Hydro-pneumatic
Lighting	: Intensity adjustable LEDs
Lens cleaner	: Compressed Air : Water
Weight	: 5,1kg (11.2lbs)

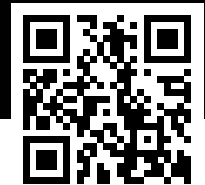
FEATURES

- Compatible with R125 Crawler
- Heavy-duty materials
- Speed adjustable movements
- Wide angle color camera with Sapphire protection lens
- Durable stainless body without delicate exterior parts
- Short design with hinging strain relief for tight manholes
- Maintenance friendly

ACCESSORIES

- M14x2 threaded cutter bits & tools
- Cutter brackets for circumferential and longitudinal cutting
- Packer 'puck' coupling mechanism
- Gripper

SOLID DEBRIS REMOVAL



SCAN FOR VIDEO

GRIPPER

The gripper accessory is compatible with all water driven lateral reinstatement and water jet cutting job-specific modules. It has 3 replaceable 'fingers' that can be closed to grab and remove solid debris and other undesired objects from pipelines.

The closing force of the gripper's fingers is controlled by adjusting the pressure of the high-pressure power pack.



SAVING A ROV FROM A LIVE PIPE



REMOVING A ROCK

COMPATIBLE MODULES

- HA125 Lateral reinstatement
- WJ125 Water jet cutting

- HA195 Lateral reinstatement
- WJ180 Water jet cutting
- WJ200 Water jet cutting

- HA250 Lateral reinstatement
- WJ250 Water jet cutting

FEATURES

- Heavy duty materials
- Adjustable 'fingers' for different sizes and closing angles
- Adjustable closing force via pressure

MULTI-FUNCTIONAL CRAWLER

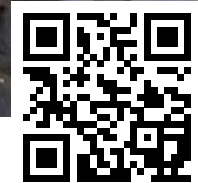
R160 200 – 750MM (8-30")

The heavy duty stainless steel R160 is compatible with various job-specific equipment modules for underground pipe inspection, cleaning, cutting and rehabilitation from lined 200mm (8") pipes and larger with a variety of wheels and spacers.

The modules can be exchanged within 60 seconds due to the twist-and-lock mechanism.



DESCALING TOOL



SCAN FOR VIDEO

APPLICATIONS

- UHP water jet cutting for the removal of solid obstructions and deposits settled
- Lateral reinstatement & cutting protruding taps
- Installation of Top Hats and other (UV) spot repair patches
- Removing rocks, debris and other items from pipelines with the gripper
- CCTV Inspection

SPECIFICATIONS

Scope of use	: 200 - 750mm (8-30")
Max. pressure	: 3000 bar (43,500psi)
Drive	: AWD - Electric
Rotation (pan)	: Infinite - Electric
Length	: 440mm (17.3 ")
Body diameter	: 125mm (4.9")
Weight	: 22,3kg (49.2lbs)

COMPATIBLE MODULES

- WJ180 Precision Water Jet Cutting
200 - 500mm (8-20")
- WJ200 Precision Water Jet Cutting
250 - 750mm (10-30")
- HA195 Lateral Reinstatement Cutting
250 - 750mm (10-30")
- CAM160 CCTV Inspection
200 - 500mm (8-20")
- Gripper
250 - 750mm (10-30")

FEATURES

- Twist-and-lock-mechanism
- Heavy-duty stainless steel
- Roll and Pitch sensors (x-y)
- Continuously pressurized
- Pressure sensor
- Rotation sensor
- Temperature sensor

ACCESSORIES

- Wheels and spacers
- Additional weights
- Custom developed modules
- Descaling (or circumferential cutting) tool with adjustable rotating lances

HIGH DEFINITION CCTV INSPECTION

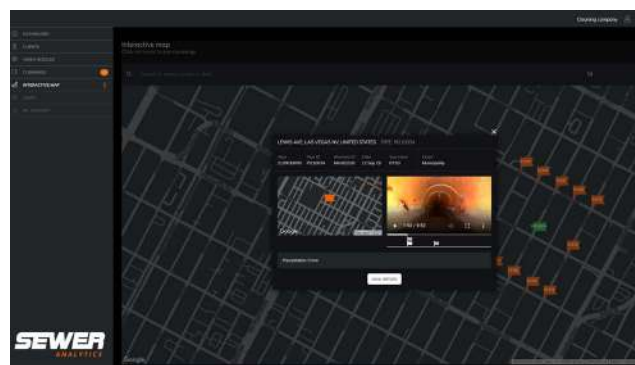


SCAN FOR VIDEO

CAM 160HD 200 - 500MM (8 - 20")

The CAM160 module connects the CAMTRONICS ZRK70 HD Pan & Tilt inspection camera with the Sewer Robotics R160 crawler for quick High-Definition pre- and post inspections with the same robot system that is used for cutting protruding services, solid obstructions removal and lateral reinstatement cutting.

The CAM160 module features a pan & tilt camera and a pressure adjustable air coupling at the front, operated from the control unit to connect with most spot repair packers available in the market.



SEWER ANALYTICS web app



SPECIFICATIONS

Scope of use	: 200 - 500mm (8-20")
Video	: Analog HD : 1080p, 30fps (recorded)
Internal storage	: 32 GB
Drive	: AWD - Electric
Camera pan	: Infinite
Camera tilt	: 230°
Focus	: Manual
Lighting	: Intensity adjustable LEDs
Location transmitter	: 512 Hz
Inspection software	: SCS (NEN EN 13508) : WINCAN (WRc, NASSCO) : POSM (NASSCO)
Air pressure	: Max. 10 bar (145psi)
Length	: 158mm (6.2")
Weight	: 1,6kg (3.6lbs)

FEATURES

- Compatible with R160 crawler
- Compatible with SEWER ANALYTICS WEB
- Automatic web synchronization*
- Auto-horizon adjustment
- Single button joint inspection
- Air coupling for spot repair packers
- Camera compatible with push cable for inspection from 100mm (4") pipeline

ACCESSORIES

- Push cable reel for inspections inside 100mm (4") pipelines
- Laser crack measurement
- 512Hz locator receiver

* Internet connection required

UHP PRECISION WATER JET CUTTING



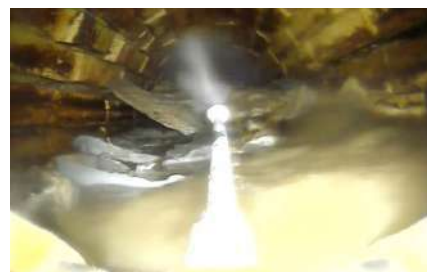
SCAN FOR VIDEO

WJ180 200 – 500MM (8-20")

The WJ180 precision water jet cutting module is compatible with the R160 crawler for removing root balls, hardened fat, grease, cement, scaling, calcium, mineral build-up and over-poured concrete from within 200 – 500mm (8-20") pipes.

The WJ180 features a moving camera, lens cleaner and 90 degrees nozzle lift.

*"THE VERY FIRST WATER JET CUTTING
ROBOT WAS RETIRED IN WORKING
CONDITION AFTER 15 YEARS OF SERVICE"*



WJ180 REMOVING CONCRETE



WJ180 WITH PINPOINT NOZZLE

SPECIFICATIONS

Scope of use	: 200 – 500mm (8-20")
Max. pressure	: 3000 bar (43,500 psi)
Movements	: 3-axis
Drive	: AWD – Electric
Rotation (pan)	: 500° – Electric
Nozzle pivot (tilt)	: 90° – Hydro-pneumatic
Camera rotation	: Simultaneous with nozzle
Lighting	: Intensity adjustable LEDs
Lens cleaner	: Compressed air
Length	: 250mm (9,8")
Weight	: 7,5kg (16.4lbs)

FEATURES

- Compatible with R160 crawler
- Heavy duty materials
- Speed adjustable movements
- Wide angle color camera with Sapphire protection lens
- Twist-and-lock mechanism

ACCESSORIES

- Rotary- and pinpoint nozzles with extensions
- Fluid lens cleaner for concrete cutting
- Mixing unit to add root foaming or grease dissolving additives
- Gripper



UHP PRECISION WATER JET CUTTING



SCAN FOR VIDEO

WJ200 250 - 750MM (10-30")

The WJ200 UHP water jet cutting module removes root balls, hardened fat, grease, cement, scaling, calcium, mineral build-up and over-poured concrete from within 250 - 750mm (10-30") pipes.

The WJ200 jetting module features 270mm (11") arm lift and 90° nozzle-tilt to ensure the right working angle in large pipelines of up to 750mm (30").

The LED lighting and camera are placed next to the nozzle to see exactly what the nozzle aims at.



FAILED CIPP LINER



WJ200

SPECIFICATIONS

Scope of use	: 250 - 750mm (10-30")
Max. pressure	: 3000 bar (43,500 psi)
Movements	: 4-axis
Drive	: AWD - Electric
Rotation (pan)	: 500° - Electric
Ram lift	: 270mm (11") : Hydro-pneumatic
Nozzle pivot (tilt)	: 90° - Hydro-pneumatic
Camera rotation	: Simultaneous with nozzle
Lighting	: 4 Intensity adjustable LEDs
Lens cleaner	: Compressed air
Length	: 461mm (18.1")
Weight	: 8kg (17.6lbs)

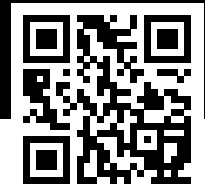
FEATURES

- Compatible with R160 crawler
- Heavy duty materials
- Speed adjustable movements
- Wide angle color camera with sapphire protection lens
- Twist-and-lock mechanism

ACCESSORIES

- Rotary- and pinpoint nozzles with extensions
- Fluid lens cleaner for concrete cutting
- Mixing unit to add root foaming or grease dissolving additives
- Gripper

LATERAL REINSTATEMENT CUTTING



SCAN FOR VIDEO

HA195 250 - 750MM (10-30")

The HA195 reinstatement cutter features an infinite rotating camera with water lens cleaner and on-demand wiper for a clear and unobstructed view while reinstating service connections after lining and cutting protruding laterals and hammer taps of any material from inside 250 – 750mm (10-30") pipelines.

This HA195 reinstatement cutter can be used with the powerful WM500 water driven cutter motor, or -when water jet cutting is not desired- with a pneumatic or silent electric driven cutter motor.

The cutter motor can be easily replaced for a packer coupling mechanism to catch the 'puck' of most readily available spot repair packers.

*"COMPATIBLE WITH MOST TOP HAT
AND (UV) SPOT REPAIR PACKERS"*



HA195 WITH TOP HAT

SPECIFICATIONS

Scope of use	: 250 – 750mm (10-30")
Cutting Motor	: WM500 - Water : AM500 - Pneumatic : EM500 - Electric
Cutter shaft	: M14 thread
Movements	: 4-axis
Drive	: AWD – Electric
Rotation (pan)	: 500° - Electric
Ram lift	: 270mm (11") : Hydro pneumatic
Cutter Pivot (tilt)	: 90° - Hydro-pneumatic
Camera Rotation	: Infinite - Electric
Lighting	: 4 Intensity adjustable LEDs
Lens cleaner	: Water : On-demand wiper
Weight	: 12kg (26.5lbs)

FEATURES

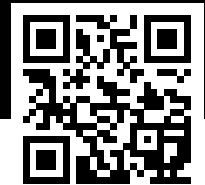
- Compatible with R160 Crawler
- Coupling mechanism for spot repair packers
- Heavy-duty materials
- Speed adjustable movements
- Wide angle color camera with Sapphire protection lens
- Durable stainless body without delicate exterior parts
- Maintenance friendly

ACCESSORIES

- M14x2 threaded cutter bits & tools
- Cutter brackets for circumferential and longitudinal cutting
- Packer 'puck' coupling mechanism
- Gripper



MULTI-FUNCTIONAL CRAWLER



SCAN FOR VIDEO

R250 250 - 1000MM (10-40")

The multi-functional and heavy-duty, stainless steel, R250 crawler features an UHP swivel inside the robot to allow infinite rotation.

The various job-specific equipment modules are easily exchanged within 60 seconds for underground pipe inspection, cleaning, cutting and rehabilitation from lined 250mm (10") pipes and larger with a variety of wheels and spacers.

The R250 is compatible with SEWER ROBOTICS' mobile and vehicle integrated control units, cable- and hose reels.

APPLICATIONS

- UHP water jet cutting for the removal of solid obstructions and deposits settled
- Lateral reinstatement & cutting protruding taps
- Installation of Top Hats and other (UV) spot repair patches
- Removing rocks, debris and other items from pipelines with the gripper
- CCTV Inspection



R250 CRAWLER AND WJ250 WATER JET

SPECIFICATIONS

Scope of use	: 250 - 1000mm (10-40")
Max. pressure	: 3000 bar (43,500psi)
Drive	: AWD - Electric
Rotation (pan)	: Infinite - Electric
Length	: 645mm (25.4")
Weight	: 57kg (126lbs)

COMPATIBLE MODULES

- WJ250 Precision Water Jet Cutting
300 - 1000mm (12-40")
- HA250 Lateral Reinstatement Cutting
300 - 1000mm (12-40")
- CAM250 CCTV Inspection
300 - 1000mm (12-40")
- Gripper
300 - 1000mm (12-40")

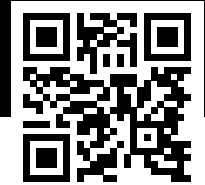
FEATURES

- Twist-and-lock-mechanism
- Heavy-duty stainless steel
- Roll and Pitch sensors (x-y)
- Continuously pressurized
- Pressure sensor
- Rotation sensor
- Temperature sensor

ACCESSORIES

- Wheels and spacers
- Additional weights
- Auxiliary lighting
- Auxiliary camera with 180° rotation for looking forward and backward
- Descaling (or circumferential cutting) tool with adjustable rotating lances

UHP PRECISION WATER JET CUTTING



SCAN FOR VIDEO

WJ250 250 - 1000MM (10-40")

The WJ250 water jet cutting robot can be used for fast and powerful solid obstructions removal inside 250 – 1000mm (10–40") sewer-, storm- and water pipelines with its 520mm (20") ram lift and 90 degree nozzle pivot.

This beast features infinite rotation while precisely applying a water blast of max. 3000 bar (43,500psi) for controlled removal of tree roots, solidified fat, grease, grout, cement, tuberculation, scaling, grout, cement, failed liner, calcium, mineral deposits and concrete to avoid costly pipeline replacement.



WJ250



MINERAL BUILD-UP

SPECIFICATIONS

Scope of use	: 250 - 1000mm (10-40")
Max. pressure	: 3000 bar (43,500psi)
Movements	: 4-axis
Drive	: AWD - Electric
Rotation (pan)	: Infinite - Electric
Ram lift	: 520mm (20")
	: Hydro-pneumatic
Nozzle pivot (tilt)	: 90° - Hydro-pneumatic
Camera rotation	: Simultaneous with nozzle
Lighting	: 4 Intensity adjustable LEDs
Lens cleaner	: Compressed air
Length	: 650mm (23.6")
Weight	: 35kg (77lbs)

FEATURES

- Compatible with R250 crawler
- Heavy duty materials
- Speed adjustable movements
- Wide angle color camera with Sapphire protection lens
- No external UHP hoses

ACCESSORIES

- Rotary- and pinpoint nozzles with extensions
- Fluid lens cleaner for concrete cutting
- Mixing unit to add root foaming or grease dissolving additives
- Gripper



LATERAL REINSTATEMENT CUTTING



SCAN FOR VIDEO

HA250 250 - 1000MM (10-40")

The HA250 is the most powerful and durable robot available for reinstating service connections after CIPP relining and cutting protruding laterals and hammer taps of any material from inside 250 - 1000mm (10-40") pipelines.

This beast is strong enough to pull a 9 ton truck and features infinite rotation, great camera visibility with both a water lens cleaner and on demand lens wiper, and very precise and operator friendly controls.



HA250

SPECIFICATIONS

Scope of use	: 250 - 1000mm (10-40")
Cutter motor	: WM500 Water : PM500 Pneumatic : EM500 Electric
Cutter shaft	: M14 thread
Movements	: 4-axis
Drive	: AWD - Electric
Rotation (pan)	: Infinite - Electric
Ram lift	: 325mm (13") : Hydro-pneumatic
Cutter pivot (tilt)	: 90° - Hydro-pneumatic
Camera rotation	: Infinite - Electric
Lighting	: 4 Intensity adjustable LEDs
Lens cleaner	: Water : On-demand wiper
Length	: 605mm (23.6")

FEATURES

- Compatible with R250 crawler
- Heavy duty materials
- Speed adjustable movements
- Wide angle camera with Sapphire protection lens

ACCESSORIES

- M14x2 threaded cutter bits & tools
- Cutter brackets for circumferential and longitudinal cutting
- Packer 'puck' coupling mechanism with manometer(s)
- Gripper

The VRM100 mixing unit allows precise dosing of root control, grease removal and other additives for controlled spot treatments with precision water jet cutting equipment. The modular dosing unit is compatible with all precision water jet cutting modules and installed between high-pressure unit and hose reel. Operation takes place from the control unit and special software.

MIXING UNIT

VRM 100



ROOT CONTROL

By using chemical root control you can remove roots further inside service laterals and inhibit their growth without having to fill the complete line with foam.

GREASE REMOVAL

Adding a grease remover encapsulates and dissolves fats, oils and greases to remove blockages and prevent recollection and settlements further down the line.

SPECIFICATIONS

Compatible with	: All precision water jet cutting modules (WJ125, WJ180, WJ200 and WJ250)
Dimensions	: 300x500x900mm (20x12x32")

PRO'S

- Efficient spot treatment
- Powerful root removal
- Inhibit root growth

UV PATCHING & SPOT REPAIR



SCAN FOR VIDEO

UVP125 150 – 400MM (6 – 16")

The UVP125 packer is made for rapid renovation of longitudinal and radial cracks from inside pipes made of concrete, steel, reinforced concrete, fiber cement, cast iron or PVC. Longer damages can be rehabilitated by overlapping patches.

The Ultra Violet LED light-train has a low power consumption and is suitable for pipes of differing diameters from 150 to 400mm (6-16") by adjusting the end-discs and bladders of the packer.

The UVP125 is directly compatible with the same hybrid cable and control unit as the robot system and can be used as stand-alone packer, or in combination with a robot.



WATER INFILTRATION



OVERLAPPING PATCHES

SPECIFICATIONS

Scope of use	: 150 - 400mm (6-16")
Curing time	: 6 - 10 Minutes
Power	: 100-230V, 50-60Hz
Max. pressure	: 2,5bar (360psi)
Renovation lengths	: 600mm (24") : 900mm (36") : 1200mm (48") : Custom length

FEATURES

- Compatible with the Sewer Robotics system
- Time-saving preparation
- No on-site mixing of resins and impregnation
- Independent of temperatures: all-year operation possible
- High adhesive tensile strength
- Low shrinking characteristics

ACCESSORIES

- Pan & tilt (HD) CCTV Inspection camera
- Packer 'puck' coupling mechanism
- Hinging joint connection
- Push rods
- Air control box

***“3 MINUTES
PREPARATION TIME,
8 MINUTES CURING TIME”***



The UV-cured FIBALITE fiberglass-reinforced patches are pre-impregnated with high stiffness, non-silicate, resin and supplied with protection films on a convenient roll to eliminate time-consuming mixing of resins and impregnating of the carrier materials on site.



PRO'S

- SUPER FAST PREPARATION
- LOW COSTS
- ALWAYS THE RIGHT DIAMETER PATCH
- MINIMAL WORKING SPACE REQUIRED
- HIGH STRENGTH
- HIGH FLEXIBILITY AT OFF-SET JOINTS
- NO ON-SITE MIXING OF RESINS AND IMPREGNATION

UV LINER ON A ROLL

The UV-cured liner material is supplied on 600mm (24") wide rolls. The roll is placed in the dispenser, which is designed to easily cut the liner at the right size, remove the protection film and load it on the packer by a single person in 3 minutes.

- | | |
|-----------------------------|---|
| ■ Reinforcement | : E-glass fibers ($\pm 70\%$) |
| ■ Resin | : UV curing ISO Polyester resin |
| ■ Adhesion properties | : >10 MPa (to steel, shot blast) (ASTM D4541) |
| ■ Adhesive modulus | : 3,8 GPa (ISO 527-2) |
| ■ Thickness | : 1,5mm/ 2,0 mm/ 2,5 mm |
| ■ Adhesive tensile strength | : ≥ 90 MPa (ISO 527-2) |
| ■ Roll length | : 10m (33') |
| ■ Roll width | : 600mm (24") |
| ■ Shipping dimensions | : 750x260x270mm
(29.5x10.2x10.6") |
| ■ Shipping weight | : 20kg (44LBS) |



UV PATCH DISPENSER FOR
LINER MATERIAL ON A ROLL

***“CLEANING OF (SEA)WATER INTAKES,
HORIZONTAL TANKS, & PIPELINES”***

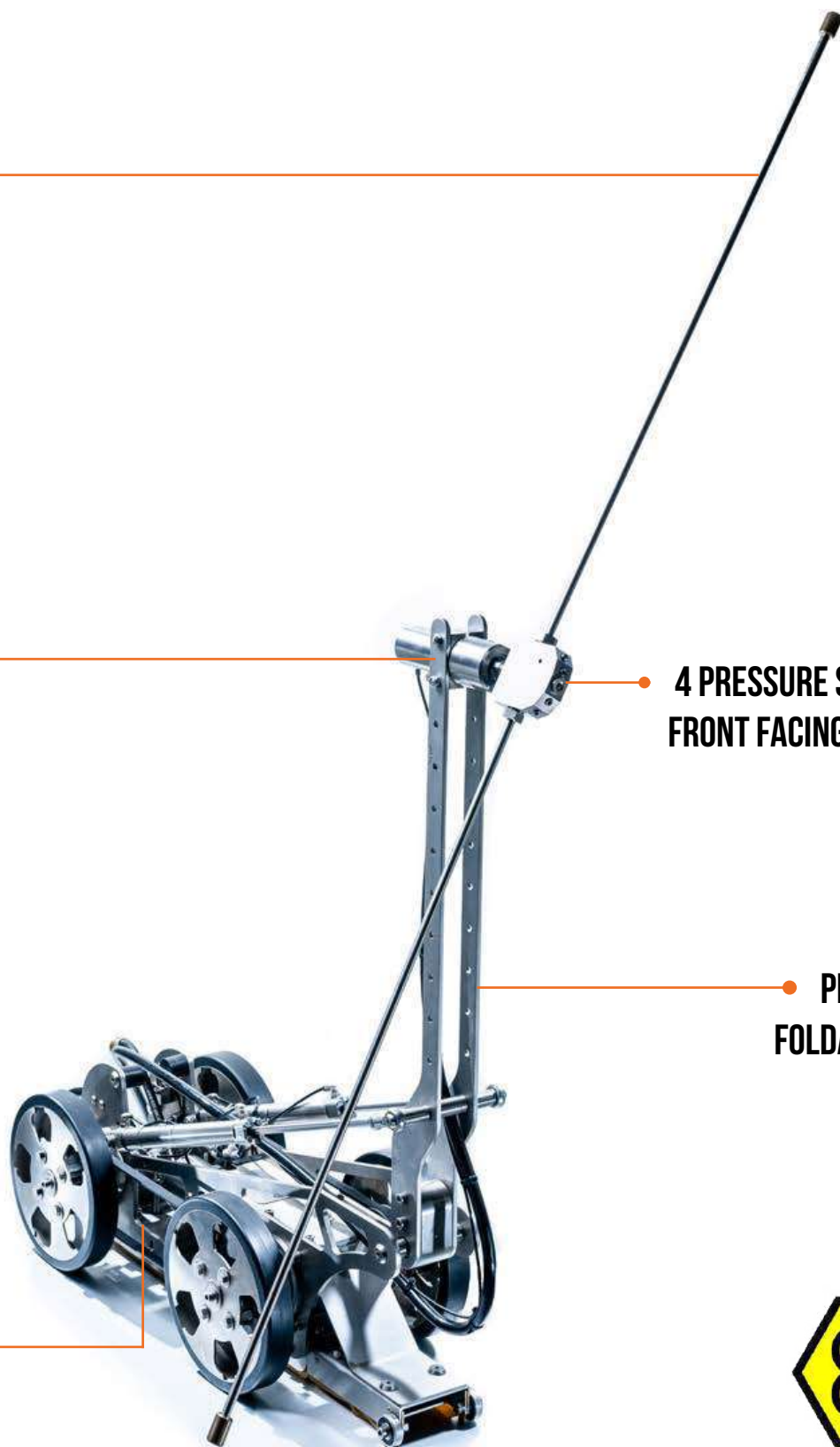
**EXCHANGEABLE
LANCES**

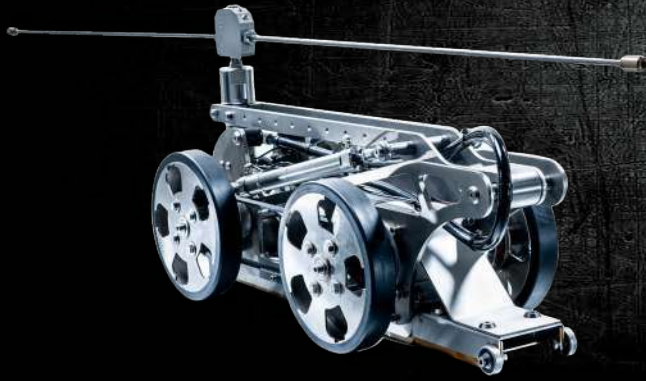
**HIGH PRESSURE
SWIVEL**

**4 PRESSURE SWITCHED
FRONT FACING NOZZLES**

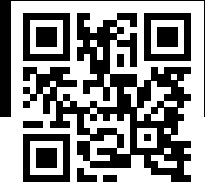
**PNEUMATIC
FOLDABLE ARM**

**ELECTRIC OR
WATER DRIVEN
DRIVETRAIN**





LARGE DIAMETER PIPE & TANK CLEANING

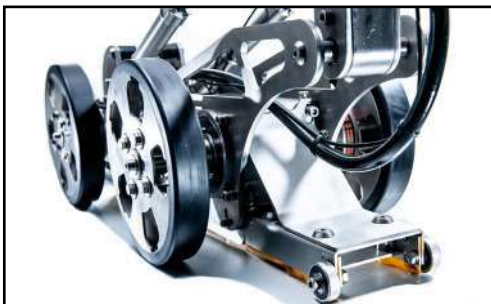


SCAN FOR VIDEO

TWK300 1000 - 3000MM (40-120")

The TWK300 tank cleaning robot has a pneumatic foldable arm to fit 400mm (16") manholes, and exchangeable lances for intense cleaning, close to the surface of 1000 to 3000 mm (40 - 120") tanks and pipes.

The TWK300 is available with water hydraulic drives to comply with Atex Zone 0 or with powerful electric drives to reach very far inside large diameter pipelines or seawater intakes!



DEBRIS REMOVAL ADAPTER



FORWARD FACING NOZZLES

SPECIFICATIONS

- Scope of use : 1000 - 3000mm (40-120")
- Min. access diameter: 400mm (15,7")
- Drive : Electric
- Max. pressure : 500bar (7,250psi) (ATEX)
- Max. flow : 21GPM (80LPM)
- Max. rotation : 1000 RPM
- Max. temperature : 90°C (194°F)
- Weight : 45kg (99lbs)
- Dimensions : 850x350x400mm (33.5x14x 16")

FEATURES

- Exchangeable lances for intense cleaning close to the surface
- Pressure switched forward-facing nozzles for cleaning tank heads
- Pneumatic foldable arm to fit 400mm (16") access points
- Water hydraulic driven

OPTIONS

- Camera module(s)
- Adapter for vacuum debris removal
- Hot water compatibility
- Certified Atex explosion Zone 1 or Zone 0

“THE R600 INDUSTRIAL CLEANING ROBOT IS COMPATIBLE WITH THE SAME CONTROL UNIT AND CABLE REEL AS THE SEWER ROBOTS”

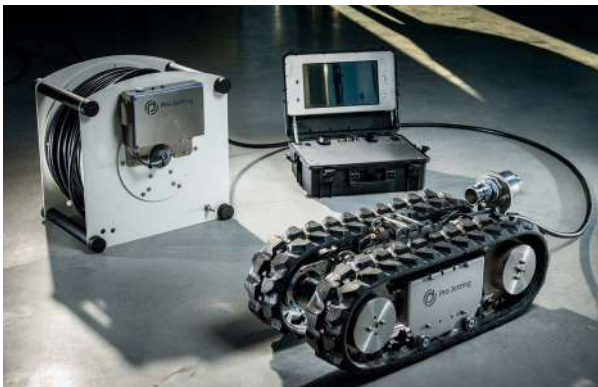


REAR VIEW CAMERA

Rear view camera and convenient connections for power- and job-specific supplies to minimize setup times.

POWERFUL DRIVE

The powerful R600 can be equipped with either 2 or 4 driving motors that provide 150 or 300 KG towing capacity to take a heavy load or reach far inside pipelines or tanks.



DURABLE & MODULAR BASE

The modular base platform is made off durable stainless steel and adjustable in length and width to adjust to various applications.

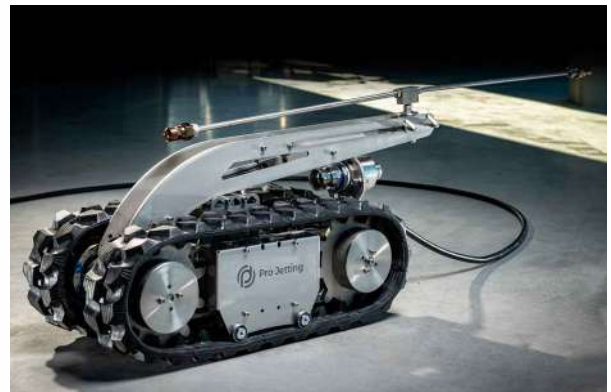




FULLY CUSTOMIZABLE

The R600's programmable outputs allow easy customization for specialty jobs. Add auxiliary cameras and lighting, additional sensors and electronic- or pneumatic driven movements.

-Or- a completely custom tool can be developed for your specific application.



MULTI-PURPOSE

Various job-specific modules can be easily exchanged to adapt the robot for different applications via its twist-and-lock mechanism.

HYDRO-PNEUMATIC ACTUATOR

The R600 has a powerful linear actuator to raise the boom, cleaning arm or dome.

This actuator is operated with compressed air and features an enclosed hydraulic circuit to combine strength and precision.



***“PROGRAMMABLE OUTPUTS ALLOW
EASY CUSTOMIZATION FOR SPECIALTY JOBS”***

APPLICATIONS

- SURFACE PREPARATION & REMOVAL OF MARKINGS OR STRIPING
- VACUUM EXCAVATION & SLUDGE OR BULK WASTE REMOVAL
- LARGE DIAMETER PIPE & TANK CLEANING
- COLD CUTTING & (ULTRA) HIGH PRESSURE JETTING
- YOUR CUSTOM APPLICATION



SC600DVAC



TRACKED INDUSTRIAL CLEANING ROBOT



SCAN FOR VIDEO

R600 >500MM (>20")

The R600 is a powerful and multi-functional modular robot crawler that can be used with various job-specific modules for heavy-duty industrial applications.

The R600 is compatible and easy exchangeable with the SEWER ROBOTICS mobile cable reel and control unit for a very small footprint or can be used in combination with a special purpose vehicle installed system.



VAC600

SPECIFICATIONS

Scope of use	: >500MM (>20")
Cameras	: Forward facing : Rear view
Lighting	: Intensity adjustable LEDs
Speed	: 3 - 10kmh (1.9-6.2mph)
Traction Force	: 250kg (550lbs) 2 motors : 500kg (1100lbs) 4 motors
Weight	: 110kg (243lbs)
Dimensions	: 900x420x300mm (35.4x16.5x11.8")

COMPATIBLE MODULES

- VAC600 – Vacuum Excavation & Sludge removal
- SC600DVAC – Dual Surface Cleaner with Vacuum
- TWK600 – Large diameter pipe and tank cleaning
- WJ600 – Precision Water Jet Cutting
- Your custom module

FEATURES

- Easy exchangeable job-specific modules
- Heavy-duty stainless steel
- Wide angle color camera with Sapphire protection lens
- Adjustable length and width
- Single, lightweight, hybrid cable
- Programmable outputs for customization

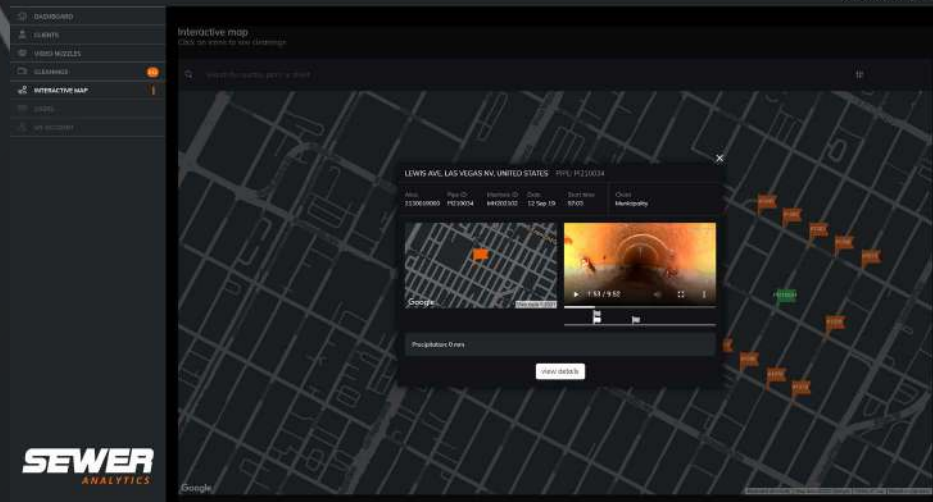
OPTIONS

- Additional sensors
- Auxiliary cameras and lighting
- Electronic- or pneumatic driven features
- Customization and development of job-specific modules

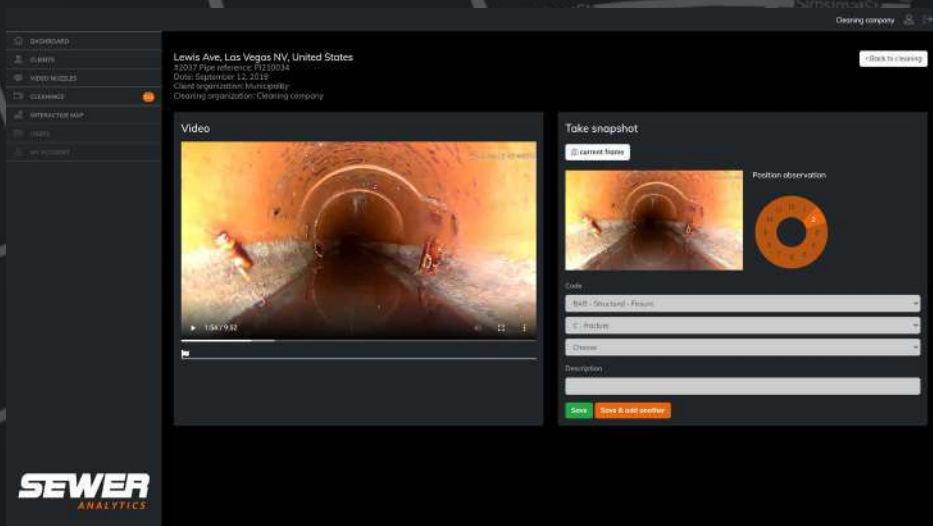


***“COLLECT VALUABLE INTELLIGENCE
AT LOW COSTS & MINIMUM EFFORT
WHILE CLEANING”***

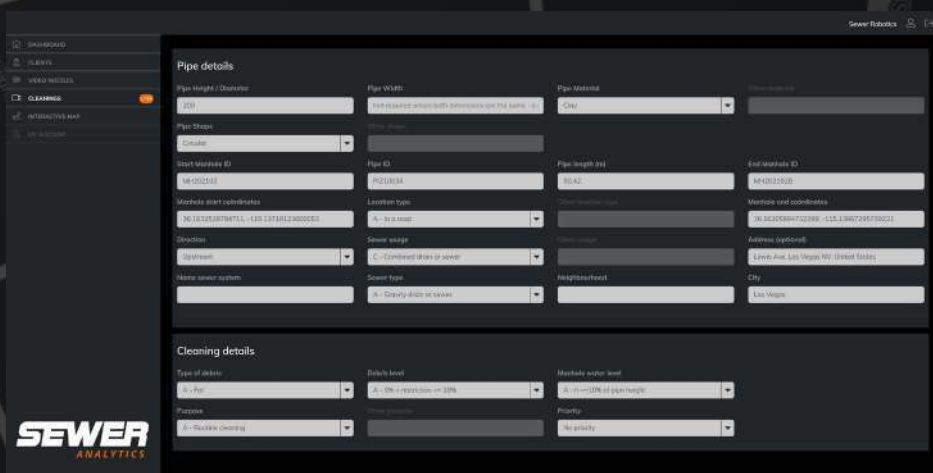




INTERACTIVE MAP



ADD OBSERVATIONS



ADD HEADER INFO & PRIORITIZE

#397

“LOGIN TO SEWER ANALYTICS TO ACCESS CLEANINGS”

- + REVIEW VIDEOS
- + ADD OBSERVATIONS
- + ADD HEADER INFO
- + PRIORITIZE CLEANINGS
- + SHARE CLEANING INFO

AUTOMATIC RECORDING

A built-in high pressure switch activates 8 super bright LED's and automatically starts the recording. No buttons have to be pushed.

10 HOURS RUNTIME

The Lithium-Ion battery pack is rapidly charged and lasts as long as a good 10 hour working day.



FOR ANY TRUCK

The stand-alone C70 camera nozzle threads onto any jetting hose.

GREAT CLEANING CAPACITY

Outstanding cleaning, forward thrust and debris transportation with different nozzles and exchangeable Ceramic jets for the best configuration with any truck.

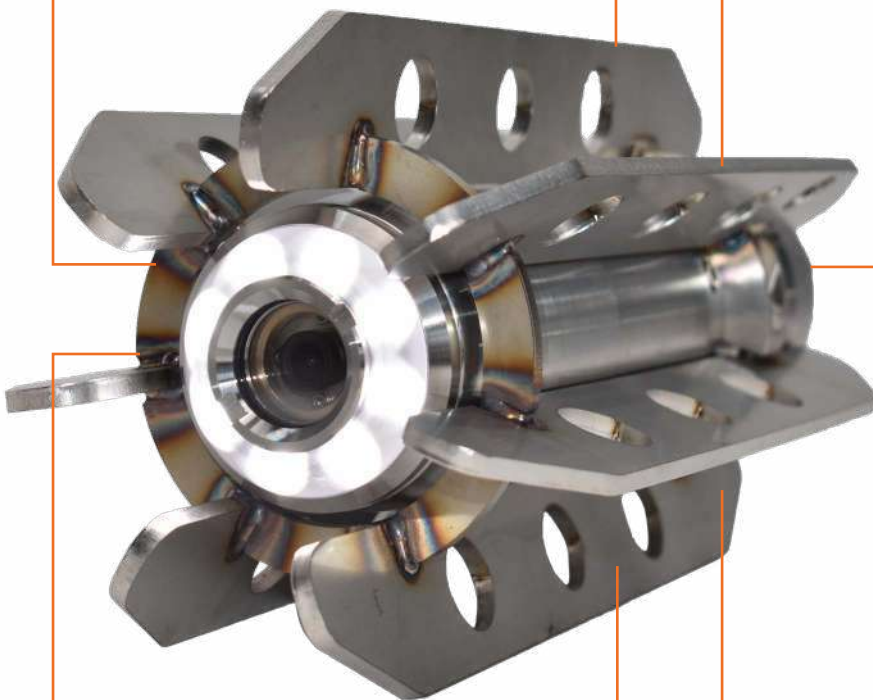


WORKFLOW INTEGRATION

Videos are downloaded from the nozzle via Wi-Fi. Individually or all at once and automatically uploaded to the Sewer Analytics web cloud, together with the date, time and GPS location of the cleanings.

DURABLE

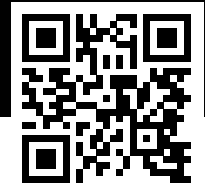
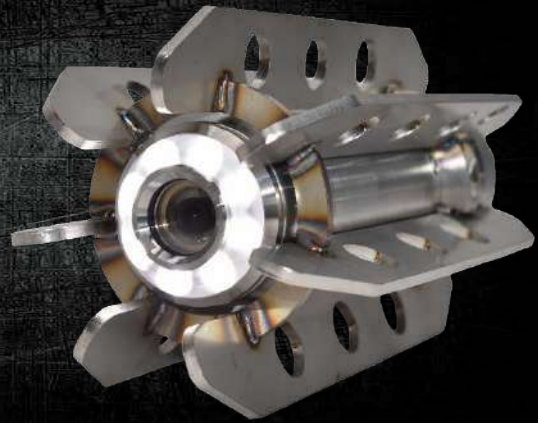
The pressurized, Stainless-Steel, housing has no external buttons and is made to withstand a serious beating.



SUPERIOR VIDEO

The auto-upright, High-Definition camera is protected by stacked Sapphire lenses and records always from a perfect horizontal position.

C70 CAMERA NOZZLE



SCAN FOR VIDEO

C70 150 - 1000MM (6-40")

The durable C70 Camera nozzle easily threads onto any jetting hose to help cleaning crews and asset managers record High Definition, auto-upright, video at low-cost during pipe cleaning operations.

Once the pipe is cleaned, the video is downloaded with a single touch of a button and automatically uploaded to the Sewer Analytics web cloud, together with the date, time and GPS location of the cleanings.



C70 SKIDS



SEWER ANALYTICS WEB CLOUD

SPECIFICATIONS

Scope of use	: 150 – 1000mm (6-40")
Pressure	: 125 – 275bar (2000-4000psi) : Up to 3000bar (43,500psi) ¹
Flow	: 80 – 650 LPM (21-170GPM)
Hose connection	: ¾, 1 and 1¼" BSP & NPT
Video	: Self leveling, High-Definition, MP4
Camera	: CMOS, 1980x1080 or 1280x720
Internal storage	: 32 Gb
Cleaning	: 8x 55-degree & 4x 20-degree jets with Ceramic orifices : Other nozzles (optional)
Housing	: Durable, Stainless-steel
Protection lenses	: 2 Sapphire lenses, stacked
Lighting	: 7 intensity adjustable superbright LED's
Battery	: Lithium-Ion battery pack : 10+ hours battery runtime : 3 hours charge time
Weight	: 6,2kg (13,7 Lbs) ²
Dimensions	: D90x295mm (D3.5x11.6") ²
Tablet	: 8", Rugged, IP67 : Windows® operated : GPS receiver

FEATURES

- Pressure activated lighting
- Pressure activated recording
- Wireless operation & video downloading
- Great cleaning, thrust and debris removal

SEWER ANALYTICS

- Password-protected access from any device
- Automatic cloud synchronization ³
- Automatic registration of date, time and location
- Interactive map, observation coding, prioritizing and sharing functions
- FREE 500 GB Sewer Analytics cloud storage

ACCESSORIES

- Jet inserts
- Hose adapters and swivels
- Nozzles for different cleaning applications
- Large diameter skid with auxiliary lighting
- Charging dock for C70 and tablet
- Inclination measurement
- Customized software integrations

NOTES



NOTES





OUR STORY

Two operators, tasked with removing a massive root blockages from a sewer pipeline had the great idea of equipping a robot crawler with a high-pressure jet.

With that solution, 15 years ago, ID-TEC (now Sewer Robotics) was founded and introduced the first modular robot system to perform various sewer rehabilitation jobs.

Today, Sewer Robotics' technologies help customers around the world to keep the storm-, water and wastewater pipelines in good conditions.

ID-TEC, the company behind SEWER ROBOTICS, PRO-JETTING and DIVEWISE-EQUIPMENT is specialized in high pressure and robotic applications for cleaning, inspection and maintenance of confined spaces.

SEWER
ROBOTICS

**WHAT CHALLENGES
CAN WE HELP
YOU WITH?**



WWW.SEWERROBOTICS.COM



INFO@SEWERROBOTICS.COM



+31 174 289 475 [TEL]



+1 503 504 8474 [USA]



ABC-WESTLAND 197, 2685DB
POELDIJK, THE NETHERLANDS