PRODUCT CATALOGUE

APS

AUSTRALIAN
PIPELINING SUPPLIES

1300 277 111

www.pipeliningsupplies.com.au

Brawoliner®

BRAWO SYSTEMS CENTER · IMS ROBOTICS · RIEZLER · Härke. · SACPRO RELINING INNOVATORS · PICOTE LIFE FOR PIPES · Kras Tech Trenchless Pipe Rehabilitation Technology · SANIKOM WORLD OF PIPE REPAIR

The Trusted Choice For Pipelining Technology

Australian Pipelining Supplies is the number one supplier, in Australia and New Zealand, of the world's leading relining technology - including the Brawoliner Inversion Relining system.

With an experienced team of pipe rehabilitation experts, and proven success in millions of dollars of client relining projects across Australia, we can help take you and your business to the next level with the introduction of pipe relining.

We have invested heavily in local research and development to provide not only the best in global technology, but to provide the right technology for Australian conditions and the local marketplace. The result is a solution for almost every application.

Whether you are seeking to provide inversion lining, a patch repair even junction repair solution, APS has the answer.

A keystone of our approach is our commitment to providing a complete solution to your clients. That means providing Australia's leading relining training and education program, to show you and your technicians how to reline and avoid issues, as well as on-going support by both phone and even on-site assistance.

For all their relining needs, our clients know they can count on Australian Pipelining Supplies for prompt delivery; the best technology and systems; and comprehensive training and support.

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PATCH REPAIR LINING

Repair damaged sections of pipe without the need to excavate.

Patch repair lining is an easy cost effective way to enter into the pipe relining industry.

Packers available in varied lengths to suit your application.

Various resins are also available to suit your application.

Training is supplied with all patch kits to ensure you get the absolute best results out of your investment.

➤ Great entry level into pipe relining

➤ Eliminates the need to dig

➤ Ideal for repairing small sections of pipe

Ongoing training & support is our specialty

Straight Transition Packer

Perfect for undertaking repairs within straight section of pipe.

Packer lengths available - 1m to 5m

50mm Straight Packer 1m	APS-001-010
100/150mm Straight Transition Packer 1m	APS-001-023
100/150mm Straight Transition Packer 1.5m	APS-001-024
100/150mm Straight Transition Packer 2m	APS-001-084
100/150mm Straight Transition Packer 3m	APS-001-025
100/150mm Straight Transition Packer 5m	APS-001-026

Bendy Packer

Suitable for undertaking repairs in either straight sections of pipe or bends up to 90°.

Packer lengths available - 1m to 2m

40mm Bendy Packer 300mm	APS-001-009
100mm Bendy Packer 1m	APS-001-012
100mm Bendy Packer 2m	APS-001-013
150mm Bendy Packer 1m	APS-001-017
150mm Bendy Packer 2m	APS-001-018
200/225mm Bendy Packer 1.8m	APS-001-029
225/300mm Bendy Packer 1.5m	APS-001-030

Multi Bend Packers - Large

Perfect for multiple bend offsets, also suitable for repairing earthenware boundary traps.

100/150mm Multi Bend Packer 1.2m	APS-001-027
100/150mm Multi Bend Packer 2m	APS-001-028
Annotech 100/150 Multi Bend Packer 3m	APS-001-092
200/250mm Multi Bend Packer 1.8m RED	APS-001-029
Trap Leader With Spring	APS-001-021

APS AUSTRALIAN PIPELINING SUPPLIES

Multi Bend Packers - Small

Perfect for multiple bend offsets, earthenware floor wastes and boundary traps. Also great for undertaking difficult access repairs.

Packer lengths available - 1.2m to 2m

50mm Multi Bend Packer	APS-001-011
70/100mm Multi Bend Packer 1.2m	APS-001-019
70/100mm Multi Bend Packer 2m	APS-001-020
Annotech 70/100 Multi Bend Packer 3mt	APS-001-091
Trap Leader With Spring	APS-001-021

Multi Dimensional Packers (HD)

Perfect for undertaking repairs within straight section of pipe.

Packer lengths available - 1m to 5m

30-100mm Multi Dimensional Packer 1000mm	APS-001-085
50-150mm Multi Dimensional Packer 1500mm	APS-001-086
100-250mm Multi Dimensional Packer 1000mm	APS-001-087
200-500mm Multi Dimensional Packer 1500m	APS-001-088

Large Bore Packers

APS will hire you our range of large bore packers for those one off jobs. Call for more details on sizes available and to check availability.

These large bore packers work perfectly with the patch box repair system.

Large Bore Packer 150/225mm with Flow Through & Wheels	APS-001-048
Large Bore Packer 300/400mm with Flow Through & Wheels 2.0m	APS-001-055
Large Bore Packer 450/600mm with Flow Through & Wheels 2.0m	APS-001-057
Large Bore Packer 600/800mm with Flow Through & Wheels 2.0m	APS-001-058

Liner

Australian Pipelining Supplies recommend the use of the Brawoliner one piece woven liner for patch repairs. Brawoliner provides a much smoother result through bends and cleaner transitions between the relined sections of pipe and the original host pipe.

40mm Felt Liner	APS-003-018
50mm Brawoliner	APS-003-019
70/80mm Brawoliner	APS-003-022
70/100mm Brawoliner	APS-003-025
100mm Brawoliner	APS-003-028
100mm Brawoliner XT	APS-003-031
150mm Brawoliner	APS-003-036
150mm Brawoliner XT	APS-003-037
100/150mm Brawoliner 3D	APS-003-041
150/200mm Brawoliner 3D	APS-003-044
200/250mm Brawoliner	APS-003-047
300/400mm Brawoliner	APS-003-052

Standard Box Lengths

25m, 50m, 100m or cut to length also available.

Patch Box - The Pipe Repair Kit

Available in sizes 100-800 diameter with various lengths available

Each Kit Contains:

- Protective Gloves
- Two-part Silicate Resin Kit
- Pre-measure & Cut Fibreglass Mat
- Packer Protection
- Protective Groundsheet
- Resin Spreader
- Rubber Bands

Clear Packer Tube

Designed to protect your packer from coming in contact with resin.

Made from a high slip, high impact plastic

50mm Clear Packer Tube - Metre	APS-001-037
100mm Clear Packer Tube 5kg	APS-001-039
150mm Clear Packer Tube 5kg	APS-001-041
225mm Clear Packer Tube 5kg	APS-001-042

PATCH REPAIR LINING

Patching Regulator & Air Hose Including Fittings

Used for accurate inflation of the packers. Pressure relief valve included to ensure internal packer pressure is maintained.

Replacement hose assemblies including the associated fittings.

Patching Regulator	APS-001-003
Air Hose Including Fittings	APS-001-005
Trap Leader With Spring	APS-001-021

Bypass Plug

100mm stack bypass plug.

Designed to divert water from a stack to allow work downstream to continue.

Bypass Plug 100mm	APS-001-082

Packer Inflation Push Rods

Available in 2 configurations:

Standard flex & APS super flex.

Available in standard 1.5m length.

APS Super Flex Push Rod 1.5m	APS-001-007
Standard Flex Push Rod 1.5m	APS-001-006

Patching Accessories

Designed for fast turn around to help keep you on the job.

A large number of patching accessories and spare parts are carried in stock.

Rubber Bands - Size 33 - Large Bag	APS-001-043
Plastic Roll	APS-001-046
Disposable Gloves	APS-001-045
Steinco Lockable Couplings	APS-001-050
Standard Euro Couplings	APS-001-033
Resin Mixing Paddles	APS-001-081
Telstra Rope 400m	APS-001-047
Cable Pushing Rod	APS-001-077
Duct Tape	APS-001-076
Replacement Flexi Adaptors - Multi Bend Packers	APS-001-032
Scouring Tool	APS-006-152
Compressor	APS-001-002

INVERSION
RELINING

Drum Capacity Chart

Drum	Weight	LxWxH (cm)	DN100*/**	DN150*/**
APS400	17.5 kg	53x44x65	15*	12*
APS500	44 kg	79x57x95	25*	20*
APS600	54 kg	85x57x107	35*	32*
APS700	57 kg	98x59x116	65/40	45/20
APS900	95 kg	110x65x135	95*	90*
Brawo 600	Approx. 46kg	90x50x90	33/28	25/22
Brawo 700 UL	Approx. 50kg	110x70x105	72/56	48/37
Brawo 800	Approx. 80kg	125x70x115	100/78	65/47
Brawo 800 XL	Approx. 95kg	125x87x115	124/94	84/63

APS 400 - Ambient Cure Only

* Max inversion length of liner (m)

** Max inversion length of liner + water hose (m)

Mini Inversion Lining Systems

PICOTE CANNON

➤ Compact and lightweight design makes them extremely portable.

➤ Either of the two sizes come with multiple inversion heads and a fast cap. The fast cap allows you to shoot a liner, clamp it, then disconnect the cannon and install the fast cap, allowing you to then instantly install another liner.

➤ Transparent body allows you to watch the liner inversion in real time giving you more visibility and control.

➤ Maximum operation pressure of 2 bar (29 psi).

Mini Cannon Technical Specifications	
Empty Weight	4.8kg (10.5 lbs)
Full Weight	10kg (22 lbs)
Mini Cannon Liner Capacity	
DN50 (2")	7.5m (24.5 ft)
DN75 (3")	5m (16.5 ft)
DN100 (4")	3.5m (11.5 ft)

Original Cannon Technical Specifications	
Empty Weight	6.2kg (14 lbs)
Full Weight	15kg (33 lbs)
Original Cannon Liner Capacity	
DN50 (2")	15m (49 ft)
DN75 (3")	10m (33 ft)
DN100 (4")	7m (23 ft)

Picote Original Cannon	APS-006-048

APS ID400 & ID400T INVERSION DRUM

The ID400 is our larger hand-carried extruder. It can be directed 94° to position the nozzle at a fitting angle for the shoot.

The extruder is easy to carry due to its low weight and size.

Its 400mm in diameter and is made in aluminium to reduce the weight.

The inner surface of the drum is ceramic treated to make it smooth and safe for the liner inside. Two robust discs are mounted on the shaft inside limiting the movement of the liner and eliminating the risk of the liner getting stuck inside as its rolled in and out of the extruder.

- 6" F-150 Storz coupling for the nozzle.
- Storz spanner is included
- Capacity: approx. 12m DN150 liner depending on liner type and amount of epoxy

| APS ID400 Inversion Drum | APS-000-027 |

INVERSION RELINING

APS ID500 INVERSION DRUM - Suitable For Hot Water Circulation

The ID500 is our smaller medium sized inversion drum mounted on a trolley. It can be directed 126° to position the nozzle at a fitting angle for the shoot.

The inversion drum is easy to move due to its low weight and size.

Its 500mm in diameter and is made in aluminium to reduce the weight.

The trolley is robust yet slim enough to easily go through doorways or narrow spaces. It has a large wheel giving the operator a better feel of the extrusion process. The inner surface of the drum is ceramic treated to make it smooth and safe for the liner inside. Two robust dividers are mounted on the shaft inside limiting the movement of the liner and eliminating the risk of the liner getting stuck inside as it is rolled in and out of the inversion drum. The ID500 drum is also the smallest drum fitted with Geka fittings designed for hot water circulation to aid in the resin curing process.

The trolley is equipped with a holder for the Storz spanner on the side.

- 6" F-150 Storz coupling for the nozzle.
- Storz spanner is included
- Capacity: approx. 18m DN150 liner depending on liner type and amount of epoxy

APS ID500 Inversion Drum	APS-000-028

APS ID600 INVERSION DRUM

The ID600 is our medium sized inversion drum mounted on a trolley.

It can be directed 128° to position the nozzle at a fitting angle for the shoot. The inversion drum is easy to move due to its low weight and size.

Its 600mm in diameter and is made in aluminium to reduce the weight.

The trolley is robust yet slim enough to easily go through doorways or narrow spaces. It has a large wheel giving the operator a better feel of the extrusion process. The ID600 has a large sight glass with a hatch making the inside of the drum easy to access. The inner surface of the drum is ceramic treated to make it smooth and safe for the liner inside.

Two robust dividers are mounted on the shaft inside limiting the movement of the liner and eliminating the risk of the liner getting stuck inside as it is rolled in and out of the inversion drum.

The trolley is equipped with a holder for the Storz spanner on the side.

- 6″ F-150 Storz coupling for the nozzle.
- Storz spanner is included
- Capacity: approx. 31m-32m DN150 liner depending on liner type and amount of epoxy

APS ID600 Inversion Drum	APS-000-029

Brawoliner Mini Inversion Lining Drum

BRAWO DRUM 600mm

This drum offers great capacity with the lowest weight.

➤ Compact and lightweight
Ideal for long rehabilitation sections inside buildings

➤ Inversion angle can be swivelled or adjusted in height.

➤ Hand wheel
For regulating the inversion speed

➤ Large viewing window
Optical control during the inversion

➤ Handle on the inversion drum
Helpful lifting handle for better transport
Fast and easy fix

➤ Solid base construction with pneumatic tyres
For safe and simple transport

| Brawo Micro Drum 600mm | APS-000-026 |

AUSTRALIAN
PIPELINING SUPPLIES

APS ID700 INVERSION DRUM

The ID700 is our standard inversion drum mounted on a trolley.

It can be directed 128° to position the nozzle at a fitting angle for the shoot.

The inversion drum is easy to move due to its low weight and size.

Its 700mm in diameter and is made in aluminium to reduce the weight.

The trolley is robust yet slim enough to easily go through doorways or narrow spaces. It has a large wheel giving the operator a better feel of the extrusion process. The ID700 has a large sight glass with a hatch making the inside of the drum easy to access. The inner surface of the drum is ceramic treated to make it smooth and safe for the liner inside. Two robust dividers are mounted on the shaft inside limiting the movement of the liner and eliminating the risk of the liner getting stuck inside as it is rolled in and out of the inversion drum. The trolley is equipped with a holder for the Storz spanner on the side. Your APS ID700 inversion drum can also be customised with your corporate logo to help represent your business.

➤ 6" F-150 Storz coupling for the nozzle.

➤ Storz spanner is included

➤ Capacity: approx. 44m DN150 liner depending on liner type and amount of epoxy

| APS ID700 Inversion Drum | APS-000-030 |

Inversion Lining Drum

BRAWOLINER 700 UL INVERSION DRUM

The lightest 700 mm stainless steel drum on the market.

Weighing approx. 50kg, the BRAWO Inversion drum 700 UL can be easily transported and also offers the unmatched benefits of a robust stainless steel drum.

Lightweight and durable
The weight reduction of the BRAWO Inversion drum 700 UL has been achieved without any functional reductions.

The latest lightweight and durable inversion drum is built to the same high quality standard that is expected from BRAWOLINER.

➤ **Drum axle with water connection**
Easy filling of the liner with water without the need to open the drum
Output on the underside for water circulation

➤ **Hose connection in the drum**
The water hose can be inverted

➤ **Large inversion opening and height adjustable**
Optimal positioning for the inversion tube
Large hand wheel for better control

➤ **Pressure control on the back of the drum**
Allows precise control of the inversion and holding pressure
Level indicator (water level)

➤ **Solid substructure with pneumatic tyres**
For safe and easy transport

Brawoliner Inversion 700 UL	APS-000-034

APS AUSTRALIAN PIPELINING SUPPLIES

BRAWO 800mm & 800 XL Inversion Drums

Universal drums with maximum capacity for long renovation sections

The BRAWO Drums DN800 and 800 XL are made of stainless steel.

➤ **Compact** - Ideal for long rehabilitation sections

➤ **Adjusted inversion opening** - Ideal for vertical inversion

➤ **Drum axle with water connection** - Easy filling of the liner with water without the need to open the drum output on the underside for water circulation

➤ **Large viewing window** - Optical control during the inversion

➤ **Solid base construction with pneumatic tyres** - For safe and simple transport

➤ **Large hand wheel-** For regulating the inversion speed

800XL Drum standard with 225 storz connection for smoother liner installation

For those one off longer runs or larger diameter jobs you come across, APS have a Brawoliner 800XL drum as well as a mobile set of electronic impregnation rollers for hire to their existing clients.

APS HIRE INCLUDES:

• 800XL Drum
• Kraso 300 Rollers

Brawoliner 800 Inversion Drum	APS-000-036
Brawoliner 800 XL Inversion Drum	APS-000-038

INVERSION RELINING

Inversion Lining Systems

SLUICE

The KrasoSluice® is a developed system based on their patented two-chamber system for "endless inversion".

This protects the liner from unwanted stretching, bruises, wrinkles and folds. Even large nodes, fittings or heating hoses are no problem for the KrasoSluice®!

➤ **Patented chamber system**

➤ **Ideal replacement for a water tower**

➤ **Aluminium or stainless steel versions available**

➤ **Inversion with low pressure, using air or water**

➤ **Flexible even on difficult to reach job sites**

➤ **Outlet storz, cam-lock, Easy Klick, etc.**

➤ **Direct inversion without wind up**

➤ **Optional with drive**

➤ **Optional with data recording**

Contact APS for variations & pricing.

INVERSION ACCESSORIES

- ➤ Straight and angled Stainless Steel inversion nozzles 100mm - 225mm
- ➤ 45 degree aluminium Swivel inversion nozzles 50mm - 150mm
- ➤ Storz couplings
- ➤ Inversion Shoes to help invert through inspection openings or deep connections.
- ➤ Inversion hoses - pressure and temperature resistant
- ➤ Hose Clamps
- ➤ Retaining Strap
- ➤ Resin Mixers
- ➤ Scales
- ➤ Lubrication spray system
- ➤ By Pass Plugs
- ➤ Vacuum Pumps
- ➤ Liner clamping tools

MANUAL IMPREGNATION UNIT

The Sactools Manual impregnation rollers are a lightweight alternative to a truck mounted electric version.

The unit evenly distributes and impregnates epoxy resin in flexible liners.

The manual impregnation unit rollers are operated simply by rotating the wheel.

Height adjustment or distance between the rollers is adjusted by releasing the locking lever and lifting or lowering the adjustment lever.

Can be supplied with a tripod to lift the impregnation unit to a specified height, or easily bench mounted.

Manual Rollers	APS-000-010
Tripod	APS-000-011

E-ROLLER 450

E-ROLLER is an electrical impregnation unit for liners.

It can be easily fixed on van's or trailer's all kinds of work tables.

Due to its light weight and quick release, E-ROLLER has easy movement at the work site. Adjustable roller gap with counter reading and 2 powered brush-less rollers/motors with grip coating guarantee the right thickness all over the impregnated liner. E-ROLLER is available in 2 sizes.

E-ROLLER 450 can be used up to DN150 liners and E-ROLLER 600 up to DN300 liners.

Technical Data:

- Input 100 - 240VAC / 50 - 60Hz / 2.1A
- Adjustable speed control
- Direction switch
- 2 powered brush-less rollers/motors with grip coating
- Foot switch
- Adjustable roller gap with counter reading
- Quick release table fixing for easy movement on the work site
- Safety limit pressure between rollers; Rollers stop if pressure is too high
- Safety covers in both rollers
- Emergency stop
- Carrying handles
- Weight: 19.4kg
- Measures: 650x200x360 mm
- Capacity: Max. DN150 liner

Impregnation Rollers

KASOWALK ROLLERS

- ➤ Made of high quality stainless steel
- ➤ Calibration rollers with special coating - especially easy to clean!
- ➤ Synchronised drive of both calibration rollers
- ➤ Drive rotation direction forward and reverse
- ➤ Step less speed regulation
- ➤ Gap adjustment via setting wheel display (0.1mm precision) or electrical
- ➤ Emergency STOP button
- ➤ Transparent safety flap with emergency STOP function
- ➤ Mobile and stationary version possible
- ➤ Devices in all sizes from lateral up to main pipe lining
- ➤ Logo and colour integration as desired
- ➤ Assembled to suit your needs for highest efficiency

Kasowalk E200	APS-000-013	Kasowalk E300	APS-00-014

AUSTRALIAN PIPELINING SUPPLIES

BRAWO ELECTRICAL IMPREGNATION PLANT

The electrical impregnation plant enables a protective and even impregnation of the liner, with the epoxy resin, without any over-stretching of the lining material.

Due to its exact adjustable roller distance, indicated with a digital display, an even wall thickness of the liner can be controlled throughout its complete length. Furthermore it is possible to control the speed and direction of the rollers and the conveyor belt.

This makes it easier to impregnate long lengths of liners.

Advantages of the Electronic Impregnation System:

➤ Step-less regulation of the roller spacing with digital display

➤ Electrical belt drive (forward and reverse)

➤ Rollers driven synchronously

➤ Roller speed step-less regulation

➤ Pull-out roller belt for extending the working area

Roller Belt	2000mm
Belt Width	400mm, for liners up to DN250
	500mm, for liners up to DN300
Working Height	Approx. 800mm up to DN300

Electronic Impregnation Table - Brawoliner 400mm	APS-000-017
Electronic Impregnation Table - Brawoliner 500mm	APS-000-018

Hot Water Curing

CURING OF RESINS

Epoxy resins can cure at ambient temperature. The addition of heat can significantly reduce the curing time. This can be implemented in the form of hot water or steam.

APS offers reliable heating units, for curing acceleration using water or steam.

HotBox

The HotBox is a diesel-powered continuous heater specially designed for domestic sewer renovation. Thanks to the high heating output, up to 1000 litres of water can be heated per hour. The mobile unit can be easily transported and can be operated outdoors close to the renovation site.

HotBox Advantages:

- Mobile heating unit
- Diesel-powered
- Stable frame with rollers
- Boiler with heating coil, top-fired boiler system

Water Qty Per Hour (min/max)	500/1000 litres
Temperature	Up to 90°C
Heating Output Net Kcal/hour	61.000
Max Working Pressure	20 bar
Weight: ca.	74kg

Hotbox	APS-000-062
Circulation Pump	APS-000-064
Circulation Hose Set	APS-000-063

APS AUSTRALIAN PIPELINING SUPPLIES

UV Relining System

UV360RS is a curing system with exceptional performance. Built for pipe dimensions from DN70, with the ability to clear multiple 90° bends in DN70.

➤ Curing speed in a DN100 is 45m/hr, 0.75m/min

➤ Cures Liner from DN70 to DN300 (with one light head)

➤ Manoeuvres through a DN70 90° bend

➤ Easy to repair on the jobsite.

➤ Up to 70m Push Rod

Includes:
- LCD Touchscreen
- 1 LED Kit (6 LEDs)
- Inversion heads for DN70/DN100/DN150/DN200 straight in ALU with 6" camlock
- 1 double side guide piece 2x camlock male 1x camlock female part
- 1 transition piece from 6" storz to 6" camlock
- Toolbox with extra system spare parts
- Training and education

| UV Relining System | APS-000-126 |

UV Light Curing

UV Relining Packer and Connection Tool

UV360PCT unique packer and connection tool for quick, easy and reliable UV curing installation.

Suitable for dimensions from DN100/70* to DN250/150**.

*Main DN 100, Connection DN 70
**Main DN 250, Connection DN 150

Includes:

- 50m push rod
- 1 PCT Connection tool
- 1 bladder of your choise
- Toolbox with extra system spare parts
- Training and education

UV Relining Packer and Connection Tool	APS-000-135

BRAWO® Magnavity
smart · efficient · strong

Light Curing On The Next Level!

Experience fast, reliable and above all smart light curing with BRAWO® Magnavity.

The new light curing system consists of an intelligent LED head with 96 high-performance UV LEDs, a 50m long combination hose with integrated power and compressed air supply, a retraction unit and a control box.

You Save Time & Effort

➤ The innovative and unique LED head allows simultaneous retraction with inversion of the liner.

➤ Curing is carried out immediately after installation of the liner, without the need for additional insertion of the light curing head.

➤ As a result, only one access point is needed for the rehabilitation of a 50m long segment. In many cases, this is the only way to make rehabilitation possible at all, since no additional access opening (e.g. inspection opening, shaft) is necessary, which cannot be created easily or only with considerable effort in most construction measures.

Simple & Flexible Installation Log

➤ All the necessary data for your construction project can be recorded via an intuitive user interface. Your installation log is conveniently retrieved on your mobile device.

Mobile & Flexible In Use

➤ Thanks to the modular construction, compact design and low system weight, easy transportation of the system is guaranteed even under the most difficult access conditions, e.g. in residential addresses, strata complexes or commercial buildings.

Brawo Magnavity

LIGHT CURING THE SMART WAY

Smart
- Intelligent LED head with integrated magnetic coupling
- Remote unlocking
- Installation log and interface to mobile end device (USB, W-LAN)
- Exchangeable LED head with integrated operating hours monitoring
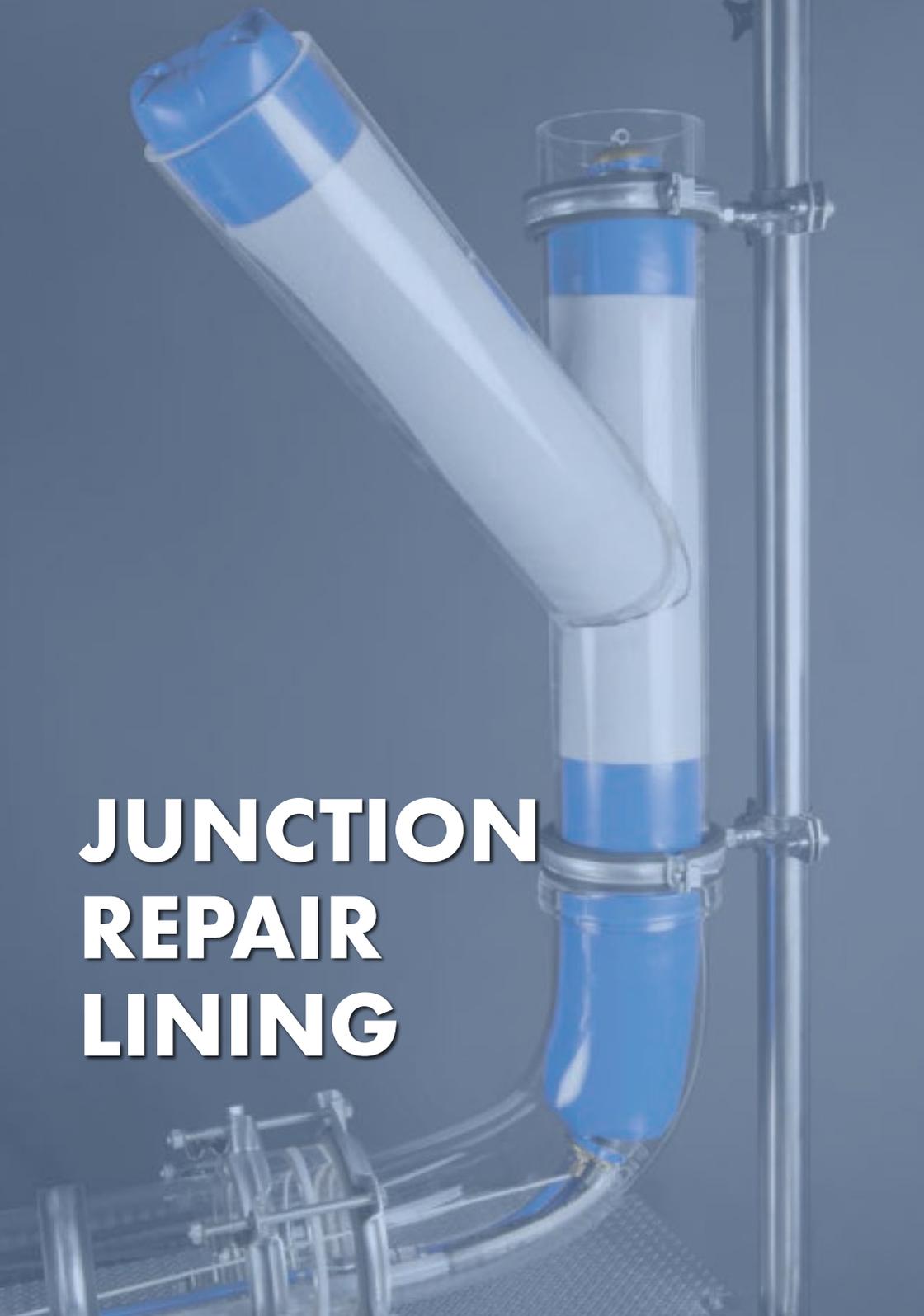- Reversible dual camera

Efficient
- Low power consumption with high light output
- High-performance UV LEDs with extremely high efficiency
- Saves a complete operation, only one access point necessary

Powerful
- Very fast curing
- Very good bend flexibility, 87° possible from DN100
- Easy transportation thanks to modular, lightweight construction

Brawo Magnavity	APS-40898933
Brawo Magnavity - LED Head Nano	APS-40898934
Brawo Magnavity - LED Head Mega	APS-40898953

AUSTRALIAN
PIPELINING SUPPLIES

JUNCTION REPAIR LINING

Junction Installation Tools

A junction installation tool consists of a Packer Holder Tool and a Packer Cover which is built in the configuration of the junction to be repaired.

APS have several options to consider in the way of Packer Holder Tools.

Standard (Straight)

- For use when it is not required that the tool has to go through bends to get to the correct position in the pipe.
- Available in steam or non steam.
- Suitable for use with the Sacpro centralisers, designed to lift your junction Packer Holder tool off the bottom of the pipe to ensure minimal resin loss during installation and easy alignment.

Flextool

- For use when you have to go through one or several bends to get to the installation point.
- Available for use with branch retraction rope
- Available for use with no branch retraction rope
- Available in steam or non steam version

APS Flextool To Suit Silicone Bladder

- Designed for use with silicone bladders with no retraction rope
- Suitable for use with APS super flex push-rods

Flextool BL

- For use for installation of the repair from the branch line.
- Available for use with branch retraction rope
- Available for both 90° and 45° junctions.
- Standard 100 and 150mm junctions only.

APS Clean-out Junction Relining Tool

- Enables you to repair a broken clean-out / inspection opening without the use of a camera.

Straight Tool 100mm	APS-004-004	Flextool 150mm Silicone Dome	APS-004-069
Straight Tool 150mm	APS-004-005	Flextool BL 100mm	APS-004-031
Flextool 100mm	APS-004-002	Flextool BL 150mm	APS-004-033
Flextool 150mm	APS-004-003	Cleanout Tool 100mm	APS-004-035
Flextool 100mm Silicone Dome	APS-004-068	Cleanout Tool 150mm	APS-004-037

Flex Rods

Used for accurate inflation of the packers. Pressure relief valve included to ensure internal packer pressure is maintained.

Replacement hose assemblies including the associated fittings.

Flexrod 1.0	APS-004-039
Flexrod 3.0	APS-004-040
Flexrod 5.0	APS-004-041

Junction Repair Systems

A complete one piece junction repair piece modified to suit the Australian market, sealing the upstream, downstream and branch arm collars.

Standard Satellite Junction repairs and Flextool installations are easily installed with only one mainline entry point required, either upstream or downstream of the junction to be repaired, and only camera access required from within the branch arm.

Flextool BL allows you to install a complete junction repair from within the branch line access, and only requires camera access within the main line upstream of the junction to be repaired.

Steambox

Compact mobile steam generator designed for producing steam to aid in curing junction liners.
Integrated pressure, vacuum and temperature control. 3.7L water tank for around three hours heating. Specifications: Max Power. 1.5KW / electric. Output approx. 2kg/hr - 100°C

Steambox - Small	APS-004-074

Steambox L

Larger steam generator also designed for producing steam to aid in curing junction liners. 22kg in weight, 9L boiler-refillable during operation, two heaters with 1500 watt for quick heating. Integrated pressure, vacuum and temperature control. Specifications: Max Power. 3KW / electric. Output approx. 4kg/hr - 100°C

Steambox L	APS-004-075

Pressure / Vacuum Box

Allows you to vacuum down the liner and control the inflation pressure within one small compact unit. Perfect for use with ambient cure resins, where no heating is required.

Simply connect a compressed air hose for both pressure and vacuum.

Pressure / Vacuum Box	APS-004-001

APS AUSTRALIAN PIPELINING SUPPLIES

SACPIPE CONNECTION SYSTEM - Bladder Material

Sacpro have three different bladder materials:

STANDARD
- A reliable material that must be lubricated with grease.
- Thin, flexible and stretchable.
- Durable for multiple installations.
- Has inbuilt branch arm retraction rope.

DUAL LAYER SILICONE SURFACE
- A reliable material with a silicone surface that does not require lubrication with grease.
- Thin, flexible and stretchable.
- Durable for multiple installations.
- Has inbuilt branch arm retraction rope.

SILICONE
- A reliable silicone material that does not require lubrication with grease.
- Flexible and stretchable material.
- Durable for multiple installations.
- Has inbuilt branch arm retraction rope.
- Dome end version has no inbuilt branch arm retraction rope.

Branch Pipe Felts

Size	Code
100x100-45°	APS-004-019
100x100-90°	APS-004-020
150x100-45°	APS-004-021
150x100-90°	APS-004-022
150x150-45°	APS-004-023
150x150-90°	APS-004-024
225x100-45°	APS-004-025
225x100-90°	APS-004-026
225x150-45°	APS-004-027
225x150-90°	APS-004-028

Packer Cover

Size	Code
100x100-45°	APS-004-007
100x100-90°	APS-004-008
150x100-45°	APS-004-009
150x100-90°	APS-004-010
150x150-45°	APS-004-011
150x150-90°	APS-004-012
225x100-45°	APS-004-013
225x100-90°	APS-004-014
225x150-45°	APS-004-015
225x150-90°	APS-004-016

BRAWOLINER
LINER

BRAWOLINER

THE STANDARD FOR REPAIRING DEFECTIVE DRAINS

The tried and tested Brawoliner is a seamless textile liner with a PU foil coating. Due to its special loop construction, Brawoliner is extremely flexible and therefore ideally suited for the renovation of small diameter defective sewers found within private households and industry.

Brawoliner can adapt perfectly to bends of up to 90° and changes in pipe dimensions without creating wrinkles or folds.

Advantages:

- Able to cope with multiple bends of up to 90°
- Gentle inversion pressure from as little as 0.2 bar possible
- Can handle one change in pipe dimension
- Simple and problem-free installation
- Can be used to fix most damage

The BRAWOLINER system is available in diameters of DN50 to 250mm.

Brawoliner 50mm	APS-003-020
Brawoliner 100mm	APS-003-028
Brawoliner 150mm	APS-003-036
Brawoliner 200mm	APS-003-047

BRAWOLINER 3D

FOR CHANGING DIAMETERS

The rehabilitation of laterals, drains and sewers with changes in diameter is a big challenge for many rehabilitation methods and systems.

Particularly, changes in diameter, for example from DN100 to DN150.

Two Changes of Dimension
The BRAWOLINER 3D was specially developed for lining through pipelines where there are big or several changes in diameter. In diameter changes from DN100 to DN150 the seamless textile liner forms itself to both diameters with the final result being a wrinkle free finish. The secret is in its unique and extremely flexible polyester/loop construction which allows the liner to stretch laterally to accommodate diametrical changes.

BRAWOLINER 3D is available in the nominal width DN100 -150 and DN150 -200 each in the lengths of 25m, 50m, or 100m.

For dimension changes from DN70 to 100 we offer the BRAWOLINER DN70 special, which is also available in the above mentioned.

Brawoliner 70/80mm	APS-003-022
Brawoliner 70/100mm	APS-003-025
Brawoliner 100/150mm	APS-003-041
Brawoliner 150/200mm	APS-003-044
Brawoliner 200/250mm	APS-003-047
Brawoliner 300/400mm	APS-003-052

BRAWOLINER XT - EXTRA THICK

Longitudinal fractures, broken pipes and holes can dramatically affect the structural integrity of the pipe. Such damage is often caused by poor installation, overloading, traffic or ground movement.

The rehabilitation of this type of damage is essential to restore structural integrity and water tightness. The BRAWOLINER XT system has a higher stiffness whilst still maintaining its unique flexibility.

For this reason the liner is ideal for the renovation of structurally impaired or deep pipes with bends and changes in diameter.

- BRAWOLINER XT is available in the nominal widths DN100 until DN250

Brawoliner 100XT	APS-003-031
Brawoliner 125XT	APS-003-033
Brawoliner 150XT	APS-003-038
Brawoliner 200/250XT	APS-003-048

BRAWOLINER HT - DOMESTIC REHABILITATION

For domestic rehabilitation, BRAWOLINER HT has been equipped with a special temperature-stable film, which means that steam curing is also possible at high temperature.

- Bends of up to 90°
- 2 dimension changes
- Hot curing with steam & water

Brawoliner 100mm HT	APS-003-031
Brawoliner 150mm HT	APS-003-037

BRAWOLINER LINER

CALIBRATION TUBE

SUPERLIGHT

Green in colour/ or non pigmented clear.
Recommended for ambient cure or warm water cure applications.

- 50mm - 150mm
- Available in 100m rolls or cut to size 50m rolls

Calibration Tube 50mm	APS-003-001
Calibration Tube 75mm	APS-003-002
Calibration Tube 90mm	APS-003-003
Calibration Tube 100mm	APS-003-004
Calibration Tube 150mm	APS-003-009

MEDIUM DUTY

Orange in colour/ or non pigmented clear.
Recommended for ambient cure or hot water cure applications.

- 100mm - 300mm

100mm Medium Duty Orange	APS-003-006
100mm Medium Duty Clear UV	APS-003-008
100mm Heavy Duty White	APS-003-007
150mm Medium Duty Orange	APS-003-011
150mm Medium Duty Clear UV	APS-003-013
150mm Heavy Duty White	APS-003-012
225mm Medium Duty Orange	APS-003-014
225mm Medium Duty Clear UV	APS-003-015
300mm Heavy Duty White	APS-003-016
375mm Heavy Duty White	APS-003-017

AUSTRALIAN
PIPELINING SUPPLIES

RESINS

BRAWOLINER EPOXY RESINS

The BRAWO resins are special epoxy resins for the renovation of domestic and industrial sewerage systems. They have been optimised for use with BRAWOLINER liners and have outstanding properties:

- Excellent mechanical properties
- High abrasion resistance
- High chemical resistance
- Last over 50 years (durability)
- Practically odourless during installation
- Environmentally friendly when fully hardened

The Green Resin

The green colour of the resin is not just a distinctive feature, it clearly shows during the impregnation process, whether even impregnation of the liner has been achieved and also enables a clearer picture of the post CCTV camera inspection of the renovated pipes.

Ambient Cure & Hot Cure

BRAWO resins are reactive resins. Mixing the resin with the hardening agent starts the reaction process. BRAWO resins will harden or cure at both ambient and higher temperatures. The application of heat considerably reduces the cure time.

	BRAWO I	BRAWO III	BRAWO HT	BRAWO RR
Processing Time	50 mins	3.5 hours	70 mins	30 mins
Curing Time 10°C	13 hours	24 hours	18 hours (15°C)	6 hours
Curing Time 50°C	100 mins	220 mins	140 mins	75 mins
Curing Time 70°C	45 mins	140 mins	80 mins	not recommended

BRAWO I

The fast reaction epoxy resin is particularly suitable for the renovation of short stretches of piping up to 30m.

A hot cure can be achieved within 100 minutes.

BRAWO I -1.5kg	APS-002-003
BRAWO I -10kg	APS-002-004

BRAWO III

This slow reaction epoxy resin is particularly effective for the renovation of longer lengths of pipeline or larger diameters.

BRAWO III has a handling or installation time of around 3.5 hours at an ambient temperature of 15°C. Hot curing at 50°C allows complete curing in only 3 hours.

BRAWO III - 10kg	APS-002-007

BRAWOLINER EPOXY RESINS

BRAWO RR

BRAWO RR is the extra quick - hardening 2K - epoxy resin of BRAWOLINER.

Of course BRAWO RR is also suited for ambient curing beginning from 5°C.
Like the proven BRAWO resins BRAWO RR can be used on humid and dry as well as on mineral (e.g. to sewage pipes) or metallic subsoil.

The high chemical resistance and excellent product features guarantee a permanently good rehabilitation result.

BRAWO RR - 1.5kg	APS-002-001
BRAWO RR - 10kg	APS-002-002

BRAWO HT - The Resin For Domestic Rehabilitation

BRAWO HT resin has been specially formulated for use in buildings.

Together with the outstanding features of the BRAWO resins, it meets all structural requirements:

- Dimensional stability under heat > 93°C
- Cold and warm curing

We supply BRAWO HT in 10kg complete packages consisting of resin and curing agent.

BRAWO HT - 10kg	APS-002-008

BRAWO LR - Vinyl Ester Resin

BRAWO LR is a special vinyl ester resin for curing with UV and LED light and has been optimized for use with BRAWOLINER and has the following material properties:

- Light-curing in the wavelength range between 360 nm and 450 nm
- Styrene free
- Low odour during installation
- High abrasion resistance
- Useful life of over 50 years
- Curing with light curing systems (UV and LED light or gas discharge lamps)

BRAWO LR - 12kg	APS-002-009

UV Epoxy Curing Resin

There has long been a need in the market for an epoxy-based UV-curing resin that provides the same durable results as a traditional epoxy.

We have now succeeded in finding a new product that meets the high demands we place for our customers. With our new Houseliner UV Epoxy, you will be able to work more efficiently with UV technology while you get a perfect end result. Simply the best of two worlds.

UV Epoxy Curing Resin	APS-002-026

AMBIENT CURE SILICATE RESINS

WATERMARK APPROVED SILICATE RESIN LINING SYSTEM*

Available In The Following Configurations:

EXPRESS

- Work Time 6 mins
- Cure time 45 mins @ 20°C
- Available in pre measured containers to do 1m x 1m patch of 100mm pipe, supplied in box of 5
- Available in bulk kits 40.5kg

WINTER

- Work Time 15 mins
- Cure time 1.5 hours @ 20°C
- Available in pre measured containers to do 1m x 1m patch of either 100mm or 150mm pipe, supplied in boxes of 5
- Available in bulk kits 40.5kg

SUMMER

- Work Time 45 mins
- Cure time 4 hours @ 20°C
- Available in bulk kits 40.5kg

100mm Silicate Resin A&B Set (Express)	APS-002-012
100mm Silicate Resin A&B Set (Winter)	APS-002-010
150mm Silicate Resin A&B Set (Winter)	APS-002-011
Silicate Resin 40.5kg Bulk Kit (Express)	APS-002-017
Silicate Resin Set 40.5kg (Winter)	APS-002-016
Silicate Resin Set 40.5kg (Summer)	APS-002-015

*Approved under Watermark Licence 022646, when used in conjunction with Brawoliner woven liner and purchased through the license holder.

AUSTRALIAN PIPELINING SUPPLIES

EXR 2 EPOXY RESIN (Clear)

- Pot Life @ 22°C, approx 15 mins
- Cure time 3 hours @ 22°C
- Available in a 18kg set

EXR-2 (Clear) - 18kg	APS-002-019

EXR 2 THICKOTROPIC RESIN (Blue)

- Pot Life @ 22°C, approx 15 minutes
- Cure time 3 hours @ 22°C
- Available in a 18kg set

EXR-2 Thickotropic (Blue)	APS-002-020

*Approved under Watermark Licence 022646, when used in conjunction with Brawoliner woven liner and purchased through the license holder.

HOUSELINER - Liner System

HOUSELINER flexible liners are the basis for a self-supporting piping system, that can handle both dimensional changes and 90° bends with an absolute minimum of wrinkles.

Combined with Houseliner Resin the new sewer pipes will get a predetermined wall thickness of your choice.

The new pipes are high E-modulus and chemically resistant after curing.
The characteristics are much like a new, conventionally made PP sewer pipe.

Houseliner FL and FLT combined with Houseliner Resin are both tested for life expectancy at Eurofins. The test showed that you can expect more then 50% of the initial strength after 50 years of service.

EPOXY RESIN - Resin Base, Fast, Medium, Slow & Hot Cure

The range of epoxy resin is tailored to suit most liners. Both woven and felt liner are able to use Houseliner resin.

There are four different curing agents to suit your needs:

- **Fast -** cures in 3 hours at 20°C but still gives you approx. 18 minutes of working time.

- **Medium -** cures in 6 hours at 20°C and gives you approx. 42 mins of working time.

- **Slow -** cures in 12 hours at 20°C and gives you approx. 3 hours of working time.

- **Hot Cure -** made for steam or hot water curing with a high temperature resistance.

- Working time approx. 70 mins.

The colour is bright orange, making it easy to see when the liner is saturated.

APS AUSTRALIAN PIPELINING SUPPLIES

PICOTE

MINI MILLER - 8mm Shaft / 16m

➤ 8mm Shaft with Thick Outer Casing

➤ High Speed Cleaning DN50-100, Cutting DN50-75 & Brush Coating DN50-150

➤ Range: 16m. Max Range: 26m with extension

➤ Weight: 27kg. 500-2900rpm

➤ Can be extended 10m (Shaft 8mm Thick 10m)

➤ Lightweight & compact while covering a large application range in small pipes

➤ Standard safety features: mechanical safety clutch, operator presence foot control, protective outer shaft casing & E-stop

Mini Miller	APS-006-198

AUSTRALIAN PIPELINING SUPPLIES

MINI CLEANER - 8mm Shaft / 16m

➤ 8mm Shaft with Flexible Outer Casing

➤ High Speed Cleaning DN32-75, Cutting DN32-75 & Brush Coating DN32-75

➤ Max Range: 16m (no extension).

➤ Weight: 26.5kg. 500-2900rpm.

➤ Includes Cleaning Tools Package DN32-40.

➤ Designed with plumbers in mind. Cleaning, de-scaling, roots, cutting & coating in small pipes is now easier than ever before.

➤ Standard safety features: protective outer shaft casing, operator presence foot control, mechanical safety clutch.

Mini Cleaner	APS-006-047

SUPER MIDI MILLER - 12mm Shaft / 20m

- ➤ 12mm Shaft with Thin Outer Casing
- ➤ High Speed Cleaning DN70-150, Cutting DN70-150 & Brush Coating DN70-200
- ➤ Range: 20m. Max Range: 30m with extension.
- ➤ Weight: 68kg. 500-1500rpm.
- ➤ Can be extended 10m (Extension: Shaft 12mm Thin 10m).
- ➤ Offers the added strength of the 12mm shaft with a weight of only 68kg.
- ➤ Standard safety features: protective outer shaft casing, operator presence foot control, electric safety clutch and E-stop.

Super Midi Miller	APS-006-046

AUSTRALIAN
PIPELINING SUPPLIES

MAXI MILLER - 12mm Shaft / 30m

➤ 12mm Shaft with Thick Outer Casing.

➤ DN70-250, Cutting DN70-200 & Brush Coating DN70-300

➤ Range: 30m. Max Range: 40m with extension.

➤ Weight: 89kg. 500-1475rpm.

➤ Can be extended 10m (Extension: Shaft 12mm Thick 10m).

➤ Opens the door for new jobs such as blockage and root removal, light and heavy de-scaling, reinstating lines in CIPP, epoxy brush coating, liner & concrete removal, and more.

➤ Standard safety features: protective outer shaft casing, operator presence foot control, electric safety clutch and E-stop.

| Maxi Miller | APS-006-001 |

PICOTE

MAXI MILLER POWER PLUS - 12mm Shaft / 30m

➤ 12mm Shaft with Thick Outer Casing.

➤ Separate Control Box with 5m cord.

➤ High Speed Cleaning DN70-250, Cutting DN70-200 & Brush Coating DN70-300.

➤ Range: 30m. Max Range: 40m with extension.

➤ Weight: 93kg. 500-1475rpm.

➤ Can be extended 10m (Extension: Shaft 12mm Thick 10m)

➤ The same great features of the Maxi Miller but with a removable control unit on a 5m cord.

➤ Standard safety features include: protective outer shaft casing, operator presence foot control, electric safety clutch and E-stop.

➤ The maxi-power plus has unique power requirements and should run off a 400 volt 3-phase generator.

Maxi Miller Power Plus	APS-012-111

APS AUSTRALIAN PIPELINING SUPPLIES

THE SMART CUTTER

The award-winning Smart Cutter is a unique lateral cutter for DN32 - 200 drains, and has successfully reinstated over 75,000 branches world-wide to date inside cast iron, concrete and clay pipes.

The Smart Cutter not only eliminates the need for traditionally expensive methods, but its user friendly and fully customisable design also greatly reduces training and maintenance costs and can also be used as an aid for robots, or for the Twister to achieve a smooth finish.

Navigating 90° bends and diameter transitions effortlessly, the Smart Cutter accurately shapes openings without accidental damage to the original pipe.

A great remedial tool, the Smart Cutter also removes lead, nails, roots, fins and epoxy slugs as well as other inconsistencies such as wrinkles in the pipe.

Smart Cutter Starter DN100	APS-006-070
Smart Cutter Starter DN150	APS-006-071

THE TWISTER RANGE

TWISTER MINI

The Twister Mini has been designed for re-instating connections in DN50 / 2" and DN70 / 3" plastic, cast iron & clay pipes.

Twister Mini 50mm	APS-006-013
Twister Mini 75mm	APS-006-014

TWISTER EXPRESS

Available for lined or unlined pipes, the Twister Express is up to six times faster at re-instating connections than the original Twister. Currently available for DN100 / 4" pipes.

Twister Express DN70 Lined Pipe	APS-006-176
Twister Express DN100 Lined Pipe	APS-006-006
Twister Express DN100 Unlined Pipe	APS-006-007

ORIGINAL TWISTER

Available to re-instate connections inside lined or unlined pipes, the original Twister is available for DN100, DN150 / 4", 6"and DN200 / 8" plastic, cast iron or clay pipes.

Original Twister DN150 Lined Pipe	APS-006-008
Original Twister DN150 Unlined Pipe	APS-006-060

TIGER TWISTER LINER & CONCRETE REMOVER

The Tiger Twister is a superior tool for reinstating connections. Fast and very efficient, the Tiger Front Metal Panels also work with the Smart Cutter Hub. DN100, DN150.

Tiger Twister L & C Remover DN100 Lined Pipe	APS-006-201
Tiger Twister L & C Remover DN100 Unlined Pipe	APS-006-202
Tiger Twister L & C Remover DN150 Lined Pipe	APS-006-203
Tiger Twister L & C Remover DN150 Unlined Pipe	APS-006-204

APS AUSTRALIAN PIPELINING SUPPLIES

LINER REMOVAL TOOL

The Liner Removal tool is designed to easily remove failed liner from within the pipe. The specially designed drilling head, in conjunction with the new thicker front metal panel make removing liner faster and more efficient.

➤ Available for DN100 and DN150 pipes.

➤ Available for both lined and unlined pipes.

➤ For use with Maxi Miller.

100mm Lined Pipe	APS-006-009
100mm Unlined Pipe	APS-006-010
150mm Lined Pipe	APS-006-011
150mm Unlined Pipe	APS-006-012

THE SMART SWEEPER

Smart Sweeper Liner Remover DN150, 200 & 225

➤ For use with the Maxi Miller Power Plus only.

➤ Developed for several challenging collapsed liner situations including where the collapsed material is around the wall of the pipe.

➤ Highly effective in situations where a liner which is too big has been wrongly installed inside the pipe (e.g. 8" liner inside 6" pipe).

➤ Create the combination that works best by simply changing the front head.

➤ Use with Smart Crusher Head for cases where the collapse is in the middle of the pipe.

• Spare parts available for all sweepers kept in stock.

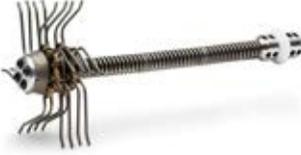|	
Mini Smart Sweeper DN40-50 - 8mm shaft	APS-006-082
Mini Smart Sweeper DN70-75 - 8mm shaft	APS-006-033
Mini Smart Sweeper DN100 - 12mm shaft	APS-006-153

COLLAPSED LINER REMOVAL

TWISTER CONCRETE REMOVER

The Twister Concrete Remover features two front bushes, a heavy duty 3mm front metal panel with large carbides and a specialised front drill head with star carbides used for efficient concrete removal.

➤ Dual brushes provide added stability.

➤ Heavy duty front panel with larger carbides brings added power to the process.

➤ Removes concrete, grout, slurry and large rocks. May be used to grind off sets in clay and concrete pipe which provides for a superior finish after lining.

➤ DN100 & DN150 for Maxi Miller and DN150, 200 & 225 for Maxi Power+.

➤ All available with or without steering axle.

Twister Concrete Remover DN100 - 12mm Shaft	APS-006-118
Twister Concrete Remover DN150 - 12mm Shaft	APS-006-116
Twister Concrete Remover DN100 + Steering Axle - 12mm Shaft	APS-006-090
Twister Concrete Remover DN150 + Steering Axle - 12mm Shaft	APS-006-091

THE SMART SPIDER - Drain Cleaning

The Smart Spider cleans all types of pipes fast and highly efficiently - even safe to use in PVC pipes. Specifically for pipes where the base or other sections are missing. Easily navigates 90 degree bends. Replacement parts available.

The Smart Spider 100mm	APS-006-081
The Smart Spider 150mm	APS-006-072

THE TWISTER CLEANER - Drain Cleaning

The PVC Twister Cleaner is a gentle option for PVC pipes. Suitable for cleaning DN100 / 4" this useful tool is also effective at scoring the inside of non porous pipes prior to relining.

Twister Cleaner 100mm	APS-006-105

TWISTER METAL GRINDER

The Picote Remover tool is designed to aid in the removal of steel rods, nails, screws, star pickets from within a pipe prior to relining.

Twister Metal Grinder	APS-006-104

CLEANING CHAINS

PREMIUM CHAINS

Larger and heavier U carbide (7-ridge) makes it stronger and faster than any other chain on the market. A versatile tool for cast iron pipes.

For tough de-scaling, hard deposits and removing residual concrete or failed liner, including inconsistencies, wrinkles and remains.

TIGER CHAINS

Fits in between the Standard & Premium versions.

Equipped with extra-hard, very long lasting carbide teeth with a lighter chain material to create a gentle but extremely durable option for cleaning cast iron pipes.

STANDARD CHAINS

Star carbide (3-ridge). An efficient general cleaning chain.

Suitable for clay, concrete and cast iron pipes.

PVC CHAINS

No carbides. General cleaning chain to restore flow quickly and safely or to remove light roots in fragile pipes such as plastic, copper & clay.

ORIGINAL CHAINS

Picote original chains are designed to make fast work of pipe cleaning whether it is tree roots, scale and calcium build-up, concrete and lead, soft blockages failed gaskets, or pipe imperfections.

Original chains are a good all-around cleaning option and are often referred to as the starter chain because they are adjustable. This allows you to make minor adjustments to the chain size to compensate for reduced pipe interior for initial cleaning of blocked pipes and then readjust them to their optimal diameter.

Uses & Benefits:
The original chain are available in 4 versions:

➤ Standard - U shaped carbide teeth that quickly clean the pipe.

➤ Premium - Star-shaped carbide teeth that have twice the carbide and surface contact area of the standard version, so they clean faster and last longer since the carbide sees less wear per job.

➤ PVC - foregoes carbide teeth, which makes it less aggressive and able to clean inside more fragile plastic and clay pipes.

➤ Tornado - for use exclusively with the Maxi Power Plus and feature highly aggressive teeth for de-scaling, concrete removal, heavy tuberculate and debris in larger diameter pipes.

100mm Original Chain	APS-006-053
150mm Original Chain	APS-006-055

PICOTE

CYCLONE CHAINS

The cyclone chains are a great option for finish cleaning because they accurately hone the pipe back to near original condition.

The cyclone chains utilise centrifugal fore to keep them centred inside the pipe which also provides extra protection for de-scaling cracked or damaged pipes.

The cyclone chains are available in 4 versions: Standard, Premium, PVC and Tornado and are also available for robotic cutters.

Uses & Benefits:

➤ **Standard** - has carbide teeth that quickly clean the pipe - a great general purpose option.

➤ **Premium** - features twice the carbide and surface contact area of the standard version, so they clean even faster and last longer since the carbide sees less wear per job.

➤ **PVC** - foregoes carbide teeth, which makes it less aggressive and able to clean inside the more fragile plastic and clay pipes.

➤ **Tornado** - are for use exclusively with the maxi power plus and feature special, highly aggressive teeth for de-scaling and concrete removal.

100mm Cyclone Chain	APS-006-017
150mm Cyclone Chain	APS-006-056
225mm Cyclone Chain	APS-006-069
250mm Cyclone Chain	APS-006-161

AUSTRALIAN
PIPELINING SUPPLIES

PICOTE PVC CYCLONE & ORIGINAL CHAINS

The Picote PVC chains are specifically designed with no carbides. They are designed as a general cleaning chain to restore flow quickly and safely or to remove light roots in fragile pipes such as plastic, copper and clay.

PVC Original Chains DN50 - 8mm Shaft	APS-006-038
PVC Cyclone Chains DN100 - 8mm Shaft	APS-006-177
PVC Original Chains DN100 - 12mm Shaft	APS-006-173
PVC Cyclone Chains DN100 - 12mm Shaft	APS-006-159
PVC Original Chains DN150 - 12mm Shaft	APS-006-174
PVC Cyclone Chains DN150 - 12mm Shaft	APS-006-160

PICOTE 3D CHAINS COMPLETE WITH LEADERS, READY TO USE

The Picote 3D range of chains are designed to save time and money on the work site, by controlling the speed of the cleaning process.

The 3D Chain continues to expand as it removes material until it reaches its maximum size. Its unique design is also very practical for navigating diameter transitions. Available for use in PVC with no Carbides, or utilising the unique "U Carbide" (7 ridge design).

All 3D Chains come complete with its own special Leader.

3D Premium Chain DN70-100 w/ leader - 8mm Shaft	APS-006-098
3D Premium Chain DN70-100 w/ leader - 12mm Shaft	APS-006-097
3D Premium Chain DN100-150 w/ leader - 12mm Shaft	APS-006-180
3D PVC Chain DN70-100 w/ leader - 8mm Shaft	APS-006-221

PICOTE STARTER KITS

PICOTE PRO CLEANING KITS & PICOTE PRO CUTTING KITS

Designed to suit both 8mm and 12mm shaft machines the Picote Pro kits include the essential tools to get you started cleaning or cutting.

Each kit is packaged within its own carry bag for ease of storage and handling.

Each kit is configured to be used in conjunction with one of the Picote Miller range.

For more information as to what is included within each Pro Kit, please use the QR code provided to browse the Picote catalogue which outlines exactly what tools are included within each kit.

Picote Pro Cutting Kit DN100- 12mm Shaft	APS-006-183
Picote Pro Cleaning Kit DN100- 12mm Shaft	APS-006-182
Picote Pro Cutting Kit DN150- 12mm Shaft	APS-006-185
Picote Pro Cleaning Kit DN150- 12mm Shaft	APS-006-184

PIPE CUTTER - Cut Back On Costly Mistakes

When lining towards a main or connection it is possible that the installation may inadvertently extend past the end of the pipe. This can create blockages and backups which can cause significant damage and expense.

In these situations, Picote Pipe Cutters are fantastic tools to quickly and easily remove an overshot lining that has extended into a connection.

Simply attach the Pipe Cutter to your Miller, push it in place from the lateral and quickly cut off the excess lining.

➤ DN70 Pipe Cutter can be operated by the Mini, Super Midi, or Maxi Miller.

➤ DN100 & DN150 Pipe Cutters can be used with the Super Midi and Maxi Miller.

➤ DN200 Pipe Cutter Ultra Flex can be combined with the Maxi Miller.

100mm Cutter Panels	APS-006-064
150mm Cutter Panels	APS-006-066
Centralizer Package 100mm	APS-006-065
Centralizer Package 150mm	APS-006-067

PICOTE

PICOTE DRAIN CLEANING

THE GRABBER

The Grabber is a must-have on every job site. It allows you to quickly retrieve lost tools or foreign objects blocking a pipe, avoiding costly and time-consuming excavation.

The Original Grabber is designed for pipes of DN100 diameter and above, and the Large Grabber can be used in DN150 and larger pipes.

While viewing the location with your CCTV camera, simply push the grabber into position. The grabbing head is easily rotated so you can locate and grip the item with precision. Then, simply turn on the air valve to get a rock-solid grip on the object to pull it out and retrieve it. Turn off the air to release.

The Picote Grabber Range

➤ Small Grabber DN50-DN70 (Available in either 5m or 10m cable length)

➤ Original Grabber DN100 + (Standard cable length 10m, Max Range 30m)

➤ Large Grabber DN150 + (Standard cable length 10m, Max Range 30m)

Small Grabber DN50-75 - 10m	APS-006-196
Picote Grabber 10m	APS-006-029
Picote Grabber Extension 10m	APS-006-140

PICOTE SPECIAL DRILL HEADS & TIGER BORES

Special Drill Heads can easily cut into tough blockages such as tree roots, grease, heavy scale, or tuberculation and can be used to unblock pipes in order to make space for larger tools to follow.

Special Drill Heads can be attached in front of Picote Original Grinding Chains to create an initial opening in the blockage to then allow the chains to open and better perform their cleaning function.

They can also be used to create an initial CIPP connection opening in pipes when larger tools like the Twister cannot fit, or where a Front Drill Head and Front Panel cannot be attached to a Smart Cutter.

PICOTE SPECIAL DRILL HEADS & TIGER BORES

The Tiger Bore is highly efficient at reinstating lined connections and opening up blockages.

It is also effective for cutting through collapsed liners to make room for larger removal tools to follow, as well as for removing grout & concrete in small diameter pipes.
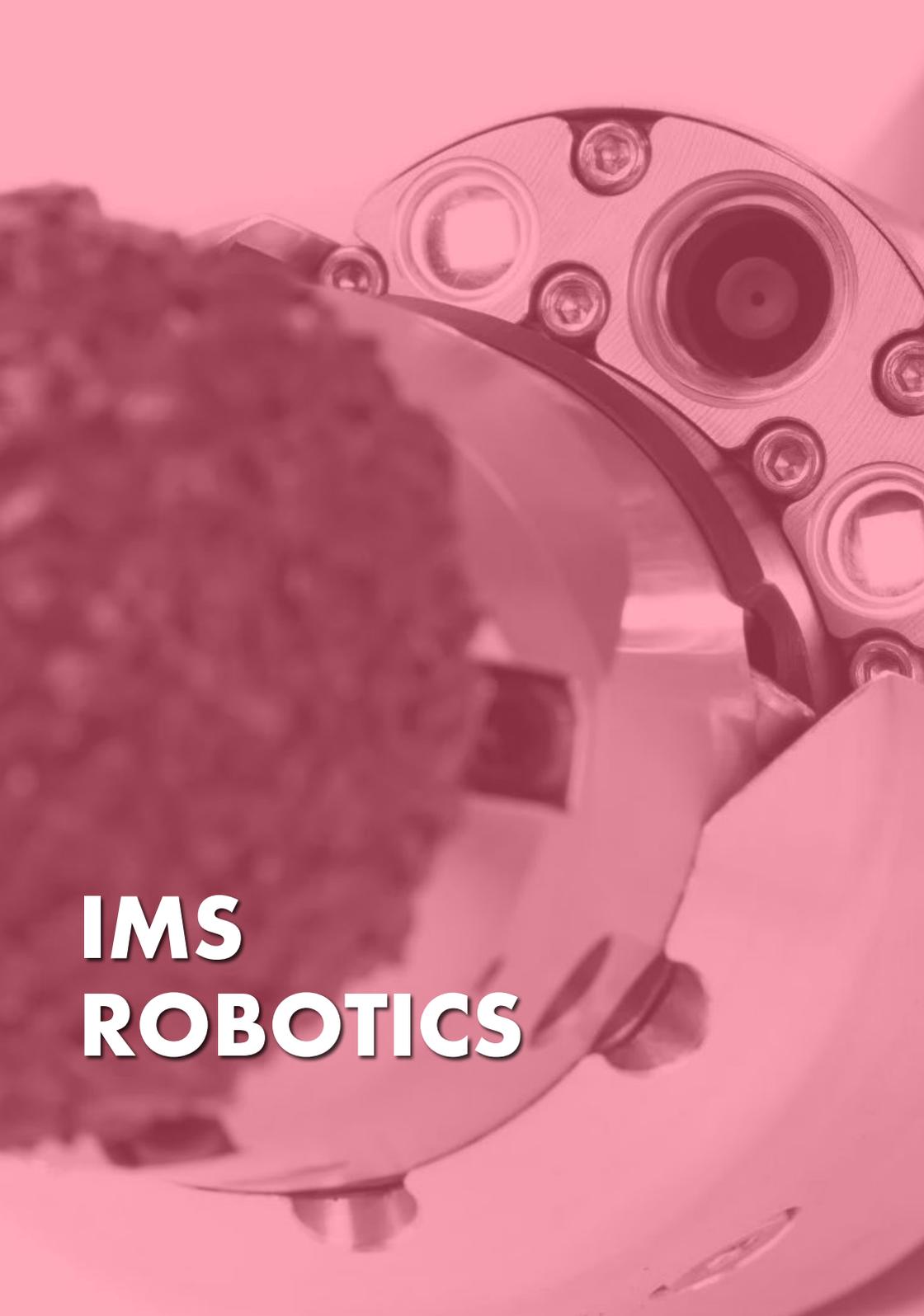
PICOTE BRUSH COATING

PICOTE COATING SYSTEM

The Picote Coating System is a simple, fast and practical coating system used for drain and sewer renovation. Coat unlined or lined pipes or connections from DN32 - DN150 with the Picote Coating Pump and Mini Miller combination.

Coat anything from a small area (such as a lined connection) to entire piping systems, (for example blocks of flats) using an unique world-class vegetable-oil based resin with strong bonding properties for cast iron, PVC, concrete or clay pipes.

IMS
ROBOTICS

IMS CUTTER NANO EASY - 15M/25M

Cutting robot DN70-150 with 15m and 25m supply hose length.

Features, Functions & Technical Details:

- Usable from DN70 up to DN100 (inner diameter), up to DN150 with optional expansion
- Excellent flexibility in bends (90° in DN100)
- 15m or 25m supply hose package
- Air-powered cutter motor
- Integrated colour camera with LED (the functionality of the camera is only ensured when the lighting is switched on)
- Permanent camera cleaning with air
- Splash-proof according to IP54
- Manual control by movable and adjustable steering wheel on supply hose
- The steering wheel is provided with one switch for the bracing bladder, one switch for the cutter motor, one potentiometer for the light control, two buttons for the lifting unit and a analogue video signal
- 3.5" TFT LCD Monitor, storage picture/video (JPEG/MPEG) with SD card, USB, date and time display
- Completely assembled cutter on chassis with pneumatic and electrical rotary lead through, analogue and digital video output
- Dimensions of cutter: L x W x H approx. 877 x 495 x 770 mm
- Outside diameter of cutter drive 42 mm
- Weight approx. 45 kg

Cutting robot DN80-250 with 30m supply hose length.

Features, Functions & Technical Details:

- Usable from DN80 up to DN150 (inside diameter), up to DN250 with optional extensions
- Flexibility in bends 90° from DN100 (clay, no folds, or similar)
- 30m supply hose on drum coupling elements for fibreglass push rod
- 400° rotating and approx. 90° swivel movement with stops
- Air-powered cutter motor
- Colour camera with LED
- Camera cleaning with permanent air
- Splash-proof according to IP 54
- Waterproof device with 0.8 bar nitrogen filling
- Permanent monitoring of internal pressure with signalling
- Cable remote control with joystick for rotation (sensitivity adjustable) and swivelling, controller for light, switch for cutting motor and bracing bladder control, 1 analogue BNC video output
- 3.5" TFT LCD monitor, storage picture/video (JPEG/MPEG) with SD card, USB, date and time display on demand
- Outside diameter of cutter: 72 mm
- Overall dimensions: L 660 x W 550 x H 800 mm
- Weight: approx. 47 kg
- Compact cutter assembly on chassis with pneumatic rotary lead-through
- Detachable individual components
- Box with job site tools, valve extension, set of replacement screws, 1 cutting tool carbide

IMS ROBOTICS

IMS CUTTER MICRO LIGHT PLUS

Cutting robot DN80-250 with 30m supply hose length.

Features, Functions & Technical Details:

- Usable from DN80-150 (inner diameter), up to DN250 with optional extension
- Flexibility in bends 90° from DN100 (stoneware, no folds or similar)
- Axial feed approx. 50mm v 30m supply hose on cable reel
- Coupling elements for fibreglass push rod
- 400° turning movement and approx. 90° swivelling movement with stops
- Air-powered cutter motor
- Colour camera with LED
- Permanent camera cleaning with air
- Splash-water-protected according to IP54
- Waterproof device with 0.8 bar nitrogen filling
- Permanent internal pressure monitoring with signal indicator
- Cable remote control with joystick for turning movement (sensitivity adjustable) and swivelling
- 3.5" TFT LCD monitor, storage of pictures/videos (JPEG/MPEG) with SD card, USB, date and time display
- Cutter outside diameter: 72 mm
- Overall dimension: approx. L 660 x W 550 x H 800mm
- Weight: approx. 47 kg
- Completely assembled cutter on chassis
- Detachable individual components
- Accessory case with construction site tools, valve extension, replacement screws, carbide granulate cutting tool, operating manual and accessory overview

AUSTRALIAN
PIPELINING SUPPLIES

Cutting robot DN75-250 with 30m & 50m supply hose length

Features, Functions & Technical Details:

- Application range DN75-DN150 (inner diameter); up to DN250 with optional expansion
- 90° flexibility in bends from DN100 (stoneware, no folds or similar)
- 30m or 50m supply hose on cable reel
- Supply hose with integrated push rod
- Bayonet connection between the supply hose and the cutter module
- Approx. 90° swivel movement with stops
- Air-operated cutting motor
- Colour camera with LED lighting
- Permanent camera cleaning with air
- Splash-water-protection according to IP54
- Waterproof device with 0.8 bar nitrogen filling
- Outer diameter of the cutter module: 60mm
- Completely assembled cutter on cable reel rack
- Detachable individual components
- Accessory case with construction site tools, valve extension, nitrogen refilling adapter, tool extension, ball bearings and vanes for air motor, replacement screw set, 1 carbide granulate cutting tool, instruction manual and accessory overview
- Dimension cable reel: L 850 x W 510 x H 1200mm
- Weight approx. 62 kg
- Due to the holding plate on the cable reel, the stable protection case with integrated control unit can be swivelled and removed

IMS CUTTER MICRO-S LIGHT PLUS

Cutting robot DN75-250 with 30m & 50m supply hose length.

Features, Functions & Technical Details:

- Application range DN75-DN150 (inner diameter); up to DN250 with optional expansion
- 90° flexibility in bends from DN100 (stoneware, no folds or similar obstacles)
- 30m or 50m supply hose on cable reel
- Supply hose with integrated push rod
- Bayonet connection between the supply hose and the cutter module
- Cutter module with radial bracing bladder and approx. 100mm axial feed for creep function
- Approx. 90° swivel movement with stops
- Air-operated cutting motor
- Colour camera with LED lighting
- Permanent camera cleaning with air
- Splash-water-protection according to IP54
- Waterproof device with 0.8 bar nitrogen filling
- Outer diameter of cutter module: 60mm
- Completely assembled cutter unit on cable reel rack
- Detachable individual components
- Accessory case with construction site tools, valve extension, nitrogen refilling adapter, tool extension, bearings and vanes for air motor, replacement screw set, 1 carbide granulate cutting tool, instruction manual and spare part overview
- Dimension cable reel: L 850 x W 510 x H 1200 mm, weight approx. 62 kg (30m)/68 kg (50m) due to the holding plate on the cable reel, the stable protection case with integrated control unit can be swivelled & removed

IMS CUTTER MICRO-S AUTOMATIC

Cutting robot DN75-250 with 50m supply hose length.

Features, Functions & Technical Details:

- Application range DN75-DN150 (inner diameter); up to DN250 with expansions
- 90° flexibility in bends from DN100 (stoneware, no folds or similar obstacles)
- 50m supply hose on cable reel
- Supply hose with integrated push rod
- Bayonet coupling between the supply hose and the cutter module
- Cutter module with two radial bracing bladders
- Usable in vertical pipes due to manual or automatic creep and climb function
- Approx. 90° swivel movement with stops
- Air-operated cutting motor
- Colour camera with LED lighting
- Camera cleaning with permanent air and connectible water
- Splash-water-protection according to IP54
- Waterproof device with 0.8 bar nitrogen filling
- Outer diameter of the cutter: 60mm
- Completely assembled cutter with supply hose rack
- Detachable individual components
- Accessory case with construction site tools, valve extension, nitrogen refilling adapter, tool extension, ball bearing and vanes for air motor, replacement screw set, carbide granulated cutting tool, instruction manual and accessory overview
- Dimension cable reel: L 850 x W 510 x H 1200mm, weight approx. 68 kg
- Due to the holding plate on the cable reel, the solid transport case can be swivelled and removed.

IMS CUTTER MICRO AUTOMATIC

Cutting robot DN80-250 with 30m supply hose length.

Features, Functions & Technical Details:

- Usable from DN80-150 (inside diameter), up to DN250 with optional extensions
- Flexibility in bends 90° from DN100 (clay, no folds, or similar)
- Axial feed approx. 100mm, manual and automatic creeping and climbing function (single or permanent movement)
- 30m supply hose on drum
- Coupling elements for fibreglass push rod
- 400° rotating and approx. 90° swivel movement with stops
- Air-powered cutter motor
- Colour camera with LED
- Camera cleaning with permanent air and switch-able water flushing
- Splash-proof according to IP 54
- Waterproof device with 0.8 bar nitrogen filling
- Permanent monitoring of internal pressure with signalling
- Cable remote control with joystick for rotating (sensitivity adjustable) and swivelling, light control, switch for water, cutting motor and control of bladders; analogue video output
- 3.5" TFT LCD Monitor, storage picture/video (JPEG/MPEG) with SD card, USB, date and time display
- Outside diameter of cutter: 72mm
- Overall dimensions: approx. L 660 x W 550 x H 800mm
- Weight: approx. 55 kg
- Completely assembled cutter on chassis with pneumatic and electrical rotary leadthrough
- Detachable individual components
- Accessory case with job site tools, valve extension, set of replacement screws, 1 carbide half globe cutting tool granulate, nitrogen filling adapter, thread extension, ball bearings and fins for air motor, operation manual, spare parts overview

![APS AUSTRALIAN PIPELINING SUPPLIES]

WITH CABLE REMOTE CONTROL

Cutting robot DN80-250 with 50m supply hose length.

Features, Functions & Technical Details:

- Usable from DN80-150 (inside diameter), up to DN250 with optional extension
- Flexibility in bends 90° from DN100 (stoneware, no folds or similar)
- Axial feed approx. 100mm, manual and automatic creeping and climbing function
- 50m supply hose on cable reel
- 400° turning movement and approx. 90° swivel movement with stops
- Air-powered cutter motor
- Colour camera with LED
- Permanent camera cleaning with air and connectible water flushing
- Cable remote control for turning movement (sensitivity adjustable) and swivelling movement, potentiometer for light control, switch for water flushing, cutter motor and bracing bladder control, 1 analogue BNC video output
- 3.5" TFT LCD monitor, storage of pictures/videos (JPEG/MPEG) with SD card, USB, date and time display
- Splash-water-protection according to IP54
- Waterproof device with 0.8 bar nitrogen filling
- Permanent internal pressure monitoring with signal indicator
- Analogue video output on cable reel
- Cutter outside diameter: 72mm
- Completely assembled cutter on chassis with pneumatic and electrical lead-through and manual brake
- Detachable individual components
- Accessory case with construction site tools, valve extension, nitrogen refilling adapter, thread extension, ball bearings and fins for air motor, replacement screws, carbide granulate cutting tool, operating manual and accessory overview
- Cable reel dimensions: approx. L 790 x W 630 x H 1050 mm
- Weight approx. 57 kg
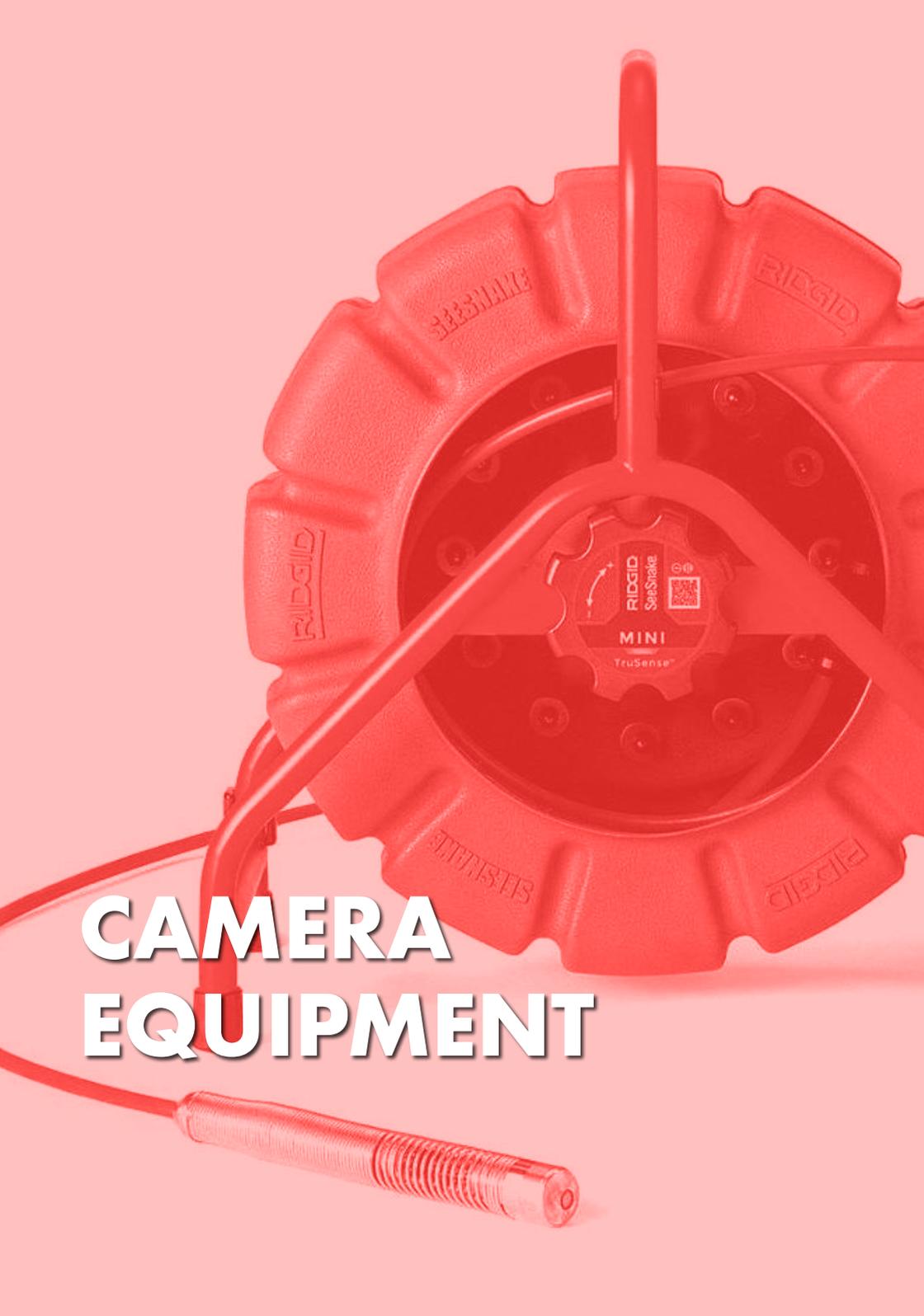
IMS CUTTER MICRO AUTOMATIC PLUS

WITH CONTROL CASE & TABLET

Cutting robot DN80-250 with 50m & 70m supply hose length.

Features, Functions & Technical Details:

- Usable from DN80-150 (inside diameter), up to DN250 with optional extension
- Flexibility in bends 90° from DN100 (stoneware, no folds or similar)
- Axial feed approx. 100mm, manual and automatic creeping and climbing function
- 50m supply hose on cable reel
- 400° turning movement and approx. 90° swivelling movement with stops
- Air-powered cutter motor
- Colour camera with LED
- Permanent camera cleaning with air and connectible water flushing
- Cable remote control for turning movement (sensitivity adjustable) and swivelling movement, potentiometer for light control, switch for water flushing, cutter motor and bracing bladder control, 1 analogue BNC video output
- 3.5" TFT LCD monitor, storage of pictures/videos (JPEG/MPEG) with SD card, USB, date and time display
- Splash-water-protection according to IP54
- Waterproof device with 0.8 bar nitrogen filling
- Permanent internal pressure monitoring with signal indicator
- Analogue video output on cable reel
- Cutter outside diameter: 72mm
- Completely assembled cutter on chassis with pneumatic and electrical lead-through and manual brake
- Detachable individual components
- Accessory case with construction site tools, valve extension, nitrogen refilling adapter, thread extension, ball bearings and fins for air motor, replacement screws, carbide granulate cutting tool, operating manual and accessory overview
- Cable reel dimensions: approx. L 790 x W 630 x H 1050 mm

CAMERA
EQUIPMENT

RIDGID SEESNAKE

CS6x VERSA (64943) Digital Recording Monitor with Wi-Fi

Improving job site ergonomics, the CS6x Versa has high and low monitor mounting positions and a unique pivoting frame that lets users tilt the monitor to the desired angle for optimal viewing efficiency.
This design allows the sunshade to remain open in all usage situations for maximum glare reduction.

Includes:
- 1 x AC Adapter
- 1 x 8 GB USB Drive (with HQ preloaded)

Features:
- 5.7" daylight viewable screen, direct USB recording, full TruSense compatibility, and Wi-Fi connectivity for remote viewing and recording on a phone or tablet.
- The frame docks to the Compact 2/C40/M40 and can be used mounted or unmounted.
- Pivoting frame with high and low mounting positions allow flexible placement and optimal viewing
- Docks to the Compact 2/C40/M40 camera reels for efficient transport, storage, and operation

Connectivity:
- Bluetooth: 4.0
- Wi-Fi: 802.11 a/b/g/n

Operating environment:
- Operating Temperature: -10°C to 50°C
- Storage Temperature: -10°C to 70°C
- Ingress protection: IPx5
- Relative humidity: 5 to 95%
- Altitude: 4000m
- Dimensions (L x W x H): 332mm x 233mm x 309mm
- Weight: 2.2kg

CS12x VERSA Digital Recording Monitor with Wi-Fi

The RIDGID SeeSnake CS12x Monitor delivers a large screen, dual battery functionality and Wi-Fi connectivity. Designed to help you work smarter, not harder on the job site.

Features:

- Enhanced Connectivity: Stream or record inspections to an iOS or Android phone or tablet with the free HQx Live companion app
- Storage Option: Capture images and video directly to a USB drive
- Dual Battery Power: Two batteries can be installed to deliver maximum runtime at the job site
- Large 12.1" Display: At 12.1" and with a resolution of 1024x768 pixels, the upgraded high contrast display is crisp, clear and daylight readable
- More Powerful Processor: Delivers quick start-up time and snappy performance

Specifications:

- Power Source: 18V Advanced Lithium Battery or AC Adapter
- Operating Temperature: -10°C to 50°C
- Storage Temperature: -20°C to 60°C
- Display: 12.1" (307 mm) Colour LCD
- Display Resolution: 1024 x 768 Pixels, XGA
- Video Format: MPEG4 (H.264) 30 FPS
- Photo Format: JPEG
- Autolog Format: MPEG4 (H.256) VFR
- Audio: Integrated Microphone and Speaker
- Transfer Method: USB Drive
- Dimensions (L x W x H): 506mm x 394mm x 302mm
- Weight (without battery): 6.3kg

RIDGID SEESNAKE

microReel Video Inspection System

40mm to 100mm/ 125 mm* lines up to 30m. Passes 90° bends in most 50mm lines.

microReel video inspection system provides small size and manoeuvrability for small diameter and tight-turn radius inspections.

- 100 mm when used with a micro CA-350 inspection camera.
- 125 mm when used with a SeeSnake monitor.
- Lightweight and compact design is half the size of popular inspection systems, easily stowed in a truck and carried onto the job site.
- Multi-monitor compatibility with existing SeeSnake monitors, or the micro CA-350 digital inspection camera.
- Durable and reliable construction with hardened stainless steel camera head spring assembly for a long service life. Long-lasting high-intensity lights for exceptional viewing.
- Stiffer push cable than microDrain to enable line inspections up to 30m.

MAX RM200 Camera

The RM200 Camera System combines portability with the versatility of the D2 drum series, offering different combinations of push cable stiffness and spring flexibility to tackle any inspection job.

The RM200 features a newly designed push cable for greater abrasion resistance. The Ridgid CS6 Monitor can be purchased separately and locks into the hand grip.

Interchangeability
- The D2 drum series currently consists of the D2A and D2B drums
- The RM200 comes with your choice of drum
- Either drum can be purchased separately
- Own them both. Quickly and easily interchanged giving you on-the-job flexibility

Pushability
- Drums feature different push cable lengths, diameters, stiffness and springs
- Choose the drum that enables you to easily negotiate turns and tees— there's a drum that's right for you!

Portability
- Easy to transport; via its wheels or carry handle
- Dock the CS6 or CS65 digital monitor for convenient transport, operation and storage

RIDGID SEESNAKE

61m x 30mm Mini Camera with TruSense (63633)

The SeeSnake Mini with TruSense provides down pipe visibility, vastly improved with High Dynamic Range (HDR), giving more clearly defined details of the pipe characteristics. The self-leveling camera head keeps the image upright (63603 - self levelling, 63633 - non levelling).

Features:

- The SeeSnake Mini camera reel is the smaller version of the SeeSnake Standard system
- Now available with TruSense technology
- The Mini's moderately stiff 61m push cable strikes a good balance between stiffness and the ability to navigate turns
- Rugged, high-intensity LEDs for exceptional viewing and long life.
- Powerful FleXmitter sonde has long range and preserves the camera's ability to make turns.
- High dynamic range (HDR) image sensor offers bright, clear in-pipe imaging difficult lighting conditions
- TiltSense displays the camera's pitch in a pipe on a connected SeeSnake CSx series monitor.

Specifications:

- Line Capacity: 40 - 200mm
- Maximum Run: 61m
- Sonde: 512 Hz
- Camera Diameter: 30mm
- Camera Length: 42mm
- Push Cable Diameter: 8mm
- Operating Temperature: -20° to 40°C
- Waterproof Depth: 100m
- Video Resolution: 656(H) x 492(V)
- Lighting: 6 LEDs or 18 LEDs (for self-levelling model)
- Reel Frame Diameter: 510mm
- Weight (without monitor): 11.1kg

61m x 30mm Self Levelling Mini Camera with TruSense (63628)

The SeeSnake Mini packs ruggedness and versatility into a small frame, making it a great all-around camera for a range of pipe sizes. Newly available TruSense technology provides a high dynamic range (HDR) image sensor and a TiltSense inclinometer for SeeSnake CSx series Wi-Fi enabled monitors.

Features:

- The SeeSnake Mini camera reel is the smaller version of the SeeSnake Standard system
- Now available with TruSense technology
- The Mini's moderately stiff 61m push cable strikes a good balance between stiffness and the ability to navigate turns
- Rugged, high-intensity LEDs for exceptional viewing and long life
- Self-levelling camera head keeps the image upright
- Powerful FleXmitter sonde has long range and preserves the camera's ability to make turns
- High dynamic range (HDR) image sensor offers bright, clear in-pipe imaging in difficult lighting conditions
- TiltSense displays the camera's pitch in a pipe on a connected SeeSnake CSx series monitor

Specifications:

- Line Capacity: 40 to 200mm
- Maximum Run: 61m
- Sonde: 512Hz
- Reel Frame Diameter: 510mm
- Camera Diameter: 30mm
- Camera Length: 42mm
- Push Cable Diameter: 8mm
- Operating Temperature: 20°C - 40°C
- Waterproof Depth: 100m
- Video Resolution: 656(H) x 492(V)
- Lighting: 6 LEDs or 18 LEDs (for self-levelling model)
- Weight: 11.8kg

RIDGID SEESNAKE

99m x 35mm Standard Camera with TruSense (63583)

Down pipe visibility vastly improved with High Dynamic Range (HDR) giving more clearly defined detail of pipe characteristics.
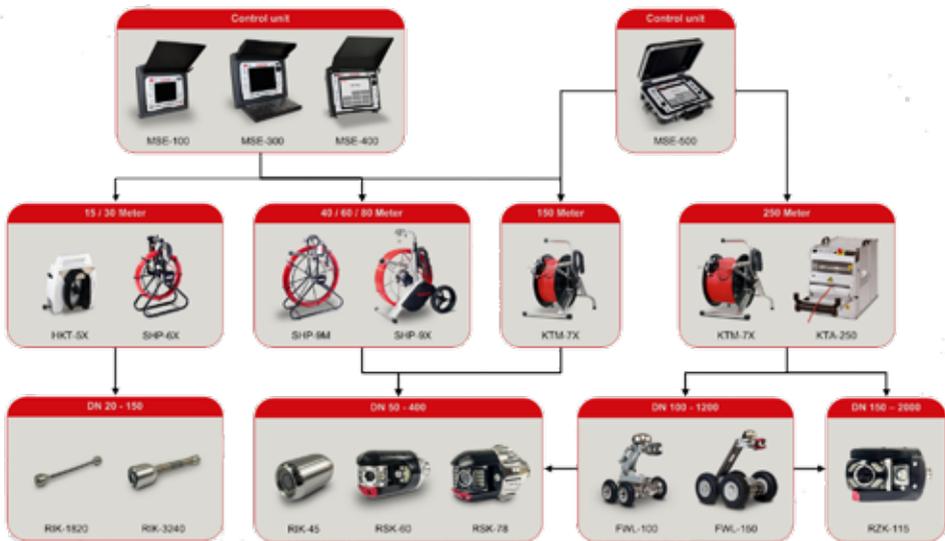
Features:

- The SeeSnake Standard camera reel offers unmatched reliability and performance in a rugged package
- Available with TruSense technology
- The Standard has the stiffest push cable and is available in lengths up to 99m - making it perfect for long runs, particularly in larger pipes with fewer turns.
- Rugged, high-intensity LEDs for exceptional viewing and long life.
- Self-levelling camera head keeps the image upright.
- Powerful FleXmitter sonde has long range and preserves the camera's ability to make turns.
- High dynamic range (HDR) image sensor offers bright, clear in-pipe imaging in difficult lighting conditions.
- TiltSense displays the camera's pitch in a pipe on a connected SeeSnake CSx series monitor.

Specifications:

- Line Capacity: 50 - 300mm
- Maximum Run: 99m
- Sonde: 512 Hz
- Camera Diameter: 35mm
- Camera Length: 42mm
- Push Cable Diameter: 11mm
- Operating Temperature: -20° to 40°C
- Waterproof Depth: 100m
- Video Resolution (H x V): 656 x 492
- Reel Frame Diameter: 810mm
- Weight (without monitor): 19.5kg

RIEZLER FAMILY TREE

RIEZLER CONFIGURATION POSSIBILITIES

RIEZLER CONTROL UNITS

MSE-100

- High-resolution, bright 5.6" TFT display
- Integrated MPEG-4 Video Recorder (avi) with snapshot function (bmp)
- Digital metre counter displaying in the video image
- Li-Ion battery with a battery charger and charge indicator

MSE-300

- High-resolution, bright 8-inch TFT display
- Integrated MPEG-4 Video Recorder (avi) with snapshot function (bmp)
- Text generator with metre counter displaying in the video image
- Li-Ion battery (extended runtime) with a battery charger and charge indicator

	MSE-100	MSE-300
High-resolution, bright TFT display	5.6 inch	8 inch
Integrated Video Recorder with snapshot function	✓	✓
Integrated digital meter counter with overlay for sensor values	✓	✓
Text generator	✗	✓
Li-Ion battery († extended runtime)	✓	✓ †
12 V jack for car operation	✓	✓
Dimensions (L x W x H)	270 x 120 x 245 mm	350 x 190 x 315 mm
Weight	ca. 2.4kg	ca. 4.5kg
Power supply	12-24 V DC 110-240 V AC	12-24 V DC 110-240 V AC

AUSTRALIAN PIPELINING SUPPLIES

SHP-6X

Our smallest system for the areas of sanitary, installation or house connection. Due to the small dimensions it optimally works in tight spaces such as kitchen or bathroom.

SHP-9X

Our professional system for industrial, civil engineering and municipal applications. It is ideal for leak testing, rehabilitation, pipe cleaning or the traditional pipe inspection. The sturdy construction makes it very robust and stable.

The two independently operating brakes make your daily work and prevent unwanted unwinding of the push cable. A detachable carrying bag for power supply, cables, etc. provides a neat optic and you always have everything close to hand.

	SHP-6X	SHP-9X
Push cable (length, diameter)	30m, 6mm	60/80m, 9mm
Prepared for pluggable camera heads	✓	✓
Integrated digital metre counter	✓	✓
Stable ball joint with quick-change system for the control unit	✓	✓
Step-less adjustable brake	✓	✓
Switch-able brake rewind (prevents accidental unwinding of the push cable)	✗	✓
Power supply via control unit	✓	✓
Material	Steel (powder coated)	Stainless Steel
Dimensions (L x W x H)	380 x 310 x 520 mm	660 x 440 x 730 mm
Weight	ca. 7.5kg	ca. 19kg

RIEZLER COMPACT INSPECTION SYSTEMS

MSE-100 WITH SHP-6X

For Plumbing, Installation, Property Management
- Usable from DN40 to DN150
- Suitable for bends as of DN50
- 30m high-flexible push cable (6mm)
- Stable ball joint with quick-change system for the control unit

MSE-100 with SHP-9X

For Rehabilitation, Pipe Cleaning, Civil Engineering
- Usable from DN70 to DN400
- Suitable for bends as of DN100
- 60m high-flexible push cable (9mm)
- Stable ball joint with quick-change system for the control unit

MSE-300 with SHP-9X

For Leak Testing, Industrial, Municipal Applications
- Usable from DN70 to DN400
- Suitable for bends as of DN100
- 60m high-flexible push cable (9mm)
- Stable ball joint with quick-change system for the control unit

AXIAL CAMERA HEADS RIK-3240 AND 3240 RO

The camera heads of the 3240 series are almost identically constructed and differentiate only by the ROLLMATIC function (permanent upright picture) of the RIK-3240 RO.

Usable 40 - 150mm, Suitable 87°/DN50, Waterproof 3.0 bar, Diameter/Length - 32mm/40mm

AXIAL CAMERA HEAD RIK-5570

Usable 70 - 400mm, Suitable 87°/DN100, Waterproof 5.0 bar, Diameter/Length - 55mm/70mm

	RIK-3240	RIK-3240/RO	RIK-5570
Application area	DN40 - DN150	DN40 - DN150	DN70 - DN400
Suitable for bends (87° bend)	as of DN50	as of DN50	as of DN100
Automatic horizontal compensation	✗	✓	✓
Waterproof	up to 3 bar	up to 3 bar	up to 5 bar
Material	Stainless steel	Stainless steel	Stainless steel
Pluggable installation	✓	✓	✓
High-res colour camera module	✓ 420 lines	✓ 420 lines	✓ 480 lines
High performance lighting	16 LEDs	16 LEDs	12 LEDs
Lens	90°	90°	97°
Focus	Fix focus (5cm - ∞)	Fix focus (5cm - ∞)	Fix focus (5cm - ∞)
Dimensions (diameter / length)	32mm / 40mm	32mm / 40mm	55mm / 70mm
Weight	ca. 150g	ca. 190g	ca. 550g

CAMERA EQUIPMENT

RIEZLER CAMERA ACCESSORIES

PAN AND TILT CAMERA HEAD RSK-60100

Optional Quick Turn Satellite module

Usable 70 - 400mm, Suitable 87° / DN100, Waterproof 2.0 bar, Diameter / Length - 60mm / 100mm, Swivel Range ±120°, Continuous Rotation 360°

The laser can be activated via the control unit or the remote control. More detailed information can be found in the operating instruction of your control unit. The lasers help to measure damages during the inspection more precisely.

PAN AND TILT CAMERA HEAD RSK-78110

Optional Quick Turn Satellite module

Usable 100 - 400mm, Suitable 87° / DN100, Waterproof 1.5 bar, Diameter / Length - 78mm / 110mm, Swivel Range ±110°, Continuous Rotation 360°

RIEZLER CAMERA ACCESSORIES

	RSK-60100	RSK-78110
Application area	DN70 - DN400	DN100 - DN400
Suitable for bends (87° bend)	as of DN100	as of DN100
Swivel range	± 115°	± 110°
Waterproof	up to 5 bar	up to 5 bar
Material	Alu-stainless steel	Alu-stainless steel
Pluggable installation	✓	✓
High-res colour camera module	✓ 420 lines	✓ 480 lines
High performance lighting	18 LEDs	18 LEDs
Lens	68°	97°
Focus	Electric (1cm - ∞)	Electric (1cm - ∞)
Dimensions (diameter / length)	60mm / 100mm	78mm / 110mm
Weight	ca. 680g	ca. 950g
Parallel Laser	✓	✕

LOCATING SENDER 33 kHz / 512 Hz

Suitable for: RIK-5570, RSK-60100, RSK-78110

1. Detach the camera head including the camera spring of the push cable.
2. Replace the locating sender with the regular camera spring.
3. Connect the locating sender back to the push cable.

RIEZLER CAMERA ACCESSORIES

GUIDE BRUSHES DN150

Guide brushes for the easy cross of socket joints in pipes from DN150. Protects and centres the camera head for perfect results. A clutch enables you to connect a further push cable to inspect longer pipes.

SKID DN150

Skid made of stainless steel-plastic combination. Developed for long pipes from DN150. 12 rubber wheels assure a perfect centring and protection of the camera. Suitable for pan and tilt cameras RSK 78110, RSK 60100 and axial camera RIK 5570.

SKID DN200

Skid made of stainless steel-plastic combination. Developed for long pipes from DN200. 16 rubber wheels assure a perfect centring and protection of the camera. Suitable for pan and tilt cameras RSK 78110, RSK60100 and axial camera RIK 5570.

SKID DN200-400

Step-less adjustable Skid made of stainless steel-aluminium combination. Developed for long pipes from DN200. 12 rubber wheels assure a perfect centring and protection of the camera. Suitable for pan and tilt camera RSK-78110, RSK-60100 and axial camera RIK-5570.

APS AUSTRALIAN PIPELINING SUPPLIES

SATELLITE MODULE

Satellite module to turn into side-pipes. Enables you to inspect a branched pipe system completely. Different guiding sticks make inspections of different pipe diameter possible.

	RIK-3240	RIK-3240/RO	RIK-5570
Application area	DN40 - DN150	DN40 - DN150	DN70 - DN400
Suitable for bends (87° bend)	as of DN50	as of DN50	as of DN100
Automatic horizontal compensation	✗	✓	✓
Waterproof	up to 3 bar	up to 3 bar	up to 5 bar
Material	Stainless steel	Stainless steel	Stainless steel
Pluggable installation	✓	✓	✓
High-res colour camera module	✓ 420 lines	✓ 420 lines	✓ 480 lines
High performance lighting	16 LEDs	16 LEDs	12 LEDs
Lens	90°	90°	97°
Focus	Fix focus (5cm - ∞)	Fix focus (5cm - ∞)	Fix focus (5cm - ∞)
Dimensions (diameter / length)	32mm / 40mm	32mm / 40mm	55mm / 70mm
Weight	ca. 150g	ca. 190g	ca. 550g

CAMERA EQUIPMENT

RIEZLER ACCESSORIES COMPATIBILITY

	RIK-3240	RIK-5570	RSK-60100	RSK-78110
Impact guard DN70	✓			
Guide brush DN150	✓			
Guiding sleeve DN100		✓		
Guide brushes DN150		✓		
Protection sleeve			✓	
Protection sleeve DN100			✓	
Skid DN150		✓	✓	✓
Skid DN200		✓	✓	✓
Skid DN200-400		✓	✓	✓
Skid adapter RIK-5570		✓		
Skid adapter RSK-60100			✓	

TRAINING & ONGOING SUPPORT

At APS our aim is to ensure that whatever relining equipment you purchase through us becomes a valuable tool to increase the revenue in your business.

We want more than just a sale.

We want to build a long term relationship with you and your team to ensure that your investment becomes a profitable one.

We therefore tailor our training courses to suit each individual client to ensure that we focus on the equipment they have purchased.

All training is done within our Sydney office, and is completely hands on, trying to keep every scenario as realistic to what you will have on the job site as possible.

We only train one company at a time, and if needed we will train over a couple of days to ensure everyone is up to speed before they leave our training facility.

We also offer refresher courses and training for new employees to ensure your team is confident in the field. Our phones are always ready to offer support to your team in the field.

No question is a stupid question.

We'd rather a phone call with a question, or several, than to try and help you get out of a sticky situation which may have been avoidable.

APS

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