

### ant s.r.o potrubárske a inštalatérske náradie

Máte záujem o čističky RIONED? Kontaktujte nás pre cenovú ponuku

0918 810 882, ant@ant.sk

#### **Sewer Cleaning Machines**

## Rioned.

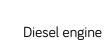
**KEEPING YOUR BUSINESS FLOWING** 

2022/2023









PTO

Pipe diameter

Petrol engine







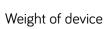
Electric engine



Water tank capacity









Vehicle weight category



Š



Spring diameter

Spring length



Remote control

Touchscreen



Keyless start



Real-time data

### LEARNING FROM YOUR FEEDBACK

It is our duty to let our customers work easily, responsibly and efficiently. By listening to them, wherever they are in the world, we are able to develop products that set the standard in the sewer cleaning industry.

In the 2022/2023 catalogue we will present the new standard in machine control, the eControl Touch. This system provides users all the information they need to get the best from their machines. The large 7" screen displays working pressure, water and fuel consumption and the number of meters cleaned, among other things. Operation is extremely easy and the touch screen is even suited for use with work gloves. You can still access the most essential data even when you are further away from the machine. The latest Riomote remote control is fitted with a display that shows real-time data. This enables operators to work in a cellar or on upper storeys and/or roofs in a fully controlled and safe manner! The new eControl Touch system is now available on our most popular machine, the CityJet CRT.

In a very short time, the UrbanJet has also become an unprecedented success. Due to its low weight, the machine is ideally suited for vans in the 3.5 ton class. In response to requests from a large number of customers, we are now introducing a premium version with a pivoting high-pressure hose reel for even greater ease of use.

Alongside innovations, we are increasingly focused on the impact of our business operations on our environment. We have implemented numerous measures in our production processes that improve our environmental impact. A special team is working on a project that aims to reduce waste, water, CO2 and energy consumption. In this context, we are particularly proud of the success of the fully electric CityJet sewer cleaning machine, which had its world premiere last year.

Your feedback is key to everything we do. Therefore we would love to hear from you and hope to see you in person again this year.

#### Jan Pieters, CEO Rioned





## TABLE OF CONTENT

About Rioned

5 - 9

#### **HIGH PRESSURE CLEANING**

PORTABLES MiniJet HD30	12 13
SKID MOUNTED	
AquaJet	14 - 15
UrbanJet	16 - 17
CityJet	18 - 19
eControl Touch	20 - 21
eCityJet	22 - 23
ProfiJet T4	24 - 25
TRAILERS FlexJet and FlexJet+ MultiJet	28 - 29 30 - 31
High-pressure Upgrades	32 - 33

#### JETTING/VACUUM CLEANING

Suction trailer	36 - 37
UniCom	38 - 39
UrbanCombi	40 - 41
RioCom	42 -43
FlexCom	44 -45

#### **MECHANICAL CLEANING**

SPRING MACHINES	
HandMatic	48
FlexMatic <sup>+</sup>	49
AllRound+	50
Master	51
SECTIONAL MACHINES Victor RioFlex RioFlex Mini	52 - 53 54 - 55 56 - 57
Accessories	58 - 59



#### JETTING NOZZLES

Jetting Nozzles Overview 62 - 71

#### **INSPECTION & DETECTION**

'4
'4
'4
5
5
5

### WE KEEP YOUR BUSINESS FLOWING

#### RIONED SPECIALISES IN CLEANING MACHINES FOR SMALL AND MEDIUM SIZED DRAINS AND SEWERS

Since its formation in 1956, Rioned has always been at the forefront of innovation. In this catalogue you will find a host of features and functions that enhance the user-friendliness and effectiveness of your high pressure jetting machine. Every machine that leaves our factory in Tilburg, the Netherlands is rigorously tested. Our modern facility measures and registers the pressure and flow of every machine, making sure all criteria and standards are met before shipment to the customer. Thousands of companies worldwide rely on their Rioned jetting machine, day in, day out.

#### OUR PRODUCT RANGE CONSISTS OF:

- Mechanical drain cleaning
- High-pressure cleaning
- Jetting/Vacuum cleaning
- Inspection and detection systems

By using only the very best components and state-of-the-art technologies we can guarantee lower costs during the service life of your machine. Our machines consume less water, less fuel, have a longer life and a high trade-in value. Numerous built-in smart functions enable you to work faster and with visibly better results. A host of standard fit smart features help you to work faster and more effectively.



### PRODUCT CONFIGURATIONS 2022/2023

More and more European cities are starting to ban diesel, with all non-road mobile machinery now needing to comply to stringent emission standards. The new European Stage V norm (Tier 4 in the US) regulates emissions produced by off-road mobile equipment with the goal to improve air quality. The new regulations are having a big impact on our industry.

Rioned is ready for the new era and provides a full range of products that comply with the latest standards; from the AquaJet with petrol engine, up to our unique eCityJet, the first van-pack jetting machine with a zero-emission label.

#### ZERO-EMISSIONS: ELECTRIC CITYJET

The eCityJet is the world's first fully electric, compact sewer cleaning machine for drains with a diameter of up to 350 mm. The new model includes all the features of the conventional CityJet van-pack but uniquely produces zero-emissions, therefore meets all current and future environmental standards and is ideal for contractors working in ultra-low emission zones.

#### PETROL, DIESEL OR PTO?

Rioned offer a wide range of options to best suit the type of work and personal preferences of our customers. Many customers prefer the advantages of an auxiliary engine, which is better suited to re-chassis, over PTO solutions that are easy to service, refill and operate.

Air-cooled Honda petrol engines are the driving force of our AquaJet and FlexJet machines. They are lightweight and Stage-V compliant. The FlexJet and AquaJet are best suited to handle emergency situations in smaller-sized drains.

The new generation of high-quality Kubota petrol engines are water-cooled (less noise, better cooling!), fuel-injected industrial engines with 3 (WG972) or 4 (WG1605) cylinders. Machines with these engines are ideally suited for work in domestic and commercial premises, but also to clear drains of fat, oil and tree roots.

Our diesel engines with less than 19 kW output are Stage-V compliant. The UrbanJet equipped with this engine is a cost-effective solution for cleaning house connections and taking care of residential work efficiently.

The more demanding V1505-CR T diesel (CityJet) and V2403-CR T diesel (ProfiJet Tier 4) also meet Stage V standards and are the ultimate solution for high-pressure sewer cleaning. With a flow rate of no less than 130 litres per minute, the ProfiJet is the most powerful (and complete) system in our range. The engine features a diesel particle filter and catalyst.

#### PTO

We have developed a PTO system for the Mercedes Benz Sprinter that takes power from the engine of the van. The Mercedes Benz Sprinter has a factory-fitted PTO option and is the preferred vehicle for this type of jetter.





VAN PACKS				
	Drive	Engine Capacity	Pump	
AquaJet	Honda petrol air-cooled	15 kW / 20 hp	150 bar / 45 lpm	2200 psi / 10 gpm
	Honda petrol air-cooled	18 kW / 24 hp	140 bar / 60 lpm	2000 psi / 13 gpm
	Honda petrol air-cooled	18 kW / 24 hp	150 bar / 55 lpm	2200 psi / 12 gpm
	Honda petrol air-cooled	18 kW / 24 hp	190 bar / 45 lpm	2800 psi / 10 gpm
UrbanJet	Kubota diesel	18,5 kW / 25 hp	200 bar / 45 lpm	3000 psi / 10 gpm
	Kubota diesel	18,5 kW / 25 hp	140 bar / 60 lpm	2000 psi / 13 gpm
	Kubota petrol water-cooled	23 kW / 30 hp	200 bar / 55 lpm	3000 psi / 12 gpm
	Kubota petrol water-cooled	23 kW / 30 hp	140 bar / 70 lpm	2000 psi / 15 gpm
CityJet	PTO* PTO* Kubota petrol water-cooled or Kubota diesel common rail	32 kW / 43 hp 32 kW / 43 hp 42.5 kW / 57 hp or 33 kW / 44 hp	200 bar / 60 lpm 160 bar / 75 lpm 320 bar / 46 lpm 250 bar / 60 lpm 160 bar / 85 lpm 270 bar / 54 lpm 200 bar / 72 lpm 150 bar / 100 lpm	3000 psi / 13 gpm 2400 psi / 17 gpm 4600 psi / 10 gpm 3600 psi / 13 gpm 2400 psi / 19 gpm 4000 psi / 12 gpm 3000 psi / 16 gpm 2200 psi / 22 gpm
eCityJet	Electric	25 kW / 33 hp	160 bar / 75 lpm	2300 psi / 17 gpm
	Electric	25 kW / 33 hp	200 bar / 60 lpm	3000 psi / 13 gpm
ProfiJet	PTO*	32 kW / 43 hp	200 bar / 72 lpm	3000 psi / 16 gpm
	PTO*	32 kW / 43 hp	150 bar / 100 lpm	2200 psi / 22 gpm
ProfiJet T4	Kubota diesel common rail Kubota diesel common rail	33 kW / 44 hp 33 kW / 44 hp 33 kW / 44 hp 33 kW / 44 hp 49 kW / 65 hp 49 kW / 65 hp	250 bar / 60 lpm 200 bar / 72 lpm 160 bar / 85 lpm 150 bar / 100 lpm 280 bar / 80 lpm 160 bar / 130 lpm	3600 psi / 13 gpm 3000 psi / 16 gpm 2400 psi / 19 gpm 2200 psi / 22 gpm 4100 psi / 18 gpm 2300 psi / 29 gpm



\* Approximate power and capacity (MB Sprinter only)

TRAILERS				
	Drive	Engine Capacity	Pump	
FlexJet	Honda petrol	15 kW / 20 hp	150 bar / 45 lpm	2200 psi / 10 gpm
FlexJet+	Honda petrol Honda petrol Honda petrol	15 kW / 20 hp 18 kW / 24 hp 18 kW / 24 hp	150 bar / 45 lpm 150 bar / 55 lpm 140 bar / 60 lpm	2200 psi / 10 gpm 2200 psi / 12 gpm 2000 psi / 13 gpm
MultiJet	Kubota petrol water-cooled or Kubota diesel common rail	42.5 kW / 57 hp or 33 kW / 44 hp	160 bar / 85 lpm 200 bar / 72 lpm 150 bar / 100 lpm 250 bar / 60 lpm	2400 psi / 19 gpm 3000 psi / 16 gpm 2200 psi / 22 gpm 3600 psi / 13 gpm



STANDARD OUTFIT									
	AquaJet	UrbanJet	CityJet	eCityJet	ProfiJet	ProfiJet T4	FlexJet	FlexJet+	MultiJet
eControl(+), eControl Touch	Optional	Standard (+)	Standard (+), eControl Touch standard on V1505-CR T	Standard (+)	Standard (+)	Standard (+)	Optional	Optional	Standard (+)
RioMote	Optional 5-channel	Optional 5 or 7-channel	Optional 7-channel	Optional 7-channel	Optional 7-channel	Optional 7-channel	Optional 5-channel	Optional 5-channel	Optional 7-channel
Drive reel	Optional hydraulic or electric	Hydraulic	Hydraulic	Electric	Hydraulic	Hydraulic	Optional electric	Optional electric	Hydraulic
Mechanical free wheel	Optional	Optional	Standard	Standard	Standard	Standard	-	Optional	Optional
Run dry protection	Optional	Standard	Standard	Standard	Standard	Standard	Optional	Standard	Standard
Hosemeter counter	-	-	Optional, standard on V1505-CR T	Optional	Optional	Standard	-	-	Optional
Accessories	Nozzles, spraygun	Nozzles	Nozzles, spraygun	Nozzles, spraygun	Nozzles, spraygun	Nozzles	Nozzles, spraygun	Nozzles, spraygun	Nozzles, spraygun

### SERVICE, RENTAL AND FINANCE

#### **RIOHIRE: EQUIPMENT RENTALS**

Rioned's operation-ready rental equipment and vehicles (UK only) are a popular option for many contractors, particularly when used to fulfil interim contracts or add additional resource to their fleet. Standalone jetters, van-pack vehicles and jet/vac combination units can be supplied with a simple hire agreement on long and short-term rental contracts with customisations to suit client requirements.

The standard van-pack hire vehicle is a long-wheelbase Transit 350 with exterior chevron signage for highways compliance. The interior conversion includes the installation of a dividing bulkhead, waterproof spray lining, LED lighting, washbasins, shelving and a night heater to provide frost-protection for the jetter and to heat a storage cupboard for drying wet overalls. (Only applicable in the UK)





Hiring also means that companies can try our best-in-class equipment before they buy, taking advantage of full maintenance coverage, which ensures no unforeseen costs over the length of the contract.

The customer-first approach offers a ready-made solution with unique features, while still providing good value for money over short or long-term agreements.

#### EQUIPMENT SERVICING AND REPAIR

Annual maintenance is essential in preventing equipment malfunctions and the key to improving the efficiency and operational life of your machine. We offer a range of annual and periodic servicing packages to help customers spread the cost of maintenance. Our global network of service agents and fully-equipped service vehicles provide mobile servicing and reactive maintenance. Rioned service vehicles carry a full complement of spare parts and accessories, with the service teams equipped to carry out most standard repairs in a single call-out.

Rioned is committed to providing the highest quality of after-sales service, providing assurance for all our customers that they are looked after in the right way. That includes the quick distribution of parts and accessories via our global network.

#### All servicing and repair work is undertaken by Rioned trained and approved technicians.

#### EQUIPMENT AND VEHICLE FINANCE AND LEASING

We work closely with leading providers to offer finance and leasing packages that are tailored to suit different requirements and financial circumstances. Access to low-rate solutions helps customers manage ongoing costs and maintain cash-flow in their businesses.



Many of our customers choose combined jetter and vehicle finance, which is generally viewed as a hard-asset purchase and therefore attracts lower monthly rates. Alongside the supply of the drain cleaning equipment and the vehicle, we often also bundle ancillary equipment, vehicle conversions and the ongoing service and repair costs into finance packages.

Customers can also opt for balloon payment terms, which again reduce monthly outgoings, and provide the opportunity to trade in old equipment against new at the end of the contract.

By choosing a single-source solution, many contractors have discovered a hassle-free and cost-effective way to satisfy their complete jetting requirements.



Johan, supervisor of an extensive team of experienced mechanics at Rioned.

## MACHINES TO RELY ON

TRAIL

Johan started working in the assembly department in 1990, becoming a supervisor in 1997. The assembly department has grown considerably over the years. When Johan arrived, there were just five mechanics working there. Today, Johan leads a large team of mechanics. He and his team build machines that our customers can rely on, day in, day out.

"High-quality, reliable machines have ensured Rioned's position as the number one manufacturer in the sector for many years. We set the bar high at Rioned, and that goes for the assembly department too. Our production process is efficient and focused on quality and reliability. Once a machine is completely assembled, we carry out extensive testing in a special test room. During these test runs, a checklist is used to check each part of the operating process. We check every function, connection and fitting. If everything is in order, the machine is thoroughly cleaned. Only then do we pass the machine on to the shipping department, who take care of dispatching it to the customer."

## High-pressure Cleaning

n

#### HIGH-PRESSURE MACHINES

Our portfolio consists of a wide range of machines to clean and unblock sewers and drains quickly and effectively. By using the best components and modern technology, we can guarantee lower operational cost and the unrivalled longevity of our machines. Our jetters use less water, less fuel and are designed to work at the maximum. Standard fit smart features help you to work faster and more effectively.

#### **PORTABLE JETTERS**

Portable machines for professional cleaning of small diameter pipework Powered by either a petrol engine or silent electric motor.

cked Uranns -

GI5,

#### TRAILER JETTERS

Versatile trailer units are available as un-braked with a max capacity of 750 kgs or braked systems with the power to complete the toughest of jobs.

#### VAN PACKS

A range of skid-mounted machines for the professional user. From the compact AquaJet, suitable for small vehicles, up to our top of the range ProfiJet for the most demanding of applications.

#### MiniJet



25 - 100 mm

Engine and pump 30 kgs Hose reel 26 kgs

#### HD30 130 bar / 30 lpm



#### HD30 100 bar / 40 lpm







### **HIGH-PRESSURE CLEANING** MINIJET AND HD30

#### **PROFESSIONAL CLEANING OF DRAINS UP TO 200 MM**

#### MINIJET

The MiniJet is a high-pressure jetting machine for residential and light commercial use. Equipped with a silent and powerful electric motor and professional pump, it is ideal for cleaning drains from 25 - 100 mm.

The MiniJet is easy to transport on stairs or in the elevator. The motor/pump unit can be easily removed and used independently (with a NW 5 hose) from the hose reel, meaning you can leave the hose reel section behind if the workspace is limited.



TECHNICAL SPECIFICATIONS						
	MiniJet 110 bar / 10 lpm		HD30 130 bar / 30 lpm		HD30 100 bar / 40 lpm	
Operating range	25-100 mm		40-200 mm		40-200 mm	
Engine	Electric (1.8 kW / 23	30V - 50Hz)	Honda petrol (8 kW	′ / 11 hp)	Honda petrol (8 kW	′ / 11 hp)
Pump Rioned/Speck	110 bar / 10 lpm	1600 psi / 2,2 gpm	130 bar / 30 lpm	1900 psi / 6,5 gpm	100 bar / 40 lpm	1450 psi / 8,8 gpm
HP hose	20 metres NW 8 1/4"coupling 10 metres NW 5 hose 1/8"coupling		40 metres NW 8		40 metres NW 10	
Weight	Engine and pump 30 kgs Hose reel 26 kgs		90 kgs		100 kgs	
Nozzles	2 nozzles 1/4" (1 open, 1 blind) 1 nozzle 1/8" (open)		2 nozzles 1/4" (1 open, 1 blind)		2 nozzles 1/2" (1 open, 1 blind)	
Accessories	High-pressure gun with 600 mm lance suction hose with filter		High-pressure gun with 600 mm lance suction hose with filter		High-pressure gun with 600 mm lance suction hose with filter	

#### HD30

The HD30 mobile high pressure jetting machine is fitted with a petrol engine that guarantees optimal cleaning of small drains and sewers up to 200 mm. This machine is particularly suitable for jetting and cleaning of house connections, roof water drains, sewers blocked with grease and industrial sewers. It is also very effective at cleaning street furniture and terraces.

The HD30 can be connected directly to a water supply therefore eliminating the need for a separate water tank. The HD30 is supplied with two nozzles and a high pressure gun with lance.









### HIGH-PRESSURE CLEANING

## AQUAJET

#### SMALL SIZE & BIG PERFORMANCE, SUITABLE FOR ALL COMMERCIAL VEHICLES

The AquaJet is suitable for unblocking and cleaning of drains and sewers up to 300 mm. Thanks to its very compact design and low weight, it fits almost any lightweight van and pick-up such as Toyota Hiace, Mercedes Benz Vito, Volkswagen Transporter, Caddy or Peugeot Partner.

The AquaJet leaves maximum internal loading space for storage of tools and equipment without exceeding the maximum payload of the van. The machine is also easily installed.

#### VALUE FOR MONEY

The choice of various engines, pumps and water tanks enables Rioned to build the machine to your specification.

The Rioned AquaJet is designed with maintenance in mind, with a removable cover allowing easy access to the engine and pump for servicing.

#### **GREAT ERGONOMICS**

The steel hose reels and control panel are mounted at the optimum working height, giving you ultimate operation comfort.

The AquaJet is available in various configurations and can be enhanced with many options such as RioMote radio remote control, RioPulse pulsator system (jump-jet) and hydraulic hose reel drive.





- Very compact construction
- Low weight
- Choice of different engines, pumps and water tank configurations
- Maintenance friendly
- Fits into almost any vehicle



RioMote remote control optionally available



#### TECHNICAL SPECIFICATIONS

Operating range	Max 300 mm		
Engine	Honda petrol air-cooled (15 kW / 20 hp) or Honda petrol air-cooled (18 kW / 24 hp)		
Fuel tank	15 litres		
Pump Rioned/Speck	Honda petrol air cooled (15 kW / 20 hp)		
	150 bar / 45 lpm	2200 psi / 10 gpm	
	Honda petrol air co (18 kW / 24 hp)	oled	
	140 bar / 60 lpm 150 bar / 55 lpm 190 bar / 45 lpm	2000 psi / 13 gpm 2200 psi / 12 gpm 2800 psi / 10 gpm	
Pump protection	Optional		
Pressure regulation	Type Speck with automatic bypass		
Water tank	400 litres		
Filling reel	35 metres NW 19		
Fixed hydrant connection	Optional		
HP hose	60 metres NW 13		
HP reel	Fixed, manually ope	rated	
Control	On the engine itself, Rioned eControl optional		
Weight	From 280 kgs		
Dimensions (lxwxh)	1,100 x 950 x 1,095 mm		
Nozzles	2 x 1/2" (1 open, 1 blind)		
Accessories	Spray gun with land	e	
Color	Blue cover, black metal frame		

#### OPTIONS

OPTIONS	
Remote control	RioMote 5-channel remote control system
RioPulse Pulsator	Pump adjustment to send the water through the hose in pulses
Pump protection	Run-dry protection with overrun possibility
Anti-freeze tank	30 litre anti-freeze tank with circulation system to protect the high-pressure pump
Extra water tanks	2 x 400 litres or 2 x 300 litres water tanks instead of 1 x 400 litres
Extra HP hose length	80 metres NW 13
Fixed suction venturi	Suction device for filling the tanks with tanks with surface water
Fixed hydrant connection	Fixed hydrant connection for rapidly filling the tank
HP reel	Electrically or hydraulically driven
Second HP reel	Second HP reel instead of filling reel
RioFree mechanical freewheel HP reel	RioFree mechanical freewheel for uncoiling without resistance (only in combination with hydraulic HP reel)



Max 350 mm

As from 440 kgs

600 litres



STAGE V

Optional

# HIGH-PRESSURE CLEANING

#### TAKING DRAIN CLEARANCE TO THE NEXT LEVEL

#### LIGHTWEIGHT

The new lightweight UrbanJet is designed to fit most compact 3.5t vans such as the VW Transporter, Ford Transit, Vauxhall Movano, MB Vito or similar sized vans. The new UrbanJet is ideally suited for unblocking of house connections and work in domestic and light commercial areas. The UrbanJet is also available with an industrial, water-cooled diesel or petrol engine to service pipes up to 350 mm.

#### EVERYTHING YOU NEED

The UrbanJet is supplied as a complete package, including a hydraulically driven high-pressure hose reel with 60 metres MaxFlow lightweight jetting hose and filling reel with 35 metres of NW 19 hose. The optionally included 5 or 7-channel radio remote control allows single-person operation and allows the user to control the pump (on/off), engine revs and emergency stop.

The run-dry function for low water pump protection has an override facility allowing the operator to use the hydraulic system to retrieve the hose from the drain. The UrbanJet is available with various water tanks and can be optionally equipped with a pivoting reel for maximum flexibility.

#### eCONTROL<sup>+</sup> INTERFACE

Despite its affordable price, the new UrbanJet is fitted with our award winning eControl<sup>+</sup> user interface with LCD display. It includes many useful features and provides a full machine status at a glance. The eControl+ system also provides the user with machine error information for quick fault diagnostics.





- Lightweight to fit most popular and compact 3.5t + vehicles
- eControl<sup>+</sup> control panel with machine status indicators
- Hydraulically driven high-pressure hose reel as standard
- Optionally equipped with radio remote control for single-person operation





Optionally available with pivoting reel.



TECHNICAL SPECIFICATIONS				
Operating range	Max 350 mm	Max 350 mm		
Engine	Kubota diesel D1105 (18.5 kW / 25 hp) or Kubota petrol water-cooled WG972 (23 kW / 30 hp)			
Fuel tank	30 litres			
Pump	Kubota diesel D110	5		
Rioned/Speck	200 bar / 45 lpm 140 bar / 60 lpm	3000 psi / 10 gpm 2000 psi / 13 gpm		
	Kubota petrol water	-cooled WG972		
	200 bar / 55 lpm 140 bar / 70 lpm	3000 psi / 12 gpm 2000 psi / 15 gpm		
Pump protection	Run-dry protection with overrun possibility			
Pressure regulation	Type Speck with au	tomatic bypass		
Water tank	600 litres (2 x 300	litres)		
Filling reel	35 metres NW 19			
Fixed hydrant connection	Optional			
HP hose	60 metres NW 13			
HP reel	Fixed, hydraulically driven			
Control	Rioned eControl <sup>+</sup>			
Weight	From 440 kgs			
Dimensions (lxwxh)	1.305 x 1.240 x 1.195 mm			
Nozzles	2 x 1/2" (1 open, 1 b	2 x 1/2" (1 open, 1 blind)		

npt	IC .

Color

OPTIONS	
Remote control	RioMote 5 or 7-channel remote control system
RioPulse Pulsator	Pump adjustment to send the water through the hose in pulses
Anti-freeze tank	30 litre anti-freeze tank with circulation system to protect the high-pressure pump
Extra water tanks	$2 \times 400$ litres or $4 \times 300$ litres water tanks instead of $2 \times 300$ litres
Extra HP hose length	80 metres NW 13
Fixed suction venturi	Suction device for filling the tanks with tanks with surface water
Fixed hydrant connection	Fixed hydrant connection for rapidly filling the tank
HP reel	180° swivelling, hydraulically driven
Second HP reel	Second HP reel instead of filling reel
RioFree mechanical freewheel HP reel	RioFree mechanical freewheel for uncoiling without resistance (only in combination with hydraulic reel)
Electric water level control	Automatic sysytem to open and close the filling line of your machine if the water has reached its minimum or maximum level in the tank
Accessories	Spray gun with lance

Blue cover, black metal frame

Accessories

Spray gun with lance







RioFree mechanical freewheel at the hose reel for coiling off without any resistance



Wide 180° pivoting hose reel for max. 140 metres of 1/2"hose

## HIGH-PRESSURE CLEANING

#### EXCEEDING ALL YOUR EXPECTATIONS IN DESIGN, PERFORMANCE, USER FRIENDLINESS AND RELIABILITY

NEW V1505-CRT

DIESEL

ENGINE

The Rioned CityJet sets the standard in design, performance and reliability. It is the most compact machine in its class and thousands of users worldwide rely on their CityJet day in, day out. The all-new CityJet hosts a range of innovative new features to enhance the machine functionality while offering superior ergonomics.

The compact design and low weight maximizes the carrying capacity of the vehicle.

#### MORE EFFECTIVE

The high-pressure hose reel now pivots through 180 degrees for optimum working conditions in all circumstances. The new hose reel has been widened to accommodate up to 140 metres of 1/2" high-pressure hose or 120 metres of 5/8"hose. And electric locking mechanism on the hose reel is a major improvement in user-friendliness and safety.

The RioFree freewheel system ensures that the hose reel can be coiled off without any friction of the hydraulics, this feature significantly reduces the effort required to operate the hose reel. The new high-pressure jetting hose fitted to the CityJet is not only the lightest hose in its class, it also ensures minimum pressure loss thanks to the smooth inner surface and widened inner core. This also results in an increase of 12% effective working pressure at the nozzle.

#### USER FRIENDLY

The CityJet fits most popular vehicles such as the Mercedes-Benz Vito, Volkswagen Crafter and Ford Transit. The modern, newly-designed covers protect the user from rotating parts and reduce the noise levels of the machine to a minimum. The covers are easily removed for quick access to the engine and pump when servicing is required. With an easy-fill fuel tank and special forklift lifting provision the new CityJet is extremely user friendly.

#### DRIVES

The CityJet can be supplied with a diesel engine, petrol engine or even a fully electric engine. The CityJet with V1505-CR T Diesel is equipped as standard with the new eControl Touch control system. A PTO version is also available. The CityJet PTO (Power Take-off) is powered by the engine of the vehicle in which it is mounted. A sophisticated hydraulic system takes power from the vehicle axle to allow the high-pressure pump to do its work. A separate combustion or other engine is therefore no longer necessary. Installed in a new van, this drive meets all legal environmental requirements.

All systems host a range of innovative features to maximize performance and user-friendliness. The CityJet Petrol has a patent pending system to cool the exhaust of the machine.



- 180° pivoting hose reel
- eControl+ or eControl Touch control panel
- High-performance
- Lightweight
- Large capacity hose reel for up to 140 metres HP hose
- Electric hose reel locking mechanism



#### TECHNICAL SPECIFICATIONS

Operating range	Max 450 mm	
Engine	PTO, Kubota petrol WG1605 (42,5 kW / 57 hp) or Kubota diesel common rail turbo V1505-CR T (33 kW / 44 hp)	
Fuel tank	30 litres	
Pump	РТО	
Rioned/Speck	200 bar / 60 lpm 160 bar / 75 lpm	3000 psi / 13 gpm 2400 psi / 17 gpm
	Kubota petrol WG16 diesel common rail	
	320 bar / 46 lpm 250 bar / 60 lpm 160 bar / 85 lpm 270 bar / 54 lpm 200 bar / 72 lpm 150 bar / 100 lpm	4600 psi / 10 gpm 3600 psi / 13 gpm 2400 psi / 19 gpm 4000 psi / 12 gpm 3000 psi / 16 gpm 2200 psi / 22 gpm
Pump protection	Run-dry protection with overrun possibility	
Pressure regulation	Type Speck with automatic bypass	
Water tank	600 litres (2 x 300 litres)	
Filling reel	50 metres NW 19	
Fixed hydrant connection	Fixed hydrant connection for rapidly filling the tank	
HP hose	80 metres NW 13 or 80 metres NW 16	
HP reel	180° swivelling, hydraulically driven and with RioFree freewheel	
Control	Rioned eControl <sup>+</sup> , Rioned eControl Touch standard on V1505-CR T engine	
Weight	From 530 kgs	
Dimensions (lxwxh)	1,335 x 1,240 x 1,195	ō mm
Nozzles	2 x 1/2" (1 open, 1 bl	ind)
Accessories	Spray gun with lance	

#### OPTIONS

Remote control	RioMote 7-channel remote control system or RioMote Premium 7 channel remote control system with display (only i.c.w. eControl Touch)
RioPulse Pulsator	Pump adjustment to send the water through the hose in pulses
Anti-freeze tank	30 litre anti-freeze tank with circulation system to protect the high-pressure pump
Extra water tanks	2 x 400 litres or 4 x 300 litres water tanks instead of 2 x 300 litres
Extra HP hose length	100 or 120 metres NW 13 or 100 metres NW 16
Fixed suction venturi	Suction device for filling the tanks with tanks with surface water
Second HP reel	Second HP reel instead of filling reel
Radiographic control HP reel	Coiling on and off via the radio remote control



# econtroltouch

#### NEXT-LEVEL SEWER MACHINE MANAGEMENT FOR UNRIVALLED CONTROL AND DIAGNOSTICS

The eControl Touch is the next generation of machine control systems for use across our range of high-pressure drain and sewer cleaning machines. Following on from the success of the first eControl unit, which garnered a prestigious Red Dot award for innovation in 2015, the latest iteration comes with a range of new smart features and offers unrivalled sewer machine control and diagnostics.

#### eCONTROL TOUCH

The new eControl Touch heralds the arrival of a platform designed for the future, offering operators more control to improve efficiencies and reduce running and maintenance costs. With operation, functionality, and sustainability at the forefront of the brief, the eControl Touch offers an unrivalled level of machine diagnostic and operational intelligence. The design takes into account future developments, such as wide-ranging connectivity, and delivers on the aim to help operators reduce carbon emissions and running costs by saving on fuel and water usage.

#### NEW LOOK

The new-look unit has been designed to provide complete fingertip control, with an ergonomic shape developed for ease of use. The new configuration includes a larger 7" LCD touch screen, displaying complete system information at a glance. A robust jog wheel has also been added to enable operators quick access to the complete range of system information even when wearing gloves.

#### BUILT-IN SENSORS FOR REAL-TIME MEASUREMENTS

Key to the development is the inclusion of more real-time sensors, with operators now able to monitor pressure and flow, RPMs and fuel and water level at a glance. Sensors also continuously monitor machine components, with the eControl Touch displaying warning alerts and solutions when detecting impending machine malfunctions. This accurate monitoring of the condition of critical components enables users to reduce machine downtime and maintenance costs.



Standard on CityJet with V1505-CR T diesel engine



Scan QR-code for product video

#### NEW STANDARD ON CITYJET V1505-CR T



- Ergonomic design with 7" touchscreen and jog wheel
- Complete system information at a glance
- More built-in sensors for real-time diagnostic data
- Continuous engine, pump and component monitoring
- RioMeter included as standard

#### NEW FEATURES

The new eControl Touch can be started with an RFID (Radio Frequency Identification) tag to increase operator safety when working remotely from the jetter. A unique code can also be used if the RFID tag is lost. Rioned's popular RioMeter has also been installed as standard, providing highly accurate measurements of the amount of hose that has travelled along a pipe.

#### NEW HANDSET

The new RioMote handset includes an LCD screen that displays essential system information relayed directly from the eControl Touch. Operators working at a distance from the machine can view pressure, flow, run time, system warnings and other component information at a glance, improving operator safety and minimising machine downtime.





The new RioMote handset includes an LCD screen displaying information from the eControl Touch





As from 690 kgs

600 litres





# HIGH-PRESSURE CLEANING

#### THE FUTURE OF SEWER CLEANING BEGINS TODAY

Take a look at the world's first fully electric high-pressure sewer cleaning machine for pipes with a diameter of up to 350 mm. The eCityJet has all the features of the conventional CityJet and meets all current and future environmental standards.

#### ZERO EMISSIONS

The fully electric CityJet uses state-of-the-art technology and features a strong electric motor powered by an extremely efficient battery pack. This means the machine produces zero emissions, which makes the eCityJet ideally suited for use in city centres where strict emission requirements apply and in areas that are completely or partially enclosed. The eCityJet has all the features of a conventional diesel-driven machine and is only marginally heavier. The empty machine weighs approximately 690 kgs. The machine is comparable in size to the diesel-powered CityJet, making it suitable for most vans (such as a Mercedes Vito or Sprinter or a Ford Transit).

#### PERFORMANCE

The performance of the eCityJet is in no way inferior to that of diesel-driven machines. The machine is ideally suited for unblocking pipes up to 350 mm. With fully charged batteries, and on an average working day you can operate the eCityJet for a full day without charging between jobs. However, most customers work for several days without recharging in between.

#### BATTERY PACK

The eCityJet is equipped with six 5 kWh batteries. The batteries are charged using regular mains power from an ordinary wall socket. The charging time for six batteries is approximately eight hours. You can even top up the charge during the day for longer flushing.

#### COMPLETE

The eCityJet is supplied with the eControl<sup>+</sup> operating panel. Winding in and out is done electrically. No hydraulic fluid is used, which reduces environmental impact. The machine is supplied as standard with two 300-litre water tanks, a 135° pivoting reel with mechanical freewheel, 80-metre MaxFlow HP hoses and a filling reel with 50 metres of NW 19 hose.



Dutch company Van der Velden has tested the eCityJet:

"We have extensively tested the electric CityJet in the centre of Amsterdam and were able to work with the machine for two days without having to recharge the batteries in between."



- Zero emissions
- Ideal for work in ultra-low emission zones and indoor use
- Powered by an extremely efficient battery pack

#### **CLEAN & GREEN SOLUTION**

With the eCityJet you are ready for the future. In the coming years, there will be more and more emphasis on limiting NOx, particulate and CO2 emissions. The eCityJet already gives you a considerable advantage when it comes to customers who prefer to work in an environmentally-friendly way. An additional advantage is that the machine is also considerably quieter than one with a diesel engine, which is an important factor when working at night, for example. The machines are easy to maintain, which in the long run will certainly result in considerable savings. Making the switch now will allow you to stand out in the market.

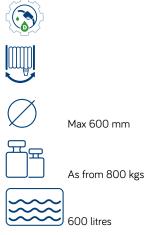


#### TECHNICAL SPECIFICATIONS

Operating range	Max 350 mm	
Engine	Electric engine	
Battery pack	30 kWh battery package	
Pump Rioned/Speck	160 bar / 75 lpm 200 bar / 60 lpm	2300 psi / 17 gpm 3000 psi / 13 gpm
Pump protection	Run-dry protection with overrun possibility	
Pressure regulation	Type Speck with automatic bypass	
Water tank	600 litres (2 x 300 litres)	
Filling reel	50 metres NW 19	
Fixed hydrant connection	Fixed hydrant connection for rapidly filling the the tank	
HP hose	80 metres NW 13 or 80 metres NW 16	
HP reel	180° swivelling, electrically driven and with RioFree freewheel	
Control	Rioned eControl <sup>+</sup>	
Weight	From 690 kgs	
Dimensions (lxwxh)	1,615 x 1,240 x 1,195 mm	
Nozzles	2 x 1/2" (1 open, 1 blind)	
Accessories	Spray gun with lanc	e
Color Blue cover, black metal frame		etal frame

#### OPTIONS

OPTIONS	
Remote control	RioMote 7-channel remote control system
RioPulse Pulsator	Pump adjustment to send the water through the hose in pulses
Anti-freeze tank	30 litre anti-freeze tank with circulation system to protect the high-pressure pump
Extra HP hose length	100 or 120 metres NW 13 or 100 metres NW 16
Second HP reel	Second HP reel instead of filling reel
Radiographic control HP reel	Coiling on and off via the radio remote control
RioMeter hose counter	RioMeter hose counter for displaying metres of hose in the pipe
Electric water level control	Automatic sysytem to open and close the filling line of your machine if the water has reached its minimum or maximum level in the tank







Tier 4/Stage V ready engine with built-in diesel particulate filter and catalyst



Pivoting and rotating hose reel

### **HIGH-PRESSURE CLEANING PROFIJET T4**

#### THE MOST POWERFUL AND GREEN MACHINES

#### TOP OF THE RANGE

The ProfiJet T4 is our top of the range diesel-operated model. It is designed to work long and hard. It offers unrivalled user-friendliness and hosts a wealth of innovative features to make your work easier and more effective. The award winning eControl+ user interface is fitted as standard, it provides you with useful features and gives you a full status update of your system at a glance. The optionally available electric water level control system opens and closes the inlet valve of the tank automatically at the minimum or maximum water level

The RioMeter hose meter counter is fitted as standard and indicates the length of jetting hose deployed.

#### FUTURE-PROOF ENGINE

Tier 4 (US) and Stage V (Europe) is legislation that requires industrial diesel engines to reduce the effects on the environment in relation to exhaust emissions. These regulations require the reduction of particulate matter (PM) and nitrogen oxides (NOx). All new non-road diesel engines have to comply with these new regulations. The new ProfiJet T4 Stage V is powered by a fuel-efficient Kubota V2403-CR turbo engine with built in catalyst and diesel particulate filter.

#### POWERFUL YET COMPACT PACKAGE

The ProfiJet T4 V2403-CR T with 65 horse power allows you to take on even the toughest jobs with 280 bar / 80 lpm. The high-flow model delivers 130 lpm with 160 bar pressure. The lightweight frame is made out of extra strong aluminium and it is designed to fit most commercial vehicles such as Mercedes Sprinter, Volkswagen Crafter or Iveco Daily. Two separate water tanks are interconnected to optimize road stability and driving comfort.

#### **OPTIMAL WORKING COMFORT**

The hydraulically-driven reel swings out 90° and rotates 180° for optimal working comfort. With a hose capacity of 140 metres, the ProfiJet is the unblocking and cleaning machine for the most demanding jobs.



- Fuelefficient Tier 4/Stage V Kubota engine complying to current and future emission regulations
- Unique pivoting and swivelling high-pressure hose reel
- eControl<sup>+</sup> user interface with integrated hose meter counter



TECHNICAL SPECIFICATIONS		
Operating range	Max 600 mm	
Engine	Kubota diesel common rail turbo V1505-CR T (33 kW / 44 hp) or Kubota diesel common rail turbo V2403-CR T (49 kW / 65 hp)	
Fuel tank	30 litres	
Pump Rioned/Speck	Kubota diesel common rail turbo V2403-CR T	
	280 bar / 80 lpm 160 bar / 130 lpm	4100 psi / 18 gpm 2300 psi / 29 gpm
	Kubota diesel comr V1505-CR T	non rail turbo
	250 bar / 60 lpm 200 bar / 72 lpm 160 bar / 85 lpm 150 bar / 100 lpm	3600 psi / 13 gpm 3000 psi / 16 gpm 2400 psi / 19 gpm 2200 psi / 22 gpm
Pump protection	Run-dry protection with overrun possibility	
Pressure regulation	Type Speck with automatic bypass	
Water tank	800 litres (2 x 400 litres)	
Filling reel	35 metres NW 19	
Fixed hydrant connection	Fixed hydrant connection for rapidly filling the tank	
HP hose	80 metres NW 13, 80 metres NW 16 or 80 metres NW 19	
HP reel	180° swivelling, 90° rotating, hydraulically driven and with RioFree freewheel	
Control	Rioned eControl <sup>+</sup>	
Weight	From 800 kgs	
Dimensions (lxwxh)	1,736 x 1,383 x 1,186	5 mm
Nozzles	2 x 1/2" (1 open, 1 blind)	
Accessories	Spray gun with lance	
Color	Blue cover, black m	etal frame

#### OPTIONS

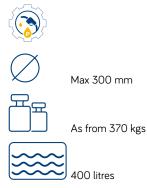
OPTIONS	
Remote control	RioMote 7-channel remote control system
RioPulse Pulsator	Pump adjustment to send the water through the hose in pulses
Anti-freeze tank	30 litre anti-freeze tank with circulation system to protect the high-pressure pump
Extra water tanks	$4 \times 400$ litres water tanks instead of $2 \times 400$ litres
Extra HP hose length	100, 120 or 140 metres NW 13, 100 or 120 metres NW 16
Fixed suction venturi	Suction device for filling the tanks with tanks with surface water
Second HP reel	Second HP reel instead of filling reel
Radiographic control HP reel	Coiling on and off via the radio remote control
RioSpindel	RioSpindel automatic hose guidance on the first HP hose reel
Electric water level control	Automatic sysytem to open and close the filling line of your machine if the water has reached its minimum or maximum level in the tank







#### FlexJet Basic



#### FlexJet Standard



Max 300 mm

As from 390 kgs

#### FlexJet+



Max 350 mm

As from 430 kgs

550 litres



Ergonomic working height

### 

### FLEXJET AND FLEXJET+

#### FLEXIBILITY AT ITS BEST

The FlexJet and FlexJet+ are super compact trailers with a powerful pump suitable for professional unblocking and cleaning of drains and sewers up to 300 mm (FlexJet) or 350 (FlexJet+) mm. The trailer is suitable for professional cleaning companies, councils, building contractors and water authorities.

#### INTELLIGENT DESIGN

Due to the streamlined and modern design, the FlexJet has a low air resistance. Thanks to the use of high strength steel and synthetic material the total weight remains low, making it possible to carry more water.

The lightweight FlexJet can be transported by practically all types of vehicle and on a standard driving license. The FlexJet has excellent road handling and maneuvering abilities, thanks to its compact size. The Flexjet+ is a braked trailer. The hose reels are mounted at the perfect working height for ultimate operational comfort. The operator has full control of the FlexJet at the rear. The FlexJet has an integrated 400 litres water tank with a large tool box and lockable cover. The FlexJet+ holds 550 litres of water.

#### STABLE BUT FLEXIBLE

The innovative construction of the water tank gives a stable road handling both when empty and full by preventing sway during driving. The trailer is very user friendly and is available in various pressure and flow capacities. As the name already indicates, this machine can be used flexibly and is well suited to drainage and surface cleaning.

The motor-pump compartment of the FlexJet+ is enclosed and supplied with flameretardant insulation material along with a special cooling system. The FlexJet+ is heavily noise damped. The cover can remain closed during operation and during transport, meaning the machine remains free from road dirt and salt.



TECHNICAL SPECIFICATIONS				
	FlexJet		FlexJet <sup>+</sup>	
Operating range	Max 300 mm		Max 350 mm	
Version	Unbraked, with or w	vithout cover	Braked, with cover	
Engine	Honda (15 kW / 20 HP)		Honda (15 kW / 20 Honda (18 kW / 24	
Fuel tank	15 litres		15 litres	
Pomp	150 bar / 45 lpm	150 bar / 45 lpm 2200 psi / 10 gpm		W / 20 hp)
Rioned/Speck			150 bar / 45 lpm	2200 psi / 10 gpm
			Honda petrol (18 kV	W / 24 hp)
			150 bar / 55 lpm 140 bar / 60 lpm	2200 psi / 12 gpm 2000 psi / 13 gpm
Pump protection	Optional		Optional	
Pressure regulation	Type Speck with automatic bypass		Type Speck with au	tomatic bypass
Water tank	400 litres		550 litres	
Filling reel	35 metres NW 19		35 metres NW 19	
HP hose	50 metres NW 13		60 metres NW 13	
HP reel	Fixed, manually operated		Fixed, manually ope	erated
Control	On the engine itself, Rioned eControl optional		On the engine itself optional	f, Rioned eControl
Weight	From 370 kgs		From 430 kgs	
Dimensions (lxwxh)	2,815 x 1,375 x 1,320 mm		3,070 x 1,375 x 1,32	20 mm
Nozzles	2 x 1/2" (1 open, 1 blind)		2 x 1/2" (1 open, 1 b	lind)
Accessories	Spray gun with lance		Spray gun with land	ce
Color	White (FM-1450)		White (FM-1450)	

#### OPTIONS

OPTIONS		
Remote control	RioMote 5-channel remote control system	RioMote 5-channel remote control system
RioPulse Pulsator	Pump adjustment to send the water through the hose in pulses	Pump adjustment to send the water through the hose in pulses
Pump protection	Run-dry protection with overrun possibility	Run-dry protection with overrun possibility
Extra HP hose length	60 or 80 metres NW 13	60 or 80 metres NW 13
Fixed hydrant connection	Fixed hydrant connection for rapidly filling the tank	Fixed hydrant connection for rapidly filling the tank
HP reel	Hydraulically driven	Hydraulically driven
Second HP reel	Second HP reel instead of filling reel	Second HP reel instead of filling reel
RioFree mechanical freewheel HP reel	RioFree mechanical freewheel for uncoiling without resistance (only in combination with hydraulic HP reel)	RioFree mechanical freewheel for uncoiling without resistance (only in combination with hydraulic HP reel)
Accessories	Alloy wheels instead of standard wheels	Alloy wheels instead of standard wheels
Electric water level control	Automatic sysytem to open and close the filling line of your machine if the water has reached its minimum or maximum level in the tank	Automatic sysytem to open and close the filling line of your machine if the water has reached its minimum or maximum level in the tank

- Compact and lightweight
- Modern design, easy to use
- Integrated water tanks
- Several configurations available
- For drains and sewers up to 350 mm









800 litres water on board



 $90^{\circ} + 180^{\circ}$  Pivoting hose reel

# HIGH-PRESSURE CLEANING

#### THE HEAVY-DUTY, HIGH-CAPACITY JETTING TRAILER

The Rioned MultiJet is a high-pressure jetting trailer designed and built with the latest technology and is suitable for unblocking and cleaning of drains and sewers up to 450 mm. The powerful MultiJet is the quietest trailer-mounted jetting machine in its class thanks to the water-cooled diesel or petrol engine, special exhaust system and enclosed body.

#### MAXIMUM VISIBILITY

The MultiJet has two integrated 400 litres water tanks that are connected. The unique design and low center of gravity ensure excellent driving characteristics and road stability. When pivoted out, the hose reel remains within the machine body, maximizing obstructions into the road thus preventing accidents. The placement of the lights guarantee maximum visibility and safety.

#### FRAME AND DESIGN

The new heavy-duty tow bar and chassis are built to withstand many years of intensive use, while the robust construction of the pivoting hose reel mechanism ensures trouble-free operation for the life of the machine. As with all premium Rioned machines, safety systems are fitted to maximize the longevity of the MultiJet's major components.

The aerodynamic design of the MultiJet contributes to ensuring lower fuel consumption of the towing vehicle. Noise levels are reduced to an absolute minimum by the use of a heat exchanger system to cool the engine. Two integrated and lockable tool compartments provide ample storage space for tools and other equipment.

#### NEW PIVOTING HOSE REEL CONSTRUCTION

The pivoting hose reel now pivots to over  $90^{\circ} + 180^{\circ}$  and further from the rear of the machine for optimum working comfort under all circumstances. The hose reels are protected by the cover of the machine, further ensuring trouble-free working during periods of frost.

The high-pressure jetting hose fitted to the MultiJet is not only the lightest hose of its kind on the market, it also ensures minimum pressure loss thanks to the smooth inner surface and widened inner diameter. Due to the new hose, the effective output of the new MultiJet is further increased delivering more working pressure at the nozzle.

For single-person operation a radio remote control option is available, along with a spray beam to clear road surfaces from oil spills and dirt.



- Robust and durable
- Designed for tough jobs
- 90° + 180° pivoting high-pressure hose reel
- Very stable road handling
- Low noise level



Large storage compartments



eControl+ control panel

TECHNICAL SPECIFICATIONS		
Operating range	Max 450 mm	
Version	Braked, with soundproof cover	
Engine	Kubota petrol WG1605 (42,5 kW / 57 hp) or Kubota diesel common rail turbo V1505-CR T (33 kW / 44 hp)	
Fuel tank	30 litres	
Pump Rioned/Speck	Kubota petrol WG1605 or Kubota diesel common rail turbo V1505-CR T	
	160 bar / 85 lpm 200 bar / 72 lpm 150 bar / 100 lpm 250 bar / 60 lpm	2400 psi / 19 gpm 3000 psi / 16 gpm 2200 psi / 22 gpm 3600 psi / 13 gpm
Pump protection	Run-dry protection with overrun possibility	
Pressure regulation	Type Speck with automatic bypass	
Water tank	800 litres (2 x 400 litres)	
Filling reel	50 metres NW 19	
Fixed hydrant connection	Fixed hydrant connection for rapidly filling the tank	
HP hose	80 metres NW 13 or 80 metres NW 16	
HP reel	180° swivelling, 90° rotating, hydraulically driven	
Control	Rioned eControl+	
Weight	From 980 kgs	
Dimensions (lxwxh)	3,640 x 1,840 x 1,50	00 mm
Nozzles	2 x 1/2" (1 open, 1 bl	lind)
Accessories	Spray gun with lanc	e
Color	Yellow (RAL 1032), blue (RAL 5010) or white (RAL 9010)	

#### OPTIONS

OPTIONS	
Remote control	RioMote 7-channel remote control system
RioPulse Pulsator	Pump adjustment to send the water through the hose in pulses
Anti-freeze tank	30 litre anti-freeze tank with circulation system to protect the high-pressure pump
Extra HP hose length	100 or 120 metres NW 13
Fixed suction venturi	Suction device for filling the tanks with tanks with surface water
Second HP reel	Second HP reel instead of filling reel
Radiographic control HP reel	Coiling on and off via the radio remote control
RioMeter hose counter	RioMeter hose counter for displaying metres of hose in the pipe
RioFree mechanical freewheel HP reel	RioFree mechanical freewheel for uncoiling without resistance
Spraybeam	Spraybeam with rotating nozzles to remove oil pollution from streets
Accessories	Alloy wheels instead of standard wheels





# HIGH-PRESSURE CLEANING

### ENHANCE THE FUNCTIONALITY OF YOUR JETTING MACHINE

#### RIOMOTE

With RioMote radio remote your jetting machine can be controlled by a single person. With the 5-channel RioMote radio remote on our petrol driven jetters and UrbanJet, you can switch the pump on or off and increase or decrease the engine revs. In addition, there is a 7-channel radio remote available on our orther machines, meaning you can also switch the engine on or off. There is also an emergency stop with auto-reset function for maximum safety. RioMote remote control has a massive operating range and thanks to the extra battery supplied you can work continuously.

#### **RIONED ACCESSORIES**

Enhance your efficiency with a range of accessories. We offer a complete range of jetting nozzles for all types of application. From standard and rotating nozzles to hydraulic root cutters and specialist nozzles to remove soil.

To extend the life of your high-pressure hose we can supply hose inlet guidance tubes and rollers. The suction venturi device is a simple tool to empty flooded cellars without having to use a separate suction pump. See www.rioned.com for more details.



#### WINTER PROTECTION

Severe winter conditions can seriously damage the critical components of your jetting machine. Rioned offers an anti-frost system with tank to prevent extreme weather damage.

#### PULSATOR

The Pulsator is an adjustment to the pump that continuously interrupts the water flow and sends pulses of water through the hose.

Water savings of up to 80% can be aachieved, whilst time is saved as the pulse action feeds the high pressure hose quickly and effectively into the pipework.









#### ELECTRIC WATER LEVEL CONTROL

The automatic water level control system automatically opens the filling valve if the water level is low and also shuts the supply feed off if the tank level has reached its maximum. This option allows the user to continuously fill and work uninterrupted when connected to a tap.

#### VENTURI TANK FILLING SYSTEM

The ventury system creates suction pressure in the clean water tanks which allows you to fill up with water from lakes and canals at high speed.

#### RIOFREE

The RioFree freewheel system ensures that the hose reel can be coiled off without friction of the hydraulic system. This feature significantly reduces the effort required to operate the hose reel. Included as standard on our CityJet and ProfiJet T4 models.

#### RIOMETER HOSE METER COUNTER

The Riometer hose meter counter supplies accurate information on how far the nozzle is inserted in the drain. It is especially useful on longer runs or when a drain is already partially cleaned. The hose meter counter is accurate to c. 2% at 100 metres.

#### MAXFLOW SEWER HOSE

By using the latest technology, Rioned has developed a new type of lightweight high-pressure sewer hose with a larger inner diameter. This optimizes the flow inside the hose and reduces pressure loss significantly without compromising the working or burst pressure.



### SMALL TANKER MAKES LIGHT WORK OF INNER CITIES

Edincare Drains, based in the UK, is using our powerful and compact RioCom. Director Andy Simpkins says the addition of the RioCom has brought immediate benefits. "85% of our work is inside the M25," he says. "The new tanker is superb for working in London. Being a 7.5-tonne unit means we can work anywhere in the city, including the ULEZ zone, without restriction."

"The size of the unit also means we're able to easily park outside homes and businesses without having to double park as we would with a larger tanker. This obviously causes fewer issues from neighbours and passing traffic."

He says they have also been impressed with the power of the RioCom, even when parking a distance from the site. "Most of our work is in basements and we recently cleared a chamber, with a base that was approximately 10m from finished floor level. The overall hose length was 49m from the tanker and it handled it comfortably."



## Jetting/Vacuum Cleaning

Rioned specializes in the design of compact, high-quality jetting/vacuum combination units for emptying grease traps, wells and flooded basements, as well as the cleaning of heavily polluted drains and sewers. Our combination units are often used where larger vehicles struggle to gain access. Using smaller vehicles also has considerable economic benefit with much lower operational costs. Rioned offers a series of concept vehicles which can be easily configured with a range of useful options.





#### POWERFUL AND MANOEUVRABLE

#### 2.100 LITRES NETTO CAPACITY

The robust Rioned suction trailer is made to empty flooded cellars, severely polluted sewers, septic tanks and wells. With a total height of just under 1.95 metres, this double axle trailer is also suitable for use in parking garages. The thermal immersion tank has a net volume of 2,100 litres, more than enough for the majority of jobs. With an empty weight of approximately 1,450 kgs, the total weight of the trailer and its contents in normal use remains below the permitted load of 3,500 kgs.

#### UNDER THE HOOD

Under the hood of the motor pump/compartment, we find a 2 cylinder, 20 HP Honda Engine driving the powerful Jurop PNR 73 vacuum pump. This pump has a suction capacity of 425m3 per hour (7,200 litres per minute) and is suitable for continuous operation. The discharge mode on the pump helps to empty the tank. A double float ball in the tank and a siphon prevent dirt particles from entering the pump. The housing of the motor and pump protect against dirt and weather influences. A muffler on the exhaust minimizes the volume of noise generated during work.

#### FULLY OPENING REAR COVER

The rear cover is fitted with a 3" inlet, a 3" outlet and three sight glasses to determine the liquid level. The tank can be opened completely for cleaning and the removal of solids. With 25 metres of 2.5" hose on the suction reel, the machine is ready for action. On one side of the trailer, an open storage box provides room for the two 3" hoses that are supplied as standard; on the other side you will find a lockable storage box for storage of tools.





Ideal for use in parking garages



### 2,100 litres netto capacity

- Fully-opening rear cover
- Powerful vacuum pump for continuous use
- Lockable storage box
- Suction reel with 25 metres hose

#### TECHNICAL SPECIFICATIONS

Frame	Double-axle trailer, max load 3,500 kgs
Dimensions (lxwxh)	4,380 x 1,854 x 1,875 mm
Empty weight	Ca. 1,450 kgs
Tank capacity	2,100 litres
Waste water level indicator	3" sight glasses
Tank material	Steel
Tank opening	Fully opening rear door, manual
Connections	3" inlet, 3" outlet
Motor/drive	Honda air-cooled petrol engine (15kW / 20 hp)
Vacuum pump	Jurop PNR73 (7.200 lpm, 425 m3/ hour, 0.8 bar suction / 0.49 bar pressure)
Suction reel	25 metres 2.5" suction hose, manually operated
Control	On the engine
Storage	Lockable storage boxes, open hose storage boxes
Safety	Worklight, beacon and LED warning lights optionally available
Standard accessories	2 x 3 metres 3" suction hose, 1 x PE suction pipe, toggle spanner for opening and closing the tank





UniCom, basic version



Max 300 mm



🖲 500 / 1,000 litres



UniCom, standard version





7 or 9-channel





# JETTING/VACUUM CLEANING

## COMPACT AND LIGHTWEIGHT, SUITABLE FOR ALMOST EVERY COMMERCIAL VEHICLE

#### COMPLETELY CUSTOM MADE

Its contemporary design makes this machine a real jack-of-all-trades, perfectly suited for all kinds of high-pressure and suction cleaning work in city centres, parking garages and other difficult-to-reach places. House connections, sewers, grease traps and street wells can be efficiently unblocked and cleaned with the UniCom. You can have this modular UniCom combination unit completely customised with any of the available options, based on the specifications and options you require.

#### ONTO, IN OR BEHIND THE VEHICLE

The design of the UniCom makes it easy to install on 4.5t and larger chassis cabs such as the Nissan Cabstar, Renault Maxity, VW Crafter, Mercedes Sprinter or Iveco Daily. The UniCom can also be mounted on a trailer or in an enclosed service van. Thanks to its limited size, the UniCom moves nimbly through busy city traffic.

#### MANY POSSIBILITIES

The UniCom has a 1,500 litres tank with a 1,000 litres waste and 500 litres clean water compartment or in a different configuration if required. The UniCom can be equipped with many options and accessories: from a radio remote control system to a hydraulically-operated suction hose reel; the choice is yours.

You can opt for a basic version with petrol engine and a simple canopy over the engine and pump compartment or a standard version with diesel engine and completely enclosed engine- and pump compartment. All components are easily accessible for maintenance. The tank is galvanised, but it can also be spray-painted in any desired company colour.

#### COMPLETE PACKAGE

Whatever version you choose, the UniCom is ready to get the job done in a professional manner. A reliable petrol or diesel engine in combination with a top-quality high-pressure and suction pump. The rear hatch swings all the way open to enable you to empty and clean it. The slanted discharge partition ensures that little or no waste remains behind.

Two suction hoses, including couplings, 60 m x NW 13 high-pressure hose and two jet nozzles make the package complete.



38



 1,500 litres tank partitioned according to your requirements

#### TECHNICAL SPECIFICATIONS

ChassisTraileDimensions (lxwxh)3,00Empty weightFrom	ic version er, 4.5 or 5.5 tons )0 x 1,740 x 1,450 (excluding c n 1,200 kgs (depending on cha 0 litres (500 litres clean / 1,00	assis)	Standard version Trailer, 4.5, 5.5 of 7.5 tons 3,000 x 1,740 x 1,450 (excluding ch From 1,200 kgs (depending on ch	assis)	
Dimensions (lxwxh) 3,00 Empty weight From	00 x 1,740 x 1,450 (excluding c n 1,200 kgs (depending on cha	assis)	3,000 x 1,740 x 1,450 (excluding ch	assis)	
Empty weight From	n 1,200 kgs (depending on cha	assis)	, , , ,	assis)	
			From 1,200 kgs (depending on ch		
Tank capacity 1,500	0 litres (500 litres clean / 1,00	) (litrae weate)	,	From 1,200 kgs (depending on chassis)	
		JO IIIres wastej	1,500 litres (500 litres clean / 1,00	00 litres waste)	
Movable partition No			No		
Waste water level 3" sig indicator	ight glasses		3" sight glasses		
Tank material Stee	el		Steel		
Tank opening Fully	/ opening rear door, manual		Fully opening rear door, manual		
Connections 3" in	nlet, 3" outlet		3" inlet, 3" outlet		
Motor/drive Hono	da petrol (18 kW / 24 hp)		Kubota diesel D1105 (18.5 kW/25	hp)	
	bar / 60 lpm ) bar / 45 lpm	2000 psi / 13 gpm 3000 psi / 10 gpm	140 bar / 60 lpm 200 bar / 45 lpm	2000 psi / 13 gpm 3000 psi / 10 gpm	
Pump protection Run-	-dry protection with overrun po	ossibility	Run-dry protection with overrun possibility		
0.49 (capa	MEC 5000 (capacity 5.000 lpm, 300m3/hour, 0.8 bar suction / 0.49 bar pressure) or GD SLS54V, air-cooled, oil-lubricated (capacity 5.400 lpm, 300m3/hour, 0.8 bar suction / 0.49 bar pressure)		GD SLS54V, air-cooled, oil-lubricated (capacity 5.400 lpm, 300m3/hour, 0.8 bar suction / 0.49 bar pressure)		
HP hose reel 60 n	metres NW 13, 180° swivelling		60 metres NW 13, hydraulically-dr	riven, 180° swivelling	
Suction reel Optio	ional		25 metres 2.5" suction hose, handmatig or hydraulically-driven		
Filling reel Optio	ional		35 metres NW 19 filling hose		
Motor and pump Cove housing	er		Fully enclosed housing		
Control Rione	ed eControl		Rioned eControl+		
Remote control RioM	Note 7-channel remote control	system optional	RioMote 7 or 9-channel remote control system optional		
Storage Stora	age for hoses underneath the	tank	Storage boxes on both sides of the tank		
Safety Work	Worklight, beacon and LED warning lights optionally available		Worklight, beacon and LED warning lights optionally available		
Standard Nozz accessories	zles, 2 x 3 metres 3" suction h	ose	Nozzles, 2 x 3 metres 3" suction h	ose	
	em, additional outlet, additiona	r hose meter counter, anti-freeze l storage space depending on	RioPulse pulsator system, RioMete system, additional outlet, additiona chassis		





eControl<sup>+</sup> control panel

# JETTING/VACUUM CLEANING

## THE NEW URBAN JETVAC COMBINATION UNIT THAT GOES WHERE OTHERS CAN'T

#### NARROW STREETS

The new Rioned UrbanCombi combination unit is developed for working in height restricted areas and narrow city streets. This small combi unit is also well suited for use on difficult terrain and in rural areas.

#### UNDERGROUND CAR PARKS

Because the total height of the car is less than 1.85 m, the UrbanCombi is ideal for use in parking garages.

#### FOUR-WHEEL DRIVE

Despite its compact size, the UrbanCombi is very suitable for cleaning both horizontal and vertical pipes and for draining grease traps or small septic tanks. It is a versatile vehicle which, thanks to the permanent 4-wheel drive, can also access the most inaccessible places.

#### ALUMINUM TANK

To reduce the weight of the vehicle, the 1,200 litres tank and lockable toolboxes are all manufactured using durable aluminum. The tanks has an 800 litres wastewater and 400 litres clean water compartment. It has fixed supports to neatly stow lengths of suction hose. The tank has a 3" inlet and 3" outlet valve. The suction hose reel is equipped with 25 metres of 2" suction hose.

#### PERFORMANCE

Don't be misled by its size! The UrbanCombi has two powerful pumps to get the job done. The P45 high-pressure pump delivers pressures up to 320 bar, allowing the operator to clean vertical pipes from the ground up. The GD SLS54V vacuum pump offers a massive suction capacity of 325 m3/hour, similar to that of many larger combination units.



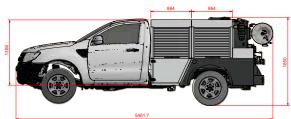


- Mini JetVac unit ideal for restrictedaccess applications
- Robust 3.2 tons 4-wheel drive Ford Ranger chassis
- Aluminum tank with 1,200 litres total capacity
- Height under 1.85 metres for underground parking access
- Powerful high-pressure and vacuum pumps



#### TECHNICAL SPECIFICATIONS

Chassis	3.2 tons Ford Ranger, 4-wheel drive			
Dimensions (lxwxh)	5,500 x 1,950 x 1,850 mm			
Empty weight	Ca. 2,870 kgs (including chassis)			
Tank capacity	1,200 litres (400 litres clean / 800 litres waste)			
Movable partition	No			
Waste water level indicator	3" sight glasses			
Tank material	Aluminium			
Tank opening	4" inspection valve			
Connections	3" inlet, 3" outlet			
Motor/drive	PTO			
HP pump Rioned/Speck	320 bar / 46 lpm4600 psi / 1250 bar / 60 lpm3600 psi / 1180 bar / 75 lpm2600 psi / 1			
Pump protection	Run-dry protection with overrun possibility			
Vacuum pump	GD SLS54V, air-cooled, oil-lubricated (capacity 5.400 lpm, 300m3/hour, 0.8 bar suction / 0.49 bar pressure)			
HP hose reel	80 metres NW 13, h 180° swivelling	ydraulically-driven,		
Suction reel	25 metres 2" suctio hydraulically driven	n hose,		
Filling reel	35 metres NW 19 fi	lling hose optional		
Control	Rioned eControl+			
Remote control	RioMote 7-channel system	remote control		
Storage	Lockable storage bo of the tank	oxes on both sides		
Safety	LED warning lights			
Standard acces- sories	Nozzles, spray gun with lance, suction hose			
Options	RioPulse pulsator sy hose meter counter camera system			







## JETTING/VACUUM CLEANING RIOCOM 7.5 T

### ALLROUND JETVAC FOR DAILY USE

#### POWERFUL CONCEPT

The RioCom is Rioned's affordable alternative to large combination units, ideal for contractors working in congested city centres. It is compact, manoeuvrable and designed for everyday use at a low operational cost. The powerful high-pressure Speck, pump in combination with the enhanced suction pump, clears the most stubborn blockages and easily cleans grease traps, wet wells, pump stations and flooded basements. The RioCom is a true single-resolution vehicle for the drainage industry and has immediate availability.

#### TANK

This combination unit has a split 3,000 litres tank compartment - 2,000 litres waste and 1,000 litres clean water - with an interconnecting valve to allow both tanks to be filled with clean water for large descaling or jetting tasks. The tank has a fully opening rear door with hydraulic, swivelling jetting hose reel, a 3" inlet and a 4" outlet, as well as a sludge tank level indicator. The added suction hose reel with 17m of 3" suction hose is directly connected to the tank for immediate operation.

#### SINGLE-PERSON OPERATION

The radio remote system allows the vehicle's engine, both pumps and the revs to be controlled from a distance by a single person. The unique eControl+ system, with clear LCD screen, provides operators system information at a glance. An easy-to-use jog-wheel guides users quickly through a clear menu system with all machine functions available at a single click. The integrated LED lights indicate current machine status with functions displayed including working hours, engine RPM, run dry protection, eco function, service intervals and various temperature and liquid level warnings.

#### STORAGE

The RioCom incorporates comprehensive storage possibilities, enabling contractors to carry additional equipment. Based on customer feedback, additional secure, shuttered doors have been added, with the cabinets along both sides providing enough capacity for PPE, an inspection camera and all the tools required to carry out the most demanding jobs.

#### VERSATILITY

The RioCom offers great versatility and was developed for use in built-up areas and locations where larger vehicles may struggle to gain access. Despite its compact design, the unit houses two very powerful pumps that can operate simultaneously. In some cases no additional driving licence requirements are needed.

#### CLEAN AND GREEN

The base vehicle of the RioCom is a Mitsubishi Fuso Canter 7C18 chassis with EURO-6 turbo-charged, direct-injection engine. The new unit has been built to meet new emission standards by featuring a PTO (Power Take-off) drive that uses power from the vehicle engine to operate the pumps. With the introduction of ultra-low emission zones (ULEZ) across major European cities, the RioCom has full European type approval and is ULEZ ready.





- Powerful pumps that operate simultaneously
- 3,000 litres tank with fully opening door
- Suitable for all cleaning operations in built-up areas
- Plenty of secure storage space for PPE and tools
- ULEZ (ultra-low emission zone) compliant



#### TECHNICAL SPECIFICATIONS

Chassis	7.5 tons Mitsubishi Fuso Canter 7C18			
Dimensions (lxwxh)	6,260 x 2,080 x 2,488 mm			
Empty weight	4,816 kgs			
Tank capacity	3,000 litres (1,000 litres clean /	2,000 litres waste)		
Movable partition	No			
Wastewater level indicator	Mechanical level inc	dicator		
Tank material	Steel			
Tank opening	Fully opening rear d	oor, manual		
Connections	3" inlet, 4" outlet, 2" connection	fixed hydrant		
Motor/drive	PTO			
HP pump Rioned/Speck	150 bar / 100 lpm 200 bar / 72 lpm	2250 psi / 22 gpm 3000 psi / 16 gpm		
Pump protection	Run-dry protection with overrun possibility			
Vacuum pump	Jurop PNR83, air-cooled, oil-lubricated (capacity 8.200 lpm, 492m3/hour, 0.8 bar suction / 0.49 bar pressure)			
HP hose reel	80 metres NW 13, hydraulically-driven, 180° swivelling			
Suction reel	17 metres 3", or 25 suction hose	metres 2.5"		
Filling reel	50 metres NW 19 fi	lling hose		
Motor and pump housing	Fully enclosed hous	ing		
Control	Rioned eControl+			
Remote control	RioMote 9-channel system	remote control		
Storage	Storage cabinets wi both sides of the tar boxes			
Safety	LED warning lights, protection	reflectors, side		
Standard accessories	Nozzles, spray gun with lance, suction hose			
Options	RioPulse pulsator system, RioMeter hose meter counter, anti-freeze system			



Max 650 mm

9-channel

3,500 or 3,750 litres



STAGE



FlexCom on a MB Atego chassis



Movable partition for capacity increases, only for Flexcom 10 or 12 tonnes.

## JETTING/VACUUM CLEANING

## **FLEXCOM**

### THE VERSATILE JET/VAC COMBINATION UNIT

#### FLEXCOM: HIGHLY VERSATILE

The Rioned FlexCom has been designed for use in built-up areas and in locations where larger vehicles struggle to gain access. The FlexCom is available with a range of options, mounted on a 7.5t Mitsubishi Fuso Canter or even a 10 or 12t Mercedes-Benz, DAF or MAN chassis.

#### FLEXIBLE CAPACITY

The FlexCom has a tank with a 3,500 or 3,750 litres capacity, depending on the chosen chassis. It can be supplied with a sliding partition to allow the capacity of the clean water or wastewater sections of the tank to be adjusted. The hydraulic cylinder allows you to move the partition to your preferred position.

#### EFFECTIVE STORAGE SPACE

The FlexCom has been designed to ensure perfect weight distribution, resulting in stable road handling. This allows you to carry more water without compromising on space. It comes with large storage compartments on either side of the vehicle for storing accessories, suction hoses and other tools.

#### **USER-FRIENDLY REELS**

The suction reel is connected directly to the tank and the 2 1/2" suction hose can be coiled and uncoiled using the hydraulic system. This feature allows the vehicle to be parked some distance from where you are working. The RioMote radio remote control system allows one person to operate the machine with ease from a distance. The pivoting high-pressure reel provides optimum ergonomics and ease of use. The reel features a new hose guide system (optional) and can pivot 180°. The control panel pivots with the reel, ensuring the best operating height and angle at all times.

#### VACUUM PUMP

The FlexCom is equipped with a high-performance, air-cooled, oil-lubricated SLS54V vacuum pump as standard. The pump has a suction capacity of 5,400 lpm (325 m<sup>3</sup> per hour). Several pump upgrades are available.





- Gross vehicle weight of 7.5, 10 or 12 tonnes
- Hydraulically-adjustable partition (optional)
- Compact dimensions and lightweight
- Suitable for all cleaning operations in built-up areas

#### TECHNICAL SPECIFICATIONS

TECHNICAE SFECI	ICATIONS		
Chassis	7.5, 10 or 12 tons		
Dimensions (lxwxh)	6,580 x 2,080 x 2,500		
Empty weight	From 4,800 kgs (depending on chassis)		
Tank capacity	3,500 or 3,750 litre (depending on chas		
Movable partition	Optional		
Waste water level indicator	2 long-sight glasses	3	
Tank material	Steel		
Tank opening	Fully opening rear d hydraulic	oor, manual or	
Connections	3" inlet, 4" outlet, 1" connection	fixed hydrant	
Motor/drive	PTO		
HP pump Rioned/Speck	160 bar / 130 lpm 200 bar / 72 lpm	2300 psi / 29 gpm 3000 psi / 16 gpm	
Pump protection	Run-dry protection possibility	with overrun	
Vacuum pump	GD SLS54V, air-cooled, oil-lubricated (capacity 5.400 lpm, 300m3/hour, 0.8 bar suction / 0.49 bar pressure) or Jurop PNR83, air-cooled, oil-lubricated (capacity 8.200 lpm, 492m3/hour, 0.8 bar suction / 0.49 bar pressure)		
HP hose reel	80 metres NW 13, h 180° swivelling	ıydraulically-driven,	
Suction reel	25 metres 2.5" or 3 hydraulically-driven		
Filling reel	35 metres NW 19 fi	lling hose	
Motor and pump housing	Fully enclosed hous	ing	
Control	Rioned eControl+		
Remote control	RioMote 7 or 9-char system	nnel remote control	
Storage	Toolboxes with hose on top	e storage boxes	
Safety	Worklight and LED optionally available	warning lights	
Standard accessories	Nozzles, spray gun suction hose	with lance,	
Options	RioPulse pulsator sy hose meter counter guide, anti-freeze sy controlled pneumat	; RioSpindel hose vstem, remote	





Matthijs Cuvelier works with the springs every day.

## FLEXIBILITY, QUALITY AND CRAFTSMANSHIP

Spring machines have been a fixed and important part of our product range since our early days. Although we developed them in-house, until 2020, their manufacture was contracted out. In 2020, Rioned moved production of the spring machines back to its own factory in Tilburg, bringing their development and production in-house. A dedicated workshop has been set up for their manufacture, where a team of skilled and experienced mechanics assembles and tests the spring machines.

We are speaking with Matthijs, a springmaker at Rioned. "I am proud of our springs. What makes our springs unique is the blue RioCore core. This core of steel wire with plastic makes the springs both flexible and resilient. They are difficult to make, but after several years of making springs, I have the knack." Matthijs says with a laugh.

## Mechanical Cleaning

Rioned supplies manual spring machines, in addition to electrical drum and suitcase machines, for professional cleaning of drain and sewers from ø 32 mm up to ø 250 mm. Rioned springs are equipped with the RioCore blue inner core. The core of steel wire with a plastic outer sleeve provides stability to improve the cleaning power and durability of the spring.





32 - 75 mm

6 - 8 - 10 mm

7.5 - 10 m

6 kgs



Now also available with cordless drill



Carrying case for the HandMatic and accessories





# SPRING MACHINES

NEW WITH

## HANDMATIC, FLEXMATIC<sup>+</sup>, ALLROUND<sup>+</sup> AND MASTER

The drum machine's automatic spring feed unit provides an easy-to-use solution for all drain and sewer cleaning problems. Rioned drum machines have a closed drum to protect floors and walls from water and dirt while working. Rioned spring machines are lightweight due to the use of aluminum and plastics. The compact construction and low weight make Rioned spring machines easy to transport and manoeuvre in restricted areas. The powerful electric motor allows suitcase models to be used to clean standpipes and larger diameter drains up to 60 metres in length.

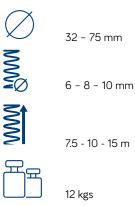
#### HANDMATIC

The HandMatic is an electric spring machine, which can be used for the professional cleaning of drains with a diameter up to 75 mm. The HandMatic is available with a (cordless) drill. An attachment HandMatic is also available. This is suitable for any type of drill with two directions of rotation.

The spring is able to clean the entire length of the drain and can easily negotiate bends and siphons. The automatic spring transporter with infinitely variable speed regulation feeds the spring in and out of the drum. The springs are fitted with a fixed drill head.

#### FLEXMATIC+

The FlexMatic+ is the ideal spring machine for professional cleaning of drains and sewers between 32 - 75 mm diameter. The lightweight and compact design, in addition to the flexible adapter hose, makes it easy to handle and manoeuvre in narrow spaces. The automatic spring feed unit has large roller bearings for long term use. It is easy to operate by pushing the handle forward and back to drive the spring in and out of the drain. The spring rotates in neutral position. The flexible adapter hose is ideal for narrow spaces. The air-activated foot switch turns the machine on and off which leaves both hands free for working. The springs have coiled bulbous heads. The 10 mm springs have the unique Rioned square coupling system, allowing different kinds of tools to be used.









Practical automatic spring feed unit



40 - 125 mm

10 - 13 - 16 mm

5 - 15 - 20 m

39 kgs

#### ALLROUND+

The Allround+ is a real wizard. It is very compact and easy to transport. The large wheels make easy work of all types of stairs. Suitable for larger cleaning jobs, the Allround+ with its powerful electric motor provides a solution for sewers and pipework of 40 - 125 mm diameter. To deal with stubborn blockages in larger pipes, the springs are supplied with square couplings in order to connect a wide range of accessories for all different kinds of blockages.

The Allround+ has a closed drum made from synthetic material which ensures a safe working environment and a clean working area. The drum can be changed or removed in minimal time and can be carried separately. The newly-redesigned automatic spring feed unit allows the spring to feed in and out of the drain with one movement. The Allround+ has an integrated tool case with five standard accessories. An extensive accessories kit is optionally available, including a special tulip cutter, chain flails, cutting knives and drilling heads to name a few. In the UK, the Allround+ is supplied with foot switch.





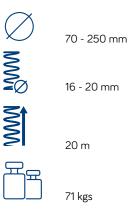
#### MASTER

The Master is a larger version of the Allround+. All obstinate blockages such as roots, urine, stone and chalk can be cleared with this machine. The Master will clean drains and sewers from 70 - 250 mm.

The spring is protected by an aluminum drum which ensures a clean working area. With two extra spring drums you can work with a maximum length of 60 metres with a 20 mm spring.

The Master comes with six standard accessories and tools supplied in a metal case which can be transported in the special support. An extensive accessories kit with special cleaning heads is also available.

The Master is safe and user friendly. It is very easy to transport, compact in design and has an adjustable hand grip.









70 400



32 - 160 mm



60 m

\_\_\_\_\_\_ 25 kgs



Supplied with an adaptor drum suitable for 8 and 10 mm springs



Never lose the decoupling pin again



Store the power cable safely



Spring baskets and accessories can be transported separately

## MECHANICAL CLEANING SECTIONAL MACHINES VICTOR

More powerful, more compact, and more flexible! The new Victor Light and Premium outperform their predecessors with various useful features that make unclogging jobs even easier. We succeeded in adding new and innovative features to the product by carefully listening to users of the Victor.

#### THE BEST OF BOTH WORLDS IN ONE MACHINE

The best of the traditional Victor and Mini Victor models has been retained and merged into a new, improved design. This makes the machine suitable for stubborn blockages and long pipes. The motor is a silent electric motor with a two-way switch (L-R). The spring machine is suitable for down pipes, sewers and drains with a diameter of 32 mm to 160 mm over a maximum length of 60 metres. By using an adapter drum, springs of 8 or 10 mm can be used. The Victor is suitable for segment springs of 16 mm (in lengths of 2 metres) or 22 mm (in lengths of 4 metres).

#### WORKING SAFELY

With the Victor you work safely. For example, there is a plug with earth leakage protection and two protective covers that protect the user frominjury caused by coming into contact with electronic parts. The machine has a very stable frame with shock absorbers to reduce vibrations. The cord is stored securely on the two dedicated hooks.

#### EASE OF USE

The Victor Premium is equipped with a lever mechanism. Because of this, the user only has to press the handle gently to operate the spring, which is very practical if you are using the machine for a longer period of time or over a longer distance! Cleaning the bearings has become much easier, due to the use of seals and low maintenance bearings. Dirt and moisture don't stand a chance. A release pin for the springs is stored in a fixed place in the frame so you don't have to look for it.

The Victor is a very robust machine, very easy to maintain, multifunctional and safe for the user.



- Unprecedentedly powerful and silent machine
- With adapter drum also suitable for 8 and 10 mm springs
- Suitable for stand pipes and pipes up to 60 metres
- Light operation thanks to lever mechanism

#### TECHNICAL SPECIFICATIONS

	Victor Light	Victor Premium
Motor	0,45 kW	0,75 kW
Ø Drain/sewer	32 - 160 mm	32 - 160 mm
Ø Spring	8 - 10 - 16 - 22 mm (8 - 10 mm with adapter drum)	8 - 10 - 16 - 22 mm (8 - 10 mm with adapter drum)
Spring length	40 metres	60 metres







38 - 125 mm

8 mm (12 mm cover), 10 mm (15 mm cover)

20 m

35 kgs

## MECHANICAL CLEANING RIOFLEX THE FLEXIBLE NEW WAY OF DRAIN CLEANING

The new RioFlex high-speed flexible shaft drain cleaning machine has been designed for the rapid removal of rust, cement, lime and small tree roots in concrete, cast iron and PVC drains up to 125 mm. Producing up to 3,000 RPM, the high rotation speed means the specialised selection of tools covers every part of the drain wall for thorough cleaning. This makes the machine ideal for sewer cleaning, CIPP preparation and cutting applications. The spring is protected with a flexible outer cover that allows the cable to go through the tightest of bends. The RioFlex can be supplied with a range of specialist cleaning heads for optimal operation in different drain types and diameters.

#### REMOTE CONTROL

The RioFlex is the only high-speed flexible shaft machine in its class supplied with a adjustable radio remote control. The ergonomic design means the unit excels in confined spaces, with the hand-operated remote control enabling comfortable and safe operation a few meters away from the machine.

Using the remote control, the maximum speed and torque can be set gradually, depending on the nature of the task and pipe material, helping minimize the risk of damage. The LED display also shows the torque and speed of the cleaning head as it progresses along the pipe, giving a clear indication of the effectiveness of the cleaning action.

#### DRIVE

The RioFlex is powered by a muscular 0.55 kW electric motor. This specially developed engine is both quieter and more powerful than drives made for common hand tools, such as angle grinders or drills.

#### TRANSPORTATION

The RioFlex is mounted on two wheels and includes a retractable handle for ease of transportation. When working in confined spaces or difficult to reach areas, such as an apartment block without an elevator, the electric engine pack and the reel can be separated and used independently. It is also possible to work with a separate cable and the detachable engine pack. Because the RioFlex uniquely separates into two components, transportation and lifting is a simple and safe task.

#### INTERCHANGEABLE REELS

The RioFlex's detachable engine pack can be used with different reel combinations. Available reel lengths and cable diameters include:

CONFIGURATIONS							
	Cable	Cable Housing	Length	Pipe Diameter			
RioFlex 1 - Small Reel	8 mm	12 mm	15 mtrs	38 - 100 mm			
RioFlex 2 – Small Reel	10 mm	15 mm	12 mtrs	50 - 125 mm			
RioFlex 3 – Large Reel	10 mm	15 mm	20 mtrs	50 - 125 mm			





#### TECHNICAL SPECIFICATIONS

Motor	0.55 kW
Ø Operating range	38 - 125 mm (90° bends from 40mm)
Ø Spring/cover	8 mm / 12 mm and 10 mm / 15 mm
Length 8 mm spring	15 m
Length 10 mm spring	12 metres or 20 metres (larger reel)
Weight	35 kgs total (engine 17 kgs, reel 18 kgs)

#### ACCESSORIES

A large number of accessories are available for the RioFlex. Choose the desired accessory depending on the pipe construction and application. Chain heads with carbide tips are available for cast iron and concrete pipes. Smooth chain heads are available for cleaning and unclogging PVC pipes. There are also different drill heads available for the toughest jobs.







38 - 100 mm

8 mm (12 mm cover)

5 m

4 kgs



## MECHANICAL CLEANING RIOFLEX MINI THE POWER OF SIMPLICITY

The RioFlex Mini is the ideal entry-level tool for unclogging and cleaning short pipes in kitchens and bathrooms. Blockages in smaller diameter pipes are removed in an instant with this handy high-speed cleaner. Due to its ease-of-use, safety features and low weight, the RioFlex Mini has become an indispensable tool for installers, plumbers and sewer cleaners in the short period since its launch.

The RioFlex Mini is supplied with a range of cleaning heads that attach to the five meters long 8 mm cable. The unit is simply operated by connecting the cable to the cordless drill. The protective housing around the cable is easy to clean with a cloth after use, and the complete kit can be stored and transported in the handy packaging.

#### INCLUDED

FOR PVC PIPES	FOR CONCRETE AND METAL PIPES
5 mtrs of 8 mms RioFlex cable in plastic housing	5 mtrs of 8 mms RioFlex cable in plastic housing
Set of tools: 40 mm Chain Knockers 50 mm Chain Knockers 75 mm Chain Knockers 100 mm Chain Knockers	Set of tools: 40 mm Chain Knockers 50 mm Pipemaster Chain Knockers 75 mm Pipemaster Chain Knockers 100 mm Pipemaster Chain Knockers
Carrying bag	Carrying bag
Teflon-spray	Teflon-spray

OPTIONALLY AVAILABLE High-speed cordless drill with clutch



TECHNICAL SPECIFICATIONS				
Motor Separate high-speed cordless drill				
Ø Operating range 38 - 100 mm				
Ø Spring/cover 8 mm (12 mm cover)				
Length spring 5 m				
Weight 4 kgs				



## MECHANICAL CLEANING WHICH SPRING DO YOU NEED?

Rioned supply a complete range of springs for every machine, from 6 mm springs up to 22 mm sectional springs for tough jobs. Springs larger than 10mm can also be supplied with a fixed bulbous head or with an easy coupling system to attach accessories. Our drum model springs have a steel inner core with plastic outer for more cleaning power and extra durability. Our suitcase models use open wound sectional springs in 2 or 4 meter lengths.

Rioned springs have a RioCore inner for extra stability and maximum flexibility.

Cleren	10 M	WELT-	11. an	2.0				
RANGE OF OPE	RATIONS MEC	CHANICAL CLE	ANING					
	Spring dia	ameter Ø mm						
	6	7	8	10	13	16	20	22
	Max. diam	neter of operation	Ømm					
	32	50	60	70	100	125	160	250
Hand tools								
Type D		32-50 mm						
HandMatic		32-75 m	m					
Spring machines								
FlexMatic+		32-75 m	m					
AllRound+				40-125 mm				
Master						70-250 ו	mm	
Sectional machin	es							
Victor				32-160 mm				
High speed drain	cleaners							
RioFlex Mini		38-100 mm						
RioFlex				38-125 mm				

#### SPRING MACHINE APPLICATION TOOLS

	Blockage							
	soap/hair	clothes	roots	cleaning	urine stone/ chalk			
<ol> <li>Standard bulbous head</li> </ol>	••	•		••				
2 Straight drilling head		•		••				
3 Funnel head		••						
4 Cutting knife	••		••	•	••			
<b>5</b> 4 or 6 blade drilling head	••		•	••	••			
6 Retrieving hook		••						
⑦ Diamond shaped head	••		•	••	••			
8 Chain head	•			••	•			
9 Root cutter			••					
Tulip cutter	••			•	••			

Possible
 • Best possible



#### 1 BULBOUS HEADS

For light cleaning in curved pipes.



#### 2 STRAIGHT DRILLING HEADS

Tool to determine right accessory for the job.



**3 FUNNEL HEADS** For long, curved pipes.



**4 CUTTING KNIVES** To mill large pipes.



**5 4 AND 6 BLADE DRILLS** To mill overgrown pipes.



6 RETRIEVING HOOKS To remove obstacles from pipes such as cloths, napkins etc.



**7 DIAMOND-SHAPED HEADS** Or pipes tarnished with chalk or urine stones.



8 CHAIN HEADS To clean steel and iron pipes.



**9 REPAIR AND QUICK COUPLINGS** To connect springs or to repair broken springs.



**10 ROOT CUTTERS** To saw tree roots.



**11 TULIP CUTTER** Ideal for removing hardened grease and rust in pipes.





USB nozzles are perfect for removing grease and roots

## **USB NOZZLES**

Rioned is an official supplier of USB nozzles. USB is a German manufacturer of high-quality stainless steel nozzles. The nozzles are precision engineered to ensure durability and superior cleaning performance. By using only the strongest and most durable industrial materials, the nozzles are resistant to chemicals, acids and alkalis and other mineral substances. USB nozzles are designed to clean better with less water and can also be used with recycled water.

## **Jetting Nozzles**

Rioned has an extensive range of nozzles for every high-pressure cleaning machine. These meet the highest efficiency demands and are suitable for a wide range of blockages in pipes with a maximum diameter of 650 mm. Our range of nozzles consists of rotating jetting nozzles, radial nozzles, special nozzle sets, specialty nozzles and, new in our range, USB nozzles.











## JETTING NOZZLES

## A DIFFERENT NOZZLE FOR EACH BLOCKAGE AND DRAIN

Rioned supply a wide range of nozzles for every type of machine. Our extensive range of jetting nozzles clear all types of blockage in drains up to 650 mm.

#### ENHANCE YOUR JETTING PERFORMANCE

Choosing the correct nozzle is essential for the performance of your machine and can enhance the efficiency of your jetting machine, saving you time and money. The right nozzle provides:

- Thorough cleaning,
- Optimal rinsing effect,
- High to very high traction,
- Minimal loss of pressure,
- Minimized cleaning time,
- High-performance velocity from the water jets,
- Low friction resistance,
- No damage to sewer pipes.

Rioned supply (stainless) steel, aluminum or bronze nozzles that meet the highest efficiency demands.

#### FOR EVERY BLOCKAGE

There are two main categories of nozzles; radial jetting nozzles are optimized for unblocking of drains, while rotating nozzles are designed for cleaning. The static jet streams of radial nozzles have maximum traction power due to their rear-facing nozzles. The jets in rotating jetting nozzles have a 360° wide reach to clean the entire pipe wall. They are often used to undertake extra cleaning after unblocking a drain to prevent forming of new blockages.

There are specialty nozzles to clear drains from different contaminates like F.O.G. (Fat, Oil, Grease), soap or urine scale. Other nozzles are equipped with chains or steel wires to handle the most difficult jobs like descaling of lime, cement or concrete, hard grease and tree roots.

#### OPEN OR BLIND

An open jetting nozzle has forward and rear facing holes. The forward jet streams unblock and the rear jet streams provide traction. A blind jetting nozzle has only rear facing holes to provide the best possible traction, optimizing the unblocking power.

#### INSERTS

Many jetting nozzles have inserts that are replaceable. Over time, the water wears out the nozzles causing a loss of pressure. Hardened steel or even ceramic nozzle inserts are most resistant to wear.

#### HOSES AND ACCESORIES

Just like the nozzle the quality of the jetting hose is essential for optimum performance. As a result of rigorous testing, Rioned has designed a hose that is lightweight, flexible and features a smooth inner core. The new Rioned MaxFlow hose has a wider inner diameter than any other comparable hose and therefore has less pressure loss, guaranteeing maximum water flow. Several accessories are available to protect the hose from premature damage, such as sharp edges.

	Cleaning	Unblocking grease and soap	Sand	Hardened deposits (lime concrete, cement etc)	Ice in drains	Roots	Washing wells and pumps
Standard jetting nozzle	•	•	•				
S31	•	•	•				
Front jetter							••
High yield jetting nozzle	••	•	•				
Rocket jetting nozzle black	•	••	•	••			
Granate	•	••	•	••			
Torpedo	•	••	•	••			
Quattro set	•		•	••	••		
Standard rotating jetting nozzle	••	••	•				
Tornado	•	••	•	••	••	•	
Buster	•	••	•	••	•	•	
Blizzard	•	••		••	••	••	
Root cutter		•		•	••	••	
Sand shoe			••				

• Possible

•• Best solution









### NOZZLE SETS AND SPECIALTY NOZZLES

Rioned offer two complete nozzle kits with a complete range of tools for different applications. The Basic kit includes the nozzles every professional sewer cleaner working in residential and commercial areas should have in his toolbox. The nozzles in the Professional kit are for the most demanding jobs in larger diameter pipes.

#### THE BASIC CONTAINS:

- Two mini jetting nozzles 1/8" (open and blind) suitable for a mini high-pressure jetting hose
- S31
  - High efficiency jetting nozzle
  - Front jetter
  - Granate jetting nozzle
  - Quattro set
  - Stainless steel rotating jetting nozzle
  - Nozzle needles
  - Universal lubricating oil

#### THE PROFISET CONTAINS:

- Two mini jetting nozzles 1/8" (open and blind) suitable for a mini high-pressure jetting hose
- S31
- High-efficiency jetting nozzle
- Front jetter
- Rotating jetting nozzle tempered steel
- Tornado
- Quattro set
- Torpedo
- Sand shoe
- Nozzle needles
- Universal lubricating oil

### BLIZZARD (WARTHOG) JETTING NOZZLE

The Warthog jetting nozzle offers unrivalled performance and is among the most popular nozzles in the industry. It easily removes grease, cuts roots, clears ice and soil blockages. The hydraulically speed controlled jets provide a powerful spray-beam for both cleaning and unblocking purposes. Numerous centralizer accessories are available to position the jet in different sized drains.

	Mini	Small	Large	Extra large
Diameter	48 mm	48 mm	79 mm	107 mm
Length	67 mm	112 mm	191 mm	231 mm
Design	Stainless steel, open			
Water flow	15 - 45 lpm	27 - 75 lpm	42 - 150 lpm	190 - 300 lpm
Pressure	275 / 4000	275 / 4000	550 / 8000	200 / 3000 bar/psi
Connection	3/8"	1/2"	1/2" of 3/4"	1"
lleese	Drains with Ø 75 - 900 mm 90° bends starting from:			
Usage	75 mm	110 mm	250 mm	300 mm
Rotation speed	300 - 500 rpm	200 - 500 rpm	150 - 300 rpm	150 - 300 rpm

### **BUSTER JETTING NOZZLE**

Made for the most difficult obstructions, but relatively lightweight, it hits, cuts and scrapes through everything.

The Buster is supplied as a set, consisting of a body, three jetting nozzles and accessories including:

- Link chains for hardened blockages (limescale, cement or concrete)
- Industrial chains, sharp enough to tackle grease or smaller roots
- Steel wires to scrape the pipes clean.

The set also contains a cutting point to drill through blockages.





Diameter

Length

Design knives

Water flow

Pressure

Usage

Connection

Standard knives

Optional knives

Standard skids

Optional skids

Hydraulic root cutter

Tempered steel

Open

1/2"

Starting from 100 mm

200 mm (knife included)

40 - 120 lpm / 9 - 27 gpm

Drains with Ø 100 - 350 mm

Max 140 bar / 2100 psi

Ø 100, 150 or 200 mm

Ø 125, 225 or 250 mm

Ø 100, 150 or 200 mm

Ø 125, 225 or 250 mm



Diameter	50 mm
Length	65 mm
Design	Tempered stainless steel, open and blind
Water flow	30 - 120 lpm / 7 - 27 gpm
Pressure	80 - 300 bar / 1130 - 4230 psi
Connection	1/2"
Usage	Drains with Ø 80 - 250 mm 90° bends starting from Ø 90 mm
Rotation speed	Depending on the capacity of the machine

Hydraulic root cutter Maxi

Starting from 150 mm

310 mm (knife included)

135 - 230 lpm / 30 - 51 gpm

Drains with Ø 150 - 500 mm

Ø 150, 200, 250, 300 or 375 mm

Ø 150, 200, 250, 300 or 375 mm

Max 140 bar / 2100 psi

Tempered steel

Open

3/4"

### HYDRAULIC ROOT CUTTER

The best solution for drains that are blocked by roots, hard grease, compacted sand or soil. Rioned root cutters are powerful, reliable and easy to use. They consist of a central body with knives in different sizes and matching skids to keep them centralized in the drain. The knives have sharp angular teeth at front and rear.

Change to Rioned supply two types of root cutter, the standard and the Maxi. The Maxi is for highpressure jetting machines and combination units with more water flow and bigger connections.

All root cutters come as a complete set in a carrying box. Each set contains:

- Standard knives
- Standard skids
- Transport box
- Grease/waternipple
- Mounting set
- Grease gun



Hydraulic root cutter



Hydraulic root cutter Maxi



## ROTATING JETTING NOZZLES

## STANDARD ROTATING JETTING NOZZLE STAINLESS STEEL

Rotating jetting nozzle that cleans away deposits of soap and grease and leaves drains streak free.

Diameter	40 mm
Length	85 mm
Design	Stainless steel, steel insert nozzles
Water flow	40 - 120 lpm / 9 - 27 gpm
Pressure	Max. 300 bar / 4350 psi
Connection	1/2"
Usage	Drains with Ø 90 - 200 mm 90° bends starting from 110 mm
Suitcase	Basic





#### Change to: Known as the 'super unblocker', this jetting nozzle has a special construction with a rotating ceramic part so that the water comes out in the form of a cone. This cone drills away any obstructions. At the same time the Tornado has an excellent traction.

Diameter	39 mm
Length	64 mm
Design	Stainless steel, open with insert nozzles
Water flow	30 - 120 lpm / 7 - 27 gpm
Pressure	Max. 300 bar / 4350 psi
Connection	1/2"
Usage	Drains with Ø 75 - 200 mm 90° bends starting from 110 mm
Suitcase	Basic

## STANDARD ROTATING JETTING NOZZLE TEMPERED STEEL

Rotating jetting nozzle made of tempered steel with ceramic insert nozzles.

Diameter	40 mm
Length	85 mm
Design	Stainless steel, ceramic insert nozzles
Water flow	10 - 400 lpm / 2 - 89 gpm
Pressure	Max. 300 bar / 4350 psi
Connection	1/8", 1/4", 3/8", 1/2"
Usage	Drains with Ø 32 - 250 mm 90° bends starting from 110 mm
Suitcase	Profiset





## RADIAL JETTING NOZZLES

### STANDARD JETTING NOZZLE

Rioned delivers standard nozzles with each new high-pressure jetting machine. They belong to the basic equipment and are mainly used for cleaning and clearing deposits of grease and soap in pipes in or around the house.

### S31 JETTING NOZZLE

The shorter version of the Standard jetting nozzle; also meant for unblocking pipes in or around the house. It has a strong jet stream for good cleaning. However, the S31 can move through curves and smaller pipes better because of its shorter length.

### FRONT JETTER

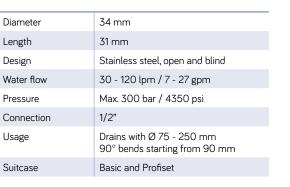
This jetting nozzle has only one front jet and no rear jets stream backwards. Therefore it is best used to clean wells and pumps or to push forward the sludge through the pipes.

### HIGH YIFI D JETTING NO77I F

Combines traction with cleaning capacity. Its high yield comes from a built-in chamber that limits the loss of pressure in the jetting nozzle. Its cleaning capacity comes from two spray rings giving jet streams at different angles.

-				
	Diameter	38 mm		
	Length	46 mm		
	Design	Stainless steel, open and blind		
	Water flow	40 - 120 lpm / 9 - 27 gpm		
	Pressure	Max. 300 bar / 4350 psi		
	Connection	1/2"		
	Usage	Drains with Ø 90 - 300 mm 90° bends starting from 110 mm		
	Suitcase	Basic		

Diameter	16 - 50 mm
Length	17 - 60 mm
Design	Stainless steel, open and blind
Water flow	10 - 120 lpm / 2 - 27 gpm
Pressure	Max. 300 bar / 4350 psi
Connection	1/8", 1/4", 3/8", 1/2"
Usage	Drains with Ø 32 - 250 mm 90° bends starting from 39 mm
Suitcase	Basic and Profiset

















## **RADIAL JETTING** NOZZLES

### **GRANATE JETTING NOZZLE**

A standard jetting nozzle for larger diameter pipes. It also has an excellent traction.

Diameter	50 mm
Length	75 mm
Design	Stainless steel, open with insert nozzles
Water flow	40 - 120 lpm / 9 - 27 gpm
Pressure	Max. 300 bar / 4350 psi
Connection	1/2"
Usage	Drains with Ø 90 - 250 mm 90° bends starting from 150 mm
Suitcase	Basic



### TORPEDO JETTING NOZZLE

The Torpedo nozzle is the bigger brother to the Granate. Suited for large pipe diameters. The rear jets provide maximum traction.

Diameter	75 mm
Length	125 mm
Design	Stainless steel, open with insert nozzles
Water flow	40 - 400 lpm / 9 - 89 gpm
Pressure	Max. 300 bar / 4350 psi
Connection	1" (if necessary adapter ring 1" to 1/2" or 3/4")
Usage	Drains with Ø 150 - 500 mm 90° bends starting from 200 mm
Suitcase	Profiset



#### **OUATTRO SET JETTING NOZZLE-**The tapering jetting nozzle is best for difficult

obstructions. It cuts, breaks and and removes them. The Quattro set is also the ideal tool to deal with ice in the pipes.

Diameter	18 - 50 mm	
Length	28 - 85 mm	
Design	Tempered steel, open	
Water flow	17 - 400 lpm / 4 - 89 gp	
Pressure	Max. 300 bar / 4350 psi	
Connection	1/8", 1/4", 1/2", 3/4"	
Usage	Drains with Ø 32 - 500 mm 90° bends (depending on the size) starting from 50 mm	
Suitcase	Basic and Profiset	
Diameter	97 - 160 mm	
Diameter Length	97 - 160 mm 195 - 260 mm (without coupling)	
Length	195 - 260 mm (without coupling)	
Length Design	195 - 260 mm (without coupling) Aluminium / bronze, open	
Length Design Water flow	195 - 260 mm (without coupling) Aluminium / bronze, open 30 - 400 lpm	
Length Design Water flow Pressure	195 - 260 mm (without coupling) Aluminium / bronze, open 30 - 400 lpm Max. 200 bar / 2900 psi	
Length Design Water flow Pressure Connection	195 - 260 mm (without coupling) Aluminium / bronze, open 30 - 400 lpm Max. 200 bar / 2900 psi 1/2", 3/4", 1" Drains with Ø starting from 250 mm	



### SAND SHOE

Designed to clear away sand and stones. Because of its shape, the sand shoe remains flat on the bottom of the sewer. Therefore they are extremely suitable to clean the bottom of wider drains. They are capable to replace many times their own weight of sand and stones. To achieve the highest efficiency, always use a sand shoe in combination with a rotating coupling.

## USB NOZZLES

Rioned is an official supplier of USB nozzles. USB is a German manufacturer of high-quality stainless steel nozzles. The nozzles are precision engineered to ensure durability and superior cleaning performance. By using only the strongest and most durable industrial materials, these nozzles are resistant to chemicals, acids and alkalis and other mineral substances. USB nozzles are designed to clean better with less water and can also be used with recycled water.

### PRIMUS

The Primus is a highly innovative and effective nozzle, specially designed for controlled rotation and use with recycled water. This user-friendly nozzle is made of hardened stainless steel and requires little maintenance. Internal parts do not need to be lubricated or replaced during the first year. Thanks to its rotating nozzle, the Primus is very effective at removing grease, hard deposits and roots in sewer and drainage pipes.

### TURBO O

The Turbo O is one of the smallest chain cutters on the market. The nozzle is made of hardened stainless steel and comes with one-piece ceramic spray heads. Despite its compact size, the Turbo O is very effective. The Turbo O uses turbine technology to deliver the highest cutting and cleaning power. Various cutting accessories make the nozzle suitable for removing roots, grease and mineral blockages. The practical storage case contains various accessories, such as extra chains, cutting heads and tools for maintenance.



Turbo O Special Case







### PIPE WOLF 3D

The Pipe Wolf 3D is a very powerful specialized nozzle, perfect for removing blockages caused by organic material. The Pipe Wolf has a hardened, tapered head with sharp edges. The head rotates at about 10,000 revolutions per minute, opening almost any blockage. The Pipe Wolf comes with one-piece ceramic inserts.

## FD2

The FD2 nozzle is specially designed for cleaning semi-open or fully open drains. The ceramic inserts are placed in the nozzle at a very small angle. Because of the small angle, the water will be sprayed almost straight back. This prevents the water from splashing out of the drain. This makes the FD2 very suitable for cleaning and unblocking gutters in city centers and petrol stations.

#### PRODUCT FEATURES

	Primus	Turbo O	Pipe Wolf 3D	FD2
Connection	1/2"	1/2"	1/2"	1/2"
Capacity (lpm)	From 40 lpm	From 30 lpm	From 40 lpm	40 lpm
Diameter (mm)	80 – 200 mm (90° turns as from DIN 110)	75 - 150 mm	75 – 150 mm (45° turns as from DIN 100)	100 mm
Dimensions (cm)	11 x 6 cm	10 x 5 cm	11 x 5 cm	12 x 5 cm
Weight (kgs)	1.4 kgs	0.4 kgs	1.1 kgs	1.2 kgs
Rear jets	3	-	-	6
Front jets	1	3	6	-
Radial jets	4	-	-	-
Turbine jets	-	3	3	-





## MAXFLOW SEWER HOSE

By using the latest technology, Rioned has developed a new type of lightweight highpressure sewer hose with a larger inner diameter. This optimizes the flow inside the hose and reduces pressure loss significantly without compromising the working or burst pressure.

Inside diameter	Length	Coupling
NW 5 (= 3/16")	10, 15 or 20 m	1/8" x 1/8"
NW 6 (= 1/4")	10, 15 or 20 m	1/8" ext. 3/8" int.
NW 8 (= 5/16")	10, 20 or 30 m	1/4" x 3/8"
NW 10 (= 3/8")	20, 30, 40 or 50 m	2" x 1/2"
NW 13 (= 1/2")	20, 40, 50, 60, 80, 100 or 120 m	2" x 1/2"
NW 16 (= 5/8")	80, 100 or 120 m	2" × 1/2"

## ACCESSORIES



#### RIOPROTECT

This "Tiger tail hose protector" protects hoses from the sharp edges of wells and manholes. It extends the life of your valuable jetting hose considerably and eases insertion into the drain. An essential accessory for the proud owner of every jetting machine!





Rioned FlexCam with self-levelling camera head

## CLEAR REPORTS AND RAZOR-SHARP IMAGES

Vincent from Kanalis shares their experience with Rioned's inspection and detection systems: "We have been doing business with Rioned for years and carry out camera inspections on a daily basis. In addition to a high-pressure sewer cleaning machine and spring machines, all our vehicles are also equipped with a camera system. This allows us to check after a blockage has been cleared whether it is really gone and whether the pipe is clean."

Kanalis has more than 40 years of experience in unblocking and cleaning pipes, emptying septic tanks and performing camera inspections in Brussels and the surrounding area. "We are very satisfied with the results we have achieved with the Rioned MaxCam and FlexCam." Vincent says. "The reporting software works very well. In addition, the self-leveling camera head and razor-sharp image quality make work much easier."

## **Inspection and Detection**

Our inspection and detection machines make your work easy. Our machines are reliable, servicefriendly and help you to easily detect, locate and inspect the problem. Easy, safe and simple to use. If you would like to have further information visit our website or contact us directly.

#### CAMERA SYSTEMS

With our camera systems you can easily detect the problem in almost any drain. Choose from a small camera for inspection in the bathroom or kitchen, or a big camera system for larger drains and sewers around houses and commercial premises. Every camera is suitable for a specific diameter range. They all move easily through the drains and provide you with excellent pictures. All functions, options and available camera heads differ for each camera.



RioSteam



RioTrack Pro 2



CompactCam

#### RIOSTEAM

The RioSteam is a portable flue gas device that faultlessly finds leaks. The machine is used for controlling air streams in ventilating flues and lines and to control density of chimneys. The RioSteam is very reliable, solidly built and also operator and service friendly. The tank for the liquid, which can often be vulnerable part of this type of machine, has been designed to reduce the risk of damage. With the RioSteam you can locate the problem within several minutes.

#### **RIOTRACK PRO 2**

The RioTrack is affordable and easy to use. The locator is the perfect alternative for customers who want to track power cables or transmitter sondes. Push buttons, clear symbols and graphic display of the signal strength make the RioTrack user-friendly. As from today, tracking problems with tracking sondes is history.

#### COMPACTCAM

The CompactCam is a professional camera system for the inspection of kitchen and bathroom pipes. The 15-metre long push cable is very flexible and can easily take sharp bends. The integrated 5" monitor gives a clear image of the situation in the pipe, under all circumstances. Videos and images are stored on the Micro-SD card, but can also be sent directly to a smartphone. To do this, an optionally available WiFi module is required.



RioTrack Pro 2

#### FLEXCAM

The FlexCam is the most complete sewer camera in its class. It features a self– levelling camera, built-in sonde and a daylight viewable screen. It has a detachable rod with connectors at both ends. In the event of damage the user can remove the damaged rod, install a new rod and continue working while the damaged rod is repaired. The MINA reporting software and App enhance the functionality and provide a second screen.

#### MAXCAM

MaxCam is the ultimate system, suitable for pipes 70 mm up to 300 mm. The MaxCam control box is the heart of the system and is packed with innovative and helpful features to enhance user efficiency and provide everything you need to carry out a professional drainage survey. It comes pre-installed with WinCan reporting software, a 44 mm self-levelling camera head, built-in sonde transmitter and a super-bright sunlight readable LCD display.

	FlexCam	MaxCam
Range	Ø 40 - 125 mm, 90° bends as from 50 mm	Ø 70 - 300 mm, 90° bends as from 90 mm
Cable length	40 metres	60 metres
Camera head	Ø 30 mm, self levelling	Ø 44 mm, self levelling
Screen	10.4"	10.4"
Location sonde	512 Hz in camera head	512 Hz in camera head
Software	Mina rapportage WinCan embedded	Mina rapportage WinCan embedded
Data	32 GB HDD, USB, SD, Wifi-enabled	32 GB HDD, USB, SD, Wifi-enabled
Battery	Li-ion, up to 9 hours usage	Li-ion, up to 9 hours usage

The MaxCam and FlexCam are both compatible with the same control box.

#### FIBERCAM+

The Fibercam+ is our top of the range inspection system for sewer professionals. The FiberCam+ is a compact and modular system that can be equipped with  $\emptyset$  55 mm self-levelling or  $\emptyset$  78 mm pan and tilt camera head. The robust stainless steel frame comes with 60 meters push-rod.



Interchangeable control unit for MaxCam and FlexCam



MaxCam





ant s.r.o. Potrubárske a inštalatérske náradie Staré grunty 17/a 841 04 Bratislava 02/ 60 10 37 21 ant@ant.sk www.ant.sk www.rioned.ant.sk



(E.

