

R.



USB nozzles are perfect for removing grease and roots

USB NOZZLES

Rioned is an official dealer 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 do extra cleaning after unblocking a drain to prevent forming of new blockages.

There are specialty nozzles to clear drains from different contaminants like F.O.G. (Fat, Oil, Grease), soap or urine scale. Others 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. Overtime 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 light-weight, flexible and features a smooth inner core. The new Rioned MaxFlow hose has 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 like sharp edges.

	Cleaning	Unblocking grease and soap	Sand	Hardened deposits (lime concrete, cement etc.)	Ice in drains	Roots	Washing wells and pumps
Standard jetting nozzles	•	•	•				
S31	•	•	•				
Front jetter							••
High yield jetting nozzle	••	•	•				
Rocket jetting nozzle black	•	••	•	••			
Granate	•	••	•	••			
Torpedo	•	••	•	••			
Quatro 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
- Quatro set
- Rotating jetting nozzle stainless steel
- 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
- Quatro 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 nozzle 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	48	79	107 mm
Length	67	112	191	231 mm
Design	stainless steel, open			
Water flow	15 - 45 lpm 3 - 10 gpm	27 - 75 lpm 6 - 17 gpm	42 - 150 lpm 9 - 33 gpm	190 - 300 lpm 42 - 67 gpm
Pressure	275 / 4000	275 / 4000	550 / 8000	200 / 3000 bar/psi
Connection	3/8"	1/2"	1/2" or 3/4"	1"
Usage	drains with Ø 75 - 900 mm 90°-bends starting from:			
	75 mm	110 mm	250 mm	300 mm
Rotation speed	300 - 500	200 - 500	150 - 300	150 - 300 rpm

BUSTER JETTING NOZZLE

Made for the most difficult obstructions, but relatively light-weight. It hits, cuts and scrapes through everything.

The Buster is delivered as a set with a body and three jetting nozzles provided with:

- 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	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

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.

Rioned supplies two types: there is a standard root cutter as well as the Maxi. The Maxi is for high pressure 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
Diameter	starting from 100 mm	starting from 150 mm
Length	200 mm (knife included)	310 mm (knife included)
Design knives	tempered steel	tempered steel
	open	open
Water flow	40 - 120 lpm / 9 - 27 gpm	135 - 230 lpm / 30 - 51 gpm
Pressure	max. 140 bar / 2100 psi	max. 140 bar / 2100 psi
Connection	1/2"	3/4", 1"
Usage	drains with Ø 100 - 350 mm	drains with Ø 150 - 500 mm
Standard knives	Ø 100, 150 or 200 mm	Ø 150, 200, 250, 300 or 375 mm
Optional knives	Ø 125, 225 or 250 mm	
Standard skids	Ø 100, 150 or 200 mm	Ø 150, 200, 250, 300 or 375 mm
Optional skids	Ø 125, 225 or 250 mm	



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 streakfree.

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

TORNADO JETTING NOZZLE



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 working on deposits of grease and soap in pipes in or around the house.

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", 3/4", 1/2", 1"
Usage	drains with Ø 32 - 250 mm 90°-bends starting from 39 mm
Suitcase	Basic and Profiset



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.

Diameter	34 mm
Length	31 mm
Design	stainless steel, open and blind
Water flow	30 - 120 lpm / 7 - 27 gpm
Pressure	max. 300 bar / 4350 psi
Connection	1/2"
Usage	drains with Ø 75 - 250 mm 90°-bends starting from 90 mm
Suitcase	Basic and Profiset



FRONT JETTER

This jetting nozzle has only 1 front jet and no jet stream backwards. Therefore it is best used to clean wells and pumps or to push forward the sludge through the pipes.

Diameter	28 mm
Length	85 mm
Design	precious steel, blind (no holes at the rear)
Water flow	30 - 400 lpm / 7 - 89 gpm
Pressure	max. 200 bar / 2900 psi
Connection	1/2"
Suitcase	Profiset



HIGH YIELD JETTING NOZZLE

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



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 from 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



QUATRO SET JETTING NOZZLE

The tapering jetting nozzle is best for difficult obstructions. It cuts, breaks and removes them. The Quatro 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", 1"
Usage	drains with Ø 32 - 500 mm 90°-bends (depending on the size) starting from 50 mm
Suitcase	Basic and Profiset



SAND SHOE

Designed to clear away sand and stones. Because of their shape, they remain 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.

Diameter	97 - 160 mm
Length	195 - 260 mm (without coupling)
Design	aluminium / bronze, open
Water flow	30 - 400 lpm / 7 - 89 gpm
Pressure	max. 200 bar / 2900 psi
Connection	1/2", 3/4", 1"
Usage	drains with Ø starting from 250 mm 90°-bends starting from 250 mm
Suitcase	Profiset

USB NOZZLES

Rioned is an official dealer 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.

PRIMUS



The Primus is a highly innovative and effective nozzle, specially designed for controlled rotation and use with recycled water. The nozzle is made of hardened stainless steel and is very user-friendly 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 suitable for removing grease, hard deposits and roots in sewer and drainage pipes.



TURBO 0

The Turbo 0 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 0 is very effective. The Turbo 0 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 0 special Case





PIPE WOLF 3D

The Pipe Wolf 3D is a very powerful and special 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	75 – 150 mm	75 – 150 mm	100 mm
Dimensions (cm)	11 x 6 cm	10 x 5 cm	11 x 5 cm	12 x 5 cm
Weight (kg)	1,4 kg	0,4 kg	1,1 kg	1,2 kg
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 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.

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" x 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!

