



BRILLIANT NOZZLES
FROM THE BLACK FOREST

PERFECTION WITH NOZZLES

Welcome to the Oskar Moser factory. We offer brilliant nozzle technology composed with the technical gemstones sapphire and ruby. They are ultra-hard, extremely wear-resistant and perfect for processing.

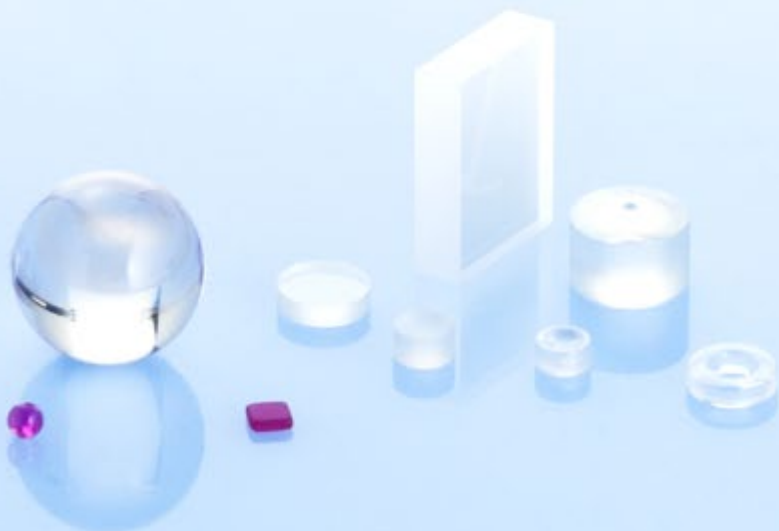
Our super-fine cleaning and trim nozzles are used in their millions in the paper industry. And for water jet cutting, or in industrial cleaning technology – for example for façade cleaning, sandblasting or paint stripping – for Oskar Moser, precision is at the heart of what we do.

In this product catalogue, you will find our current range of nozzles. In addition to these proven solutions, Oskar Moser of course also develops individually tailored nozzle components and complete assemblies. We look forward to advising you and using the latest CAD and CNC technology to develop precision plans and prototypes for you to test.



CONTENT

Precision nozzles for paper	Page 04
Cleaning with high-pressure nozzles	Page 24
Cutting with water jets	Page 30
Exact dosing with air nozzles	Page 36
Cleaning service	Page 40
Well-Advised	Page 42





PRECISION NOZZLE

For paper, cardboard, tissue and board machines, the power of the water jet is used to clean the wet sieves and press felts, and here, premium nozzles from Oskar Moser have proven themselves millions of times over.

To produce a completely coherent water jet, Oskar Moser exploits the hardness and precision of the technical gemstone. For the paper industry, ruby and sapphire are the favourites. Whether it's integrated water jet cleaning nozzles or mono, duo and trio trim nozzles for a clean edge cut, you can always rely on Oskar

Moser nozzles.

A long service life, high production speeds and low operating costs are the three pillars of our success.

Nozzles from Oskar Moser ensure that production keeps running, and running, and running.



S FOR PAPER

And by the way, our trio nozzles are the world record holder in terms of production speed: TRD 101 with 2014 m/min.

Our in-house cleaning and maintenance service ensures that our nozzles are good for the long term: we recondition used nozzles and give them back their cutting edge.

The old becomes virtually new again: test us for yourself.

Take advantage of the benefits that only Oskar Moser can offer:

- » Brilliant technology:
Oskar Moser quality
- » Robust nozzle housing:
Protection cover
- » Stress-free, reliable assembly:
EasyWork
- » Cleaning in ultrasonic baths:
EcoClean

ALL TRIM NOZZLES AT A GLANCE

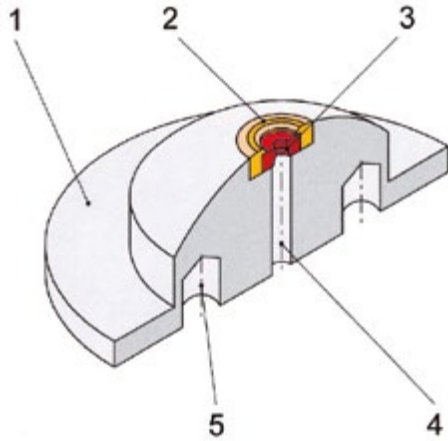
At Oskar Moser, diversity is our trump card – we offer exactly the right edge trimming nozzle for every application. Here our wide range of products at a glance – all available immediately.

Premium series trim nozzles		Jet diameter DX (mm) – pressure (bar)					
Production speed (m/min)	Model/type	Grammage (g/m ²)					Pressure (bar)
		< 50	50-80	80-120	120-170	> 170	
< 500	Mono nozzle	1 x 0.5 – 12	2 x 0.4 – 12	2 x 0.4 – 15	2 x 0.5 – 15	2 x 0.6 – 20	12
500-700	Double-jet	2 x 0.4 – 12	2 x 0.4 – 15	2 x 0.4 – 20	2 x 0.5 – 20	2 x 0.6 – 20	15
750-1000	Double-jet	2 x 0.4 – 20	2 x 0.4 – 20	2 x 0.4 – 25	2 x 0.5 – 25	2 x 0.6 – 25	20
1000-1250	Double-jet	2 x 0.4 – 25	2 x 0.4 – 25	2 x 0.4 – 30	2 x 0.5 – 30		25
1000-1250	Triple-jet	3 x 0.3 – 25	3 x 0.3 – 25	3 x 0.3 – 30	3 x 0.35 – 30		30
1250-1500	Double-jet	2 x 0.4 – 30	2 x 0.4 – 30	2 x 0.4 – 35			35
1250-1500	Triple-jet	3 x 0.3 – 30	3 x 0.3 – 30	3 x 0.3 – 35			40
1500-1750	Double-jet	2 x 0.4 – 30	2 x 0.4 – 35	2 x 0.45 – 40			
1500-1750	Triple-jet	3 x 0.3 – 30	3 x 0.3 – 35	3 x 0.3 – 40			
> 1750	Double-jet	2 x 0.4 – 30	2 x 0.4 – 40				
> 1750	Triple-jet	3 x 0.3 – 30	3 x 0.3 – 40				

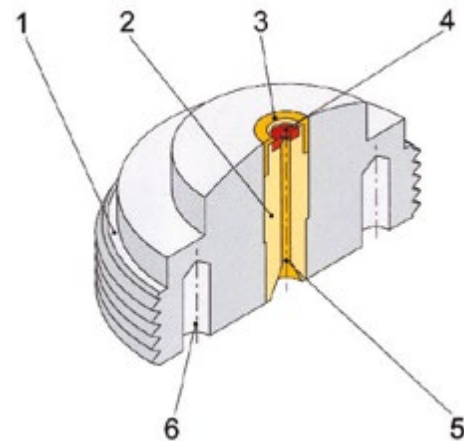


THE ORIGINAL – WITH PROTECTION COVER

Nozzles from Oskar Moser are extremely robust and reliable, because the nozzle jewel is housed and effectively protected in our special protection cover.



1. Nozzle body
2. Protection cover
3. Ruby nozzle jewel
4. Elongated flow channel for coherent water jet
5. Holes for socket



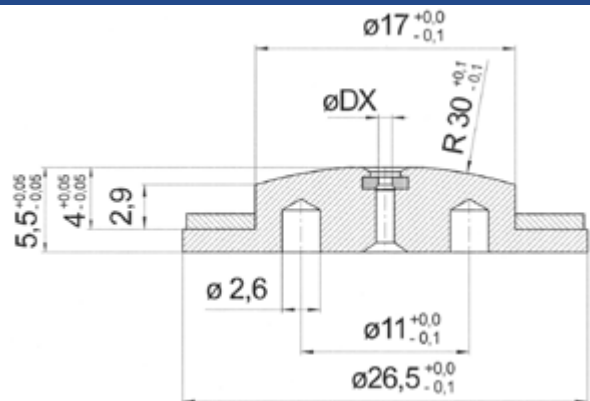
1. Nozzle body
2. Jet channel (replaceable)
3. Protection cover
4. Ruby nozzle jewel
5. Elongated flow channel for coherent water jet
6. Holes for socket

IN STAINLESS STEEL OR WITH COATING

Our trim nozzles are available in **VA steel 1.4404** or **coated** – just specify the model you require when ordering.



TYP DWR051



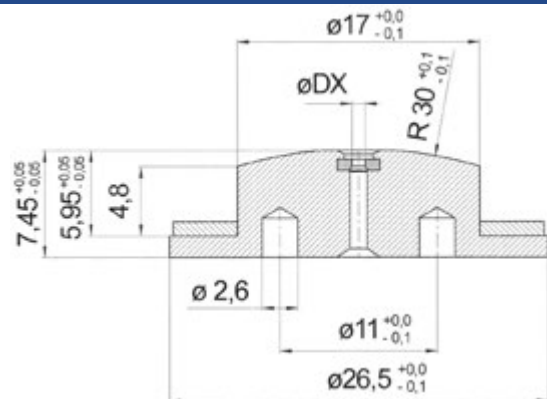
CHARACTERISTICS

- » Ruby nozzle jewel
- » Coherent water jet through elongated nozzle channel
- » Simple and reliable assembly with face pin wrench
- » Protection cover protects the jewel against brush damage
- » Stress-free, reliable jewel assembly through jewel setting, no adhesion so the nozzle jewel cannot fall out
- » Ideal for cleaning in ultrasonic bath
- » Nozzles are supplied complete with sealing ring

AVAILABLE CROSS-SECTIONS

- 0.70 mm
- 0.80 mm
- 0.90 mm
- 1.00 mm
- 1.20 mm

TYP DWR052



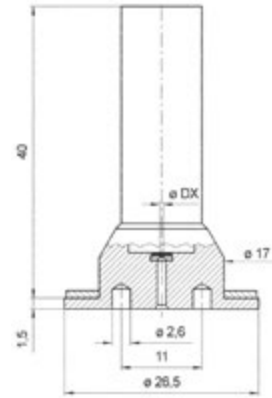
CHARACTERISTICS

- » Ruby nozzle jewel
- » Coherent water jet through elongated nozzle channel
- » Simple and reliable assembly with face pin wrench
- » Protection cover protects the jewel against brush damage
- » Stress-free, reliable jewel assembly through jewel setting, no adhesion so the nozzle jewel cannot fall out
- » Ideal for cleaning in ultrasonic bath
- » Nozzles are supplied complete with sealing ring

AVAILABLE CROSS-SECTIONS

- 0.70 mm
- 0.80 mm
- 0.90 mm
- 1.00 mm
- 1.20 mm

TYP DWR055



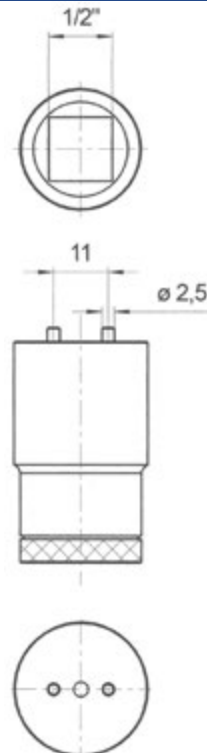
CHARACTERISTICS

- » Ruby nozzle jewel
- » Coherent water jet through elongated nozzle channel
- » Simple and reliable assembly with face pin wrench
- » Stress-free, reliable jewel assembly through jewel setting, no adhesion so the nozzle jewel cannot fall out
- » Ideal for cleaning in ultrasonic bath
- » Nozzles are supplied complete with sealing ring

AVAILABLE CROSS-SECTIONS

- 0.70 mm
- 0.80 mm
- 0.90 mm
- 1.00 mm
- 1.20 mm

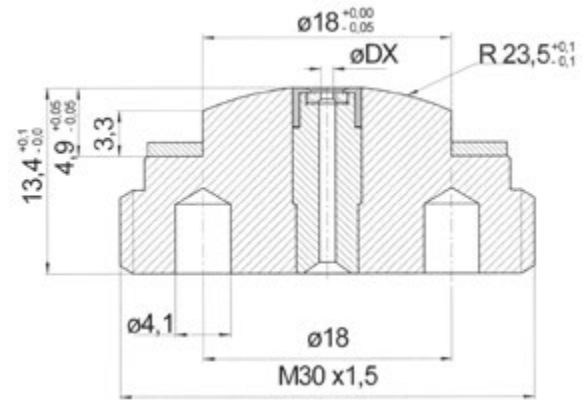
ACCESSORY SSE025



CHARACTERISTICS

- » Chrome vanadium steel / stainless steel
- » Slot: Square 1/2"
- » Centre-to-centre distance of pins: 11 mm
- » Suitable for removing DISC cleaning nozzles DWR051, DWR052 and DWR055

TYP IWR010



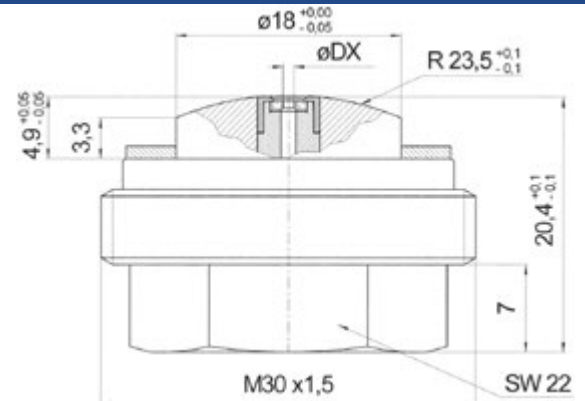
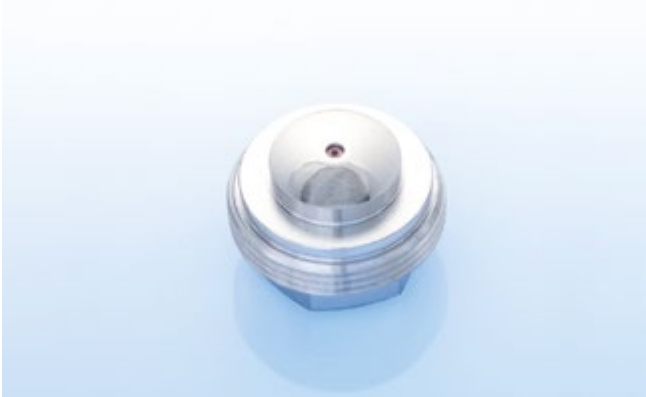
CHARACTERISTICS

- » Ruby nozzle jewel
- » Replaceable jet channel through insert technology (patented by OM)
- » Coherent water jet through elongated nozzle channel
- » Simple, reliable assembly with face pin wrench
- » Protection cover protects the jewel against brush damage
- » Stress-free, reliable jewel assembly through jewel setting, no adhesion so the nozzle jewel cannot fall out
- » Smooth surface prevents caking
- » Suitable for cleaning in ultrasonic bath (OM service)
- » Nozzles are supplied complete with sealing ring

AVAILABLE CROSS-SECTIONS

- 0.70 mm
- 0.80 mm
- 0.90 mm
- 1.00 mm
- 1.20 mm

TYP IWR011



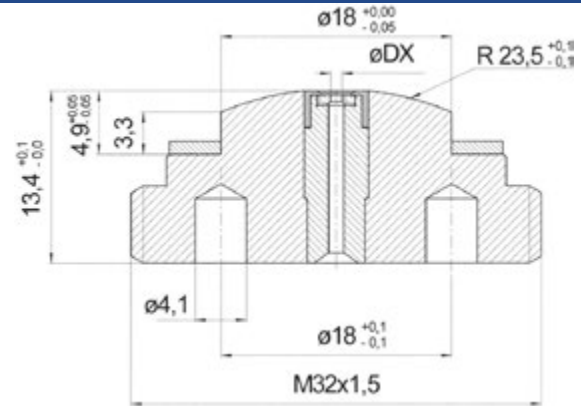
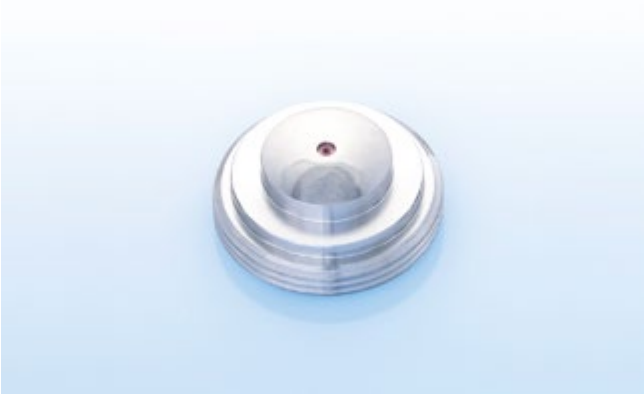
CHARACTERISTICS

- » Ruby nozzle jewel
- » Replaceable jet channel through insert technology (patented by OM)
- » Coherent water jet through elongated nozzle channel
- » Simple, reliable assembly with open-end wrench SW22
- » Protection cover protects the jewel against brush damage
- » Stress-free, reliable jewel assembly through jewel setting, no adhesion so the nozzle jewel cannot fall out
- » Suitable for cleaning in ultrasonic bath (OM service)
- » Nozzles are supplied complete with sealing ring

AVAILABLE CROSS-SECTIONS

- 0.70 mm
- 0.80 mm
- 0.90 mm
- 1.00 mm
- 1.20 mm

TYP IWR012



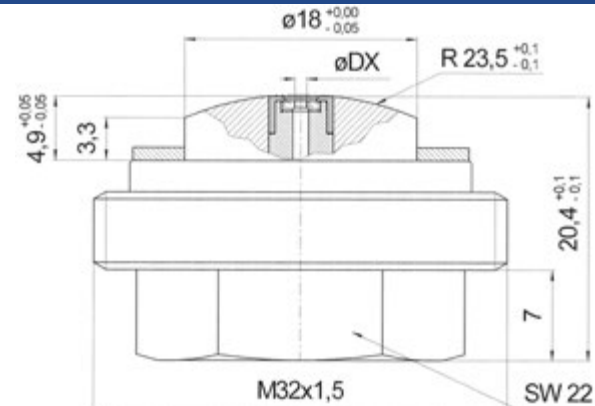
CHARACTERISTICS

- » Ruby nozzle jewel
- » Replaceable jet channel through insert technology (patented by OM)
- » Coherent water jet through elongated nozzle channel
- » Simple and reliable assembly with face pin wrench
- » Protection cover protects the jewel against brush damage
- » Stress-free, reliable jewel assembly through jewel setting, no adhesion so the nozzle jewel cannot fall out
- » Smooth surface prevents caking
- » Suitable for cleaning in ultrasonic bath (OM service)
- » Nozzles are supplied complete with sealing ring

AVAILABLE CROSS-SECTIONS

- 0.70 mm
- 0.80 mm
- 0.90 mm
- 1.00 mm
- 1.20 mm

TYP IWR013



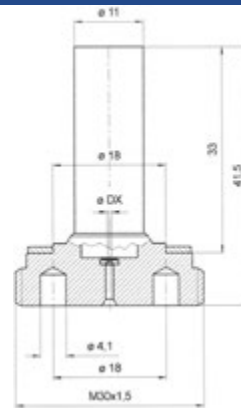
CHARACTERISTICS

- » Ruby nozzle jewel
- » Replaceable jet channel through insert technology (patented by OM)
- » Coherent water jet through elongated nozzle channel
- » Simple, reliable assembly with open-end wrench SW22
- » Protection cover protects the jewel against brush damage
- » Stress-free, reliable jewel assembly through jewel setting,

AVAILABLE CROSS-SECTIONS

- 0.70 mm
- 0.80 mm
- 0.90 mm
- 1.00 mm
- 1.20 mm

TYP IWR040



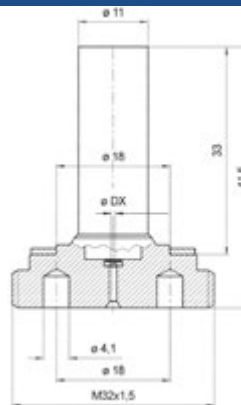
CHARACTERISTICS

- » Ruby nozzle jewel
- » Replaceable jet channel through insert technology (patented by OM)
- » Coherent water jet through elongated nozzle channel
- » Simple and reliable assembly with face pin wrench
- » Stress-free, reliable jewel assembly through jewel setting, no adhesion so the nozzle jewel cannot fall out
- » Smooth surface prevents caking
- » Suitable for cleaning in ultrasonic bath (OM service)
- » Nozzles are supplied complete with sealing ring

AVAILABLE CROSS-SECTIONS

- 0.70 mm
- 0.80 mm
- 0.90 mm
- 1.00 mm
- 1.20 mm

TYP IWR041



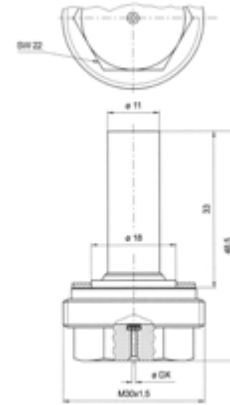
CHARACTERISTICS

- » Ruby nozzle jewel
- » Replaceable jet channel through insert technology (patented by OM)
- » Coherent water jet through elongated nozzle channel
- » Simple and reliable assembly with face pin wrench
- » Stress-free, reliable jewel assembly through jewel setting, no adhesion so the nozzle jewel cannot fall out
- » Smooth surface prevents caking
- » Suitable for cleaning in ultrasonic bath (OM service)
- » Nozzles are supplied complete with sealing ring

AVAILABLE CROSS-SECTIONS

- 0.70 mm
- 0.80 mm
- 0.90 mm
- 1.00 mm
- 1.20 mm

TYP IWR042



CHARACTERISTICS

- » Ruby nozzle jewel
- » Replaceable jet channel through insert technology (patented by OM)
- » Coherent water jet through elongated nozzle channel
- » Simple, reliable assembly with open-end wrench SW22
- » Stress-free, reliable jewel assembly through jewel setting, no adhesion so the nozzle jewel cannot fall out
- » Suitable for cleaning in ultrasonic bath (OM service)
- » Elongated inlet protects nozzle inlet from dirt
- » Nozzles are supplied complete with sealing ring

AVAILABLE CROSS-SECTIONS

- 0.70 mm
- 0.80 mm
- 0.90 mm
- 1.00 mm
- 1.20 mm

TYP IWR043



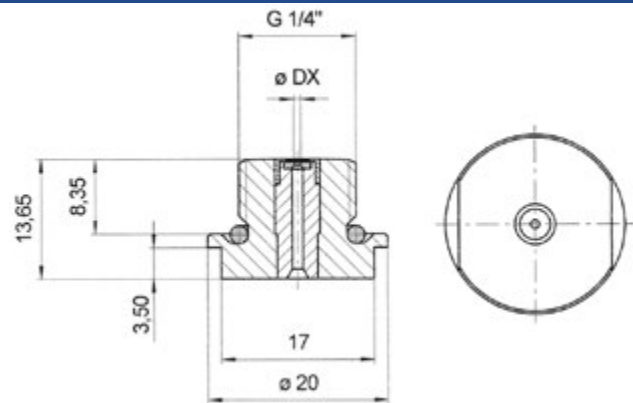
CHARACTERISTICS

- » Ruby nozzle jewel
- » Replaceable jet channel through insert technology (patented by OM)
- » Coherent water jet through elongated nozzle channel
- » Simple and reliable assembly with open-end wrench SW22
- » Stress-free, reliable jewel assembly through jewel setting, no adhesion so the nozzle jewel cannot fall out
- » Suitable for cleaning in ultrasonic bath (OM service)
- » Nozzles are supplied complete with sealing ring

AVAILABLE CROSS-SECTIONS

- 0.70 mm
- 0.80 mm
- 0.90 mm
- 1.00 mm
- 1.20 mm

TYP IWR020



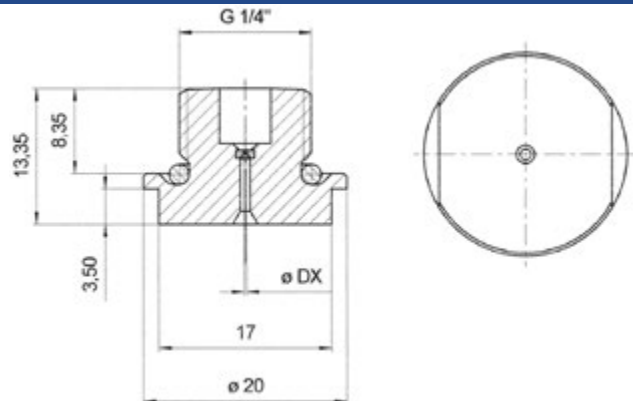
CHARACTERISTICS

- » Ruby nozzle jewel
- » Replaceable jet channel through insert technology (patented by OM)
- » Coherent water jet through elongated nozzle channel
- » Simple and reliable assembly with standard open-end wrench SW17
- » Protection cover protects the jewel against brush damage
- » Stress-free, reliable jewel assembly through jewel setting, no adhesion so the nozzle jewel cannot fall out
- » Smooth surface prevents caking
- » Suitable for cleaning in ultrasonic bath (OM service)
- » Nozzles are supplied complete with sealing ring

AVAILABLE CROSS-SECTIONS

- 0.70 mm
- 0.80 mm
- 0.90 mm
- 1.00 mm
- 1.20 mm

TYP HWR021



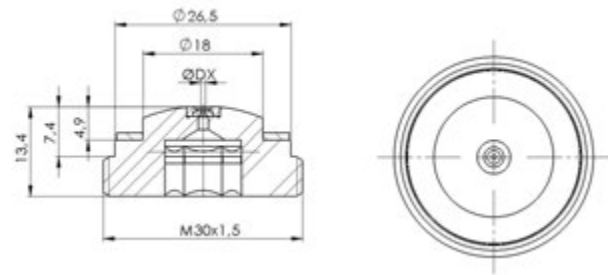
CHARACTERISTICS

- » Ruby nozzle jewel
- » Coherent water jet through elongated nozzle channel
- » Simple and reliable assembly with standard open-end wrench SW17
- » Protection cover protects the jewel against brush damage
- » Stress-free, reliable jewel assembly through jewel setting, no adhesion so the nozzle jewel cannot fall out
- » Smooth surface prevents caking
- » Suitable for cleaning in ultrasonic bath (OM service)
- » Nozzles are supplied complete with sealing ring

AVAILABLE CROSS-SECTIONS

- 0.70 mm
- 0.80 mm
- 0.90 mm
- 1.00 mm
- 1.20 mm

TYP WR110



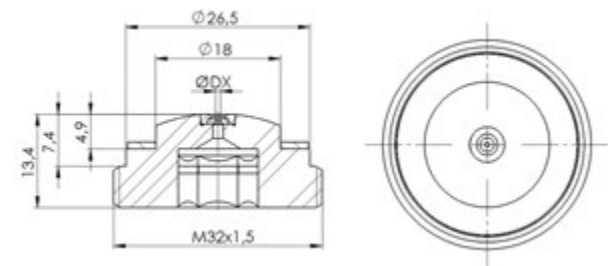
CHARACTERISTICS

- » Ruby nozzle jewel
- » Protection cover protects the jewel against brush damage
- » Stress-free, reliable jewel assembly through jewel setting, no adhesion so the nozzle jewel cannot fall out
- » Smooth surface prevents caking
- » Nozzles are supplied complete with sealing ring

AVAILABLE CROSS-SECTIONS

- 0.70 mm
- 0.80 mm
- 0.90 mm
- 1.00 mm
- 1.20 mm

TYP WR112



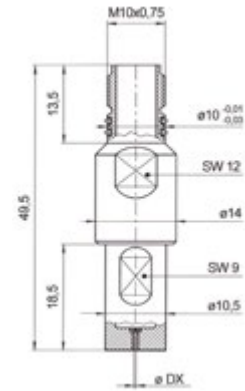
CHARACTERISTICS

- » Ruby nozzle jewel
- » Protection cover protects the jewel against brush damage
- » Stress-free, reliable jewel assembly through jewel setting, no adhesion so the nozzle jewel cannot fall out
- » Smooth surface prevents caking
- » Nozzles are supplied complete with sealing ring

AVAILABLE CROSS-SECTIONS

- 0.70 mm
- 0.80 mm
- 0.90 mm
- 1.00 mm
- 1.20 mm

TYP MDR050



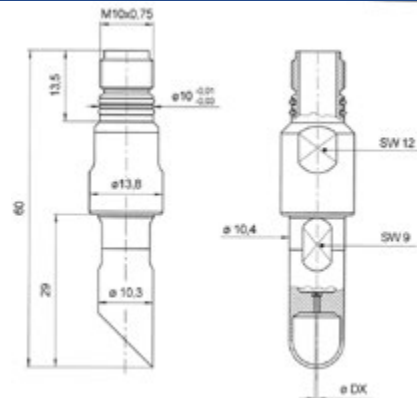
CHARACTERISTICS

- » Mono nozzle in VA steel 1.4404
- » Sapphire nozzle jewel
- » Straight model
- » Water pressure up to 40 bar
- » Connection thread M 10 x 0.75

AVAILABLE CROSS-SECTIONS

- 0.25 mm
- 0.30 mm
- 0.35 mm
- 0.40 mm
- 0.50 mm
- 0.65 mm

TYP MDR051



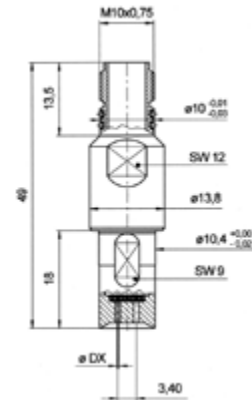
CHARACTERISTICS

- » Mono nozzle in VA steel 1.4404
- » Sapphire nozzle jewel
- » Model with drip edge 45 degrees
- » Water pressure up to 40 bar
- » Connection thread M 10 x 0.75

AVAILABLE CROSS-SECTIONS

- 0.25 mm
- 0.30 mm
- 0.35 mm
- 0.40 mm
- 0.50 mm
- 0.65 mm

TYP DRD075



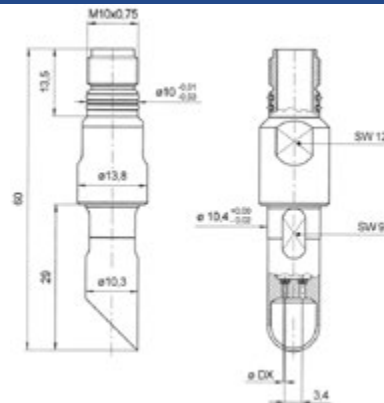
CHARACTERISTICS

- » Duo nozzle in VA steel 1.4404
- » Sapphire nozzle jewels
- » Straight model
- » Water pressure up to 40 bar
- » Connection thread M 10 x 0.75

AVAILABLE CROSS-SECTIONS

- 0.25 mm
- 0.30 mm
- 0.35 mm
- 0.40 mm
- 0.50 mm
- 0.65 mm

TYP DRD076



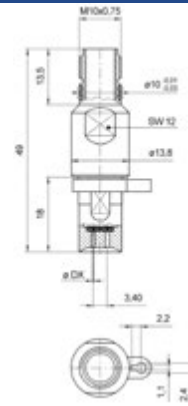
CHARACTERISTICS

- » Duo nozzle in VA steel 1.4404
- » Sapphire nozzle jewels
- » Model with drip edge 45 degrees
- » Water pressure up to 40 bar
- » Connection thread M 10 x 0.75

AVAILABLE CROSS-SECTIONS

- 0.25 mm
- 0.30 mm
- 0.35 mm
- 0.40 mm
- 0.50 mm
- 0.65 mm

TYP DRDS077



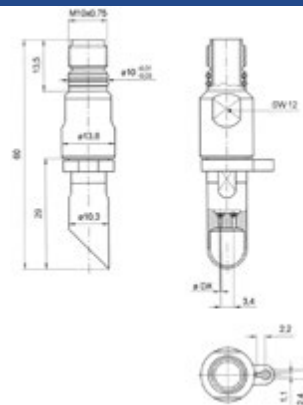
CHARACTERISTICS

- » Duo nozzle in VA steel 1.4404
- » Sapphire nozzle jewels
- » Straight model
- » Water pressure up to 40 bar
- » Connection thread M 10 x 0.75
- » With adjustment ring

AVAILABLE CROSS-SECTIONS

- 0.25 mm
- 0.30 mm
- 0.35 mm
- 0.40 mm
- 0.50 mm
- 0.65 mm

TYP DRDSR078



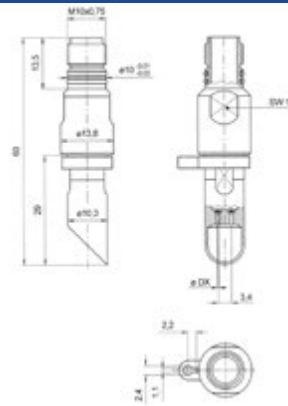
CHARACTERISTICS

- » Duo nozzle in VA steel 1.4404
- » Sapphire nozzle jewels
- » Model with drip edge 45 degrees
- » Water pressure up to 40 bar
- » Connection thread M 10 x 0.75
- » With adjustment ring

AVAILABLE CROSS-SECTIONS

- 0.25 mm
- 0.30 mm
- 0.35 mm
- 0.40 mm
- 0.50 mm
- 0.65 mm

TYP DRDSL079



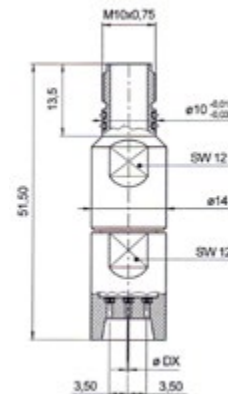
CHARACTERISTICS

- » Duo nozzle in VA steel 1.4404
- » Sapphire nozzle jewels
- » Model with drip edge 45 degrees
- » Water pressure up to 40 bar
- » Connection thread M 10 x 0.75
- » With adjustment ring

AVAILABLE CROSS-SECTIONS

0.25 mm
0.30 mm
0.35 mm
0.40 mm
0.50 mm
0.65 mm

TYP TRD100



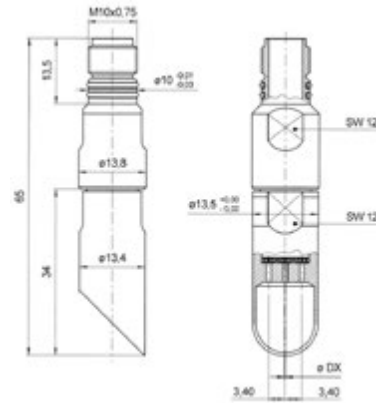
CHARACTERISTICS

- » Trio nozzle in VA steel 1.4404
- » Sapphire nozzle jewels
- » Water pressure up to 40 bar
- » Connection thread M 10 x 0.75

AVAILABLE CROSS-SECTIONS

0.25 mm
0.30 mm
0.35 mm
0.40 mm
0.50 mm
0.65 mm

TYP TRD101



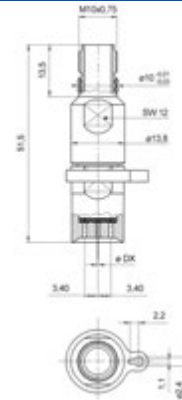
CHARACTERISTICS

- » Trio nozzle in VA steel 1.4404
- » Sapphire nozzle jewels
- » Model with drip edge 45 degrees
- » Water pressure up to 40 bar
- » Connection thread M 10 x 0.75

AVAILABLE CROSS-SECTIONS

- 0.25 mm
- 0.30 mm
- 0.35 mm
- 0.40 mm
- 0.50 mm
- 0.65 mm

TYP TRDS102



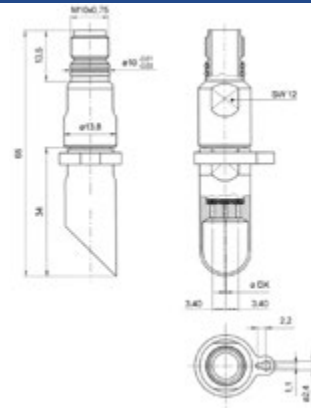
CHARACTERISTICS

- » Trio nozzle in VA steel 1.4404
- » Sapphire nozzle jewels
- » Straight model
- » Water pressure up to 40 bar
- » Connection thread M 10 x 0.75
- » With adjustment ring

AVAILABLE CROSS-SECTIONS

- 0.25 mm
- 0.30 mm
- 0.35 mm
- 0.40 mm
- 0.50 mm
- 0.65 mm

TYP TRDSR103



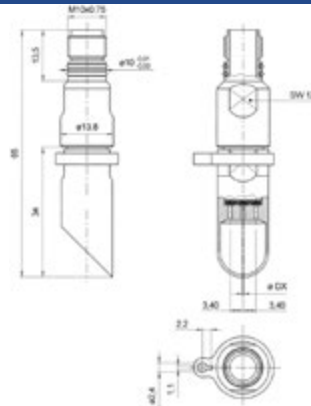
CHARACTERISTICS

- » Trio nozzle in VA steel 1.4404
- » Sapphire nozzle jewels
- » Model with drip edge 45 degrees
- » Water pressure up to 40 bar
- » Connection thread M 10 x 0.75
- » With adjustment ring

AVAILABLE CROSS-SECTIONS

- 0.25 mm
- 0.30 mm
- 0.35 mm
- 0.40 mm
- 0.50 mm
- 0.65 mm

TYP TRDSL104



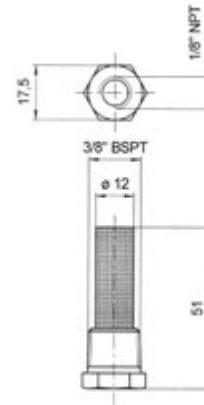
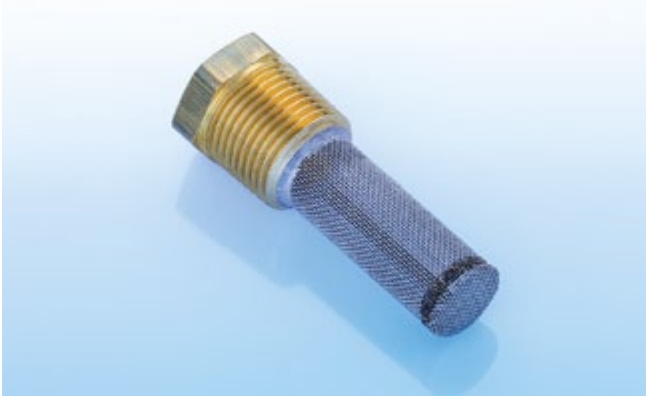
CHARACTERISTICS

- » Trio nozzle in VA steel 1.4404
- » Sapphire nozzle jewels
- » Model with drip edge 45 degrees
- » Water pressure up to 40 bar
- » Connection thread M 10 x 0.75
- » With adjustment ring

AVAILABLE CROSS-SECTIONS

- 0.25 mm
- 0.30 mm
- 0.35 mm
- 0.40 mm
- 0.50 mm
- 0.65 mm

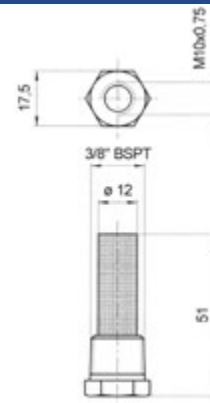
TYP FSK100



CHARACTERISTICS

- » Filter sieve 50 (mesh)
- » Housing in brass
- » Connection thread NPT 3/8" BSPT
- » Nozzle thread 1/8" NPT

TYP FSK200



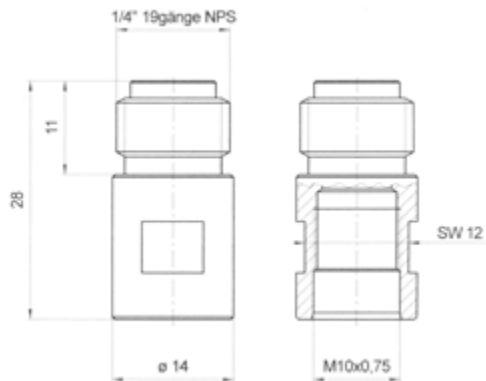
CHARACTERISTICS

- » Filter sieve 50 (mesh)
- » Housing in VA steel
- » Suitable for all Oskar Moser trim nozzles
- » Connection thread NPT 3/8" BSPT
- » Nozzle thread M 10 x 0.75

AVAILABLE CROSS-SECTIONS

- 0.25 mm
- 0.30 mm
- 0.35 mm
- 0.40 mm
- 0.50 mm
- 0.65 mm

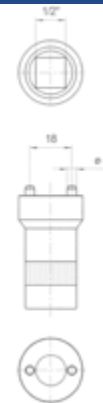
ADAPTER



CHARACTERISTICS

- » Housing in VA steel
- » Connection thread 1/4" 19-pitch NPS
- » Nozzle thread M 10 x 0.75

ZUBEHÖR SSE 040



CHARACTERISTICS

- » Chrome vanadium steel/stainless steel
- » Slot: Square 1/2"
- » Centre-to-centre distance of pins: 18 mm
- » Suitable for removing cleaning nozzles IWR from Oskar Moser



CLEANING WITH HIGH

Our nozzles put the pressure on and ensure clean conditions in industrial cleaning technology. At Oskar Moser, the complex process of jewel finishing is done in-house, guaranteeing the best quality.

Oskar Moser nozzles hold up even under the heaviest pressure. Our trademarks are precision and a long service life.

The nozzles shown here in our latest product catalogue are only the most common variants and diameters, but Oskar Moser has more and

can do more. Because we can always offer you the right nozzle for your application.

Tell us the performance and diameter you need, and we'll advise you and develop your individual high-performance nozzle.



-PRESSURE NOZZLES

You can rely on decades of experience and expertise in brilliant technology from the Black Forest. With our proverbial Oskar Moser quality and our comprehensive service, we always put the right tools in your hands.

Surface quality, precision inlet radii: with Oskar Moser, you're on the brilliant side of industrial cleaning.

TYPE HWR030 - HWR100 ROUND JET NOZZLE



1.000
BAR / MAX



CHARACTERISTICS

- » Sapphire nozzle jewel
- » Coherent water jet
- » Spot jet with high energy density
- » Simple and reliable assembly with standard Allen wrench
- » Stress-free, reliable jewel assembly through jewel setting, no adhesion so the nozzle jewel cannot fall out

AVAILABLE Ø/TOOL SW5

0.08 mm	0.45 mm
0.10 mm	0.50 mm
0.15 mm	0.55 mm
0.20 mm	0.60 mm
0.25 mm	0.65 mm
0.30 mm	0.70 mm
0.35 mm	0.75 mm
0.40 mm	0.80 mm

HWR030

- » Thread M3-6g, Length 4mm

HWR040

- » Identical to HWR030, but in thread M4-6g, Length 4 mm

HWR050

- » Identical to HWR030, but in thread M5-6g, Length 5 mm

HWR060

- » Identical to HWR030, but in thread M6-6g, Length 6 mm

HWR080

- » Identical to HWR030, but in thread M8-6g, Length 8 mm

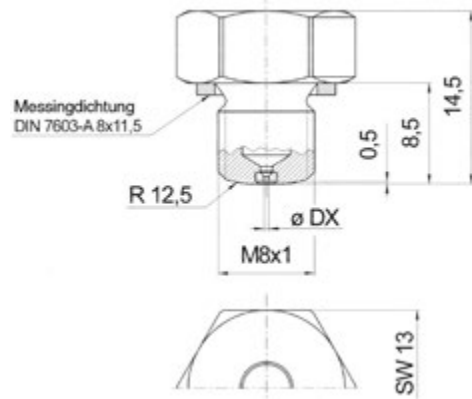
HWR100

- » Identical to HWR030, but in thread M10-6g, Length 10 mm

TYPE HWR300 ROUND JET NOZZLE



1.000
BAR / MAX



CHARACTERISTICS

- » Sapphire nozzle jewel
- » Coherent water jet
- » Spot jet with high energy density
- » Simple and reliable assembly with standard open-end wrench SW 13
- » Stress-free, reliable jewel assembly through jewel setting, no adhesion so the nozzle jewel cannot fall out

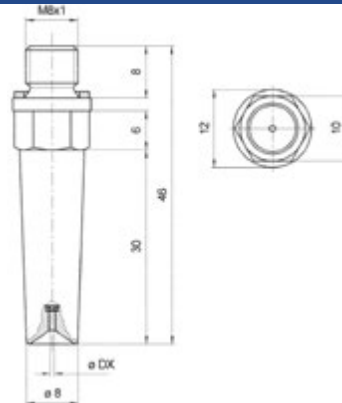
AVAILABLE Ø/TOOL SW 13

0.08 mm	0.45 mm
0.10 mm	0.50 mm
0.15 mm	0.55 mm
0.20 mm	0.60 mm
0.25 mm	0.65 mm
0.30 mm	0.70 mm
0.35 mm	0.75 mm
0.40 mm	0.80 mm

TYPE HWR301 ROUND JET NOZZLE



400
BAR / MAX



CHARACTERISTICS

- » Sapphire nozzle jewel
- » Spot jet with high energy density
- » Simple and reliable assembly with standard open-end wrench SW 10
- » Stress-free, reliable jewel assembly through jewel setting, no adhesion so the nozzle jewel cannot fall out

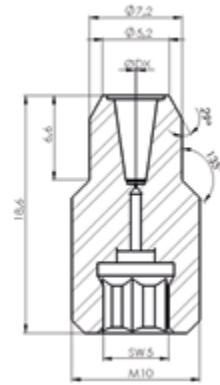
AVAILABLE Ø/TOOL SW 10

0.08 mm	0.45 mm
0.10 mm	0.50 mm
0.15 mm	0.55 mm
0.20 mm	0.60 mm
0.25 mm	0.65 mm
0.30 mm	0.70 mm
0.35 mm	0.75 mm
0.40 mm	0.80 mm

TYPE HWR110 ROUND JET NOZZLE



3.500
BAR / MAX



CHARACTERISTICS

- » Sapphire nozzle jewel
- » Absolutely coherent water jet
- » Spot jet with high energy density
- » Simple and reliable assembly with standard Allen wrench SW5
- » Stress-free, reliable jewel assembly through jewel setting – because no adhesive is used with OM jewels, the nozzle jewel cannot fall out

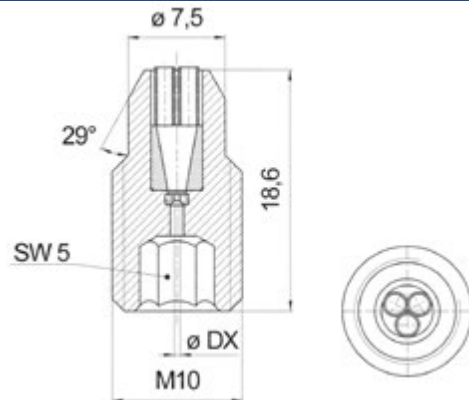
AVAILABLE CROSS-SECTIONS

0.08 mm	0.45 mm
0.10 mm	0.50 mm
0.15 mm	0.55 mm
0.20 mm	0.60 mm
0.25 mm	0.65 mm
0.30 mm	0.70 mm
0.35 mm	0.75 mm
0.40 mm	0.80 mm

TYPE HWR111 ROUND JET NOZZLE



3.500
BAR / MAX



CHARACTERISTICS

- » Sapphire nozzle jewel
- » Absolutely coherent water jet
- » Spot jet with high energy density
- » Simple and reliable assembly with standard Allen wrench SW5
- » Stress-free, reliable jewel assembly through jewel setting – because no adhesive is used with OM jewels, the nozzle jewel cannot fall out
- » Integrated jet stabiliser

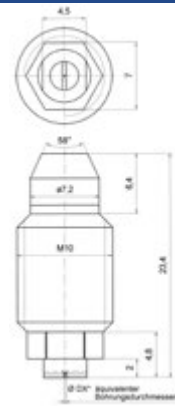
AVAILABLE CROSS-SECTIONS

0.08 mm	0.45 mm
0.10 mm	0.50 mm
0.15 mm	0.55 mm
0.20 mm	0.60 mm
0.25 mm	0.65 mm
0.30 mm	0.70 mm
0.35 mm	0.75 mm
0.40 mm	0.80 mm

TYPE FWR01 FLAT JET NOZZLE



400
BAR / MAX

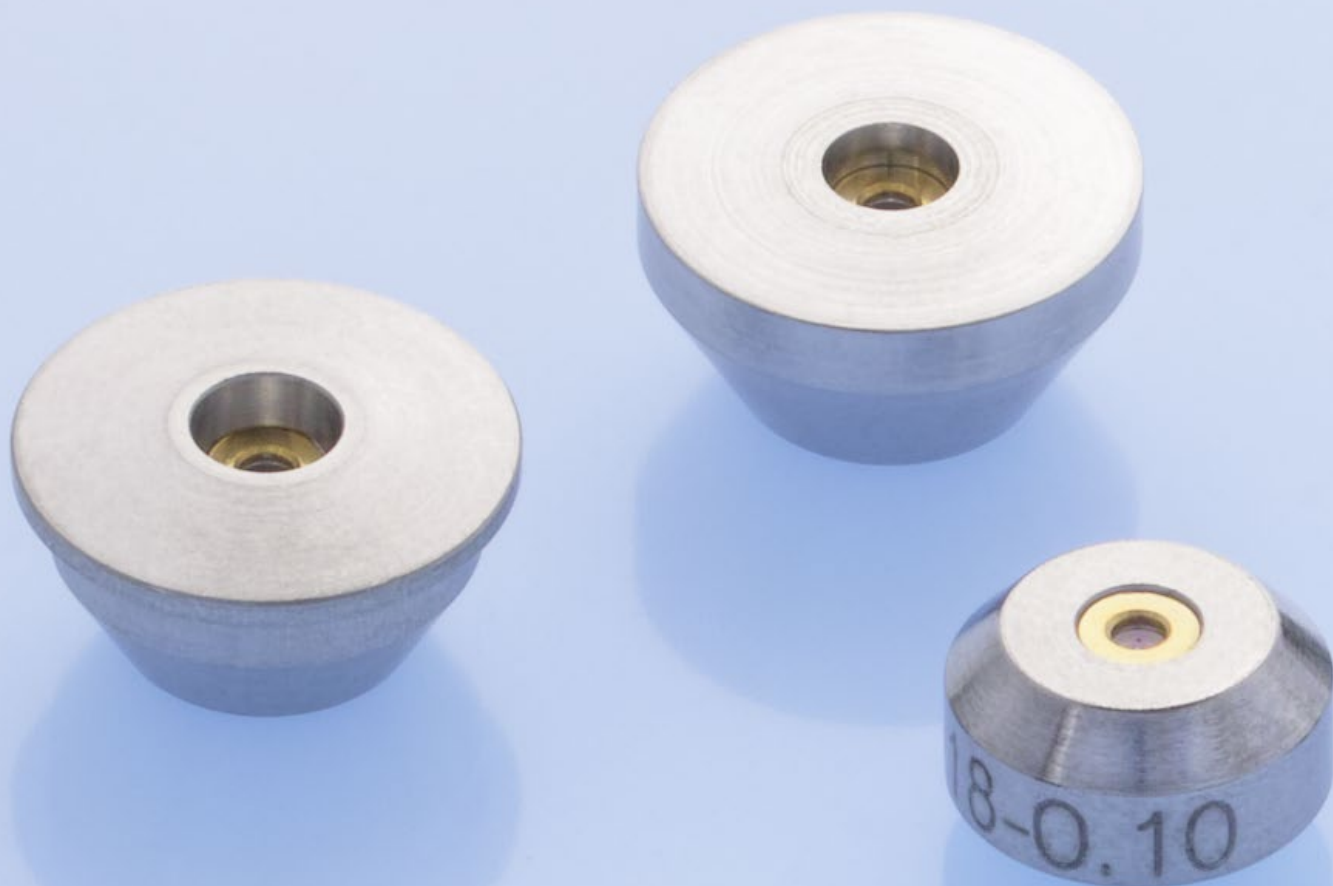


CHARACTERISTICS

- » Flat jet nozzle
- » Jet angle: 20 - 35 degrees
- » Pressure range: 20 - 400 bar
- » Absolutely uniform jet distribution
- » Hardened nozzle insert

AVAILABLE Ø/TOOL SW5

0.08 mm	0.45 mm
0.10 mm	0.50 mm
0.15 mm	0.55 mm
0.20 mm	0.60 mm
0.25 mm	0.65 mm
0.30 mm	0.70 mm
0.35 mm	0.75 mm
0.40 mm	0.80 mm

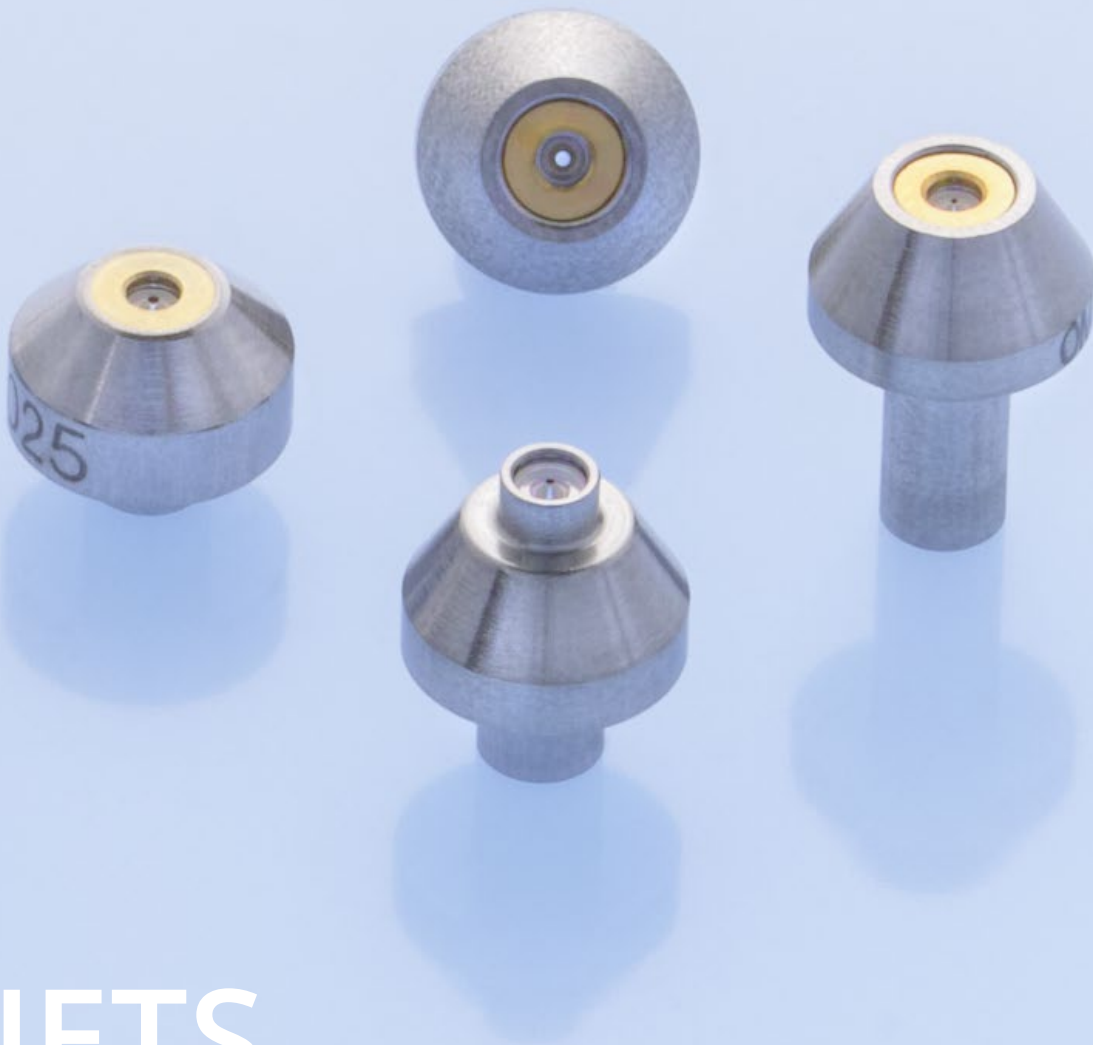


CUTTING WITH WATER

Water is soft, but if we bundle the jet in a gemstone nozzle and add pressure, the extremely thin jet is transformed into a razor-sharp tool: ideal for precise cutting.

A wide range of materials and material thicknesses are processed in high-performance cutting facilities. Sapphire nozzles from Oskar Moser make precise cuts into the material when used for abrasive water jet cutting and pure water jet cutting. High-quality cutting edges are also guaranteed, even for complex contours.

The key advantage compared with thermal techniques such as laser cutting or welding is that no structural changes occur in the material around the cutting edge, and the precision of the cutting edge made using the water jet is also far better than when using thermal techniques. The average service lives of water jet



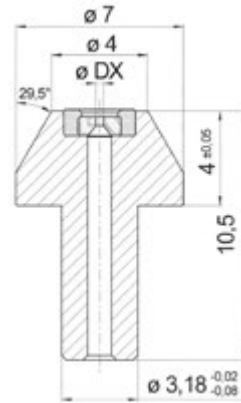
R IETS

cutting nozzles are generally over 40 operating hours. However, they are significantly influenced by pulsed operation in the facility.

With nozzles from Oskar Moser, you always get the best cut – you too can make use of the clear advantages of water jet cutting:

- » Precision cut edges with no burr formation
- » High cutting accuracy with low kerf width
- » High cutting surface quality with no finishing
- » No thermal impact on the material

TYP WS010



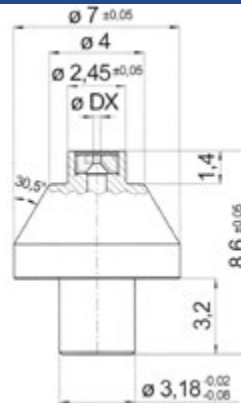
CHARACTERISTICS

- » Sapphire nozzle jewel
- » Also available with ruby nozzle jewel
- » Max pressure 4,500 bar
- » Stress-free and reliable jewel assembly with our typical jewel setting

AVAILABLE CROSS-SECTIONS

0.08 mm
 0.10 mm
 0.125 mm
 0.15 mm
 0.175 mm
 0.20 mm
 0.25 mm
 0.30 mm
 0.35 mm
 0.40 mm

TYP WS011



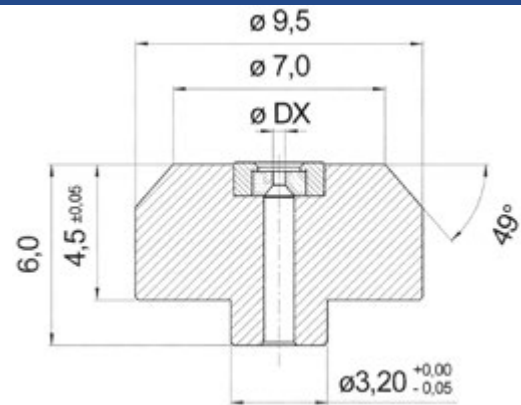
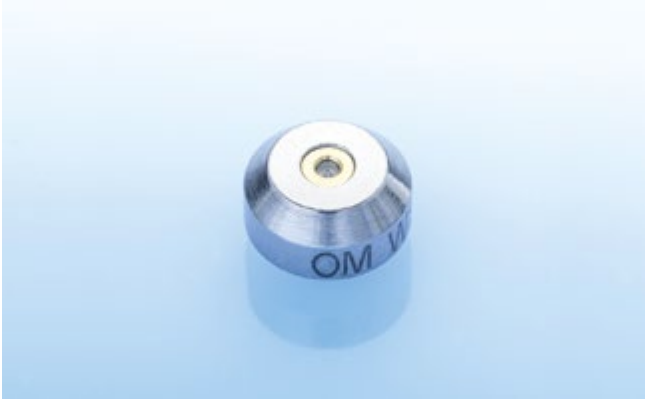
CHARACTERISTICS

- » Sapphire nozzle jewel
- » Also available with ruby nozzle jewel
- » Max pressure 4,500 bar

AVAILABLE CROSS-SECTIONS

0.08 mm
 0.10 mm
 0.125 mm
 0.15 mm
 0.175 mm
 0.20 mm
 0.25 mm
 0.30 mm
 0.35 mm
 0.40 mm

TYP WS018



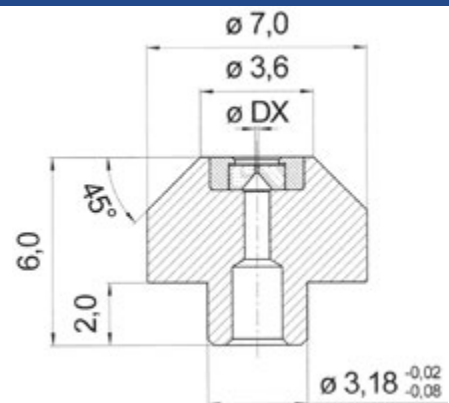
CHARACTERISTICS

- » Sapphire nozzle jewel
- » Also available with ruby nozzle jewel
- » Max. pressure 4,500 bar
- » Stress-free and reliable jewel assembly with our typical jewel setting

AVAILABLE CROSS-SECTIONS

0.08 mm
0.10 mm
0.125 mm
0.15 mm
0.175 mm
0.20 mm
0.25 mm
0.30 mm
0.35 mm
0.40 mm

TYP WS020



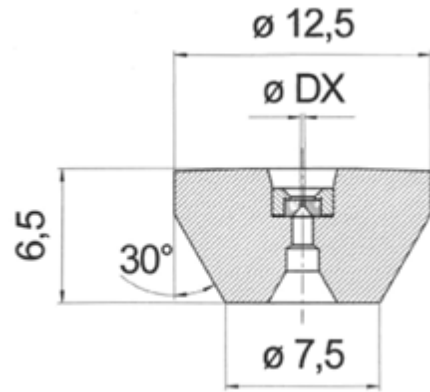
CHARACTERISTICS

- » Sapphire nozzle jewel
- » Also available with ruby nozzle jewel
- » Max. pressure 4,500 bar
- » Stress-free and reliable jewel assembly with our typical jewel setting

AVAILABLE CROSS-SECTIONS

0.08 mm
0.10 mm
0.125 mm
0.15 mm
0.175 mm
0.20 mm
0.25 mm
0.30 mm
0.35 mm
0.40 mm

TYP WS023



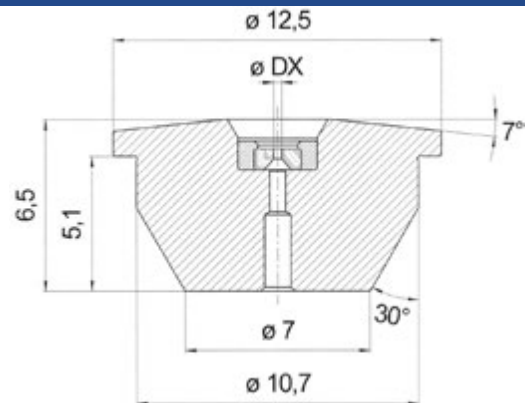
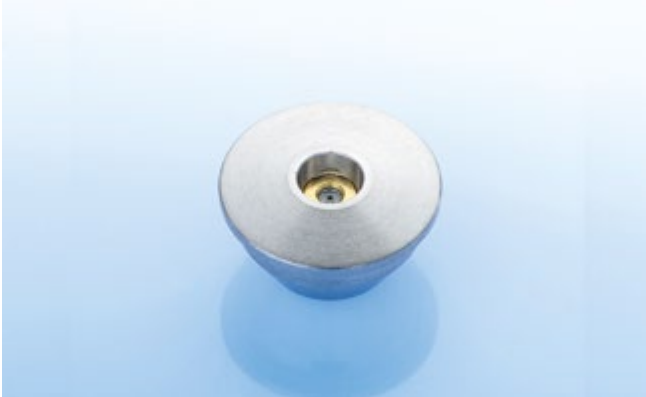
CHARACTERISTICS

- » Sapphire nozzle jewel
- » Also available with ruby nozzle jewel
- » Max. pressure 4,500 bar
- » Stress-free and reliable jewel assembly with our typical jewel setting

AVAILABLE CROSS-SECTIONS

0.08 mm
 0.10 mm
 0.125 mm
 0.15 mm
 0.175 mm
 0.20 mm
 0.25 mm
 0.30 mm
 0.35 mm
 0.40 mm

TYP WS026



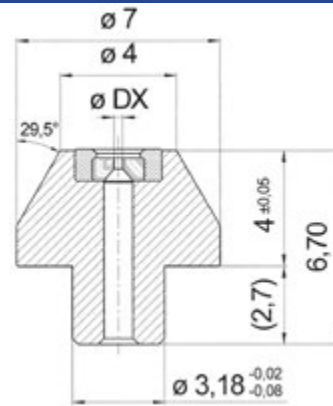
CHARACTERISTICS

- » Sapphire nozzle jewel
- » Also available with ruby nozzle jewel
- » Max. pressure 4,500 bar
- » Stress-free and reliable jewel assembly with our typical jewel setting

AVAILABLE CROSS-SECTIONS

0.08 mm
 0.10 mm
 0.125 mm
 0.15 mm
 0.175 mm
 0.20 mm
 0.25 mm
 0.30 mm
 0.35 mm
 0.40 mm

TYP WS027



CHARACTERISTICS

- » Sapphire nozzle jewel
- » Also available with ruby nozzle jewel
- » Max. pressure 4,500 bar
- » Stress-free and reliable jewel assembly with our typical jewel setting

AVAILABLE CROSS-SECTIONS

0.08 mm
0.10 mm
0.125 mm
0.15 mm
0.175 mm
0.20 mm
0.25 mm
0.30 mm
0.35 mm
0.40 mm



EXACT DOSING WITH A

Channelling air flows exactly and guiding them precisely – superfine air nozzles from Oskar Moser make it possible. We are in our element when it comes to absolute precision work with air.

When air or gases need to be supplied in a precise, dosed manner, the finest nozzle jewels made from sapphire and ruby are ideal. The particular advantage of the gemstone nozzle lies in the precision and surface quality of the jewel hole. Using critical nozzles, flow rates for air or gases can be set with a very high level of

stability. They are thus very well-suited to the calibration of all kinds of mass flow and volume flow measuring equipment for air and gases, such as gas meters, LFEs, mass flow meters and all other kinds of flow meters.



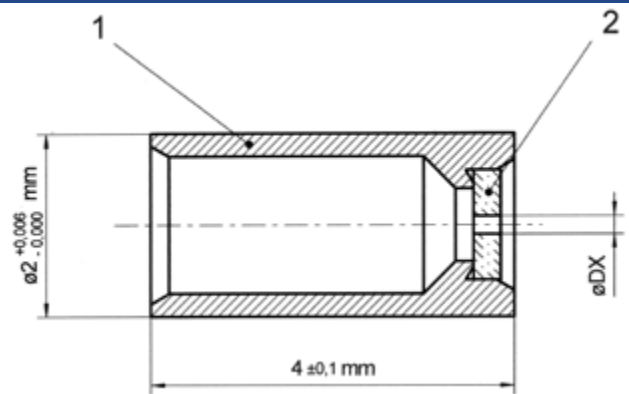
AIR NOZZLES

Oskar Moser air nozzles were first used in Germany in 1989 for precision positioning work using air bearing technology. Today, Oskar Moser air nozzles are in use and proving themselves daily around the world.

As always, the rule at Oskar Moser is: in addition to the diameters shown in the product catalogue, we are always happy to offer you individual nozzles tailored to your application and requirements.

Talk to us – we'll be happy to provide you with a comprehensive consultation. Take advantage of our expertise for your success.

TYP LD020



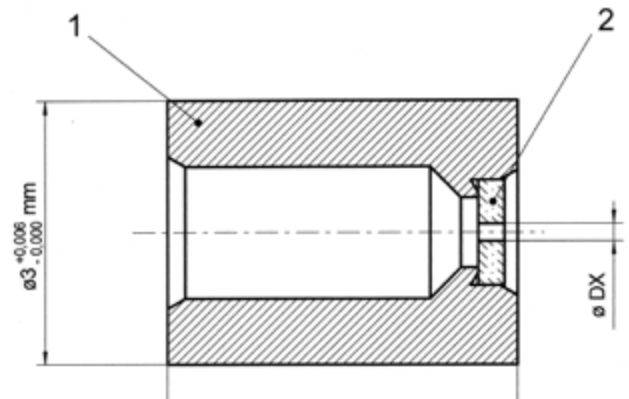
CHARACTERISTICS

- » Ruby nozzle jewel
- » Fitting in brass
- » Installation dimensions: $\varnothing 2$ mm/height 4 mm
- » Air pressure up to 6 bar

AVAILABLE CROSS-SECTIONS

0.10 mm
 0.12 mm
 0.14 mm
 0.16 mm
 0.19 mm
 0.20 mm
 0.22 mm
 0.25 mm
 0.30 mm
 0.35 mm
 0.38 mm
 0.42 mm
 0.46 mm

TYP LD030

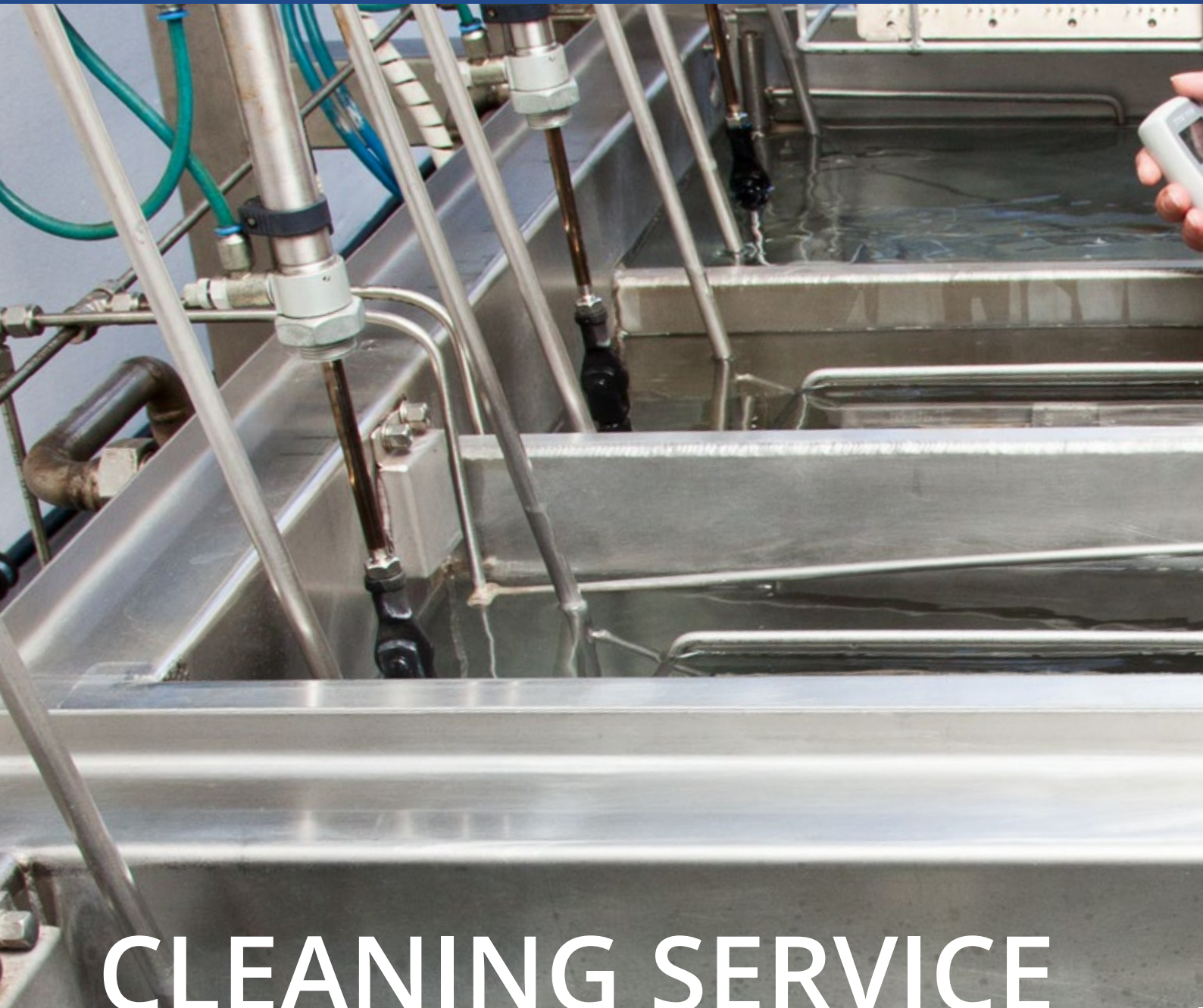


CHARACTERISTICS

- » Ruby nozzle jewel
- » Fitting in brass
- » Installation dimensions: $\varnothing 3$ mm/height 4 mm
- » Air pressure up to 6 bar

AVAILABLE CROSS-SECTIONS

0.10 mm
0.12 mm
0.14 mm
0.16 mm
0.19 mm
0.20 mm
0.22 mm
0.25 mm
0.30 mm
0.35 mm
0.38 mm
0.42 mm
0.46 mm



CLEANING SERVICE

Sustainable operations – something that has long been on offer from Oskar Moser. Our cleaning and maintenance service increases the service life of our nozzles – and their cost-effectiveness – enormously.

When the nozzles are dirty or ready for replacement, our cleaning and conditioning services kick in to clean the nozzles professionally with high temperatures, special cleaning agents and ultrasound. Ultrasonic cleaning is possible because no adhesive is used with Oskar Moser nozzle jewels – this prevents the nozzle jewel

from falling out. A clear benefit to you.

In a final inspection under the microscope, we then examine the inlet area for damage. If a nozzle is damaged irreparably, we replace the insert with ruby jewel hole and the jet channel for INT nozzles. This costs only 50%



of the original price.

Saving resources and operating costs – Oskar Moser has the brilliant solution. With our in-house service for cleaning and maintenance. Test us for yourself!

Foresight pays: to keep downtime to a minimum, we offer a regular check of the nozzles in use, which means that they can be cleaned and/or replaced in good time – while your operations keep running smoothly.

Brilliant technology for your success.
Original from Oskar Moser.



WELL-ADVISED

Small gemstones are a big topic: the diversity of geometries, applications and possible uses is enormous. This is where our development and consulting services come in for you: alternative materials, quantities, dates and costs are one thing. The other is integration of ideas, assembly analysis and an all-round complete solution. Part of this is also our individual prototype service: after all, brilliant technology mostly initially comes into the world as a shiny individual piece, then it shows what it can do and successfully enters series production.

So, you see: there is a lot to talk about. Let's sit down together soon!





Oskar Moser Technische Edelsteine GmbH
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www.oskar-moser.de