

## Safety first! ENESKApostprocess 5.0

Protection against health hazards and dust explosions





# Next Generation in the topic of 3D post-processing.

Dear ladies and gentlemen,

with the **ENESKApostprocess**, joke launched a unique workstation for the post-processing of 3D printed parts in 2019, which prevents health risks and the danger of dust explosions when post-processing 3D printed parts. In a completely enclosed workspace with a viewing window and sealed manual inlets, machining steps can be carried out on the 3D workpiece without the finest dust particles entering the operator's lungs. **Any respirable or explosive powders and dusts are safely extracted**.

The new ENESKApostprocess 5.0 is the logical further development of the highly acclaimed workstation:

The work area has been greatly enlarged (by 50% to 560 liters) so that large-volume 3D printed components weighing up to 250 kg can now be processed conveniently and efficiently. Large, heavy workpieces can be loaded from the front using a forklift truck or by crane through a special flap opening at the top. A large flap with a full-surface window made of laminated safety glass provides an optimum view of the workpiece being processed. At the same time, it is extremely break-proof and also protects against flying material residues. The large front flap can be operated with one hand, but only when the large signal lights are set to "blue" and the electromagnetic safety device allows access. Conversely, working inside is only possible if the flap is reliably and tightly closed.

Connections for many pneumatic or electric tools are located in the interior as well as an integrated ENESKAmicro control unit at the front. Hand inlets that are 50 % larger also improve tool operation inside and make the new generation even more ergonomic.

Larger support residues and removal chips are collected in a drawer under the work surface. Easy to pull out and vacuum out.

The extraction system cleans 99.95 % of the air in the work chamber and therefore also meets the strict HEPA 13 filter standard. The maintenance-friendly filter unit stands on its own castors and can be removed from the rear without a forklift or pallet truck.

Compact: With all the new features, the required footprint has only grown minimally (10 cm in length and width).

We would be glad to demonstrate the system on your premises, so that you have the time to convince yourself of the advantages of ENESKApostprocess. Please contact us.

Udo Fielenbach

Managing director, joke Technology GmbH

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### **ENESKA**postprocess



#### Improved safety standard for postprocessing

Powder removal, support removal and surface finishing, release of residual powders and dusts that may be respirable, carcinogenic, skin-irritant, and in some cases even explosive.

The standard of safety during manual postprocessing is inadequate in many companies. Protective suits are often only worn during individual work stages, and are of no help against the risk of deflagration.

Some deburring boxes are only slightly better than protective goggles, which do not retain the dust.

The ENESKApostprocess makes it possible to carry out all work stages without any contact with the materials or fine dusts — which means greater safety for both user and company.



#### Safe working instead of silicosis

The respirable dusts released during postprocessing are implicated among other aspects in cancerous and cardiovascular diseases. This is why the ENESKApostprocess is completely encased and enclosed. It is equipped with suitable, safe extraction and filtering devices.

**No dust** can escape from its working area. Before the system can be opened, there is a post-suction phase and a special cleaning process - only then does the system unlock and the finished workpiece can be removed. The system fulfils important IG Metall trade union "golden rules" for dust control, such as dust extraction directly at the point of exit.



#### No more risks of explosion

Particularly with reactive substances, such as titanium and aluminium, explosions and fires may occur simply through friction of individual particles. Therefore, all components of the ENESKApostprocess are completely earthed to prevent spark discharge. An integrated moisture separator is optionally available for highly reactive substances.

In addition, a compressed-air gun and special air showers enhance cleaning in more concealed corners. These enable fine dusts to be removed from crevices in a workpiece without any risk of explosion.



#### **Convincing versatility**

Integrated control units drive a range of electric and pneumatic tools for deburring, milling, grinding or polishing.

Up to three different micromotors and two pneumatic devices can be connected simultaneously – which reduces setup times, and allows rapid, versatile work.

A range of accessories may be used, such as magnifying glasses, turntables and magnetic clamping balls.



#### Ergonomics, user friendliness - and thinking of the user!

Concentration and relaxation during work is a prerequisite for optimum postprocessing results. The joke development team has achieved this goal by means of many details of the equipment. Coloured instructions on the touch display indicate the current status of the ENESKApostprocess. The lighting intensity can be dimmed, and the hand apertures, with a diameter of 240 mm, give the user great freedom of movement. The display also shows information about upcoming maintenance, filter cleaning and similar items. Both the lower limit of the particle count and the cleaning cycle can be adjusted on the display.

An optimal working height is perfect for the back. The ENESKApostprocess can be optionally equipped with height adjustment. The large glass dome gives a very good view of the components to be processed.



## **ENESKA**postprocess

## Advantages at a glance

- High standard of safety
- No risk of explosion or deflagration
- No permanent damage due to respirable dust
- No need for additional protective clothing
- Ergonomic working and simple operation
- Many options for connecting various tools either pneumatic or electric.

## Work steps that you can perform

- Removal of residual powder
- Separation from the substrate material
- Removal of support structures
- Deburring
- Coarse surface finishing
- Fine surface finishing
- Finish

## Materials that you can process

- Steel
- Stainless steel
- Aluminium
- Titanium
- Carbon
- Brass
- Ceramic

- PEEK
- POM
- Plastics
- Rubber-like materials
- Gypsum
- and many more



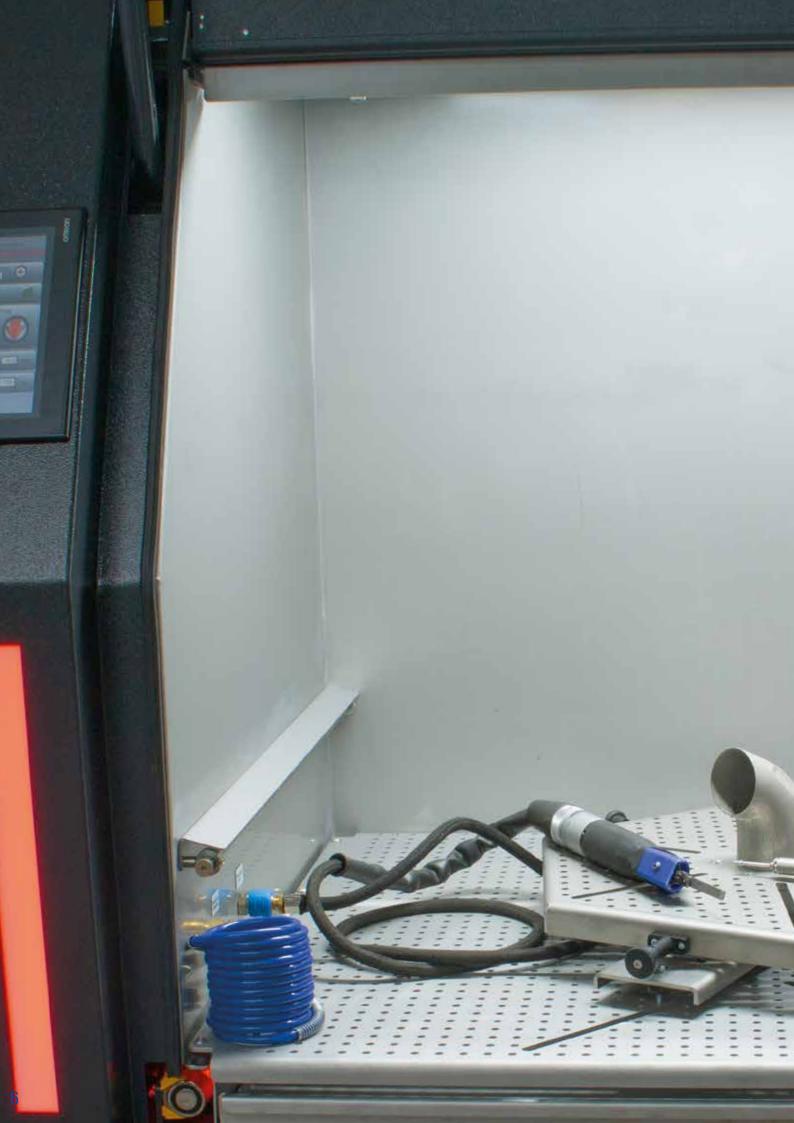




Belt grinder

Hand-filing machine

Compressed-air filing machine







## **ENESKApostprocess**Perfect solution for finishing in 3D printing

The standard of safety during manual postprocessing is inadequate in many companies. Protective suits are often only worn during individual working stages and are of no help against the risk of deflagration. Moreover, the working areas are not protected from invisible airborne dusts, which are usually underestimated. This is precisely where ENESKApostprocess from joke can help you.

Particular caution is required when processing reactive materials. In this case, it is not only the dusts that can ignite through friction; the material is also highly flammable and therefore carries higher risks of explosion and deflagration. A special moisture extractor with 3-fold filtration and explosion protection according to ATEX standard guarantees safe work. An integrated liquid bath binds the reactive particles which are thus unable to develop their explosive effect.

Titanium or aluminium are the common materials that most users recognised as reactive, but many alloys also have references to minimum ignition energy in their data sheets.

Are you not sure? We will be pleased to advise you.

					Price from
			Design	Order No.	1 piece
ENESKApostprocess 5.0 incl. extract	Suitable for materials with a minimum ignition energy above one mJ  With explosion protection according to ATEX standard Moisture separator suitable for zone 22  4-fold filtration  Extraction capacity / volumetric flow: max. 350 m³/h  Incl. FSX automatic fine dust measuring system (for further information, see order no. 0 210 309)  Materials to be processed: incl. among others aluminal ditanium  Technical data:  Weight (without/with extraction system): 650/748 kg  Dimensions of the working chamber (W x D x H): 974 x 766 x 386/869 mm  Device dimensions (W x D x H): 1.437 x 1.685 x 1640/1940 r  Lighting: Fully integrated LED light.				
		a minimum ignition energy		0 210 014	
		with height adjustment	0 210 015		
• AP ENESKA postprocess	4-fold filtration     Extraction capacity / volumetric flow: max. 350 m³/h     Incl. FSX automatic fine dust measuring system				
	and titanium	l: incl. among others aluminium			
	recimical data.				
	extraction system): Dimensions of the working chamber (W x D x H):	974 x 766 x 386/869 mm			

### **Variants**

ENESKApostprocess for reactive substances (Order No. 0 210 014)	ENESKApostprocess for non-reactive substances (Order No. 0 210 004)
Extraction system suitable for continuous operation, for extracting flammable dusts – MIE $\geq 1~\text{mJ}$	Extraction system suitable for continuous operation, for extracting $\textbf{dusts} - \text{MIE} \geq 1 \text{ mJ}$
<b>4-fold filtration, including moisture separator</b> , suitable for zone 22 ATEX II 3D c T 125 °C, 5-fold filtration, removal efficiency: 99.995%	3-fold filtration, removal efficiency: 99.95%
Exchangeable, stainless steel collection tank with drain cock, inert oil (approx. 30 L), tank capacity 100 litres	Exchangeable, stainless steel collection tank, tank capacity 100 litres
H13 filter cassette, antistatic	H13 filter cassette, antistatic
Wet filter cassette, earthed	Wet filter cassette, earthed
Filter bag MC K4 microfibre, antistatic	-



## **ENESKApostprocess**Perfect solution for finishing in 3D printing

This variant of ENESKApostprocess was developed for the processing of non-reactive materials. However, respirable dusts are also an issue with steel and stainless steel. The ENESKApostprocess helps enormously in this case and protects you and your colleagues from hazardous particles. Wearing cumbersome protective suits is also no longer required.

A large working chamber of approx. 0.6 m³ offers sufficient space even for the largest 3D-produced workpieces. There are numerous possibilities for connecting various tools simultaneously at the same workplace – whether pneumatic or electric.

Dimmable light, a large glass front and ergonomically shaped hand apertures make everyday work very pleasant.

					Price from
			Design	Order No.	1 piece
ENESKApostprocess 5.0 incl. extrac	tion for non-reactive materia	ls			
		SKApostprocess incl. extraction		0 210 004	
	for non-reactive materials:		with height adjustment	0 210 005	
	<ul> <li>Dry extractor with explosion protection according to ATEX standard</li> <li>Triple filtration</li> <li>Extraction capacity / volumetric flow: max. 350 m³/h</li> <li>Optionally with FSX automatic fine dust measuring system (more Information see order no. 0 210 309)</li> <li>Materials to be processed: incl. among others, steel,</li> </ul>				
AT ENCERA postprocess	stainless steel and various Technical data: Weight (without/with extraction system): Dimensions of the working chamber (W x D x H): Device dimensions (W x D x H) Lighting: Supply voltage:	650/748 kg 974 x 766 x 386/869 mm 11.437 x 1.685 x 1640/1940 mm Fully integrated LED light, ESG safety glass, approx. 5600K / 9000 lm, 58W, dimmable 400 V / 16 A			

### \*Accessories / spare parts

Order No.	. р.ооо
0.1.1	1 piece
	Price from



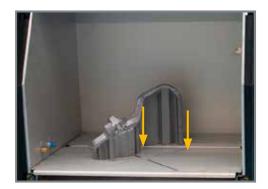
The FSX automatic fine dust measuring system from joke can be retrofitted to the ENESKApostprocess 5.0 at any time!

- Precise dust measurement independent of gas velocity or particle charge
- No external purge air unit required as it is integrated in the unit (option)
- Low cost and maintenance due to self-monitoring
- Independent measuring device
- Automatic monitoring of zero and reference point
- Robust and compact design
- $\bullet$  No moving parts in the duct

0 210 309



## **Extraction and cleaning process function**



Extraction is through the floor of the working chamber.



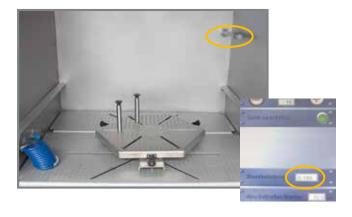
It is only possible to work in the ENESKApostprocess with the extraction system running.
The system is locked during processing.



With flow-optimised air guidance, hazardous dusts are directed towards the extractor.



After the processing, the system cannot be opened until a special automatic cleaning process has finished. This stirs up and extracts the residual dust from the corners of the chamber.



The system can be equipped with the special FSX automatic fine dust measurement. The dust load in the working chamber is continuously measured and shown on the display.

In combination with this FSX, the previously described cleaning process can be adjusted so that the system does not unlock before a defined value is reached.

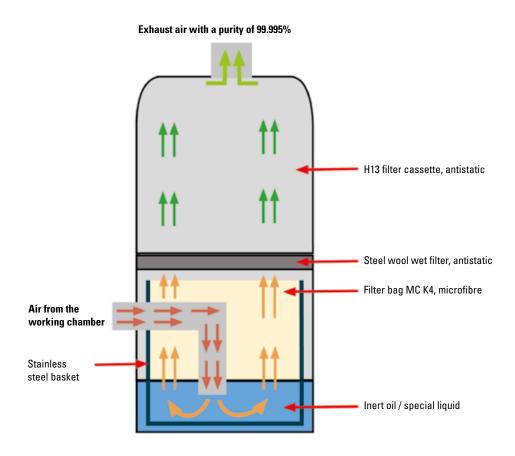


The system is not unlocked and the working chamber is not released until the cleaning process has finished.



## Filter system

## Diagram of the system for reactive substances



## View of extraction system



Extraction system easily accessible from the rear...



...and easy to remove on castors



### **ENESKAmicro**

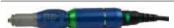
## Micromotors 3rd generation

Price from

1 piece

Order No.

0 100 001



#### The fast runner

ENESKAmicro COMPACT JEM 50C, motor incl. rapid-chuck handpiece and motor cable

The range is rounded off with the JEM 50C. Owing to its compact design, it offers perfectly quiet running and extremely high concentricity. With its high speed of up to 50,000 rpm, it is perfectly suited for all applications with tools that require high speeds, such as milling cutters and the like. Integrated high-quality collets Ø 3 mm for frequent tool changes.

ENESKAmicro COMPACT JEM 50C • motor incl. rapid chuck • motor cable

• brushless DC motor

Output: 200 W

Rotation speed range: 1,000 - 50,000 rpm 8.4 N cm Torque:

Ø 27.5 mm x 137.6 mm (without coupling) Dimensions:

Weight: 215 g (without motor cable)

Switch: on motor cable

Price from

Order No.

0 100 002

1 piece

### ENESKAmicro motor JEM 40R, up to 40,000 rpm, incl. motor cable



#### The fine finisher

The JEM 40R is the perfect choice for light work that requires handpieces that are both fine and delicate. Ideal for use in jewellery working, for example.

ENESKAmicro JEM 40R, brushless AC motor with max. 40,000 rpm • incl. motor cable • Rapid-Change coupling

84 W Output:

Rotation speed range: 1,000 - 40,000 rpm 4.0 N cm Torque: Dimensions: Ø 25 mm x 71.4 mm Weight: 100 g (without motor cable)

Switch: on motor cable

Price from

Order No. 1 piece

0 100 003

#### ENESKAmicro motor JEM 20R, up to 20,000 rpm, incl. motor cable



With the JEM 20R, joke addresses users who mainly work in the low speed range (up to 20,000 rpm), but require a particularly high torque. It is precisely these users who usually come up against performance limits with conventional motors. Speed fluctuations, which occur with most motors, are directly reflected in the grinding or polishing pattern and result in problems. The new JEM 20R provides a torque that makes such problems a thing of the past. The constant-speed motor guarantees an absolutely clean and harmonious microsection, even with challenging tasks.

ENESKAmicro JEM 20R, brushless AC motor with max. 20,000 rpm • incl. motor cable • Rapid-Change coupling

Output: 73 W

1,000 - 20,000 rpm Rotation speed range: Torque: 5.0 N cm

Ø 27.5 mm x 78.1 mm Dimensions: Weight: 145 g (without motor cable)

Switch: on motor cable





## **ENESKA**micro Micromotors 3rd generation

Price from 1 piece

Order No.

0 100 020

ENESKAmicro motor JEM 50R, up to 50,000 rpm, incl. motor cable



The all-rounder

With the JEM 50R, joke offers a motor that is particularly suitable for users who require a high degree of flexibility and have a wide range of applications for which a medium torque is sufficient.

The motor operates at up to 50,000 revolutions and can therefore be used for polishing and grinding, but also deburring work.

Brushless AC motor

Output:

1000 - 50,000 rpm Speed range: Torque: 8.4 N cm

Dimensions: Ø 27.5 mm x 137.6 mm (without coupling)

Weight: 143.6 g (without motor cable)

Switch: on motor cable

## **ENESKAmicro Belt grinder** JBS 20R

Price from

Order No. 1 piece

**ENESKAmicro belt grinder JBS 20R** 

Speed: max. 20,000 r/min

for Beltsize: 4 mm / 6 mm / 8 mm with guide,

changeable handling

Weight: 227 g 0 100 008







## **ENESKAmicro angle handpieces** 3rd generation

				Price from
			Order No.	1 piece
ENESKAmicro angle handpiece JERA	90 20R			
	Collet:	Ø 3 mm included	0 100 004	
The Marie Co.	Speed:	max. 20,000 r/min, reversal of the direction of rotation		
200 SV(D0)	Concentricity:	± 0.01 mm		
THE RESERVE OF THE PERSON NAMED IN COLUMN 1	Dimensions:	Ø 21.8 x 73 mm		
+	Weight:	92 g		
	Vibration:	2.5 m /s <sup>2</sup>		
	Noise level:	70 dB		

				D: (
				Price from
			Order No.	1 piece
ENESKAmicro angle handpiece JEAH	60 20R			
TO ANY	Collet: Speed: Concentricity: Dimensions: Weight:	Ø 3 mm in scope of delivery max. 20,000 r/min ± 0.01 mm Ø 22.5 x 80.8 mm (head: Ø 15.9 mm) 91 g	0 100 011	





## **Compressed-air tools**

## **Compressed-air grinder** joke AirMAX

#### Compressed-air grinder joke AirMAX

The family of compressed-air grinders from joke. The name says it all, for these power tools make full use of air. Regardless of whether you need high speed or just solid performance – the joke AirMAX series has the right device for you. All these grinders are lubricated with oil in conjunction with the joke Oiljet.

	Compressed-air grinder joke AirMAX 35	
Rotation speed	35,000 1/min	
Power	220 W	
Air pressure	6 bar	
Air consumption	520 l/min	
Exhaust air	forwards	
Noise level	78 dB(A)	
Vibration	< 6 m/s²	
Dimensions	Ø 31 x 143 mm	
Weight	290 g	
Lubrication	continuously by oil mist	
Scope of delivery	collet Ø 6 mm, clamping wrench, rotary and lever valve	
Order No.	0 750 840	
Price		







## **Compressed-air tools**

### Compressed-air filing machine LFC 11

#### Compressed-air filing machine LFC 11

The high-speed allrounder (12,000 strokes/min). Ideal for grinding, filing, polishing, cutting, sawing and also deburring larger areas as well as for support removal in the additive area. A continuously adjustable stroke length (between 2 and 11 mm) enables this device to be used for both coarse and fine working. The bare machine is available, but also a case, complete with tools and accessories.

Price from

Order No. 1 piece

0 750 980

#### Compressed-air filing machine LFC 11



No. of strokes: 6,000 – 12,000 strokes/min

Stroke length: 2 – 11 mm, continuously adjustable

Output: 300 W
Air pressure: 6.3 bar
Air consumption: 230 l/min

Noise level: 74 dB(A), ISO 15744

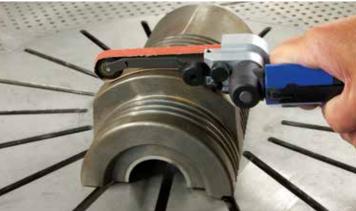
Vibration:  $2.2 \text{ m/s}^2$ ,  $K = 0.8 \text{ m/s}^2$  according to EN ISO 28927-8

Dimensions: 280 x 60 mm Weight: 830 g

Lubrication: continuously by oil mist

(supply and exhaust air, silencer)





### Air belt grinder MBS 20 DH

Small, handy and powerful – that best describes the new compressed-air minibelt grinder from joke. With a weight of just 570 g, it lies comfortably in the hand. So the second hand is free to move the workpiece into the ideal position.

The grinding belt is ideally suitable for deburring, grinding and finishing work. The workpieces can be optimally freed from burrs and cleaned. No matter what the radius, the joke grinding belt contacts the workpiece perfectly, and with a little sensitivity of touch achieves a fine, satin-textured surface.

The width of the belt can be selected between 6 mm and 12 mm. A wide range of belts is available, from a coarse grinding belt to a fleece belt for finishing work. Belts are easily replaced with just one action.

Price from

Order No. 1 piece

#### Air belt grinder joke MBS 20 DH



Tapes:  $6-12 \times 305 \text{ mm}$  (depending on the belt grinder attachment) **0.750 87** 

Max. air pressure: 6 bar
Air consumption: 590 l/min
Exhaust air: to the front
Operation: rotary, lever valve

Weight: 570 g

Connection: 8 mm hose nozzle

Required lubrication: continuously 1–2 drops / min oil mist

21 m/s



## Magnetic clamping balls joke Magic-Ball

#### Magnetic clamping balls joke Magic-Ball

Comfortable and ergonomic 3-dimensional work. Ideal for polishing and welding workplaces. The Magic-Ball magnetic clamping balls bring your workpiece into almost any desired position. Depending on the workpiece geometry and weight, pivoting angles of up to 90° can be set. The balls are enclosed in leather-lined, chemically nickel-plated steel rings that hold them absolutely securely in any position – the sliding adhesion effect makes it possible! The powerful magnetic chuck of the Magic-Ball is activated using the key supplied (partial activation is also possible for optimum positioning of the workpiece). The balls available in four sizes are all of "Made in Germany" quality.

				Clamping				
	Weight	Size	Dimensions	force	Pole pitch	Order No.	1 piece	
Magnetic clamping balls joke Mag	ic-Ball							
	ball: 17 kg ring: 5 kg	Ø 160 mm	magnet (Ø): 160 mm ball (Ø x H): 218 x 164 mm	100 N/cm <sup>2</sup>	1.5 + 0.5 mm	0 200 326		



## **Positioner joke easy-Work** for attachment to table

### Positioner joke easy-Work

Compact and very flexible to use: the small rotating and pivoting unit unit joke easy-Work can be attached quickly and securely to almost any table by means of the drillings, such as the large joke Ergo-Work worktable.

The optionally available T-slot clamping plates ensure make fixing the workpieces child's play. These plates are made from aluminium and are optionally available in square or round shape.

				Price from
			Order No.	1 piece
oke easy-Work positioner with T-slot clampi	ng plate, round			
	Rotation range:	360° manual	0 200 873	
-000	Pivoting range:	0 – 90° manual		
	Dimensions (W x H x D):	250 x 130 x 250 mm		
	Weight:	approx. 8 kg		
	Clamping system:	T-slot clamping plate, Ø 248 mm		



## **Precision grinding and control vices**

Ground on all sides for 4-side processing, hardened steel, with prism jaws, draw-down clamping system, accuracy 0.005 mm.

						Price from
	Jaw widths	Clamping length	Jaw height	Dimensions	Order No.	1 piece
Precision grinding and	control vice					
	63 mm	87 mm	32 mm	63 x 175 mm	0 200 343	



## Additional magnifying glass with vacuum suction cup

				Price from
			Order No.	1 piece
Additional magnifying glass, with vacu	uum suction cup			
	for all smooth surfaces		0 200 894-1	
	magnifying glass: suction cup:	2.5 x Ø 125 mm / 10 x Ø 25 mm 55 mm		





## **Precision grinding and control vices**

		Packing			Price	from
		Dimensions	quantity	Order No.	1 set	1 piece
Turntable, hexagonal						
	Tripod support Freely positionable, rotatable and lockable Clamping width 440 mm Material 1.4301	500 mm		0 210 209		
Stop pin, adjustable, assortment = 2 pieces						
			2 pieces	0 210 204		

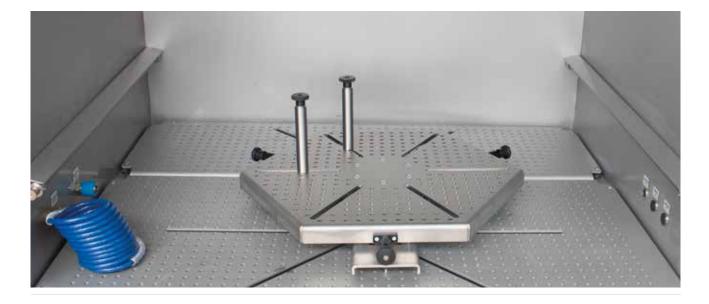
### 10-piece clamping device set



consisting of:

- M8 x 100 mm threaded bolts, 2 pieces
- Hexagon nut with flange M 8, 2 pieces
- T-nut with thread M8, 2 pieces
- Clamping claws for 10 mm T-slot width and M8 thread 2 pieces with counter holder 2 pieces

10 pieces 0 210 200







## **ENESKApostprocess**Accessories

			Price from	
Size	Dimensions	Order No.	1 pair	1 piece

### HePa filter cartridge H13, variant inert oil



- 3 m² filter area
- Filter dust class H (high hazard) according to BIA class USGC
- For the separation of any dust with all exposure limits, including carcinogenic and pathogenic dusts
- Antistatic (separation efficiency: 99.95%)

#### Wet filter cassette, version inert oil



Filled with stainless steel wool, antistatic

Ø 260 x 70 mm

0 210 363

0 210 388

### Filter bag MC K4 microfibre, variant inert oil



With wire ring

Ø 430 x 500 mm

0 210 361

### Stainless steel basket to hold the filter bag MC K4



Ø 430 x 500 mm 0 210 362

#### Stainless steel tank 100 l, variant inert oil



With drain cock and window

0 210 356



## **ENESKApostprocess** Accessories

			Price from		
Size	Dimensions	Order No.	1 pair	1 piece	

#### Internal extraction system



Your ENESKApostprocess has an internal extraction system. However, if you are processing, for example, titanium and aluminium - i.e. two reactive materials - we recommend using at least a second extraction system.

The use of a second ENESKApostprocess is even safer. When using several different reactive materials, it is essential to ensure that there is no unwanted reaction!

 Power:
 3 KW

 Suction:
 350 m³/h

 Filter:
 H13 Filter

 Height:
 1683 mm

#### ENESKApostprocess high-performance oil, 20 l



For filling the extraction with wet scrubber for reactive materials

0 580 518

0 210 309

0 210 316

### **ENESKApostprocess automatic fine dust measuring system FSX**



The FSX automatic fine dust measuring system from joke can be retrofitted to the ENESKApostprocess 5.0 at any time!

- at any time!

   Precise dust measurement independent of gas
- velocity or particle charge
   No external purge air unit required as it is integrated in the unit (option)
- Low cost and maintenance due to self-monitoring
- Independent measuring device
- Automatic monitoring of zero and reference point
- Robust and compact design
- No moving parts in the duct

#### **ENESKApostprocess glass pane, laminated glass**



970 x 933 x 8,76 mm 0 210 051

#### Protective screen with flexible arm and suction foot



• Can be clamped on flat and slightly uneven surfaces.

• Flexibly adjustable by 4 joints.

• Suction force: 350 N

• Dimensions:

Suction foot: Ø 88 x 23 mm Screen: 300 x 200 x 2 mm 0 210 208





## **ENESKApostprocess**Accessories

						Price from	
			Size	Dimensions	Order No.	1 pair	1 piec
Protective screen, plexig	lass						
e III E				300 x 200 x 2 mm	0 210 201		
PLEXIGLAS				200 x 200 x 2 mm	0 210 202		
Gloves latex for ENESKA	postprocess, 600 mm						
	• With cuff Ø 180 – 300 m • Size 10 • EN388	nm	10		0 210 250		
ENESKApostprocess arm	cuff made of latex						
	rolled edge for installati	y robust and stretchable latex with on for Ø 230 to approx. 360 mm ause the wear on the extra pens			0 210 260		
ENESKAmicro footpedal							
	from software version V • For comfortable contro (start/stop, speed adju • Cable length 2 m	ol by foot			0 011 003		
Maintenance unit joke 0	iljet						
(20)	Filter controller MD1-FR	0000-1/4:			0 004 070		
	<ul> <li>Max. Working flow:</li> <li>Max. Inlet pressure:</li> <li>Container capacity:</li> <li>Condensate drain:</li> </ul> Air connection:	1,200 l / min 16 bar 24 cm³ semi-automatic-manual, automatic via pressure relief, drain via threaded connection G1/8 1/4"					
reduced the last	Medium:  Oiler MD1-L00-1/4:	compressed air					
	<ul><li> Max. Inlet pressure:</li><li> Container capacity:</li><li> Air connection:</li><li> Medium:</li></ul>	16 bar 40 cm³ 1/4" compressed air					

25 µm filter, manual water separator, micro oiler, pressure reducer, pressure gauge and wall mounting

Scope of delivery:



## **Demonstration**

## Would you like a personal demonstration?

We are out and about every day in Germany and some neighbouring countries. You can test our system with your workpieces on your premises. We have everything on board!

Would you like a personal demonstration?

**Mr. Fielenbach** will be glad to arrange the next possible appointment with you.

You can contact him at +49 2204 839-749 or by email at m.fielenbach@joke.de.



## For any kind of support or demonstration please contact us. We will be pleased to help you!

### Your expert team:



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