

Driving motors and handpieces Overview



Ultrasonic system ENESKAsonic



Handpieces



Grinding, milling, polishing system ENESKAmicro

40



24

ENESKAmicro COMPACT series



jokeFlex Premium Plus



Micromotors



jokeFlex Power



High-speed handpiece ENESKA J 320



Polishing machines OPTI polish



Grinder jokeTURBO

Polishing lathe

76



Compressed-air grinder ENESKAair



ENESKApostprocess Postprocessing system



Compressed-air hand-filing machines DIPROFIL®



Tungsten carbide coating system ENESKArecoat 85

06 Ultrasonic system Ultrasonic minicutter ENESKAsonic

12 Electric motor systems Mobile grinding system MINI MONTOR mobile P1 Mobile grinding system ENESKAmobile ENESKAmicro system overview ENESKAmicro control unit ENESKAmicro complete sets ENESKAmicro COMPACT series ENESKAmicro Micromotors ENESKAmicro hand-filing machines Hollow handle Rapid Change ENESKAmicro handpieces and collets ENESKAmicro belt grinder ENESKA-old Systems

45 Flexible shaft systems

jokeFlex Premium Plus system overview jokeFlex Premium Plus shaft Motor system jokeFlex Premium Plus Handpieces jokeFlex Premium Plus Handpieces joke Classic-Line Rapid-chuck handpiece Hemisphere handpiece Hand-filing machines Reducing sleeves Quick coupling system jokeFlex Power system overview Quick coupling system jokeFlex Power shafts Motor system jokeFlex Power Handpieces jokeFlex Power and collets

60 Pneumatic systems

Pneumatic system overview Maintenance unit Lubricant High-speed handpiece ENESKA J 320 Grinder jokeTURBO Compressed-air grinder Compressed-air grinder joke AirMax Compressed-air hand-filing machines Compressed-air filing machines Compressed-air engraving pen Hand-filing machines Turbolap

74 Polishing machines

Polishing machines OPTI polish Polishing machines Equipment Polishing lathe system overview Polishing lathes

82 ENESKApostprocess

Postprocessing system

94 Tungsten carbide coating system ENESKArecoat 85



Ultrasonic minicutter ZO-91 economical alternative for plastic

			Price fror
		Order No.	1 piec
Itrasonic minicutter ZO-91			
A	Consisting of: 1 x control unit	0 006 260	
Λ	1 x handpiece with cable		
/1	1 x blade receptacle ZH04 3 x spare screws HB03 for blade receptacle		
/ 1	1 x allen key RR02		
B	40 x blades HA04		
A			
-			
7			
	<i>.</i>		
A D			
	1 Sta		
10 100			

• Accessories / spare parts

					Price from	
		Packing quantity	Order No.	1 pack	1 piece	1 se
Spare blades HA04						
1000		40 pieces	0 006 270			
Blade receptacle ZH04						
			0 006 271			
Blade receptacle set ZH	04S					
	Set contents: 1x blade receptacle ZH04 1x spare screw HB03 1x allen key RR02		0 006 272			
Spare screw HB03						
	Suitable for ultrasonic cutter blade holder ZH04		0 006 273			

Ultrasonic lapping and polishing system ENESKAsonic

The most innovative advancement in the field of ultrasonics ENESKAsonic – high-efficiency, leading-edge, latest generation for finest stock removal

As with the ENESKAmicro, the ENESKAsonic ultrasonic system is characterised by consistent advancements in every respect. An outstanding feature is the sophisticated design combined with convenient high-tech equipment.

Highlights:

Co

- Intuitive touch operation combined with a rotary controller on high-quality glass
- Modern LED-assisted multifunctional display
- Boost function for applications requiring greater power
- Idle timer detects unused handpieces and protects against wear
- USB charging connection enables for example optional addition of a workplace light without a further power source

The ENESKAsonic is used for polishing and lapping in the frequency range of between 20 and 30 kHz. The Auto Tune function determines the optimum frequency. The infinitely adjustable power control is suitable for fine, delicate work on narrow webs and edges as well as in boost mode for power-intensive, extra abrasive work with sintered diamond files. The LED-assisted display shows the widest range of operating parameters and settings. The 140 g lightweight handpiece with an M6 fine thread is comfortable to hold and enables fatigue-free work.

It was especially important to our development department that this addition to our family should also be "100% Made in Germany" and be reverse-compatible with ENESKA 2-1 handpieces. Guaranteeing this demand for particularly high quality is a major concern for us and protects your years of investment. Combine the ENESKAsonic with an ENESKAmicro and you will receive an unbeatable tandem fully specialised in their respective fields.

				Price from
			Order No.	1 piece
ntrol unit ENESKAsonic				
	Technical Data:		0 012 001	
	Output:	max. 80 W		
	Dimensions (w x h x d):	135 x 235 x 200 mm		
11	Weight:	2.7 kg		
	Supply voltage:	115/230 V, 50/60 Hz, 150 VA		



			Price from
		Order No.	1 piece
Set ENESKAsonic ultras	sonic-system		
	 The set contains the following components: 1 x control unit ENESKAsonic (Order No. 0 012 001) 1 x rapid-chuck handpiece JUS-50-ES (Order No. 0 012 008) 1 x standard handpiece support, black (Order No. 0 011 110) 1 x screen protector made of tempered glass (Order No. 0 011 098-G) 1 x power cord set for Germany, Switzerland, England and Europe (Order No. 0 007 435-1) 2 x 4 A fuse (Order No. 1 711 407-1) for 110 V use 1 x T10 TORX screwdriver (Order No. 0 006 304-T) 2 x chuck key (Order No. 0 006 347) 1 x tool holder – Ø 3 mm bore (Order No. 0 006 306-E) 1 x tool holder – 1 mm slot width (Order No. 0 006 310-E) 	0 012 000-1	



Ultrasonic lapping and polishing system ENESKAsonic • handpieces

Price from Order No. 1 piece Ultrasonic handpiece JUS-50-ES Receptacle: M6/fine 0 012 008 22.5 kHz (40 µm) Frequency: Dimensions: Ø 29.7 x 135 mm 140 g (without cable) Weight: Cable length: 2 m 50 W Output:



• Accessories / spare parts



					Price from
	Tool support	Profile	Thread	Order No.	1 piece
Tool holder for receiving round tools					
= 9	d = Ø 2 mm	round	M6/fine	0 006 305	
Read of the second s	d = Ø 3 mm	squared	M6/fine	0 006 306-E	
Tool holder for receiving flat tools					
0	t = 0.8 mm	squared	M6/fine	0 006 309	
	t = 1 mm	round	M6/fine	0 006 310	
	t = 1 mm	squared	M6/fine	0 006 310-E	
	t = 2 mm	squared	M6/fine	0 006 311	
	t = 3 mm	squared	M6/fine	0 006 312	
Adapters for receiving ultrasonic tools					
	Thread M4		M6/fine	0 006 900	



Torx screwdriver



0 006 304-T

LED workplace light



• Flexible light holder tube • 3-stage adjustable

• With clamp mounting, max. 45 mm clamping range

Technical data: Equipment: 3-watt LED / 350 lm Colour temperature: 5,000 K Connection: USB, 5V 1A / 5V 2A input

0 200 524



• Accessories / spare parts

Ultrasonic lapping and polishing system ENESKAsonic

		Price from	
		Price from 1 set 1 piece	
NESKAsonic ultrasonic	-system, plastic case, incl. foam insert and plastic box		
	Easy, bundled transport due to carrying handle. Permanent order due to precisely fitting recesses for each: • 1 x handpiece • 1 x control unit • 1 x foot pedal • 5 x tool holder • 1 x plastic box, 46 x 46 x 70 mm (included in delivery)	0 012 004	
	External dimensions (w x h x d): 210 x 396 x 296 mm		
NESKAmicro footpedal	• For comfortable control by foot (start/stop, speed adjustment),	0 011 002	
	• Cable length 2 m		
NESKAmicro handpieco	e support standard, black		
	For secure handpiece storage	0 011 110	
NESKAsonic connectio	n cable		
	Suitable for handpiece JUS-45 PB-ES	0 012 006	
	Suitable for handpiece JUS-50-ES	0 012 006-1	
NESKAsonic set blade	receptacle with graphic blades		
	1 x Blade receptacle ENESKAsonic (Order No. 0 006 351) 10 x graphic blades (Order No. 0 006 354) 1 x Torx screwdriver (Order No. 0 006 304-T)		

ENESKAmicro **COMPACT JEM 50C** Order no. 0 100 001

Collets JCC Order no. 0 100 040-Order no. 0 100 065 ENESKAmicro Rapid-chuck handpiece **JIR 40R** Order no. 0 100 005

ENESKAmicro handpiece **JBMXLH 40R** Order no. 0 100 006L

Collets JCB Order no. 0 100 060-Order no. 0 100 066

Collets JCS Order no. 0 100 050-Order no. 0 100 052 ENESKAmicro handpiece **JEHG 20R** Order no. 0 100 007

ENESKAmicro angle handpiece **JEAH 60 20R** Order no. 0 100 011

ENESKAmicro angle handpiece JERA 90 20R Order no. 0 100 004

ENESKAmicro Mini hand-filing machines **JMH 20R** Order no. 0 100 009

ENESKAmicro belt grinder **JBS 20R** Order no. 0 100 008

Belt sander arm JBS 20R Order no. 0 100 008-0 Order no. 0 100 008-1 Order no. 0 100 008-2



ENESKA 3, 3-1 3-2 handpieces

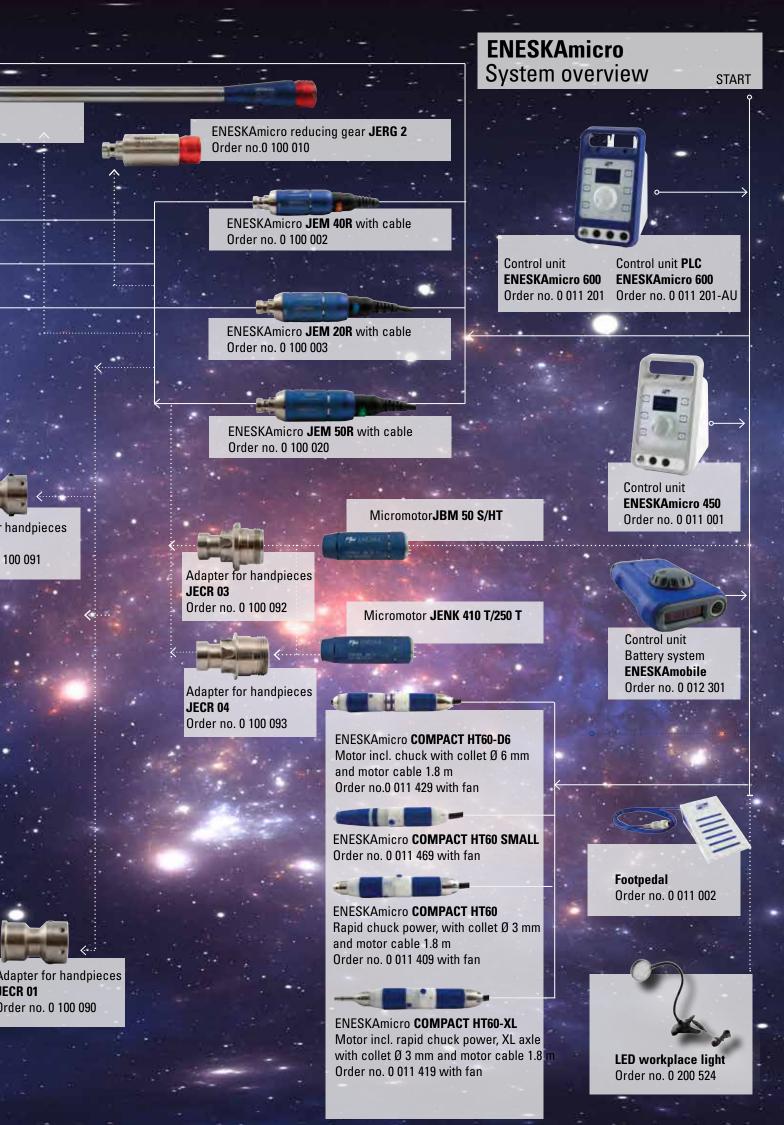
Adapter for **JECR 02** Order no. 0

ENESKAmicro extension JEEA

Order no. 0 100 013



ENESKA 4-1 handpieces for plus connection





The new standard for grinding, polishing, milling and deburring

ENESKAmicro – the unbeatable all-round talent

The in-house development by joke sets standards for micromotor systems. What is unique about this series is its system-wide and downwards compatibility as well as extreme power. Higher final speed, more power, higher clamping force for the handpieces, 100% Made in Germany, touch display, USB interface and high level of true running are just some of the highlights of this extraordinary system. This not only enables its use in many new application areas, such as aerospace and 3D printing, but also in conventional toolmaking and mould building or in medical engineering.

Simple to operate with the touch display

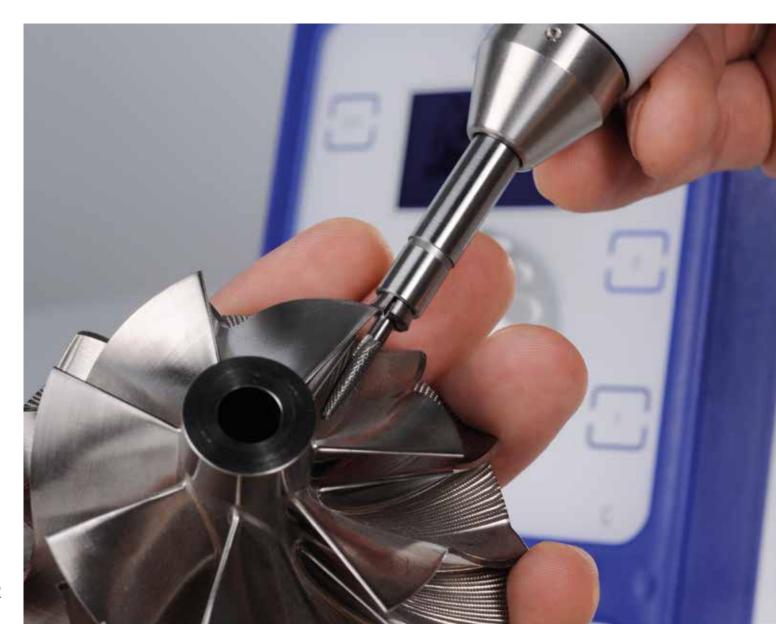
The core component of the ENESKAmicro is the intelligent control unit. Intelligent because it automatically detects which micromotor is connected, whether from the joke family or a third-party manufacturer. The individual settings can be saved on the touch display with station keys. The speed input can be set via a finely adjusted rotary knob or optionally via a foot switch. The slim design and low centre of gravity make for high stability. The control unit dispenses with fans or slots – which means less noise pollution for the user and it is also dust-protected (according to IP 54).

The newly developed handpieces achieve a higher clamping force than similar devices on the market. Created by a combination of spring and lever force that keeps the tool in position even at high speeds. The high-precision grinding of all axes and the installation of the latest-generation bearings enable a high level of true running to within less than 0.01 millimetres. Further advantages are the on/off switch directly on the motor and the toolless quick-clamping function. This saves time and guarantees precise, low-vibration and fatigue-free work. The joke team has developed handpieces with a longer XL axis for hard-to-reach areas in workpieces.

The ENESKAmicro offers a genuine alternative to many compressed-air systems.

The facts speak for themselves:

- Tremendously high cost advantage compared to expensive compressed-air
- Remarkably high-speed, variably adjustable
- Low-vibration work
- Quick tool changes without external aids
- Low noise pollution





ENESKAmicro PLC Control units

NEW!

ENESKAmicro plus PLC – the perfect introduction to automated operation

The in-house development by joke sets standards standards in easy external control of micromotors.

The strength of the new motor series lies in its compatibility with existing motors and control units.

More options await you in accomplishing your tasks with increased requirements in terms of flexibility and the need to optimise processes. For this purpose, joke with its new motors provides targeted solutions.

This not only enables its use in many new application areas, such as aerospace and 3D printing, but also in conventional toolmaking and mould building or in medical engineering.

100% Made in GERMANY

				Price from
			Order No.	1 piece
ESKAmicro 600 control unit PLC				
	 Standardised connection and foot pedal Analogue signal input for Run/Stop plus digital swoth In addition, toggling bet Digital control for right/l Standby output (OK/Error Extremely simple parame manual operation Optionally available test easy introduction to the Greater convenience and Connection and detection motor Adjustable speed in 100 Control circuit for optimm Familiar clear display st Simplified and switchab Adjustable speed limitar User support via extend 	Arogrammable logic controller operation on via 8-pin industrial IO connector for PLC or the setpoint speed via 0-5V or 0-10V or vitching between two independent speeds ween two motor channels is possible eft rotation changeover or) for feedback to superordinate control unit leter configuration through settings as for toox for testing all ext. inputs (plus output) for automated functionality with firmware v044 on of two BLDC motors and one DC brushed 0 rpm increments up to 60,000 rpm um control behaviour with digital speed display ructure and operation via touch keys le change of rotation direction via the handpiece tion when switching to anticlockwise rotation	0 011 201-AU	

• Accessories / spare parts

		Price from
	Order No.	1 piece
ENESKAmicro SPS Signalkabel 3,0 m		
	0 011 136	
\bigcirc		
Plug detail		

ENESKAmicro Control units



			Price from
		Order No.	1 piece
SKAmicro 600 control unit			
	 Infinitely variable speed control up to max. 60,000 rpm Speed limited by potentiometer Digital speed display Connection for 2 motors BLDC and 1 AC motor Motor recognition Speed Memory button Clockwise, anticlockwise running Connection for foot control USB charging port allows the addition of a workplace light 	0 011 201 ght	
S C S	Weight: 3.6 kg Dimensions (W x H x D): 135 x 235 x 200 mm Connection: 90–240 V, 50–60 Hz		

				Price from
			Order No.	1 piec
SKAmicro 450 control unit				
	 Infinitely variable speed Speed limited by potenti Digital speed display Connection for 2 motors Motor recognition Speed Memory button Clockwise, anticlockwis Connection for foot continues 	BLDC e running	0 011 001	
2	Weight: Dimensions (W x H x D):	3.6 kg 135 x 235 x 200 mm		
	Connection:	90–240 V, 50–60 Hz		



ENESKAmicro Control units

			Price fror
		Order No.	1 piec
ENESKAmicro footpeda	 For comfortable control by foot (start/stop, speed adjustment), Cable length 2 m 	0 011 002	
ENESKAmicro handpie	ce support HT, white		
~	For secure handpiece storage	0 011 109	
ENESKAmicro handpie	ce support standard, black		
	For secure handpiece storage	0 011 110	
ENESKAmicro extensio	on cable, 2 m		
0	Suitable for all motor cables of the ENESKAmicro series	0 011 401	
ENESKAmicro storage	case, incl. foam inlay		
	Aluminium case with carrying handle and two lockable locks Dimensions (W x H x D): 502 x 150 x 370 mm Weight: 3.2 kg	0 011 910	
	-		

ENESKAmicro 600 Complete sets



		0 1 1	Price fro
NESKAmicro 600 set 2.5		Order No.	1 s
	The set contains the following components: 1 x ENESKAmicro 600 control unit (order no. 0 011 201) 1 x ENESKAmicro COMPACT HT60, Motor incl. Handpiece Power (order no. 0 011 409) 1 x ENESKAmicro Motorcable HT, 1.8 m (order no. 0 011 402) 1 x ENESKAmicro Collet Type EMA, Ø 3 mm (order no. 0 011 413) 1 x ENESKAmicro handpiece support HT, white (order no. 0 011 109)	0 011 220	
		Order No.	Price fro
ENESKAmicro 600 set 2.6			_
	The set contains the following components: 1 x ENESKAmicro 600 control unit (order no. 0 011 201) 1 x ENESKAmicro motor HT60/rapid chuck Power, XL axle (order no. 0 011 419) 1 x ENESKAmicro motor cable HT, 1.8 m (order no. 0 011 402) 1 x ENESKAmicro collet type EMA, Ø 3 mm (order no. 0 011 413) 1 x ENESKAmicro handpiece support HT, white (order no. 0 011 109)	0 011 230	
			Price fr
		Order No.	1
ENESKAmicro 600 set 2.11			
	The set contains the following components: 1 x ENESKAmicro 600 control unit (order no. 0 011 201) 1 x ENESKAmicro COMPACT HT60-D6, motor incl. chuck Ø 6 mm (order no. 0 011 429) 1 x ENESKAmicro motor cable HT, 1.8 m (order no. 0 011 402) 1 x ENESKAmicro collet type CHG, Ø 6 mm (order no. 0 011 426) 1 x ENESKAmicro handpiece support, white (order no. 0 011 109)	0 011 235	
			Price fr
		Order No.	1:
ENESKAmicro 600 set 2.14			
	The set contains the following components: 1 x ENESKAmicro 600 control unit (order no. 0 011 201) 1 x ENESKAmicro COMPACT HT60 SMALL, motor incl. rapid-chuck head (order no. 0 011 469) 1 x ENESKAmicro motor cable HT, 1.8 m (order no. 0 011 402) 1 x ENESKAmicro collet type EMA, Ø 3 mm (order no. 0 011 413) 1 x ENESKAmicro handpiece support, white (order no. 0 011 109)	0 011 270	
			Price fro
		Order No.	1:
ENESKAmicro 600 set 2.15			
	The set contains the following components: 1 x ENESKAmicro 600 control unit (order no. 0 011 201) 1 x ENESKAmicro ENESKAmicro HT60-D6 CNC, motor spindle in stainless steel housing (order no. 0 011 470) 1 x ENESKAmicro motor cable HT-D6, 3 m (order no. 0 011 404-3M) 1 x ENESKAmicro collet type CHG, Ø 3 mm (order no. 0 009 652) 1 x ENESKAmicro collet type CHG, Ø 6 mm (order no. 0 009 651)	0 011 275	



- 1 x ENESKAmicro motor cable JEM 40R, 1.85 m (order no. 0 100 031)
- 1 x ENESKAmicro handpiece support, black (order no. 0 011 110)

ENESKAmicro 600 Complete sets



			Price from
		Order No.	1 se
ENESKAmicro 600 set 2.24			
	The set contains the following components: 1 x ENESKAmicro 600 control unit (order no. 0 011 201) 1 x ENESKAmicro motor JEM 20R (order no. 0 100 003-0) 1 x ENESKAmicro motor cable JEM 20R, 1.85 m (order no. 0 100 032) 1 x ENESKAmicro handpiece support, black (order no. 0 011 110)	0 011 299	
NEW!			Price fron
		Order No.	1 se
ENESKAmicro 600 set 2.25			
	The set contains the following components: 1 x ENESKAmicro 600 control unit (order no. 0 011 201) 1 x ENESKAmicro motor JEM 50R (order no. 0 100 020-0) 1 x ENESKAmicro motor cable JEM 50R, 1.85 m (order no. 0 100 030) 1 x ENESKAmicro handpiece support, black (order no. 0 011 110) 1 x ENESKA rapid-chuck handpiece JIR 40R (order no. 0 100 005) incl. collet type JIR, Ø 3 mm	0 011 286	
NEW!			
			Price from
		Order No.	1 se
ENESKAmicro 600 set 2.26			
	The set contains the following components: 1 x ENESKAmicro 600 control unit (order no. 0 011 201) 1 x ENESKAmicro motor JEM 50R (order no. 0 100 020-0) 1 x ENESKAmicro motor one la LEM FOR 1 9E m (order no. 0 100 020)	0 011 296	

1 x ENESKAmicro motor cable JEM 50R, 1.85 m (order no. 0 100 030)

1 x ENESKAmicro handpiece support, black (order no. 0 011 110)

ENESKAmicro 450 Complete sets

			Price from
		Order No.	1 set
ENESKAmicro 4	450 Set 2.0		
	The set contains the following components: 1 x ENESKAmicro 450 controller (order no. 0 011 001) 1 x ENESKAmicro COMPACT HT60 SMALL, motor incl. Power clamping head with chuck Ø 3 mm and motor cable 1.8 m (order No. 0 011 469) 1 x ENESKAmicro handpiece tray, white (order No. 0 011 109)	0 011 045	
	-		Price from
		Order No.	1 set
ENESKAmicro 4	450 set 1.0		
	The set contains the following components: 1 x ENESKAmicro 450 control unit (order no. 0 011 001) 1 x ENESKAmicro motor COMPACT JEM 50C incl. rapid-chuck handpiece and motor cabel (order no. 0 100 001) 1 x ENESKAmicro handpiece support, black (order no. 0 011 110)	0 011 050	

ENESKAmicro 450 Complete sets **NEW!**

from

			Price from
		Order No.	1 set
ENESKAmicro	450 set 1.01		
	The set contains the following components: 1 x ENESKAmicro 450 control unit (order no. 0 011 001) 1 x ENESKAmicro motor JEM 40R (order no. 0 100 002-0) 1 x ENESKAmicro motor cable JEM 40R, 1.85 m (order no. 0 100 031) 1 x ENESKAmicro handpiece support, black (order no. 0 011 110) 1 x ENESKA rapid-chuck handpiece JIR 40R (order no. 0 100 005) incl. collet type JIR, Ø 3 mm	0 011 055	
		NE	W!
			Price from
		Order No.	1 set
ENESKAmicro	450 set 1.02	Order No.	1 set

	W! 🗾
	Price from
Order No.	1 set
0 011 065	
	Order No.

		N	EW!
			Price from
		Order No.	1 set
NESKAmicro	450 set 1.04		
	The set contains the following components:	0 011 070	
Pres l	1 x ENESKAmicro 450 control unit (order no. 0 011 001)		
	1 x ENESKAmicro motor JEM 20R (order no. 0 100 003-0)		
- 10 mm	1 x ENESKAmicro motor cable JEM 20B 1 85 m (order no. 0.100.032)		

1 x ENESKAMICro motor cable JEM 20R, 1.85 m (order no. 0 100 032)	
1 x ENESKAmicro handpiece support, black (order no. 0 011 110)	







ENESKAmicro 600 Change-over sets

()

You already own joke handpieces of the old generations and would like to continue to use them? No problem with the update sets put together especially for you. No matter whether with the Plus (+) connection of the previous 4 series or the 3 series, all connection types can still be used.

			Price from
		Order No.	1 set
ENESKAmicro 600 Conversi	ion package 20+		
	The set contains the following components: 1 x ENESKAmicro 600 control unit (order no. 0 011 201) 1 x ENESKAmicro motor JEM 20R (order no. 0 100 003-0) 1 x ENESKAmicro motor cable JEM 20R, 1.85 m (order no. 0 100 032) 1 x Handpiece adapter JECR 01 (order no. 0 100 090) 1 x ENESKAmicro handpiece support, black (order no. 0 011 110)	0 011 283	
			Price from
		Order No.	1 set
ENESKAmicro 600 Conversi	ion package 20-		
	The set contains the following components: 1 x ENESKAmicro 600 control unit (order no. 0 011 201) 1 x ENESKAmicro motor JEM 20R (order no. 0 100 003-0) 1 x ENESKAmicro motor cable JEM 20R, 1.85 m (order no. 0 100 032) 1 x Handpiece adapter JECR 02 (order no. 0 100 091) 1 x ENESKAmicro handpiece support, black (order no. 0 011 110)	0 011 284	
			Price from
		Order No.	1 set
ENESKAmicro 600 Conversi	ion package 40+		
	The set contains the following components: 1 x ENESKAmicro 600 control unit (order no. 0 011 201) 1 x ENESKAmicro motor JEM 40R (order no. 0 100 002-0) 1 x ENESKAmicro motor cable JEM 40R, 1.85 m (order no. 0 100 031) 1 x Handpiece adapter JECR 01 (order no. 0 100 090) 1 x ENESKAmicro handpiece support, black (order no. 0 011 110)	0 011 281	



ENESKAmicro 600 Change-over sets **NEW!**

			Price from
		Order No.	1 set
ENESKAmicro 600 Convers	ion package 40-		
	The set contains the following components: 1 x ENESKAmicro 600 control unit (order no. 0 011 201) 1 x ENESKAmicro motor JEM 40R (order no. 0 100 002-0) 1 x ENESKAmicro motor cable JEM 40R, 1.85 m (order no. 0 100 031) 1 x Handpiece adapter JECR 02 (order no. 0 100 091) 1 x ENESKAmicro handpiece support, black (order no. 0 011 110)	0 011 282	
			Price from
		Order No.	1 set
ENESKAmicro 600 Convers	ion package 50+		
	The set contains the following components: 1 x ENESKAmicro 600 control unit (order no. 0 011 201) 1 x ENESKAmicro motor JEM 50R (order no. 0 100 020-0) 1 x ENESKAmicro motor cable JEM 50R, 1.85 m (order no. 0 100 030) 1 x Handpiece adapter JECR 01 (order no. 0 100 090) 1 x ENESKAmicro handpiece support, black (order no. 0 011 110)	0 011 287	
			Price from
		Order No.	1 set
ENESKAmicro 600 Convers			
	The set contains the following components: 1 x ENESKAmicro 600 control unit (order no. 0 011 201) 1 x ENESKAmicro motor JEM 50B (order no. 0 100 020-0)	0 011 288	



- 1 x ENESKAmicro motor JEM 50R (order no. 0 100 020-0)
- 1 x ENESKAmicro motor cable JEM 50R, 1.85 m (order no. 0 100 030)
- 1 x Handpiece adapter JECR 02 (order no. 0 100 091)
- 1 x ENESKAmicro handpiece support, black (order no. 0 011 110)

ENESKAmicro Handpieces and motors

3rd generation | powerful | constant speed | perfectly quiet running extremely high concentricity





ENESKAmicro | The next generation handpieces and motors

A whole series of new applications have emerged in recent years in the field of surface finishing. New tools have developed in parallel that place different demands on the drive units.

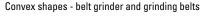
With the 3rd generation of ENESKA motors, joke takes account of these new requirements and in doing so achieves a genuine game change: the range of speeds with conventional surface finishing devices is very wide these days, e.g. 0 - 60,000 rpm, in order to be able to cater for as many applications as possible. This misses the point of everyday work however, as very few users have tasks that cover this entire range. In addition, motors with such a wide range of speeds cannot deliver constant power over the whole spectrum. Torque is often lacking in the lower speed range. This lack of power results in speed fluctuations, which in turn are negatively reflected in the grinding or polishing pattern. joke is therefore adopting a different, more practical approach with its new generation of motors: For the first time, users now have the possibility of choosing among different motors. They can now choose the one with the **performance characteristics that best suit their applications. All models are characterised by their durability, power, ergonomical handling, precision and high efficiency.** Drives are available that are still suitable for a wide range of tasks but, like competitive athletes, are particularly strong in their main disciplines:

- THE WORKER FOR TASKS THAT CALL FOR PARTICULAR POWER, WHICH NECESSITATE A LOW SPEED AND A HIGH TORQUE AT THE SAME TIME.
- THE FINE FINISHER FOR LIGHT WORK THAT REQUIRES PARTICULARLY FINE FINGERTIP CONTROL.
- THE FAST RUNNER FOR WORK WITH TOOLS THAT REQUIRE HIGH SPEEDS, SUCH AS MILLING OR GRINDING
- THE ALLROUNDER FOR HIGH FLEXIBILITY AND A WIDE RANGE OF APPLICATIONS WHERE MEDIUM TORQUE IS SUFFICIENT

All four motors run at a very constant speed and operate extremely quietly with low vibration.

Cool cut with a ceramic fibre cut-off disc







Polishing wood with hand-filing machine





Welding seam with Blue Stones grinding

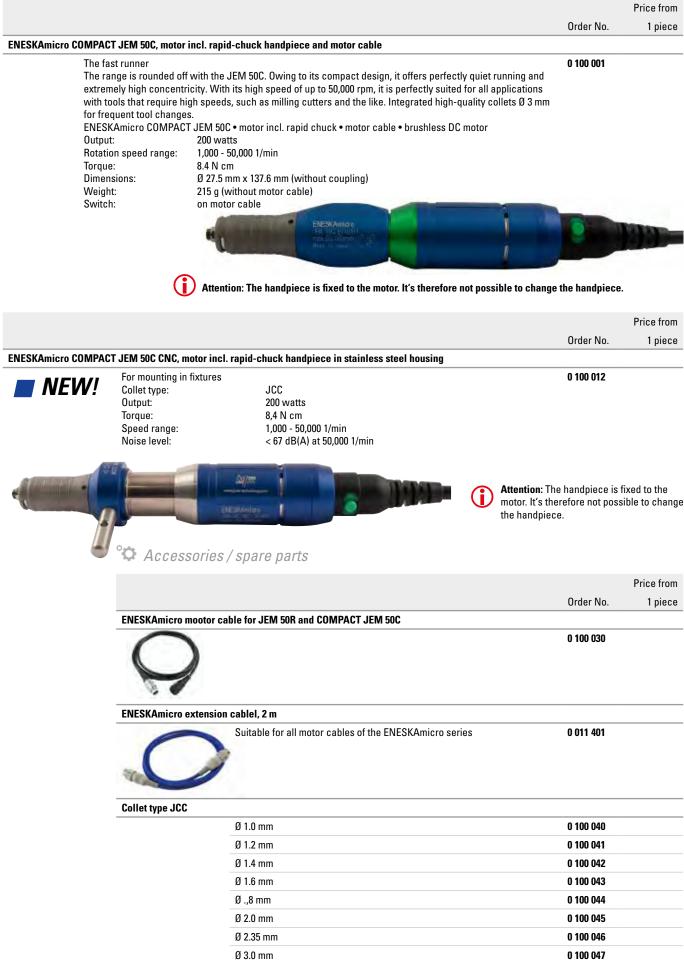
Aluminium polishing with angle-handpiece and felt

jo _{ke}

ENESKAmicro Micromotors 3rd generation



0 100 048



Ø 3.175 mm

ENESKAmicro Micromotors 3rd generation NEW!

Order No.

0 100 020

micro ration	
Price from	
1 piece	

 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: Speed range: Torque: Dimensions: Weight: Switch: 200 watts 1000 - 50,000 rpm 8.4 N cm Ø 27.5 mm x 137.6 mm (without coupling) 43.6 g (without motor cable) on motor cable





Accessories / spare parts



jo ke

ENESKAmicro Micromotors 3rd generation NEW!

			Price fror
		Order No.	1 piec
ESKAmicro motor JEM 40R, up t	o 40,000 rpm, incl. motor cable		
The fine finisher		0 100 002	
	e perfect choice for light work that requires handpieces that are both fine and delicate. Ideal		
for use in jewelle	ry working, for example.		
	M 40R, brushless AC motor with max. 40,000 rpm • incl. motor cable • rapid-Change coupling		
Output:	84 watts		
Rotation speed ra			
Torque:	4.0 N cm		
Dimensions:	Ø 25 mm x 71.4 mm		
	100 g (without motor cable)		
Weight:	Too g (without motor cable)		

•

• Accessories / spare parts



jo _{ke}

ENESKAmicro Micromotors 3rd generation

				Price from
			Order No.	1 piece
ESKAmicro motor JEM 20R, up to 20,000	rpm, incl. motor cable			
re a particularly high toro conventional motors. Speed fluctuations, whic and result in problems. Tl	ue. It is precisely these users who n occur with most motors, are dire ne new JEM 20R provides a torque	n the low speed range (up to 20,000 rpm), but requi- usually come up against performance limits with ctly reflected in the grinding or polishing pattern that makes such problems a thing of the past. The narmonious microsection, even with challenging	0 100 003	
tasks.	arancees an absolutely clean and i			
ENESKAmicro JEM 20R, I	prushless AC motor with max. 20,00)0 rpm • incl. motor cable • Rapid-Change coupling		
Output: Rotation speed range: Torque: Dimensions:	73 watts 1,000 - 20,000 1/min 5.0 N cm Ø 27.5 mm x 78.1 mm			
Weight: Switch:	145 g (without motor cable) on motor cable			
				199
° O Access	ories / spare parts			
				Price from
			Order No.	1 piece
	eduction gear JERG 2			







ENESKAmicro Handpieces JIR 40R **NEW!**



				Price from
			Order No.	1 piece
ENESKAmicro quick-release handpiece JI	R 40R			
	Collet: Speed: Dimensions:	Ø 3 mm in scope of delivery max. 40,000 r/min Ø 26 mm x 90 mm	0 100 005	

± 0.01 mm 112 g

• Accessories / spare parts

Concentricity: Weight:

	Price from
	Order No. 1 piece
Collet JCC	
Ø 1.0 mm	0 100 040
Ø 1.2 mm	0 100 041
Ø 1.4 mm	0 100 042
Ø 1.6 mm	0 100 043
Ø 1.8 mm	0 100 044
Ø 2.0 mm	0 100 045
Ø 2.35 mm	0 100 046
Ø 3.0 mm	0 100 047
Ø 3.175 mm	0 100 048

ENESKAmicro Handpieces

JBMXLH 40R			JEM 50R	JEM 40R	JEM 20R
					Price from
				Order No.	1 piece
ENESKAmicro handpiece JBMXLH 40R					
	with extended shank 12	6 mm		0 100 006L	
	Collet: Speed:	Ø 3 mm in scope of delivery max. 40,000 r/min			

Dimensions: Concentricity:

Weight:

• Accessories / spare parts

	Price from
	Order No. 1 piece
Collet JCC	
Ø 1.0 mm	0 100 040
Ø 1.2 mm	0 100 041
Ø 1.4 mm	0 100 042
Ø 1.6 mm	0 100 043
Ø 1.8 mm	0 100 044
Ø 2.0 mm	0 100 045
Ø 2.35 mm	0 100 046
Ø 3.0 mm	0 100 047
Ø 3.175 mm	0 100 048

± 0.01 mm

152 g

Ø 12.6 mm / Ø 21.8 mm x 198.5 mm

ENESKAmicro Handpieces JEHG 20R Heavy-Duty NEW!

Order No.

0 100 007

Fel. +49 2204 839-





Price from

Price from piece

Order No. 1 piece

0 100 009

Accessories / spare parts

Tool holder:

Weight:

Stroke length: Max. Strokes:

Max. Speed input: Dimensions:

		Order No.	1
Handpiece adapter JEC	R 03		
	for ENESKA JEM ,R' handpieces on ENESKA 4 motor series	0 100 092	
Handniece adapter JFC	R N4		

max. Ø 3.2 mm 1.0 mm

Ø 21.8 x 125.0 mm

12,000 rpm 20,000 rpm

142 g

for ENESKA JEM ,R' handpieces on ENESKA 3 motor series

0 100 093

Visit our shop: www.joke-technology.com

Price from

1 piece







ENESKAmicro mini hand filing machine JMH 20R

Collet:
Speed:
Dimensions:
Concentricity:
Weight:

Ø 6 mm in scope of delivery 141 g

max. 20,000 r/min Ø 22.5 mm x 99.5 mm ± 0.01 mm

Accessories / spare parts

	Price from
	Order No. 1 piece
Collet JCB	
Ø 2.35 mm	0 100 060
Ø 3.0 mm	0 100 061
Ø 6.0 mm	0 100 065





ENESKAmicro Handpieces JERA 90 20R NEW!



Price from

ENESKAmicro angle handpiece JERA 902	20R
10.0	



			Order No.	1 piece
RA 90 20R				
8	Collet: Speed:	Ø 3 mm included max. 20,000 r/min, reversal of the direction of rotation	0 100 004	
	Concentricity: Dimensions:	± 0.01 mm Ø 21.8 x 73 mm		
	Weight: Vibration:	92 g 2.5 m / s²		
	Noise level:	70 dB		

• Accessories / spare parts

	Price from
	Order No. 1 piece
Collet JCS	
Ø 2.35 mm	0 100 050
Ø 3.0 mm	0 100 051
Ø 3.175 mm	0 100 052

ENESKAmicro Handpieces JEAH 60 20R NEW!



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

• Accessories / spare parts

	Price from
	Order No. 1 piece
Collet JCS	
Ø 2.35 mm	0 100 050
Ø 3.0 mm	0 100 051
Ø 3.175 mm	0 100 052



for ergonomic handling of your handpieces **NEW!**

Hollow handle for ENESKAmicro

Perfect handling of the handpiece during polishing. The handle hemisphere fits perfectly into the hand, thereby providing full control with fatigue-free work. By simple conversion, the handle can be used by both right and left-handed individuals.

		Price from Order No. 1 piece
Hollow handle for ENESKAmicro with with R	-coupling	
	Or Or	0 009 249 Easy change between right-hand and left-hand operation!
JEM 50R		JEAH 60 20R NEW! Price from Order No. 1 piece
ENESKAmicro reduction gear JERG 2	Reduction ratio: 4:1	0 100 010
		JEAH 60 20R
JEM 50R JEM 40R JEM 20R		Price from
Extension JEEA 300 mm		Order No. 1 piece



Price from

ENESKAmicro Belt grinder JBS 20R **NEW!**



0 100 008-2

			Order No.	1 piece
ENESKAmicro belt grinder JBS 20R				
	Speed: for Beltsize:	max. 20,000 r/min 4 mm / 6 mm / 8 mm with guide, changeable handling	0 100 008	
	Weight:	227 g		
* *		ENESKAMICO JUS 2007 EHODOI Wada in Jacar Mada in Jacar CCW-40-6 CW		100

• Accessories / spare parts

			Price from
		Order No.	1 piec
Handpiece adapter JEC	R 03		
	for ENESKA JEM ,R' handpieces on ENESKA 4 motor series	0 100 092	
Handpiece adapter JEC	R 04		
	for ENESKA JEM ,R' handpieces on ENESKA 3 motor series	0 100 093	
Belt sander arm JBS 20	R		
	Complete for 4 mm belts without guidance	0 100 008-0	
	Complete for 4, 6 and 8 mm belts without guidance	0 100 008-1	



Complete for 4, 6 and 8 mm belts with guidance

Grinding belt 3M Trizact NEW!

					Price from	
	Dimensions	Grit size	Order No.	1 piece	100 pieces	300 pieces
Grinding belt 3M Trizact						
	6 x 300 mm	280	0 404 360			
\frown		240	0 404 361			
		120	0 404 362			
		80	0 404 363			



ENESKAmicro Belt grinder J-BS 100

Belt grinder J-BS

Compliments the ENESKAmicro system. This belt grinder is screwed onto the micromotors, just like a handpiece. It is small, fits nicely in your hand and can be used for delicate work. The head can be swivelled on its axis by approximately 90°. A hand rest is located above the grinding belts to enable the device to be used safely with both hands.

				Price from
			Order No.	1 piece
Belt grinder JBS 100 with (-)-connection				
	fits grinding belts 4, 6 ar Gearing: 8:3 Input rotation speed: Output speed: Weight:	max. 35,000 rpm max. 13,000 rpm 355 g ding belts 6 x 300 mm respectively	0 009 950	

• Accessories / spare parts

			Price from
		Order No.	1 piece
Handpiece adapter JEC	CR 01		
	for ENESKA 4 handpieces with ENESKA JEM ,R' series	0 100 090	
Handpiece adapter JEC	CR 02		
	for ENESKA 3 handnieces with ENESKA JEM_B' series	0 100 091	



SKA 3 handpieces with ENESKA JEM ,R' series

0 100 091





ENESKAmicro Belt grinder J-BS 100 • JBS 20R

• Accessories / spare parts

						Price fr	om
	Hardness	Dimensions	Grit size	Packing quantity	Order No.	1 pack	10 packs
Grinding belt, diamond							
	soft	8 x 300 mm	180	3 pieces	0 404 343		
		8 x 300 mm	240	3 pieces	0 404 344		
		8 x 300 mm	800	3 pieces	0 404 348		
		8 x 300 mm	1000	3 pieces	0 404 349		
Grinding belt, corundum							
		6 x 300 mm	120	10 pieces	0 401 540		
		6 x 300 mm	240	10 pieces	0 401 541		
		6 x 300 mm	320	10 pieces	0 401 545		
		6 x 300 mm	400	10 pieces	0 401 542		
		6 x 300 mm	500	10 pieces	0 401 549		
		6 x 300 mm	600	10 pieces	0 401 547		
		8 x 300 mm	80	50 pieces	0 401 930		
9		8 x 300 mm	120	50 pieces	0 401 931		
		8 x 300 mm	180	50 pieces	0 401 932		
0		8 x 300 mm	240	20 pieces	0 401 933-0		
D		8 x 300 mm	320	50 pieces	0 401 934		
Ø		8 x 300 mm	400	20 pieces	0 401 935-0		
		8 x 300 mm	600	20 pieces	0 401 936-0		
		8 x 300 mm	800	20 pieces	0 401 937-0		
		8 x 300 mm	1000	30 pieces	0 401 938		
Grinding belt, zirconium	corundum						
att		6 x 300 mm	80	10 pieces	0 401 543		
		6 x 300 mm	120	10 pieces	0 401 544		



ENESKAmicro COMPACT series COMPACT HT60

		Design	Price fro Order No. 1 pie
NESKAmicro COMPACT HT60			
	• With collet Ø 3 mm • Brushless DC motor BLDC • On-off switch located on the micromotor	Incl. motor cable 1.8 m and fan	0 011 409
	Motor speed:max. 60,000 rpmOutput:8.9 N cm at 280 WWeight:0.4 kgDimensions (D x L):Ø 30 x 170 mmConcentricity:< +/- 0.01 mm		
	Attentio	n: Suitable for work from an motor spee	ed > 20,000 1/min!
		COMPACT	HT60 SMAL
			Price fro
		Design	Order No. 1 pie
NESKAmicro COMPACT HT60 SMALL			
	 With collet Ø 3 mm Brushless DC motor BLDC On-off switch located on the micromotor 	Incl. motor cable 1.8 m and fan	0 011 469
	Motor speed: max. 60,000 rpm Output: 7.8 N cm at 260 W Weight: 0.22 kg Dimensions (D x L): Ø 28 x 156 mm Concentricity: < +/- 0.01 mm		
	Attent	on: Suitable for work from an motor spe	eed > 20,000 1/min!
° © Acces	ssories / spare parts		
			Price fro
		Dimensions	Order No. 1 pie
Collet type EN	ЛА	<u> </u>	
Dame		Ø 1.6 mm Ø 2.35 mm	0 011 411 0 011 412
		Ø 3.0 mm	0 011 413
		Ø 1/8"	0 011 414
ENESKAmicro	o motor cable HT, 1.8 m		
	For connecting the micromotors HT to the ENESKAmicro and ENESKA- mobile control units		0 011 402
ENESKAmicro	o extension cable, 2 m		
	Suitable for all motor cables of the ENESKAmicro series		0 011 401



ENESKAmicro COMPACT series COMPACT HT60-D6

					Price fro
			Design	Order No.	1 piec
ENESKAmicro COMPACT HT60-D	6				
	• With collet Ø 6 mm		Incl. motor cable 1.8	0 011 429	
C	Brushless DC motor E	BLDC	m and fan		
	On-off switch located	l on the micromotor			
	Motor speed:	up to max. 50,000 rpm			
	Output:	8.9 N cm at 280 W			
	Weight:	0.475 kg			
	Dimensions (D x L):	Ø 30 x 180 mm			
	Dimensions (D X L).	5 66 X 166 mm			
	Concentricity:	< +/- 0.01 mm			
	Concentricity: Collet type:		,000 1/min!		
NESKAmicro HT60-D6 CNC	Concentricity: Collet type: Attention: Suitable for wo	< +/- 0.01 mm EMB rk from an motor speed > 20			
NESKAmicro HT60-D6 CNC	Concentricity: Collet type: Attention: Suitable for wo • With collet Ø 3 and 6	< +/- 0.01 mm EMB rk from an motor speed > 20 mm	incl. motor cable 3 m,	0 011 470	
NESKAmicro HT60-D6 CNC	Concentricity: Collet type: Attention: Suitable for wo	< +/- 0.01 mm EMB rk from an motor speed > 20 mm		0 011 470	
NESKAmicro HT60-D6 CNC	Concentricity: Collet type: Attention: Suitable for wo • With collet Ø 3 and 6	< +/- 0.01 mm EMB rk from an motor speed > 20 mm	incl. motor cable 3 m,	0 011 470	
NESKAmicro HT60-D6 CNC	Concentricity: Collet type: Attention: Suitable for wo • With collet Ø 3 and 6 • Brushless DC motor B Motor speed: Output:	< +/- 0.01 mm EMB rk from an motor speed > 20 mm 3LDC	incl. motor cable 3 m,	0 011 470	
NESKAmicro HT60-D6 CNC	Concentricity: Collet type: Attention: Suitable for wo • With collet Ø 3 and 6 • Brushless DC motor f Motor speed: Output: Weight:	< +/- 0.01 mm EMB rk from an motor speed > 20 mm 3LDC up to max. 50,000 rpm 8.9 N cm at 280 W 0.5 kg	incl. motor cable 3 m,	0 011 470	
ENESKAmicro HT60-D6 CNC	Concentricity: Collet type: Attention: Suitable for wo • With collet Ø 3 and 6 • Brushless DC motor f Motor speed: Output: Weight: Dimensions (D x L):	< +/- 0.01 mm EMB rk from an motor speed > 20 mm 3LDC up to max. 50,000 rpm 8.9 N cm at 280 W 0.5 kg Ø 28 x 170 mm	incl. motor cable 3 m,	0 011 470	
ENESKAmicro HT60-D6 CNC	Concentricity: Collet type: Attention: Suitable for wo • With collet Ø 3 and 6 • Brushless DC motor f Motor speed: Output: Weight: Dimensions (D x L): Clamping shank:	< +/- 0.01 mm EMB rk from an motor speed > 20 mm 3LDC up to max. 50,000 rpm 8.9 N cm at 280 W 0.5 kg Ø 28 x 170 mm Ø 28 x 45 mm	incl. motor cable 3 m,	0 011 470	
ENESKAmicro HT60-D6 CNC	Concentricity: Collet type: Attention: Suitable for wo • With collet Ø 3 and 6 • Brushless DC motor f Motor speed: Output: Weight: Dimensions (D x L):	< +/- 0.01 mm EMB rk from an motor speed > 20 mm 3LDC up to max. 50,000 rpm 8.9 N cm at 280 W 0.5 kg Ø 28 x 170 mm	incl. motor cable 3 m,	0 011 470	



• Accessories / spare parts

					Price from	
		Dimensions	Order No.	1 piece	3 pieces	5 pieces
Collet type CHG						
		Ø 2.35 mm	0 009 653			
		Ø 3.0 mm	0 009 652			
		Ø 6.0 mm	0 009 651			
ENESKAmicro extension	n cable, 2 m					
0	Suitable for all motor cables of the ENESKAmicro series		0 011 401			
ENESKAmicro motorcab	le HT-D6, fan-variation					
			0 011 404-1			

36 Tel. +49 2204 839-0 • sales@joke.de

ENESKAmicro COMPACT series COMPACT HT60-XL

					Price from
			Design	Order No.	1 piece
ENESKAmicro COMPACT HT60-XL					
	 With collet Ø 3 mm Brushless DC motor B On-off switch located XL axle 		Incl. motor cable 1.8 m and fan	0 011 419	
	Motor speed: Output: Weight: Dimensions (D x L): Collet axle: housing) Concentricity:	up to max. 50,000 rpm 8.9 N cm at 280 W 0.4 kg Ø 30 x 200 mm Ø 8 x 30 mm (outside the < +/- 0.01 mm			
	Collet type:	< +/- 0.01 mm EMA			
		Attention: Suitable	for work from an motor spee	ed > 20,000 1/min	!

• Accessories / spare parts

			Pri	ce from
		Dimensions	Order No.	1 piece
Collet type EMA				
		Ø 1.6 mm	0 011 411	
		Ø 2.35 mm	0 011 412	
		Ø 3.0 mm	0 011 413	
		Ø 1/8"	0 011 414	
ENESKAmicro motor c	able HT, 1.8 m			
00	For connecting the micromotors HT to the ENESKAmicro and ENESKA- mobile control units		0 011 402	
ENESKAmicro extension	on cable, 2 m			
0	Suitable for all motor cables of the ENESKAmicro series		0 011 401	
-				





ENESKAmicro Hand-filing machines with integrated micromotor Hand-filing machine DIPROFIL® Di-Pro FXM-N, Mark II

Hand-filing machines with integrated micromotor

These hand-filing machines with a built-in micromotor can be directly connected to suitable ENESKAmicro 600 series control units. No additional micromotor is required.

			Order No.	1 piece
and-filing machine DIPROFIL® Di-Pr	o FXM-N, Mark II			
1	for direct connection	to ENESKAmicro control units 600	0 001 521-N	
	Stroke length:	of 0 – 6 mm, continuously adjustable (0.5 – 3 mm recommended)		
	No. of strokes:	max. 7,000 strokes/min (5,000 – 6,000 strokes/min recommended)		
100	Tool receptacle:	Ø 2 – 6.4 mm		
	Insertion depth:	40 mm		
	Vibration:	1.55 – 5.08 m/s²		
	Weight:	860 g		
	Noise level:	< 75 dB (A) at 7,000 strokes/min		
	Accessories:	Storage case, tool set, extension tube /finger protection		
		bush, counterweights, replacement friction bearing and felts, lubricating oil		

ENESKAmicro Hand-filing machines with integrated micromotor Hand-filing machine DIPROFIL® FPM/R, Mark II

Hand-filing machines with integrated micromotor

These hand-filing machines with a built-in micromotor can be directly connected to suitable ENESKAmicro 600, as well as DIPROFIL® DPU-3 series control units (via adapter). No additional micromotor is required.

				Price from
			Order No.	1 piec
Hand-filing machine DIPROFIL® I	FPM/R, Mark II			
	for direct connection t	o ENESKAmicro control units 600	0 005 201-N	
Ţ	Stroke length: Number of strokes: Initial speed: Tool receptacle: Weight: Scope of supply:	0.5 – 6 mm, infinitely adjustable 1,000 – 7,800 strokes/min. max. 30,000 rpm Ø 1 – 6.2 mm 800 g 2 tool holders, tool set, oil and storage case		
		ders can be found on page 249 It www.joke-technology.com		

ENESKAmicro Hand-filing machines with (+) connection Hand-filing machine JFMM 4

				Price from
			Order No.	1 piece
Hand-filing machine JFMM 4, complete with ac	cessories			
A .	For connection to m with step-down gea	icromotors with (+) connection, r ratio 4:1	0 005 300	
œ q ¶¶ €	Stroke length: No. of strokes: Initial speed: Tool support: Weight: Accessories:	0 – 6 mm, continuously adjustable max. 7,800 strokes/min max. 30,000 1/min Ø 1 – 6.2 mm 750 g storage box, tool holder, tool set, oil		

Combine new motors with existing, older handpieces? (\mathbf{i}) Or new handpieces with earlier generation motors? No problem: These adapters make it possible!

O			
			Price from
		Order No.	1 piece
Handpiece adapter JECR 01			
	for ENESKA 4 handpieces with ENESKA JEM ,R' series	0 100 090	
Handpiece adapter JECR 02			
	for ENESKA 3 handpieces with ENESKA JEM ,R' series	0 100 091	
Handpiece adapter JECR 03			
	for ENESKA JEM ,R' handpieces on ENESKA 4 motor series	0 100 092	
Handpiece adapter JECR 04			
	for ENESKA JEM ,R' handpieces on ENESKA 3 motor series	0 100 093	



Mobile polishing system ENESKAmobile

ENESKAmobile

The handy, battery operated ENESKAmobile polishing system is the ideal tool for setters and toolmakers – anywhere that grinding, polishing, milling or deburring is required. Robust and shock-resistant, it can be used flexibly in any place, and away from the work bench.

This mobile device is extremely versatile as it can be used with all motors, handpieces and filing machines compatible with the ENESKAmicro. It is also powerful and long-lasting. The batteries can be charged separately, which allows non-stop working. With up to 3 hours battery life under full load and a maximum torque of 6.5 N cm at 40,000 rpm, it can be used in a significantly wider range of applications than conventional devices of this type.

The speed is continuously adjustable from 2,000 to 40,000 rpm. Left and right rotation are also a matter of course with this single-handed device.

Highlights:

- Extremely versatile, as it can be connected to all ENESKAmicro motors (BLDC), handpieces and filing machines
- Ergonomic handling given by start/stop function directly on the motor, straightforward control unit and pocket-size casing
- High-quality Li-Ion batteries
- No inconvenient time lost waiting for the batteries to charge, because they are exchangeable and can be recharged separately
- for brushless DC motor (BLDC)
- Runs clockwise/anticlockwise
- Monitoring of battery level and temperature
- Digital control with protective disconnection
- High torque with max. of 6.5 N cm on the motor shaft

				Price from
			Order No.	1 piec
NESKAmobile cordless grinder system, control un	it			
	Technical data: Speed: Battery: Exchangeable battery: Battery capacity: Output power: Operating time: Load time: Dimensions (w x h x d): Weight (without battery): Weight (with battery):	2,000 – 40,000 rpm (steplessly adjustable) 14.8 V Li-lon yes 3,000 mAh 44.4 W up to 3 hours 2.5 hours for 80 % + 0.5 hours for 100 % 176 x 103 x 49 mm 200 g 480 g	0 012 301	
	# Control unit ONLY, WITH	IOUT battery and charger #		

Accessories / spare parts

			Price from
		Order No.	1 piece
ENESKAmobile cord	lless grinder system, charger		
4	 ENESKAmobile charger including power supply (only power supply unit Order No. 2 112 203) LED charge level indicator Clip-In function for joke battery pack Dimensions (w x h x d): 176 x 103 x 42 mm Weight: 200 g 	0 012 302	
ENESKAmobile cord	lless grinder system, replacement battery-pack		
0	 Li-Ion 14.8 V 3,000 mAh 44.4 Wh LG 41SP Clip-In function for joke ENESKAmobile charger CE approved Dimensions (w x h x d): 100 x 103 x 36 mm Weight: 280 g 	0 012 303	
ENESKAmobile cord	lless grinder system, plastic case with foam pad		
	 Plastic case with foam insert for: ENESKAmobile control unit including battery ENESKAmobile charger with power supply 2 additional battery slots One-piece handpiece or micromotor with mounted handpiece with cable rewind Position slots for handpiece tools 	0 012 304	

The ENESKAmobile system offers the following options for using handpieces



()

ENESKAmicro rapid chuck handpiece JIR 40R Order No.: **0 100 005**



ENESKAmicro handpiece JEHG 20R Order No.: 0 100 007



ENESKAmicro mini hand-filing machine JMH 20R Order No.: **0 100 009**



ENESKAmicro belt grinder JBS 20R Order No.: 0 100 008

ENESKAmicro handpiece JBMXLH 40R Order No.: **0 100 006L**



ENESKAmicro angle-handpiece JERA 90 20R Order No.: **0 100 004**



ENESKAmicro angle-handpiece JEAH 60 20R Order No.: 0 100 011



ENESKAmicro reducing gear JERG 2 Order No.: **0 100 010**

Extension JEEA 300 mm Order No.: **0 100 013**





Video ENESKAmobile

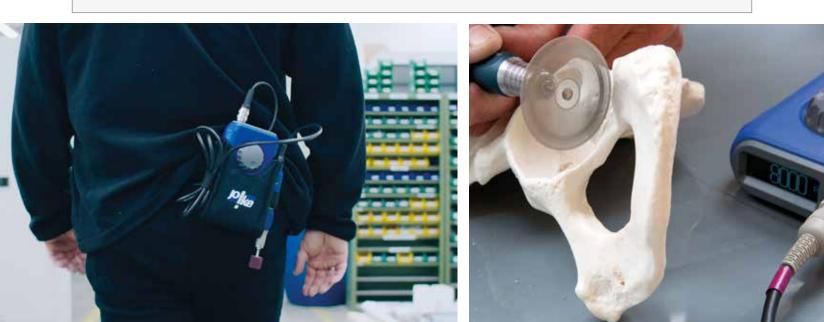


Device sets and other variants can be found in our shop at: www.joke-technology.com





Be mobile everywhere! Powerful, lightweight and easy to use.





Mobile polishing system ENESKAmobile

		Order No.
ENESKAmobile cordless	grinder system Set JEM 40R	
	 The set contains the following components: ENESKAmobile control unit (Order No. 0 012 301) ENESKAmobile charger including power supply (Order No. 0 012 302) ENESKAmobile battery-pack (Order No. 0 012 303) ENESKAmicro JEM 40R, motor with 40,000 r/min incl.motor cable (Order No. 0 100 002) ENESKAmicro rapid-chuck handpiece JIR 40R, incl. Ø 3 mm collet (Order No. 0 100 005) Plastic case (Order No. 0 012 304) 	0 012 355
ENESKAmobile cordless	grinder system Set JEM 20R	
	 The set contains the following components: ENESKAmobile control unit (Order No. 0 012 301) ENESKAmobile charger including power supply (Order No. 0 012 302) ENESKAmobile battery-pack (Order No. 0 012 303) ENESKAmicro JEM 20R, motor with 20,000 r/min incl.motor cable (Order No. 0 100 003) ENESKAmicro rapid-chuck handpiece JIR 40R, incl. Ø 3 mm collet (Order No. 0 100 005) Plastic case (Order No. 0 012 304) 	0 012 360
NESKAmobile cordless	grinder system Set JEM 50R	
	 The set contains the following components: ENESKAmobile control unit (Order No. 0 012 301) ENESKAmobile charger including power supply (Order No. 0 012 302) ENESKAmobile battery-pack (Order No. 0 012 303) ENESKAmicro JEM 50R, motor with 50,000 r/min incl.motor cable (Order No. 0 100 020) ENESKAmicro rapid-chuck handpiece JIR 40R, incl. Ø 3 mm collet (Order No. 0 100 005) Plastic case (Order No. 0 012 304) 	0 012 365
IESKAmobile cordless	grinder system Set COMPACT JEM 50C	
	 The set contains the following components: ENESKAmobile control unit (Order No. 0 012 301) ENESKAmobile charger including power supply (Order No. 0 012 302) ENESKAmobile battery-pack (Order No. 0 012 303) ENESKAmicro COMPACT JEM 50C, motor incl. rapid-chuck handpiece and motor cabel (Order No. 0 100 001) plastic case (Order No. 0 012 304) 	0 012 300
NESKAmobile cordless	grinder system Set LITE	
	The set contains the following components: • ENESKAmobile control unit (Order No. 0 012 301) • ENESKAmobile charger including power supply (Order No. 0 012 302) • ENESKAmobile battery-pack (Order No. 0 012 303) • plastic case (Order No. 0 012 304)	0 012 315
NESKAmobile cordless	grinder system Set COMPACT	
	The set contains the following components: • ENESKAmobile control unit (Order No. 0 012 301) • ENESKAmobile charger including power supply (Order No. 0 012 302) • ENESKAmobile battery-pack (Order No. 0 012 303) • ENESKAmicro COMPACT HT60 SMALL, Motor incl. Rapid-Chuck-Handpiece Power, fan-variation (Order No. 0 011 469) • plastic case (Order No. 0 012 304)	0 012 350

44



Mobile polishing system MINI MONTOR mobile 1 P

MINI MONTOR mobile 1 P

The mobile system for grinding, milling and polishing. Maximum mobility in processing large workpieces, for this compact system can now be taken with you almost anywhere. The Ni-Mh storage battery is not only environment friendly; it is durable too: 90 minutes working time at a stretch. If ever the juice dries up, you can also continue work with the mains cable (the storage battery is recharged in the meantime!).

The handpiece (with an integrated motor) can be rotated clockwise and anticlockwise, is infinitely adjustable in speed and is electrically protected against overload. The handpiece can be set in motion both by hand and using a foot switch. The speed can also be regulated in both ways.

The set consisting of control unit, handpiece and all accessories is supplied in a compact hard-shell aluminium case.

				Price from
			Order No.	1 piece
Nobile control unit MPC20-W				
~		of the handpiece MPH 33. age battery (Ni-Mh) for mobile use.	0 006 713	
12	Dimensions (W x H x D):			
	Weight:	300 g		
1 min	Storage battery type: Charging time:	Ni-Mh 60 min.		
(a d)	Working time:	90 min.		
Accessories	/ spare parts			
				Price fror
			Order No.	1 piec
Battery for MPC20-W				i piec
			0 006 724	
-1-				
U matching set	t			
				Price fron
			Order No.	1 piece
Set MINI MONTOR mob	ile 1 P			
100000000000000000000000000000000000000	This set consists of:		0 006 700	
	1 x control unit MPC20-W	/ (Order No. 0 006 713) rated micromotor (Order No. 0 006 711)		
Contraction of the second s	(incl. 1 x collet Ø 3 mm	n Order No. 0 006 704)		
	1 x charging device ACPC 1 x foot controller TPF30			
	1 x handpiece rack TRCO	2 (Order No. 0 006 702)		
	1 x hard-shell aluminium	case (Order No. 0 006 703)		
SIVE EN LA				
				Price from
			Order No.	1 piece
landpiece MPH 33				1 piece
	Speed:	max. 30,000 rpm 20 W	Order No. 0 006 711	1 piece
łandpiece MPH 33	Output: Dimensions:	max. 30,000 rpm 20 W Ø 25 x 143 mm		1 pieco
landpiece MPH 33	Output:	20 W		1 piece

Motor system with flexible shaft

jokeFlex Premium Plus









piokeFlex Premium PLUS

- Minimised noise emission
- The most powerful joke motor of all time
- Compatible with accessories from the previous generation
- Flexible shafts with silicon hose

jokeFlex Premium Plus motor system

Our flexible shaft system for today and the future. The core is the motor with an impressive 1,000 watts power. The noise level is reduced to a pleasant level in spite of increased power. The motor can be used in a hanging or lying position. Thanks to the robust construction of the suspension and shaft connection, it is optimally equipped for a hard day's work.

The matching **joke Premium Plus handpieces** fulfill all requirements which are expected of a modern handpiece. They lie comfortably and securely in the hand, muffle vibrations effectively and tire the worker's hand over long working periods. This is achieved by the uniformly narrow handle made of special rubber which is used in all handpieces. At least equally important: the inside. And also here high tech is the key. The handpieces are very robust and have a closed double bearing inside. The result is extremely quiet-running operation. Further advantages of the Premium Plus hand-pieces: changing the tool in seconds, without pinning.

The joke Premium Plus handpieces are available in a straight design or with a 90° angle head. The handpieces are of course also available in Rapid-Change design which connects to the motor system in a second. A closer look at the angle handpiece is worth-while: the slim, almost filigree head gives you the opportunity of reaching and processing even otherwise difficult to access areas of the workpiece.



Motor system with flexible shaft jokeFlex Premium Plus





Motor system with flexible shaft jokeFlex Premium Plus

Premium Plus flexible shafts

The Premium Plus flexible shafts are consistently optimised to suit everyday requirements in industry. The silicone hose offers many advantages:

- Utmost flexibility and suppleness
- Extremely smooth running (owing to minimised vibrations)
- Very quiet
- No heat generation

For connecting the handpieces, our flexible shafts offer you a choice between a spring clip and the joke Rapid-Change quick coupling system. This innovative system allows safe handpiece change in a few seconds without any "fumbling around". Shafts with a hook spring are also available on request.

On the motor side, a choice of shafts with standard motor connection or the joke Quick-Change "premium connection" is available.



Flexible shaft with hook ring

Motor connectors



joke Quick-Change motor connector



Standard motor connector (with pins)



Flexible shaft with Rapid-Change coupling

				Price from
	Shaft connection	Motor connection	Dimensions	Order No. 1 piece
Flexible shaft with	Rapid-Change coupling			
Rapid Change coup	Rapid Change coupling	standard	1,100 mm	0 015 900
\bigcirc		Quick-Change	1,100 mm	0 016 900
Flexible shaft with	spring clip			
\bigcirc	Spring clip	standard	1,100 mm	0 015 800
\frown	Spring clip	Quick-Change	1,100 mm	0 016 800



Price from

Motor system with flexible shaft jokeFlex Premium Plus

jokeFlex Premium Plus motor system

Our flexible shaft system for today and the future. The core is the motor with an impressive 1,000 watts power. The noise level is reduced to a pleasant level in spite of increased power. The motor can be used in a hanging or lying position. Thanks to the robust construction of the suspension and shaft connection, it is optimally equipped for a hard day's work.

The matching joke Premium Plus handpieces fulfill all requirements which are expected of a modern handpiece. They lie comfortably and securely in the hand, muffle vibrations effectively and tire the worker's hand over long working periods. This is achieved by the uniformly narrow handle made of special rubber which is used in all handpieces. At least equally important: the inside. And also here high tech is the key. The handpieces are very robust and have a closed double bearing inside. The result is extremely quiet-running operation. Further advantages of the Premium Plus hand-pieces: changing the tool in seconds, without pinning.

The joke Premium Plus handpieces are available in a straight design or with a 90° angle head. The handpieces are of course also available in Rapid-Change design which connects to the motorsystem in a second. A closer look at the angle handpiece is worthwhile: the slim, almost filigree head gives you the opportunity of reaching and processing even otherwise difficult to access areas of the workpiece.

				Price from
			Order No.	1 piece
Motor jokeFlex Premium Plus				
in the second se		ft connection and suspension) pleasant noise nd hanging, compatible with foot controller max. 18,000 1/min 1,000 W input, 700 W output 240 x 105 x 95 mm	0 016 550	
A. A.	Weight: Cable length:	2.1 kg 2.2 m		
	Shaft connection:	Quick-Change		

Matching set

				Price from
		Design	Order No.	1 piece
Advantage package jok	eFlex Premium Plus			
0	This advantage package for getting	Rapid-Change	0 016 850R	
	started straight away includes: 1 x motor Premium Plus (Order No. 0 016 550) 1 x foot controller Premium (Order No. 0 016 600) 1 x flexible shaft Premium Plus 1.1 m length (Order No. 0 016 800, for Rapid-Change Order No. 0 016 900)	standard	0 016 850	

O Accessories / spare parts

			Urder No.	1 pack	1 piece
Foot control Premi	um, Motor system with flexib	le shaft			
	To adjust motor speed	l by foot action	0 016 600		
	Speed range:	3,000 to 22,000 1/min			
A D	Speed restriction:	the potentiometer can be used to limit maximum speed to between 10,000 to			
		22,000 rpm			
	Dimensions:	Ø 190 (230 with pedal) x 200 mm			
	Weight:	2 kg			
	Supply voltage:	230 volts, 50 Hz			
	Cable length:	2.8 m			
Suspension device	e G2, height adjustable				
	• Fixable to the workb		0 020 200		
	clamping range: max				
	• •	etween 700 and 1,100 mm			
		antilever arm adjustable by max. 300 mm			
	 Lockable in any des 	ired position			
	• Colour: blue/silver				
Spring clip, Standa	nd				
4	Proven steel design, p	oack contents: 20 pieces	0 015 201		



25

Handpieces

joke Premium Plus

Price from Order No. 1 piece Туре Handpiece joke Premium Plus 0 030 200 Rotational speed: max. 22,000 1/min standard Collet: GH (Ø 3 mm in scope of delivery) Rapid-Change 0 030 200R Dimensions: Ø 25 x 138 mm Weight: Scope of delivery: 160 g including tool set

🍄 Accessories / spare parts

				Price from	
		Dimensions	Order No.	1 piece	3 pieces
Collet type GH					
		Ø 2.35 mm – 3/32"	0 030 010		
C-T-		Ø 3 mm	0 030 013		
		Ø 6 mm	0 030 016		
Driver					
i si k			0 030 205		
Connector plug					
	Rapid change to joke Premium Plus handpieces		0 015 285		

					Price from
			Туре	Order No.	1 piece
Angle-Handpiece 90° joke P	remium Plus				
(h.	Rotational speed:	max. 18,000 1/min, clockwise rotation	standard	0 030 250	
	Collet: Dimensions:	WH (Ø 3 mm in scope of delivery) Ø 26 x 165 mm (head Ø 17 x 27 mm)	Rapid-Change	0 030 250R	
	Weight:	170 g			
-	Scope of delivery incl	uding tool set			

🍄 Accessories / spare parts

				Price from	
		Dimensions	Order No.	1 piece	3 pieces
Collet type WH					
		Ø 2.35 mm – 3/32"	0 031 301		
		Ø 3 mm	0 031 302		
Driver					
			0 030 205		
Connector plug					
	Rapid change to joke Premium Plus handpieces		0 015 285		



Handpieces joke Classic-Line

					Price from
			Туре	Order No.	1 piece
Handpiece THSZ/N					
1 Carrier and a second	Collet:	GH (Ø 3 mm in scope	standard	0 030 004	
	Speed: Dimensions: Weight: Scope of delivery w	of delivery) max. 18,000 1/min Ø 24 x 132 mm 120 g rrench, clamping pin	Rapid-Change	0 030 004R	

° Accessories / spare parts

				Price f	rom
		Dimensions	Order No.	1 piece	3 pieces
Collet type GH					
		Ø 2.35 mm – 3/32"	0 030 010		
CARE -		Ø 3 mm	0 030 013		
C. F.		Ø 6 mm	0 030 016		
Driver for Rapid-Chang	ge				
) C			0 015 262		
Connector plug					
and the second	Rapid change to Handpiece THSZ/N Order No. 0 030 004, 0 030 005 and 0 030 006		0 015 261-1		

					Price from
			Туре	Order No.	1 piece
Angle-handpiece VTN-N 90°					
		70 mm telescope-type extendable angle head with 90° star		0 031 341	
	head adjustment, cloc Collet:	kwise rotation WH (Ø 2.35 and Ø 3 mm in scope of delivery)	Rapid-Change	0 031 341R	
	Speed:	max. 18,000 1/min			
	Dimensions:	Ø 24 x 175 mm (head Ø 17 x 30 mm)			
	Weight:	185 g			
	Scope of delivery:	tool kit			

• Accessories / spare parts

				Price from	
		Dimensions	Order No.	1 piece	3 pieces
Collet type WH					
		Ø 2.35 mm – 3/32"	0 031 301		
		Ø 3 mm	0 031 302		
Driver					
			0 015 264		
Connector plug					
	Rapid change to Anglehandpiece VTN/N		0 015 263		



Handpieces joke Classic-Line

					Price from
			Туре	Order No.	1 piece
Angle-handpiece VTN-S/N					
	Collet:	GH (Ø 3 and Ø 6 mm in scope of delivery)	standard	0 031 540	
	Speed: Rotation: Dimensions: Weight: Scope of delivery:	max. 18,000 1/min clockwise Ø 24 x 171 mm (head Ø 24 x 40 mm) 240 g tool kit	Rapid-Change	0 031 540R	

🍄 Accessories / spare parts

				Price f	rom
		Dimensions	Order No.	1 piece	3 pieces
Collet type GH					
		Ø 2.35 mm – 3/32"	0 030 010		
1		Ø 3 mm	0 030 013		
		Ø 6 mm	0 030 016		
Driver					
			0 031 563		
Connector plug					
No.	Rapid change for anglehandpiece VTN-S/N		0 015 265		

Rapid-chuck handpiece TH-M II

This Rapid-chuck handpiece was designed for lighter jobs involving frequent tool changes. The selected tools are clamped in using the clamping lever fitted on the top.

					Price from
			Туре	Order No.	1 piece
Rapid-chuck handpiece TH-M II					
4	Collet:	TH (Ø 3 mm in scope of delivery)	standard	0 030 640	
	Speed: Dimensions: Weight:	max. 15,000 1/min Ø 21.9 x 139 mm 107 g	Rapid-Change	0 030 640R	

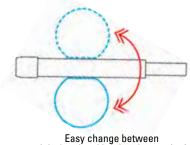
♥♥ Accessories / spare parts

				Price from	
		Dimensions	Order No.	1 piece	3 pieces
Collet type TH					
		Ø 2.35 mm	0 030 641		
		Ø 3 mm	0 030 642		
Driver					
			0 030 666		
Connector plug					
	Rapid Change suitable for the TH-M II quick release handpiece (0 030 640)		0 015 273		



Hemisphere handpiece NHG-L

Our special recommendation for polishing jobs (for example, when using rings for finishing). The hemisphere attached to the handle provides a fatigue-free handrest and can be adapted for either right or left-handed users.



Easy change between right-hand and left-hand operation!

					Price from
			Туре	Order No.	1 piece
Hemisphere handpiece NHG-L					
		able angle head (70 mm),	standard	0 031 400	
	with 125° head adjustr Collet: Speed: Dimensions: Weight: Scope of delivery:	nent, anticlockwise rotation WH max. 11,000 1/min Ø 18 x 190 mm (head Ø 18 x 30 mm) 250 g Collet Ø 3 mm, holder for ring Ø 12 mm, tool kit	Rapid-Change	0 031 400R	
	assarias / spara	norto			



				Price f	rom
		Dimensions	Order No.	1 piece	3 pieces
Collet type WH					
		Ø 2.35 mm – 3/32"	0 031 301		
11-1		Ø 3 mm	0 031 302		
Driver					
			0 015 256		
Connector plug					
	Rapid change for hollow Handpiece		0 015 255		

jo _{ke}

Hand-filing machines DIPROFIL® Di-Pro • FXK-N • FPK/R

					Price from
			Туре	Order No.	1 piece
Hand-filing machine DIPROFIL® FPI	K/R, Mark II				
17022300 A.C.	Stroke length:	0 – 6 mm, (recommended 0.5 – 3 mm)	standard	0 005 151-N	
-	No. of strokes: Tool receptacle: Insertion depth: Vibration: Sound level:	max. 8,000 strokes/min (5,000 – 6,000 strokes/min recommended) Ø 2 – 6.4 mm 40 mm 5.79 – 13.37 m/s ² < 70 dB(A) at 7,000 strokes/min (acc. to ISO	Rapid-Change	0 005 151R-N	
U	15744) Weight: Scope of delivery:	575 g storage case, tool set, oil, extension tube/ finger protection bush, replacement friction bearing and felts, lubricating oil			

°♥ Accessories / spare parts

			Price f	rom
		Order No.	1 piece	3 pieces
Driver				
		0 015 252		
Connector plug				
	Rapid change to DIPROFIL® FPB/R, FPK/R, FPB/RL, FPK/RLV, FXB	0 015 251		

					Price from
			Туре	Order No.	1 piece
Hand-filing machine DIPROFIL® Di-	Pro FXK-N, Mark II				
	Stroke length:	0.5 – 6 mm (recommended 0.5 – 3 mm)	standard	0 001 503-N	
	No. of strokes:	max. 7,000 strokes/min, (5,000 – 6,000 strokes/min recommended)			
	Tool receptacle: Insertion depth:	Ø 2 – 6.4 mm 40 mm			
	Vibration:	1.55 – 5.08 m/s ²			
	Sound level: Weight:	< 75 dB(A) at 7,000 strokes/min 700 g			
	Scope of delivery:	Storage case, tool set, extension tube, finger protection bush, counterweights replacement friction bearing and felts, lubricating oil			

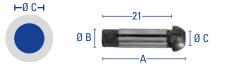
🍄 Accessories / spare parts

			Price from	
		Order No.	1 piece	3 pieces
Driver				
		0 015 252		
Connector plug				
	Rapid change to DIPROFIL® FPB/R, FPK/R, FPB/RL, FPK/RLV, FXB	0 015 251		



Reducing sleeves to allow use of a smaller shaft diameter in larger collets

			Price from	
Length A	Dimensions	Order No.	1 piece	5 pieces
28 mm	B Ø 3.0 C Ø 2.35 mm	0 545 287		
25 mm	B Ø 3.0 C Ø 1.6 mm	0 010 583		
	B Ø 3.0 C Ø 2.35 mm	0 010 588		
	B Ø 6.0 C Ø 3.0 mm	0 545 288		
	28 mm	28 mm B Ø 3.0 C Ø 2.35 mm 25 mm B Ø 3.0 C Ø 1.6 mm B Ø 3.0 C Ø 2.35 mm	28 mm B Ø 3.0 C Ø 2.35 mm 0 545 287 25 mm B Ø 3.0 C Ø 1.6 mm 0 010 583 B Ø 3.0 C Ø 2.35 mm 0 010 583	Length A Dimensions Order No. 1 piece 28 mm B Ø 3.0 C Ø 2.35 mm 0 545 287 - 25 mm B Ø 3.0 C Ø 1.6 mm 0 010 583 - B Ø 3.0 C Ø 2.35 mm 0 010 583 - -



()	More reducing bushes on request!
	Other reducing bushes in 0.1 mm decrements are available!

Quick coupling system joke Rapid-Change

joke Rapid-Change

The revolution in secure, rapid handpiece changes. The joke Rapid-Change quick coupling system means you can change handpieces in just a few seconds: just pull out the old handpiece and push in the new one. Hey presto!

This system does not just optimise hand-piece changes however. It also means that you can work with joke Rapid-Change more safely and economically, because firstly, there is no longer any risk of injury from spring clips and secondly, repair costs are lower. A "Rapid-Change connection" between the hand-piece and the shaft simply lasts longer.

You can continue to use your existing hand-pieces. All you need is a conversion set and a coupling piece, which is simply fitted to the handpiece end of the flexible shaft.

When buying handpieces, you can choose between the standard design with spring clips and the version with the Rapid-Change connector.



			Price f	rom
		Order No.	1 piece	3 pieces
Rapid-Change coupling for jokeFlex Premium Plus	S			
	for mounting at the flexible shaft (handpiece end)	0 015 250		
		2		X
Handpiece conversion in just two steps:	Unscrew sliding connector cover		oid-Change country of the second s	



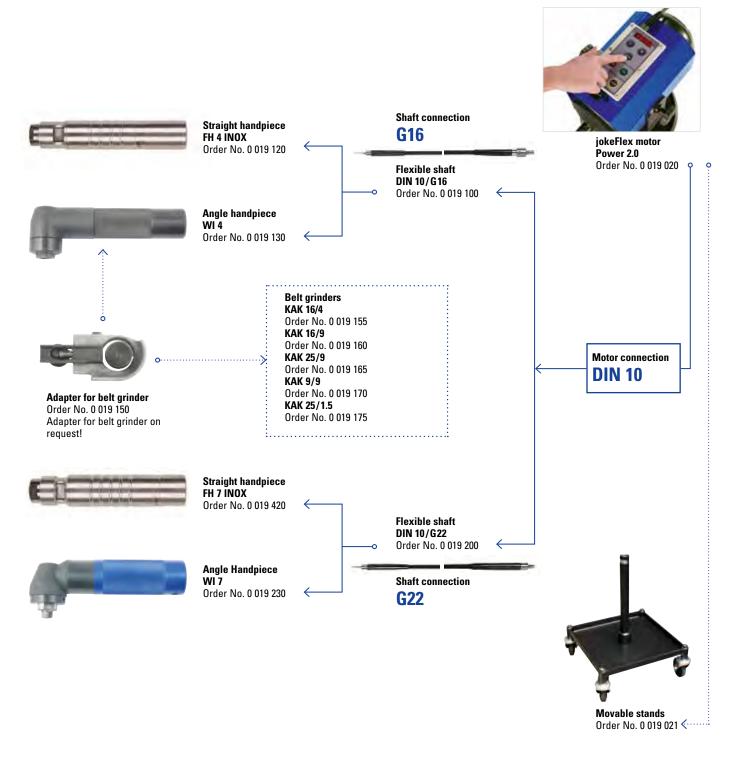
jokeFlex Power Motor • Accessories • Flexible shafts

Motor system jokeFlex Power –

The heavyweight champion

Our most powerful driving motor – for your coarse and large surface grinding needs. The jokeFlex Power motor system delivers up to 13,000 rpm – adjustable in 100 rpm steps. Everything is adjusted and controlled digitally. Soft start, stable speeds and an active brake are the decisive advantages of the unit's electronic control. Low speeds down to 500 rpm are also possible with this system – thanks to powerful torque with real pulling power! Force is not the same as mass. The high-output motor in the metal housing is robust, but thanks to its light and compact design. It is also suitable for portable use. Also: the jokeFlex Power system has a 230 V connection, enabling it to be quickly connected anywhere.

- Output max. 1,500 W (230 V supply voltage)
- High torque for stability at all speeds
- Digital control and monitoring
- Versatile operation thanks to large range of handpieces



jokeFlex Power Motor • Accessories • Flexible shafts



				Price from
			Order No.	1 piece
Motor jokeFlex Power 2.0				
	Speed between: steps)	500 and 13,000 1/min (adjustable in 100 rpm	0 019 020	
	Power output:	1,650 W		
	Power consumption:	2,000 W		
P 1 077	Shaft connection:	DIN 10		
	Supply voltage:	230 V, 50/60Hz, 1 phase		
NO-	Sound level:	63 dB(A)		
	Dimensions (W x H x D):	472 x 340 x 352 mm		
	Weight:	27 kg		

° Accessories / spare parts

				Price from
			Order No.	1 piece
Movable stands for jok	eFlex Power 2.0			
i	Dimensions (W x L x H): Weight:	Ø 470 x 470 x 606 mm 23 kg	0 019 021	

					Price from
	Shaft connection	Motor connection	Dimensions	Order No.	1 piece
Flexible shaft jokeFlex Power					
	G 16	DIN 10	Ø 4 x 1,250 mm	0 019 100	
	G 22	DIN 10	Ø 7 x 1,500 mm	0 019 200	

* Accessories / spare parts

			Price from
	Dimensions	Order No.	1 piece
Flexible shaft core NA 4 / G 16 for jokeFlex Power			
Flexible shaft core NA 7 / G 22 for jokeFlex Power	Ø 4 x 1,250 mm	0 019 101	
TIEXIDIE SIIdit COLE INA 77 G 22 IOI JUKETIEK FOWEI	Ø 7 x 1,500 mm	0 019 201	
\bigcirc			



jokeFlex Power Handpieces

				Price from
			Order No.	1 piece
Straight handpiece FH 4 INOX				
	Shaft connection:	G 16	0 019 120	
	Speed:	max. 40,000 rpm		
and the state of the local division of the l	Dimensions:	Ø 20 x 107 mm		
	Weight:	135 g		
	Accessories:	Collet 6 mm, chuck key set		

°♥ Accessories / spare parts

				Price from
	Dimensions	Туре	Order No.	1 piece
Collet for handpiece FH 4				
	Ø 3 mm	FH	0 019 111	
	Ø 6 mm	FH	0 019 112	
	Ø 6 mm	FH	0 019 1	112

jokeFlex Power Handpieces

				Price from
			Order No.	1 piece
Straight handpiece FH 7 INOX				
	Shaft connection:	G 22	0 019 420	
and a set of the part of the p	Speed:	max. 25,000 rpm		
	Dimensions:	Ø 27 x 128 mm		
	Weight:	315 g		
	Accessories Collet 6 n	nm, chuck key set		

°O Accessories / spare parts

				Price from
	Dimensions	Туре	Order No.	1 piece
Collets for handpieces FH 7, FH 10				
	Ø 3 mm	FH	0 019 211	
	Ø6mm	FH	0 019 212	
	Ø 8 mm	FH	0 019 213	

jokeFlex Power Handpieces



				Price from
			Order No.	1 piece
Angle handpiece WI 4				
	Shaft connection: Rotation speed:	G 16 max. 20,000 rpm (1 : 1), clockwise	0 019 130	
Second Second	Dimensions:	Ø 23 x 111 x 43 mm		
	Weight:	265 g		
100	Accessories:	Collet 3 mm, chuck key set		

* Accessories / spare parts

	Dimensions	Туре	Order No.	Price from 1 piece
Collet for angle handpiece WI 4				
(AB)	Ø 3 mm	WI	0 019 131	
	Ø 6 mm	WI	0 019 132	

jokeFlex Power Handpieces

Order No.	1 piece
0 019 230	

* Accessories / spare parts

			Price from
	Dimensions	Order No.	1 piece
Collets for angle handpieces WI 7, WI 10 and jokeAirMax			
	Ø 3 mm	0 750 831	
	Ø 6 mm	0 750 832	

Demonstration

We are on the road every day and bring our know-how to you. You can test the whole range of our equipment and products (3D post-processing, welding, new motors and control units for polishing, chamfering, deburring, grinding and much more) in your premises at your own workpieces! We have everything on board!!

Would you like a personal demonstration? Arrange an appointment with us:

Phone +49 2204 / 839-0 email sales@joke.de.



Team joke

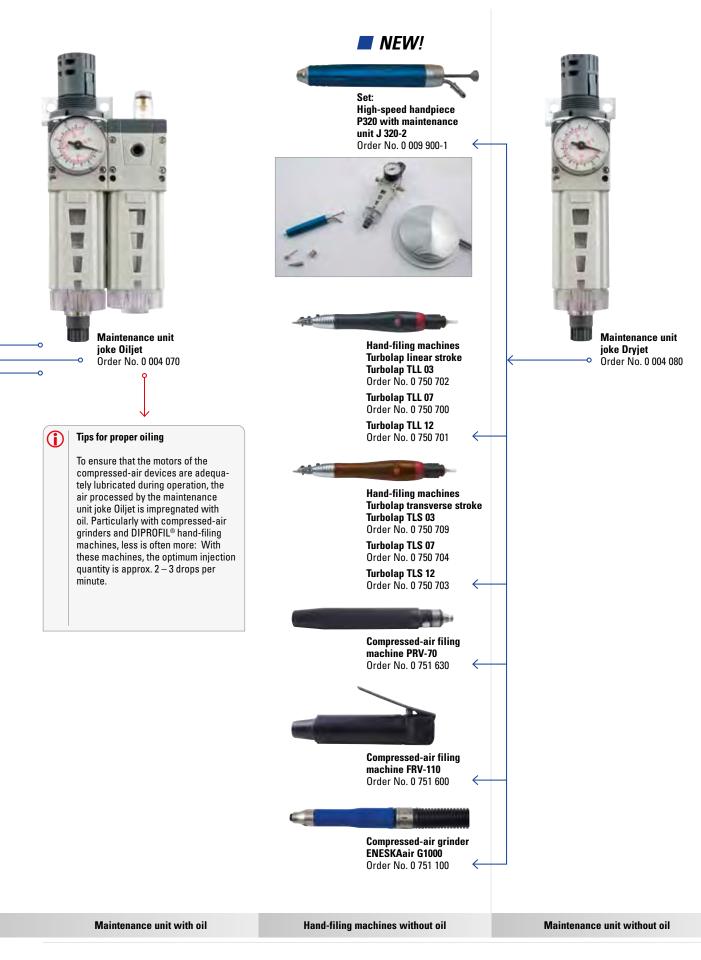




Pneumatics System overview Hand-filing machines **Rapid coupling** DIPROFIL® HSL-M Di-Pro FXL-N, Mark II Order No. 0 003 001 0 Order No. 0 001 504-N 🗧 Hand-filing machines DIPROFIL® Lubricant MFA-K FPL/R, Mark II Order No. 0 004 002 o Order No. 0 002 251-N Turbo hand grinder G 180/60 Order No. 0 750 501 LIMITED AVAILABLE **Turbo hand grinder** W 45/40 Order No. 0 750 502 < LIMITED AVAILABLE Heavy-duty lubricant **Turbo hand grinder** W 45/23 X 73012 Order No. 0 750 503 0.1 litre LIMITED AVAILABLE Order No. 0 580 601 • Turbo hand grinder W 90/23 Order No. 0 750 504 LIMITED AVAILABLE Compressed-air engraving pen LGS 30 Order No. 0 750 790 4 Heavy-duty lubricant **Compressed-air grinder** ^ Set: X 73012 **Compressed-air filing** FX 3.0 1 litre Order No. 0 750 705 machine LFC 11 Order No. 0 580 602 o with case Order No. 0 750 960 Compressed-air grinder joke AirMAX 20 Order No. 0 750 830 Compressed-air grinder Heavy-duty joke AirMAX 35 lubricant Order No. 0 750 840 X 73012 5 litres Order No. 0 580 603 o Compressed-air grinder joke AirMAX 90/20 Order No. 0 750 860 1Legend modular components ÷ options **«**----joke expert info ÷ Hand- & compressed-air filing Equipment Hand- & compressed-air grinder with oil machine with oil & equipment



Pneumatics System overview





Maintenance units joke Oiljet • joke Dryjet

Maintenance units

Maintenance unit for connection to all joke compressed-air equipment. Excellent compressed-air treatment with filter, manual water separator and a micro-oiler that is simple and precise to operate. The joke Oiljet Maintenance Unit is delivered preassembled with filter, manual water separator, pressure reducer, pressure gauge, micro-oiler and wall attachment. We recommend our prepared installation packs for connecting the individual compressed-air devices.Optimum results in conjunction with the two high-performance lubricants.

				Price from
			Order No.	1 piece
laintenance unit joke Dryjet				
	Filter controller MD1-FF	R0000-1/4:	0 004 080	
	Max. Working flow:	1,200 l / min		
	Max. Inlet pressure:	16 bar		
and a	Container capacity:	24 cm ³		
5	Condensate drain:	semi-automatic-manual, automatic via pressure relief, drain via threaded connection G1/8		
	Air connection:	1/4"		
TET	Medium:	compressed air		
	Scope of delivery: reducer, pressure gaug	25 μm filter, manual water separator, pressure e and wall mountin		

°♥ Accessories / spare parts

			Price from
		Order No.	1 piece
Ball stop valve 1/4"			
-	1x internal and 1x external thread 1/4"	0 004 053	
Double nipple 1/4"			
ale.	Fits on connector for Turbolap handpieces, supplied with two O-rings	1 722 246-0	



Maintenance units joke Oiljet • joke Dryjet

Aintenance unit joke Oiljet Filter controller MD1-FR0000-1/4: Max. Working flow: 1,200 l / min Max. Inlet pressure: 16 bar Container capacity: 24 cm ³ Condensate drain: semi-automatic-manual, automatic via pressure relief, drain via threaded connection G1/8 Air connection: 1/4"	Order No.	1 piec
Filter controller MD1-FR0000-1/4: • Max. Working flow: 1,200 l / min • Max. Inlet pressure: 16 bar • Container capacity: 24 cm ³ • Condensate drain: semi-automatic-manual, automatic via pressure relief, drain via threaded connection G1/8 • Air connection: 1/4"	0 004 070	
 Max. Working flow: 1,200 l / min Max. Inlet pressure: 16 bar Container capacity: 24 cm³ Condensate drain: semi-automatic-manual, automatic via pressure relief, drain via threaded connection G1/8 Air connection: 1/4" 	0 004 070	
Max. Inlet pressure: 16 bar Container capacity: 24 cm ³ Condensate drain: semi-automatic-manual, automatic via pressure relief, drain via threaded connection G1/8 Air connection: 1/4"		
Max. Inlet pressure: 16 bar Container capacity: 24 cm ³ Condensate drain: semi-automatic-manual, automatic via pressure relief, drain via threaded connection G1/8 Air connection: 1/4"		
 Container capacity: 24 cm³ Condensate drain: relief, drain via threaded connection G1/8 Air connection: 1/4" 		
Condensate drain: semi-automatic-manual, automatic via pressure relief, drain via threaded connection G1/8 Air connection: 1/4"		
relief, drain via threaded connection G1/8 • Air connection: 1/4"		
Air connection: 1/4"		
Oiler MD1-L00-1/4:		
Max. Inlet pressure: 16 bar		
Container capacity: 40 cm ³		
• Air connection: 1/4"		
Medium: compressed air		
Scope of delivery: 25 μm filter, manual water separator, micro oiler, pressure reducer, pressure gauge and wall mounting		

°♥ Accessories / spare parts

			Price fro
		Order No.	1 piec
Installation pack DIPR	DFIL®		
	The package contains everything necessary for the direct connection of the maintenance unit to its air supply line (including 1.5 m hose) and for connection of the DIPROFIL® hand-filing machine with (3 m hose) rapid coupling HSI-M (including lubricant MFA-K in a 0.5 l container).	0 004 051	
Installation pack Turbo	hand grinder		
	The package contains everything necessary for the direct connection of the maintenance unit to its air supply line (including 1.5 m hose) and for connection of the Turbo hand grinder including high- performance lubricant X 73012 in a 1 l container.	0 004 055	
Ball stop valve 1/4"			
-	1x internal and 1x external thread 1/4"	0 004 053	
Double nipple 1/4"			
elle.	Fits on connector for Turbolap handpieces, supplied with two O-rings	1 722 246-0	

100



Lubricants for compressed-air grinders and hand-filing machines

				Price from
		Content	Order No.	1 piece
High-performance lubricant X 73012				
	For all compressed-air grinders	0.1 litre	0 580 601	
	For all compressed-air grinders	1 litre	0 580 602	
	For all compressed-air grinders	5 litres	0 580 603	
Lubricant MFA-K				
	for all DIPROFIL [®] hand-filing machines	0.5 litre	0 004 002	



Tips for proper oiling

 \bigcirc

To ensure that the motors of the compressed-air devices are adequately lubricated during operation, the air processed by the maintenance unit joke Oiljet is impregnated with oil. Particularly with compressed-air grinders and DIPROFIL® hand-filing machines, less is often more: With these machines, the optimum injection quantity is approx. 2 – 3 drops per minute.





High-speed handpiece J 320

NEW!

High-speed handpiece J 320

The virtuoso among our handpieces. This handpiece can be used for the highest precision jobs anywhere; for example, when deburring steel, stainless steel or even glass and plastics. Thanks to its compact, ergonomic and – due to its aluminium casing – very light design, the handpiece fits perfectly in your hand and can be held like a pen. This means that the user can work even for longer periods without tiring. Changing tools takes just seconds, thanks to the Quick-Change mechanism: Twist, take out old tool, click in new tool, that's it.



				Price from
			Order No.	1 se
Set J 320 incl. high-speed handpiece				
A	connection, maintenand (3-part)	piece including collet Ø 1.6 mm, 2 m air line and ce unit, foot switch and connecting accessories): 115 x 160 x 100 mm (Maintenance unit) ce)	0 009 900-1	
	Weight handpieces: Speed:	71 g 320,000 1/min		
1.	Air pressure: Air consumption:	3,0 bar 35 l/min		

Noise level:

75 dB(A) at 320,000 1/min

			Order No.	1 piece
ligh-speed handpiece J 320				
	Speed max.: Air pressure: Air consumption: Noise level : Dimensions: Weight:	320,000 1/min 3.0 bar 35 l/min < 75 dB(A) at 320,000 rpm Ø 19 x 130 mm 71 g	0 009 901-1	
	Accessories 2 m air li	ne and collet Ø 1.6 mm		

				Price from
	Dimensions	Туре	Order No.	1 piece
Collet Ø 1.6 mm				
	Ø 1.6 mm	J 320	0 009 909-1	
Head, complete (spare), incl. collet				
10 × 10			0 009 902-1	
Foot control				



Foot controller high-speed handpiece, incl. double hose

0 009 916

Hand-grinders joke TURBO

Only a limited number of pieces left!

Hand-grinders joke TURBO

Our own old favourites: thanks to a powerful blade motor, these air grinders deliver real power (70 watts) and yet run very quietly (70 dB(A)). Thanks to their sturdy design, they are virtually tireless workhorses. Ideal for coarse grinding as well as finer tasks. Little maintenance is required, thanks to permanent lubrication by the oil mist (optimum: 3 drops/min). The drive air is led out backwards via a tube and baffle.



- Suitable tool holders with clamping shank on page 249!
- The matching rubber holder Ø 30 mm with internal thread bears the order no. 0 531 008!

	Hand grinders joke TURBO G 180/60	Hand grinders joke TURBO W 45/40	Hand grinders joke TURBO W 45/23	Hand grinders joke TURBO W 90/23
Rotation speed	60,000 1/min	40,000 1/min	23,000 1/min	23,000 1/min
Power	70 W	70 W	70 W	70 W
Air pressure	4 – 6 bars	4 – 6 bars	4 – 6 bars	4 – 6 bars
Air consumption	165 l/min	165 l/min	165 l/min	165 l/min
Exhaust air	backwards	backwards	backwards	backwards
Noise level	80 – 90 dB(A)	80 – 90 dB(A)	80 – 90 dB(A)	80 – 90 dB(A)
Vibration	< 0.32 m/s ²	< 0.32 m/s ²	< 0.56 m/s²	< 0.56 m/s ²
Dimensions	Ø 24 x 146 mm	Ø 24 x 158 mm	Ø 51.5 x 159 mm	Ø 46.5 x 152 mm
Weight	200 g	230 g	230 g	230 g
Lubrication	continuously by oil mist	continuously by oil mist	continuously by oil mist	continuously by oil mist
Scope of delivery	Tube package (1.1 m) with coupling sleeve 1/4", collet Ø 3 mm (type CHS), tool set	Tube package (1.1 m) with coupling sleeve 1/4", collet Ø 3 mm (type CHS), tool set	1 x rubber holder, 2 x cup wheels, 1 x clamping shank, assortment of consumables, tool set, tube package 1.1 m with coupling sleeve 1/4", collet Ø 3 mm (type CHS)	1 x rubber holder, 2 x cup wheels, 1 x clamping shank, assortment of consumables, tool set, tube package 1.1 m with coupling sleeve 1/4", collet Ø 3 mm (type CHS)
Order No.	0 750 501	0 750 502	0 750 503	0 750 504

Price



Compressed-air grinder FX 3.0

Compressed-air grinder FX 3.0

High power - low air consumption. With the FX 3.0 air grinder, you can use tools with heads-Ø up to 10 mm. Ergonomic design means that even working for longer periods need no longer be "torture", as vibrations are absorbed efficiently.

				Price from
			Order No.	1 piece
Compressed-air grinder FX 3.0				
	Speed:	65,000 rpm	0 750 705	
	Air pressure:	max. 5 bar		
	Air consumption:	90 l/min		
	Exhaust air:	backwards		
Use with:	Noise level:	< 75 dB(A)		
n joke Oiljet	Dimensions:	Ø 22.5 x 150 mm		
(Seite 63)	Weight:	78 g		
CIT	Lubrication:	continuously by oil mist		
	Scope of delivery:	collet Ø 3 mm, wrench, air tube 1.5 m,		
	· · ·	1/4" connecting sleeve including filter		

Compressed-air grinder ENESKAair G1000

The latest generation air belt grinder

- 100,000 rpm during oil-free operation
- Extremely compact construction incl. ceramic ball bearings



Price from 1 piece

Order No.

0 751 100

Compressed-air grinder ENESKAair G1000



Speed: Power: Air pressure: Air consumption: Exhaust air: Noise level: Vibration: Dimension: Weight: Lubrication:

100.000 1/min 63 Watts max. 6.3 bars 170 l/min backwards 70 dB(A) < 2.5 m/s² Ø 21 x 129 mm 150 g oilfree

Scope of delivery:

Tube package (2 m) with connection nipple R1/4", collet Ø 3 mm, tool set



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 20	Compressed-air grinder joke AirMAX 35	Compressed-air grinder joke AirMAX 90/20
Rotation speed	20,000 1/min	35,000 1/min	20,000 1/min
Power	270 W	220 W	220 W
Air pressure	6 bars	6 bars	6 bars
Air consumption	590 l/min	520 l/min	520 l/min
Exhaust air	forwards	forwards	forwards
Noise level	81 dB(A)	78 dB(A)	79 dB(A)
Vibration	< 6 m/s²	< 6 m/s²	< 6 m/s²
Dimensions	Ø 32 x 80 mm	Ø 31 x 143 mm	Ø 31 x 70 mm / 42 x 137 mm
Weight	420 g	290 g	370 g
Lubrication	continuously by oil mist	continuously by oil mist	continuously by oil mist
Scope of delivery	collet Ø 6 mm, clamping wrench, rotary and lever valve	collet Ø 6 mm, clamping wrench, rotary and lever valve	collet Ø 6 mm, clamping wrench, rotary and lever valve
Order No.	0 750 830	0 750 840	0 750 860
Price			

🍄 Accessories / spare parts

					Price from
		Туре	Dimensions	Order No.	1 piece
Supply air tube, for all m	odels				
0	Important: also remem- ber the matching air supply hose when ordering!			0 750 813	
Collets for angle handpi	eces WI 7, WI 10 and jokeAirMax				
(44)			Ø 3 mm	0 750 831	
			Ø 6 mm	0 750 832	
Collet for angle handpie	ce WI 4				
(FB)		WI	Ø 3 mm	0 019 131	
		WI	Ø 6 mm	0 019 132	



Compressed-air hand-filing machines DIPROFIL® for operating on the joke Oiljet maintenance unit





Compressed-air hand-filing machine DIPROFIL®, Di-Pro FXL-N, Mark II



Compressed-air hand-filing machine DIPROFIL®, FPL/R, Mark II

0 – 6 mm, continuously adjustable (0.5 – 3 mm recommended)	0 – 6 mm, continuously adjustable (0.5 – 3 mm recommended)
max. 7,000 strokes/min (5,000 – 6,000 strokes/min recommended)	max. 8,000 strokes/min (5,000 – 6,000 strokes/min recommended
Ø 2 – 6.4 mm	Ø 2 – 6.4 mm
40 mm	40 mm
4 bars	4 bars
approx. 60 l/min at 7,000 strokes/min	approx. 65 l/min at 8,000 strokes/min
through housing	through housing
< 75 db(A) at 7,000 strokes/min	70 db(A) at 7,000 strokes/min (according to ISO 15744)
< 1.55 – 5.08 m/s²	5.79 – 13.37 m/s²
900 g	740 g
continuously by oil mist	continuously by oil mist
storage case, tool set, extension tube/finger protection bush, coun- terweights, replacement friction bearing and felts, lubricating oil	storage case, tool set, extension tube/finger protection bush, replacement friction bearing and felts, lubricating oil
0 001 504-N	0 002 251-N
	max. 7,000 strokes/min (5,000 – 6,000 strokes/min recommended) Ø 2 – 6.4 mm 40 mm 4 bars approx. 60 l/min at 7,000 strokes/min through housing < 75 db(A) at 7,000 strokes/min < 1.55 – 5.08 m/s ² 900 g continuously by oil mist storage case, tool set, extension tube/finger protection bush, coun- terweights, replacement friction bearing and felts, lubricating oil

Accessories / spare parts

			Price from
		Order No.	1 piece
Rapid-release coupling	g HSL-M		
	With "on/off" switch, for connection of hand-filing machines to mainte- nance unit	0 003 001	
	Important: this rapid-release coupling is needed for using the DIPROFIL® compressed-air hand-filing machines. So be sure to include it in your initial order!		
Lubricant MFA-K			
	for all DIPROFIL® hand-filing machines	0 004 002	



for all DIPROFIL® hand-filing machines

0 004 002

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. 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.

Set Compressed-air filing machine LFC 11 with case

No. of strokes: Stroke length: Output: Air pressure: Air consumption: Noise level: Vibration: Dimensions: Weight: Lubrication: Scope of supply:

6,000 – 12,000 strokes/min	0 750 960
2 – 11 mm, continuously adjustable	
300 W	
6.3 bars	
230 l/min	
74 dB(A)	
< 2,2 m/s ²	
280 x 60 mm	
830 g	
continuously by oil mist	
tool holder Ø 4 mm, 1 file, various different tools,	
counter-holder, hose unit and case	

🍄 Accessories / spare parts

		Price from
	Tool support	Order No. 1 piec
Tool holder		
	Ø 3 mm	0 750 751
1 A A	Ø 4 mm	0 750 752
	Ø 6 mm	0 750 753

40.000

High-performance lubricant X 73012		
4	For all compressed-air grinders	0 580 601
	For all compressed-air grinders	0 580 601
	For all compressed-air grinders	0 580 601



joke Oiljet (page 63)

Use with:

Price from Order No. 1 set

- . .

.



Compressed-air filing machines PRV-70 • FRV-110

Order No.

1 piece

LFC 11

Compressed-air filing machine LFC 11



- No. of strokes: Stroke length: Output: Air pressure: Air consumption: Noise level: Vibration:
- Dimensions: Weight: Lubrication: Scope of supply:

6,000 – 12,000 strokes/min	0 750 980
2 – 11 mm, continuously adjustable	
300 W	
6.3 bars	
230 l/min	
74 dB(A), ISO 15744	
2.2 m/s², K = 0.8 m/s² according	
to EN ISO 28927-8	
280 x 60 mm	
830 g	
continuously by oil mist	
1 x tool holder Ø 4 mm, 1 x counter-holder,	
1 x hose unit (supply and exhaust air, silencer)	

Compressed-air filing machines PRV-70 • FRV-110 "24/7"-use owing to minimal vibrations

Compressed-air filing machines PRV-70 • FRV-110

24/7, so around the clock, 7 days a week:

this is just how long you can work with these filing machines at a stretch, as the vibration values lie markedly below the limit value of 2.5 m/s².

Available with short (2 mm) and long (8 mm) stroke. The machines lie conveniently and securely in the user's hands and consume little air. Both machines can dispense with oiling and may therefore be directly connected to the joke Dryjet maintenance unit.

Highlights:

• use 24/7 possible

- extremely high degree of running smoothness
- 2 and 8 mm stroke length versions
- excellent service life
- use without oil, only a few drops a day are required
- low air consumption







	Compressed-air filing machine FRV-110	Compressed-air filing machine PRV-70
Stroke length	8 mm	2 mm
Max. no. of strokes	9,000 strokes/min	7,000 strokes/min
Tool support	max. 6 mm	max. 4 mm
Air pressure	6,5 bars	6,5 bars
Air consumption	78 l/min	30 l/min
Exhaust air	backwards	backwards
Noise level	< 77 dB(A)	< 71 dB(A)
Vibration	2 m/s²	2 m/s²
Dimensions	Ø 40 x 182 mm	Ø 28 x 190 mm
Weight	1,000 g	300 g
Lubrication	not necessary	not necessary
Scope of delivery	tool (without air hose)	tool, air hose
Order No.	0 751 600	0 751 630
.		



Compressed-air engraving pen LGS 30

Compressed-air engraving pen LGS 30

This little pen enables you to engrave metal, glass, plastics, etc. effortlessly. Thanks to the carbide needle, you can even make deep indentations in hardened steel. No harmful vibrations are transmitted to your hand, which protects your health and gives you maximum pen control.



Order No.

Price from

1 piece

Compressed-air engraving pen LGS 30, incl. engraving needle

No. of strokes: Air pressure: Air consumption: Dimensions: Weight: Vibration: Lubrication: Scope of supply:	30,000 strokes/min 6 bars 30 l/min Ø 17 x 154 mm 150 g < 2.5 m/s ² continuously by oil mist air tube 2 m, engraving needle type GN M,	0 750 790
Scope of supply:	connection nipple 1/4"	

* Accessories / spare parts

				Price from
	Shape	Туре	Order No.	1 piece
Engraving needle				
1	fine tipped	GN F	0 750 791	
	medium tipped	GN M	0 750 792	
	coarse tipped	GN G	0 750 793	

flat

angled

GM F

GM S

Engraving chisel



Air hose, supply air, 2 m



0 750 795

0 751 930

0 751 931



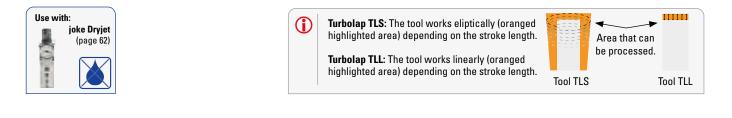
Hand-filing machines Turbolap Linear and transverse stroke!

Turbolap hand-filing machines

ASSAULT T

High power in a small casing. These permanently lubricated handfiling machines connect directly to the joke Dryjet maintenance unit. With these devices, there is no need to worry about oiling, just about your hands, as they will prefer to no longer be without from these ergonomic high-tech handpieces ...

Available with linear and transverse stroke (0.3, 0.7 with 1.2 mm stroke length).





	Hand-filing ma- chines Turbolap TLL 03 with linear stroke	Hand-filing machi- nes Turbolap TLS 03 with transverse stroke	Hand-filing ma- chines Turbolap TLL 07 with linear stroke	Hand-filing machi- nes Turbolap TLS 07 with transverse stroke	Hand-filing ma- chines Turbolap TLL 12 with linear stroke	Hand-filing machi- nes Turbolap TLS 12 with transverse stroke
Stroke length	0.3 mm	0.3 mm	0.7 mm	0.7 mm	1.2 mm	1.2 mm
Max. no. of strokes	52,500 ¹ /min	56,000 ¹ /min	28,000 ¹ /min	20,000 ¹ /min	14,000 ¹ /min	14,000 ¹ /min
Tool support	Ø 3 mm / 4 mm high					
Air pressure	3 bars / max. 6 bars	1–2 bars / max. 6 bars	3 bars / max. 6 bars	1.5–2.5 bars / max. 6 bars	2–3 bars / max. 6 bars	max. 6 bars
Air consumption	125 l/min	125 l/min	46 l/min	46 l/min	46 l/min	46 l/min
Exhaust air	backwards	backwards	backwards	backwards	backwards	backwards
Noise level	72 dB(A)	73 dB(A)	64 dB(A)	63 dB(A)	59 dB(A)	63 dB(A)
Vibration	8.69 m/s ²	4.58 m/s ²	9.79 m/s²	3.37 m/s²	7.86 m/s²	4.90 m/s ²
Dimensions	Ø 28 x 216 mm					
Weight	180 g					
Lubrication	not necessary					
Scope of delivery	tool holder, chuck key, supply airhose 1.5 m, exhaust air tube, 1/4" connecting sleeve incl. filter	tool holder, chuck key, supply airhose 1.5 m, exhaust air tube, 1/4" connecting sleeve incl. filter	tool holder, chuck key, supply airhose 1.5 m, exhaust air tube, 1/4" connecting sleeve incl. filter	tool holder, chuck key, supply airhose 1.5 m, exhaust air tube, 1/4" connecting sleeve incl. filter	tool holder, chuck key, supply airhose 1.5 m, exhaust air tube, 1/4" connecting sleeve incl. filter	tool holder, chuck key, supply airhose 1.5 m, exhaust air tube, 1/4" connecting sleeve incl. filter
Order No.	0 750 702	0 750 709	0 750 700	0 750 704	0 750 701	0 750 703
Price						



Polishing machine OPTI polish

Polishing machines OPTI polish

The workhorses for precision work. For grinding, polishing, deburring, matting, rounding ... the possible uses of these grinding lathes are so to speak virtually unlimited.

Highlights:

- Robust, heavy industrial design
- Long lasting with maintenance-free motor
- Casing made of cast aluminium
- Quiet running owing to balanced motor and quality ball bearings ...

For rapid deburring, we recommend a tandem of one brush with nylon bristles on one side of the polishing machine and a wrapped fleece disk on the other side.

For individual matching to your application please contact our Product Manager Dominic Singer: Tel. +49 (0) 22 04 / 8 39-0 e-mail: d.singer@joke.de





	Polishing machine OPTI polish GU 20 P	Polishing machine OPTI polish GU 25 P
Polishing disc size	200 x 20 mm	250 x 25 mm
Tool support	Ø 16 mm	Ø 20 mm
Max. tool width	20 mm	25 mm
Rotation speed max.	2850 1/min	2850 1/min
Power	600 W	1,500 W
Dimensions (W x H x D)	591 x 326 x 292 mm	591 x 326 x 292 mm
Supply voltage	230 V, AC, 1 PH, 50/60 Hz	400 V, AC, 3 PH, 50/60 Hz
Weight [kg]	10.6 kg	17.4 kg
Scope of delivery	1 x polishing disc soft Ø 200 x 20 x 16 mm (Order No. 0 041 622) and 1 x polishing disc hard Ø 200 x 20 x 16 mm (Order-No. 0 041 623)	1 x polishing disc soft Ø 250 x 25 x 20 mm (Order No. 0 041 632) and 1 x polishing disc hard Ø 250 x 25 x 20 mm (Order No. 0 041 633)
Order No.	0 041 620-0	0 041 630-0
Price		



		0 I N	Price from
		Order No.	1 piece
Machine substruc	ture for polishing machines OPTI polish		
	Dimension: table 320 x 270 mm, height: 825 mm. The suitable substructure for the series OPTI PSM polishing machines. Please be aware that this must be fixed to the bottom and holes at the table need to be drilled. Drilling template inside but no fixing material.	0 041 621-1	



Polishing machine Accessory

Convolute compact grinding discs

Wound, not pressed. These special grinding discs have been developed for the demanding preliminary and final processing of surfaces of the widest array of materials. They result from winding nylon fleece fabric around a hard core. The fabric is wetted with a special abrasive resin system beforehand. The winding results in a very uniform structure with which the direction of rotation must nevertheless be observed.

The discs are available in two abrasive finishes (corundum and SiC) and two diameters and grit sizes in addition to three hardnesses.





Further information on page 176.

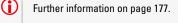
Round brushes with nylon grinding bristles

The nylon fibres of these brushes are interspersed with silicon carbide. The latter is constantly released during work and a highly even grinding effect with a very uniform ground section is produced.

The nylon polishing bristles are extremely elastic and flexible and consequently absolutely unbreakable. The trimming area does not clog with work residues during deployment and the polishing effect remains constantly high throughout the entire working period. Suitable for wet and dry use.







Polishing buffing discs OPTI

These discs are used on stationary polishing machines in conjunction with solid polishing compounds (Dialux).

Available in two versions:

• Cotton, soft

(i)

• Cotton, hard (quilted)





Further information on page 178.



Polishing lathe PB 2 System overview

Polishing lathe PB

The polishing lathes with high-performance motors. Three-stage or infinite speed adjustment possible. Ideal for all tough tasks that can be accomplished by turning: filing, sanding, polishing, deburring, scraping, brushing, winding, separating, chamfering, rounding, hand filing, coating, etc. ...

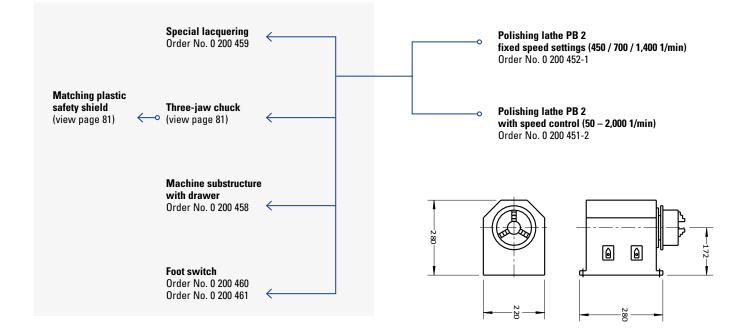
Highlights:

 (\mathbf{i})

- Maintenance-free work
- Clamping of the workpieces by a three-jaw chuck
- Limited spatial requirements owing to compact construction
- Robust, interference-proof, extremely durable
- Comprehensive range of accessories and safety devices available
- Radial run-out of shaft ± 0,01 mm
- Shaft rotated and balanced in a clamping system
- incl. magnetic brake and emergency stop
- incl. protective hood with automatic switch-off



Optional accessory to be determined before ordering, as no longer possible afterwards!





Polishing lathe PB 2

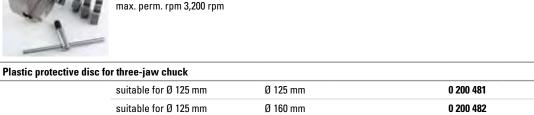




	Polishing lathe PB 2	Polishing lathe PB 2
Tool support	Ø 37 mm	Ø 37 mm
Rotation speed	infinitely adjustable: 50 – 2,000 rpm.	fixed speed settings: 450 / 700 / 1,400 rpm.
Power	max. 0.6 kW	0.2 / 0.5 / 0.6 kW
Centre height	172 mm	172 mm
Dimensions (W x H x D)	280 x 280 x 220 mm	280 x 280 x 220 mm
Supply voltage	400 V, 50/60 Hz, IP 54	400 V, 50/60 Hz, IP 54
Weight [kg]	45 kg	45 kg
Order No.	0 200 451-2	0 200 452-1
Price		

🍄 Accessories / spare parts

						Price from
		Si	ze	Dimensions	Order No.	1 piece
Machine substructure w	ith drawer					
Д	Dimensions (W x D x H): 540 x 800 mm	390 x			0 200 458	
Special lacquering						
	Any RAL colour is optiona available.	lly			0 200 459	
Foot switch type 1						
	Function: press = start hold = work release = stop				0 200 460	
Three-jaw chuck incl. ch	uck flange					
	Chuck Ø 125 mm max. perm. rpm 3,200 rpm			Ø 125 mm	0 200 473	
- 4y	Chuck Ø 160 mm max. perm. rpm 3,200 rpm			Ø 160 mm	0 200 474	
Plastic protective disc fo	r three-isw chuck					



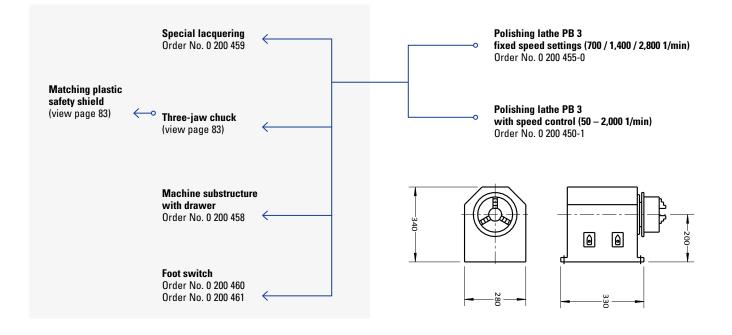


Polishing lathe PB 3 System overview

Just bigger and stronger than his little brother PB 2!



 Optional accessory to be determined before ordering, as no longer possible afterwards!





Polishing lathe PB 3





	Polishing lathe PB 3	Polishing lathe PB 3
Tool support	Ø 37 mm	Ø 37 mm
Rotation speed	infinitely adjustable: 50 – 2,000 rpm.	fixed speed settings: 700 / 1,400 / 2,800 rpm.
Power	max. 2.5 kW	1.1 / 1.9 / 2.4 kW
Centre height	200 mm	200 mm
Dimensions (W x H x D)	330 x 340 x 280 mm	330 x 340 x 280 mm
Supply voltage	400 V, 50/60 Hz, IP 54	400 V, 50/60 Hz, IP 54
Weight [kg]	90 kg	90 kg
Order No.	0 200 450-1	0 200 455-0
Price		

🍄 Accessories / spare parts

					Price from
		Size	Dimensions	Order No.	1 piece
Machine substructure	with drawer				
Д	Dimensions (W x D x H): 390 x 540 x 800 mm			0 200 458	
Special lacquering					
	Any RAL colour is optionally available.			0 200 459	
Foot switch type 1					
	Function: press = start • hold = work • release = stop			0 200 460	
Three-jaw chuck incl.	chuck flange				
	Chuck Ø 125 mm max. perm. rpm 3,200 rpm		Ø 125 mm	0 200 473	
An 64	Chuck Ø 160 mm max. perm. rpm 3,000 rpm		Ø 160 mm	0 200 474	
1	Chuck Ø 250 mm max. perm. rpm 2,000 rpm		Ø 250 mm	0 200 477	
Plastic protective disc	for three-jaw chuck				
	suitable for Ø 125 mm	Ø 125 mm		0 200 481	
	suitable for Ø 160 mm	Ø 165 mm		0 200 482	
	suitable for Ø 250 mm	Ø 250 mm		0 200 483	



Poli Base polishing unit with integrated suction

Are your quality requirements high, but space is limited? If so, the powerful, versatile and space-saving joke poli base polishing machine is exactly the right solution for your company. Our compact polishing unit guarantees extremely smooth running and excellent results when polishing or deburring in many areas, such as the industrial, optical, jewellery or dental sectors.

The most important data at a glance:

- particularly compact polishing unit, space-saving and efficient
- integrated, powerful and low-noise extraction system
- \bullet equipped with the universal 11 mm stub shaft
- wide variety of possible processing operations
- various tool receptacles available as accessories
- working area completely made of stainless steel
- easy to clean
- removable solid rubber polishing trough
- jacket-cooled motor, dust protected
- speed: 750 6,000 rpm, adjustable in increments
- easily replaceable, large-capacity micro fine dust filter bag, dust class M
- optimum illumination: integrated daylight LEDs and daylight LED spotlight

- -- --

- designed for a long service life
- extremely low maintenance and wear
- completely preassembled



	Poli Base polishing unit with integrated suction
Rotation speed	750 – 6,000 rpm
Power	500 W
Noise level	< 65 dB(A)
Dimensions	455 x 485 x 505 mm
Fan output	445 m³/h
Supply voltage	220 – 240 V, 50/60 Hz
Weight [kg]	37 kg
Scope of delivery	 Poli Base polishing unit Micro fine dust filter bag Storage tray (W 257 mm x H 40 mm x D 198 mm) Polishing trough Supply lead
Order No.	0 200 400
Price	





Poli Base polishing unit with integrated suction

Accessories /	spare parts					
					Price	from
			Packing quantity	Order No.	1 set	1 piec
Pocket filter micro fine du	ıst for Poli Base, set					
			2 pieces	0 200 401		
Poli Base drill chuck with	h a clamping range of 1	1.6-6 mm				
				0 200 402		
Poli Base tool holder big						
	for panes with: bore: diameter: width:	Ø 14 mm – 25 mm max Ø 150 mm max 30 mm		0 200 403		
Poli Base tool holder med	lium					
	for panes with: bore: diameter: width:	Ø 6 mm – 13 mm max Ø 110 mm max 30 mm		0 200 404		
Poli Base tool holder coll	et set 1 - 7 mm			0 200 405		
			7 pieces	5 200 700		
Protective screen				0 200 406		

ENESKApostprocess

jo ke

ENESKApostprocess

The safe postprocessing system for all materials and work steps









100% made in Germany



ENESKApostprocess

Advantages at a glance

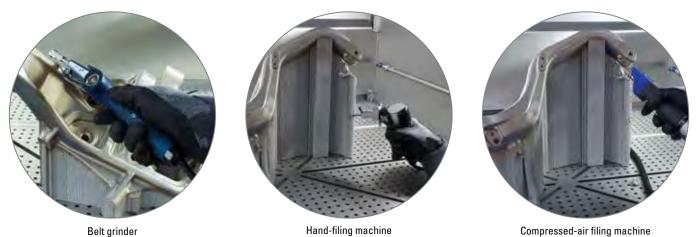
- High standard of safety
- No risk of explosion or deflagration
- No permanent damage due to respirable dust
- No need for additional protective clothing
- Ergonomic working and simple operation
- Many options for connecting various tools either pneumatic or electric.

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	Ceramic
Stainless steel	PEEK
Aluminium	POM
Titanium	Plastics
Carbon	Rubber-like materials
Inconel	Gypsum
Brass	and many more



Belt grinder

Hand-filing machine



Extraction and cleaning process function



Extraction is through the floor of the working chamber.



Working in the ENESKApostprocess is only possible with the extraction system running. 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.

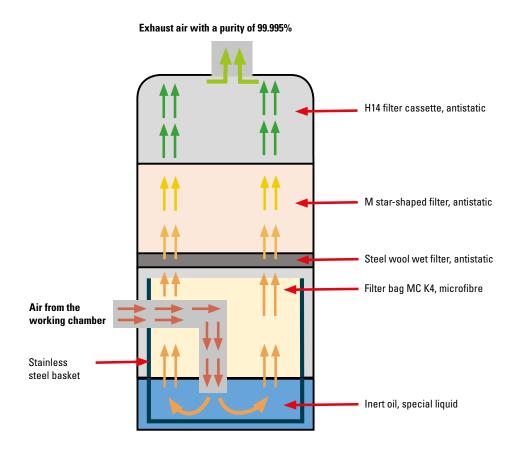
In combination with this FSX, the previously described cleaning process can be adjusted so that the system does not unlock before a defined value is reached.



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 is easily accessible from the rear



View of the ENESKApostprocess extraction system - the complete extractor can be removed



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 5-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 of less than one mJ in their data sheets.

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

				Price from
		Design	Order No.	1 piece
ENESKApostprocess incl. extraction with we	t separator for reactive materials			
	• suitable for materials with a minimum	-	0 210 010	
	ignition energy above one mJ • with explosion protection according to ATEX standard	with height adjustment	0 210 012	
ENESKApustprocess	 moisture separator suitable for zone 22 5-fold filtration extraction capacity / volumetric flow: max. 350 m³/h 			
	• incl. FSX automatic fine dust measuring system (for further information, see Order no. 0 210 306)			
ENESINAPOSPIOCES	• materials to be processed: incl. among others aluminium and titanium			
ie ke				

Technical data

ENESKApostprocess
580 kg (Order No. 0 210 000) 600 kg (Order No. 0 210 010)
930 x 790 x 250-600 mm
1,300 x 1,500 x 1,790 mm
a. 5,000K / ca. 3,300 lm, dimmable
400 V / 16 A



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, stainless steel and Inconel. 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. 0.75 m² 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 incl. extraction f	for non-reactive materials			
	Special features of the ENESKApostprocess incl. extrac-	-	0 210 000	
	tion for non-reactive materials:	with height adjustment	0 210 003	
	dry extractor with explosion protection according to ATEX standard trials filture in			
DATEASA	 triple filtration extraction capacity / volumetric flow: max. 350 m³/h 			
	 optionally with FSX automatic fine dust measuring system (more Information see Order No. 0 210 306 			
· · · ·	• materials to be processed: incl. among others, steel, stainless steel, Inconel and various plastics			

🏠 Accessories / spare parts

	, oparo parco		
			Price from
		Order No.	1 piece
ENESKApostprocess aut	tomatic fine dust measurement FSX		
	The FSX automatic fine dust measuring system from joke is to be included in the order for your ENESKApostprocess! The FSX cannot be retrofitted! • 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	0 210 306	

Variants

ENESKApostprocess for reactive substances (Order No. 0 210 010)	ENESKApostprocess for non-reactive substances (Order No. 0 210 000)
Extraction system suitable for continuous operation, for extracting flammable dusts $-MIE \ge 1mJ$	Extraction system suitable for continuous operation, for extracting $\textit{dusts} - MIE \ge 1 \ mJ$
5-fold filtration, including moisture separator , 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
M star-shaped filter, antistatic with manual cleaning	M star-shaped filter, antistatic with manual cleaning
H14 filter cassette, antistatic	H14 filter cassette, antistatic
Wet filter cassette, earthed	_
Filter bag MC K4 microfibre, antistatic	_

jo ke

ENESKApostprocess



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 post-processing are blamed for cancer and cardiovascular diseases, among other things.

For this reason, the ENESKApostprocess is completely enclosed and sealed. It has appropriate and safe extraction and filtering equipment. No dust can escape from its working area. Before the system can be opened, there is an after-suction phase and a special cleaning process - only then does the system unlock and the finished workpiece can be removed.

The system complies with important legal regulations on dust control, such as that dust must be directly removed 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!

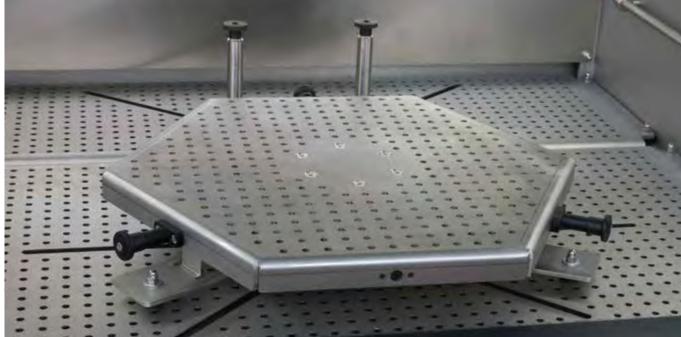
Concentration and relaxation during work is a prerequisite for optimum postprocessing results. The joke development team has achieved this goal by means of many details of the equipment. Coloured instructions on the touch display indicate the current status of the ENESKApostprocess. The lighting intensity 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.



ENESKApostprocess Accessories

					Price fr	
		Dimensions	Packing quantity	Order No.	1 set	1 piec
Furntable, hexagonal						
	 Tripod support freely positionable, rotatable and lockable Clamping width 440 mm Material 1.4301 	500 mm		0 210 209		
IO-piece clamping device set						
11/10	 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		
Stop pin, adjustable, assortment = 2 pieces						
			2 pieces	0 210 204		
		Ē			A.	1





ENESKApostprocess Accessories

	Size	Dimensions	Order No.	Price from 1 piece	m 1 p
NESKApostprocess glass dome, laminated glass	0126	Dimensions		1 0000	.,
		900 x 900 x 8,5 mm	0 210 050		
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		
Protective screen, plexiglass					
Prexigins		200 x 200 x 2 mm	0 210 202		
e lite		300 x 200 x 2 mm	0 210 201		
Stainless steel tank 100 l, variant dry					
Stainless steel tank 100 l, variant inert oil					
With drain cock and window			0 210 356		
Filter bag MC K4 microfibre, variant inert oil					
With wire ring		Ø 430 x 500 mm	0 210 361		



ENESKApostprocess Accessories

					Price from	
		Size	Dimensions	Order No.	1 piece	1 pair
Stainless steel basket to) hold the filter bag MC K4					
			Ø 430 x 500 mm	0 210 362		
Wet filter cassette, versi	ion inert oil					
R	Filled with stainless steel wool, antistatic		Ø 260 x 70 mm	0 210 363		
Star shaped filter dust cl	lass M, variant inert oil					
White the second	 Dust class M (medium risk) according to EN 60335-2-69 For the separation of dust with an ex- posure limit of greater than 0.1 mg/m³ Suitable for vacuuming dry, flamma- ble Dusts in zone 22 PU/polyester, antistatic (separation efficiency: 99.95%) 		Ø 460 x 210 mm	0 210 357		
HePa filter cartridge H14	l, variant inert oil					
	 3 m² filter surface Filter Dust class H (high risk) according to EN 60335-2-69 for the separation of all dust with all exposure limits, including carcinogenic and pathogenic dusts antistatic (separation efficiency: 99.995%) 		Ø 460 x 105 mm	0 210 358		
Gloves latex for ENESKA	Apostprocess, 600 mm					
-	• With cuff Ø 180 – 300 mm • Size 10 • EN388	10		0 210 250		
ENESKApostprocess arm						
	 Length: 500 mm Installation diameter: from Ø 230 to 360 mm Arm cuff made from very robust and stretchable latex with rolled edge for installation for Ø 230 to approx. 360 mm For long-term use because the wear on the extra gloves to be used happens With star slits for optimal sealing 			0 210 260		

jo ke

ENESKApostprocess Accessories

				Price fro	m
	Size	Dimensions	Order No.	1 piece	1 pair
Maintenance unit joke Oiljet					
Filter controller MD1-FR	0000-1/4:		0 004 070		
 Max. Working flow: Max. Inlet pressure: Container capacity: Condensate drain: Air connection: Medium: 	1,200 I / min 16 bar 24 cm ³ semi- automatic- manual, automatic via pressure relief, drain via threaded connection G1/8 1/4" compressed air				
Oiler MD1-L00-1/4: • Max. Inlet pressure: • Container capacity: • Air connection: • Medium: Scope of delivery: manual water separator, pressure reducer, pressure wall mounting					

ENESKAmicro footpedal



For comfortable control by foot (start/ stop, speed adjustment),
Cable length 2 m

0 011 002

ENESKApostprocess high-performance oil, 20 l

For filling the extraction with wet scrubber for reactive materials





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 fron
			Order No. 1 piece
air belt grinder j	oke MBS 20 DH		
	Tapes:	6 – 12 x 305 mm (depending on the belt grinder attachment)	0 750 871
	Belt speed:	21 m/s	
	Max. air pressure:	6 bar	
	Air consumption:	590 l/min	
	Exhaust air:	to the front	4
	Operation:	rotary, lever valve	
	Weight:	570 g	
	Connection:	8 mm hose nozzle	
	Required lubrication:	continuously 1–2 drops / min oil mist	

°☆ Accessories / spare parts

				Price	from
	Dimensions	Grit size	Order No.	1 piece	500 pieces
Grinding belt, ceramic 8	85 T				
-	6 x 305 mm	80	0 412 201		
	6 x 305 mm	120	0 412 202		
	12 x 305 mm	80	0 412 211		
	12 x 305 mm	120	0 412 212		
Grinding belt, fleece – 3	M				
	6 x 305 mm	coarse	0 412 220		
4		medium	0 412 221		
		very fine	0 412 222		
	12 x 305 mm	coarse	0 412 230		
		medium	0 412 231		
		very fine	0 412 232		





Better surface results, faster application, lower usage costs: After two years of development work, joke Technology presents the ENESKArecoat 85, a new generation of carbide coating devices.

ENESKArecoat 85 is used to coat severely stressed surfaces quickly and easily. A carbide coating is applied by burning a tungsten carbide electrode at 2800 degrees Celsius, which achieves a maximum surface hardness of 82 HR 30 N.

This process is especially suitable for tools, devices and surfaces that have to be especially tough, hard and wear-resistant – such as punching and bending tools. In comparison to the previous model, the ENESKArecoat 85 achieves a higher maximum coat thickness by now having an up to 30 percent higher maximum working voltage of 54 volts. The specially controlled ignition spark and the higher vibration frequency of 120 Hertz allow working up to 20 percent faster and give an even better surface result. This also prevents burning out of the electrodes, which reduces usage costs. Furthermore, in comparison to the previous model, larger electrodes can be used, which expand the possible range of uses.

There have also been further developments in the handling of ENESKArecoat 85: In addition to the conventional foot switch, the new type of ergonomically shaped handpiece has an operating button for sensitive control of the coating process. In-built LEDs guarantee optimal, glare-free illumination of the workplace and enable monitoring of the electrode contact.

The preset parameters in the software are also new. They ensure a fast start and have an calibration function for automatically balancing the ignition timing. The user can also store and call additional, individual empirical values.

14 advantages at a glance

- 30 percent higher working voltage giving a higher maximum achievable layer thickness
- Faster application with a 20 percent higher vibration frequency of 120 Hertz
- · A new type of ignition spark control improves the surface finish
- No burning out of electrodes (reduced tool costs)
- Electrodes up to 25 percent larger widen the range of fields of work
- Reduction in vibrations on the outside of the handpiece
- Maximum achievable coating hardness of 82 HR 30 N
- Ergonomic, user-friendly handpiece with integrated operating button
- LEDs for optimal, glare-free illumination of the workplace and contact monitoring
- Function control with animated LED line on the control unit and on the handpiece
- Software: Call of preset parameters and storage of individual parameters
- Calibration function for balancing of the optimal ignition timing
- Well-proven ENESKA user interface with language support (D, E, F)
- Assistant function



Methods

Nowadays, very high demands are made on the toughness, hardness and surface wear resistance of tools, equipment and machines. The following options came to light in seeking a tough material with a more wear-resistant coating:

- 1. Galvanic coating with hard layers,
- 2. Plasma gun spraying method,
- 3. Electroerosive tungsten carbide coating.

The adhesive strength of the coatings in methods 1 and 2 is unsatisfactory in the case of heavy stresses since the coatings are likely to scale off. With the third method, however, it is possible to apply tungsten carbide in a very wear-resistant surface on the heavily stressed points of a workpiece.

Properties of the tungsten carbide coat

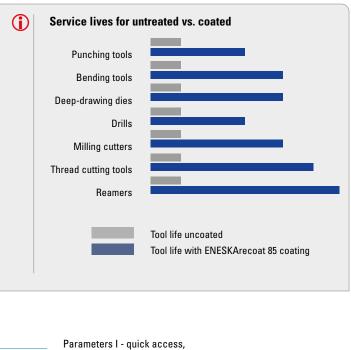
The layer applied combines joins perfectly with the steel and adheres in such a way that it withstands almost any mechanical stress. Blows, bending, stretching or compressive strains are incapable of detaching the coating. This can only be done by grinding or special sand blasting; it can, however, be relapped with diamond or silicon carbide. The steel beneath is not softened by the coating but increases in hardness in the upper zone. In the case of certain steel alloys the tungsten carbide layer even penetrates into the base material. The coating produces a hardness of up to 82 HR 30N, without the workpiece undergoing any change or distortion since the depositing process is practically cold. The coating possesses a high degree of heat resistance. The surface is uniform and shows no directional texture. With good saturation, it achieves a mean roughness of 2-9 µm.

Examples of applications

- · Hardness coating of tools or wear parts to extend service life.
- Post hardening of additively manufactured parts
- Coating of smooth surfaces in order to achieve greater adhesion through the structure of the layer
- Coating of sliding surfaces in order to avoid cold weldings as a result of the structure of the layer

Materials and their pretreatment

Any soft, heat-treated and hardened unalloyed or alloyed steel is suitable as material for coating with tungsten carbide. The surface must be clean and metallically pure.



Voltage and energy

Parameters II - Advanced settings

Navigation of device operation

Handpiece control connection

USB connection

Ground connection

Information, e.g. about the set parameters as well as coating quality, vibration intensity, charge storage, handpiece, interval coating, etc.

Auto Tune

Display:

Foot pedal control (switchover)

Navigation Retrieval / Saving of settings

Control wheel for navigation and adjusting the parameters

ON/OFF

Electrode connection





				Price from
			Order No.	1 set
ENESKArecoat 85 hard metal coating unit, set				
_	Control unit:		0 700 300	
	Max. achievable coating hardness:	82 HR 30N		
	Working voltage:	36-54 V		
ar a h	Vibration frequency:	variable up to 120 Hz		
and the second state	Supply voltage:	115/230 DCV, 50/60 Hz		
	Dimensions (W x D x H):	135 x 476 x 321mm		
	Weight:	10 kg		
	Application gun:			
6 PA	Vibration frequency :	variable up to 120 Hz		
And the second second	Working lamp:	4 LEDs, 5000 K		
	Weight	0.84 kg		
	Cable length:	1.80 m		
	Scope of delivery:			
	• 0 700 301 Carbide coating unit, control	unit		
	• 0 700 302 Application handpiece, comp			
	• 0 700 351 Earth cable 10mm ² , 2.0 m, plu			
	• 0 700 060 Set of clamping elements for			

- 0 700 060 Set of clamping elements for carbide electrodes, incl. spare
- screws and screwdriver (12 pieces) 0 700 034 Set of carbide electrodes (24 pieces)

🍄 Accessories / spare parts

		Packing		Price from
		quantity	Order No.	1 piece
ENESKArecoat 85 foo	ot switch			
	Foot control / foot switch for on/off function of the coating process. Optionally connectable to the ENESKArecoat 85 control unit (Alternative to control via application gun).		0 700 360	
ENESKArecoat 85 ap	plication gun			
1	The application gun has a button to start the working process. In addition, there is a status LED on the application handpiece, which indicates the optimum distance to the workpiece. This helps the user to optimise the coating process. Vibration frequency: variable up to 120 Hz		0 700 302	
	Working field lamp with 4 LEDs, 5000K Push button switch: On / Off Status LED for contact monitoring Dimensions (W x D x H): 160 x 40 x 190 mm Weight: 0.84 kg including cable package			
	Cable length: 1.8 m			
ENESKArecoat 85 Cla	amping element for carbide electrodes			
	for round carbide electrodes up to max. Ø 1.4 mm		0 700 061	
0	for round carbide electrodes up to max. Ø 2.3 mm		0 700 062	
(=) =	for triangular carbide electrodes up to max. 2 mm		0 700 063	
	for square carbide electrodes up to max. 2.2 mm		0 700 064	
Set of tungsten carbi	ide electrodes for ENESKArecoat 85 and tucadur (24 pieces)			
	consisting of: • 3 pieces each 1.0 mm round (Order No. 0 700 036) • 3 pieces each 1.3 mm round (Order No. 0 700 046) • 3 pieces each 1.8 mm round (Order No. 0 700 047) • 3 pieces each 2.3 mm round (Order No. 0 700 048) • 3 pieces each 1.1 mm square (Order No. 0 700 039) • 3 pieces each 1.6 mm square (Order No. 0 700 040) • 3 pieces each 2.1 mm square (Order No. 0 700 041)	24 pieces	0 700 034	

• 3 pieces each 1.95 mm triangular (Order No. 0 700 042-0)



				Price from	
	Shape	Dimensions	Order No.	1 piece	10 pieces
Tungsten carbide electro	des for ENESKArecoat 85 and tucadur				
	round	Ø 1.0 x 50 mm	0 700 036		
	round	Ø 1.3 x 50 mm	0 700 046		
	round	Ø 1.8 x 50 mm	0 700 047		
	round	Ø 2.3 x 50 mm	0 700 048		
	square	1.1 x 50 mm	0 700 039		
	square	1.6 x 50 mm	0 700 040		
	square	2.1 x 50 mm	0 700 041		
	triangular	1.95 x 50 mm	0 700 042-0		



				Price fro	om
			Order No.	1 set	10 set
Set of tu	ngsten carbide e	electrodes for ENESKArecoat 85 and tucadur (24 pieces)			
	AV 1	consisting of: • 3 pieces each 1.0 mm round (Order No. 0 700 036) • 3 pieces each 1.3 mm round (Order No. 0 700 046) • 3 pieces each 1.8 mm round (Order No. 0 700 047) • 3 pieces each 2.3 mm round (Order No. 0 700 048) • 3 pieces each 1.1 mm square (Order No. 0 700 039) • 3 pieces each 1.6 mm square (Order No. 0 700 040) • 3 pieces each 2.1 mm square (Order No. 0 700 041) • 3 pieces each 1.95 mm triangular (Order No. 0 700 042-0)	0 700 034		



Several application possibilities

Coating of a machine part