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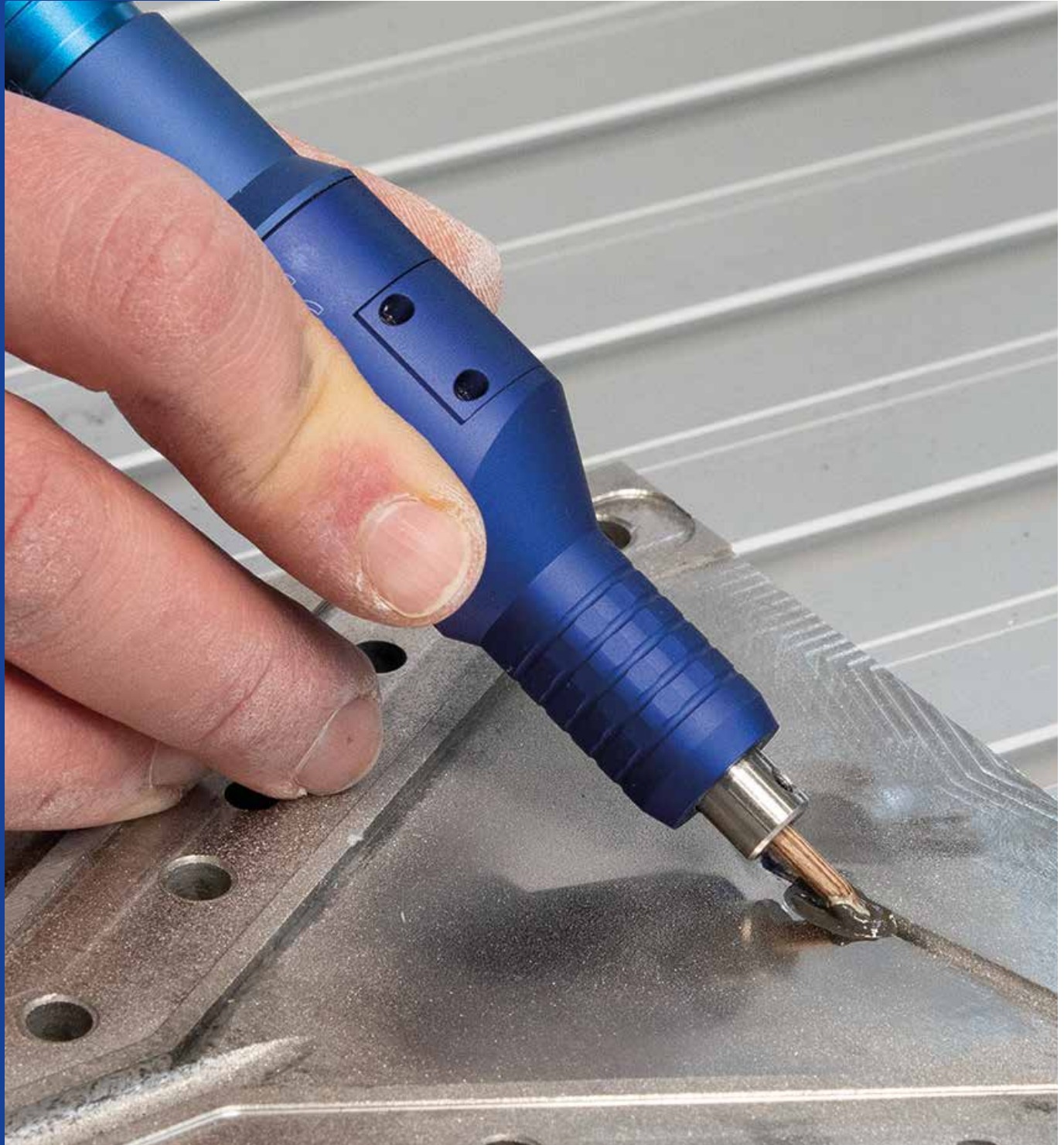
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Driving motors and handpieces





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Ultraschall-Minicutter AX für sauberes und präzises Trennen von Supports

NEU!

Für präzise Trenn- und Schnitarbeiten im professionellen Dauerbetrieb. Vielfältige Werkstoffe und Strukturen lassen sich mit dem Minicutter bearbeiten: Stützstrukturen an Kunststoffspritzteilen, Zuschnitte von ABS, Polystyrol, PVC und anderen Kunststoffen, aber auch weichere Materialien, wie z.B. Gummi, Leder oder Sperrholz. Daher ist der handliche Cutter auch hervorragend im Modellbau einzusetzen. Ergonomie und Ultraschallantrieb ermöglichen langes Arbeiten ohne Ermüdung.

	Bestell-Nr	Preis ab 1 Stück
Ultraschall-Minicutter AX		
	Set bestehend aus: 1 x Steuergerät 1 x Handstück mit Kabel 1 x Klingenaufnahme 3 x Ersatzschrauben HB03, zur Klingenaufnahme 40 x Klinsen 1 x Inbusschlüssel RR02, zur Klingenaufnahme	0 006 261 875,00 €

Zubehör / Ersatzteile

	Bestell-Nr	Preis ab 1 Stück
Klingenaufnahme Ctrl AX	0 006 263	12,04 €
Ersatzschraube zur Klingenaufnahme Ctrl AX	0 006 264	0,16 €
Ladekabel Ctrl AX	0 006 265	16,05 €
Drehmomentschlüssel mit Bit Ctrl AX	0 006 266	32,10 €



Ultraschall-System zum Läppen und Polieren ENESKAsonic

Die innovativste Weiterentwicklung im Bereich Ultraschall
ENESKAsonic – leistungsstarke High-Tech-Nachfolgeneration für feinsten Abtrag



Wie schon beim ENESKAmicro zeichnet sich das ENESKAsonic Ultraschallsystem durch konsequente Weiterentwicklung in jedem Detail aus. Hervorzuheben ist das edle Design gepaart mit komfortabler High-Tech-Ausstattung.

Highlights:

- intuitive Bedienung per Touch kombiniert mit Drehregler auf hochwertigem Glas
- moderne LED-unterstützte Multifunktionsanzeige
- Boost-Funktion für leistungsstärkere Anforderungen
- Leerlauf-Timer erkennt nicht genutzte Handstücke und schützt vor Verschleiß
- USB-Ladeanschluss ermöglicht bspw. die optionale Ergänzung einer Arbeitsplatzleuchte ohne weitere Stromquelle

Das ENESKAsonic arbeitet beim Polieren und Läppen im Frequenzbereich von 20 bis 30 kHz. Die optimale Frequenz ermittelt die Auto-Tune-Funktion. Die stufenlose Leistungsregelung ist sowohl geeignet für feine, filigrane Arbeiten an schmalen Stegen und Kanten, als auch im Boost-Modus für leistungsintensive, extra abrasive Arbeiten mit gesinterten Diamantfeilen. Das LED-unterstützte Display zeigt die verschiedensten Betriebsparameter und Einstellungen. Das 140 g leichte Handstück mit M6-Feingewinde liegt gut in der Hand und ermöglicht ein ermüdungsfreies Arbeiten.

Unserer Entwicklung war es besonders wichtig, dass auch dieses Familienmitglied „100% Made in Germany“ produziert wird und rückwärtskompatibel zu ENESKA 2-1 Handstücken ist. Die Gewährleistung des besonders hohen Qualitätsanspruches liegt uns sehr am Herzen und schützt Ihre Investitionen vergangener Jahre. Kombinieren Sie das ENESKAsonic mit einem ENESKAmicro und Sie erhalten ein unschlagbares Team aus voll ausgebildeten Spezialisten auf ihrem jeweiligen Arbeitsgebiet.

		Bestell-Nr	Preis ab
			1 Stück
ENESKAsonic Steuereinheit			
	Technische Daten: Leistung: max. 80 W Abmessungen (B x H x T): 135 x 235 x 200 mm Gewicht: 2,7 kg Anschlussspannung: 115/230 V, 50/60 Hz, 150 VA	0 012 001	2151,00 €
			






↓ *passendes Set*

		Bestell-Nr	Preis ab
			1 Stück
Set ENESKAsonic Ultraschall-System			
	Lieferumfang Set: 1 x Steuereinheit ENESKAsonic (Bestell-Nr. 0 012 001) 1 x Handstück JUS-50-ES (Bestell-Nr. 0 012 008) 1 x Handstückablage Standard, schwarz (Bestell-Nr. 0 011 110) 1 x Displayschutz aus gehärtetem Glas (Bestell-Nr. 0 011 098-G) 1 x Netzkabel-Set für Deutschland, Schweiz, England und Europa (Bestell-Nr. 0 007 435-1) 2 x Sicherung 4 A (Bestell-Nr. 1 711 407-1) für den 110 V Einsatz 1 x Schraubendreher T10 Vielzahn TORX (Bestell-Nr. 0 006 304-T) 2 x Maulschlüssel (Bestell-Nr. 0 006 347) 1 x Werkzeughalter Bohrungs-Ø 3 mm (Bestell-Nr. 0 006 306-E) 1 x Werkzeughalter Schlitzbreite 1 mm (Bestell-Nr. 0 006 310-E) 1 x Klingenaufnahme (Bestell-Nr. 0 006 351) 10 x Grafikklingen (Bestell-Nr. 0 006 354)	0 012 000-1	3857,00 €

Ultraschall-System zum Läppen und Polieren

ENESKAsonic

Zubehör / Ersatzteile

	Bestell-Nr	Preis ab	
		1 Set	1 Stück
Kunststoffkoffer für ENESKAsonic, inkl. Schaumstoffeinlage und Kunststoffbox			
 <p>Einfacher, gebündelter Transport durch Tragegriff. Dauerhafte Ordnung durch passgenaue Aussparungen für je:</p> <ul style="list-style-type: none"> • 1 x Handstück • 1 x Steuereinheit • 1 x Fußpedal • 5 x Werkzeughalter • 1 x Kunststoffbox, 46 x 46 x 70 mm (im Lieferumfang) <p>Außenmaße (B x H x T): 210 x 396 x 296 mm</p>	0 012 004	-	222,00 €
ENESKAmicro Fußpedal			
 <ul style="list-style-type: none"> • zur komfortablen Steuerung per Fuß (Start/Stop, Drehzahlregulierung) • Kabellänge 2 m 	0 011 002	-	203,00 €
 <ul style="list-style-type: none"> ab Softwareversion V044 (mit USB-Buchse) • zur komfortablen Steuerung per Fuß (Start/Stop, Drehzahlregulierung), • Kabellänge 2 m 	0 011 003	-	211,00 €
ENESKAmicro Handstückablage			
 <p>zur sicheren Aufbewahrung der Handstücke Silikon, schwarz</p>	0 011 110	-	9,09 €
ENESKAsonic Anschlusskabel			
passend zum Handstück JUS-45 PB-ES	0 012 006	-	299,00 €
passend zum Handstück JUS-50-ES	0 012 006-1	-	148,24 €
ENESKAsonic Set Klingenaufnahme und Grafikklingen			
 <p>bestehend aus:</p> <ul style="list-style-type: none"> 1 x ENESKAsonic Klingenaufnahme (Bestell-Nr. 0 006 351) 10 x Grafikklingen (Bestell-Nr. 0 006 354) 1 x Schraubendreher Torx (Bestell-Nr. 0 006 304-T) 	0 006 350	66,06 €	-



Ultraschall-System zum Läppen und Polieren ENESKAsonic • Handstücke

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				Bestell-Nr	Preis ab 1 Stück
Ultraschall-Handstück JUS-50-ES					
	Aufnahmegewinde:	M6/Fein		0 012 008	1784,00 €
	Frequenz:	22,5 kHz (40 µm)			
	Maße:	Ø 29,7 x 135 mm			
	Gewicht:	140 g (ohne Kabel)			
	Kabellänge:	2 m			
	Leistung:	50 W			









Zubehör / Ersatzteile



Profil: rund




Profil: eckig

					Bestell-Nr	Preis ab 1 Stück
Werkzeughalter zur Aufnahme runder Werkzeuge						
	d = Ø 2 mm	rund	M6/fein	0 006 305	38,57 €	
	d = Ø 3 mm	eckig	M6/fein	0 006 306-E	41,50 €	
Werkzeughalter zur Aufnahme flacher Werkzeuge						
	t = 0,8 mm	eckig	M6/fein	0 006 309	38,57 €	
	t = 1 mm	rund	M6/fein	0 006 310	38,57 €	
	t = 1 mm	eckig	M6/fein	0 006 310-E	38,57 €	
	t = 2 mm	eckig	M6/fein	0 006 311	38,57 €	
	t = 3 mm	eckig	M6/fein	0 006 312	38,57 €	
Adapter zur Aufnahme von Ultraschall-Werkzeugen						
	Gewinde M4		M6/fein	0 006 900	22,84 €	
Schraubendreher Torx						
				0 006 304-T	6,72 €	
LED Arbeitsplatzleuchte						
	<ul style="list-style-type: none"> • flexibler Lichthalterschlauch • 3 Stufen einstellbar • mit Klemmhalterung max. 45 mm Klemmbereich 			0 200 524	46,96 €	
	Technische Daten:					
	Bestückung:	3 Watt LED / 350 lm				
	Farbtemperatur:	5.000 K				
	Anschluss:	USB, 5V 1A/5V 2A Eingang				

Werkzeughalter für Ultraschall-Werkzeuge für runde und flache Werkzeuge


Halter zur Aufnahme runder Ultraschall-Werkzeuge wie zum Beispiel Polierhölzer oder Keramikfaserfeilen.

	Werkzeugaufnahme	Halterprofil	Gewinde	Bestell-Nr	Preis ab 1 Stück
Werkzeughalter zur Aufnahme runder Werkzeuge					
	d = Ø 2 mm	rund	M6/fein	0 006 305	38,57 €
	d = Ø 3 mm	eckig	M6/fein	0 006 306-E	41,50 €
	d = Ø 2 mm	rund	M4	0 405 740	56,70 €
	d = Ø 3 mm	rund	M4	0 405 746	56,70 €
	d = Ø 2 mm	rund	M6	0 405 750	28,09 €
	d = Ø 3 mm	rund	M6	0 405 751	28,09 €
	d = Ø 2 mm	eckig	M6 x 0,75	0 405 761	56,70 €
	d = Ø 3 mm	eckig	M6 x 0,75	0 405 762	56,70 €



Werkzeughalter für Ultraschall-Werkzeuge für runde und flache Werkzeuge

In diesen Haltern finden alle flachen Ultraschall-Werkzeuge sicheren Halt. Keramikfaserfeilen oder Messingstäbe zum Beispiel.

	Werkzeugaufnahme	Halterprofil	Gewinde	Bestell-Nr	Preis ab 1 Stück
Werkzeughalter zur Aufnahme flacher Werkzeuge					
	t = 0,5 mm	eckig	M4	0 405 742	51,56 €
	t = 1 mm	eckig	M4	0 405 743	56,70 €
	t = 2 mm	eckig	M4	0 405 744	53,60 €
	t = 3 mm	eckig	M4	0 405 745	56,70 €
	t = 0,5 mm	eckig	M6	0 405 752	37,15 €
	t = 1 mm	eckig	M6	0 405 753	28,09 €
	t = 2 mm	eckig	M6	0 405 754	44,23 €
	t = 3 mm	eckig	M6	0 405 755	37,15 €
	t = 0,5 mm	eckig	M6 x 0,75	0 405 764	51,56 €
	t = 0,8 mm	eckig	M6 x 0,75	0 405 765	56,70 €
	t = 1 mm	eckig	M6 x 0,75	0 405 766	56,70 €
	t = 2 mm	eckig	M6 x 0,75	0 405 767	56,70 €
	t = 3 mm	eckig	M6 x 0,75	0 405 768	56,70 €
	t = 0,8 mm	eckig	M6/fein	0 006 309	38,57 €
	t = 1 mm	rund	M6/fein	0 006 310	38,57 €
		eckig	M6/fein	0 006 310-E	38,57 €
t = 2 mm	eckig	M6/fein	0 006 311	38,57 €	
t = 3 mm	eckig	M6/fein	0 006 312	38,57 €	

Adapter für Ultraschall-Werkzeuge

Mit Hilfe dieser Adapter können Sie nahezu alle Ultraschall-Werkzeuge auf den verschiedenen Systemen einsetzen. Welche Gewinde die einzelnen Systeme haben, entnehmen Sie bitte der Infobox unten.

Werkzeugaufnahme	Ausführung	Gewinde	Bestell-Nr	Preis ab 1 Stück
Adapter zur Aufnahme von Ultraschall-Werkzeugen				
Gewinde M4	eckig	M6	0 405 757	27,95 €
Gewinde M6/Fein	eckig	M6	0 405 758	23,97 €
Gewinde M4		M6 x 0,75	0 405 769	46,00 €
Gewinde M6/Fein		M6 x 0,75	0 405 770	23,97 €
Gewinde M4		M8 x 1	0 405 780	23,86 €
Gewinde M6/Fein		M8 x 1	0 405 781	23,86 €
Gewinde M4		M6/fein	0 006 900	22,84 €



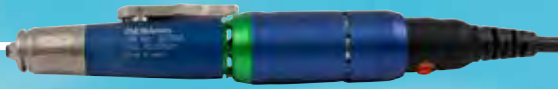
Übersicht der Gewindeausführungen gängiger Ultraschall-Poliersysteme

M 4	z. B. Ultramax UM 2000, Sonofile SF 1000
M 6	z. B. joke 226, UC 550, Royal
M 6/fein (M 6 x 0,9)	ENESKAsonic, ENESKA 2-1
M 6 x 0,75	z. B. Ultramax DF und SF, Ultraform UF 5600 und 2600, Sonotec SF-5600 und SF 2600
M 8 x 1	z. B. Laptron, Ultramax UM 1200

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



ENESKAmicro **COMPACT JEM 50C CNC**
Order no. 0 100 012



ENESKAmicro **COMPACT JEM 40C**
Order no. 0 100 025



Collets JCC

Order no. 0 100 040-
Order no. 0 100 048

ENESKAmicro reducing gear
JERG 2 | Order no. 0 100 010



ENESKAmicro quick-release
handpiece **JIR 40R**
Order no. 0 100 005

ENESKAmicro handpiece
JBMLH 40R
Order no. 0 100 006L



Collets JCB

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



ENESKAmicro handpiece **JEHG 20R**
Order no. 0 100 007



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

Collets JCS

Order no. 0 100 050-
Order no. 0 100 052



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



ENESKAmicro
mini hand filing machine **JMH 20R**
Order no. 0 100 009

Collets JBS 20R

Order no. 0 100 008-0
Order no. 0 100 008-1
Order no. 0 100 008-2



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

ENESKA 3, 3-1, 3-2-handpieces
for minus connection



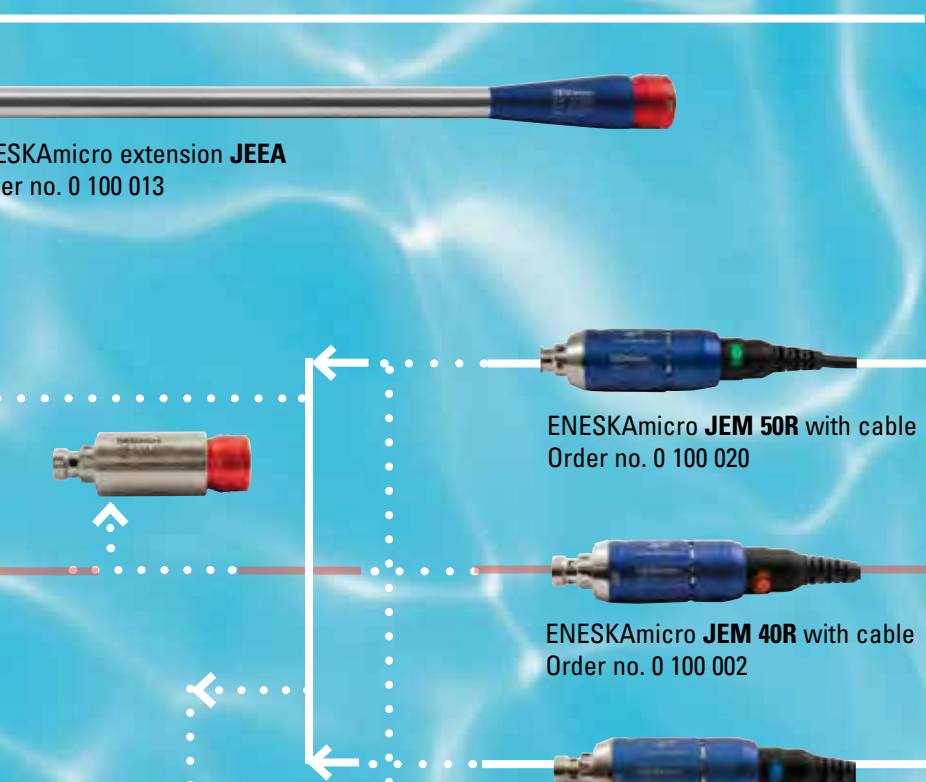
ENESKA 4-1-handpieces
for plus connection



ENESKAmicro System overview

START

ENESKAmicro extension **JEEA**
Order no. 0 100 013



ENESKAmicro **JEM 50R** with cable
Order no. 0 100 020

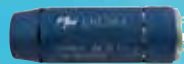
ENESKAmicro **JEM 40R** with cable
Order no. 0 100 002

ENESKAmicro **JEM 20R** with cable
Order no. 0 100 003

Adapter for handpieces **JECR 02**
Order no. 0 100 091



Adapter for handpieces **JECR 03**
Order no. 0 100 092



Micromotor **JBM 50 S/HT**



Adapter for handpieces **JECR 04**
Order no. 0 100 093



Micromotor **JENK 410 T/250 T**

Adapter for handpieces **JECR 01**
Order no. 0 100 090



ENESKAmicro **COMPACT HT60-D6**
Motor incl. chuck with collet Ø 6 mm
and motor cable 1,8 m
Order no. 0 011 429 with fan



ENESKAmicro **COMPACT HT60 SMALL**
Order no. 0 011 469 with fan



ENESKAmicro **COMPACT HT60**
Rapid chuck power, with collet,
with collet Ø 3 mm
and motor cable 1,8 m
Order no. 0 011 409 with fan



ENESKAmicro **COMPACT HT60-XL**
Motor incl. rapid chuck Power,
XL axle with collet Ø 3 mm
and motor cable 1,8 m
Order no. 0 011 419 with fan



Control unit **PLC**
ENESKAmicro 600
Order no. 0 011 201-AU

Control unit
ENESKAmicro 600
Order no. 0 011 201



Control unit
ENESKAmicro 450
Order no. 0 011 001



Control unit
Battery system,
ENESKAmobile
Order no. 0 012 301



Footpedal
Order no. 0 011 002
not for control unit PLC

Footpedal
Order no. 0 011 003
not for control unit PLC
from software V.44



LED workplace light
Order no. 0 200 524



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



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**.

Price from

Order No.

1 piece

ENESKAmicro 600 control unit PLC

0 011 201-AU



100% Made in GERMANY

Highlights of the units with PLC operation

- PLC mode for external programmable logic controller operation
- Standardised connection via 8-pin industrial IO connector for PLC and foot pedal
- Analogue signal input for the setpoint speed via 0-5 V or 0-10 V or
- Run/Stop plus digital switching between two independent speeds
- In addition, toggling between two motor channels is possible
- Digital control for right/left rotation changeover
- Standby output (OK/Error) for feedback to superordinate control unit
- Extremely simple parameter configuration through settings as for manual operation
- Optionally available test box for testing all ext. inputs (plus output) for easy introduction to the automated functions - (article no. 0 011 137)

Greater convenience and enhanced functionality with firmware v044

- Connection and detection of two BLDC motors and one DC brushed motor
- Adjustable speed in 1000 rpm increments up to 60,000 rpm
- Control circuit for optimum control behaviour with digital speed display
- Familiar clear display structure and operation via touch keys
- Simplified and switchable change of rotation direction via the handpiece
- Adjustable speed limitation when switching to anticlockwise rotation
- User support via extended device messages
- Activatable diagnostic display with information on operating parameters

Dimensions (W x H x D): 135 x 235 x 200 mm
 Speed (max): 60,000 rpm
 Power consumption: 250 W
 Connected load: 90 - 240 V, 50-60 Hz

⚙️ Accessories / spare parts

Price from

Order No.

1 piece

ENESKAmicro PLC signal cable 3.0 m

0 011 136



Plug detail

ENESKAmicro Control units

Price from

Order No.

1 piece

ENESKAmicro 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

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 piece

ENESKAmicro 450 control unit



- Infinitely variable speed control up to max. 45,000 rpm
- Speed limited by potentiometer
- Digital speed display
- Connection for 2 motors BLDC
- Motor recognition
- Speed Memory button
- Clockwise, anticlockwise running
- Connection for foot control

0 011 001

Weight: 3.6 kg
 Dimensions (W x H x D): 135 x 235 x 200 mm
 Connection: 90–240 V, 50–60 Hz

ENESKAmicro Control units

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Accessories / spare parts

	Type	Order No.	Price from 1 piece
ENESKAmicro footpedal			
 <ul style="list-style-type: none"> • for comfortable control by foot (start/stop, speed adjustment) • Cable length 2 m 		0 011 002	
	from software version V04x (with USB port)		0 011 003
<ul style="list-style-type: none"> • for comfortable control by foot (start/stop, speed adjustment) • Cable length 2 m 			
ENESKAmicro handpiece support			
	for secure handpiece storage, HT white	HT	0 011 109
	for secure handpiece storage, black	Standard	0 011 110
ENESKAmicro extension cable, 2 m			
	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

		Price from
	Order No.	1 set
ENESKAmicro 600 set 2.5		
	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 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)	0 011 220
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
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 EMB, Ø 6 mm (order no. 0 011 426) 1 x ENESKAmicro handpiece support, white (order no. 0 011 109)	0 011 235
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
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 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

ENESKAmicro 600 Complete sets

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	Order No.	Price from 1 set
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ENESKAmicro 600 set 2.20


The set contains the following components:
 1 x ENESKAmicro 600 control unit (order no. 0 011 201)
 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)

0 011 280

	Order No.	Price from 1 set
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ENESKAmicro 600 set 2.21


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 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

0 011 285

	Order No.	Price from 1 set
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ENESKAmicro 600 set 2.23


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

0 011 295

	Order No.	Price from 1 set
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ENESKAmicro 600 set 2.22


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)
 1 x ENESKA **rapid-chuck handpiece JIR 40R** (order no. 0 100 005) incl. collet type JIR, Ø 3 mm

0 011 290


	Order No.	Price from 1 set
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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


ENESKAmicro 600 Complete sets

	Order No.	Price from 1 set
ENESKAmicro 600 set 2.25		
 <p>The set contains the following components:</p> <ul style="list-style-type: none"> 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) x ENESKA rapid-chuck handpiece JIR 40R (order no. 0 100 005) incl. collet type JIR, Ø 3 mm 	0 011 286	

	Order No.	Price from 1 set
ENESKAmicro 600 set 2.26		
 <p>The set contains the following components:</p> <ul style="list-style-type: none"> 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) 	0 011 296	

ENESKAmicro 450 Complete sets

	Order No.	Price from 1 set
ENESKAmicro 450 Set 2.0		
 <p>The set contains the following components:</p> <ul style="list-style-type: none"> 1 x ENESKAmicro 450 control unit (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	

	Order No.	Price from 1 set
ENESKAmicro 450 set 1.0		
 <p>The set contains the following components:</p> <ul style="list-style-type: none"> 1 x ENESKAmicro 450 control unit (order no. 0 011 001) 1 x ENESKAmicro motor COMPACT JEM 50C incl. rapid-chuck handpiece and motor cable (order no. 0 100 001) 1 x ENESKAmicro handpiece support, black (order no. 0 011 110) 	0 011 050	

ENESKAmicro 450

Complete sets

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		Price from
	Order No.	1 set
ENESKAmicro 450 set 1.01		0 011 055
 <p>The set contains the following components:</p> <ul style="list-style-type: none"> 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 		
ENESKAmicro 450 set 1.02		0 011 060
 <p>The set contains the following components:</p> <ul style="list-style-type: none"> 1 x ENESKAmicro 450 control unit (order no. 0 011 001) 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) 1 x ENESKA rapid-chuck handpiece JIR 40R (order no. 0 100 005) incl. collet type JIR, Ø 3 mm 		
ENESKAmicro 450 set 1.03		0 011 065
 <p>The set contains the following components:</p> <ul style="list-style-type: none"> 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) 		
ENESKAmicro 450 set 1.04		0 011 070
 <p>The set contains the following components:</p> <ul style="list-style-type: none"> 1 x ENESKAmicro 450 control unit (order no. 0 011 001) 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) 		
ENESKAmicro 450 set 1.5		0 011 075
 <p>The set contains the following components:</p> <ul style="list-style-type: none"> 1 x ENESKAmicro 450 control unit (order no. 0011001) 1 x ENESKAmicro COMPACT JEM 40C, motor incl. lever handpiece with collet Ø 3 mm and motor cable (order no. 0100025) 1 x ENESKAmicro handpiece holder standard, black (order no. 0011110) 		


ENESKAmicro 600 Conversion 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.

	Design	Order No.	Price from 1 set
ENESKAmicro 600 Conversion 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)	the most powerful Motor in the lower Speed-Range (Package 20+, incl. Micromotor JEM 20R)	0 011 283

	Design	Order No.	Price from 1 set
ENESKAmicro 600 Conversion 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)	the most powerful Motor in the lower Speed-Range (Package 20-, incl. Micromotor JEM 20R)	0 011 284

	Design	Order No.	Price from 1 set
ENESKAmicro 600 Conversion 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)	the lightest Motor (Package 40+, incl. Micromotor JEM 40R)	0 011 281

ENESKAmicro 600 Conversion sets

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	Design	Order No.	Price from 1 set
ENESKAmicro 600 Conversion 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)	the lightest Motor (Package 40-, incl. Micromotor JEM 40R)	0 011 282

	Design	Order No.	Price from 1 set
ENESKAmicro 600 Conversion 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)	the most powerful and fastest Engine (Package 50+, incl. Micromotor JEM 50R)	0 011 287

	Design	Order No.	Price from 1 set
ENESKAmicro 600 Conversion 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 02 (order no. 0 100 091) 1 x ENESKAmicro handpiece support, black (order no. 0 011 110)	the most powerful and fastest Motor (Package 50-, incl. Micromotor JEM 50R)	0 011 288

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ENESKAmicro Handpieces and motors

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

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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 - 50,000 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, ergonomic 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
- THE BALANCED ONE for maximum accuracy in a slim and robust design
- THE OPERATIVE for mounting in fixtures

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



Cool cut with a ceramic fibre cut-off disc



Convex shapes - belt grinder and grinding belts



Polishing wood with hand-filing machine



Welding seam with Blue Stones grinding



Aluminium polishing with angle-handpiece and felt

ENESKAmicro Micromotors 3rd generation



Price from

Order No.

1 piece

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

The fast runner

0 100 001

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

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

Output: 200 W
 Rotation speed range: 1,000 - 50,000 rpm
 Torque: 8.4 N cm
 Dimensions: Ø 27.5 mm x 137.6 mm (without coupling)
 Weight: 215 g (without motor cable)
 Switch: on motor cable



Attention: The handpiece is fixed to the motor. It's therefore not possible to change the handpiece.

Accessories / spare parts



	Dimensions	Order No.	Price from
			1 piece 1 set
ENESKAmicro JEM cleaning set 'keep it clean'			
Cleaning set for motors and handpieces of the ENESKAmicro JEM series Regular cleaning maintains the longevity and performance and performance of your motors and handpieces!		0 100 080	

ENESKAmicro motor cable for JEM 50R and COMPACT JEM 50C



0 100 030

Protective cap



for push-button ENESKAmicro motor cable JEM



0 100 039

ENESKAmicro extension cable, 2 m



suitable for all motor cables of the ENESKAmicro series

0 011 401

Collet JCC



Ø 1.0 mm	1 mm	0 100 040
Ø 1.2 mm	1,2 mm	0 100 041
Ø 1.4 mm	1,4 mm	0 100 042
Ø 1.6 mm	1,6 mm	0 100 043
Ø 1.8 mm	1,8 mm	0 100 044
Ø 2.0 mm	2 mm	0 100 045
Ø 2.35 mm	2,35 mm	0 100 046
Ø 3.0 mm	3,0 mm	0 100 047
Ø 3.175 mm	3,175 mm	0 100 048



ENESKAmicro Micromotors 3rd generation

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Price from

Order No.

1 piece

ENESKAmicro COMPACT JEM 50C CNC, motor incl. rapid-chuck handpiece in stainless steel housing

The Operative

0 100 012

ENESKAmicro COMPACT JEM 50C CNC motor incl. quick-action clamping head in stainless steel housing
 Designed for mounting in fixtures! With lifting bolt for clamping the mount and Ø 20 mm surface for fixing the mount.
 Perfect for mounting in drilling jigs or robot clamping and gripping systems.

Collet type: JCC
 Output: 200 W
 Torque: 8,4 N cm
 Speed range: 1,000 - 50,000 rpm
 Noise level: < 67 dB(A) at 50,000 rpm



Attention: The handpiece is fixed to the motor. It's therefore not possible to change the handpiece.



ENESKAmicro

Micromotors 3rd generation

NEW!



Price from

Order No. 1 piece

ENESKAmicro COMPACT JEM 40C, motor incl. rapid-chuck handpiece and motor cable

The balanced one

0 100 025

Maximum precision in probably the slimmest and most robust design, paired with the convenience of one-handed tool changes. Thanks to its sophisticated ergonomics and perfect balance, the joke one-handed handpiece makes light work of the tasks carried out. Ideal for particularly delicate and precise work. With permanently integrated handpiece and collet Ø 3.0 mm.

Output:	84 watts
Rotation speed range:	1,000 - 40,000 1/min
Torque:	4.0 N cm
Dimensions:	Ø 25 mm x 136.4 mm (without coupling)
Weight:	165 g (without motor cable)
Switch:	on motor cable

Works with our control units ENESKAmobile, ENESKAmicro 600 and 450



Attention: The handpiece is fixed to the motor. It's therefore not possible to change the handpiece.

Accessories / spare parts

Price from

Dimensions Order No. 1 piece 1 set

ENESKAmicro motor cable JEM 40R



0 100 031

Protective cap



for push-button ENESKAmicro motor cable JEM

0 100 039

ENESKAmicro extension cable, 2 m



suitable for all motor cables of the ENESKAmicro series

0 011 401

Collet JCC



Ø 1.0 mm	1 mm	0 100 040
Ø 1.2 mm	1,2 mm	0 100 041
Ø 1.4 mm	1,4 mm	0 100 042
Ø 1.6 mm	1,6 mm	0 100 043
Ø 1.8 mm	1,8 mm	0 100 044
Ø 2.0 mm	2 mm	0 100 045
Ø 2.35 mm	2,35 mm	0 100 046
Ø 3.0 mm	3,0 mm	0 100 047
Ø 3.175 mm	3,175 mm	0 100 048

ENESKAmicro JEM cleaning set 'keep it clean'




The set contains: Cleaning spray, microfibre cleaning cloth for motors and handpieces, motor cleaning brush, blue, spiral brush for collets, blue, 2 x cleaning wire

0 100 080







Regular cleaning maintains the longevity and performance and performance of your motors and handpieces!



ENESKAmicro Micromotors 3rd generation

		Price from
		Order No. 1 piece
ENESKAmicro motor JEM 50R, up to 50,000 rpm, incl. motor cable		
The all-rounder		0 100 020
<p>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.</p> <p>Brushless AC motor</p> <p>Output: 200 W Speed range: 1000 - 50,000 rpm Torque: 8.4 N cm Dimensions: Ø 27.5 mm x 137.6 mm (without coupling) Weight: 143.6 g (without motor cable) Switch: on motor cable</p>		
		

Accessories / spare parts

		Price from
		Order No. 1 piece 1 set
ENESKAmicro reduction gear JERG 2		
	Reduction ratio: 4:1 Speed range: up to 40,000 1/min	0 100 010
Extension JEEA 300 mm		
		0 100 013
ENESKAmicro motor cable for JEM 50R and COMPACT JEM 50C		
		0 100 030
Protective cap		
	for push-button ENESKAmicro motor cable JEM	0 100 039
ENESKAmicro extension cable, 2 m		
	suitable for all motor cables of the ENESKAmicro series	0 011 401
ENESKAmicro JEM cleaning set 'keep it clean'		
	The set contains: Cleaning spray, microfibre cleaning cloth for motors and handpieces, motor cleaning brush, blue, spiral brush for collets, blue, 2 x cleaning wire	0 100 080
<p>Regular cleaning maintains the longevity and performance and performance of your motors and handpieces!</p>		

ENESKAmicro Micromotors 3rd generation




	Order No.	Price from 1 piece
ENESKAmicro motor JEM 40R, up to 40,000 rpm, incl. motor cable		
The fine finisher	0 100 002	
<p>The JEM 40R is the perfect choice for light work that requires handpieces that are both fine and delicate. Ideal for use in jewellery working, for example. brushless AC motor with max. 40,000 rpm • incl. motor cable • rapid-Change coupling</p>		
Output:	84 W	
Rotation speed range:	1,000 - 40,000 rpm	
Torque:	4.0 N cm	
Dimensions:	Ø 25 mm x 71.4 mm	
Weight:	100 g (without motor cable)	
Switch:	on motor cable	



⚙️ Accessories / spare parts

	Order No.	Price from 1 piece
ENESKAmicro reduction gear JERG 2		
 Reduction ratio: 4:1 Speed range: up to 40,000 1/min	0 100 010	
Extension JEEA 300 mm		
	0 100 013	
ENESKAmicro motor cable JEM 40R		
	0 100 031	
Protective cap		
  for push-button ENESKAmicro motor cable JEM	0 100 039	
ENESKAmicro extension cable, 2 m		
 suitable for all motor cables of the ENESKAmicro series	0 011 401	

ENESKAmicro „keep it clean“ ■ **NEW!**

	Order No.	Price from 1 set
ENESKAmicro JEM cleaning set „keep it clean“		
The set contains: Cleaning spray, microfibre cleaning cloth for motors and handpieces, motor cleaning brush (blue), spiral brush for collets (blue), 2 x cleaning wire.	0 100 080	
 Regular cleaning maintains the longevity and performance of your motors and handpieces!		



ENESKAmicro Micromotors 3rd generation

	Order No.	Price from 1 piece
ENESKAmicro motor JEM 20R, up to 20,000 rpm, incl. motor cable		

The worker **0 100 003**

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

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

Output: 73 W
 Rotation speed range: 1,000 - 20,000 rpm
 Torque: 5.0 N cm
 Dimensions: Ø 27.5 mm x 78.1 mm
 Weight: 145 g (without motor cable)
 Switch: on motor cable



⚙️ Accessories / spare parts

	Order No.	Price from 1 piece
ENESKAmicro reduction gear JERG 2		

Reduction ratio: 4:1
 Speed range: up to 40,000 1/min

0 100 010



Extension JEEA 300 mm

0 100 013



ENESKAmicro motor cable JEM 20R

0 100 032



Protective cap

for push-button ENESKAmicro motor cable JEM

0 100 039



ENESKAmicro extension cable, 2 m

suitable for all motor cables of the ENESKAmicro series

0 011 401







ENESKAmicro Handpieces

JIR 40R

		Order No.	Price from 1 piece
ENESKAmicro quick-release handpiece JIR 40R			
	Collet: Speed: Dimensions: Concentricity: Weight:	Ø 3 mm in scope of delivery max. 40,000 r/min Ø 26 mm x 90 mm ± 0.01 mm 112 g	0 100 005
			

Handpieces

JBMXLH 40R

		Order No.	Price from 1 piece
ENESKAmicro handpiece JBMXLH 40R			
	with extended shank 126 mm		0 100 006L
	Collet: Speed: Dimensions: Concentricity: Weight:	Ø 3 mm in scope of delivery max. 40,000 r/min Ø 12.6 mm / Ø 21.8 mm x 198.5 mm ± 0.01 mm 152 g	
			

Accessories / spare parts

		Order No.	Price from 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 JEHG 20R Heavy-Duty

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		Order No.	Price from 1 piece
ENESKAmicro handpiece JEHG 20R, heavy-duty			
	Collet: Ø 6 mm in scope of delivery Speed: max. 20,000 r/min Dimensions: Ø 22.5 mm x 99.5 mm Concentricity: ± 0.01 mm Weight: 141 g	0 100 007	



Accessories / spare parts

		Order No.	Price from 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	

Mini hand filing machine JMH 20R

		Order No.	Price from 1 piece
ENESKAmicro mini hand filing machine JMH 20R			
	Tool holder: max. Ø 3.2 mm Stroke length: 1.0 mm Max. Strokes: 12,000 rpm Max. Speed input: 20,000 rpm Dimensions: Ø 21.8 x 125.0 mm Weight: 142 g	0 100 009	



Accessories / spare parts

		Order No.	Price from 1 piece
Handpiece adapter JECR 03			
	for ENESKAmicro ,R' handpieces on ENESKA 4 motor series	0 100 092	
Handpiece adapter JECR 04			
	for ENESKAmicro ,R' handpieces on ENESKA 3 motor series	0 100 093	

Angle handpiece JERA 90 20R

Price from

Order No. 1 piece

ENESKAmicro angle handpiece JERA 90 20R



Collet:	Ø 3 mm included	0 100 004
Speed:	max. 20,000 r/min, reversal of the direction of rotation	
Concentricity:	± 0.01 mm	
Dimensions:	Ø 21.8 x 73 mm	
Weight:	92 g	
Vibration:	2.5 m / s ²	
Noise level:	70 dB	



JEAH 60 20R

Price from

Order No. 1 piece

ENESKAmicro angle handpiece JEAH 60 20R



Collet:	Ø 3 mm in scope of delivery	0 100 011
Speed:	max. 20,000 r/min	
Concentricity:	± 0.01 mm	
Dimensions:	Ø 22.5 x 80.8 mm (head: Ø 15.9 mm)	
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

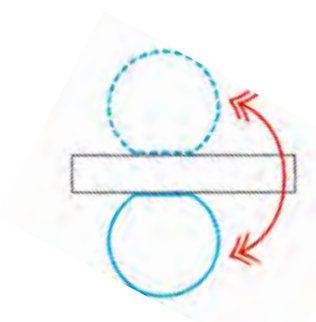
Hollow handle for ENESKAmicro

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

0 009 249



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

ENESKAmicro handpieces with (+) - connection





Angle handpiece WE4-90

			Order No.	Price from 1 piece
ENESKAmicro Angle handpiece WE4-45				
		Collet: CHC (Ø 3 mm included) Speed: max. 30,000 rpm, same direction of rotation Concentricity: < +/- 0.01 mm Dimensions: Ø 22 x 62 mm (without thread) Weight: 65 g	0 011 335	
ENESKAmicro Angle handpiece WE4-90				
		Collet: CHC (Ø 3 mm included) Speed: max. 30,000 rpm, reversal of direction of rotation Concentricity: < +/- 0.01 mm Dimensions: Ø 22 x 62 mm (without thread) Weight: 65 g	0 011 330	

Accessories / spare parts

		Dimensions	Order No.	Price from 1 piece
Collet type CHC				
		Ø 1.6 mm	0 009 207	
		Ø 2.35 mm	0 009 202	
		Ø 3.0 mm	0 009 201	
Handpiece adapter JECR 01				
	for ENESKA 4 handpieces with ENESKA JEM ,R' series		0 100 090	

Reduction gear JERG 2

			Order No.	Price from 1 piece
ENESKAmicro reduction gear JERG 2				
	Reduction ratio: 4:1 Speed range: up to 40,000 1/min		0 100 010	
				

Extension JEEA

			Order No.	Price from 1 piece
Extension JEEA 300 mm				
			0 100 013	



ENESKAmicro belt grinder JBS 20R

Price from

Order No.

1 piece

ENESKAmicro belt grinder JBS 20R



Speed: max. 20,000 r/min
for Beltsize: 4 mm / 6 mm / 8 mm with guide, changeable handling
Weight: 227 g

0 100 008



⚙️ Accessories / spare parts

Price from

Order No.

1 piece

Handpiece adapter JECR 03

for ENESKAmicro ,R' handpieces on **ENESKA 4** motor series

0 100 092



Handpiece adapter JECR 04

for ENESKAmicro ,R' handpieces on **ENESKA 3** motor series

0 100 093



Clamping arm JBS 20R

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

0 100 008-2



ENESKAmicro grinding belt 3M Trizact

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

Grinding belt, diamond or corundum

	Hardness	Dimensions	Grit size	Packing quantity	Order No.	Price from	
						1 pack	10 packs
Grinding belt, diamond							
	soft	8 x 300 mm	180	3 pieces	0 404 343		
	soft	8 x 300 mm	240	3 pieces	0 404 344		
		8 x 300 mm	800	3 pieces	0 404 348		
	soft	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		
		8 x 300 mm	120	50 pieces	0 401 931		
		8 x 300 mm	180	50 pieces	0 401 932		
		8 x 300 mm	240	20 pieces	0 401 933-0		
		8 x 300 mm	320	50 pieces	0 401 934		
		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						
		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	Order No.	Price from 1 piece
ENESKAmicro COMPACT HT60			
<ul style="list-style-type: none"> • 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 rpm Output: 8.9 N cm at 280 W Weight: 0.4 kg Dimensions (D x L): Ø 30 x 170 mm Concentricity: < +/- 0.01 mm Collet type: EMA			



Attention: Suitable for work from an motor speed > 20,000 rpm!



ENESKAmicro COMPACT series

COMPACT HT60 SMALL

	Design	Order No.	Price from 1 piece
ENESKAmicro COMPACT HT60 SMALL			
<ul style="list-style-type: none"> • 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		
Collet type:	EMA		



Attention: Suitable for work from an motor speed > 20,000 rpm!





Accessories / spare parts

	Dimensions	Order No.	Price from 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 cable HT, 1.8 m			
	For connecting the micromotors HT to the ENESKAmicro and ENESKAmobile control units	0 011 402	
ENESKAmicro extension cable, 2 m			
	Suitable for all motor cables of the ENESKAmicro series	0 011 401	

ENESKAmicro COMPACT series

COMPACT HT60-D6





	Design	Order No.	Price from 1 piece
ENESKAmicro COMPACT HT60-D6			
 <ul style="list-style-type: none"> • with collet Ø 6 mm • brushless DC motor BLDC • On-off switch located on the micromotor <p>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 Concentricity: < +/- 0.01 mm Collet type: CHG</p>	Incl. motor cable 1.8 m and fan	0 011 429	
ENESKAmicro HT60-D6 CNC			
 <ul style="list-style-type: none"> • with collet Ø 3 and 6 mm • brushless DC motor BLDC <p>Motor speed: up to max. 50,000 rpm Output: 8.9 N cm at 280 W Weight: 0.5 kg Dimensions (D x L): Ø 28 x 170 mm Clamping shank: Ø 28 x 45 mm Concentricity: < +/- 0.01 mm Collet type: CHG</p>	incl. motor cable 3 m, stainless steel case	0 011 470	




Attention: Suitable for work from an motor speed > 20,000 rpm!



Accessories / spare parts

	Dimensions	Order No.	Price from		
			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 cable, 2 m					
	Suitable for all motor cables of the ENESKAmicro series	0 011 401			
ENESKAmicro motorcable HT-D6, fan-variation					
		0 011 404-1			




ENESKAmicro COMPACT series COMPACT HT60-XL

	Design	Order No.	Price from 1 piece
ENESKAmicro COMPACT HT60-XL			
 <ul style="list-style-type: none"> • With collet Ø 3 mm • Brushless DC motor BLDC • On-off switch located on the micromotor • XL axle <p>Motor speed: up to max. 50,000 rpm Output: 8.9 N cm at 280 W Weight: 0.4 kg Dimensions (D x L): Ø 30 x 200 mm Collet axle: Ø 8 x 30 mm (outside the housing) Concentricity: < +/- 0.01 mm Collet type: EMA</p>	Incl. motor cable 1.8 m and fan	0 011 419	



Attention: Suitable for work from an motor speed > 20,000 rpm!

Accessories / spare parts


	Dimensions	Order No.	Price from 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 cable HT, 1.8 m			
	For connecting the micromotors HT to the ENESKAmicro and ENESKA-mobile control units	0 011 402	
ENESKAmicro extension cable, 2 m			
	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

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.	Price from 1 piece
Hand-filing machine DIPROFIL® Di-Pro FXM-N, Mark II		
for direct connection to ENESKAmicro control units 600	0 001 521-N	
 <p>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) 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</p>		





Accessories / spare parts

	Shank dimensions	Order No.	Price from 1 piece
Tool holder for lapping sticks			
 head pivotable through 90°, for receiving tool up to 10 x 10 mm	Ø 3 x 35 mm	0 411 291	
 for receiving tool up to 8 mm high	Ø 3.5 x 30 mm	0 411 292	
	Ø 6 x 30 mm	0 411 201	
Holder for grinding files			
 clamping height up to 11 mm	Ø 4 x 50 mm	0 401 959	
Tool holder Premium, mini			
 clamping range: height up to 8 mm, hardened finish, high-strength clamping plate	Ø 3 mm	0 401 951	
Tool holder Premium, medium			
 clamping range: height 6 mm, hardened finish. Shank and body manufactured from a piece of high-strength clamping plate. With recess for 6 mm flat and round stones.	Ø 3 mm	0 401 972	
Tool holder with counter-clamping			
 sturdy holder for clamping round and flat tools up to max. 3 mm. All solid carbide (VHM) round rods (see articles: 2 012 498 and 2 012 499) are used as a clamping shank for handpieces and/or hand-filing machines and are simply clamped and screwed to the rear of the holder.		0 750 710	
VHM round rod head Ø 6 mm			
 length 50 mm		2 012 499	

ENESKAmicro Hand-filing machines with integrated micromotor

Hand-filing machine DIPROFIL® FPM/R, Mark II

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.



	Order No.	Price from
Hand-filing machine DIPROFIL® FPM/R, Mark II		1 piece
 <p>for direct connection to ENESKAmicro control units 600</p> <p>Stroke length: 0.5 – 6 mm, infinitely adjustable</p> <p>Number of strokes: 1,000 – 7,800 strokes/min.</p> <p>Initial speed: max. 30,000 rpm</p> <p>Tool receptacle: Ø 1 – 6.2 mm</p> <p>Weight: 800 g</p> <p>Scope of supply: 2 tool holders, tool set, oil and storage case</p>	0 005 201-N	
		

ENESKAmicro Hand-filing machines with integrated micromotor

Hand-filing machine FMD/3-2/EM





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.	Price from
Hand-filing machine FMD/3-2/EM		1 piece
 <p>for direct connection to ENESKAmicro and ENESKAmobile control units</p> <p>Stroke length: 0.5 – 6 mm, infinitely adjustable</p> <p>Number of strokes: 1,000 – 7,800 strokes/min.</p> <p>Initial speed: max. 30,000 rpm</p> <p>Tool receptacle: Ø 1 – 6.2 mm</p> <p>Weight: 800 g</p> <p>Scope of supply: 2 tool holders, tool set, oil and storage case</p>	0 011 550	
		



Combine new motors with existing, older handpieces? Or new handpieces with earlier generation motors?
No problem: These adapters make it possible!

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

Mobile polishing system 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

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

Accessories / spare parts

	Order No.	Price from 1 piece
ENESKAmobile cordless grinder system, charger		
	0 012 302 • 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	
ENESKAmobile cordless grinder system, replacement battery-pack		
	0 012 303 • 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	
Holster for ENESKAmobile		
	0 012 307	
ENESKAmobile cordless grinder system, plastic case with foam pad		
	0 012 304 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	



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**



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

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NE



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



Mobile polishing system ENESKAmobile sets

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W!

		Price from
		Order No. 1 set
ENESKAmobile cordless grinder system Set JEM 20R		
	The set contains the following components: <ul style="list-style-type: none"> • 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
ENESKAmobile cordless grinder system Set JEM 40R		
	The set contains the following components: <ul style="list-style-type: none"> • 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 COMPACT JEM 40C		
	The set contains the following components: <ul style="list-style-type: none"> • 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 40C, motor incl. rapid-chuck handpiece and motor cable (Order No. 0 100 025) • plastic case (Order No. 0 012 304) 	0 012 370
ENESKAmobile cordless grinder system Set JEM 50R		
	The set contains the following components: <ul style="list-style-type: none"> • 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
ENESKAmobile cordless grinder system Set COMPACT JEM 50C		
	The set contains the following components: <ul style="list-style-type: none"> • 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 cable (Order No. 0 100 001) • plastic case (Order No. 0 012 304) 	0 012 300
ENESKAmobile cordless grinder system Set LITE		
	The set contains the following components: <ul style="list-style-type: none"> • 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
ENESKAmobile cordless grinder system Set COMPACT HT60 SMALL		
	The set contains the following components: <ul style="list-style-type: none"> • 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

Mobile polishing system MAXIMA mobile

NEW!

The mobile system for grinding, milling and polishing. Maximum mobility when working on large workpieces, because you can now really take this compact system with you almost anywhere. The Ni-Mh battery is not only environmentally friendly, but also long-lasting: 90 minutes working time at a time. And if it does run out of power, you can continue working with the mains cable (the battery is recharged in the meantime!).

The handpiece (with integrated motor) has left and right-hand rotation, infinitely variable speed adjustment and electronic overload protection. You can start the handpiece either by hand or by 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 aluminium hard case.

	Order No.	Price from 1 piece
Set MAXIMA mobile		
This set consists of:	0 006 700-1	
1 x MPC20-W control unit (order no. 0 006 713)		
1 x handpiece with integrated micromotor (order no. 0 006 711) (incl. 1 x collet Ø 3 mm order no. 0 006 704)		
1 x ACP01 charger (order no. 0 006 714)		
1 x foot controller TPF30 (order no. 0 006 701)		
1 x handpiece holder TRC02 (order no. 0 006 702)		
1 x aluminium hard case (order no. 0 006 703)		



⚙️ Accessories / spare parts

	Order No.	Price from 1 piece
Handpiece with integrated MBH 30 micromotor, incl. Ø 3 mm collet chuck		
Speed:	max. 30,000 rpm	0 006 711-1
Torque:	3.2 Ncm	
Dimensions:	Ø 23 x 97 mm	
Weight:	90 g	
Collet chuck:	3.0 mm	
Mobile control unit MPC30		
For infinitely variable speed regulation of the MPC 30 handpiece.	0 006 713-1	
Dimensions:	65 x 147 x 25 mm	
Weight:	225 g	
Battery type:	LI-ION	
Charging time:	180 min	
Operating time up to	140 min	



Motor system with flexible shaft jokeFlex Premium Plus



jokeFlex 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



Handpiece
joke Premium Plus
Order No. 0 030 200
Collet Typ GH



Angle-handpiece
joke Premium Plus
Order No. 0 030 250
Collet Typ WH



Technical handpiece
THSZ/N
Order No. 0 030 004
Collet Typ GH



Angle-handpiece
VTN-N 90°
Order No. 0 031 341
Collet Typ WH



Angle-handpiece
VTN-S/N
Order No. 0 031 540
Collet Typ GH



Rapid-chuck handpiece
TH-M II
Order No. 0 030 640
Collet Typ TH



Hemisphere handpiece
NHG-L
Order No. 0 031 400
Collet Typ WH



Hand-filing machines
DIPROFIL®
Di-Pro FXK-N, Mark II
Order No. 0 001 503-N



Hand-filing machines
DIPROFIL®
FPK/R, Mark II
Order No. 0 005 151-N



Flexible shafts
Premium Plus

Standard motor connection
Spring clip 1.1 m
Order No. 0 015 800
Rapid-Change 1.1 m
Order No. 0 015 900

Quick-change motor connection
Spring clip 1.1 m
Order No. 0 016 800
Rapid-Change 1.1 m
Order No. 0 016 900



Motor
jokeFlex Premium Plus
Order No. 0 016 550




Foot control
Premium
Order No. 0 016 600



Suspension device,
clamp-on
Order No. 0 020 200

Quick coupling system
joke Rapid-Change
Coupling piece
Order No. 0 015 250
Connector plugs for handpieces see from page 54!



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.

Shaft connectors



Flexible shaft with spring clip



Available on request!

Flexible shaft with hook ring



Flexible shaft with Rapid-change coupling

Motor connectors



joke Quick-Change motor connector



Standard motor connector (with pins)

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


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.

	Order No.	Price from 1 piece
Motor jokeFlex Premium Plus		
	Robust construction (shaft connection and suspension) pleasant noise level, can be used lying and hanging, compatible with foot controller Premium Rotational speed: max. 18,000 1/min Power: 1,000 W input, 700 W output Dimensions (H x W x D): 240 x 105 x 95 mm Weight: 2.1 kg Cable length: 2.2 m Shaft connection: Quick-Change	0 016 550

↓ matching set

	Design	Order No.	Price from 1 piece
Advantage package jokeFlex Premium Plus			
	This advantage package for getting 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
		Rapid-Change	0 016 850R

⚙️ Accessories / spare parts

	Order No.	Price from 1 pack	1 piece
Foot control Premium, Motor system with flexible shaft			
	To adjust motor speed by foot action		0 016 600
	Speed range: 3,000 to 22,000 1/min 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 G2, height adjustable			
	<ul style="list-style-type: none"> • Fixable to the workbench; clamping range: max. 70 mm • Height adjustable between 700 and 1,100 mm • Depth adjustable: cantilever arm adjustable by max. 300 mm • Lockable in any desired position • Colour: blue/silver 		0 020 200
Spring clip, Standard			
	Proven steel design, pack contents: 20 pieces		0 015 201

Handpieces

joke Premium Plus

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

⚙️ Accessories / spare parts

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



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

⚙️ Accessories / spare parts




		Dimensions	Order No.	Price from	
				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




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

Accessories / spare parts

		Dimensions	Order No.	Price from	
				1 piece	3 pieces
Collet type GH					
	Ø 2.35 mm – 3/32"		0 030 010		
	Ø 3 mm		0 030 013		
	Ø 6 mm		0 030 016		
Driver for Rapid-Change					
				0 015 262	
Connector plug					
	Rapid change to Handpiece THSZ/N Order No. 0 030 004, 0 030 005 and 0 030 006		0 015 261-1		

			Type	Order No.	Price from 1 piece
Angle-handpiece VTN-N 90°					
	70 mm telescope-type extendable angle head with 90° head adjustment, clockwise rotation		standard		0 031 341
	Collet:	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

		Dimensions	Order No.	Price from	
				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

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

⚙️ Accessories / spare parts

		Dimensions	Order No.	Price from	
				1 piece	3 pieces
Collet type GH					
		Ø 2.35 mm – 3/32"	0 030 010		
		Ø 3 mm	0 030 013		
		Ø 6 mm	0 030 016		
Driver					
			0 031 563		
Connector plug					
	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.

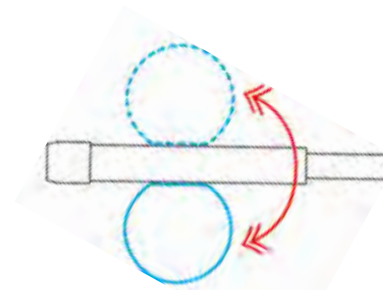
			Type	Order No.	Price from 1 piece
Rapid-chuck handpiece TH-M II					
	Collet:	TH (Ø 3 mm in scope of delivery)	standard	0 030 640	
	Speed:	max. 15,000 1/min	Rapid-Change	0 030 640R	
	Dimensions:	Ø 21.9 x 139 mm			
	Weight:	107 g			

⚙️ Accessories / spare parts


		Dimensions	Order No.	Price from	
				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!

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

Accessories / spare parts

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

Hand-filing machines

DIPROFIL® Di-Pro • FXK-N • FPK/R

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

⚙️ Accessories / spare parts



		Order No.	Price from 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		

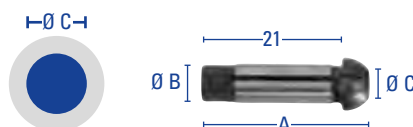
			Type	Order No.	Price from 1 piece
Hand-filing machine DIPROFIL® Di-Pro FXK-N, Mark II					
	Stroke length:	0.5 – 6 mm (recommended 0.5 – 3 mm)	standard	0 001 503-N	
	No. of strokes:	max. 7,000 strokes/min, (5,000 – 6,000 strokes/min recommended)			
	Tool receptacle:	Ø 2 – 6.4 mm			
	Insertion depth:	40 mm			
	Vibration:	1.55 – 5.08 m/s ²			
Sound level:	< 75 dB(A) at 7,000 strokes/min				
Weight:	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

		Order No.	Price from 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

	Length A	Dimensions	Order No.	Price from	
				1 piece	5 pieces
Reducing bush RHB					
	28 mm	B Ø 3.0 C Ø 2.35 mm	0 545 287		
Reducing bush with collar					
	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		



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 handpiece 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.



	Order No.	Price from	
		1 piece	3 pieces
Rapid-Change coupling for jokeFlex Premium Plus			
	for mounting at the flexible shaft (handpiece end)	0 015 250	

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**Handpiece conversion
in just two steps:**

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 motor
Power 2.0**
Order No. 0 019 020



**Straight handpiece
FH 4 INOX**
Order No. 0 019 120



**Angle handpiece
WI 4**
Order No. 0 019 130



Adapter for belt grinder
Order No. 0 019 150
Adapter for belt grinder on request!

Belt grinders

- KAK 16/4**
Order No. 0 019 155
- KAK 16/9**
Order No. 0 019 160
- KAK 25/9**
Order No. 0 019 165
- KAK 9/9**
Order No. 0 019 170
- KAK 25/1.5**
Order No. 0 019 175



**Straight handpiece
FH 7 INOX**
Order No. 0 019 420



**Angle Handpiece
WI 7**
Order No. 0 019 230

Shaft connection G16



**Flexible shaft
DIN 10/G16**
Order No. 0 019 100

**Flexible shaft
DIN 10/G22**
Order No. 0 019 200



Shaft connection G22

Motor connection DIN 10




Movable stands
Order No. 0 019 021


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.



	Order No.	Price from
Motor jokeFlex Power 2.2		1 piece
	0 019 020-1 Speed: between 500 and 13,000 1/min (adjustable in 100 steps) Power output: 1,650 W Power consumption: 2,000 W Shaft connection: DIN 10 Supply voltage: 230 V, 50/60Hz, 1 phase Sound level: 77 dB(A) Dimensions (W x H x D): 472 x 340 x 352 mm Weight: 28 kg	
Up to 6 freely programmable memory slots		

Accessories / spare parts

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

	Shaft connection	Motor connection	Dimensions	Order No.	Price from
Flexible shaft jokeFlex Power					1 piece
	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

	Dimensions	Order No.	Price from
Flexible shaft core NA 4 / G 16 for jokeFlex Power			1 piece
	Ø 4 x 1,250 mm	0 019 101	
Flexible shaft core NA 7 / G 22 for jokeFlex Power			
	Ø 7 x 1,500 mm	0 019 201	

jokeFlex Power Handpieces

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


⚙️ Accessories / spare parts

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


jokeFlex Power Handpieces

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


⚙️ Accessories / spare parts

			Order No.	Price from 1 piece
Collets for handpieces FH 7, FH 10				
	Ø 3 mm	FH	0 019 211	
	Ø 6 mm	FH	0 019 212	
	Ø 8 mm	FH	0 019 213	


jokeFlex Power Handpieces

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


Accessories / spare parts

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

jokeFlex Power Handpieces

			Order No.	Price from 1 piece
Angle handpiece WI 7				
	Shaft connection:	G 22	0 019 230	
	Speed:	max. 17,000 rpm (1.3:1), clockwise		
	Dimensions:	Ø 36 x 156 x 61 mm		
	Weight:	610 g		
	Accessories:	Collet 6 mm, chuck key set		

Accessories / spare parts

		Dimensions	Order No.	Price from 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



Legend

- modular components
- options
- joke expert info

Pneumatics System overview

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**Maintenance unit
joke Oiljet**
Order No. 0 004 070



NEW!

**High-speed angle
handpiece JW 320**

Order No. 0 009 901-W



**Set:
High-speed
handpiece J 320 with
maintenance unit**
Order No. 0 009 900-1



**Hand-filing machines
Turbolap linear stroke
Turbolap TLL 03**
Order No. 0 750 702

Turbolap TLL 07
Order No. 0 750 700

Turbolap TLL 12
Order No. 0 750 701



**Hand-filing machines
Turbolap transverse stroke
Turbolap TLS 03**
Order No. 0 750 709

Turbolap TLS 07
Order No. 0 750 704

Turbolap TLS 12
Order No. 0 750 703



**Compressed-air filing
machine PRV-70**
Order No. 0 751 630



**Compressed-air filing
machine FRV-110**
Order No. 0 751 600



**Compressed-air grinder
ENESKAair G1000**
Order No. 0 751 100



**Maintenance unit
joke Dryjet**
Order No. 0 004 080

NEW!

**Control unit
ENESKAair**
Order No. 2 200 000



Tips for proper oiling

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.

Maintenance unit with oil


Hand-filing machines without oil

Maintenance unit without oil



Maintenance units

joke Oiljet • joke Dryjet

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.

	Order No.	Price from
Maintenance unit joke Dryjet		1 piece
	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" Medium: compressed air Scope of delivery: 25 µm filter, manual water separator, pressure reducer, pressure gauge and wall mounting	0 004 080

Accessories / spare parts

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

Maintenance units

joke Oiljet • joke Dryjet

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	Order No.	Price from 1 piece
Maintenance 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" Medium: compressed air 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	0 004 070

Accessories / spare parts

	Order No.	Price from 1 piece
Installation pack DIPROFIL®		
	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"		
	Fits on connector for Turbolap handpieces, supplied with two O-rings	1 722 246-0

Lubricants

for compressed-air grinders and hand-filing machines

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



Tips for proper oiling

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ENESKAair

Control unit with 2 connections

NEW!

ENESKAair control unit from joke.

This innovative control unit combines attractive design with high functionality. Equipped with a useful carrying handle and two connections, it enables the operation of multiple turbo handpieces, ensuring efficient use and reduced downtime.

The integrated change-over switch allows quick switching between the connected handpieces for flexible use. The ENESKAair is ideal for use with the latest J 320 and JW 320 models and is also compatible with the P 320.

Quality made in Germany.

	Order No.	Price from 1 piece
ENESKAair control unit with 2 connections		
Dimensions (W x H x D):	135 x 235 x 200 mm	2 200 000
Weight:	1.8 kg	
Max. speed:	320,000 rpm	
Connection:	6 mm bulkhead plug-in connection	
Power approx.:	10 W	
Air pressure:	3 bar	
Air consumption:	40 l/min	
Noise level:	< 75 dB(A) at 320,000 1/min	



Accessories / spare parts

	Type	Order No.	Price from 1 piece
Foot control			
	Foot controller high-speed handpiece, incl. double hose	0 009 916	
ENESKAmicro handpiece support			
	For secure handpiece storage, black	Standard	0 011 110


High-speed handpiece J 320




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.

		Order No.	Price from 1 piece
High-speed handpiece J 320			
	Speed max.: 320,000 1/min Output: 10 W Air pressure: 3.0 bar Air consumption: 35 l/min Noise level: < 75 dB(A) at 320,000 rpm Dimensions: Ø 19 x 130 mm Weight: 71 g Accessories collet: Ø 1.06 mm	0 009 901-1	

NEW!

		Order No.	Price from 1 piece
High-speed angle handpiece JW 320			
	Speed max.: 320,000 1/min Output: 10 W Air pressure: 3.0 bar Air consumption: 35 l/min Noise level: < 75 dB(A) at 320,000 rpm Dimensions: Ø 19 x 130 mm Weight: 71 g Accessories collet: Ø 1.6 mm	0 009 901-W	

ENESKAair

Full-set

NEW!

Price from

Order No. 1 set

ENESKAair Set 1.0 controller with 2 connectors, J 320 handpiece and footcontroller



Full set with controller, highspeed handpiece J 320, footcontroller and handpiece support

2 200 100

Technical data controller:

Dimensions (B x H x D): 135 x 235 x 200 mm
 Weight: 1.8 kg
 Speed max.: 320,000 1/min
 Connector: 6 mm schott plug-in
 Output: ca. 10 W
 Air pressure: 3 bar
 Air consumption: 40 l/min
 Noise level: < 75 dB(A) at 320,000 1/min

NEW!

Price from

Order No. 1 set

ENESKAair Set 2.0 controller with 2 connectors, J 320 handpiece, JW 320 anglehead and footcontroller



Full set with controller, highspeed handpiece J 320, highspeed anglehead JW 320, footcontroller and handpiece support

2 200 110

Technical data controller:

Dimensions (W x H x D): 135 x 235 x 200 mm
 Weight: 1.8 kg
 Speed max.: 320,000 rpm
 Connector: 6 mm schott plug-in
 Output: ca. 10 W
 Air pressure: 3 bar
 Air consumption: 40 l/min
 Noise level: < 75 db (A) at 320.000 1/min



Hand-grinders joke TURBO

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 (from 75 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.






- The installation pack (Order no. 0 004 055) contains everything for connecting the "TURBOs".
- Suitable collets (type CHS) to be found on page 39!
- 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 bar	4 – 6 bar	4 – 6 bar	4 – 6 bar
Air consumption	165 l/min	165 l/min	165 l/min	165 l/min
Exhaust air	backwards	backwards	backwards	backwards
Noise level	80 dB(A)	75 dB(A)	90 dB(A)	95 dB(A)
Vibration	< 0.32 m/s ²	< 0.32 m/s ²	< 0.56 m/s ²	< 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.

		Order No.	Price from 1 piece
Compressed-air grinder FX 3.0			
 <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> Use with:  joke Oiljet (page 71)  </div>	Speed:	65,000 rpm	0 750 705
	Air pressure:	max. 5 bar	
	Air consumption:	90 l/min	
	Exhaust air:	backwards	
	Noise level:	<75 dB(A)	
	Dimensions:	Ø 22.5 x 150 mm	
	Weight:	78 g	
	Lubrication:	continuously by oil mist	
Scope of delivery:	collet Ø 3 mm, wrench, air tube 1.5 m, 1/4" connecting sleeve including filter		

 Only a limited number of pieces left!

Compressed-air grinder ENESKAair G1000



		Order No.	Price from 1 piece
Compressed air grinder ENESKAair G1000			
	Speed:	100,000 1/min	0 751 100
	Power:	63 watts	
	Air pressure:	max. 6.3 bar	
	Air consumption:	170 l/min	
	Exhaust air:	to the rear	
	Noise level:	70 dB(A)	
	Vibration:	< 2.5 m/s ²	
	Dimensions:	Ø 21 x 129 mm	
	Weight:	150 g	
	Lubrication:	oil-free	
Scope of delivery:	Hose 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 bar	6 bar	6 bar
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/s ²	< 6 m/s ²	< 6 m/s ²
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

	Type	Dimensions	Order No.	Price from 1 piece
Supply air tube, for all models				
	Important: Also remember the matching air supply hose when ordering!		0 750 813	
Collets for angle handpieces WI 7, WI 10 and jokeAirMax				
		Ø 3 mm	0 750 831	
		Ø 6 mm	0 750 832	
Collet for angle handpiece WI 4				
	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
Stroke length	0 – 6 mm, continuously adjustable (0.5 – 3 mm recommended)	0 – 6 mm, continuously adjustable (0.5 – 3 mm recommended)
Max. no. of strokes	max. 7,000 strokes/min (5,000 – 6,000 strokes/min recommended)	max. 8,000 strokes/min (5,000 – 6,000 strokes/min recommended)
Tool support	Ø 2 – 6.4 mm	Ø 2 – 6.4 mm
Insertion depth	40 mm	40 mm
Air pressure	4 bar	4 bar
Air consumption	approx. 60 l/min at 7,000 strokes/min	approx. 65 l/min at 8,000 strokes/min
Exhaust air	through housing	through housing
Noise level	< 75 db(A) at 7,000 strokes/min	70 db(A) at 7,000 strokes/min (according to ISO 15744)
Vibration	< 1.55 – 5.08 m/s ²	5.79 – 13.37 m/s ²
Weight	900 g	740 g
Lubrication	continuously by oil mist	continuously by oil mist
Scope of delivery	storage case, tool set, extension tube/finger protection bush, counterweights, replacement friction bearing and felts, lubricating oil	storage case, tool set, extension tube/finger protection bush, replacement friction bearing and felts, lubricating oil
Order No.	0 001 504-N	0 002 251-N
Price		

Accessories / spare parts

	Order No.	Price from 1 piece
Rapid-release coupling HSL-M		
<p>With "on/off" switch, for connection of hand-filing machines to maintenance unit</p> <p>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!</p>	0 003 001	
Lubricant MFA-K		
<p>for all DIPROFIL® hand-filing machines</p>	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.

Use with:

joke Oiljet
(page 71)



Price from



Order No. 1 set

Set Compressed-air filing machine LFC 11 with case




No. of strokes:	6,000 – 12,000 strokes/min	0 750 960
Stroke length:	2 – 11 mm, continuously adjustable	
Output:	300 W	
Air pressure:	6.3 bar	
Air consumption:	230 l/min	
Noise level:	74 dB(A)	
Vibration:	< 2,2 m/s ²	
Dimensions:	280 x 60 mm	
Weight:	830 g	
Lubrication:	continuously by oil mist	
Scope of supply:	tool holder Ø 4 mm, 1 file, various different tools, counter-holder, hose unit and case	

Accessories / spare parts

	Tool support	Order No.	Price from 1 piece
Tool holder			
	Ø 3 mm	0 750 751	
	Ø 4 mm	0 750 752	
	Ø 6 mm	0 750 753	
High-performance lubricant X 73012			
	For all compressed-air grinders, 0.1 l	0 580 601	
	For all compressed-air grinders, 1 l	0 580 602	
	For all compressed-air grinders, 5 l	0 580 603	

Compressed-air filing machines

LFC 11

		Price from
		Order No. 1 piece
Compressed-air filing machine LFC 11		
	No. of strokes:	6,000 – 12,000 strokes/min
	Stroke length:	2 – 11 mm, continuously adjustable
	Output:	300 W
	Air pressure:	6.3 bar
	Air consumption:	230 l/min
	Noise level:	74 dB(A), ISO 15744
	Vibration:	2.2 m/s ² , K = 0.8 m/s ² according to EN ISO 28927-8
	Dimensions:	280 x 60 mm
	Weight:	830 g
	Lubrication:	continuously by oil mist
Scope of supply:	1 x tool holder Ø 4 mm, 1 x counter-holder, 1 x hose unit (supply and exhaust air, silencer)	
		0 750 980

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 bar	6,5 bar
Air consumption	78 l/min	30 l/min
Exhaust air	backwards	backwards
Noise level	< 77 dB(A)	< 71 dB(A)
Vibration	2 m/s ²	2 m/s ²
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
Price		

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.



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



Accessories / spare parts

				Price from
				Order No. 1 piece
Engraving needle				
	fine tipped	GN F		0 750 791
	medium tipped	GN M		0 750 792
	coarse tipped	GN G		0 750 793
Engraving chisel				
	flat	GM F		0 751 930
	angled	GM S		0 751 931
Air hose, supply air, 2 m				0 750 795
				

Hand-filing machines Turbolap Linear and transverse stroke!

Turbolap hand-filing machines

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).

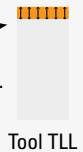


Turbolap TLS: The tool works elliptically (oranged highlighted area) depending on the stroke length.

Turbolap TLL: The tool works linearly (oranged highlighted area) depending on the stroke length.



Area that can be processed.



	Hand-filing machines Turbolap TLL 03 with linear stroke	Hand-filing machines Turbolap TLS 03 with transverse stroke	Hand-filing machines Turbolap TLL 07 with linear stroke	Hand-filing machines Turbolap TLS 07 with transverse stroke	Hand-filing machines Turbolap TLL 12 with linear stroke	Hand-filing machines 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	Ø 3 mm / 4 mm high	Ø 3 mm / 4 mm high	Ø 3 mm / 4 mm high	Ø 3 mm / 4 mm high	Ø 3 mm / 4 mm high
Air pressure	3 bar / max. 6 bar	1–2 bar / max. 6 bar	3 bar / max. 6 bar	1.5–2.5 bar / max. 6 bar	2–3 bar / max. 6 bar	max. 6 bar
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/s ²	3.37 m/s ²	7.86 m/s ²	4.90 m/s ²
Dimensions	Ø 28 x 216 mm	Ø 28 x 216 mm	Ø 28 x 216 mm	Ø 28 x 216 mm	Ø 28 x 216 mm	Ø 28 x 216 mm
Weight	180 g	180 g	180 g	180 g	180 g	180 g
Lubrication	not necessary	not necessary	not necessary	not necessary	not necessary	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 2204 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 rpm	2850 rpm
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		

Accessories / spare parts

	Order No.	Price from 1 piece
Machine substructure for polishing machines OPTI polish		
	Dimension: table 320 x 270 mm, height: 825 mm.	0 041 621-1
	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.	

Polishing machine Accessory

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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 190.

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.



Further information on page 192.

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
- Cotton, hard (quilted)



Further information on page 191.

Polishing lathe PB 2

System overview

Polishing lathe PB

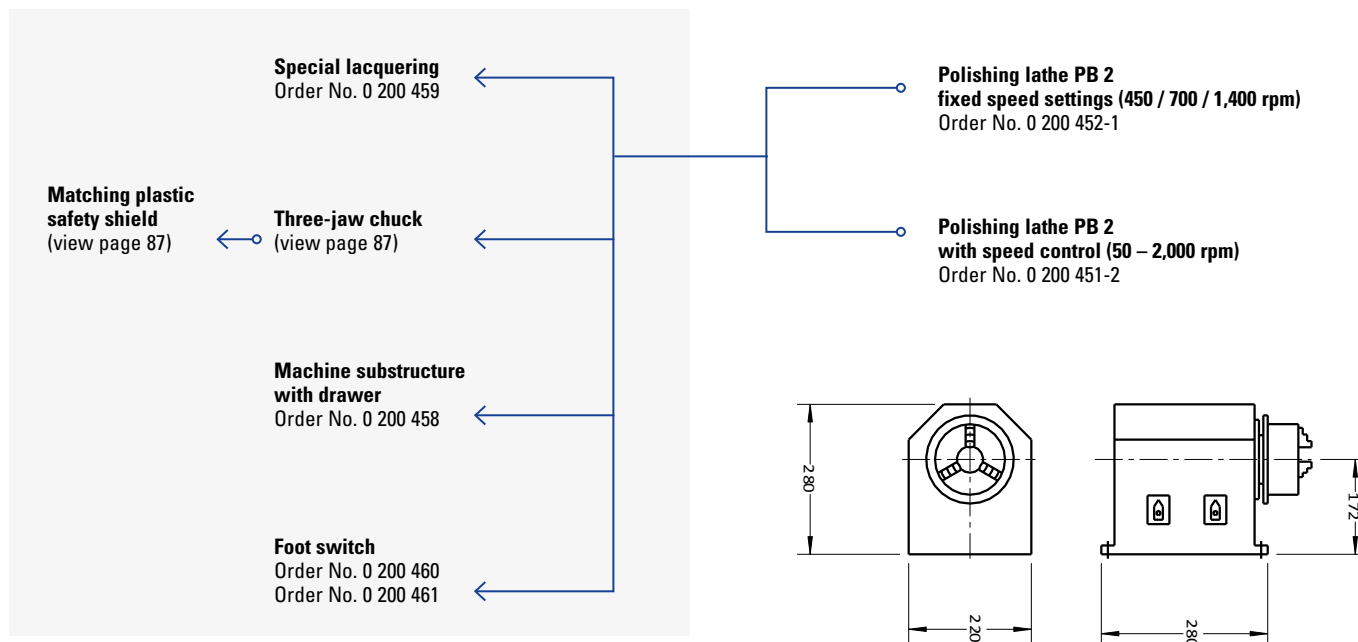
The polishing lathes with high-performance motors. Three-stage or infinite speed adjustment possible. Ideal for all tough tasks that can be accomplished by turning: filing, sanding, polishing, deburring, scraping, brushing, winding, separating, chamfering, rounding, hand filing, coating, etc. ...

Highlights:

- 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 $\pm 0,01$ 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

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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

	Size	Dimensions	Order No.	Price from 1 piece
Machine substructure with drawer for PB 2 and PB 3				
		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
		Chuck Ø 160 mm max. perm. rpm 3,000 rpm	Ø 160 mm	0 200 474
Plastic protective disc for three-jaw chuck				
		suitable for Ø 125 mm	Ø 125 mm	0 200 481
		suitable for Ø 160 mm	Ø 160 mm	0 200 482

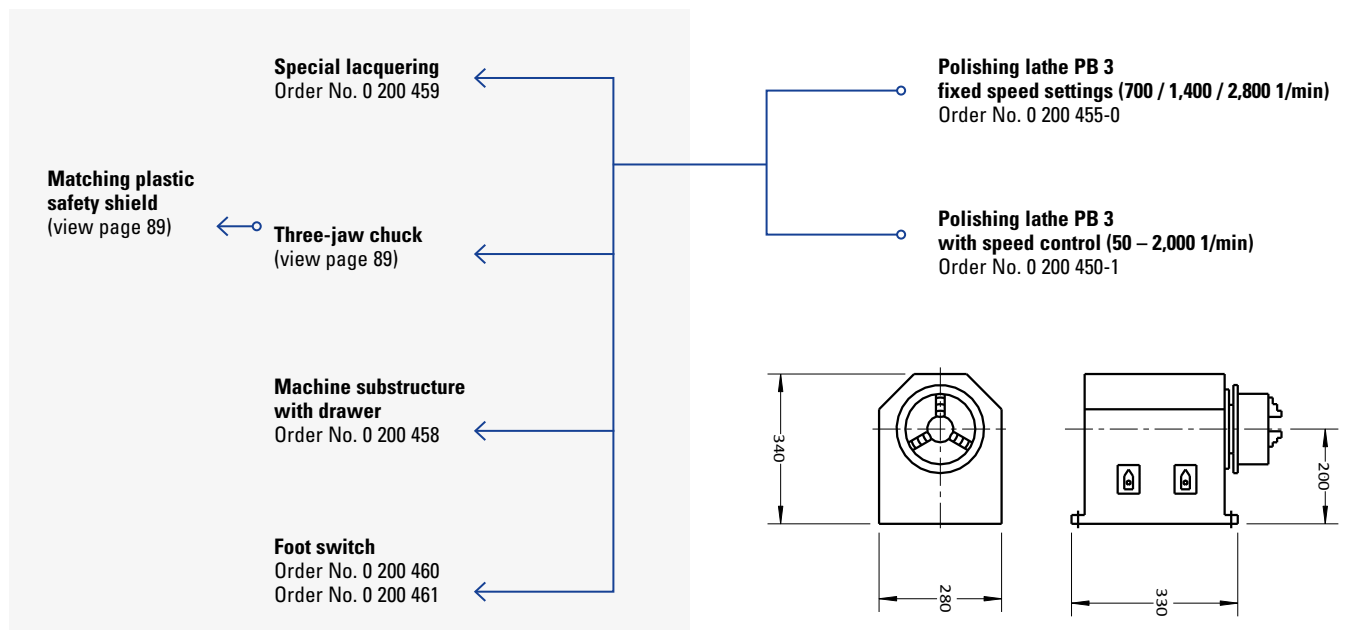
Polishing lathe PB 3

System overview

Just bigger and stronger than his little brother PB 2!



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



Polishing lathe PB 3

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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

	Size	Dimensions	Order No.	Price from 1 piece
Machine substructure with drawer for PB 2 and PB 3				
		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
		Chuck Ø 160 mm max. perm. rpm 3,000 rpm	Ø 160 mm	
		Chuck Ø 250 mm max. perm. rpm 2,000 rpm	Ø 250 mm	0 200 474
Plastic protective disc for three-jaw chuck				
		suitable for Ø 125 mm	Ø 125 mm	0 200 481
		suitable for Ø 160 mm	Ø 160 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
- 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	<ul style="list-style-type: none"> • 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

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Accessories / spare parts

		Packing quantity	Order No.	Price from	
				1 set	1 piece
Pocket filter micro fine dust for Poli Base, set					
		2 pieces	0 200 401		
Poli Base drill chuck with a clamping range of 1.6-6 mm					
			0 200 402		
Poli Base tool holder big					
		for panes with: bore: mm diameter: width:	\varnothing 14 mm – 25 max \varnothing 150 mm max 30 mm	0 200 403	
Poli Base tool holder medium					
		for panes with: bore: diameter: width:	\varnothing 6 mm – 13 mm max \varnothing 110 mm max 30 mm	0 200 404	
Poli Base tool holder collet set 1 - 7 mm					
		collet set 1 - 7 mm	7 pieces	0 200 405	
Protective screen					
				0 200 406	

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jolke ENESKA postprocess

100%
made in Germany



ENESKA postprocess

The safe postprocessing system for all materials and work steps!

ENESKApostprocess

New generation of the joke workstation

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

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

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

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

Larger support residues and chips are collected in a chip tray under the work surface. Easy to pull out and vacuum out. **The extraction system cleans 99.95% of the air** in the work chamber and therefore also fulfils the strict HEPA 13 filter standard. The maintenance-friendly filter unit stands on its own castors and can be removed from the rear without a forklift or pallet truck.

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

Advantages at a glance

High standard of safety | no risk of explosion or deflagration | no permanent damage due to respirable dust | no need for additional protective clothing
ergonomic working and simple operation | many options for connecting various tools – either pneumatic or electric.

Work steps that you can perform

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

Materials that you can process

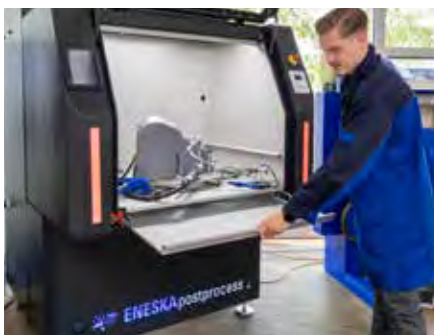
Steel | Stainless steel | Aluminium | Titanium | Carbon | Brass | Keramik | PEEK | POM | Ceramic | Rubber-like materials | Gypsum and many more



larger hand inlets improve ergonomics at the workplace



large panoramic area made of laminated safety glass



pull-out drawer in which support residues can be loaded from the front and top

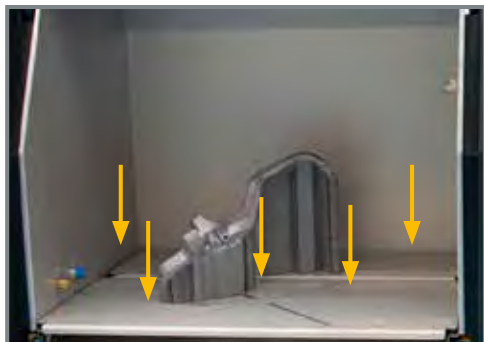


can be loaded from the front and top



mobile extraction unit on castors

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.

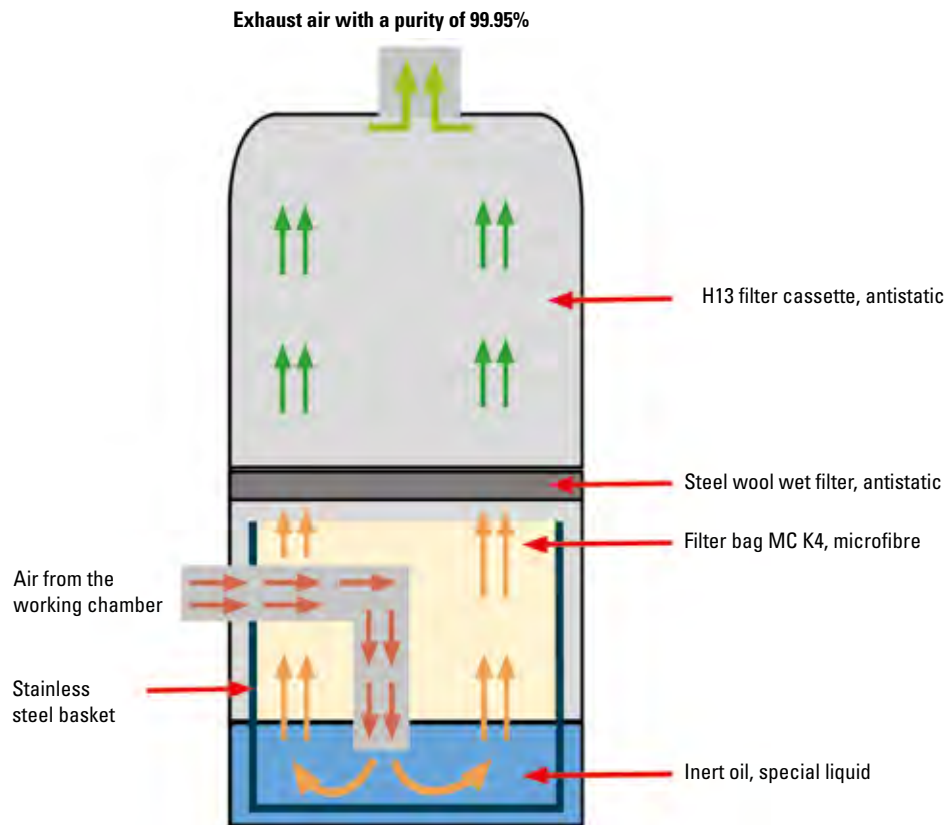


The system is not unlocked and the working chamber is not released until the cleaning process has finished.

Filter system

Diagram of the system for reactive substances

- 2
- 3
- 4
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View of extraction system



Extraction system easily accessible from the rear..



...and easy to remove on castors.

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 4-fold filtration and explosion protection according to ATEX standard guarantees safe work. An integrated liquid bath binds the reactive particles which are thus unable to develop their explosive effect.

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

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

	Desig	Order No.	Price from 1 piece
ENESKApostprocess 5.0 incl. extraction with wet separator for reactive materials			
 <ul style="list-style-type: none"> • Suitable for materials with a minimum ignition energy above one mJ • With explosion protection according to ATEX standard • Moisture separator suitable for zone 22 • 4-fold filtration • Extraction capacity / volumetric flow: max. 350 m³/h • Incl. FSX automatic fine dust measuring system (for further information, see order no. 0 210 309) • Materials to be processed: incl. among others aluminium and titanium <p>Technical data: Weight (without/with extraction system): 650/748 kg Dimensions of the working chamber (W x D x H): 974 x 766 x 386/869 mm Device dimensions (W x D x H): 1,437 x 1,685 x 1,640/1,940 mm Lighting: Fully integrated LED light, toughened safety glass, approx. 5,600K / 9,000 lm, 58 W, dimmable Supply voltage: 400 V / 16 A</p>	-	0 210 014	
		with height adjustment	0 210 015

Variants

ENESKApostprocess for reactive substances (Order No. 0 210 014)	ENESKApostprocess for non-reactive substances (Order No. 0 210 004)
Extraction system suitable for continuous operation, for extracting flammable dusts – MIE ≥ 1 mJ	Extraction system suitable for continuous operation, for extracting dusts – MIE ≥ 1 mJ
4-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
H13 filter cassette, antistatic	H13 filter cassette, antistatic
Wet filter cassette, earthed	–
Filter bag MC K4 microfibre, antistatic	–


ENESKApostprocess

Perfect solution for finishing in 3D printing


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

A large working chamber of approx. 0.75 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.

	Design	Order No.	Price from 1 piece
ENESKApostprocess 5.0 incl. extraction for non-reactive materials			
 <p>Special features of the ENESKApostprocess incl. extraction for non-reactive materials:</p> <ul style="list-style-type: none"> • Dry extractor with explosion protection according to ATEX standard • Triple filtration • Extraction capacity / volumetric flow: max. 350 m³/h • Optionally with FSX automatic fine dust measuring system (more Information see order no. 0 210 309) • Materials to be processed: incl. among others, steel, stainless steel and various plastics <p>Technical data:</p> <p>Weight (without/with extraction system): 650/748 kg</p> <p>Dimensions of the working chamber (W x D x H): 974 x 766 x 386/869 mm</p> <p>Device dimensions (W x D x H): 1,437 x 1,685 x 1,640/1,940 mm</p> <p>Lighting: Fully integrated LED light, toughened safety glass, approx. 5,600K / 9,000 lm, 58 W, dimmable</p> <p>Supply voltage: 400 V / 16 A</p>		0 210 004	
		with height adjustment	

Accessories / spare parts

	Order No.	Price from 1 piece
ENESKApostprocess Automatic fine dust measuring system FSX		
 <p>The FSX automatic fine dust measuring system from joke can be retrofitted to the ENESKApostprocess 5.0 at any time!</p> <ul style="list-style-type: none"> • 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 		0 210 309

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 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 • clamping devices

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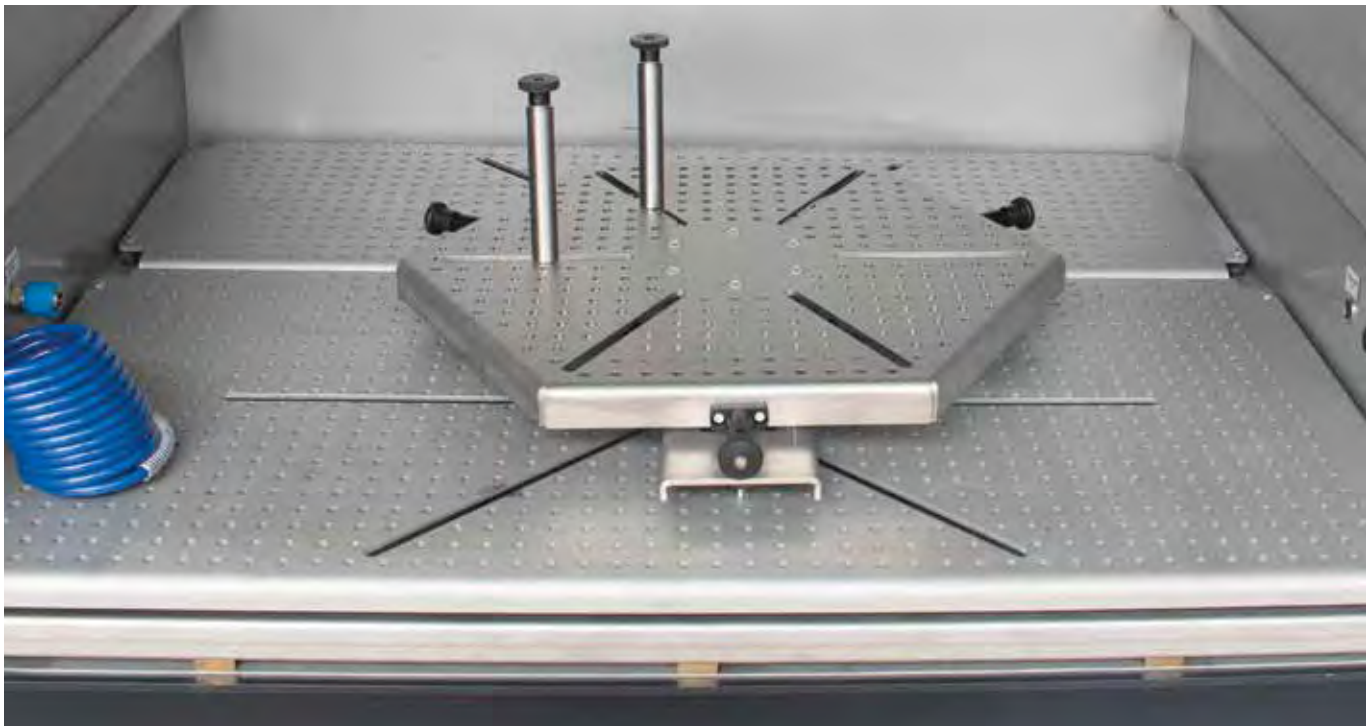
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	Dimensions	Packing quantity	Order No.	Price from	
				1 set	1 piece



Turntable, hexagonal  <ul style="list-style-type: none"> • Tripod support • freely positionable, rotatable and lockable • Clamping width 440 mm • Material 1.4301 <p>Stop bolt not included in the scope of delivery.</p>	500 mm		0 210 209		
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Stop pin, adjustable, assortment = 2 pieces 		2 pieces	0 210 204		
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10-piece clamping device set  <ul style="list-style-type: none"> 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		
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ENESKApostprocess Accessories

	Size	Dimensions	Order No.	Price from	
				1 pair	1 piece
HePa filter cartridge H13, variant inert oil  <ul style="list-style-type: none"> • 3 m² filter area • Filter dust class H (high hazard) according to BIA class USGC • for the separation of any dust with all exposure limits, including carcinogenic and pathogenic dusts • antistatic (separation efficiency: 99.95%) 			0 210 388		
Wet filter cassette, version inert oil  <p>filled with stainless steel wool, antistatic</p>		Ø 260 x 70 mm	0 210 363		
Filter bag MC K4 microfibre, variant inert oil  <p>with wire ring</p>		Ø 430 x 500 mm	0 210 361		
Stainless steel basket to hold the filter bag MC K4 		Ø 430 x 500 mm	0 210 362		
Stainless steel tank 100 l, variant inert oil  <p>with drain cock and window</p>			0 210 356		

ENESKApostprocess Accessories

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	Size	Dimensions	Order No.	Price from	
				1 pair	1 piece

Internal extraction system					
	When processing titanium and aluminium (two reactive materials), we recommend the extraction unit as a replacement or to order a second device to order.		0 210 316		
	Power: 3 KW Suction capacity: 350 m³/h H13 filter Height: 1683 mm				

ENESKApostprocess high-performance oil, 20 l					
	for filling the extraction with wet scrubber for reactive materials		0 580 518		

ENESKApostprocess automatic fine dust measurement FSX					
	The FSX automatic fine dust measuring system from joke can be retrofitted to the ENESKApostprocess 5.0 at any time!		0 210 309		
	<ul style="list-style-type: none"> • Precise dust measurement – independent of gas velocity or particle charge • No external purge air unit required as it is integrated in the unit (option) • Low cost and maintenance due to self-monitoring • Independent measuring device • Automatic monitoring of zero and reference point • Robust and compact design • No moving parts in the duct 				

ENESKApostprocess glass pane, laminated glass					
			970 x 933 x 8,76 mm	0 210 051	
					

Protective screen with flexible arm and suction foot					
	• Can be clamped on flat and slightly uneven surfaces.		0 210 208		
	• Flexibly adjustable by 4 joints.				
• Suction force: 350 N					
• Dimensions:					
Suction foot: Ø 88 x 23 mm					
Screen: 300 x 200 x 2 mm					

ENESKApostprocess Accessories

	Size	Dimensions	Order No.	Price from	
				1 pair	1 piece
Protective screen, plexiglass					
		300 x 200 x 2 mm	0 210 201		
		200 x 200 x 2 mm	0 210 202		
Gloves latex for ENESKApostprocess, 600 mm					
		<ul style="list-style-type: none"> • with cuff Ø 180 – 300 mm • Size 10 • EN388 	10	0 210 250	
ENESKApostprocess arm cuff made of latex					
		<ul style="list-style-type: none"> • 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	
ENESKAmicro footpedal					
		<ul style="list-style-type: none"> • from software version V04x (with USB port) • for comfortable control by foot (start/stop, speed adjustment) • Cable length 2 m 		0 011 003	
Maintenance unit joke Oiljet					
		<p>Filter controller MD1-FR0000-1/4:</p> <ul style="list-style-type: none"> • 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" • Medium: compressed air <p>Oiler MD1-L00-1/4:</p> <ul style="list-style-type: none"> • max. Inlet pressure: 16 bar • Container capacity: 40 cm³ • Air connection: 1/4" • Medium: compressed air <p>Scope of delivery: 25 µm filter, manual water separator, micro oiler, pressure reducer, pressure gauge and wall mounting</p>		0 004 070	

Compressed-air filing machine LFC 11

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Compressed-air filing machine LFC 11

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

		Price from
		Order No. 1 piece
Compressed-air filing machine LFC 11		0 750 980
No. of strokes:	6,000 – 12,000 strokes/min	
Stroke length:	2 – 11 mm, continuously adjustable	
Output:	300 W	
Air pressure:	6.3 bar	
Air consumption:	230 l/min	
Noise level:	74 dB(A), ISO 15744	
Vibration:	2.2 m/s ² , K = 0.8 m/s ² according to EN ISO 28927-8	
Dimensions:	280 x 60 mm	
Weight:	830 g	
Lubrication:	continuously by oil mist	
Scope of supply:	1 x tool holder Ø 4 mm, 1 x counter-holder, 1 x hose unit (supply and exhaust air, silencer)	



Tungsten carbide coating unit

Tungsten carbide coating unit ENESKArecoat 85

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 a 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

Tungsten carbide coating unit ENESKArecoat 85

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

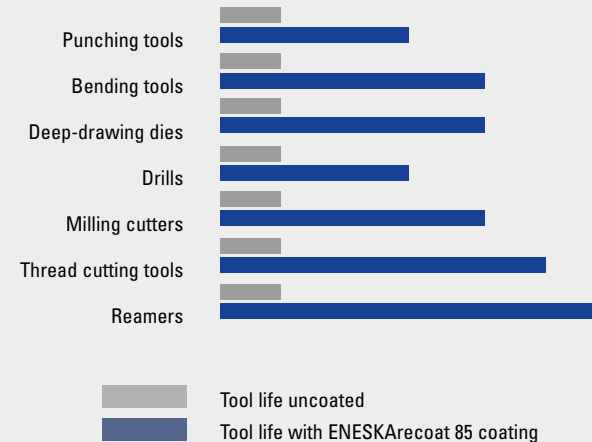
Any soft, heat-treated and hardened unalloyed or alloyed steel is suitable as material for coating with tungsten carbide. The surface must be clean and metallically pure.

Display:

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




Service lives for untreated vs. coated







User-friendly, intuitive user guidance

Tungsten carbide coating unit













ENESKArecoat 85

	Order No.	Price from
ENESKArecoat 85 hard metal coating unit, set		1 set
	Control unit:	0 700 300
	Max. achievable coating hardness:	82 HR 30N
	Working voltage:	36-54 V
	Vibration frequency:	variable up to 120 Hz
	Supply voltage:	115/230 DCV, 50/60 Hz
	Dimensions (W x D x H):	135 x 476 x 321mm
	Weight:	10 kg
	Application gun:	
	Vibration frequency :	variable up to 120 Hz
	Working lamp:	4 LEDs, 5000 K
	Weight:	0.84 kg
	Cable length:	1.80 m
	Scope of delivery:	
		<ul style="list-style-type: none"> • Carbide coating unit, control unit (Order No. 0 700 301) • Application handpiece, complete with cable package (Order No. 0 700 302) • Earth cable 10mm², 2.0 m, plus magnetic pole clamp (Order No. 0 700 351) • Set of clamping elements for carbide electrodes, incl. spare screws and screwdriver (12 pieces) (Order No. 0 700 060) • Set of carbide electrodes (24 pieces) (Order No. 0 700 034)

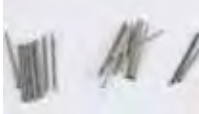
Accessories / spare parts

	Order No.	Price from
ENESKArecoat 85 foot switch		1 piece
	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 application gun		
	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.	0 700 302
	Vibration frequency: variable up to 120 Hz	
	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 Clamping element for carbide electrodes		
	for round carbide electrodes up to max. Ø 1.4 mm	0 700 061
	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

Tungsten carbide coating unit ENESKArecoat 85

Shape	Dimensions	Order No.	Price from	
			1 piece	10 pieces
Tungsten carbide electrodes 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		
 round	Ø 3.0 x 50 mm	0 700 048-1		
 round	Ø 3.2 x 50 mm	0 700 051		
 round	Ø 4.0 x 50 mm	0 700 048-2		
 round	Ø 5.0 x 50 mm	0 700 048-3		
 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		

 *matching set*

	Order No.	Price from	
		1 set	10 set
Set of tungsten carbide electrodes for ENESKArecoat 85 and tucadur (24 pieces)			
 <p>consisting of:</p> <ul style="list-style-type: none"> • 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

Tungsten carbide coating unit


ENESKArapidcoat

NEW!

Tungsten carbide coating devices from joke are used to coat particularly stressed surfaces quickly and easily by applying a hard metal layer. The process is particularly suitable for tools, moulds or general surfaces that need to be especially tough, hard and wear-resistant, e.g. punching or bending tools. In addition to these classic applications, the process is also suitable for producing a wear-resistant, rough surface. This can be used to improve the adhesive and holding properties, e.g. for grippers, gripper and clamping jaws etc. or for sliding surfaces, e.g. to improve the adhesion of an oil film. Parts of the friction surfaces of a mechanical guide can also be coated in order to compensate for dimensional deviations caused by abrasion. It can also be used to create a heat-resistant protective layer, e.g. to protect moulds in die casting.

The latest development from joke is the **ENESKArapidcoat**. It is suitable for **fast and effective coating of large surfaces**. By melting a rotating hard metal electrode made of tungsten carbide at 2,800 °C, a hard metal layer is applied and a maximum surface hardness of 82 HR 30 N is achieved. Compared to conventional devices, the ENESKArapidcoat achieves an **extremely clean and homogeneous coating in just one operation**. The very simple operation is unique.

In addition to the handpiece with rotating electrode, the ENESKArapidcoat can also be operated with the vibrating handpiece of the ENESKArecoat system. This handpiece basically achieves the same surface results as the handpiece with rotating electrode, but is particularly suitable for fine, filigree work and partial surfaces. This unique combination of both processes and systems makes the ENESKArapidcoat a universally applicable coating device - regardless of the shape and size of the surfaces to be treated.

	Order No.	Price from
ENESKArapidrecoat control unit		1 piece
	Technical data: Max. achievable coating hardness: 82 HR 30N Pressure air: 4 - 6 bar Supply voltage: 110/230 DCV, 50/60 Hz Dimensions (W x D x H): 135 x 476 x 321mm Weight: 11 kg	0 700 401

	Order No.	Price from
ENESKArapidcoat carbide coating unit, set		1set



Technical data: Max. achievable coating hardness: 82 HR 30N Pressure air: 4 - 6 bar Supply voltage: 110/230 DCV, 50/60 Hz Dimensions (W x D x H): 135 x 476 x 321mm Weight: 11 kg	0 700 400
Scope of delivery: <ul style="list-style-type: none"> • ENESKArapidcoat control unit • handpiece ROT 135 complete with cable package • earth cable 2m with contact magnet • set of clamping elements with electrodes • safety glasses • maintenance unit joke dryjet 	
Optional: <ul style="list-style-type: none"> • handpiece holder • workplace light 	

Rotating or linear mode - both is possible!

Highlights:

- fast coating of larger surfaces and tool sections
- easy-grip handpiece for comfortable application
- proven ENESKA operating environment
- adjustable direction of rotation
- various switch-on modes
- storage of individual parameters
- use of coarse electrode diameters.
- High-quality interchangeable collets with high concentricity accuracy
- System is compatible with foot switch on request
- Parameter settings can be adjusted during the coating process
- Air-cooled application handpiece



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Accessories / spare parts

		Price from	
		Order No.	1 set 1 piece
ENESKArapidcoat coating handpiece ROT135			
	The application handpiece has a button to start the work process. Thanks to its ergonomic shape, the coating process can also be carried out effortlessly over a longer period of time. Electrode diameters from 1.1 to 6.0 mm can be clamped	0 700 402	
	Technical data: Coating power: up to 140 W Coating energy: 110 mJ at 42V up to 700 mJ at 54V (1mJ = 1Ws) F_shot shot frequency: 100, 200 Hz in steps up to 600 Hz depending on the number of loading banks. Speed / target speed: approx. 225 to 725 rpm Sound pressure level: < 85 dB (A) The sound pressure can be amplified due to the working environment, e.g. when working inside accessible metal structures etc., and may be higher. Weight: approx. 850 g incl. cable package Cooling: Compressed air coole		
ENESKArecoat application gun VIB85			
	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.	0 700 302	
	Vibration frequency: variable up to 120 Hz 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 foot 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	
Clamping elemnts for carbide electrodes, set		0 700 070	
Set of tungsten carbide electrodes		0 700 035	