

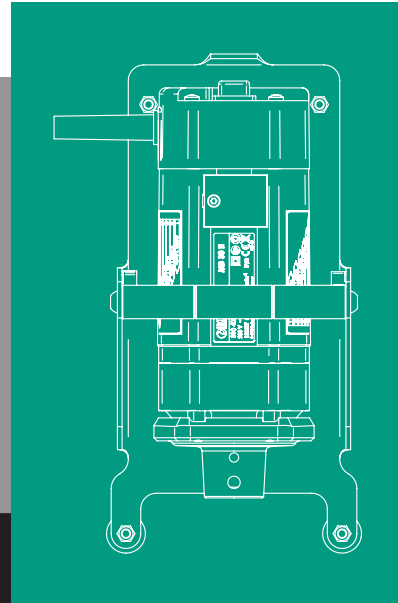


# BIAX

Professional Power

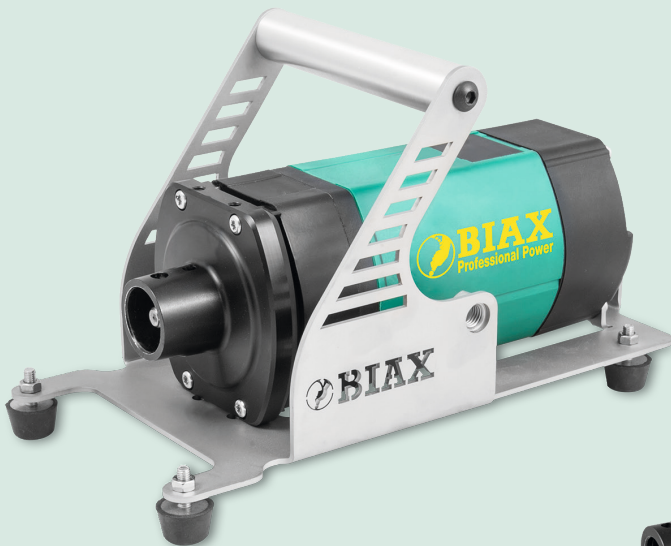
## THE POWER PACKS FOR EVERY APPLICATION: MACHINES WITH A FLEXIBLE SHAFT

Tough • Consistent • Proven



MADE IN GERMANY

*Das Original*



[www.biax.de](http://www.biax.de) | 001 580 628



Production hall at the Maulbronn factory

**Schmid & Wezel has been synonymous with highest precision, quality and collaborative partnership since 1919.**

The company operates three divisions: BIAX Pneumatic and Electric Tools, BIAX Carbide Tools and EFA Meat-Processing Machines. These machines are manufactured at three modern production sites in Germany and Switzerland. The products that Maschinenfabrik Schmid & Wezel supplies make it a quality leader in the market – not least due to its great in-house production depth that in some areas reaches levels of up to 90%.

Long-lasting customer satisfaction is the objective and the most important driver behind continual innovation and quality. The strengths at Schmid & Wezel include tailored customer services and customised solutions based on high-quality products.

**We manufacture our flexible shafts ourselves!**

BIAX's business operations focused on machines using flexible shafts from the outset when the brand was established in 1919. That's also the reason why the 'MBs' (the machines used to be called 'Multi Biax') remain very close to our hearts.

We still manufacture all our flexible shafts at our factory in Hilsbach to this day. The specialists at 'BIAX flexible Power' have been manufacturing top-quality flexible shafts to serve a variety of industries for many decades. That's why we are also always able to develop tailored solutions to meet your needs. Just get in touch with us.

BIAX Maulbronn



BIAX Hilsbach



**BIAX repair services**

We've repaired many pneumatic and electric tools throughout the 100 years of our existence. The experience and skills gained from this work have been handed down from one generation of employees to the next. For us, repair services are one way of making sure that customers are satisfied. That's why our workshop is also equipped with tools that were specially made for us and adapted entirely to BIAX machines. Place your confidence in us by having the manufacturer handle your repairs.



The following represents a short overview of our services:

- 12-month warranty.
- We only use original and highest-quality BIAX spare parts.
- Repairs are carried out by specialists possessing extensive experience with BIAX products.
- Standard machines are repaired at favourable fixed prices – which eliminates the need for cost estimates and so saves lots of time.
- The average throughput time is around two weeks. Repaired machines are technically almost like new.
- That's why all repairs come with a new 12-month warranty.
- Goodwill: We are always open to suggestions and will often decide in favour of customers when in doubt!
- Repair training is available for end customers on request.
- Low shipping costs within the European Union.

**Other services include:**

- On-site expert advice provided either by our field staff or over the phone by our in-house staff.
- Technically trained in-house application consultants who provide very comprehensive advice. These consultants are also able to develop customer-specific special solutions to meet your needs.
- Test machine... not quite decided yet? You can test our machines before purchase free of charge and at no obligation.
- Very fast delivery times and responses to your inquiries.
- Training and expert presentations.
- Extensive national and international partner network.

Schmid & Wezel is ISO certified:



Building on over 25 years of proven and highly successful previous models, the MB20/3 represents an attractive advance development and brings real added value to the market. This model is particularly suitable for use in mould manufacture, precision tooling and precision engineering. It is characterized by its very favourable purchase and maintenance costs.

### The best MB20 that we have ever had. What's new?

- Higher speed of up to 34,000 rpm for finer, more precise work.
- The motor is protected from overloading by an automatic cut-out.
- Restart protection provides a high degree of safety.
- Prolonged motor life through optimum dust protection.

### Inexpensive to purchase and maintain. Safe to operate.

- Cost-effective universal motor in a sturdy plastic shell.
- Automatic cut-out if wear occurs to the carbon brushes
- Soft start.
- Degree of protection: IP 20, Protection class: II

### Specifically designed for versatile use in mould making

- Constant speed under load.
- Uses various quick-change hand pieces for milling, grinding, polishing, brushing and filing.
- The machine can be operated standing upright or suspended from a hook.

### Shafts

Besides its robust standard versions, BIAx also supplies extremely flexible shafts or shafts with rigid extensions for special applications. The latter are ideal, for example, for working in areas inside components that are difficult to access.

	DV6	DV6 Flex	DV6 rigid	DV7 Flex
Order no.:	032 004 200	032 004 600	032 009 400	030 190 801
Length [mm]:	1500	1500	2000 (500mm rigid)	1800
Ø shaft core [mm]:	6	6	6	7
Max. speed [rpm]:	30.000	30.000	30.000	20.000
Shaft core order no.:	007 704 200	007 704 200	007 709 400	007 700 021
Protective hose order no.:	007 804 200	007 804 600	007 809 400	007 800 021
Connection to machine:	all shafts: M 10 x 30 threaded connection			
Connection to handpiece:	all shafts: square small (5mm)			

### Handpieces

	KGS27 / straight	W627-45 / 45° angle	W627 / 90° angle	HB1527 / Belt sander	FR5-827 / File
Order no.:	020 017 620	020 000 615	020 000 610	020 014 810	020 000 730
Max. speed [rpm]:	30.000	15.000	15.000	15.000	15.000
Max. tool shank Ø [mm]:	6	6	6	-	4
Collet:	ZG 4 / 6mm	ZG 4 / 6mm	ZG 4 / 6mm	-	-
Height head / length handpiece [mm]:	-/124	44/136	48/136	belt meas. L x B: 330 x 15 / 330 x 8	102,5/159
Weight [g]:	160	380	380	860	2650
Connection:	all handpieces: square small (5mm)				



### Bench control unit

The bench control unit allows machines to be suspended thus enabling them to be comfortably switched on and off and their speed to be adjusted from the bench top.

Versions	Order no.
Motor only:	010 607 807
MB 20/3 G Set (motor + DV 6 + KGS 27):	010 405 005
MB 20/3 G with table controller:	010 607 809
Slipping clutch RKG:	010 200 620



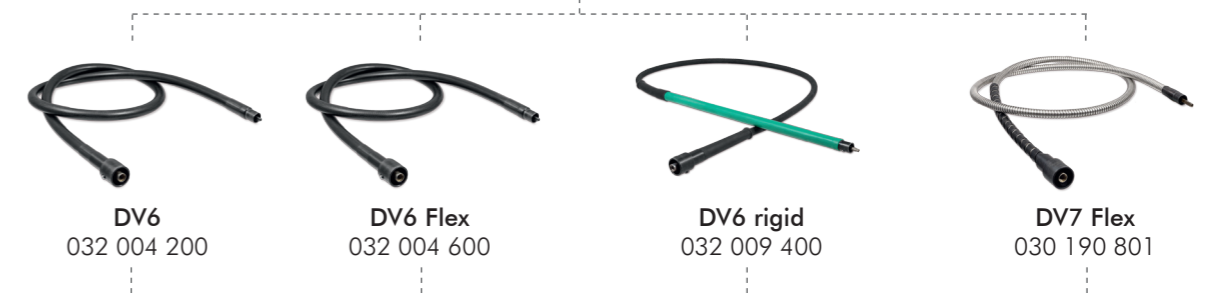
### RKG

Our friction clutch engages at overload (from 2 Nm) and protects the shafts from ripping. It thus extends shaft lifespans, saves costs and increases occupational safety.

Speed [rpm]:	Continuous from 13.000 - 34.000
Power consumption/output [watts]:	710 / 430
Weight without shaft and handpiece [kg]:	3,0
Voltage [Volt/Hz]:	230 / 50 - 60
Connection:	M 10 x 30 threaded connection



### Flexible Shafts



### Handpieces



Milling, grinding, brushing, polishing, filing – and all with a single device! This super-strong Multi-BIAX provides the best results for a variety of applications. Besides it's very low maintenance costs, the machine is also characterized by a high level of comfort and safety. This all-rounder is suitable for use in almost all sectors of industry.

**The best results are achieved through digital sensor-less control electronics. This ensures:**

- Consistently high torque at any speed between 5,000 and 15,000 rev/min.
- Constant speeds at different loads.
- Retrieval of power reserves: at maximum load a remarkable peak power of 1.5 kW. Above this the machine is shut down by the overload protection.
- No pulsation in the low speed range.
- Work results in smoother surfaces.

**Delivers the highest attainable degree of occupational safety and comfort.**

- At only 75 dB (A) (according to EN 60745) is significantly quieter than comparable machines. In numerous applications this eliminates the need for hearing protection.
- Extremely low weight for this performance class, significantly increasing mobility.
- Uses various quick-change hand pieces for milling, grinding, polishing, brushing and filing.
- The machine can be operated standing upright or suspended from a hook.
- Soft start.
- Degree of protection: IP 20, Protection class: II

**Low maintenance costs and no unnecessary downtime**

- The motor is protected from overloading by an automatic cut-out.
- Automatic cut-out if wear occurs to the carbon brushes.
- Less mechanical wear parts because there are no gears.
- Fully encapsulated sensorless electronics can not be clogged with metallic particles.
- Electrical surge protection prevents current peaks and protects the motor.

**Shafts**

Besides its robust standard versions, BIAX also supplies extremely flexible shafts or shafts with rigid extensions for special applications. The latter are ideal, for example, for working in areas inside components that are difficult to access.

	DV7 Flex	DV8	DV8 rigid
Order no.:	030 190 801	032 004 700	032 009 500
Length [mm]:	1800	1500	2000 (500mm rigid)
Ø shaft core [mm]:	7	8	8
Max. speed [rpm]:	20.000	15.000	15.000
Shaft core order no.:	007 700 021	007 704 700	007 709 500
Protective hose order no.:	007 800 021	007 804 700	007 809 500
Connection to machine:	all shafts: M 10 x 30 threaded connection		
Connection to handpiece:	all shafts: square small (5mm)		

**Handpieces**

	KGS27 / straight	W627-45 / 45° angle	W627 / 90° angle	HB1527 / Belt sander	FR5-827 / File
Order no.:	020 017 620	020 000 615	020 000 610	020 014 810	020 000 730
Max. speed [rpm]:	30.000	15.000	15.000	15.000	15.000
Max. tool shank Ø [mm]:	6	6	6	-	4
Collet:	ZG 4 / 6mm	ZG 4 / 6mm	ZG 4 / 6mm	-	-
Height head / length handpiece [mm]:	-/124	44/136	48/136	belt meas. L x B: 330 x 15 / 330 x 8	102,5/159
Weight [g]:	160	380	380	860	2650
Connection:	all handpieces: square small (5mm)				



**Bench stand / portable stand**

The swivelling bench stand makes working more comfortable while the portable stand makes workers more mobile when they need to work on large components and when they need to move to different workplaces.

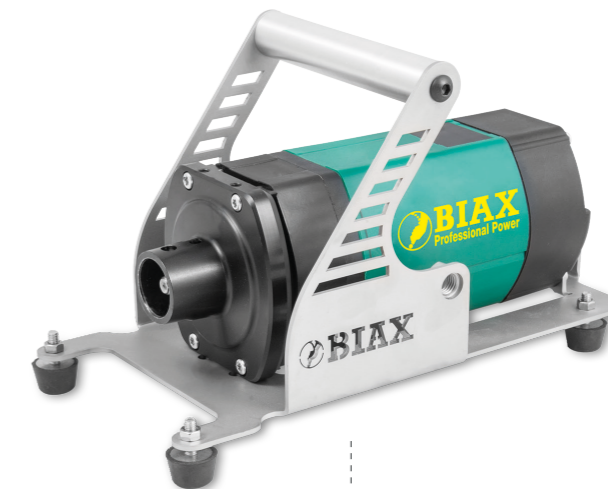
Versions	Order no.
Motor only:	010 403 400
MB 30 E Set (motor + DV 8 + KGS 27):	010 403 410
Bench stand:	010 300 120
Portable stand:	007 014 140
Slipping clutch RKG:	010 200 620



**RKG**

Our friction clutch engages at overload (from 2 Nm) and protects the shafts from ripping. It thus extends shaft lifespans, saves costs and increases occupational safety.

Speed [rpm]:	Continuous from 5.000 - 15.000
Power consumption/output [watts]:	1.300/900
Weight without shaft and handpiece [kg]:	5,2
Voltage [Volt/Hz]:	230/50
Connection:	M 10 x 30 threaded connection



**Flexible Shafts**



DV7 Flex  
030 190 801



DV8  
032 004 700



DV8 rigid  
032 009 500

**Handpieces**



Straight handpiece  
KGS27 - 020 017 620



45° angle  
W627-45 - 020 000 615



90° angle  
W627 - 020 000 610



Belt sander  
HB1527 - 020 014 810



File  
FR5-827 - 020 000 730

Designed for moderate to severe grinding and milling in tool and mould making, deburring, fettling and brushing work in foundries, container and steel construction, and for mechanical workshops.

**The lightest and most compact machine in its class for the most difficult applications.**

- Unbeatable power to weight ratio with 1.9 kW at 21.7 kg.
- Ultra-strong asynchronous motor ("continuous runner") with maximum efficiency.
- Indestructible, absolutely maintenance free, virtually no wear.
- Particularly suitable for a large tool diameter.
- Ideal for working large surfaces.
- Motor overload protection.
- Constant speed under load.

**Convenience and safety features.**

- Extremely quiet
- A multitude of possible combinations of shafts and handpieces.
- The machine may be operated free standing, on a table stand or on a travelling column.
- Restart protection.
- Soft start.
- Degree of protection: IP 54, Protection class: I

**Shafts**

Besides its robust standard versions, BIAX also supplies extremely flexible shafts or shafts with rigid extensions for special applications. The latter are ideal, for example, for working in areas inside components that are difficult to access.

	DV8	DV8 rigid	DV10	DV10 rigid	DV12
Order no.:	032 004 700	032 009 500	032 004 811	032 009 611	032 004 911
Length [mm]:	1500	2000	2000	2500 (500mm rigid)	2000
Ø shaft core [mm]:	8	8	10	10	12
Max. speed [rpm]:	15.000	15.000	9.000	9.000	9.000
Shaft core order no.:	007 704 700	007 709 500	007 704 811	007 709 611	007 704 911
Protective hose order no.:	007 804 700	007 809 500	007 804 811	007 809 611	007 804 911
Connection to machine:	all shafts: M 10 x 30 threaded connection				
Connection to handpiece:	square small (5mm)		square large (8,5mm)		

**Handpieces**

	KGS10-9	W6-9 / 90° angle
Order no.:	020 001 600	020 001 670
Max. speed [rpm]:	9.000	9.000
Max. tool shank Ø [mm]:	10	6
Collet:	ZG 1a/6	ZG4/6
Height head / length handpiece [mm]:	-/155	66/175
Weight [g]:	0,5	0,6
Connection:	all handpieces: square large (8,5mm)	



**Bench stand / portable stand**

The swivelling bench stand makes working more comfortable while the portable stand makes workers more mobile when they need to work on large components and when they need to move to different workplaces.

Versions	Order no.
Motor (version G):	010 402 261
Motor (version Z):	010 402 271
Bench stand:	010 300 130
Portable stand:	010 300 320
Slipping clutch RKG:	010 200 620

Speed [rpm]:	Continuous from 900 - 15.000
Power consumption/output [watts]:	1.900/1.500
Weight without shaft and handpiece [kg]:	21,7
Voltage [Volt/Hz]:	230/50-60
Connection:	M 10 x 30 threaded connection



**RKG**

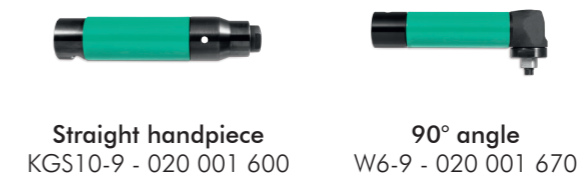
Our friction clutch engages at overload (from 2 Nm) and protects the shafts from ripping. It thus extends shaft lifespans, saves costs and increases occupational safety.



**Flexible Shafts**



**Handpieces**



# SHAFTS FOR OLDER MACHINES

for machines MB 20/2	
	HW27
Order no.:	030 097 100
Length [mm]:	1.500
Ø shaft core [mm]:	6
Max. speed [rpm]:	25.000
Shaft core order no.:	007 900 976
Protective hose order no.:	007 900 977
Connection to machine:	square small (5mm)
Connection to handpiece:	square small (5mm) like MB 20/3 G (see p. 3)



for machines SN 12, MBF 15 G			
	DK7	DK10	DK12
Order no.:	030 046 001	030 002 201	030 002 401
Length [mm]:	1.500	1.500	2.000
Ø shaft core [mm]:	7	10	12
Max. speed [rpm]:	9.000	9.000	9.000
Shaft core order no.:	007 900 517	008 900 041	008 900 045
Protective hose order no.:	007 900 703	007 900 906	007 900 909
Connection to machine:	M 10 x 30	M 10 x 30	M 10 x 30
Connection to handpiece:	claw 18	claw 25	claw 31



for machines MB 3 Z, MB 5 Z, MBF 5 Z, MBF 15 Z, MB 50 Z					
	ZK7	ZK10	ZK10 (2m)	ZK12	ZK15
Order no.:	030 001 001	030 001 201	003 001 211	030 001 401	030 001 601
Length [mm]:	1.500	1.500	2.000	2.000	2.000
Ø Wellensee [mm]:	7	10	10	12	15
max. permissible speed [min-1]:	9.000	9.000	9.000	9.000	9.000
Wellensee Order no.:	008 900 017	008 900 021	008 901 021	008 900 025	008 900 029
Protective hose Order no.:	007 900 905	007 900 908	007 901 908	007 900 911	007 900 914
Connection machine:	Z-connection	Z-connection	Z-connection	Z-connection	Z-connection
Connection handpiece:	claw 18	claw 25	claw 25	claw 31	claw 31



for machines MB 3 Z, MB 5 Z, MBF 5 Z, MBF 15 Z, MB 50 Z with high-speed transmission HTZ 27 or HTZ 45			
	HTW20	HTW27	HTW45
Order no.:	030 077 000	030 005 502	030 005 400
Length [mm]:	1.500	1.500	1.500
Ø shaft core [mm]:	6	8	6
Max. speed [rpm]:	20.000	27.000	45.000
Shaft core order no.:	007 900 648	008 900 090	008 900 440
Protective hose order no.:	007 900 649	008 900 350	008 900 349
Connection to machine:	Cyl. 6mm	Cyl. 8mm	Cyl. 6mm
Connection to handpiece:	claw 18	M 8	M 5
		for HTZ 27	for HTZ 45

**If you cannot find the right shaft or are looking for a special shaft, please contact us. We are happy to help.**

for machines MB 30	
	HTW30
	HW32 (Only in connection with high-speed transmission HTG30)
Order no.:	030 097 000
Length [mm]:	1.500
Ø shaft core [mm]:	7
Max. speed [rpm]:	15.000
Shaft core order no.:	007 900 770
Protective hose order no.:	007 900 771
Connection to machine:	plug-in connection
Connection to handpiece:	claw 18



# HANDPIECES FOR OLDER MACHINES

Connection claw 18	straight	straight	angle 90°	angle 90°	angle 45°	Connection claw 25	Connection claw 31
	KGE18	KGE18L	W618	W618L300	W618-45	KGE25 (straight)	KGE31 (straight)
Order no.:	020 000 200	020 000 300	020 000 600	020 012 200	020 000 605	020 001 200	020 001 300
Max. speed [rpm]:	6	6	6	6	6	10	10
Max. tool shank Ø [mm]:	ZG 1/6	ZG 4/6	ZG 4/6	ZG 4/6	ZG 4/6	ZG 1a/6	ZG 1a/6
Collet:	20.000	20.000	15.000	15.000	15.000	9.000	9.000
Height head / length handpiece [mm]:	-/100	-/233	48/169,5	48,5/369,5	49/188	-/135	-/140
Weight [g]:	200	570	400	850	400	500	500

Connection M 5	Connection M 8
	KGEH (straight)
	KGE25H (straight)
Order no.:	020 004 700
Max. speed [rpm]:	6
Max. tool shank Ø [mm]:	ZG 1/6
Collet:	45.000
Height head / length handpiece [mm]:	-/100
Weight [g]:	200

# COLLETS



Type	ZG 1	ZG 1 A	ZG 4	ZG 5	ZG 7	ZG 8
	Order no.	Order no.	Order no.	Order no.	Order no.	Order no.
Inner diameter 0,5 mm	-	-	-	001 999 871	-	-
Inner diameter 1,0 mm	-	-	001 999 957	001 999 989	001 999 868	-
Inner diameter 1,5 mm	-	-	001 999 960	001 999 988	-	-
Inner diameter 2,0 mm	001 999 932	-	001 999 959	001 999 987	001 999 867	-
Inner diameter 2,5 mm	-	-	001 999 952	001 999 986	-	-
Inner diameter 3,0 mm	001 999 999	001 999 995	001 999 991	001 999 985	001 999 982	-
Inner diameter 3,5 mm	-	-	001 999 951	-	001 999 924	-
Inner diameter 4,0 mm	001 999 998	001 999 949	001 999 961	-	001 999 973	-
Inner diameter 5,0 mm	001 999 997	-	001 999 958	-	001 999 972	-
Inner diameter 6,0 mm	001 999 996	001 999 994	001 999 990	-	001 999 981	001 999 977
Inner diameter 7,0 mm	-	-	-	-	001 999 971	-
Inner diameter 8,0 mm	-	001 999 993	-	-	001 999 980	001 999 976
Inner diameter 10,0 mm	-	001 999 992	-	-	-	001 999 975
Inner diameter 1/8"	-	-	001 999 964	001 999 983	001 999 979	-
Inner diameter 1/4"	-	-	001 999 965	-	001 999 978	-
Inner diameter 3/32"	-	-	001 999 970	001 999 984	-	-
Wrench	001 365 806 +Retaining pin 002 000 069	001 365 811 +Retaining pin 002 000 070	007 899 874 (Size 9+11 in set)	007 899 751 (Size 6+8 in set)	007 899 746 (Size 11+14 in set)	007 899 721 (Size 14+17 in set)



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