

Ultrasonic Polishing



ULTRAMAX® Ultrasonic Polishing Systems

Reduce Finishing Time By More Than 50%



5001320 ULTRAMAX® DF Power Set

The ULTRAMAX DF Power is a dual-function system that gives you the versatility of both ultrasonic and mechanical polishing. Achieve mirror finishes on milled and EDM surfaces using the ULTRAMAX DF Power with finishing stones, files, ceramic stones, lapping stones with diamond compounds, and sintered, resin, and plated diamond tools. With a maximum output of 100 Watts, you can even polish the toughest metals like titanium and tungsten carbide with ease.

This set is compatible with the entire line of Gesswein Power Hand micromotor system handpieces. For the toughest jobs, turn to the optional UF-7405 handpiece with 8mm thread. Ideal if you have very heavy-duty EDM applications.

Set Includes:

- Controller
- UF-9705 Ultrasonic Handpiece (500-1321)
- PHP35 Rotary Handpiece (510-5144)
- Standard tools and accessories
- Tool box

Key Features:

- Frequency (range): 17-31kHz
- Frequency adjustment: Auto feedback system
- Ultrasonic power output: 100W Maximum
- Power consumption: 300VA
- Outside dimensions (W x D x H): 180 x 263 x 229mm (7.08" x 10.35" x 9.0")
- Electrical: 100/120V AC, 1 Ph, 50/60Hz
- Net weight: 11.9 lbs

Accessories and Replacements



ULTRAMAX® DF Power Functions

NANO Function – The normal stroke length of the DF Power is adjustable between 3-40µm. With NANO mode, you can reduce the adjustable stroke length to a minute 1-3µm range. This is ideal for ultra-high polishing such as diamond compound polishing or when you need to remove a very small amount of metal.

TOUCH Function – When the TOUCH function is activated, the mounted tool in your ultrasonic handpiece will reciprocate at full power only when contact is made with the metal surface of your workpiece. When you remove the tool from the metal surface, the reciprocation reduces to minimum power to protect your workpiece from any accidental contact.

FINE Function – Allows you to finetune the output. The unit will normally save you time by jumping in increments of 5's but switching to the FINE Function allows you to further set the output to the exact whole number you require.

	Description	SKU
	ULTRAMAX DF Power Controller	5001319
A.	ULTRAMAX DF Power Handpiece UF-9705	5001321
B.	ULTRAMAX DF Power Heavy Duty Handpiece UF-7405	5001322
C.	PHP35 Handpiece Only (with 1/8" Collet)	5105144
D.	Variable Speed Foot Rheostat for PH3 and UMax DF	5103306

ULTRAMAX® MF 3-in-1 Complete Package

The Multi-Function ULTRAMAX MF TOUCH and MF Standard are our most versatile polishing systems. They utilize a high-efficiency microprocessor to deliver power to ultrasonic, brushless DC, and brush-type DC handpieces. The MF Touch system offers touch screen control and read out while the MF Standard has all the same functions utilizing push buttons.

ULTRAMAX® MF Touch 3-in-1



ULTRAMAX® MF Standard 3-in-1



Description	SKU
MF Touch 3-in-1 Complete (w/ Z-8X Proflier)	5000332
MF Touch 3-in-1 Complete (w/ Z-2X Proflier)	5000333

Description	SKU
MF Standard 3-in-1 Complete (w/ Z-8X Proflier)	5000330
MF Standard 3-in-1 Complete (w/ Z-2X Proflier)	5000331

Sets Include:

- MF Touch Control Box or MF Standard Control Box
- MF Ultrasonic Handpiece: provides 36W of continuously variable power for precision reciprocating action.
- BH-60 Rotary Handpiece: delivers 50,000rpm utilizing a 230W brushless rotary motor for incredible power – even at low speeds!
- Tool changing wrenches
- 1mm & 3mm flat clamp tool holders
- 3mm round tool holder
- Variable speed foot pedal
- Z-8X or Z-2X Power Hand Reciprocating Profiler. Use for polishing flat surfaces, deburring, filing, stoning, scraping, lapping and draw-stoning deep cavities.

Accessories and Replacements

A



B



C



ULTRAMAX® MF Standard 3-in-1

	Description	SKU
A.	Replacement Ultrasonic Handpiece	5000222
B.	Replacement Brushless Rotary Handpiece	5000224
C.	Replacement Z-2X Handpiece	5103420
	Replacement Z-8X Handpiece	5103430
	Replacement Variable Speed Foot Pedal	5000221
	Optional ON/OFF Foot Switch	5000227
	MF Touch Cabinet Only	5000238
	MF Standard Cabinet Only	5000239

ULTRAMAX® UM-1200 and Accessories

5001200

ULTRAMAX® UM-1200 Ultrasonic Polisher

The most affordable ultrasonic polisher for polishing with diamond tools and ceramic stones. The high quality UM-1200 produces 25,000 cycles per second of longitudinal vibration in a small, comfortable handpiece with an invisible minute stroke of 10 to 35 microns from low to high output levels.

Include controller, UM-1200 handpiece with 8mm screw thread standard accessory set (two sintered and six plated diamond tools and two ceramic stones), one flat clamp tool holder, two round clamp tool holders, on/off foot switch, handpiece cradle rest, bench jig, wrench and hex key.



Key Features:

- Vibration frequency: 8–25kHz
- Stroke length: 10–35 microns
- Max. output power: 39W
- Electrical: 90–240V, 50/60Hz
- Controller measures: 7-1/2"W x 5-1/2"D x 3-1/2"H
- Handpiece measures: 5"L x 1-3/16" dia.

Description	SKU
Replacement Handpiece	5000101
Replacement Power Cord for UM-1200 – Handpiece	5000103
Accessory Set for UM-1200	5000140
UM1200 ON/OFF Foot Switch	5000107

5000234

3-in-1 Consumable Set

Set of Polishing Supplies for ULTRAMAX MF Complete Packages



This set contains 98 polishing consumables specifically selected for the ULTRAMAX MF 3-in-1 Complete Packages. Provides the full range of abrasive consumables from aggressive polishing and grinding, up to diamond and mirror polishing. Keep your tools in the convenient carrying case or store in the MF metal cabinet.

Set Includes:

- Diemaker All Grit Stone Set
- EDM All Grit Stone Set
- Mounted Stone Sampler Set
- New Super Stone All Grit Set
- Round Ceramic Stone Set
- Finishing Stone Holder
- 6 Grades of Diamond Compound
- Soft End Brushes
- Hard End Brushes
- Soft Cup Brushes
- Hard Cup Brushes
- Soft Wheel Brushes
- Hard Wheel Brushes
- Soft Felt Bob Set
- Hard Felt Bob Set
- GMX Soft Cylinders
- Diamond Files
- Rockwood & Soft Sticks
- Supreme Green Stoning Oil

8301559

MF Touch Complete Transport Case

Durable and functional, this transport case makes moving the MF Touch Complete convenient within your organization. Measures 20"W x 15"H x 25"L.



ULTRAMAX® Systems



5000301

ULTRAMAX® Mini

The ULTRAMAX Mini Ultrasonic Polishing System allows you to polish Ribs, slots and intricate details much faster than by hand. Take a rough milled surface to a mirror finish using diamond tools and ceramic stones. Includes a compact ultrasonic handpiece with an infinitely variable stroke length of 3-40µm, 36 watts output power, 20-30kHz oscillation frequency and a complete accessories kit.

Set Includes:

- 1 – ULTRAMAX Mini Controller
- 1 – ULTRAMAX Mini Handpiece GS-H26 (500-0222)
- 1 – 6mm Adapter
- 2 – M6 Flat Tool Holders, 1.0mm and 3.0mm (508-3122, 508-3126)
- 1 – M6 Round Tool Holder, 3.0mm diameter (508-3133)
- 1 – Plug/Power Cord
- 1 – Foot Switch (500-0221)
- 1 – Tool Changing Rack
- 1 – Handpiece Cradle Rest
- 1 – Hex Wrench
- 1 – Spanner Wrench
- 4 – Ceramic Stones in various grits
- 6 – Diamond Files in various grits

Key Features:

- Power supply: AC 90-250V, 50/60Hz
- Maximum power consumption: 36 watts
- Strokes/second: 22,000
- Ultrasonic amplitude: 3-40µm
- Adjustment of ultrasonic output: Continuous
- Overload protection circuit: Yes
- Dimensions (W x D x H): 120 x 160 x 230mm (5" x 6.5" x 9")



5000400

ULTRAMAX® Cutter

Use this innovative cutter anywhere you would usually use a knife to cut through material.

Set Includes:

- GSONIC-1082 Cutter Controller
- UC-60N-03A Cutter Handpiece (500-0405)
- Foot switch (500-0227)
- Cutting Blades 20 pieces (500-0406)
- L Wrenches 5 pieces (500-0409)
- Fixing screws 12 pieces (500-0407)
- Cleaning file (500-0410)
- Holder clip (500-0408)
- Plastic toolbox for easy storage (500-0411)

Applications:

- Printed circuit boards
- Natural fibers
- Synthetic fiber
- All forms of paper
- Bottom films made of rubber, silicone, PP, PE, and other plastic sheets (< 2mm)

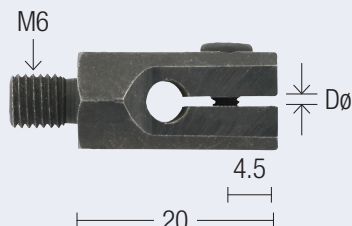
Key Features:

- Power supply: 90~240 VAC 50/60Hz
- Maximum power consumption: 45 Watts
- Consumption: 50VA
- Output power: 40 Watts
- Adjustment of ultrasonic output: Continuous
- Ultrasonic amplitude: 3-40µM

ULTRAMAX® Accessories

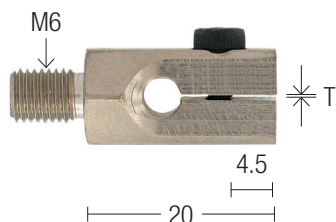
DF Power and UF-9701 Handpiece

Create your own polishing tools by inserting stones and lapping tools into the appropriate steel clamp. Use the M6 (6mm thread) clamp tool holders in the UF-9700 ultrasonic handpiece supplied with ULTRAMAX DF. For optimum machine performance, choose a medium clamp tool holder for tools up to 6.35mm in width and a large clamp tool holder for tools up to 15mm in width. Replacement screws are available from stock.



6mm Thread Round Clamp Tool Holder – For Round Tools

For Dø (Diameter)	SKU
2.0mm Round Tool	5083508
2.35mm ($\frac{3}{32}$ ") Round Tool	5083509
3.0mm Round Tool	5083512
3.3mm ($\frac{1}{8}$ ") Round Tool	5083516



6mm Thread Medium Clamp Tool Holder – For Flat Tools Up to 6.35mm ($\frac{1}{8}$ ") Wide

For T (Thickness)	SKU	For T (Thickness)	SKU
0.5mm Flat Tool	5083495	2mm Flat Tool	5083506
0.8mm Flat Tool	5083500	3mm Flat Tool	5083510
1mm Flat Tool	5083502	3.3mm ($\frac{1}{8}$ ") Flat Tool	5083514
1.5mm Flat Tool	5083504		



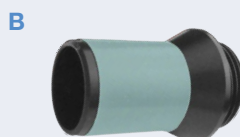
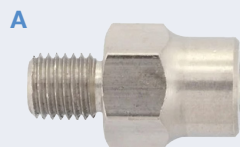
6mm Thread Adjustable Clamp Tool Holder – For Flat Tools 0.1mm to 8.0mm Wide

For T (Thickness)	SKU
0.1mm to 1.5mm Thick	5083522



4mm Thread Clamp Tool Holders

Description	SKU	Description	SKU
Flat 0.8mm	5083223	Flat $\frac{1}{8}$ "	5083233
Flat 1mm	5083325	Round 2mm	5083224
Flat 1.5mm	5083225	Round 2.35mm	5083231
Flat 2mm	5083227	Round 3mm	5083226
Flat 3mm	5083228	Round $\frac{1}{8}$ "	5083229

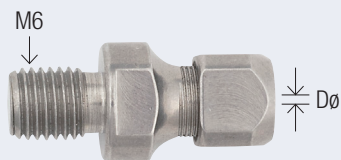


ULTRAMAX® DF Accessories

	Description	SKU
A.	6/4mm Tool Adapter (to hold M4 Ultrasonic tools)	5083342
B.	Standard Handpiece Protector Sleeve	5000208

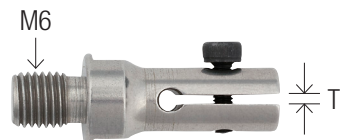
ULTRAMAX® MF Units

Create your own polishing tools by inserting stones and lapping tools into the appropriate steel clamp. Use 6mm thread for the MF handpiece.



6mm Round Tool Holders

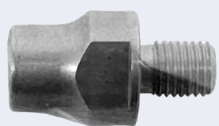
For Dø (Diameter)	SKU
3.0mm Round	5083133
1/8" Round	5003134



6mm Flat Clamp Tool Holders

For T (Thickness)	SKU
0.5mm Flat	5083120
1.0mm Flat	5083122
2.0mm Flat	5083124

For T (Thickness)	SKU
3.0mm Flat	5083126
1/8" Flat	5083128

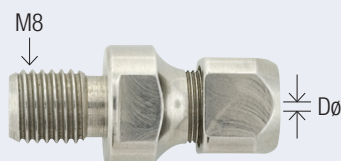


ULTRAMAX® MF Adapter

Description	SKU
6mm to 4mm Adapter	5083114

ULTRAMAX® UM-1200 Units

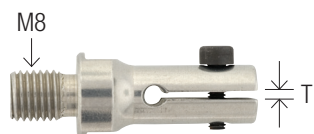
Create your own polishing tools by inserting stones and lapping tools into the appropriate steel clamp. Use 8mm thread for the UM-1200 handpiece.



8mm Thread Round Tool Holder

For Dø (Diameter)	SKU
1.0mm Round Tool	5000134
2.0mm Round Tool	5000135
2.35mm Round Tool	5000136

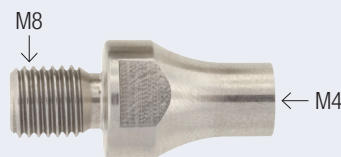
For Dø (Diameter)	SKU
3.0mm Round Tool	5000109
1/8" Round Tool	5000137



8mm Thread Flat Clamp Tool Holders

For T (Thickness)	SKU
0.5mm Flat Tool	5000111
0.8mm Flat Tool	5000131
1.0mm Flat Tool	5000108

For T (Thickness)	SKU
2.0mm Flat Tool	5000132
3.0mm Flat Tool	5000110
1/8" Flat Tool	5000133



ULTRAMAX® UM-1200 Accessories and Replacements

Description	SKU
8/4mm Tool Adapter	5000129
Repl. Standard Set	5000140
Repl. ON/OFF Foot Switch	5000107

Description	SKU
Repl. Handpiece Cradle	5101130
Repl. UM1200 2.5mm Key	5000112

