

The BenchMate

The BenchMate, is a powerful work-holding system that helps you make and repair jewellery. It lets you work faster and with more confidence when stone setting, soldering, drilling, sawing, finishing, and engraving. Using a dovetail shaped mounting plate, BenchMate fits on the front of your work bench at the correct height and requires less hand force to produce better work. Try a Bench-Mate! Without changing your basic techniques, you'll be more effective doing quality jewellery work. Setters will find their work much easier.

BenchMate Basic Kit

Ref: 29-490-000

The Basic BenchMate Holder tilts and rotates to any position then locks solid while you work on rings, pendants, earrings, and other jewellery. Kit includes Holder, shellac pad, fixed mounting plate, replacement jaw inserts, back-up bridge and hardware. Weight: 2.7Kg.



BenchMate Deluxe Kit

Kit includes, a BenchMate Basic Kit plus Third Hand, Bench Pin Kit & two Solder Fingers. Weight: 3.6Kg. Ref: 29-491-000



BenchMate Plus Kit

Ref: 29-493-000

Kit includes BenchMate Basic Kit plus two Third Hands, Bench Pin Kit, two Solder Fingers & 4" Solder Station
Weight: 4.5Kg



Jaw Inserts - BenchMate

Replacement inserts made of black plastic
Ref: 29-490-001



Inside RingHolder Ref: 29-492-000

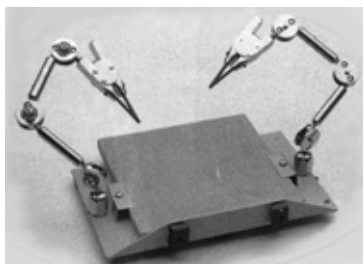
Many wide, delicate or unusual rings are difficult to hold with an outside clamp. This attachment can be used with any BenchMate. It allows the ring to be gripped from the inside so that you can easily work on all outside surfaces and keeps it from flexing while you work. Complete with 6 different size nylon clamps and key.



Soldering Station Ref: 29-495-000

Fits onto the dovetail plate in place of the BenchMate. Features two removable precision third hands and 150mm square solder pad.

100mm version available for use on the BenchMate Holder. Combine with our syringe solder pastes (see Soldering p115) for trouble free precision soldering.



Optional Mounting Plate

Ref: 29-490-002

Sturdy stainless steel construction used to mount BenchMate dovetail plate on benches with thin, curved or unusual bench tops.



Pitch Cup Ref: 29-494-000

This attachment fits into the jaws of the BenchMate Holder and is filled with heat meltable material to hold irregular or fragile pieces for setting or engraving.



Dovetail Mounting Plate

Ref: 29-490-005



Precision Third Hand

Ref: 29-490-004



Mounted on Base
Ref: 29-496-000

Bench Peg

Ref: 29-490-003



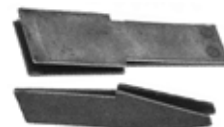
Insulated Solder Clamp

Ref: 29-490-010



Straight Solder Clamp

Ref: 29-490-012



Tapered Solder Clamp

Ref: 29-490-011

GRS GraverMax Ref: 30-052-000

A complete power system for engraving, stone setting, jewellery making, carving, mould detailing, & other handwork. Ideal for soft and hard metals, plastics, wood, glass, bone and other materials. Make clean, sharp cuts with confidence. GraverMax impact handpieces push the graver forward even through tough steels. A foot pedal controls the impact power like a car accelerator... the farther you push, the greater the power. The GraverMax power assist allows hand precision and artistry without hand fatigue. Stone setting, bright cutting, bead raising, and florentine finishing are ideal GraverMax applications in jewellery making. Perfect control means real power for forming heavy bezels and finesse for delicate prong setting.



New Technology in the latest GraverMax

The GRS GraverMax tradition continues with this new design. The new, economical GraverMax SC shares many features with the GraverMach including its new air porting technology, quiet operation and a more ergonomic and compact chassis. There are two main differences: the GraverMax SC uses a single stage precision air regulator in place of the dual-stage GraverMach regulator, and there is no throttle bias adjustment valve. Requires compressed air 1.4 cfm at 45 psi minimum (40 liters per minute at 3 bar minimum).

GraverMach Ref:30-054-000

Air pulse porting technology (patent pending) inside the control unit gives each handpiece excellent range of power with perfect control throughout an expanded range of impact speeds. The GraverMach features 400 to 8000 strokes per minute, a newly developed throttle bias adjustment valve for tailoring throttle response to your work and a dual-stage precision air regulator. Advanced ergonomics include front air pressure adjustment, quick change air couplings, rear mount throttle connection, and an advanced valve pulse unit that operates with virtually no noise or vibration. The GraverMach has connections for two impact handpieces plus an auxiliary air connection for other air tools including the GRS Ultra 850 rotary handpiece. Requires compressed air 1.4 cfm at 45 psi minimum (40 liters per minute at 3 bar minimum).



GRS Magnum Handpiece Ref:30-052-050

A breakthrough in impact power, the new GRS Magnum Handpiece for GraverMax. There is no impact handpiece in the world that can equal the Magnum's range of power from very fine to amazingly heavy. Its compact size (handpiece length 2.8") is misleading because the Magnum exceeds the power of the old models. fine control with shading capability significantly better than any handpiece with this much top end power. Two knobs are available: a palm knob and an oval knob. Both are included with the Magnum Deluxe Set.



GRS Engraving Block Ref: 30-049-000

Complete with 30 accessories, this high quality engraving block is perfectly balanced. Its rotary turntable has an internal double ball bearing system that allows for smooth rotation without looseness or wear. Smooth non-reflective satin finish for a low eye strain and long working life.

Includes rubber base pad with nylon bearings

Block Weight: 8.6Kg
 Diameter: 130mm.
 Max. Jaw Opening: 76mm.
 Jaw Width: 64mm.
 Jaw Height: 38mm..



GRS Engraving Block Shelf Ref: 30-049-100

GRS Engraving Block Shelf fits on to the dove tail plate in place of the BenchMate and has some height adjustment to keep it at the same work height as your bench pin.



GRS Inside Ring Clamp-Blocks/Vice Ref: 30-049-055

Made for use with GRS Engravers Block or Vice, this tool allows the ring to be gripped from the inside so that you can easily work on all outside surfaces. Complete with 6 nylon clamps and key.



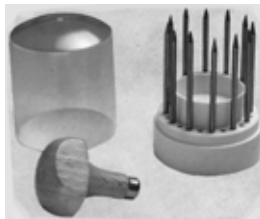
GRS Bench Vice Ref: 29-100-000

Vice fits on to the dove tail plate in place of the BenchMate. Solid Precision Steel Jaws 55mm widewith peg holes for clamping pendants and larger flat pieces. Vice opens 50mm. Rotates 360° on turn-table. Also swivels through 360° on front mount.



Beading Tools Used to form beads to hold gems in mounting.

- Reference Description
- 12-101-000 Swiss set of 12 beaders with wooden handle on a plastic base, containing: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12.
- 12-102-000 Swiss set of 23 beaders with wooden handle on a plastic base, containing all sizes from 00 to 22
- 31-166-000 Beader handle with Brass insert.



Reference	Size
12-012-000	0.85mm
12-013-000	0.90mm
12-014-000	1.00mm
12-015-000	1.05mm
12-016-000	1.10mm
12-017-000	1.15mm
12-018-000	1.20mm
12-019-000	1.25mm
12-020-000	1.30mm
12-020-000	1.35mm
12-022-000	1.40mm

Reference	Size	Reference	Size
12-000-000	0.25mm	12-004-000	0.45mm
12-001-000	0.30mm	12-005-000	0.50mm
12-002-000	0.35mm	12-006-000	0.55mm
12-003-000	0.40mm	12-007-000	0.60mm

Reference	Size
12-008-000	0.65mm
12-009-000	0.70mm
12-010-000	0.75mm
12-011-000	0.80mm

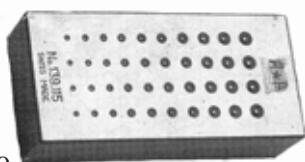
Beading Tool Blocks

For reshaping ends of standard size beading tools. Soften beaders before reshaping and retemper after.

A☆F Steel

Ref: 12-230-000

4 each of 10 sizes from 0.06 to 1.75mm in hardened steel Weight: 95g

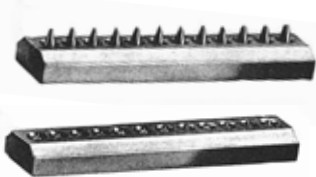


Fions - Brass body

1 each of 12 sizes.

Ref: 12-210-000 Raised

Ref: 12-220-000 Sunken



Milligrain Wheels Ref: 12-400-000

Cup shaped cutters on wheels form decorative beaded edges on settings and jewellery. Larger number denotes larger size. Available sizes:

Ref	Size
12-400-000	0.25mm
12-401-000	0.30mm
12-402-000	0.35mm
12-403-000	0.40mm
12-404-000	0.45mm
12-405-000	0.50mm
12-406-000	0.55mm
12-407-000	0.60mm
12-408-000	0.65mm
12-409-000	0.70mm

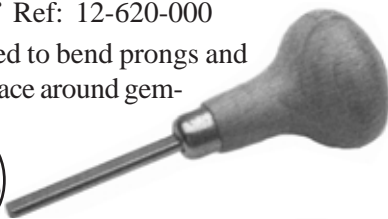
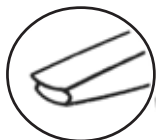
Ref	Size
12-410-000	0.75mm
12-411-000	0.80mm
12-412-000	0.85mm
12-413-000	0.90mm
12-414-000	0.95mm
12-415-000	1.00mm



Prong Pusher Ref: 12-620-000

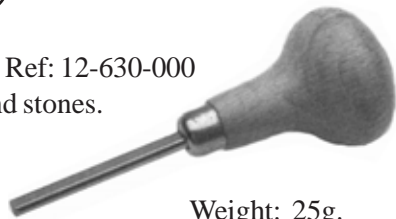
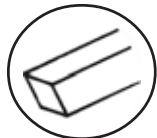
Top quality steel tool used to bend prongs and push crown points into place around gemstones.

Weight: 20g.



Bezel Pusher Ref: 12-630-000

For rolling bezels around stones.



Weight: 25g.

Bezel Roller Ref: 12-640-000

Half round polished head. Designed for pushing and shaping bezels around stones. Weight: 30g



Beaders & Milligrain Handle

Ref: 31-310-000

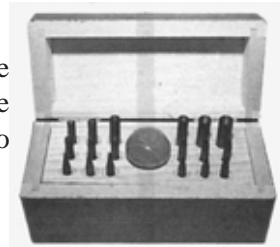
'Mushroom' shape with two chucks, 0.0mm to 1.0mm and 1.5 to 3.0mm.



Claw Closers

After the stone is set & prongs are in place, just press the concave punch down over the settings to push the tips over the stones.

Ref	Description
12-312-000	Set of 18. 240g 0.3mm - 6.7mm
12-324-000	Set of 24. 420g 0.3mm - 7.6mm



Prong Lifter Ref: 12-650-000

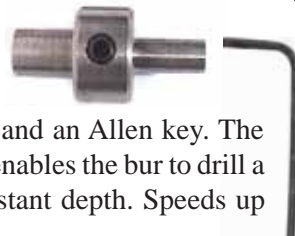
A useful tool designed to prevent damage to stones and settings. Made of hardened steel, the prong lifter allows easy removal of stones from settings.



Diamond Setters

Helper Ref: 12-900-000

Consists of a reversible holder and an Allen key. The bur is located in the holder and enables the bur to drill a hole, or cut a channel to a constant depth. Speeds up channel setting.



Wood Ring Clamps

Inside Clamp

Allows ring to be held from the inside.



Ref: 29-450-000

Wide Double End - Wedge

Made to suit wider ring shanks. Leather padded rounded jaws one end, leather padded square jaws the other



Ref: 29-410-000

Standard Double End - Wedge

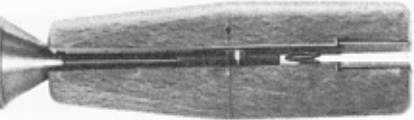
Made for standard ring shanks. Leather padded rounded jaws one end, leather padded square jaws the other



Ref: 29-420-000

Bottom Screw Operated

Leather padded square end jaws for standard ring shanks.



Ref: 29-440-000

Italian Ring Clamp

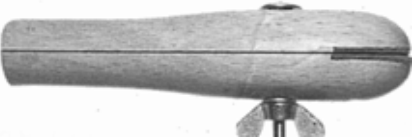
With protruding leather padded jaws, the unique construction of this clamp makes it ideal for wide or narrow bands alike. It will also securely clamp uneven tapered bands.



Ref: 29-436-000

Hinged Base

Leather padded rounded jaws. Evenly grips narrow to standard ring shanks



Ref: 29-435-000

Narrow Shank Clamp

Made specially for narrow bands this clamp closes parallel to grip narrow bands firmly. The wedge type clamps tend to grip only at the front on narrow bands.



Ref: 29-430-000

Double End Nylon Clamp

Leather padded rounded jaws one end, leather padded square jaws the other. The moulded construction assures perfect alignment of jaws. Ideal for hobbyists.



Ref: 29-408-000

Stone Setting Pliers

Ref: 27-620-000



120mm, for setting or tightening the prongs on stone set rings.

Jaws designed to fit over prongs on a setting.

GRS BenchMate

Ref: 29-490-000

The ultimate ring clamping system - Hard wearing steel construction - see Setting page 108 for details



GRS Aluminium Ring Clamp

Ref: 29-445-000

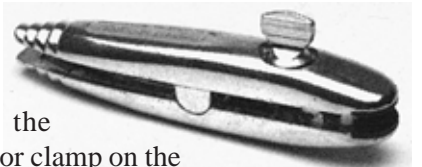
The GRS clamp features a safety lip to protect your hand if a graver slips and quick change long wearing nylon jaw inserts that provide a superior firm grip



Aluminium Combination Ring Clamp

Ref: 29-442-000

This versatile clamp can be used to clamp the ring from inside to work on the outside of the band or clamp on the outside in the rounded leather padded jaws.



Super Clamp

Ref: 29-400-000

Superior ring clamp grips like a bench vice.

Precision made from steel & aluminium. Features leather lined jaws to prevent damage to the ring. Six sided handle prevents rolling on bench.

Weight: 300g Size: 165 x 30mm



Ring Setters Clamp

Ref: 29-455-000

Set of 9 collets to hold the inside of rings whilst working on the outside surface. The collets also support weaker rings from the inside.



Universal Work Holder

Ref: 30-040-000

Designed to hold small and odd shaped parts for setting, engraving, sawing, etc. Supplied with 4 holding bits, the Handle is removable for fitting the holder into a bench vice

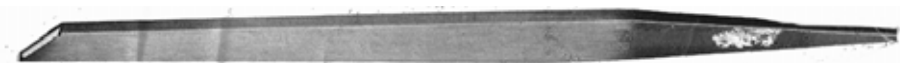


Vallorbe Gravers

Finest Swiss quality carbon steel gravers suitable for use with all types of metals, wood, bone, ivory & onyx.

For use by Diesinkers, Engravers, Jewellers, Setters and Watchmakers. Special High Speed Steel gravers (HSS), (identified by yellow paint on tang). HSS gravers keep a sharper cutting edge 4 to 5 times longer than carbon steel gravers, but they are more difficult to sharpen. All gravers made by Vallorbe in Switzerland.

Flat Edge



Type	Reference	A
Standard	10-622-000	0.2mm
HSS	10-622-001	0.2mm
Standard	10-628-000	0.8mm
HSS	10-628-001	0.8mm
Standard	10-634-000	1.4mm
HSS	10-634-001	1.4mm
Standard	10-640-000	2.0mm
HSS	10-640-001	2.0mm

Type	Reference	A
Std	10-624-000	0.4mm
HS	10-624-001	0.4mm
Std	10-630-000	1.0mm
HSS	10-630-001	1.0mm
Std	10-636-000	1.6mm
HSS	10-636-001	1.6mm
Std	10-642-000	2.2mm
HSS	10-642-001	2.2mm

Type	Reference	A
Std	10-626-000	0.6mm
HSS	10-626-001	0.6mm
Std	10-632-000	1.2mm
HSS	10-632-001	1.2mm
Std	10-638-000	1.8mm
HSS	10-638-001	1.8mm
Std	10-644-000	2.4mm
HSS	10-644-001	2.4mm

Round Edge



Type	Reference	A
Standard	10-652-000	0.2mm
HSS	10-652-001	0.2mm
Standard	10-658-000	0.8mm
HSS	10-658-001	0.8mm
Standard	10-664-000	1.4mm
HSS	10-664-001	1.4mm
Standard	10-672-000	2.4mm
HSS	10-672-001	2.4mm

Type	Reference	A
Std	10-654-000	0.4mm
HSS	10-654-001	0.4mm
Std	10-660-000	1.0mm
HSS	10-660-001	1.0mm
Std	10-666-000	1.6mm
HSS	10-666-001	1.6mm

Type	Reference	A
Std	10-656-000	0.6mm
HSS	10-656-001	0.6mm
Std	10-662-000	1.2mm
HSS	10-662-001	1.2mm
Std	10-670-000	2.0mm
HSS	10-670-001	2.0mm

Onglette



Type	Reference	No.	A
Standard	10-680-500	5/0	1.16mm
HSS	10-680-501	5/0	1.16mm
Standard	10-680-400	4/0	1.24mm
HSS	10-680-401	4/0	1.24mm
Standard	10-680-300	3/0	1.35mm
HSS	10-680-301	3/0	1.35mm
Standard	10-680-200	2/0	1.45mm
HSS	10-680-201	2/0	1.45mm
Standard	10-682-000	0	1.58mm
HSS	10-682-001	0	1.58mm

Type	Reference	No.	A
Std	10-684-000	1	1.78mm
HSS	10-684-001	1	1.78mm
Std	10-686-000	2	1.94mm
HSS	10-686-001	2	1.94mm
Std	10-688-000	3	2.16mm
HSS	10-688-001	3	2.16mm
Std	10-690-000	4	2.54mm
HSS	10-690-001	4	2.54mm
Std	10-692-000	5	2.74mm
HSS	10-692-001	5	2.74mm

Type	Reference	No.	A
Std	10-694-000	6	2.94mm
HSS	10-694-001	6	2.94mm
Std	10-696-000	7	3.14mm
HSS	10-696-001	7	3.14mm
Std	10-700-000	8	3.36mm
HSS	10-700-001	8	3.36mm

Lining Gravers



Used for making parallel lines in background or florentine finish.

Reference	Size	Lines
10-741-000	1.0mm	4
10-746-000	1.2mm	6
10-760-000	1.8mm	4

Reference	Size	Lines
10-742-000	1.0mm	6
10-750-000	1.4mm	6
10-770-000	2.0mm	6

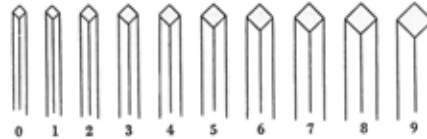
Reference	Size	Lines
10-744-000	1.2mm	4
10-755-000	1.6mm	6

Square Graver

Alloy Steel, Suitable for bold letter engraving.



Reference	Description
10-600-000	2.00mm wide Standard
10-602-001	2.25mm wide HSS
10-603-000	2.50mm wide Standard
10-603-001	2.50mm wide HSS
10-606-000	3.00mm wide Standard
10-606-001	3.00mm wide HSS
10-609-000	3.50mm wide Standard
10-609-001	3.50mm wide HSS

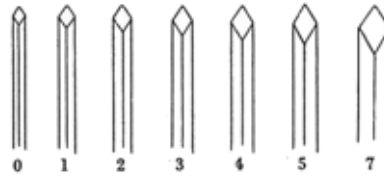


Lozange Graver

Alloy steel,
Used for fine letter engraving.

Not available in HSS

Reference	Description
10-610-000	2.00mm wide
10-613-000	2.50mm wide
10-616-000	3.00mm wide



Bevel



Reference	A
Standard 10-720-000	1.6mm



For heavy lettering and engraving hard metals.

Knife Edge



Reference	A
Standard 10-728-000	2.25mm
HSS 10-728-001	2.25mm



For line engraving and deep cuts.

Oval



Reference	A
Standard 10-710-000	1.5mm



For shading of curved surfaces, deep cutting and stone setting.

Tungsten Carbide Graver

Ref: 10-600-900 The square graver measures 2.15mm x 50mm long Tungsten carbide construction means it will hold excellent edge and is ideal for use on platinum. Sharpen with 1200 grit diamond.



Graver Sharpener

Ref: 30-370-000

Quick and easy to use. Place a graver in one of two angled openings and roll it over a flat oilstone. Graver is sharp again and ready to use. Sharpening stone is not included



Square Graver Sharpener

Ref: 30-360-000 also ideal for sharpening screwdriver blades.

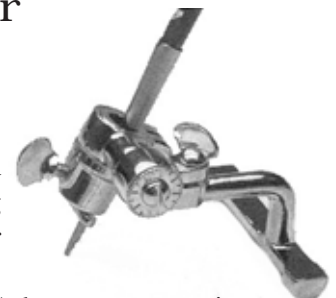


Crocker Graver Sharpener

Ref: 30-371-000

Sharpener can be adjusted to any angle by setting index. The best graver hand sharpener available.

Use in conjunction with Arkansas or ceramic sharpening stones.



See *Abrasives page 3* for Sharpening Stones to suit.

Burnishers

Tungsten Carbide Round Ref: 10-852-000



Tungsten carbide 5.0mm round burnisher has polished mirror finish which can produce high finish on gold and platinum. Mounted in a steel handle. Overall length 150mm.

*Curved Oval Single End Ref: 10-855-000



*Straight Oval Single End Ref: 10-870-000



*Require wood handles - see Handtools page 80

Straight & Curved Double End Ref: 10-875-000



Straight Oval with Handle Ref: 10-876-000

Economy 50mm burnisher with wood handle



Curved Oval with Handle Ref: 10-877-000

Economy 50mm burnisher with wood handle



Chenier Cutting Tools



Hand Held

Ref: 30-150-000

This universal tool will hold round, square and shaped wires to be cut with saw frame. It can also be used to cut many pieces exactly the same length.



Vice Held Ref: 30-155-000

Precision machined to cut Chenier at exactly 90 and 45 degree angles. Bottom section is recessed to sit onto the vice jaws for easy attachment.



Scrapers

For opening bezels, cleaning, smoothing and deburring metals and plastics.

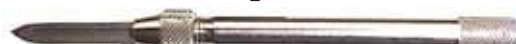
Vallorbe Scraper Ref: 10-810-000



High Quality chrome alloy steel blade 70mm x 6mm. Required wood handle - see Handtools page 80



Double end Scraper Ref: 10-830-000

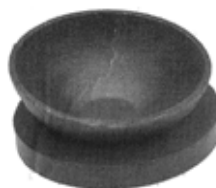


Quality chrome steel alloy blade inside an adjustable hand-piece. Blade: 80 x 5mm. Weight: 25g.

Pitch Equipment



Ref: 44-401-000 Pitch 900g



Ref: 44-400-000 Pitch bowl 2.5Kg

Ref: 44-400-001 Rubber base for 2.5Kg bowl

Ref: 44-405-000 Pitch Bowl 1.5kg

Ref: 44-405-001 Rubber base for 1.5Kg bowl



Shellac Flakes

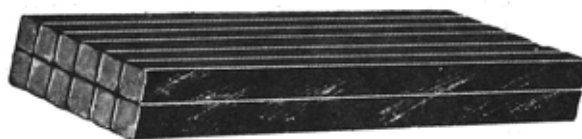
Ref: 44-201-000 250g

When melted is used to hold bracelets while being set, or engraved.

Setters Cement

When melted and placed on wooden peg it can firmly hold pieces in place while gems are set or hold stones during polishing operation. Square rods 270 x 18 x 15mm

Green Ref: 44-113-000 Red Ref: 44-110-000



Jeweller's Glues



Vigor 2 Part Epoxy Ref: 44-320-000

The Vigor Epoxy is a clear, permanent bond for repairing jewellery that sets in 5 minutes, does not shrink and withstands temperatures up to 75°C. (Will not unset when immersed in warm water.)

UHU Plus Ref: 44-327-000



Super firm grip for permanent adhesion of marcasite and other "unsettable" items. Holds up to 300kg! Sets in 2 hours - full strength after 12 hours.



UHU Quickset Ref: 44-325-000

Bonds in 5 minutes. You can handle the item in 10 minutes and is fully set in 1hour (100kg) Simply melt to unset.