

Engraving with your computer
and sign-making / CAD software

Mimaki
Your cut of the future

ME-500/ME-650 Engraving Plotters

Main Features

ME-500

ME-650

- Maximum engraving areas of 483×305mm(19×12") and 650×440mm(25.6×17.3")
- Supports HP-GL^{*1} commands for compatibility with various sign-making and CAD software.
- Simultaneous 3-axis linear interpolation enables smooth and speedy 3D engraving.
- Engraves on metals as well as plastics.
- Rigid construction and precisely controlled servo motors for all X, Y and Z axes for accurate engraving.
- Software controllable spindle height adjustment makes multi-pass engraving easy.
- Material height sensor eliminates need for manual adjustment of spindle height and ensures engraving at constant depth.
- A pen^{*2} can be attached for test-drawing before engraving.
- Z-stroke of 60mm (2.4") for engraving on thick materials.
- One megabyte memory buffer allows repeat engraving and also frees computer for another job quickly.
- Handy operation panel for ease of use.
- Chip removal attachment and adaptor to vacuum pump are standard^{*3}



ME-500

ME-650

Maximum engraving areas: 483 × 305mm (19 × 12"), 650 × 440mm (25.6 × 17.3")

Long materials can be set along the front-back direction. Maximum material widths are 650mm (25.6") for the ME-500 and 750mm (29.5") for the ME-650.

HP-GL*1 compatible

Most of sign-making and CAD software programs for both PC and MAC support HP-GL. The ME-500/ME-650 can be driven by these programs.

3D-Engraving

Simultaneous 3-axis linear interpolation enables smooth and speedy 3D engraving.

Wide variety of materials

The ME-500/ME-650 can engrave on metals as well as plastics.

Accurate engraving

Rigid construction and servo control technologies of Mimaki accumulated through years of developing and manufacturing of drafting and cutting plotters allow the ME-500/ME-650 to engrave very accurately. All X, Y and Z axes are servo motor driven for maximum precision.

Automatic material height sensing and constant depth engraving

Material height sensor eliminates need for manual adjustment of spindle height and ensures constant depth engraving on a material with uneven thickness.

Test-drawing with pen

Optional pen can be attached to test-draw before actually engraving. (Optional pen holder is required to install the pen.)

60mm Z-stroke

Spindle can move up to 60mm (2.4") above table and allows materials of up to 50mm (2.0") to be set.

Software controllable spindle height adjustment

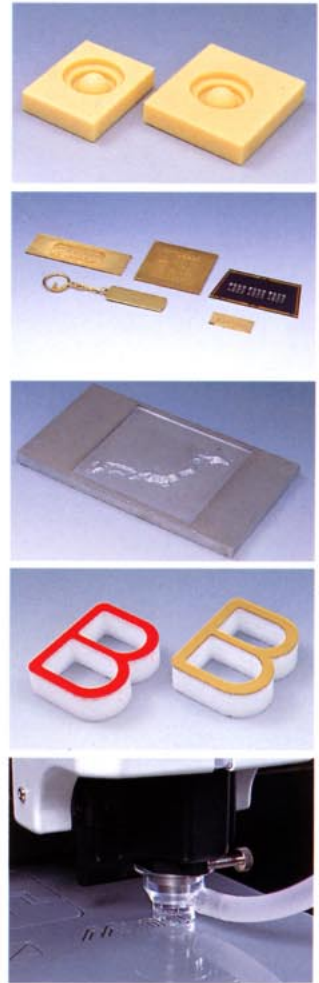
Spindle height adjustment can be done through software as well as from the ME-500/ME-650's handy operation panel, which makes multi-pass engraving easy.

Large memory buffer

A computer can send jobs to the ME-500/ME-650's one megabyte memory buffer without waiting for the ME-500/ME-650 to finish engraving. The computer therefore can be used for another job while the ME-500/ME-650 are engraving. Also, data stored in the memory can be used to engrave the same job.

Handy operation panel

Operation panel is separated from the main body for ease of use. All electrical circuitry is contained in the main body and the handy operation panel.



SPECIFICATIONS

Model		ME-500	ME-650
X-Y Axes	Engraving Area	483 × 305mm (19.0 × 12.0")	650 × 440mm (25.6 × 17.3")
	Speed	Engraving	0.5-50mm/sec (0.02-2.0"/sec)
		Moving	20-80mm/sec (0.8-3.1"/sec)
	Acceleration	Engraving	0.05G
		Moving	0.3G
Mechanical Resolution	0.5μm		
Z-Axis	Maximum Z Stroke	60mm (2.4")	
	Speed	Engraving	0.5-10mm/sec (0.02-0.4"/sec)
		Moving	5-30mm/sec (0.2-1.2"/sec)
	Acceleration	Engraving	0.05G
		Moving	0.3G
Mechanical Resolution	0.25μm		
Command Resolution	10, 25μm		
Spindle Rotation	7000-14000rpm		
Spindle Diameter	6mm (0.24"), 3mm (0.11") optional		
Maximum Material Weight	20kg (44lbs)		
Command	MGL-IIC3 (HP-GL*1 based)		
Receiver Buffer Size	1MB		
Interface	RS-232C		
Flatness	0.2mm		
Distance Accuracy	0.1mm/300mm		
Perpendicularity	± 0.3mm/300mm		
Repetition Accuracy	0.05mm		
Origin Repetition Accuracy	± 0.2mm		
Power Requirement	AC100, 120, 220, 240V Factory preset		
Power Consumption	50/60Hz 350VA or less		
Operating Environment	Temperature	5-40°C	
	Humidity	35-75% (Rh) No condensation	
Dimensions (W × D × H)	ME-500	785 × 730 × 510mm (30.9 × 28.7 × 20.1")	880 × 940 × 510mm (34.6 × 37.0 × 20.1")
	ME-650		
Weight	80kg (177lbs)	95kg (210lbs)	

The specifications are subject to change without prior notice.

Chip removal attachment and adaptor

The ME-500/ME-650 are equipped with a chip removal attachment and an adaptor to a vacuum pump. Typical vacuum pump*3 can be easily attached to the adaptor. Optional Vacuum Pump Controller turns on/off power to the vacuum pump so it will run only when engraving.

SUPPORTING TOOLS AND ACCESSORIES

SPA-0014	: Pen Holder for DU-23
SPA-0015, 0016	: Chip Removal Attachment (26.0, 11.0mm diameter)
SPA-0019	: Clamp tool
SPA-0021, 0024, 0032	: Engraving Cutter Holder (6mm, 3mm & 1/4 inches diameter)
SPA-0026	: Holder for BS Tapered Shank Cutter
SPB-0010, 0014, 0015	: Engraving Cutter (0.4, 0.2, 1.0mm)
SPB-0016	: Braille Cutter
SPB-0017, 0026	: End Mill (2.0, 1.0mm)
SPB-0018	: Ballnose End Mill (1.0mm)
SPA-0028*4	: Modification Kit for BS Tapered Shank Spindle Type
OPT-C0078, C0081	: Vacuum Pump Controller (120V, 220V AC)
OPT-C0090	: Adaptor Kit for Kavo High Speed Spindle
OPT-C0094	: Vacuum Table (ME-500)
DU-23	: Ball-Point Pen (Used with SPA-0014, 0020)
SPC-0067, 0068	: Gluefilm (For ME-500, 650)
SPC-0024	: Spindle Motor Brush
SPA-0025	: Chip Removal Attachment for Modeling Purpose

*1 HP-GL is a trademark of Hewlett-Packard Co.

*2 Pen and pen holder are optional.

*3 Vacuum pump is not included.

*4 BS Tapered Shank Spindle is suitable for highly precise engraving.

For this spindle, the following accessories are available.

SPA-0020	: Pen Holder for DU-23
SPA-0017	: Chip Removal Attachments (3.0 & 9.0mm diameter)
SPA-0022	: Holder for 3mm Diameter Straight Type End Mill
SPB-0025, 0019, 0020, 0021	: Engraving Cutter (0.1, 0.2, 0.4, 1.0mm)
SPB-0027, 0022, 0023	: End Mill (1.0, 2.0, 3.0mm)



ISO 9001:1994
Registration number JSAQ 417



QS Accreditation
Certificate number R001

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