

GERBER SABRE™

MAXIMUM SPEED AND PRODUCTIVITY

STATE-OF-THE-ART
TECHNOLOGY

FAST SETUP
AND FEED RATES

INDUSTRIAL
STRENGTH
RELIABILITY



GERBER SABRE routers are ideally suited for dimensional sign making, woodworking, and parts fabrication applications. SABRE routing systems offer high-speed letter and graphic design routing along with dependability, flexibility, ease of use, and minimal maintenance. SABRE can rout designs from a variety of materials—foams, plastics, woods, composites, and non-ferrous metals—as well as draw all types of text and graphics for layout templates. Available in two floor-mount sizes, SABRE accommodates individual sign shop needs. Both the SABRE 404 (4' x 4') and SABRE 408 (4' x 8') are ideal for creating any size indoor or outdoor durable sign, including architectural, structural, electrical and signs featuring engraving, prismatic letters and graphics, push-through letters, ADA standards, reverse carving, large lettering, and logos.

STANDARD FEATURES

Directly supported by GERBER OMEGA™, GERBER GRAPHIX ADVANTAGE®, and ArtCAM™, SABRE works with a variety of design programs or directly imports AI, EPS, DXF or HPGL file formats. Regardless of the design program, GERBER ARTPath™ software prepares the design for routing by assigning user-defined tool paths with varying depths or multiple tools and outputting the job to the router. When used with design programs other than OMEGA or GRAPHIX ADVANTAGE, ARTPath's open architecture enables the importing of standard file formats for tool path generation.

ARTPath is feature-loaded to eliminate manual processes and minimize scrap. Its Auto-Inlay™ feature produces rounded corners on male and female shapes, so no manual filing is necessary. With the paneling feature, shops can work with panel sizes that are longer than the table, producing panels with no seams. And with its nesting feature, ARTPath positions shapes on the table for maximum material usage.

Mounted on a bracket adjacent to the work surface, **the control panel** can be used as a

stationary or hand-held device. The control panel is the hub for operating the SABRE; it features a message display screen, menu selections, and arrow keys for moving the router motor. With the control panel, operators can set up jobs, manually move the routing tool to a desired location, start, stop, or pause a job, and change the speed or feed rate. Available with a **multiple language firmware option**, operators can choose display messages in languages that include: English, Italian, French, Dutch, Spanish, Portuguese, and German.

SABRE's drive system employs an **anti-backlash lead screw** instead of the more common rack and pinion system. Located beneath the table and gantry, the lead screw drive mechanism is well protected from flying debris. The Teflon®-coated lead screws are self-cleaning so chip build-up is virtually impossible, and it requires minimal maintenance and needs no lubrication.

The SABRE includes a **chip removal system** that helps keep the work area clean during routing by vacuuming chips into a shop-supplied vacuum. And its pressure foot also provides the necessary downward force to keep the cutting

tool's force from lifting the work piece. The system accommodates a 3 HP, 16-gallon vacuum or larger and includes a 2.5" diameter hose for connection to the vacuum. The chip removal system should be used when cutting plastic, foam, and wood and disconnected when pen plotting, scribing, or cutting metals such as aluminum or brass. When cutting metals, the **mist coolant option** is recommended—it applies a fine lubricant to the cutting tool, keeping the tool smooth and cool. This option requires .5 CFM at 100–120 psi of compressed air.

The **material hold down system** facilitates the material cutting process. When the material is securely held to the router, shops improve cut quality, expand cutter life, and increase feed rates. There are several methods of holding down material including clamps, T-VAC, tape, adhesive, or any combination of the those methods. The T-VAC employs zoned slats with vacuum holes to hold a variety of materials and sizes and control knobs to manage the suction areas. The control knob feature allows operators to shut off specific router sections, which provides greater suction on the designated work area.

GERBER SABRE

TECHNICAL INFORMATION



SPECIFICATIONS

	SABRE 404	SABRE 408
ACTIVE CUTTING AREA	53.5" x 54" (1350 mm x 1370 mm)	53.5" x 101" (1350 mm x 2565 mm)
OVERALL SIZE	69" x 75" (1750 mm x 1900 mm)	69" x 123" (1750 mm x 3120 mm)
WEIGHT	1,245 lbs (564.7 kg)	1,575 lbs (714.4 kg)
MAX MATERIAL THICKNESS	4.4" (110 mm)	4.4" (110 mm)
MAX MATERIAL WIDTH	59" (1500 mm)	59" (1500 mm)
Z AXIS TRAVEL	7.5" (190 mm)	7.5" (190 mm)
X, Y FEED RATE	600 ipm (250 mm/sec)	600 ipm (250 mm/sec)
Z FEED RATE	300 ipm (125 mm/sec)	300 ipm (125 mm/sec)
MAX POSITIONING RATE	1400 ipm (593 mm/sec)	1300 ipm (550 mm/sec)
REPEATABILITY ACCURACY	0.000078" (0.0019 mm)	0.000078" (0.0019 mm)
DRIVE SYSTEM	Patented anti-backlash lead screw	Patented anti-backlash lead screw
CONTROLLER	32-bit servo	32-bit servo
CERTIFICATIONS	CE, ETL	CE, ETL

OPTIONS

Motors: 7 HP high frequency spindle, 3 1/4 HP Porter Cable, or engraver
Mist coolant
T-VAC
Engraver
Engraver vacuum
Automatic tool changer w/10 HP spindle

02/05 Specifications are subject to change without notification.
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