

METALMASTER PLUS

Precision Cutting System

High Productivity

Excellent Cut Quality and Accuracy

Advanced Unitized Construction



MESSER 
MG Systems &
Welding, Inc.

MG Systems - Your Productivity Process People®

METALMASTER PLUS

Provides Your Key

To the Highest Productivity

The MetalMaster Plus is a unitized table and gantry cutting machine that utilizes the Conventional and Precision Plasma processes to produce excellent quality parts for the precision fabrication market. This machine is ideal for making parts for air handling equipment, ductwork, kitchen equipment, vessels and tanks, boats and leisure vehicles, appliances, and precision sheet metal applications.

Professional Grade CNC Control Makes Every Operator an Expert

MG Global Control incorporates many years of our worldwide knowledge in a very easy-to-use operator interface using Windows and PC-based CNC

- 15" TFT color touchscreen
- Embedded process database for plasma and oxyfuel
- Fiber-Optic I/O Bus Communication System
- Eight position joystick
- Handwheel/feedrate override
- Standard shapes, nesting, and networking
- Many more features also included



Operator Station



Back Cover Removed

Part Program loading with USB port, 3.5" disk drive, or network connection



(access door shown open)

Rigid Frame and Bearings: Smooth Motion and Dependability

- The MetalMaster Plus features an extruded aluminum beam and X-Axis ways support, providing high strength while reducing unnecessary weight
- The cross-braced beam is very rigid, providing more accurate cut parts and smooth motion
- Each carriage uses four-bearing way encapsulation with a wide spacing for stable support
- Unique system of gothic arch bearings on circular ways provides 8 contact points per carriage for smooth, precise motion
- Way and gear rack are connected via special grooves in the extrusion allowing future table extensions

Top and bottom bearing modules (one end of carriage)

X-Axis way support with gear rack installed



Shown with Slagger table option

Advanced Unitized Construction for Long-term Durability

- Mounted on a rugged, machined, modular steel base
- All ways are aligned at the factory to insure accuracy
- Side-draft exhaust cutting table is integral part of machine
- Utilizes a rigid engineered structure for high acceleration and accurate cutting, even during corner moves
- Unique endtruck attachment for smooth motion throughout travel length
- Covered powertrack to prevent cable damage

Multiple Processes for Maximum Versatility

- Conventional or precision plasma and marking or drilling can be implemented in a variety of combinations
- Precision plasma, in conjunction with smooth axes drive systems, creates fine part edge quality
- Marking with either air scribe or plasma marker
- Drilling for material up to 3/8" thick



Air Scribe Marker

Standard Feature Summary

- Tool Coverage 6' or 8' wide x 120" long, expandable in 60" length increments to 30 feet
- Contouring speeds from 0.1 ipm to 400 ipm, rapid traverse speed of 1200 ipm
- Machine motion accuracy: $\pm 0.002"$ accuracy in 72" x 72" area
- Covered powertrack hose-and-cable carrier in both axes to prevent cable damage
- High speed MG Systems programmable lifters at 880 ipm
- Unitized construction with zoned and ducted exhaust table
- Accepts conventional or Precision Plasma up to 260 Amps - two torches maximum per machine
- Marker or drill available (optional) - one system per machine
- Thickness - 26 Ga. to 1.25" (process dependent)
- Materials Processed - Mild Steel, Stainless Steel, Aluminum
- Designed and manufactured in the USA to machine tool standards
- Motion accuracy and repeatability ensured with a laser interferometer to ISO 230-2 Standard

High Performance Lifters Accommodate Varying Plate Conditions

- Plasma torch height is accurately maintained by the MG Systems PL-1 lifter
- PL-1 lifter travels at up to 880 in/min, reacting to height changes quickly enough to follow warped or curved plate
- Unique SureStop magnetic torch collision protection for maximum up-time



Plasma with PL-1 Lifter and SureStop

Slagger Collection Pit (optional)



Patented Slagger® Table Yields Maximum Productivity

- The unitized construction of the MetalMaster Plus can utilize a built-in Slagger® (optional)
- Slagger® self-cleaning, zoned and ducted table offers easy cleaning and small parts retrieval
- A built-in zoned and ducted table without self cleaning is included as a standard part of machine



Zone actuation for table

METALMASTER PLUS

OPTIONAL FEATURES

- Conventional plasma systems from 40-200AMP and Precision plasma from 15-260AMP
- Various marking techniques including plasma marker and air scribe
- Drill available for holes up to 3/8"
- Self-cleaning Slagger® zoned exhaust table
- MG Systems dust collector system
- Programming and nesting software
- Sentry Service preventive maintenance program

PLUS

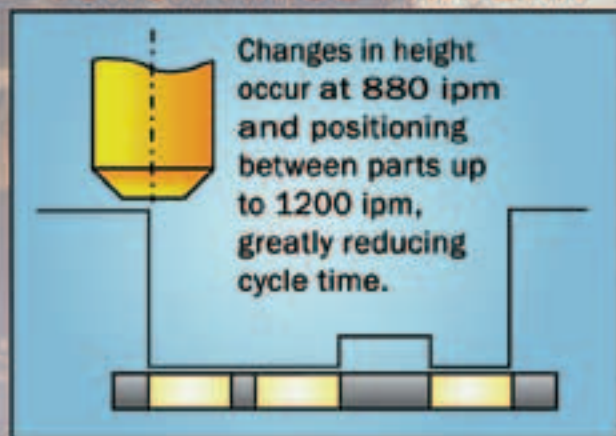
- Quick and easy installation using patent-pending alignment feature
- Virtual Service™ remote consultation and diagnostics included
- Fast and easy installation
- Single source responsibility
- Application support
- Designed and manufactured by experienced knowledgeable people that care



PRODUCTIVITY

- Torch lifters are fully controllable through the PC-based CNC control. Retract after each cut can be set to various heights - including no raise at all.

TORCH RAISE PATTERN



Programmable torch height with fast lifter speeds reduces cycle time.



ARC ON
TIME



POSITIONING
TIME

The Metalmaster PLUS means productivity.



METALMASTER PLUS (time in minutes)



Other plasma machine



This nest of parts was cut from a 4-foot square with a **21% productivity gain.**

MG Systems Commitment

EXPERIENCE

over 100 years of worldwide experience in the thermal cutting machine industry, combined with our customer-first philosophy, is the foundation for MG System's commitment to provide high-productivity solutions for your cutting needs. This commitment is shown in the precision cutting and durability of our machines. As a long-time AMT member, MG Systems builds machines to the exacting standards of the Machine Tool Industry.

FULL LINE OFFERINGS

Whatever your cutting needs, MG Systems has a complete product line of cutting systems with machine tool quality for thermal machining of metals.

QUALITY CERTIFICATION

Your assurance of MG System's commitment to superior craftsmanship.

WORLDWIDE SUPPORT

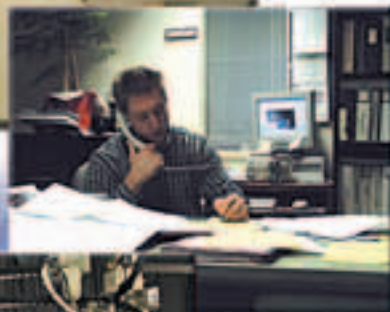
Technical support helps our customers get the most productivity from their cutting machines.

VIRTUAL SERVICE™

It's like having our service department at your side, allowing interactive data communication over an ethernet line.

SENTRY SERVICE

Our preventive maintenance program keeps all your MG Systems' machines running like new. Ensuring maximum up-time, greater efficiency, and lower operating costs.



Systems Approach to Productivity
Benefits for all Plate
Cutting Operations.

MESSER 
MG Systems & Welding, Inc.

W141 N9427 Fountain Blvd.
Menomonee Falls, WI 53051
Phone: 262-255-5520
Fax: 262-255-5170

website: www.mg-systems-welding.com
E-Mail: sales@messer-mg.com

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