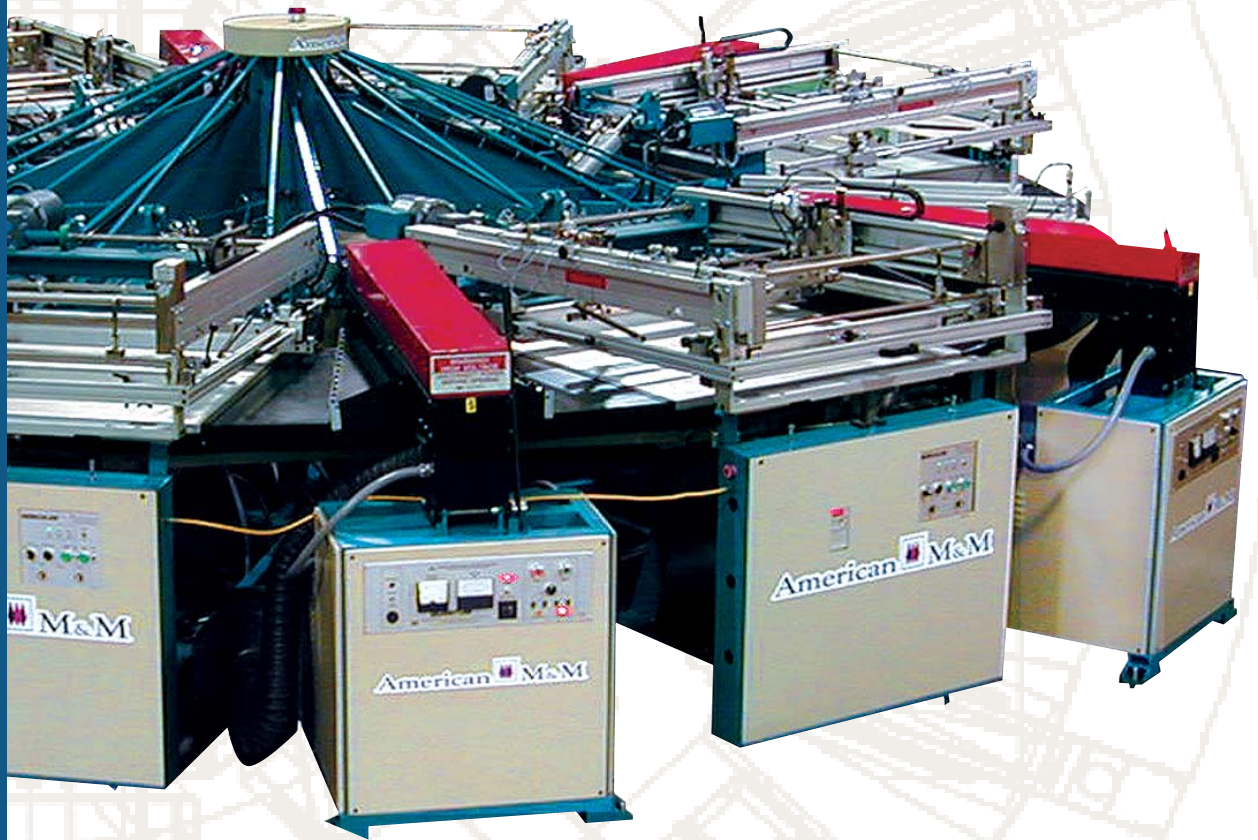# *HERCULES*™

Multicolor UV
Graphics Printing System

The Leader in Multicolor UV Technology for over 20 years

The Power to Compete…
at a Price You Can Afford!

American M&M
SCREEN PRINTING EQUIPMENT
A Division of The A.W.T. World Trade Group

The Hercules™ Multicolor UV Graphics Printing System

If you want to **grow your screen printing business** in today's competitive environment, your options are clear: automate production and implement multicolor printing. Now you can reap the benefits of the industry's most innovative and time-tested automated multicolor printing system—at a price you can afford—with the A.W.T./American M&M Hercules™ Multicolor UV Graphics Printing System.

Known worldwide for its extremely efficient design, the Hercules system allows you to **print and dry up to seven colors completely in sequence,** without inter-color substrate handling. UV curing units mounted between each print head provide a quick, cool cure even on the most heat-sensitive substrates. The low-heat curing greatly reduces shrinkage of stock, while vacuum beds virtually eliminate sheet movement. At the end of each cycle, the Hercules produces a premium-quality multi-colored piece—fully printed, cured and ready for packaging.

Made in America, the Hercules is the ideal system for multicolor printing on paper, cardboard, plastic, metal, or any other graphic surface currently being printed on by standard, single-color flatbeds. And it offers the **largest print size in the industry** (50 x 75˝ or 127 x 190cm), an option that compares favorably with in-line models at one-third the purchase cost!
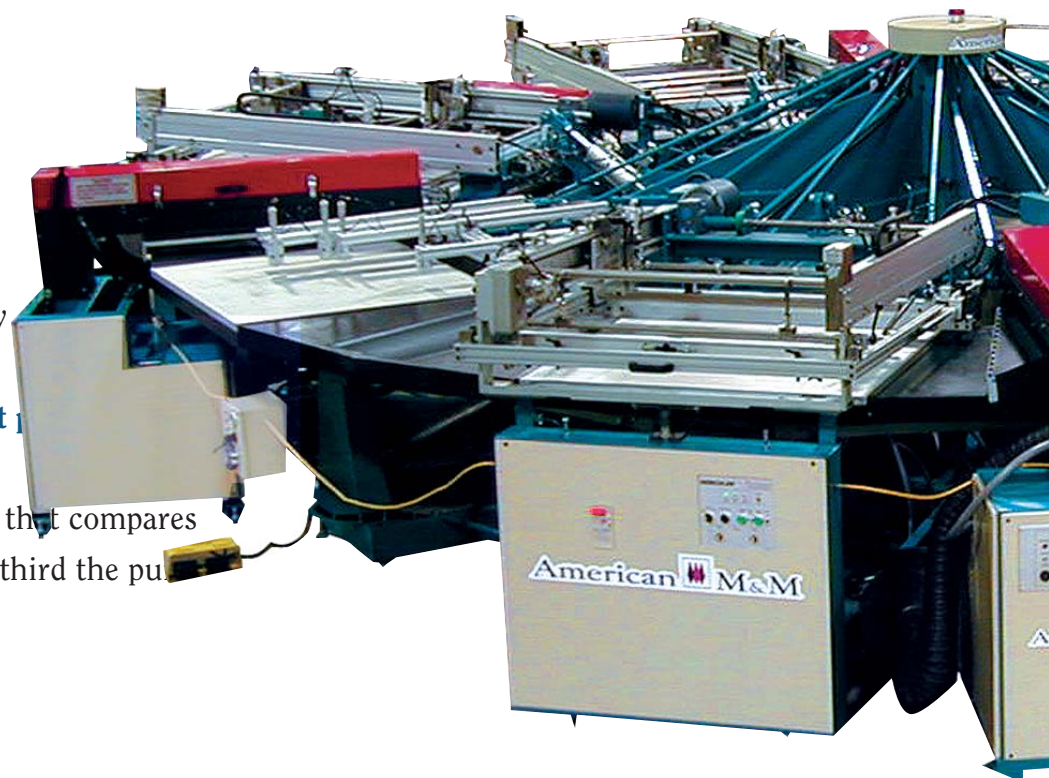
Proven Technology

When you shop for a major piece of equipment, you naturally look for machines with a proven track record. Developed more than 20 years ago, the Hercules was the first screen printing system to combine sequential multicolor printing with inter-station UV curing. Today, more than 100 units are in operation worldwide, and their operating history is characterized by exceptional results and long-term reliability. In addition, all Hercules models are backed by A.W.T.'s Remote Diagnostics service, which greatly reduces costs associated with downtime and repairs.

Higher Productivity

With its automated multicolor printing system, the Hercules significantly enhances productivity. Instead of running substrates through multiple cycles, the Hercules allows you to produce finished products in one cycle. In fact, with the Hercules, you can produce up to 600 pieces per hour—and with fewer employees! Consider these other advantages:

- Instant proofing—unlike a single-color printer, the Hercules allows you to proof a multicolor job after just one cycle
- Increase your productivity without increasing your staff—the very definition of smart growth in any economic climate
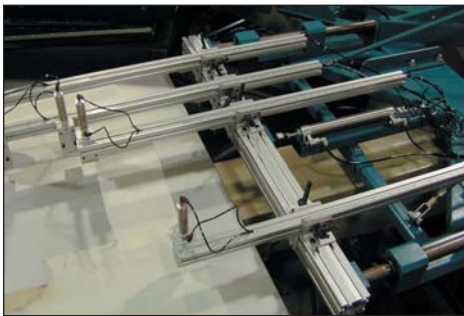
Standard Features

The Hercules is designed to provide smooth operation and excellent printing results with a minimum of maintenance and servicing. Outside-load print heads offer highly accessible micro-registration adjustments, while the air-powered registration fork maintains registration repeatability of +/-.002″. Unobstructed screen visibility makes it easy to check or correct screen position during setup and production. The brushless vacuum motor—an industry-first when introduced 10 years ago—continues to set the standard for quiet, maintenance-free operation. Following are some of the other standard features that make Hercules the ideal choice for high-volume multicolor graphics printing.
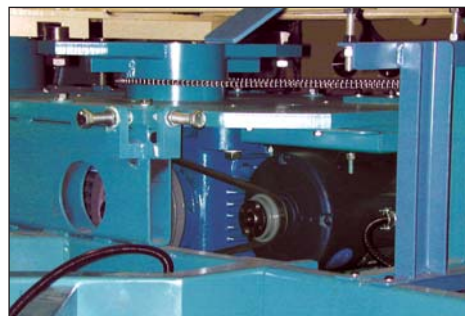

Main Control Console
The extensive control console combines interactive screens with user-friendly controls.

Registration System
Four-point registration allows for either left- or right-hand guiding and facilitates two-sided printing. In-table guides are available as an option.
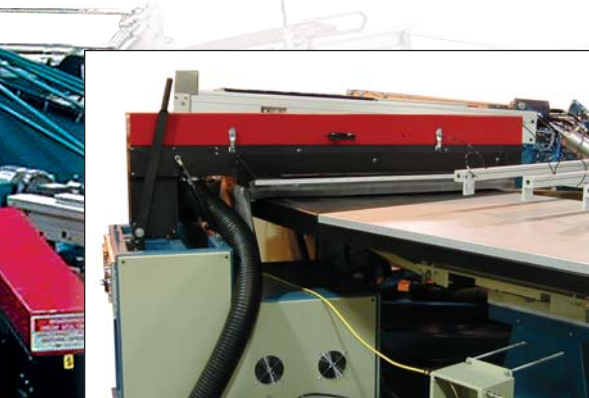

Electro-mechanical Indexer Drive
Provides for smooth, station-to-station indexing on every cycle. Durable design ensures low maintenance for extended production.

Squeegelizer™
The patented air-controlled squeegee system automatically maintains uniform print pressure across the entire squeegee length and throughout the print stroke.

Quantum UV Curing Modules
A Quantum module is mounted between each print head to eliminate inter-color handling of stock. Each module is equipped with A.W.T.'s exclusive Inteli-Guard™ system, designed to switch to standby mode (150 W) during each print stroke to reduce energy consumption and heat build-up. **To deliver superior curing, all Hercules models come equipped with a new standard feature—double 400 W lamps in the final station!** In the largest Hercules model (50 x 75″), double lamps are standard after EACH print station.

Exclusive Off-Contact Peel
A.W.T.'s exclusive Off-Contact Peel System, with up-front, easy-to-access controls, provides the proper reverse peel rate when adjusting screen size, making setup quicker.
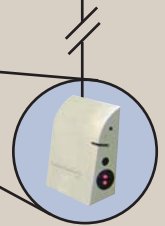
The A.W.T. Advantage: Remote Diagnostics!

Standard with every Hercules press is the Remote Diagnostic System, a unique feature that delivers instant service to any location in the world. Remote Diagnostics employs a simple phone-modem connection to provide a direct link between the Hercules' on-board microprocessor and the central A.W.T. diagnostics computer. The benefits of this technical-support system are numerous:

- Reduces downtime by up to 80%
- Minimizes need for expensive on-site service calls
- Allows for remote downloading of optional software upgrades
- Offers operator-friendly instruction
- Does not require a local PC hookup at customer plant
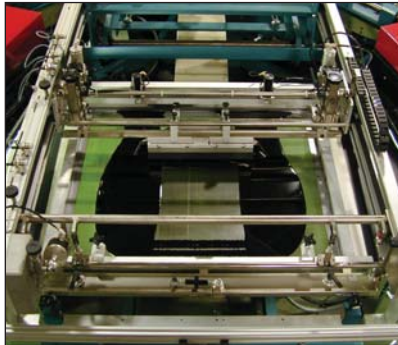
Your Hercules

Phone Modem

Mechanical Features

- Eight stations; up to seven colors
- Lengthwise sheet loading, left to right
- Aircraft-quality aluminum print bed
- Open flip station for two-sided printing
- Unobstructed screen visibility
- Brushless maintenance-free Quiet Vacuum
- Central exhaust system removes emissions and excess heat

Print Head Features

- Easy-drop master frame for firm screen support
- Swing-away front screen clamp for easy screen loading
- Micro-registration screen frame clamps
- Up-front off-contact mechanical peel system
- High-lift head for easier screen maintenance and cleaning
- Variable speed control for print and flood stroke
- Advanced ink recovery system
- Positive lock-in print head

Master Control Features

- Microprocessor controls
- Load-in/load-out sequence
- Skip print sequence
- Sample print
- Touch screen display
- Ascending and descending counters
- Downtime management
- On-screen diagnostics
- Production rate data in pieces/hour
- Time-to-complete-job data

Downtime Management Interactive Screen

UV Curing Unit Features

- Inteli-Guard™ system for reduction in energy consumption and heat build-up
- Controlled cooling via variable-speed blower
- Easy lamp maintenance without loss of settings
- Adjustable lamp height

Options

- A/C Cooling module
- Sheet registration system
- Automatic take-off system
- Blowback system
- Heads and UV setup for 7th position
- Servo-Drive indexer
- No flood-ink scoop
- Dripless squeegee system
- Spare parts package
- Other voltages available
- UV lamp upgrade (double lamps at all stations)

Specifications

Hercules Multicolor Press

Print Area	25 x 38˝ 63.5 x 96.5 cm	30 x 40˝ 76.2 x 101.6 cm	38 x 50˝ 96.5 x 127 cm	50 x 75˝ 127 x 190.5 cm
Maximum Frame Size	43 x 49˝	50 x 52˝	60 x 67˝	72x 91˝
Print Speed—IPH	600	450	350	350
Electrical	240 V, 3 Ph, 60 Hz	480 V, 3 Ph, 60 Hz	480 V, 3 Ph, 60 Hz	480 V, 3 Ph, 60 Hz
Amperage—Indexer	40 A	25 A	25 A	25 A
Amperage—Each Head	5 A	5 A	5 A	5 A
Quantum UV Curing Modules				
Length of Lamp	32˝	36˝	44˝	60˝
Amperage (per unit)	65 A	40 A	50 A	70 A
Output Level	150 W to 400 W	150 W to 400 W	150 W to 400 W	150 W to 400 W
Standby Between Cycles (each lamp)	150 W	150 W	150 W	150 W

Our policy is one of continuous improvement, and we therefore reserve the right to change specifications without prior notice.

Stay ahead of the competition with trusted, proven technology!

Flexible Operation

The Hercules' flexible design offers you a number of options for maximizing the efficiency and productivity of your print run. Depending on the number of colors involved, the Hercules allows you to:

- Print both sides of a two-sided job simultaneously
- Double up on the same job to shorten turnaround
- Print two or more different jobs at the same time

Increased Profit Margins

A Hercules makes great financial sense. The high efficiency of the Hercules multicolor printing system means you can greatly increase your production without adding staff or increasing overtime. The unit's rugged design—supported by Remote Diagnostics—reduces downtime, further enhancing profitability.

Competitive Advantage

The Hercules gives you a powerful competitive advantage by drastically reducing turnaround time, allowing you to deliver finished products to your customers more quickly. Plus, the Hercules gives you the ability to ship finished pieces on a continuous basis, beginning with the first day of production—a major advantage when bidding on large print jobs. It all adds up to responsive service that wins customers and promotes repeat business.

Minimal Space Requirements

Although the Hercules can greatly expand your printing capabilities, it does not require an expansion of your facilities. Due to its configuration, the Hercules requires minimal floor space. In fact, because the Hercules can take the place of several single-color machines, you can actually free up floor space for other uses.

Contact Us!

More and more customers are demanding the quick turnaround and high-quality finish you can only achieve with automated, multicolor printing systems. Are you equipped to meet these requirements? Many of your competitors are, or soon will be.
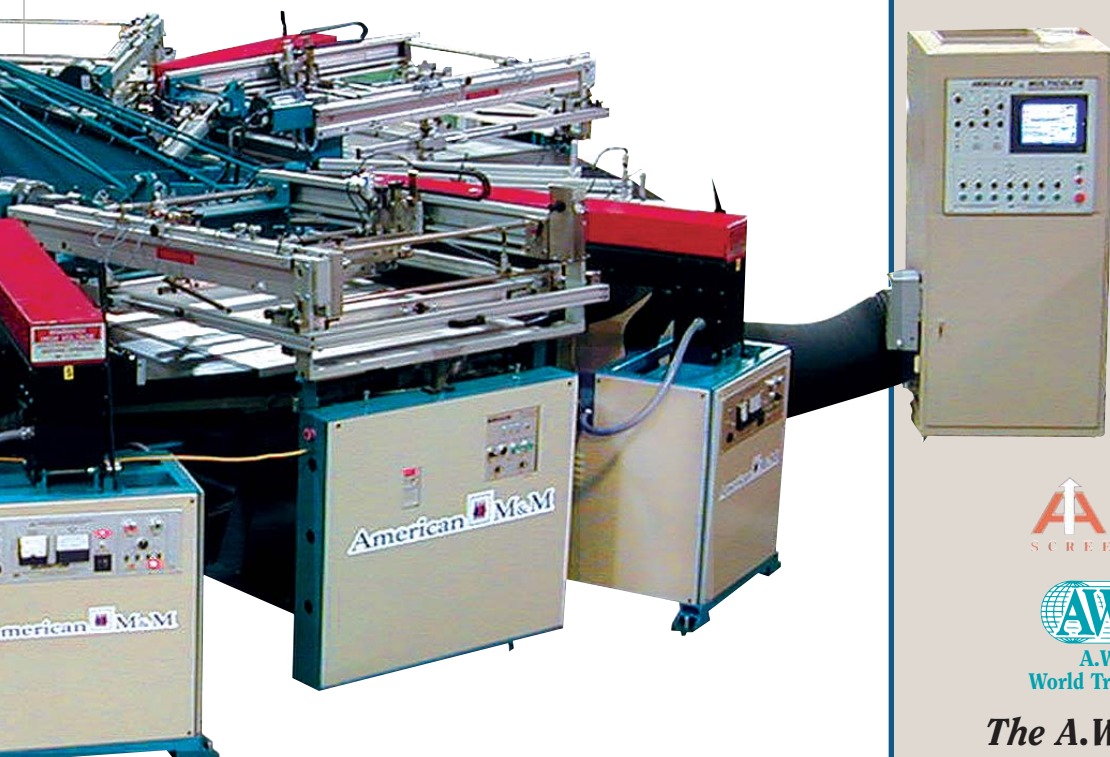
Talk to us about how Hercules can give your company the edge it needs to win business and build customer loyalty in today's competitive marketplace. Our sales specialist can recommend a Hercules configuration that best meets your needs. And if you need financing, we can help with that, too. Contact our sales department today to learn how you can compete more effectively with the power of the Hercules.

Phone us at: 773-777-7100

Fax us at: 773-777-0909

E-mail us at: sales@ screenprintmachinery.com

Go to: www.screenprintmachinery.com

American M&M
SCREEN PRINTING EQUIPMENT

AWT
A.W.T. World Trade, Inc.

GRAPHIC PARTS INTERNATIONAL, INC.
GRAPHIC PARTS INTERNATIONAL, INC.

The A.W.T. World Trade Group

The A.W.T. World Trade Group

Combining knowledge, expertise, creativity, outstanding engineering, quality and value to provide the finest equipment, parts, supplies, remanufacturing services and technical support to the screen printing industry

The A.W.T. World Trade Group was formed in 2002 when A.W.T. World Trade, Inc., and Graphic Parts International, Inc., purchased the American M&M screen printing equipment and parts divisions.

With decades of experience in both setting up and serving textile and graphics print shops, the A.W.T. World Trade Group is a screen printer's **complete** manufacturing source for equipment, supplies, parts and remanufactured products.

Experience has shown that when printers use one manufacturing source, they reduce compatibility problems between equipment lines and supplies. The A.W.T. World Trade Group designs and develops **complete** systems to work efficiently and economically together - reducing printing problems, production costs, and downtime.

A.W.T. WORLD TRADE, INC.

A.W.T. is your complete manufacturing source for screen printing equipment, supplies, parts and rebuilt equipment. The company's industry-leading Remote Diagnostics feature allows printers to connect directly with A.W.T.'s service department, saving printers costly downtime.

www.awt-gpi.com

GRAPHIC PARTS INTERNATIONAL, INC. (G.P.I.)

G.P.I. is the screen printing industry's premier source for replacement parts, remanufacturing services and technical support. G.P.I. offers replacement parts for all foreign and domestic screen printing equipment.
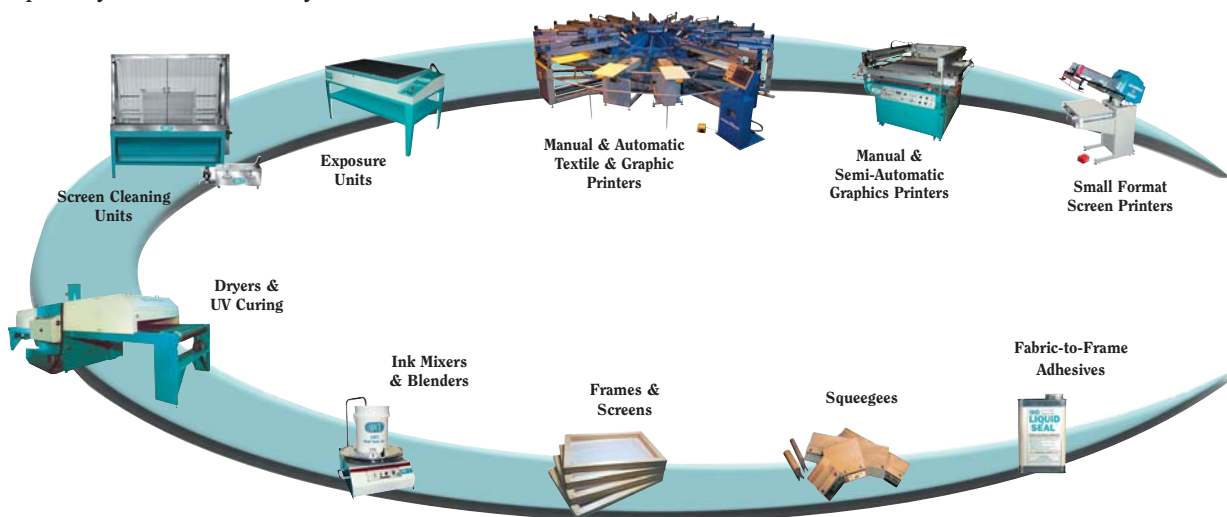
www.gpiparts.com

AMERICAN M&M

American, a recent acquisition of A.W.T. World Trade, Inc., is home to such well-known and respected screen printing equipment as the Cameo, Daytona, Hercules and Centurian, among others.

www.screenprintmachinery.com

The A.W.T. World Trade Group's technical sales staff will help you choose the right system for your company's needs. Their industry experts in both service and technical support will help you through the installation and set-up process quickly and confidently.

Screen Cleaning Units

Exposure Units

Manual & Automatic Textile & Graphic Printers

Manual & Semi-Automatic Graphics Printers

Small Format Screen Printers

Dryers & UV Curing

Ink Mixers & Blenders

Frames & Screens

Squeegees

Fabric-to-Frame Adhesives

Manufactured by

A.W.T. World Trade, Inc.
A Division of The A.W.T. World Trade Group

773.777.7100 • Fax: 773.777.0909

4321 N. Knox Avenue • Chicago, IL 60641 USA

sales@awt-gpi.com • www.awt-gpi.com