INTRODUCTION

Thank you for purchasing your MPM screen printer.

This document contains information to answer all the frequently asked questions in relation to the installation of a MPM screen printer.

Section 1 - Important Installation Requirements

Section 2 - Machine Footprint

Section 3 - Training

If you have any further questions, please don't hesitate to contract your local MPM Customer Support Group.

| US/Canada | |
|---------------------|--------------------------------------|
| mtsc@itweae.com | 800-737-8110, option 1 |
| | 508-520-0083, Option 3 then Option 1 |
| Mexico | |
| msupport@itweae.com | 01-800-718-1614 |
| | (From US) 1-800-639-9574 |
| | (Direct) +52 (33) 33-65-6511 |
| EUROPE | |
| mtsc@itweae.com | +1 508-520-0083 (US), |
| | Option 3 then Option 1 |
| ASIA | |
| tsc.ap@itweae.com | +65 9674 7646 |

Thank you for your cooperation, may I take the opportunity of wishing you many years of quality production with your new MPM screen printer.

Sincerely,

Pat O'Brien Vice President/General Manager



Are you ready for Installation?

| Item | | Confirm |
|--|---------|---------|
| Pallet Jack/Fork Lift (Capable of lifting 3000 lbs (1360.7 kg) | | Yes No |
| Main Supply Machine configured for 200-240V | Voltage | Yes No |
| Pneumatic Supply 100 psi @ 4cfm run mode or 18cfm Vacuum Wipe (7 bar @ 5L/s to 12L/s) | Bar | Yes No |
| Print Medium (Solder Paste) | | Yes No |
| Test Product (Stencil & Boards) | | Yes No |
| Squeegees | | Yes No |

^{*}If you have any further questions, please don't hesitate to contract your local MPM Customer Support Group.

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ITW EAE

Important Installation Requirements

It is critical both your facility and your employees are ready for the ITW EAE field service engineer's visit to install your new machine. Please review the list below and let us know if you have any questions. Failure in preparation may incur delays in the installation.

Utility and Environmental Requirements

Electrical Supply

- Electrical Power 200 240VAC (± 10%) @ 50/60 Hz 15A,
- Single Phase

The machine is <u>not</u> supplied with an electrical plug. Please ensure one is made available when the machine is scheduled for installation.

Pneumatic Supply available at machines installation position.

- Air Supply 100 psi @ 4 cfm (run mode) to 18 cfm (vacuum wipe) (7 bar @ 5L/s to 12L/s)
- 12.7 mm (0.5") Outer diameter, minimum of 9.5mm (3/8") Inside diameter
- Machine is supplied with fitting that will accept .5" line

Other:

Weight:

Momentum, Momentum+ and Momentum HiE

Crated (Domestic) - 2249 lbs. (1020 kg) Crated (International) - 2509 lbs. (1138 kg) Uncrated - 1900 lbs. (862 kg)

Momentum Elite

Crated (Domestic) - 2315 lbs. (1050 kg) Crated (International) - 2579 lbs. (1170 kg) Uncrated - 1982 lbs. (899 kg)

MPM125

Crated - 2543 lbs. (1153.5 kg) Uncrated - 1800 lbs. (816 kg)

Momentum BTB, Momentum BTB 125 and MPM100

Crated - 2399 lbs. (1090.5 kg) Uncrated - 1757 lbs. (797 kg)

Momentum II HiE

Crated - 2547 lbs. (1155.5 kg) Uncrated - 1900 lbs. (862 kg)

Momentum II Elite

Crated - 2629 lbs. (1192.5 kg) Uncrated - 1982 lbs. (899 kg)

Momentum II BTB, Momentum II BTB HiE

Crated - 2404 lbs. (1090.5 kg)



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Height:

Momentum, Momentum+, Momentum Hi E, and MPM125

Crated - 83" (2159 mm)

Uncrated - 64.5" (1638.4mm) at 37.0" (940 mm) transport height

Momentum Elite

Crated - 80" (2032 mm)

Uncrated - 64.5" (1638.4mm) at 37.0" (940 mm) transport height

Momentum BTB, Momentum BTB 125 and MPM100

Crated - 83" (2159 mm)

Uncrated - 62.57" (1589.4mm) at 37.0" (940 mm) transport height

Momentum II HiE, Momentum II Elite

Crated - 83" (2159 mm)

Uncrated - 60" (1526mm) at 37.0" (940 mm) transport height

Momentum II BTB, Momentum II BTB HiE

Crated - 83" (2159 mm)

Uncrated - 78.6" (1997mm) at 37.0" (940 mm) transport height

Depth:

Momentum, Momentum+, Momentum HiE, and MPM125

Crated - 85" (2159 mm)

Uncrated - 62.72" (1593.1 mm)

Momentum Elite

Crated - 84" (2133.6 mm)

Uncrated - 62.72" (2159 mm)

Momentum BTB, Momentum BTB 125 and MPM100

Crated - 85" (2159 mm)

Uncrated - 54.88" (1394 mm)

Momentum II HiE, Momentum II Elite

Crated - 85" (2159 mm)

Uncrated - 62.7" (1592 mm)

Momentum II BTB, Momentum II BTB HiE

Crated - 85" (2159 mm)

Uncrated - 56.04" (1423.5mm)

Width:

Momentum, Momentum+, Momentum HiE

Crated - 56" (1422.4 mm)

Uncrated - 47.35" (1202.7 mm)

Momentum Elite

Crated - 69" (1752.6")

Uncrated - 65.96" (1675.5 mm)

MPM125

Crated - 56" (1422.4 mm)

Uncrated - 47.79" (1214.0 mm)

Momentum BTB, Momentum BTB 125 and MPM100

Crated - 56" (1422.4 mm)

Uncrated - 47.06" (1195.4 mm)



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Momentum II HiE

Crated - 56" (1422.4 mm) Uncrated - 47.4" (1203 mm)

Momentum II Elite

Crated - 69" (1752.6") Uncrated - 66" (1675.5 mm)

Momentum II BTB, Momentum II BTB HiE

Crated - 56" (1422.4 mm) Uncrated - 47.08" (1195.4mm)

Front and Rear Clearance (Minimum)

Momentum, Momentum+, Momentum Elite, Momentum HiE, Momentum II HiE, Momentum II Elite, Momentum BTB, Momentum II BTB, Momentum II BTB HiE, Momentum BTB 125 MPM125 and MPM100 20" (508 mm)

Ground Clearance

Momentum, Momentum+, Momentum Elite, Momentum HiE, Momentum II HiE, Momentum II Elite, Momentum BTB, Momentum II BTB, Momentum II BTB HiE, Momentum BTB 125 MPM125 and MPM100

Adjustable from 6.0" (152.4 mm) to 7.0" (177.8 mm) to achieve corresponding to SMEMA transport conveyor height, however the machine height is adjustable down to 5.0" for installations in deviation of SMEMA standards.

Dimensions and Floor Space Requirements

Install the Momentum in a clean, dust-free environment to ensure proper operation. The installation area should provide a clearance of 2 ft. (0.06 m) in the back of the machine to provide adequate space for service. Clearance in the front of the machine should have at least 3 ft. (0.91 m)

Uncrating

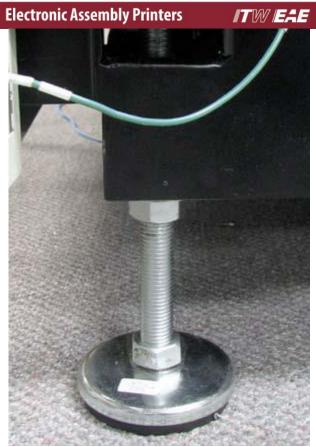
Install forklift blades under the printer base. Confirm that the forklift blades do not pinch any pneumatic or electrical lines and that they fully extend across the printer base.



ATTENTION

- ITW EAE recommends extended forks of 5 ft to 6 ft (152.4 cm x 182.8 cm) in length to ensure proper weight distribution when lifting the platform from the skid.
- Make certain that the forks have a total width/span of 5 ft (150 cm).
- Place the forks approximately one foot from the front legs (because the center of gravity is towards the front of the printer).
- The forklift must be capable of lifting 3000 lbs. (1360.7 kg).



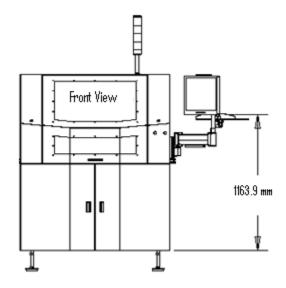


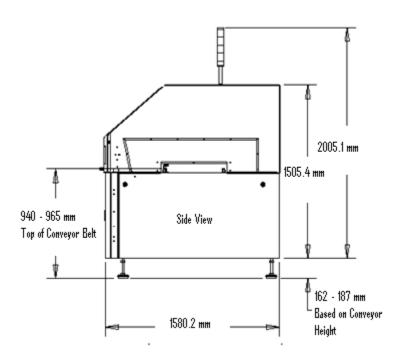
Installing Feet

Printer feet are installed as each shipping isolator is removed from the bottom of the printer. The feet are installed in the same location as the shipping isolator bolts. When assembling the feet to the Momentum, the orientation of the level mount is such that the washer is on top (against the machine base), and the two hex nuts are below the washer. NOTE: For shipping purposes the washer is placed between the bottom of the foot and the hex nut, however when the machine is installed the washer needs to be placed between the bottom of the machine and the top of the hex nut.



Momentum Series Machine Footprint (Momentum, Momentum+ and Momentum HiE)

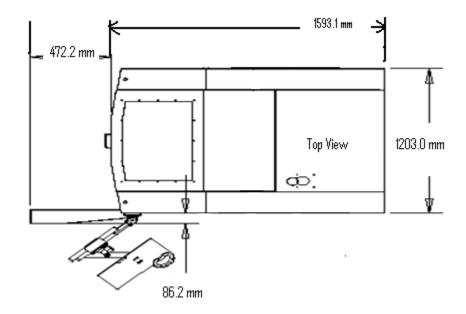






ITW EAE

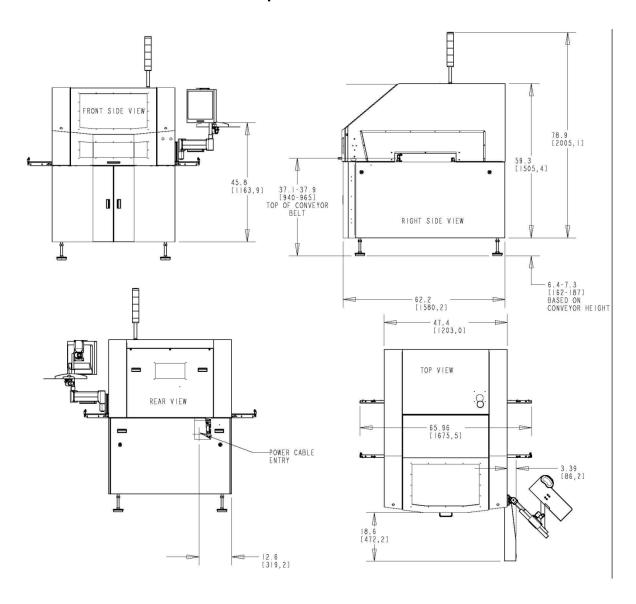
Momentum Series Machine Footprint – continued (Momentum, Momentum+ and Momentum HiE)





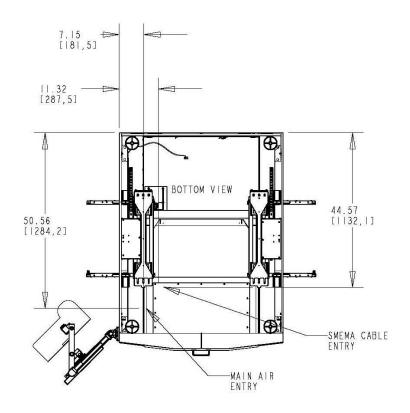


Momentum Elite Machine Footprint





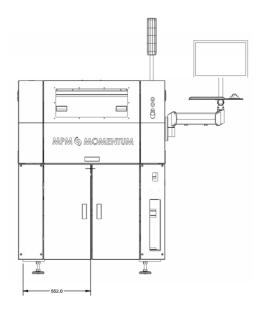
Momentum Elite Machine Footprint- continued

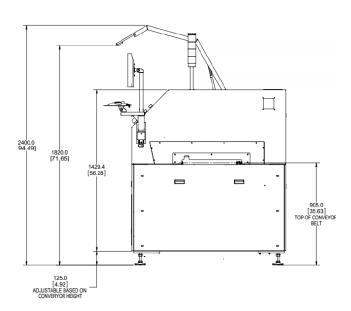


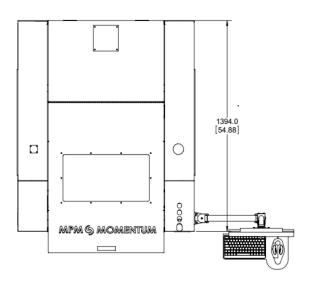


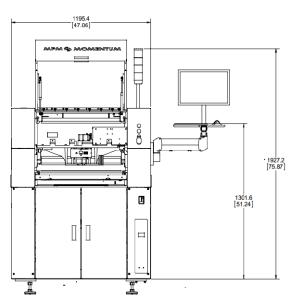
ITW EAE

Momentum BTB Footprint





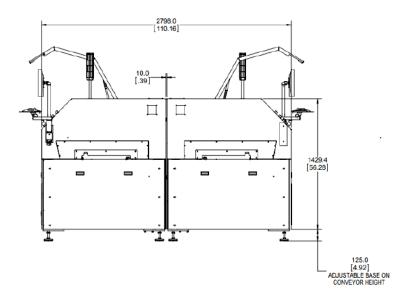






ITW EAE

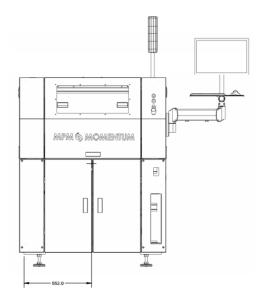
Momentum BTB Footprint continued

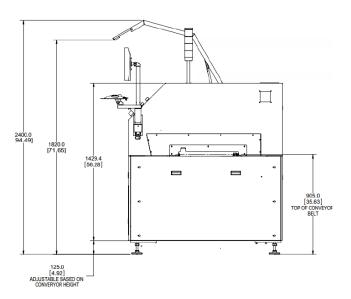


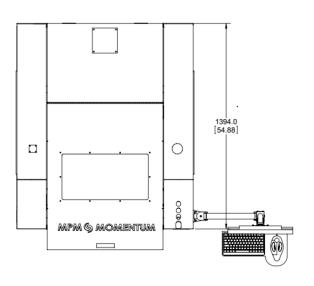


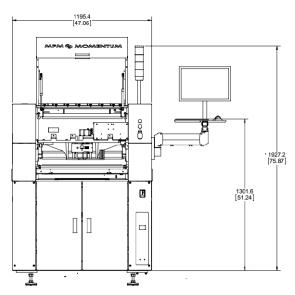
ITW EAE

Momentum BTB 125





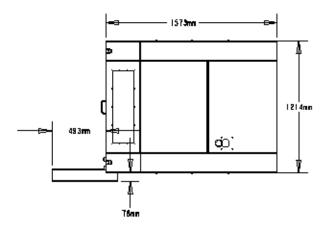


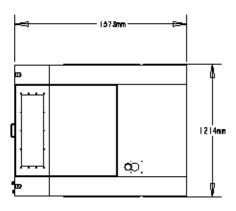


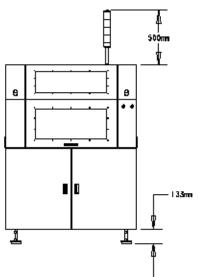


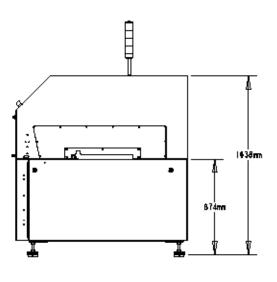
ITW EAE

MPM125 Footprint





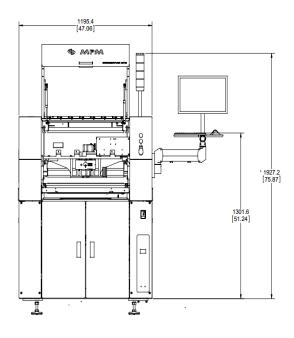


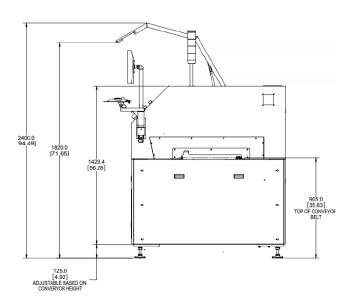


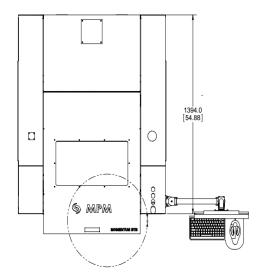


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MPM100 Footprint

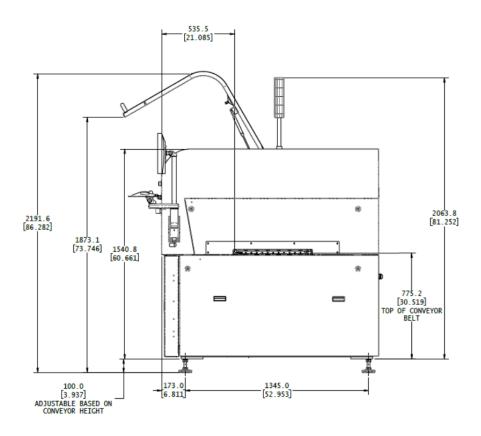




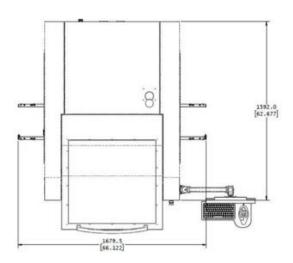




Momentum II HiE Machine Footprint



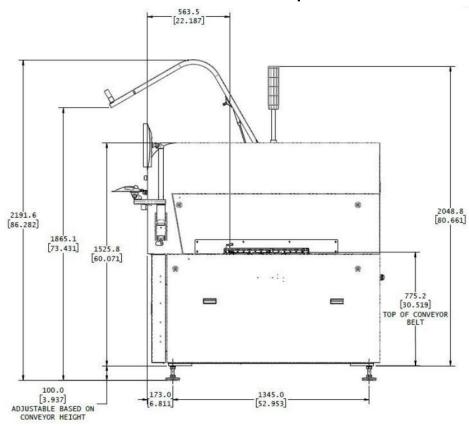
Momentum II Elite Machine Footprint





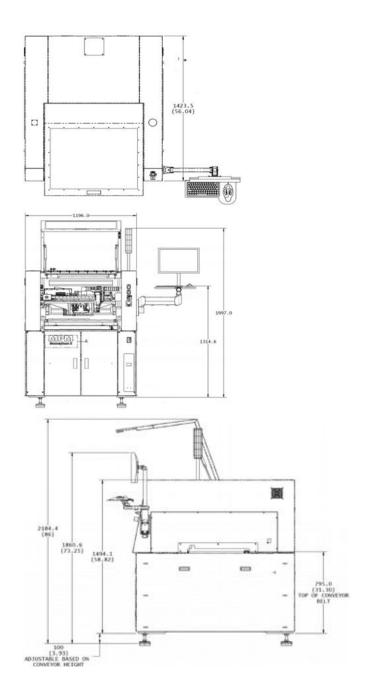


Momentum II Elite Machine Footprint



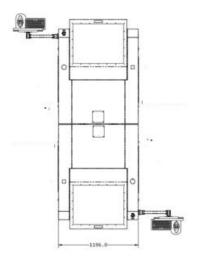


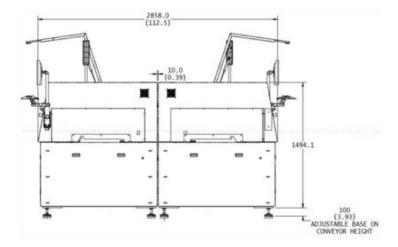
Momentum II BTB, Momentum II BTB HiE Footprint





Momentum II BTB, Momentum II BTB HiE Footprint – Continued







TRAINING AT INSTALLATION

As part of the Installation process, ITW EAE offers a complimentary "up and running" training program. This covers the basic operation, maintenance and programming of the printer and associated options.

- · Paste, stencil and boards are required for test printing
- Required floor space needed for the machine
- Availability of upstream and downstream conveyors

Training Summary

Customer Start-Up Assistance Training

- The FSE (field service engineer) will provide maximum of eight hours of training for up to four process engineers*
 - o If possible, use several different combinations of boards and stencils
- The FSE will provide a maximum of four hours of training for up to four operators*
- The FSE will provide a maximum of eight hours of training for up to four maintenance technicians*
- Verification alignment accuracy of the board and stencil
- The FSE will then demonstrate that the system performs to specification using the customer's production materials

*NOTE: The customer's personnel are expected to devote the entire time to the training program. Hours not devoted by the customer may not be "banked" for later use.

Additional Training

A full range of training courses are available covering operation, maintenance and process. Courses are conducted at our ITW EAE headquarters in Hopkinton, MA.

For further information, including course descriptions and schedule please contact the Training Department or visit http://www.itweae.com/services-and-support/americas