

DP-VDM

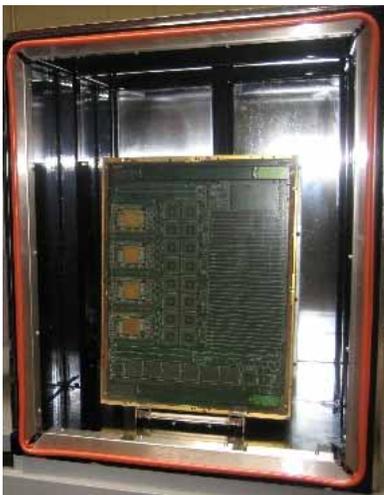
VACUUM DEGASSING

Taiyo Circuit Automation's **DP-VDM** V1.2 vacuum system enhances and improves the Liquid photoimageable soldermask coating quality and performance. The compact **DP-VDM** unit incorporates a powerful vacuum degassing unit designed to remove entrapped air and solvent from LPI soldermask or other via plug material on printed circuit boards. By reducing the solvent and the entrapped air, micro bubbles are virtually eliminated. Proven especially effective on heavy copper panels with excessively tall trace heights and thick plating. The degassing process eliminates hole blowout and the need for step cure at final bake from vias. Tack dry and final bake times potentially may be reduced and the surface quality on the coating improved keeping photo tools cleaner.



DP-VDM Model V1.2

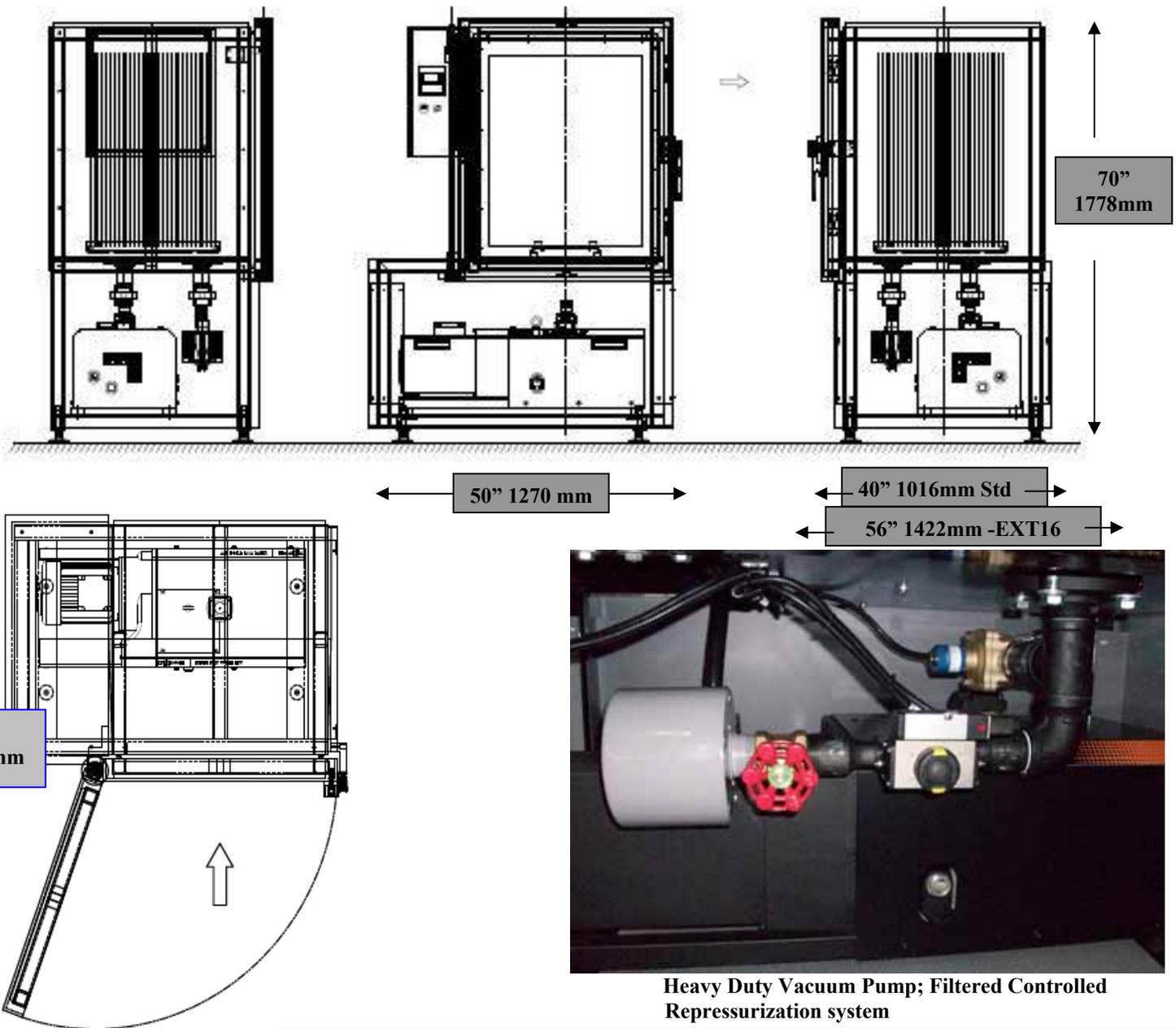
Incorporating a PLC and HMI controls, the system will automatically degas and debubble coatings by removing entrapped air bubbles; a must for soldermask plugged via holes. The machine is designed to hold a selectable vacuum level down to 26 in. Hg for a time up to 99 minutes. The unit is compact and self-contained, designed as a stand-alone unit to degas one rack of panels, up to 25 per rack, for the prescribed time. Now available **OPTION - DP-VDM-EXT16** expands capacity to 30" X 42" (762 x 1069mm).



The DP-VDM machine includes a 3.0 hp dry claw type vacuum pump enabling the unit to quickly evacuate the air from the rack of panels in as low as one minute at a selectable vacuum level down to 26 inHg. The system will hold the set point vacuum for a cycle time with several repressurization schemes selectable. Normally a complete cycle will be accomplished in under 10 minutes.

Degassing filled holes reduces the need for step cure at final bake. Degassed holes will not experience "blow out" where the filled hole material explodes due the rise in temperature causing defects and rejects. Step curing at final bake has been used to combat this problem, but adds cycle time and equipment modifications. A 5-10-minute vacuum process will provide the same effect.

DP-VDM DEGASSING EQUIPMENT



Heavy Duty Vacuum Pump; Filtered Controlled Repressurization system

- **Powerful**
- **Sturdy**
- **Compact**
- **Elegant**
- **Flexible**

Electrical Required:
 Pneumatic Required:
 Exhaust Required
 Maximum Panel Size
 Maximum Rack Size
 DP-VDM-EXT16
 Optimum Rack
 Machine Size

DP-VDM Model 1.2

380-480 V 50/60 Hz @ 15 AMP
 3cfm @ 100 psi
 50 cfm
 24" W X 30" H (610 X 762mm) *Standard model
 21" L X 10" W (533 X 305mm) * Standard model
 Expanded capacity to 30" X 42" (762 X 1069 mm)
 CAI "Standard Rack" 6-3169
 70" H X 50" W X 40" D (1778 x 1270 x 1016mm)

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Specifications subject to change