

Vacmobile E1 series

8 or 20 m³/h pump
0.6 litre resin trap
Standard paper cup
catchpot

Vacmobile E1 – mini-trap series, using standard paper drinking cups for catchpots

The Vacmobile E1 series is based on a compacted down form of the resin trap from our well proven 20/2 machine. The compact trap uses a standard paper drinking cup as the replaceable resin catchpot. The paper cups supplied with the machine have a resin catching capacity of 600 ml (20 fluid ounces), with similar size cups being available in most countries.

The primary uses of the E1 series are the manufacture of small laminates using resin infusion or moderate sized laminates made by vacuum bagging over wet laminate or pre-preg. The maximum laminate size that can be infused by an E1 series machine very much depends on the experience of the laminator, especially familiarity with the use of wide peel ply resin breaks around the perimeter of the laminate. (For further information on wide peel ply resin breaks, please see our website note “Peel ply resin breaks” (http://www.vacmobiles.com/peel_ply_resin_breaks.html)).

As supplied from the factory, an E1 series system is not mobile, but it can easily be added to a customer supplied mobile cart if bench top mounting is not appropriate.

E1 system (shown with 20 m³/h pump)



Trap lid options

Steel lid for vacuum bagging



Glass lid for infusion



Vacmobile E1 series

Specifications

Vacuum pump	1 of the following single phase powered continuous duty oil sealed vacuum pumps:
230 V + 5%	Agilent EM 8/B. 50 Hz capacity 8.5 m ³ /h (5 cfm). Note that the main benefit of this pump is the low noise level of 58 dB(A) compared with about 66 dB(A) for the 20 m ³ /h capacity pump. VSV-20. 50 Hz capacity 20 m ³ /h (11.8 cfm). 60 Hz capacity 24 m ³ /h (14.1 cfm)
115 V + 5%	VSV-20. 60 Hz capacity 24 m ³ /h (14.1 cfm)
Vacuum level	Adjustable from 20% vacuum (800 mbar absolute) to the pump's maximum vacuum:
EM8/B pump	20 mbar, 2000 Pa, 15 Torr, 98% vacuum*, 29.3" Hg*, -99.3 kPa*, -14.4 psig*
VSV-20 pump	0.5 mbar, 50 Pa, 0.38 Torr, 99.95% vacuum*, 29.9" Hg*, -101.25 kPa*, -14.68 psig* VSV-20 pump fitted with EVA valve as standard. Refer to Modular 2S information sheet. * Please note that "gauge" vacuums are weather and altitude dependent.
Resin catchpot	Disposable paper drinking cup of 600 ml (20 fluid ounces) capacity. 10 spare cups are supplied with the machine. Similar capacity cups will be available in most countries.
Trap lid options	Two trap lid options are available (see illustrations on page 1). The pressed steel lid does not allow the trap contents to be viewed while under vacuum. This lid should be reserved for vacuum bagging over dry laminates or very small infusions. The toughened glass lid option allows the catchpot contents to be inspected at any time. For ease of cleaning, the glass is protected on both sides by disposable transparent PVC shields.
Tubing connections	The high integrity sealing quality and almost nil maintenance requirement of the Vacmobile O-ring sealed tubing connections has been proven for more than 20 years. The O-rings seal on the outside of extruded tubing, such as polyethylene, nylon and PVC. Standard connection sizes suit the following tubing outside diameters: 3/8" to 10 mm 12.0 mm to 12.5 mm 1/2" to 13 mm 5/8" to 16 mm 19 mm to 3/4". Adaptors available to suit 1/2" and 3/4" inside diameter tubing.
Control manifold	This provides for the following functions: vacuum regulation, analogue vacuum gauge, O-ring sealed connection port for absolute pressure gauge, pump inlet filter and pump isolation valve.
Vacuum integrity	All E1-series resin traps are tested to achieve vacuum leak rates of less than 1 mbar per hour (or more than 1,000 hours to leak back to atmosphere).
Dimensions	Length: 465 mm (18.3") Width: 345 mm (13.6") Height: 340 mm (13.4")
Weight range	With EM8/B pump: 18 kg (40 lbs) With VSV-2-pump: 25 kg (55 lbs)
Optional accessory	"Degas on the way in" kit. This enables the degassing of a thin stream of resin on the way into the pre-evacuated vessel. The kit enables more effective degassing than bulk resin degassing. It is suitable for small resin batches of less than 500 ml (16.5 fluid ozs), with the standard cup supplied.
Warranty	No fuss, as new repair, or complete replacement warranty applicable worldwide.



Degas kit

"The design is fantastic and very robust! I like it!! I find it perfect in every aspect. Very compact too!"
GE India Technology Center, India

B17277 E1- series



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