

Vacmobile 4S

For Resin Infusion | RTM Light | Vacuum Bagging | Double Bag Infusion

4S

1 or 2 Vacuum Pumps
1 or 2 Resin Traps

Ultimate flexibility: 1 or 2 Vacuum Pumps and 1 or 2 Resin Traps

The Vacmobile 4S - the flagship model of the Vacmobiles MODULAR Series - is the culmination of more than 25 years' experience in manufacturing vacuum systems for the fabrication of advanced composites.

Based on a series of interchangeable vacuum pump and resin trap modules, the Vacmobile 4S is a continuous duty vacuum system that is customisable to suit single vacuum level processes such as resin infusion and vacuum bagging over pre-preg and wet laid material, or dual vacuum level processes such as double bag infusion and RTM Light. With an optional interconnection valve on a twin pump / twin resin trap system, interchanging between single or dual vacuum level processes is instantaneous.

Flexible, scalable...future-proofed

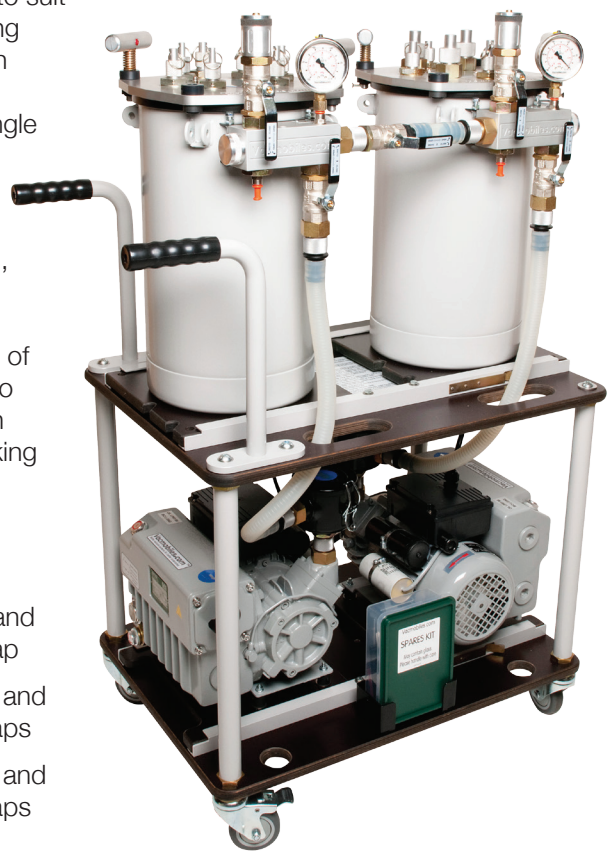
The Vacmobile 4S is a highly flexible and scalable module-based system, housed on a 4-station mobile docking station. The system allows for the simple installation of 1 or 2 vacuum pumps and 1 or 2 resin traps, giving you the freedom to reconfigure the machine to meet the changing needs of your projects. All modules are extremely easy to install, simply locking into place without the need for tools. When infusing very large parts, the resin trap(s) - complete with vacuum controls - can be removed from the docking station and positioned remotely if required.

4S configuration examples

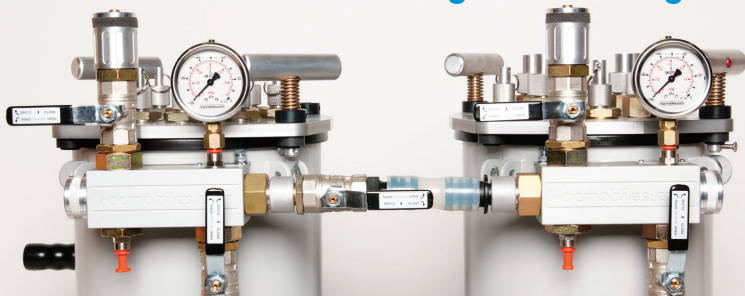


- 1 One pump and one resin trap
- 2 Two pumps and two resin traps
- 3 Two pumps and two resin traps

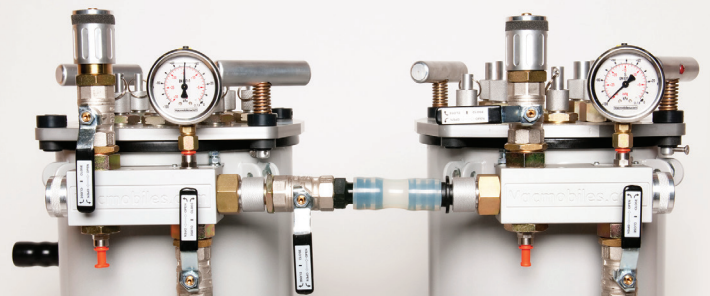
MODULAR SERIES



Machines with 2 vacuum pumps, 2 resin traps and the optional interconnect valve (as pictured) allow instantaneous changeover from single vacuum level use to dual vacuum level use.



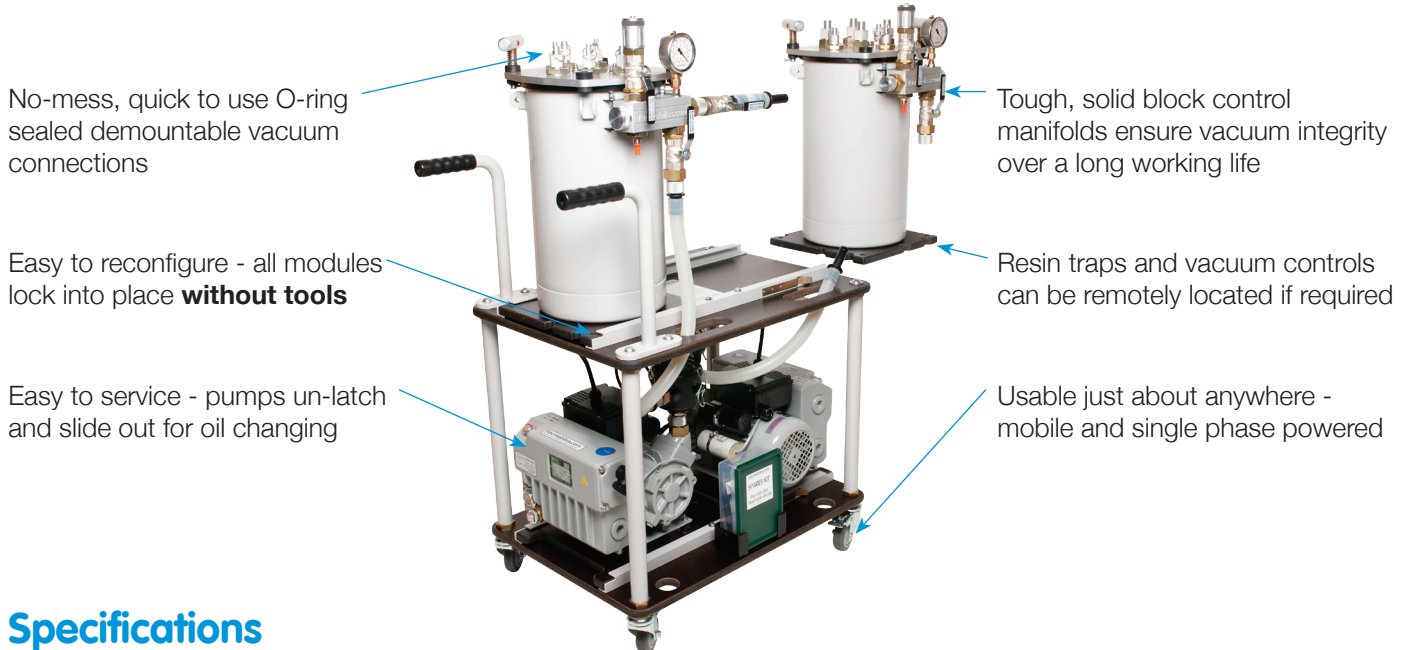
1. Interconnect valve OPEN. The machine functions as a single vacuum level system with up to 16 vacuum connections on the trap lids. In this mode, the machine may be run on 1 or 2 pumps. This capability might be useful for:
 - Speeding initial evacuation of large bags using 2 pumps but dropping back to 1 pump for maintaining vacuum
 - Having instant access to back-up pump capacity when working on high value parts



2. Interconnect valve CLOSED. The machine can function as 2 independently controllable vacuum systems. In this mode, the machine can be used for:
 - Dual vacuum level applications such as RTM Light
 - Providing vacuum to two separate parts to be independently infused or vacuum bagged
 - Simultaneous degassing and infusion

Docking station

Two level mobile unit, with docking locations for two modules on each level. When infusing very large parts, the resin trap(s) - complete with vacuum controls - may be removed from the docking station and positioned remotely if required.



No-mess, quick to use O-ring sealed demountable vacuum connections

Tough, solid block control manifolds ensure vacuum integrity over a long working life

Easy to reconfigure - all modules lock into place **without tools**

Resin traps and vacuum controls can be remotely located if required

Easy to service - pumps un-latch and slide out for oil changing

Usable just about anywhere - mobile and single phase powered

Specifications

Vacuum pump 230 V + 5%	1 or 2 of the following single phase powered continuous duty oil sealed vacuum pumps: VSV-20. 50 Hz capacity 20 m3/h (11.8 cfm). 60 Hz capacity 24 m3/h (14.1 cfm). EM28/B. 50 Hz capacity 28 m3/h (16.5 cfm). 60 Hz capacity 33.6 m3/h (19.8 cfm).
115 V + 5%	VSV-20. 60 Hz capacity 24 m3/h (14.1 cfm).
Vacuum level VSV-20 EM28/B	Adjustable from 20% vacuum (800 mbar absolute) to the pump's maximum vacuum: 0.5 mbar, 50 Pa, 0.38 Torr, 99.95% vacuum*, 29.9" Hg*, -101.25 kPa*, -14.68 psig* 20 mbar, 2000 Pa, 15 Torr, 98% vacuum*, 29.3" Hg*, -99.3 kPa*, -14.4 psig* <small>*Please note that "gauge" vacuums are weather and altitude dependent</small>
Resin trap	1 or 2 RT19 resin traps, with machined aluminium lids. Each trap lid includes a 75 mm (3") viewport and allows up to 8 O-ring sealed tube connections. Optional illumination port. If chosen, this replaces one tubing connection. Choice of two types of disposable resin catchpot or a reusable polyethylene degas bucket. Please refer to RT19 information sheet for more detailed information.
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.
Other options	Trap interconnection valve (for twin trap machines only). Absolute pressure gauge(s), for more precise vacuum readings and improved process control. Degas kit. Degases a thin stream of resin on the way into the vessel for more thorough degassing and for degassing high viscosity resins.
Dimensions	Length: 680 mm (26.8") Width: 490 mm (19.3"). Operating height: 1,140 mm (45") Minimum transport height: 630 mm (24.8").
Weight range	From 52 kg (115 lbs) to 101 kg (223 lbs), depending on pump and trap combination.
Warranty	No fuss, as new repair or complete replacement warranty applicable worldwide.

"I have just finished assembling the mobiles and I have to admit, these things are gorgeous and your instructions are incredible!" **GE Advanced Manufacturing, USA**