

ALAN HARPER COMPOSITES

e-brochure

To assist clients in identifying by process the essential products and equipment for successful Reusable Vacuum Membrane manufacture and use

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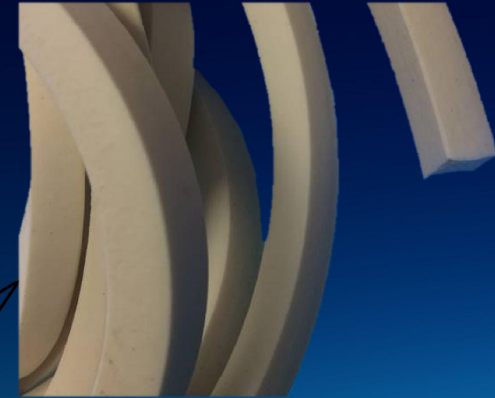


CALIBRATION MATERIALS

102151

15mm Sheet Wax

Use to calibrate cavity between
mould face and membrane



102104

Reusable Seal Profile

Use to create perimeter
vacuum channel and
silicone saving
moulded edge

102122

Wax Strip Cutter

Use to cut thin wax strips
for breather vacuum lines



102152

Wax Moulding Dough

Sulphur Free

Use to tidy and fill
imperfections in
calibration



102110

Double Sided Tape

Use to temporarily bond seal
profile to mould tool

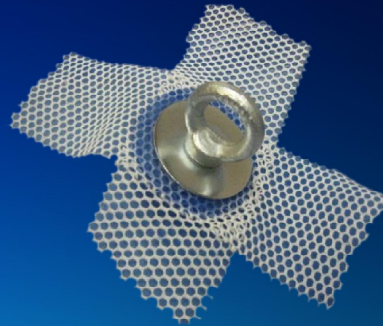
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MEMBRANE MANUFACTURE ESSENTIALS



102289
TopGear SilCon SIX
Silicone spray machine



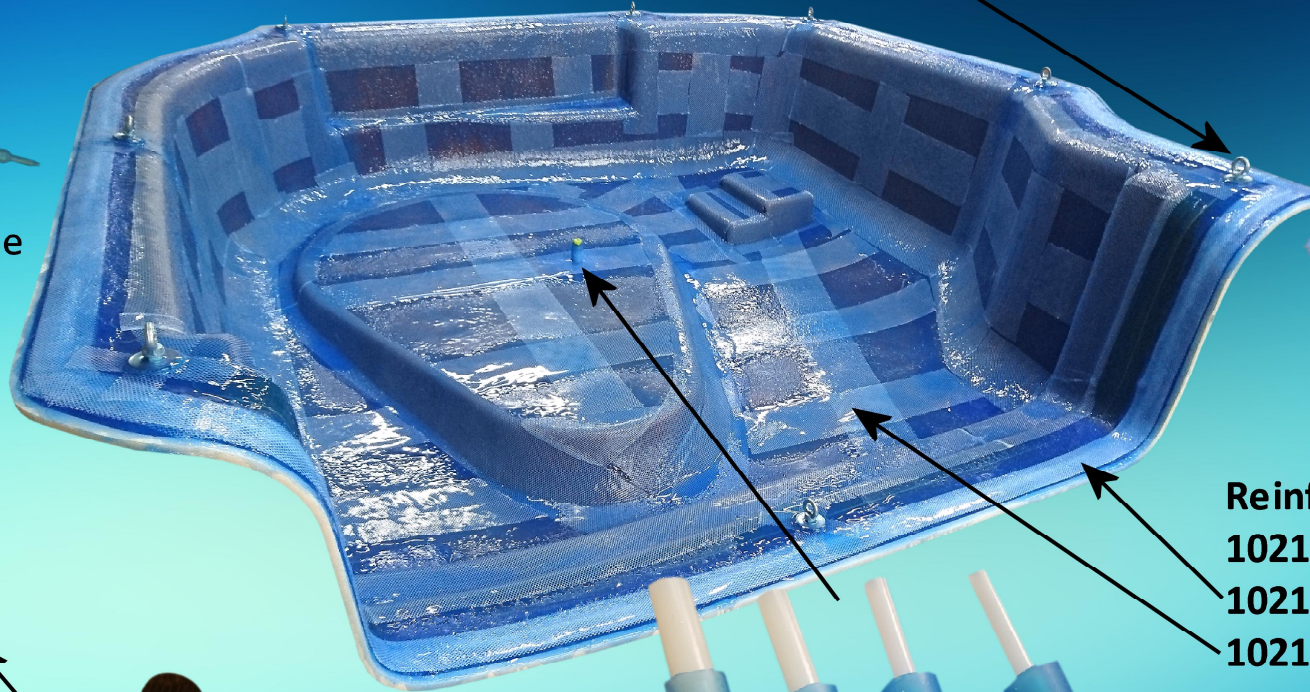
102150
Eco Anchor
Built into membrane
lifting eye



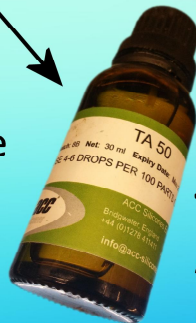
102174
Brush On Starter Kit
Complete kit with
instructions to create
up to 1.4m² vacuum
membrane



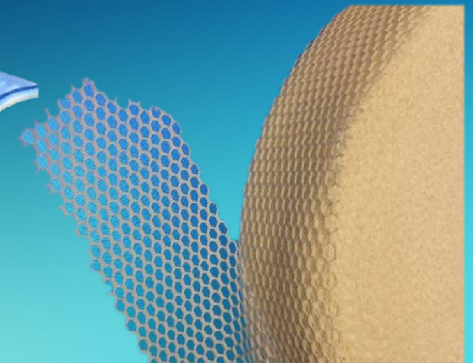
102114
Disposable Mixer
Silicone spray machine
mixer nozzle



VBS26-35 Silicone
The best of British
platinum cure silicone



102164
TA50 Thixotropic
Additive 30g
Use to rapidly
produce silicone paste



Reinforcing Cloth
102109 Sheet per m²
102170 50mm wide x 100m roll
102171 100mm wide x 100m roll



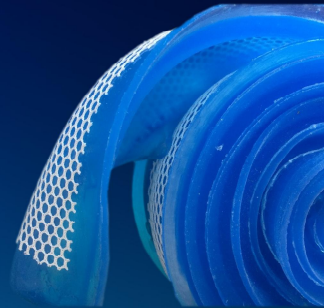
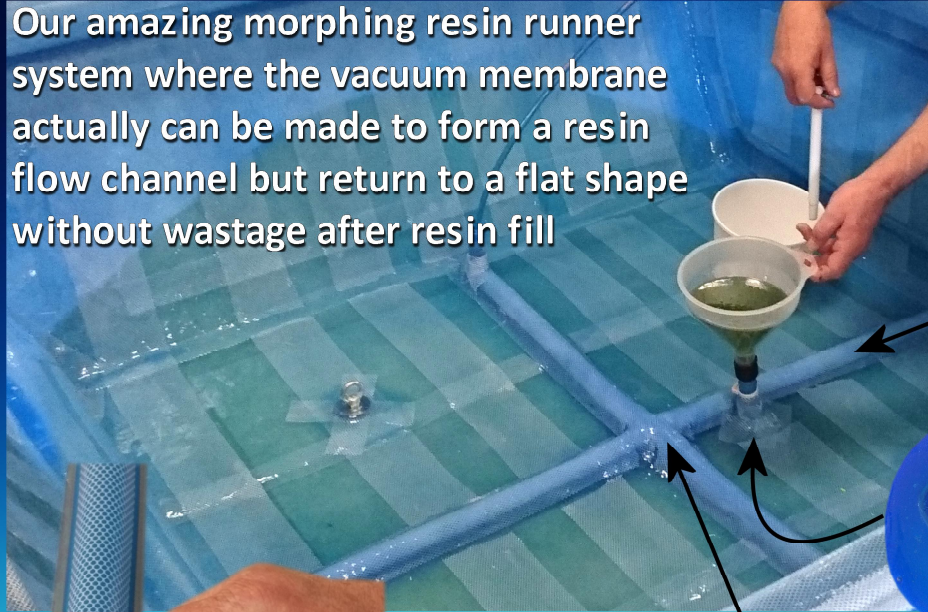
102182
Moulded Silicone
Membrane Inserts
10, 12, 16 & 19mm



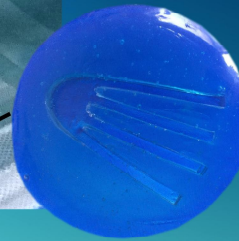
102176
Insert Moulding Kit
Mould your own inserts,
all sizes included plus instructions

MOULDED INTO MEMBRANE FLOW MEDIA

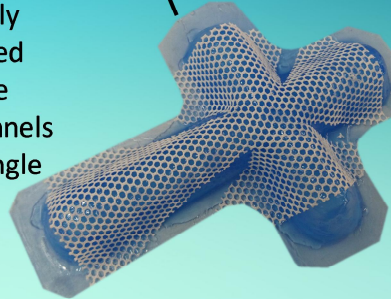
Our amazing morphing resin runner system where the vacuum membrane actually can be made to form a resin flow channel but return to a flat shape without wastage after resin fill



102175
Morph Runner 2m
Seamless built in resin path within a reusable vacuum membrane

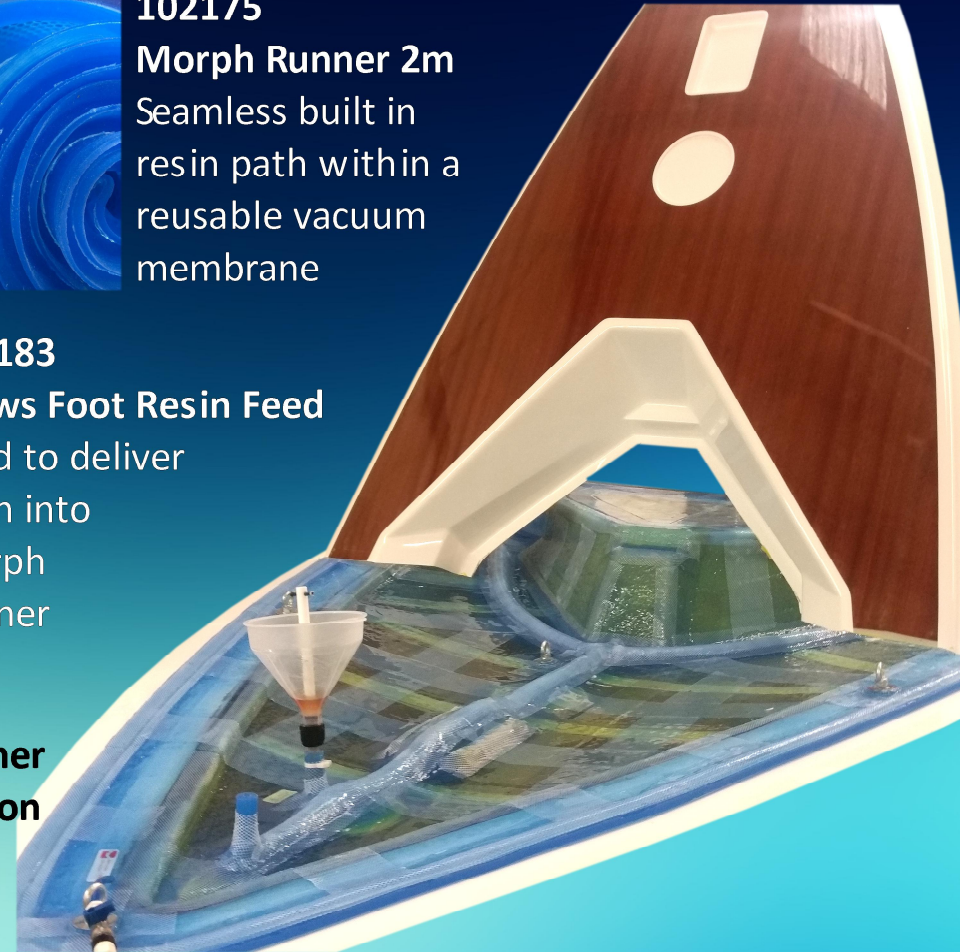


102183
Crows Foot Resin Feed
Used to deliver resin into Morph Runner



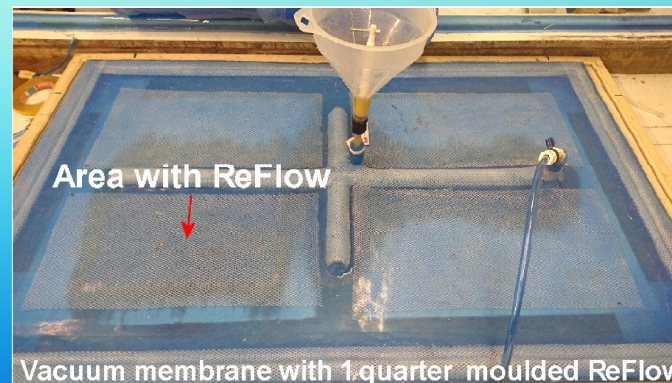
102177
Morph Runner Cross Junction

The Morph runner system can easily be cut and pasted to form multiple networked channels filling from a single injection insert and controlled with a single vacuum point



102153 ReFlow

ReFlow - Use to create a moulded into membrane reusable flow mesh



Membrane internal surface with Moulded ReFlow

Moulded Laminate

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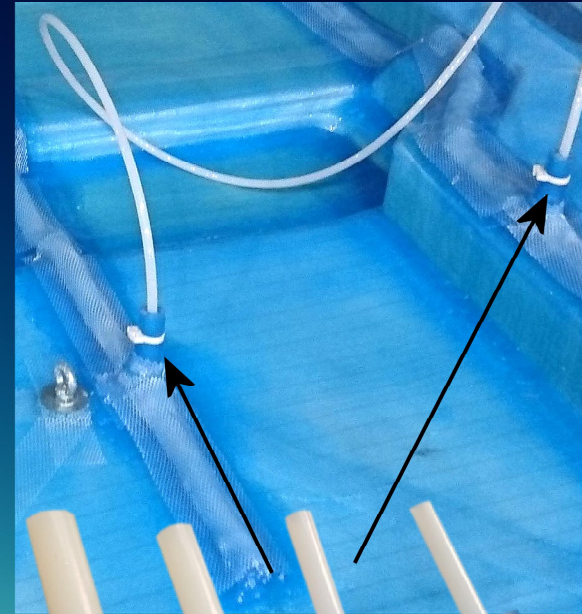
VACUUM FITTINGS & PUMPS



102118
Vacuum Connector
For installation into
rigid face mould
flange



102181
**Vacuum Isolation
Valve**



102182 Moulded Silicone Inserts
Use for built into membrane
vacuum connection



102124 ClearVac
Vacuum chamber
and catchpot



102123
Vacuum Test Plug

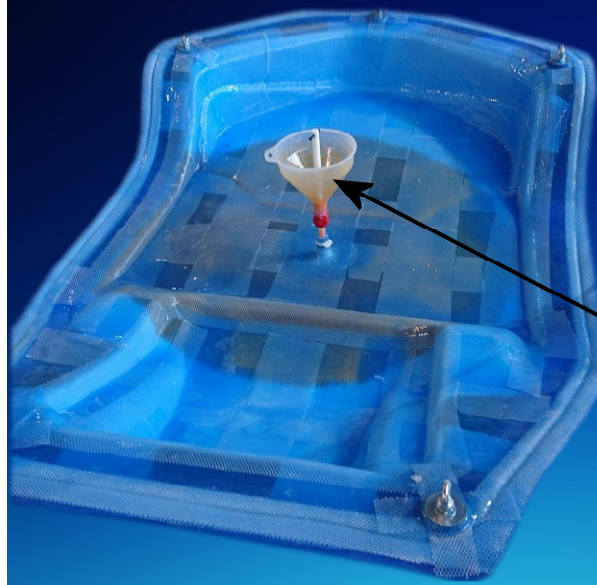


102288
MiniVac Station
Complete vacuum
pump with catch
pot and gauge



102160
TwoVac T

RESIN INJECTION



Injection Hopper Funnels

- 102141 - 10mm large
- 102143 - 10mm small
- 102161 - 16mm HiFlo
- 102167 - 19mm MegaFlo



PTFE Plug Stoppers For Hopper Funnels

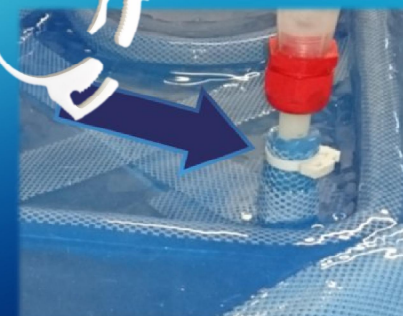
- 102142 - 10mm
- 102162 - 16mm HiFlo
- 102166 - 19mm MegaFlo



102182 Moulded silicone Inserts 10,16 & 19mm



102178 Reusable Pipe Clip Instant hand locked ratchet clamps



102182 Moulded Inserts also used for vacuum connection

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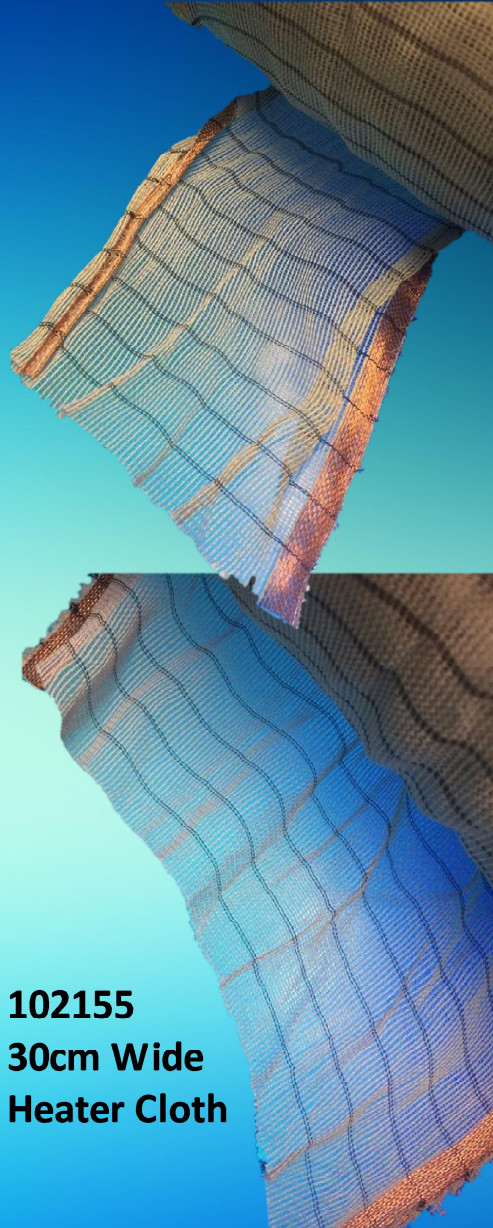
HEATER CLOTH FOR IN-MEMBRANE ELECTRICAL HEATING

The in-membrane electrical heating we offer incorporates the heat source directly next to the moulded part. With low thermal mass, offers enormous energy savings over traditional large scale industrial ovens and quicker heat up and cool down times all advantages that lead to faster cycle times. The low cost embedded heater cloth allows temperatures to be gained above 240C at low wattage and safe low voltages. Heat up times of 100C in 5 minutes are achievable and the unique feature of the heater cloth is that it can stretch and conform to different laminate schedules and thicknesses.

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102154
15cm Wide
Heater Cloth

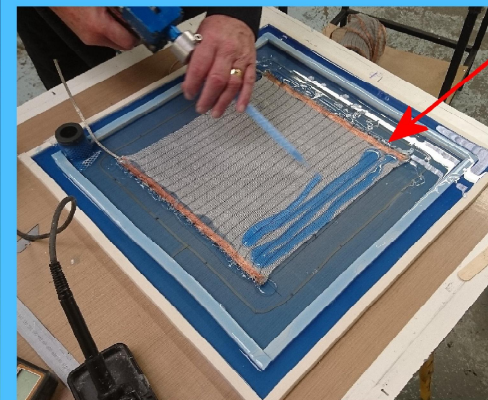


102155
30cm Wide
Heater Cloth

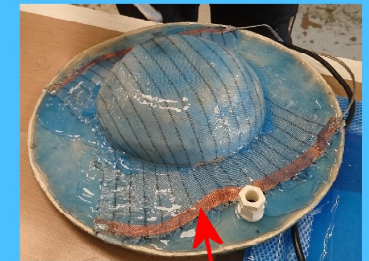


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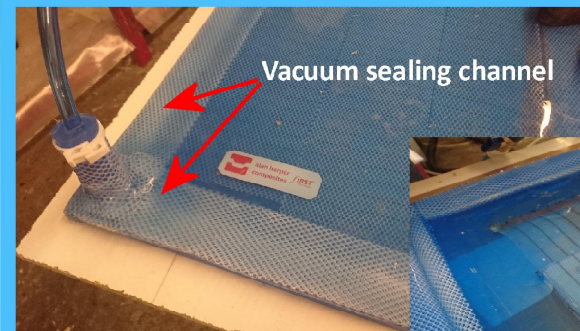
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Embedding heater cloth in
silicone vacuum membrane



Fitted to back side of
composite mould



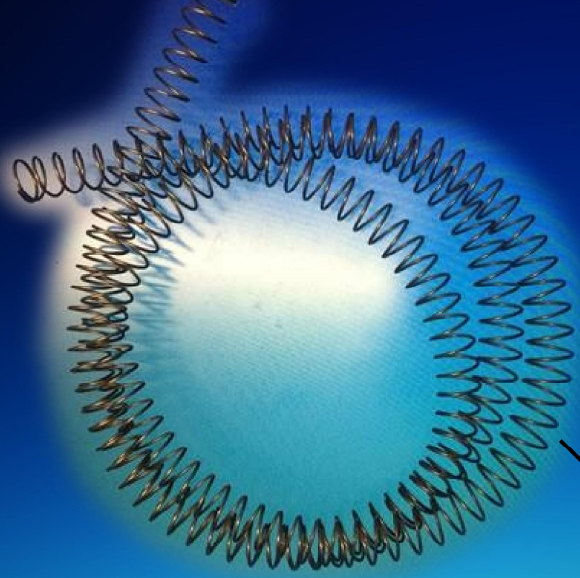
Vacuum sealing channel

Heated membrane
under vacuum



Heater cloth embedded in
silicone vacuum membrane
will stretch and conform to
different laminate
thicknesses

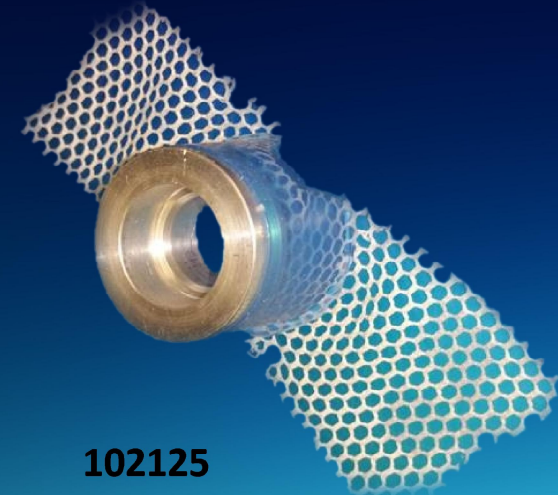
HIGH TEMPERATURE & AUTOCLAVE



102148 Autoclave Anti Collapse Spring
Use to support edge seal cavity at higher pressures within autoclave



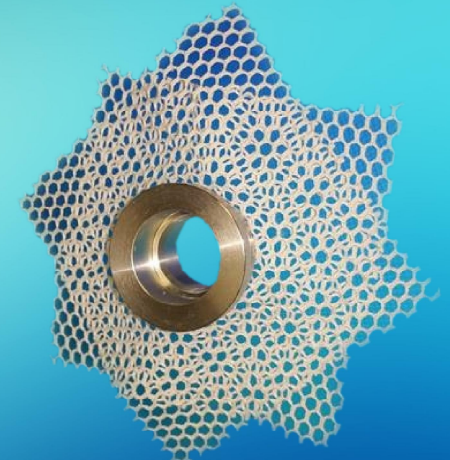
102138 High Temperature Injection / Vacuum Fitting
Use with high temp alloy membrane & saddle inserts



102125 High Temperature Alloy Saddle Insert
Use to inject resin into resin runner



102182 All Temperatures Moulded Membrane Inserts
Injection / Vacuum Inserts
Available for 10, 12, 16 & 19mm tube



102139 High Temperature Alloy Membrane Insert

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TOPGEAR SPRAY MACHINE SPARES & ACCESSORIES

102114
Disposable Mixer
Nozzle



102119
Disposable Angled Spray Tip
Use to spray in hard to
reach areas

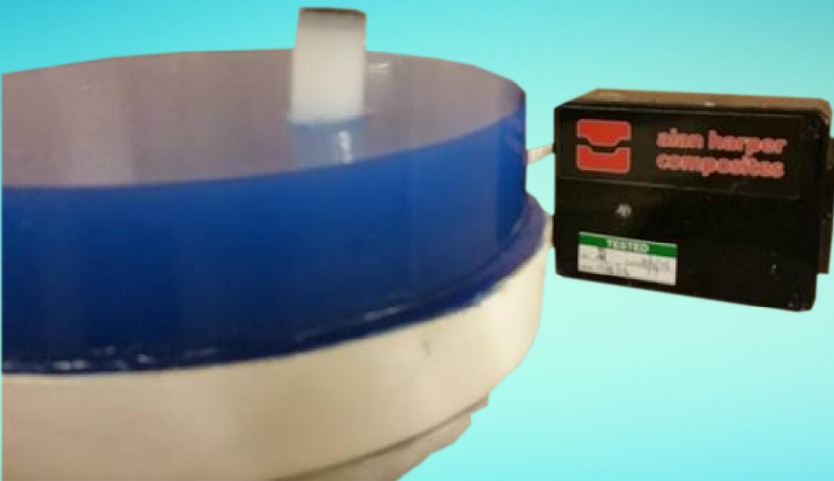


102112
Quick Coupler
Air connector for mixer
head spray nozzle



102111
Spray Nozzel
Reusable mixer tip

102168
Tank Low Level Alarm
Long life battery operated tank level alarm
system. Can be factory fitted or
retrospectively added



MISCELLANEOUS

102290

TopGear Six Compact Flight Model

Smaller portable silicone spray machine designed to safely travel in aircraft cargo hold



102106 Silicone Cord

85mm Diameter

Use for split mould and return flange vacuum sealing



102186

Magloc Ejector

Composite mould air ejector



102127

Hand Wipe Power Towel

Low cost hand wipes ideally suited for silicone cleaning

Silcoset 153

Reusable vacuum membrane repair kit

102113 75g

102121 310g



SILFLON a low cost coating to extend the life of a reusable vacuum membrane, particularly useful for epoxy resin users

102163 125g

102172 510g



PLE58R

Pot Life Extender

Use when mixing brush on silicone to extend workable time



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