

# Introducing “Flow fields” for better resin distribution

*Presented By:*

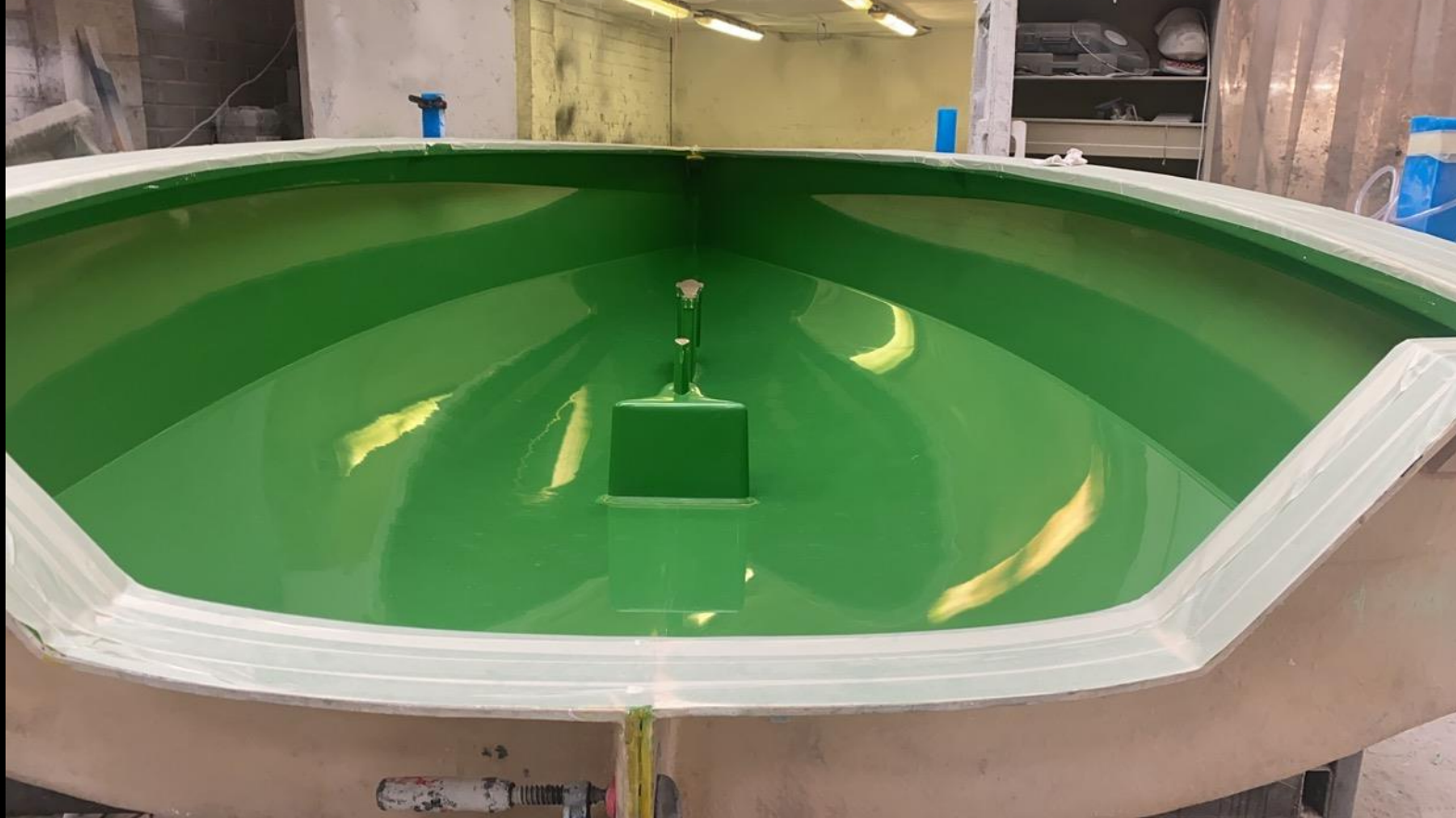
Alan Harper, CEO,  
Alan Harper Composites Ltd  
Hosted by Masters in Marketing



# RS Sailing21 (6.2 m) lightweight hull



# Split female face tool with two upstands





# Hull with multiaxial loaded



- This multiaxial fibre and core lay up has no good flow characteristics .
- The layup is
- skin coat
- Layer of multiaxial and stitched chopped 1.2 mm
- 12 mm foam
- Final layer multiaxial 1.0mm

# Positioning the membrane over upstands





# Vacuum and infusion





# Using the new MicroMorph

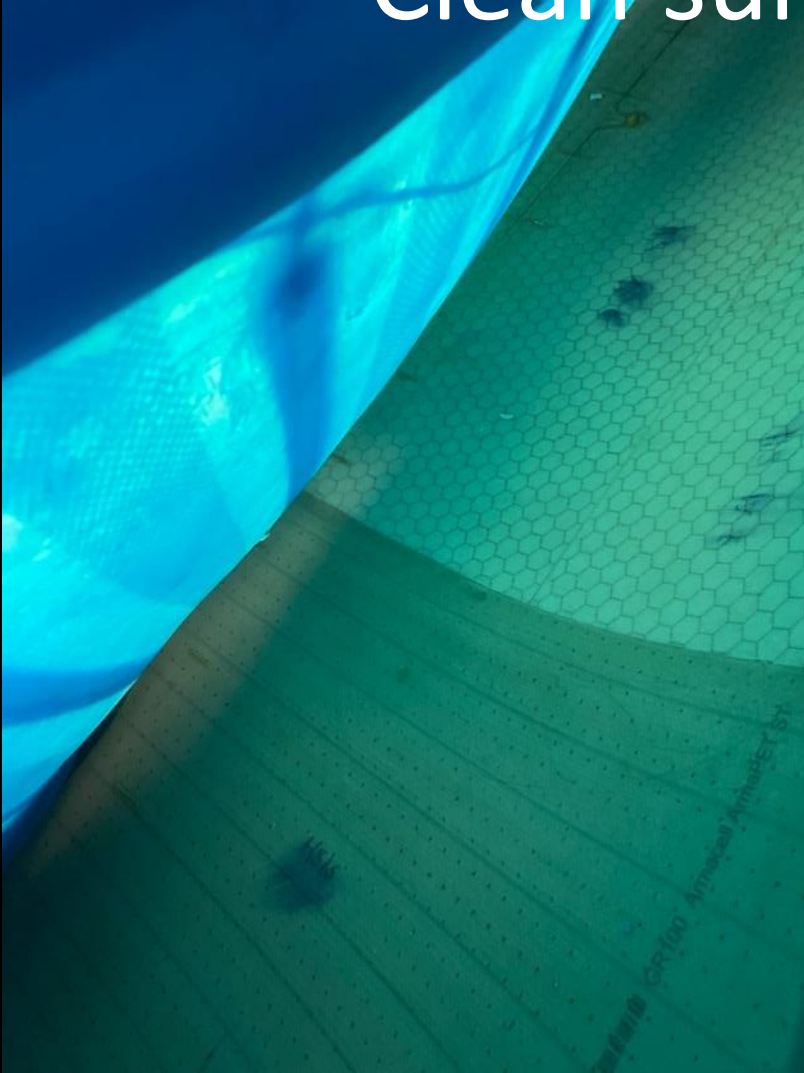
- Supplied with 4 mm pipe and vacuum secure connector for each 1m length

160 Lengths  
of micromorph  
fitted to this  
hull membrane  
to create  
“flow fields”





# Clean surface and ready





# Eliminates flow mesh, waste & COST



# Lifting clear of split hull mould

- Top Gunnel sections need split hull tooling
- This is the demoulded hull straight from the mould
- Note the clean surface .
- Nothing to strip or sand









# History in the making

- AHC are here to save you money
- This is the first time in the history of composites when all consumables have been eliminated
- Reusable membranes,
- Reusable flow channels
- Non resin contamination wasted



# MicroTop 1.5

- A new silicone spray cartridge unit
- Uses new Shore 50 A silicone
- Low cost/investment
- Low maintenance
- Low power need
- Ideal for smaller membranes
- Ideal for advanced composites
- Fulfills Aerospace needs





- VMS 26 - standard 26 Shore A
- VMS 50 - New 50 Shore A
- Packaging 5 x 1.5 kg box set
- 7.5 kg total box set = 1m<sup>2</sup>



- Air supply 6 bar
- Single trigger start/stop spraying flow and air usage
- Cartridge change over in seconds
- Option to spray or dispense
- Support robust strap included





# Total Package





Feel free to unmute and ask a question

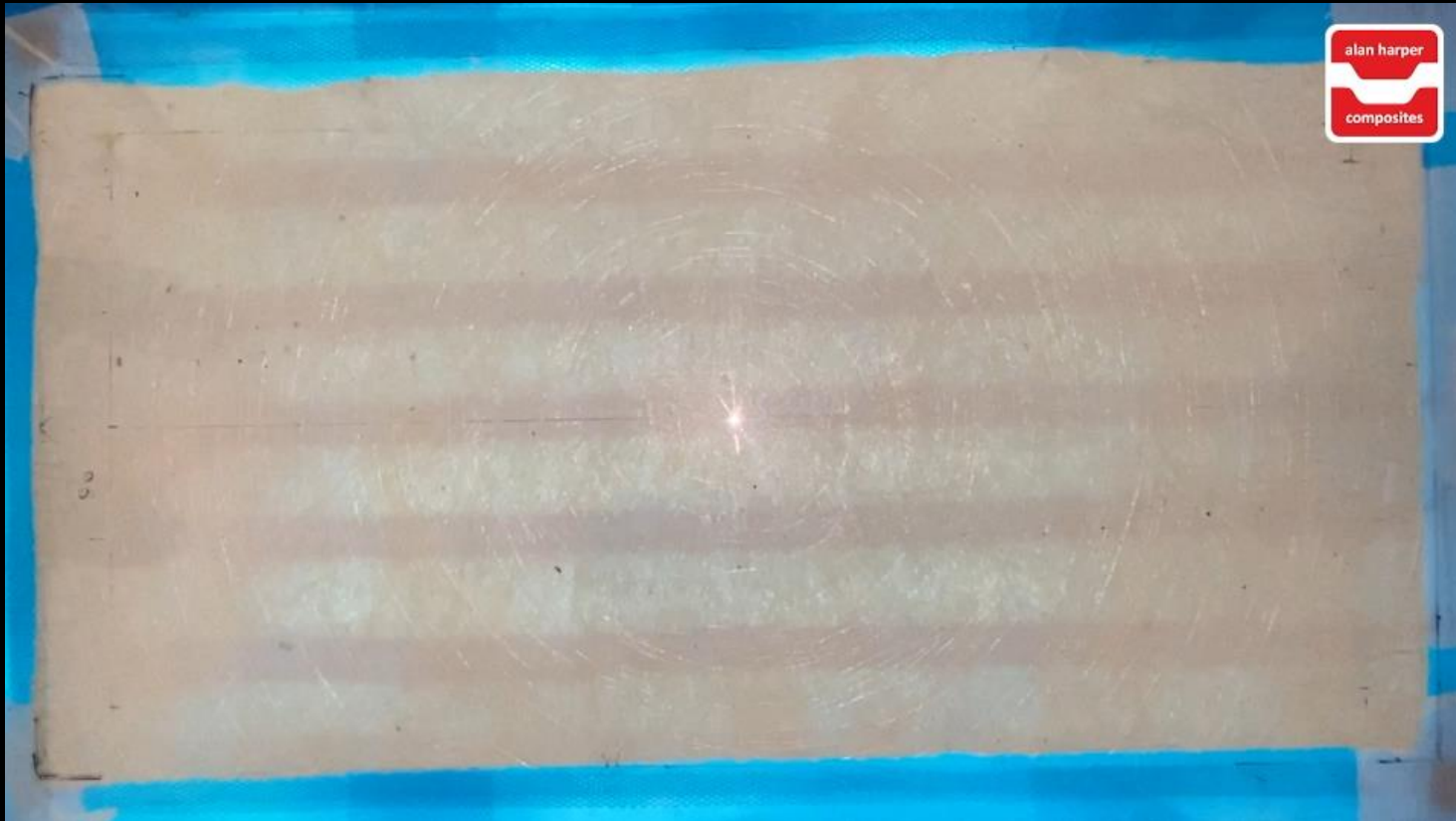
# **PART 1 QUESTION & ANSWER SESSION**





# Control of Flow

- Progressive fill control
- Prevents trap off
- Lower cost allows many more to be installed
- Takes less than 2 minutes to install 1m!





# All MicroMorphs can operate together



# Flow Fields

- Place in a new reusable membrane
- Alternative build in a reusable format to place under a conventional bagging







# Elimination Game Changer

- Eliminates single use flow mesh
- Eliminates single use peel ply
- Eliminates single use spiral wrap
- Eliminates resin waste locked and cured in all
- Eliminates waste
- Eliminates cost of waste management