BUILDING & CONSTRUCTION

SCOTT BADER

Lightweight EN Approved SSC Composite Manhole and Drain Covers Manufactured Using Crestapol® Acrylic RTM Resin

Company Profile - SSC Limited

LOCATION : BARROW IN FURNESS, UK

Established since 2005, SSC Ltd has extensive knowledge and expertise in designing, manufacturing and supplying high quality composite manhole cover solutions for underground access. All SSC composite manhole covers are independently tested to fully validate that both the product design and all fabricated products supplied to an installer meet the BS EN124:1994 standards specified for a specific application.

The durable, long term performance properties of SSC composite access covers, alongside the significant benefits of easy installation and in-situ opening and closing due to being so light, has gained SSC orders across the UK, and internationally with a rapidly growing export business.





Crestapol® Acrylic RTM Resin Application

"Custom Grade" Crestapol® RTM Acrylic Resin

The full RTM closed moulding process and tooling used by SSC is well-suited for high volume production of 100 to 10,000 units per annum.

By combining its unique Thrubeam® technology with a 'custom grade' Crestapol® resin specially developed for SSC by Scott Bader, SSC is able to produce GRP composite covers which are more than 20% lighter than other composite covers currently available, based on independent test data.

This has been achieved due to the high mechanical properties of the Crestapol® resin, along with more precision and control through using an RTM injection process. In other words, a thinner, so overall much lighter, Crestapol glass fibre laminate is needed to encapsulate the Thrubeam® stiffener beams used in all SSC covers, with no loss of performance in use.



Benefits/Advantages

- Exceptional strength
- Incredibly lightweight
- 🗸 🛛 Rapid cure
- Low viscosity resin
- Fully compatible with polyester pigment pastes
- Compatible with Crystic[®] Gelcoats, as well as Crestomer[®] and Crestabond[®] adhesives

Customer Quote

After extensive new product development trials and testing different UPR and epoxy resin systems, we were very pleased that Scott Bader was able to develop a special grade of its Crestapol® high performance acrylic resin for SSC that met all our needs. The custom Crestapol® grade we now use firstly provides a level of physical properties to match our Thrubeam® technology and meet BS EN124 test standards. Secondly, the resin's rheology and very fast cure rate at moderately elevated temperatures enables us to manufacture our composite covers consistently, and with a high level of confidence that parts will meet our quality standards.

Andrew Burton, General Manager of SSC