



# GLASSINSIGHT

Improving Performance In Production

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## ask the expert...

### PYROTHERM STS VACUUM PADS – A GLASS INDUSTRY SOLUTION



**Bob Pollard,**  
Pyrotek Glass  
Sales Engineer

Pyrotek offers a wide range of materials, products and equipment for all branches of the world glass industry. One specialised product with a range of particular applications suited to its unique set of properties is the Pyrotherm STS vacuum pad. Here, product specialist Bob Pollard\* answers some questions posed by customers.

**Q: Tell us about the background to this product – what is it?**

A: Pyrotherm STS vacuum pads were developed by Pyrotek to provide a fabric to be used for handling hot glass ware at temperatures between 700° to 800°C and which provides a longer lasting vacuum pad than those manufactured from high temperature belting or fabric.

**Q: Could you tell us about any special features of its manufacture?**

A: Custom fabricated, these vacuum pads are manufactured from high qual-

ity 100% 316L stainless steel fabric that is heat-resistant up to 650°C. The Pyrotherm STS fabric also exhibits excellent abrasion resistance when handling hot glass. The vacuum pads are designed for specific applications and are generally manufactured with internal layers of other high temperature materials such as silicone coated fabric, ceramic paper, multi-layered silica, a contact surface of Pyrotek Pyrotherm STS stainless steel fabric and sewn together using multi-strand stainless steel thread.

**Q: What is the current market position with the product?**

A: There are only some five manufacturers in the world who produce this fabric. And Pyrotek was able to penetrate this market because customers were not happy with delivery times from their current suppliers and also the costs demanded. Additionally, the fabric supplied by the largest existing manufacturer is knit as a tube and the customer has to cut the fabric lengthwise to obtain a single thickness of fabric. When the tube is cut and laid flat, in most cases a crease line is left in the centre of the fabric. The Pyrotherm fabric is split immediately after coming off the knitting machine and laid flat so that a crease doesn't form in the fabric. Also, any knots or imperfections are repaired prior to shipment. Our main competitor simply provides documentation marking

the location of the flaws so the customer can attempt to work around the imperfections. Another benefit for customers is that Pyrotek currently stocks this fabric in Carlisle, Pennsylvania to eliminate delivery problems.

**Q: What are the specific product advantages?**

A: Pyrotherm STS offers some key practical, process and cost-saving benefits for customers.

The durability of fabric results in cost savings because of longer service life. It has the ability to not check when in contact with hot glass.

For greater application flexibility, Pyrotek offers custom shapes and sizes for customers' specific applications.

**Q: What are the main application areas for the product?**



Round and rectangular Pyrotek STS vacuum pads

A: Bob outlines two particular customer situations:

The stainless steel fabric he points out is also used as a bending medium in the automotive glass industry.

Bob explains that he has been selling the product to a manufacturer in this sector for use in applications for wind-screens and rear windows.

The automotive glass manufacturer consumes six to eight rolls of fabric 1.2m wide x 10m long per month at a selling price of almost USD\$5,000/roll.

He also says he has another customer who purchases vacuum pads in this material manufactured at Pyrotek's Evansville, Indiana to be used for transferring glass blocks out of the moulds and depositing them onto a conveyor.

**Q: What about tailored solutions and product support for customers?**

A: Pyrotek has developed several proven designs and can tailor these vacuum pads to fit customers' specific machines and requirements. In-house assistance with application design and function of Pyrotek Pyrotherm STS Vacuum Pads can be provided at no cost.

*\*Bob Pollard is Glass Sales Engineer with Pyrotek Inc., based in Carlisle, Pennsylvania, USA. Bob has six years experience in the glass industry and over 30 years in industrial sales. Bob's expertise with Pyrotek has centred mainly on specialty glass.*