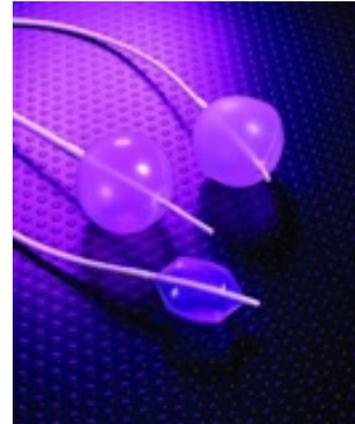


Polyzen Leverages Its Patented Process To Transform Polyurethane Films Into Low-Pressure Medical Balloons

Polyzen, Inc. has mastered a very unique, patented process to create specialized, custom shaped low- pressure balloons. Uniquely shaped balloons with new geometric conformation allow medical device designers the freedom to create products specifically for the intended application verses designing around the restrictions of conventional processing methods.*



Polyzen provides medical product designers, an alternative to latex materials for the construction of low-pressure balloons. A series of polyurethane films from Polyzen can be thermoformed, then welded together to form a medical balloon that achieves previously unattainable high neck-to-body ratio. Additionally, these polyurethane films represent a materials source that offers quick turn-around times by facilitating the design, prototyping, manufacturing and assembly capabilities of the balloons.

The Polyzen low-pressure balloons can be produced in any size and configuration as small as 0.200” (inches) and offered in 1:5, 1:10, and 1:20 neck-to-body ratios, and any variation in between. The balloons are fully three-dimensional and exhibit a nearly invisible seam, and can be produced in thicknesses ranging from 1 to 10 mils. Previously, the configuration of non-latex, low-pressure balloons were undesirable due to limitations of the two-dimensional form, and the low-pressure between 1-2 psi was too low for certain medical applications. With its Patented process, Polyzen can offer 3D designs with pressures up to 5 psi. The special welding process allows Polyzen the ability to produce polyurethane balloons to into full three-dimensional shapes.

The seams are almost invisible because they are inside the balloon rather than outside, making the devices suitable for in-patient applications. Unlike most latex balloons, these can be easily folded into a compact shape for easier insertion into the body cavity or structure. The Polyzen seam-welding technology ensures that the seams are stronger than the materials used.

The line of polyurethane films features film grades that can be thermoformed, the characteristic that makes the material suitable for the construction of three dimensional, low-pressure balloons, says the company. The polyurethane films and their processing are expressly offered to medical product manufacturers that require balloons with higher neck to body ratios in non-latex materials. The balloons can be fabricated in nearly any shape and size, such as, conical, pear, triangular and cylindrical. Additionally, the balloons and material itself are stable when exposed to UV light, have good mechanical properties and longer shelf life. Applications for the Polyzen low-pressure polyurethane balloons are many but include gastrointestinal and vascular devices, as well as catheters used for drug delivery.

“All polyurethane films by Polyzen meet Class VI medical

Polyzen, inc. is a leading single source solution provider for many of the leading medical device OEMs since its inception in 1991. From prototype of initial design concept to full scale production, Polyzen delivers high quality customized specialty components and fully assembled device sourcing for both large and small medical device OEM companies.

For additional information please contact: Polyzen, Inc., 1041 Classic Road, Apex, North Carolina 27539 <http://www.polyzen.com>.

*Patent US 6,712,832 B2 Low-Pressure Medical Balloons, etc.