

POLYZEN, INC.

THERMOFORMED POLYURETHANE FILM PROCESS BREAKTHROUGH ALLOWS POLYZEN TO WELD LOW PRESSURE BALLOONS WITH RATIOS OF 1 TO 20

Unlimited Shapes, Sizes, Ratios Now Possible With Proprietary Process



Medical product designers seeking low pressure balloon alternatives to latex with polyurethane now have a device and materials source that has research, design, prototyping, manufacturing and assembly capabilities with quick turnaround times, in previously unattainable body to neck ratios. Offered in 1-10, 1-15, and 1-20 (and any variation in between) neck to body ratios, the low pressure balloons can now be obtained in as little as 4 weeks from Polyzen, Inc. of Cary, NC. Further, the balloons can be produced in any size and configuration and as small as .050 inch. These low pressure balloons have a body ratio of 10 to 100 times the neck size, are fully 3 dimensional, exhibit a nearly invisible seam, and can be produced in thicknesses from 1 to 10 mils.

All polyurethane films are suitable for and meet Class VI medical applications.

This new development from Polyzen, beginning with a new series of polyurethane films, featuring film grades that can be thermoformed, are what makes this low pressure polyurethane balloon breakthrough possible. They are expressly offered to medical product manufacturers /more... who require balloons with big bodies and smaller necks in non-latex materials. The balloons can be fabricated in nearly any shape and size - for example conical, pear, triangular and cylindrical shapes. Further, Polyzen offers films that have special properties built into them for demanding specific applications like drug therapy delivery. Also, Polyzen provides medical device manufacturers with full contract packaging or assembly services for single-source OEM resourcing.

Company sources state that prior to developing this proprietary process, other non-latex low- pressure balloons were limited to two-dimensional forms. These resembled Mylar "birthday balloons", which is both undesirable and limiting for most medical applications. The new Polyzen films combined with their special patented welding process allow the balloons to be made in full 3-dimensional shapes. The seams are almost completely invisible because they are inside the balloon, not outside, so that the device is friendly for in-patient applications. Patented seam welding technology ensures the seams are stronger than the materials used.

Applications for the new Polyzen low-pressure polyurethane balloons include catheters for drug delivery, GI, vascular and stomach uses, among others. Polyzen will make samples to inquirer company specs at reasonable rates, often in as little as 4 weeks, and final product in as little as 6 weeks after samples are approved. Additionally, either samples or small or large production runs can be purchased at extremely competitive rates, with charges only for laboratory day rates and cost of materials.

The Medical and Polymer Divisions of Polyzen, Inc. offer a one-stop source for the production of quality products and materials for medical device OEMs. Some areas of

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health care that Polyzen products can be found include cardiology, radiology, urology, oncology, gastrointestinal and plastic surgery, among others. Polyzen's products and services include thin film welding, dip molding of both polyurethane and silicone materials, thermo/vacuum forming, thin-wall film, /more... lay flat tubing, blow molding of balloons, bellows and containers, insert molding, catheter and device assembly and kit packing. The firm's specialties include contract research and development, specialty polymer formulations and development and radiopaque compounding. The firm is FDA registered, GMP compliant and has Class 10,000 clean room facilities. Polyzen is also ISO 9002 certified.