

# Executive Summary on AutoFit™ Engineered Film

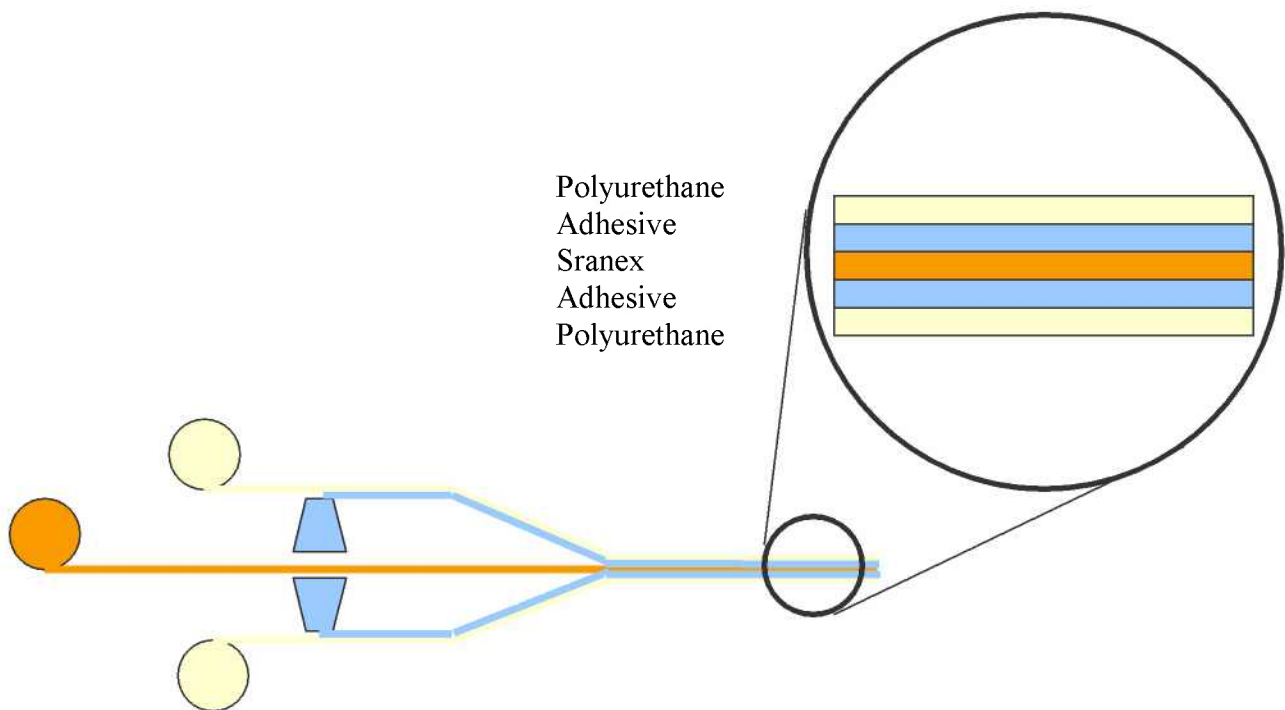
March 5, 2004

Brian Erickson

## Overview:

Allsteel has developed a low permeability, high toughness engineered film that allows the manufacture and use of partially filled gas chambers for lumbar support. By combining the properties of gas barrier films with the properties of high toughness films we have created an engineered film that provides extended life to a hermetically sealed chamber. This allows us to implement novel inflated lumbar supports that never need to be “re-inflated” or adjusted.

## Construction:



## SARANEX information from DOW:

SARANEX\* films provide a proven barrier to gases, water vapor and aromas. A layer of film produced from Saran\* barrier resin is integrally coextruded between outer layers of polyolefin. The result is a product with the barrier properties of Saran combined with the machinability, printability and functionality of polyolefin skins.

SARANEX films offer excellent resistance to a wide variety of chemicals for chemical-resistant clothing. They can also be laminated to other films and substrates for additional barrier functionality.

SARANEX\* barrier medical films resist deterioration by most acids, bases, foods, pharmaceuticals and alcohols.

## Examples of SARANEX used in other applications:

### Chemical Protection

### Tychem® SL Overview

- A lightweight fabric made from Tyvek® laminated with a chemical-resistant Dow Saranex® 23P film.
- Offers dependable protection against a broad spectrum of chemicals.
- Available in a variety of garment and seam types to provide great protection against hazardous particles and liquids.
- Strong fabric is rugged and durable, reducing the risk of tears and abrasion.
- Color: White
- Seams: Bound, Taped and NSR®

Typical Applications: petrochemical manufacturing, waste management, industrial plants, hazardous material response, emergency medical response, paint spraying, radioactive environments, environmental cleanups and other emergency services. Commonly used in domestic preparedness for protection from biohazards, several toxic industrial chemicals and some chemical warfare agents.

