

FLEXIJOINT[®]

ISOSTATIC MOLDED TUBING

Ethylene employs only 100% virgin, high molecular weight PTFE resin in its isostatic tube molding process. No pigments, additives or lubricants whatsoever, just Pure PTFE resin.

1
It all starts the



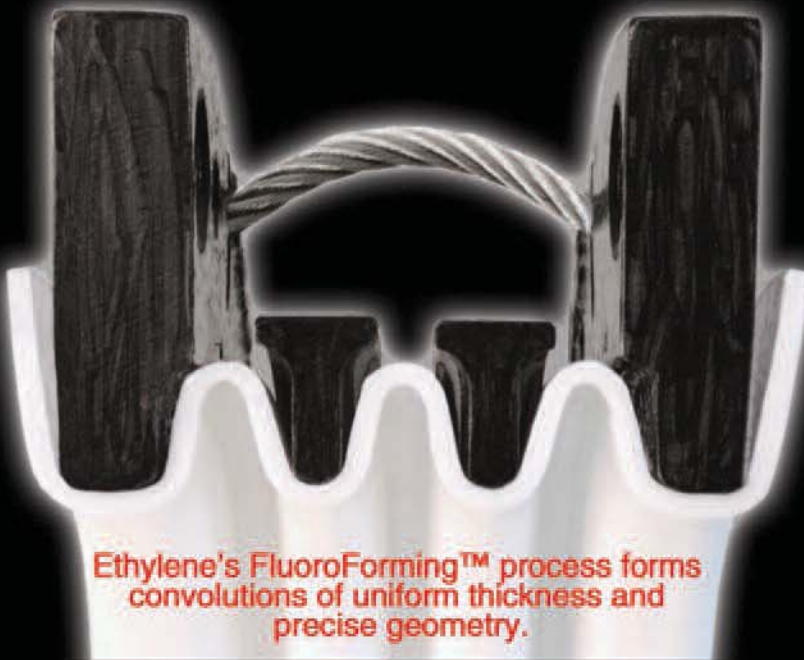
2
The

FluoroForming™

All Flexijoints are made by the exclusive FluoroForming™ process, a development of Ethylene. The proprietary technique utilizes hydraulics to influence the isostatically molded tube to "form" convolutions of uniform thickness and precise geometry. Deep convolutions allow increased axial travel while reducing the force necessary to produce axial movement and lateral misalignment.

Combine all the distinctive features;

- 100% Pure PTFE
 - T-Band™ root and sidewall support
 - T-Band™ protection from over-compression
 - LimitLink™ protection from over-expansion
- with the FluoroForming™ process, and the relationship of these features provide the basis for the outstanding performance of Flexijoints.



Ethylene's FluoroForming™ process forms convolutions of uniform thickness and precise geometry.



**High Performing
Severe Service
Longest Flex-Life**

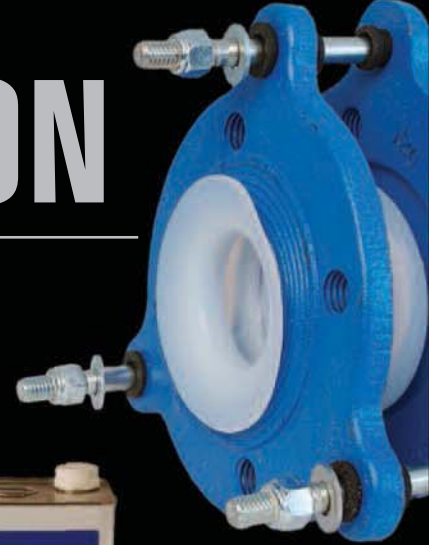
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VS THE COMPETITION

PASTE EXTRUDED TUBING

In the "Paste Extruding" process, solvent based hydrocarbon additives must be added to PTFE as a lubricant in order to facilitate the extrusion process. These solvents are not only hazardous but could also contaminate contacting fluids by leaching out or could be vulnerable to blistering. Paste extruded expansion joints are NOT Pure PTFE.

with resin...



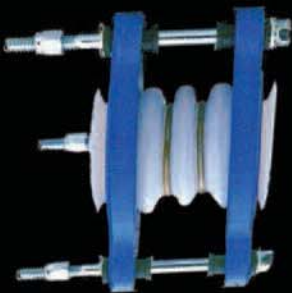
process... Blow Molding (Contour Molding)

"Blow Molding", sometimes referred to as "Contour" molding by some manufacturers is a very economical means of manufacturing expansion joints. The process, during which a plastic parison (hollow tube) is heated above the transition temperature and is placed between two halves of a mold (cavity) and forced to assume the shape of that mold cavity by the use of air pressure. Wall thickness distribution is severely affected as shown in the expansion joint cross-section on right and below.

Contour Molding (Blow Molding) is an excellent low cost technique for products such as plastic milk jugs or soda bottles where yielding of the plastic is not a potential liability....



Severe thinning is evident by the translucency of the convolutions above. Permanently yielding (stretching) PTFE beyond its elastic limit will compromise the materials mechanical integrity and can cause sudden premature failure.



Blow Molding (Contour Molding) severely affects wall thickness uniformity and geometry as shown below

**Economical
Light-Duty Service
Limited Flex-Life**

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.047 .045 .098



3

End Result...