

Polyurethane Foam Processing

A reactive liquid mixture (usually polyol and isocyanate) is injected or poured into a mold or cavity of a structural part where a chemical reaction takes place. After an exothermic (heat generating) reaction occurs, the finished part is removed from the mold.

Depending on the chemical formulation, the end product can take on a wide range of physical characteristics: foam or solid, highly rigid or very flexible.

Foam processing is used in a score of industries and products, including doors, windows and decorative millwork for the construction industry; interior components such as steering wheels, dashboards and NVH (noise, vibration, harshness) applications for the automotive industry; military and aerospace applications; computer enclosures in the electronics industry; and insulation in refrigerators in the appliances industry. When foam is sprayed, it can be applied as an insulation to tanks and pipes.