At Moduform, we have been rotationally molding furniture for more than 41 years. The process is designed to create furniture for customers who need durable seating solutions that are easy to clean, rugged, comfortable, safe and secure. We utilize two different materials depending on what we are making. Polyvinyl Chloride (liquid) is used for flexible vinyl and Linear, Low Density Polyethylene (pellets) is used for rigid plastic. While the material is different, the process is almost identical. There are four (4) "events" or "stations" that happen to manufacture furniture products that are rotationally molded:

ROTOMOLDING



1. LOAD

At this station, molds are securely attached to large platforms. These platforms are fastened to large arms that progress the platforms through the molding process. Once secure, molds are loaded with calculated amounts of material that are determined by the size of the unit we are making. If we are making cushions that are part of a chair, settee, sofa or beam grouping, frames are secured to the inside of the mold so that as the arms are rotating, the frames are completely sealed and secured inside. Lounge pieces do not receive any frames.

2. HEAT

Rotational molding is a heating and cooling process. The material is formed under intense heat so that it takes the shape of the mold. Molds are specially design for this purpose. Heat is applied in a large oven to the molds with the arms are rotating. This rotation is critical so that the material can even coat the inside of the mold providing for a uniform thickness and a one-piece product.

3. COOLING

The cooling process allows for the pieces to fully cure while allotting appropriate time for the molds and platform to cool so that the operator can de-mold.

4. UNLOAD

The final step is removing the piece from the mold. Plastic units are cleaned and packed, while vinyl pieces travel to our foaming department for additional processing.



FOAMING

Moduform deploys a two part, high resiliency foam that is pressure molded and bonded to the interior skin of our specially formulated vinyl. Moduform also produces cushions for several seating models that allow for fabric covers (350, 800, 810, 600) that have embedded steel frames for safety and security.



MODUFORM



PRESSURE FOAMING

