

The Six Step Talalay Foam Making Process

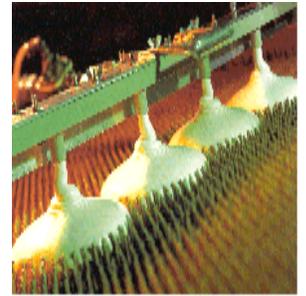
The Talalay latex foam manufacturing process is a six-step procedure which includes the following processes: compounding, whipping air into foam, pouring foam into a mold (with more foam = higher density = firmer product), pulling a vacuum (enabling foam to occupy the entire volume of mold), freezing (locks foam structure), injecting CO2 to gel foam (changes liquid to solid), heating (which solidifies durability and resiliency), de-molding core/pillow, washing, drying, inspecting for quality, and fabricating.



1. Compounding: In the first step, synthetic and natural latexes, soaps and rubber curing agents are mixed together in a water cooled, stainless steel mix tank to create latex foam. Using computer automation technology, an operator mixes the batch. After all materials have been mixed, the operator conducts quality checks on PH, viscosity, and temperature to ensure that consistent compound is delivered to the molding process. The liquid latex foam is now automatically transferred to the pressroom through a computer-monitored pipe and manifold system. The system software automatically determines to which mold to send the compound.



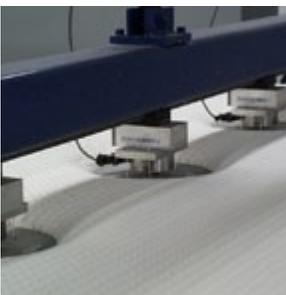
2. Molding: Once in the state of the art, computer-integrated pressroom, the mixed latex foam compound is injected into an aluminum mold. This mold contains pins that create a unique aerated cell structure and facilitate heat transfer. Robotic systems distribute the mixture evenly to ensure consistency in the finished product. Once distributed evenly in the mold (not completely filled), a vacuum is pulled that completely fills the mold cavity with foam. This allows the manufacturer to create different softness levels of foam. The foam is then frozen in the mold (-30 degrees Celsius) and CO2 is introduced to gel the foam. Heat is applied (115 degrees Celsius) to cure the foam to allow the latex particles to bond as the mattress core or pillow is baked into a solid state.



3. Washing: Upon completion of the molding process, the latex foam is placed on a conveyor belt and put through a large washer to rinse and remove proteins, soap residue and improve product durability through a five-stage wash/squeeze cycle process.



4. Drying: The mattress core or pillow is then transported by conveyor belt to a dryer. The core or pillow bun is slowly run on another conveyor belt through the dryer, which evaporates the liquids to finalize the curing process.



5. Quality Testing: In this rigorous testing process, the mattress core is placed on a belt and put through a nine-point pressure/firmness test to ensure that all cores meet stringent quality standards and that there is even support across the mattress. Pillows are hand inspected for visual and physical defects, as well as individually weighed to ensure firmness meets exact specifications.



6. Fabrication: Cores are transported from the core bank to the fabrication area on a just-in-time basis. Here, the core is cut and constructed to the appropriate size. When larger core sizes and heights are needed, smaller cores are affixed with environmentally sound, water-soluble latex adhesive.