

SNEC SIA Visits Hope Global and Grant's Mills

On October 8, 2004, fifteen members of SNEC SIA visited two sites in Cumberland, RI: Hope Global, a narrow-fabric textile company, and Grant's Mills, a privately owned 19th century saw and grist mill.

Hope Global

Founded in 1883 in Pawtucket, RI, the contemporary Hope Global is an international operation, with plants in Mexico, Brazil, and France, that thrives as a niche manufacturer of narrow fabrics, such as cargo nets, weather-stripping, and polyester straps, and braided products such as shoelaces and parachute cords. With the assistance of Kent Andrews, Charlie DaRosa, director of manufacturing, guided us through the facility's manufacturing processes.

Among the tour highlights were the looms used to create bands of wire braid that, in turn, form the "backbone" of rubber extruded automobile trunk weather strips. The looms shuttle the wire into a switchback pattern held in place with interwoven bands of polyester yarn. A surprising manufacturing twist: The wire is guided from its spools onto the loom with ordinary fishing rods -- their inherent flexibility makes them ideal for the rapid, intermittent switchback movements of the loom's wire shuttles.

Years ago, Hope Global bought the wire. But they found they could save money by extruding the wire themselves. Today, three parallel wire extruders, each with fourteen drawing stations, reduce .218" rod to .030" wire. The drawing process consumes as much as 50% of the facility's entire energy demands, yet the operation is phe-

nomenally successful: By drawing the wire themselves, Hope Global reduces the cost of wire from \$0.50/lb. to \$0.30/lb., saving \$60,000 every week.

The braiding operation gave us the opportunity to see old and new technology side-by-side. On one side of the center aisle we could see the older Wardwell braiders that are gradually being replaced by the new (and foreign) machines opposing them that are three-times faster. SNEC members struggled to follow the "Maypole dance" movements of the spindles that circled in a rapid blur. Much of the resulting braided product is transformed into shoelaces on special machines that seal the tips with plastic and cut the laces to the appropriate lengths.

In the weaving plant, Hope Global manufactures carpet strips, weather-stripping, cargo nets and an unusual "tunnel tie" product that incorporates a draw-string within the narrow fabric; when these strips are stitched onto automobile upholstery, the strings can be tugged tight to hold the seating in place.

Grant's Mills

Pat Blais, the current co-owner (with her husband) of Grant's Mills, gave us an informal tour of the old saw and grist mill on her property. Built in 1819 by Fenner Grant, the mill is fed by a man-made lake (still intact) that, in summer, would have been drained for use as a cow pasture. According to Blais, the best available evidence suggests there was an earlier, pre-revolutionary mill on her property, and that Grant recycled many of its beams in the mill extant today.

The current structure seems to be a hodgepodge of original elements and contemporary pieces: the roof and shingles are new, while the beams and most of the interior structural elements seem original. The saw is still in place, as is the "bed" that slid stock to it, but the power transmission pieces are broken and/or missing. There is an iron, flutter wheel in the water but it is dislocated from its axle. The stones from the grist works seem intact. The sluice works and races are in excellent shape, thanks in large part to the expert stonework by mason Moe Dubois and his sons.

As a result of previous work and advocacy by Pat Malone, the site has been surveyed by the Smithsonian, but as private property, grant money is hard to come by. With assistance, the Blais family hopes to conduct further research and restore the mill to its original design.

Jonathan Kranz