



## Chemicals

**Client**  
Ticona

**Location**  
Shelby, NC, USA

### VECTRA Liquid Crystal Polymer Plant

#### Project Description

To increase production of its VECTRA liquid crystal polymers, Ticona enlisted CH2M HILL Lockwood Greene to provide preliminary design, estimating, detailed design, purchasing, construction management and start-up assistance for an expansion of its existing plant.

Features of the project include:

- Using pre-cast panels rather than concrete masonry units saved two months on the construction schedule and \$90,000.
- Redesigning the chip conveying-line supports saved \$100,000.
- Utilizing modular construction for the 1,800-ft. pipe bridge saved \$250,000.
- Constructing the expansion without imposing any shutdowns on the existing unit resulted in early project completion.
- Obtaining governmental permission to use the IBC 2000 building code prior to its adoption in the state allowed the facility to be built in North Carolina as planned.

The construction of this expansion impacted the following areas:

- Increased production capabilities by 150% with no net head count increase
- Reduced labor requirements for pellet production by replacing granulation equipment
- Reduced labor for batch making by installing automated monomer weighing systems

This project received the 2001 North Carolina Department of Labor Certificate of Safety Achievement.