



## GREENFIELD NONWOVENS FIBER PLANT

### GREENFIELD PLANT – SOUTHEAST USA

**TOTAL INSTALLED COST \$60,000,000**

PENTA designed this greenfield facility for a European company. The European company had ordered all of the primary process equipment for the plant from European suppliers prior to the start of design. The project was very fast track and startup was 12 months after PENTA was hired. The new facility was designed to produce non-woven web.

The new 214,000 sq. ft. building includes the following areas:

- Process Area
- Opening Area
- Raw Material and Finished Goods Storage Area
- Shipping Offices
- Water and Waste Treatment Room
- Utility Rooms for Water, Gas and Electrical
- Cylinder Storage and Rewiring Area
- Office Building
- Technical Building / Offices / Lab Section



The PENTA team sized and specified the main utility systems for the building and equipment. The utility systems encompassed Electrical Distribution, Compressed Air, Cooling Water, Chilled Water, Natural Gas, Thermal Oil (Interconnecting piping), HVAC, Potable Water, Fire Water, and Hot Water.

PENTA's engineering design specifically included 11,300 cubic yards of concrete, 1100 tons of structural steel, installation of all process equipment, 21,000 linear feet of piping, and 136 miles of electrical cable.

The building design had to conform to critical owner criteria for:

- Overpressure
- Humidity
- Circulation/Material Flow
- Insect and Rodent Protection
- Glass
- Colors
- Food & Beverage Area

