



GREENFIELD TEXTILE PLANT PROJECT

GREENFIELD PLANT – INTERNATIONAL

TOTAL INSTALLED COST \$160,000,000

PENTA prepared detailed conceptual engineering packages for sitework, building, structural, mechanical and plumbing, and power and lighting for a Greenfield Textile and Sock Manufacturing facility in Central America. The project was executed on an aggressive schedule, requiring close coordination among the owner, equipment suppliers, contractors, in-country engineers, and PENTA. The entire project was designed for sustainability with the goal of LEED certification.

The project consists of two approximately 500,000 square foot production facilities, one for socks and one for textiles; an employee change house, expanded water and waste water treatment, and an administration and central kitchen facility.



Production equipment was installed in several phases with the ultimate connected load approaching 30 MW for the entire site. PENTA's power and lighting design included a 22.9 Kva loop, with five sets of transformers and switchgear, and innovative energy-saving lighting throughout.

Site work design provided layout of all plant roads and building locations, a fire water and irrigation supply lagoon,

employee and truck parking, water and waste water treatment, and accommodations for public and alternative modes of transportation.

PENTA prepared performance specifications for the pre-engineered manufacturing buildings to accommodate significant utility collateral loads and resistance to seismic forces. PENTA also provided extensive review of vendor submittals for the building packages.

Detailed conceptual design packages were prepared for all interior up-fit for offices, rest rooms, break rooms, cafeterias, and support facilities.

