



Lean Manufacturing

Client

Volvo

Location

Dublin, Virginia

Project Highlights

Improved process layout and building orientation, saving \$4 million in site development costs.

Designed combined office space and observation area into manufacturing facility, saving \$475,000 in construction costs.

Adapted pre-engineered building concept, saving \$500,000 and reducing schedule by six weeks.

Coordinated with paint vendor to combine make-up air for building and process, saving \$150,000.

Volvo Heavy Truck Manufacturing Facility

CH2M HILL provided the following services in the expansion of Volvo's Heavy Truck Manufacturing Facility:

- Concept design programming
- Site search and evaluation
- Coordination of financial incentives from state and county
- Program management, including coordination of equipment suppliers
- Detail facility design
- Process engineering of assembly Construction management

This \$55 million facility expansion includes a 95,000 sf Body In White plant, a 235,000 sf paint shop, and an upgrade of the existing assembly building.

Developed plant equipment and facility standards, reducing maintenance costs, increasing interchangeability of spare parts, and improving safety.

Added 24 dock doors, reducing line side storage and just-in-time material deliveries. Major milestones were met to successfully execute the schedule:

- Paint and Body Shop equipment installation began within seven months of contract signing, and equipment start-up began within 13 months.
- Assembly building production occurred in less than eight months from concept.

The Volvo/CH2M HILL team used programming and visioning techniques to develop the production philosophy and plant layout.