

## **PROJECT** Material Logistics Planning and Improvements for Future Assembly Plant Product

## **CUSTOMER** Chrysler Corporation

### *Objectives*

1. Obtain and refine part and material handling information for new products.
2. Study and understand current material handling logistics within assembly plant.
3. Create material logistics simulation models for current (base) material handling operations.
4. Develop proposed material logistics operations, equipment and layouts with optimized flow.
5. Develop material logistics simulation models for proposed material handling operations.
6. Evaluate results of simulation, and develop alternatives to improve material flow and material handling effectiveness.

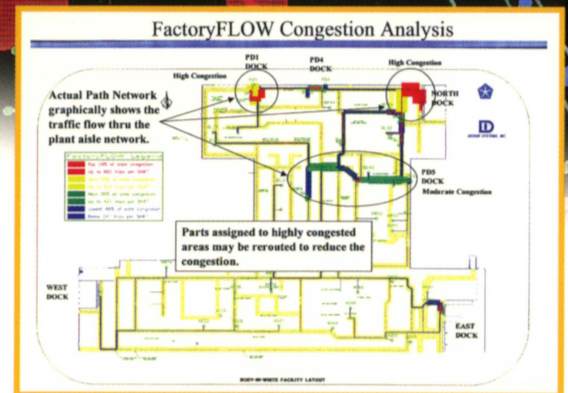
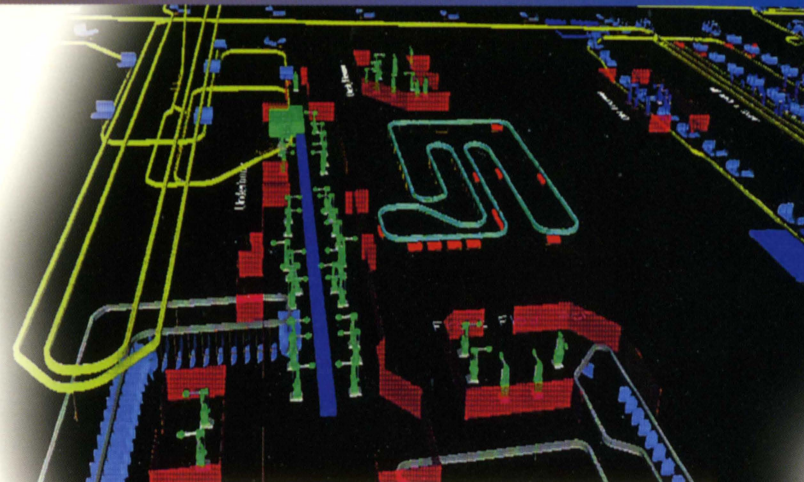
### *Description*

Current Mexican assembly plant material handling operations are centralized to an onsite warehouse with long travel distances required for delivery to the assembly locations. Large inventory levels are also common due to part supplier locations. Design Systems performed a material logistics study to identify and incorporate improved material flows, reduced inventory opportunities and resulting cost savings.

### **DESIGN SYSTEMS, INC.**

DESIGN SYSTEMS, INC.  
38799 WEST 12 MILE ROAD  
FARMINGTON HILLS, MI 48331-2903  
800-660-4DSI • 248-489-4300  
FAX: 248-489-4321

DESIGN SYSTEMS CANADA, LTD.  
3585 RHODES DRIVE,  
UNIT A  
WINDSOR, ONTARIO, CANADA N8W 5B3  
519-944-8807 • FAX 519-944-8853



### **"Bottom Line" Results**

- Developed a material logistics base simulation for current material handling operations.
- Established future material logistics requirements based on new model part and container information.
- Created new plant layout with optimized material flow, and more efficient material handling operations.
- Developed and evaluated alternative layouts and methods for material logistics.
- Identified cost savings of \$500,000 per year in material handling labor and equipment.
- Verified recommended operational changes with a logistics simulation model.

