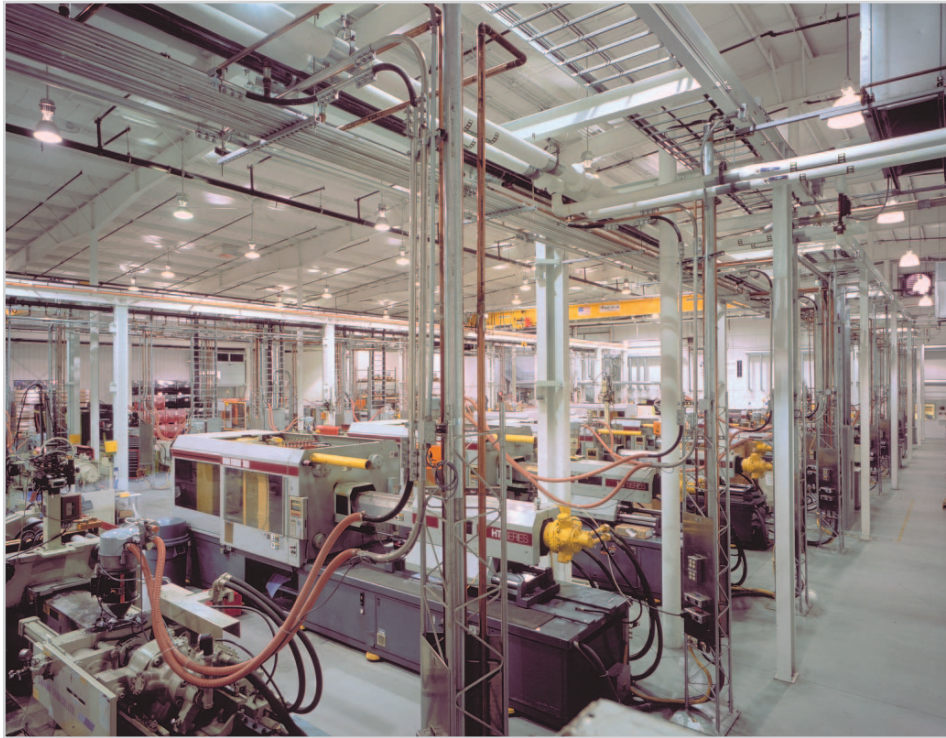


## AECON Design/Builders case studies

**United Plastics Group needed more space and a more efficient workflow, but they also needed to reduce labor, utilities, and material handling costs. They had six months. They chose AECON.**



### Here's why:

By November 1998, United Plastics Group (UPG), a Chicago-based manufacturer, had acquired several plastic molders and extruders in western Massachusetts. Among these was Ludlow Plastics, located in the old Ludlow Mills building, where UPG consolidated operations. Running this demanding, high-traffic business in the aged, multi-structure mill building quickly proved to be inefficient and expensive.

UPG soon decided to move the entire business to a new location. The goal was to lease existing space and/or construct a new facility that would accommodate state-of-the-art "lights-out" manufacturing processes, and provide a more efficient environment for equipment and personnel. The entire project was to be completed within two years.

Local UPG managers planned this large and complex relocation as a series of small, logical steps, and searched for a suitable existing building to lease. This traditional "linear" task approach was tried for over a year, until it became obvious that the company's costs were still rising as the project stalled. UPG searched for a more inventive, "global" solution.

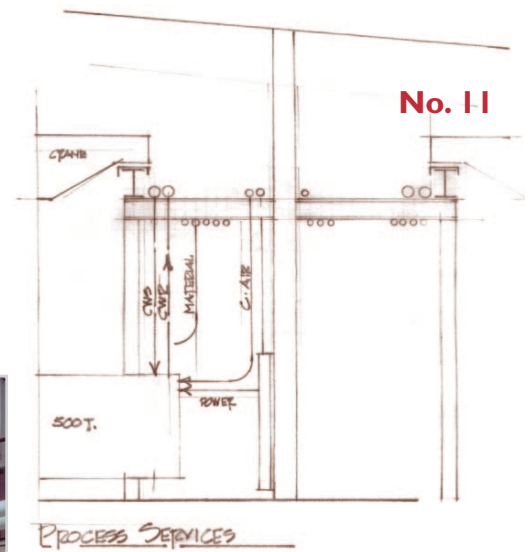
### The next wave

UPG Corporate then hired Don Fowler, a veteran manufacturing consultant with several successful shop expansions to his credit. He kick-started this project by placing all responsibility for design, construction, build-out and process installation on the shoulders of one industrial design/build firm.

After evaluating proposals, and conducting interviews, he selected AECON. Mr. Fowler explains, "I felt comfortable with John (Morgan). AECON had a very practical, common-sense approach to doing business...very direct.

"John's proposal was the lowest bid for the work. They (the AECON staff) worked as an integral part of our organization. We made some huge changes and they were able to respond very quickly – and they always brought good alternatives to the table."

When asked what he would change if he could do the project over again, Mr. Fowler responded, "If we could do it over, I would certainly want more time. We had only six months total. And, (in the future) if it were my business, I would simply go with John. He would provide the best value."



### An interior with guts

AECON created UPG's interior using a connected series of struts with aerial cross-members, or masts. This series of masts carries complete process services to the base of each strut, and also supports the rails for two high-capacity bridge cranes. Each machine simply docks to a strut, which offers power, material and process hookups. The interior footprint allows for plenty of space around and between the machines for efficient product transportation. Access to every machine from all sides also results in easy operation and maintenance.

### A night-and-day difference

The benefits of this new facility started to show as soon as UPG occupied the building. For example, the new electrical distribution system, with properly-sized cable, saved significant monthly costs, from reduced power loss and from less resistance-generated heat. A more efficient cool water supply allows most machinery to cycle at higher rates. The movement of raw material, which had occupied several employees, is now largely an automated task. And, computer network cable nodes at the base of each mast carry CAM instruction data to the machines for lights-out operation.

### Call Us First

AECON is an industrial and commercial design/build firm. Our services include construction management and industrial process installation. We're also regional building system representatives for United Structures of America. Let us help you save money and time on your next building project.



AECON, Inc.  
123 Mountain Road  
Suffield, CT 06078  
860 668-0288  
FAX: 860 668-2611  
www.aecon.net