Wavin Metalplast Buk Manufactures Success

SITUATION

Wavin Metalplast Buk is based in Poland and is part of the international Dutch-owned Wavin group of companies. It is the leading Polish manufacturer of plastic pipes and fittings, and its facilities include a tool shop which designs and manufactures tools for plastic injection molds and for extruded plastic pipes. Wavin Metalplast Buk also provides a molding service for its customers.

To maintain its position in the market in the face of increasing domestic competition, the company recognized that it had to streamline its product introduction process, provide higher quality products at lower costs, and reduce manufacturing time. Officials also knew that they must expand the services available to their customers and provide the ability to produce increasingly complex injection molds.

OBJECTIVES

✔ Replace its existing 2D AutoCAD system with new CAD/CAM/CAE software based on an integrated solid modeling system.

✔ Maintain market position by minimizing costs, decreasing time-to-market, and increasing product quality.

✔ Provide full service for customers, including product design when requested.

"SDRC technology has given us countless advantages. One of the most significant benefits is that we can now provide the market with tools and components with far more complicated geometry than we ever could before."

- Maciej Kazimierski
Tool Shop Manager
Wavin Metalplast Buk

PROCESS VISION

✔ Work in a concurrent engineering environment, rapidly exchanging information among engineers and departments.

✔ Have the ability to quickly and easily model tools with more fluid shapes and surfaces in 3D, designing concepts and assemblies in the software just as an engineer would develop the tool in his mind.

✔ Create toolpaths directly from the solid model.

ACTIONS

✔ Wavin Metalplast Buk analyzed various CAD/CAM/CAE systems and chose I-DEAS® for its integrated and superior manufacturing capabilities.

I-deas®

Get There Faster®

Wavin Metalplast Buk Manufactures Success

✔ Customer product data provided in 3D was translated directly into I-DEAS software solids. When the information was provided in 2D, a 3D component was created in a matter of hours.

✔ Rough toolpaths were created while the tool plates were ordered to reduce time-to-market.

✔ Components and assemblies were created and analyzed in 3D solids to identify interferences among parts. This eliminated the engineering changes required during tool manufacture.

✔ Wavin Metalplast Buk engineers communicated with their customers during all the stages of tool development using 3D solid images. Customers approved the tool design from 3D solid information.

RESULTS

✔ Due to the change from 2D AutoCAD to I-DEAS, Wavin Metalplast Buk products are getting to market faster. Wavin officials estimate that they achieved a 15% reduction in the time it takes to move a product from concept through manufacturing.

✔ Because of the fully integrated modules within I-DEAS, toolpaths are generated 30% faster than before.

✔ The accuracy of the digital product model has contributed to a 4% saving on the amount of raw plastics used annually.

✔ When drawings are required, they can be produced 15% faster than with the previous 2D CAD system.

✔ I-DEAS has enabled Wavin engineers to provide their customers with parts and molds with far more complex shapes than they could using AutoCAD.

PLANS

To meet the needs of its increasing customer base, Wavin is expanding its manufacturing operations and its use of I-DEAS. It will also be investing in rapid prototyping facilities in the near future. This will enable Wavin Metalplast Buk to support its customers' demands for full, fast service, encompassing tool design through manufacture and maintenance.

SDRC

M-5131 Nielsen 7,500 12/99