

# PROJECT BRIEFING

## STRATEGIC IMPROVEMENTS TO INJECTION MOLDING SCHEDULING

*"The technical assistance provided by [our project partners] has been instrumental in optimizing the scheduling of Injection Molding. The project provided a new strategic direction that we intend to follow in how we will schedule production at our Allentown facility."*

Vice President & General Manager,  
PA/NJ Operations  
B. Braun Medical Inc.



B. Braun manufactures medical devices such as needles, catheters, and valves. These devices are sold individually or in kits for a variety of medical procedures.

### PROJECT OBJECTIVE

To increase the amount of molding time and production by delivering a program to more effectively schedule assets within the injection molding operation.





### PROJECT SUMMARY

SAP, the ERP system used by B. Braun, had no scheduling module. On a daily basis, the scheduler downloaded data from SAP to view the demands for various parts. He would then manually match the demand to seventy different machines, seven hundred molds and various personnel to produce an updated schedule.

The project team from ESPI created an Access-based tool that took data from the daily SAP download, identified the due dates, and matched mold bases to the ideal machines for the various jobs. If an ideal machine was available, the program then determined if a mechanic was available to make the changeover. In the event that the ideal machine or mechanic was not available, the program presented a list of production trade-offs if the job was run on an alternate machine or at a later date.

Ultimately, the scheduler was able to generate real-time schedules to manage the operation. Resource planning can now be done optimally within one hour, allowing the scheduler to work on other important planning needs.

### RESULTS

-  Delivered a program that automated and optimized injection molding schedules.
-  Improved the efficiency and accuracy of the injection molding scheduling process.
-  Increased injection mold productivity through improved job order sequencing.
-  Reduced scheduler time required to develop injection molding schedules.

