Situated on the outskirts of Columbus, Ohio, Rimrock Corporation is an automation equipment supplier to the high-pressure die casting industry. Operating in the United States, Canada and Mexico, it’s the only company in the world to have integrated RobotStudio throughout its organization.

Many of Rimrock’s customers don’t have a technical background. As Dan Herzog, Applications Engineer, puts it: “They make parts. That’s their job. They can’t afford to slow the cycle down. To put their minds at rest, we simulate a full cycle. RobotStudio provides hard numbers. They can see it’s going to work in reality. It builds confidence.”

Rimrock Corporation has been in business for almost half a century, supplying automation solutions for a wide range of die casting applications. In 1993, the company decided to work with ABB as a single-source supplier of robotic equipment. A good decision according to Dave Celek, Director-Product Development at Rimrock. “It means we’re not dependent on one expert. The knowledge is spread across the organization.”

As ABB has evolved within robotics, Rimrock has developed right alongside it. When ABB launched RobotStudio, the Ohio-based company didn’t hesitate. “We purchased eight copies of the program,” Dave remembers.

**A confidence builder**

Until the advent of RobotStudio, Rimrock created 2D layouts using AutoCAD. “We still use AutoCAD,” says Dave, “but thanks to RobotStudio, we can now do a lot more. Reachability studies, cycle time analysis, you name it. It’s much easier for customers to visualize what they’re getting if you show them a 3D clip.”

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Is it feasible? Dan Herzog, Application Engineer, will tell you.
Case Study: Rimrock – automation integrator, die casting

Helping the Sales Manager sell
Steve Wiegerink is Rimrock’s Sales Manager. His job is to demonstrate the benefits of automation. In a world of 2D and 3D drawings, it was hard for some customers to actually imagine the full impact of sophisticated robotics. “Simulations provide reassurance. They can see that cycle times won’t be slower. They can see that reach won’t be a problem.”

Dan Herzog agrees: “It’s great if the customer can visualize the cycle. It puts him at ease. I have a recent example of that from a metal stamping operation. Currently, the customer has a cycle time of 19 seconds. They were concerned that we couldn’t match that. But we put together a RobotStudio clip to show we could. They haven’t asked any more questions about cycle time.”

RobotStudio – from start to finish
Rimrock uses RobotStudio for much more than building customer confidence. It’s a vital tool, both during the design phase and after delivery to the customer. Dan explains: “In the past, we used 2D or 3D CAD models to determine if there were interferences in the operation. But it doesn’t matter how experienced you are, you can’t always know what’s going to happen. RobotStudio helps us avoid problems.”
The team at Rimrock also uses RobotStudio for program verification. Dan continues: “We take the ABB product as it’s supplied to us, and design a user program. To run that program on a trial and error basis on the customer’s floor creates too much pressure. Now all we have to do is put it through RobotStudio – just to verify that everything is okay.” However, RobotStudio’s work isn’t done yet, as Dan Herzog points out. “The engineers use the program to debug in the field and simplify installation. It’s a great way to avoid reach or program problems.”

A great PR tool
Despite the best efforts of Dan Herzog, Dave Celek and the team at Rimrock, some customers are not that easily seduced by the benefits of advanced automation products. But, as Dave points out, that doesn’t have to be bad news. “I believe it will help us sell automation solutions to customers who run complicated processes. Because we’ve shown that we can handle tough challenges, they call us when it’s time to automate an easy process.”

Rimrock and RobotStudio – getting better all the time
Rimrock operates in a highly competitive environment. That’s why they’re always looking for an edge. Dave explains: “We need to have a competitive advantage. RobotStudio is part of that advantage. I haven’t seen anything on the market that compares as far as functionality goes. Looking to the future, we see it as a useful part of our package. We rely on repeat business, and RobotStudio helps us make a home run even when there are difficulties.” The potential is thought to be enormous. Greg Gernert, Robotic Engineer, captures the hopeful mood at Rimrock: “What I like about this program is the flexibility. If it works in the virtual world, it works in the real world. RobotStudio saves a lot of time and expense.”

FACTS AND FIGURES ON THE RIMROCK SYSTEM:

<table>
<thead>
<tr>
<th>RobotStudio:</th>
<th>Version 2.0</th>
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<tbody>
<tr>
<td>No. of copies of RobotStudio:</td>
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<tr>
<td>Robot models in use:</td>
<td>IRB140, IRB2400s, IRB4400s, IRB6400s, IRB6600s, and IRB7600s.</td>
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<tr>
<td>Controller version:</td>
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According to David L. Celek, Director-Product Development, RobotStudio has helped Rimrock hit a few home runs.

Greg Gernert, Robotic Engineer, makes sure the concept works on the customer’s floor.

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