In the world of manufacturing, companies get ahead of the competition by building trust with their customers and excelling in technological expertise. Genesis Systems Group, a global leader in robotics system integration, wanted a way to bridge these distinct goals.

“We want to create a new customer experience,” says Genesis Solutions Engineering Manager, Justan Each. “The goal is for Genesis to be a leader in the industry.”

In 2015, Genesis partnered with Mechdyne Corporation to find a new way to showcase what Genesis excelled at. As a result, Genesis began seeing their customer rapport, sales cycle, and collaboration capabilities skyrocket.

A New Customer Experience

When prospective or current clients visit Genesis’ headquarters, they invariably find themselves in the Virtual Solutions Center. Within this room, Genesis reveals their secret weapon – a virtual reality display called the 3DG. Stretching nine feet tall and fifteen feet wide, the 3DG curves slightly inward to create a truly immersive feel. Once the initial “wow” factor subsides, visitors dive deeper into their concepts, ask insightful questions, and make design requests before product development ever begins.

“Our customers are interacting a lot more with our engineers and with the design,” says Genesis President/CEO Patrick Pollock. “And, the customer attaches to a solution a lot sooner.”

Within the client engagement space, the sales team turns over control to the engineers and designers. Together with the customers, the group discusses the customer needs and begins solution design. Genesis’ customers experience

Challenges

- Create a new customer experience
- Allow customer interaction with automation and robotic designs in VR
- Ensure minimal design changes from concept to fabrication
a comfortable, collaborative, and customized atmosphere, leaving them feeling engaged and excited to move forward with a design.

“I find that more people are making trips to our facility to see their concept before they even buy anything now,” says Travis Sample, Virtual Solutions Engineer at Genesis. “The 3DG enables us to interact with our customers on a deeper level and help bring our simulations to life.”

Enabling Technology to Realize Customer Insights

Such an experience doesn’t happen without careful consideration and planning. Before considering what the custom solution would look like, Mechdyne fully analyzed all of Genesis’ complex goals:

• Building trust and increasing collaboration with customers, creating strong relationships

• Continuing to be considered a leader in the industry

• Virtually reviewing and changing designs with their customers

• Ensuring minimal design changes from concept through fabrication

Mechdyne and Genesis designed and integrated a Mechdyne ARC™ system to allow customers to interact with automation and robotic designs in virtual reality. Renamed the 3DG at Genesis, the curved, four-by-four tiled solution creates a long-lasting positive impression with potential and current customers. Demonstrating their robotics systems to customers using simulation quickly became a critical part of Genesis’ product design success.

“Our customers’ confidence in us grows when they can see their designs in the 3DG,” says Each. “Combined with the versatile teams that use the 3DG, there’s a greater sense of cohesion and trust between all our teams. We’re working better, faster, and smarter.”
A Unified Project Team

Increased collaboration with customers is only a small piece of the benefits Genesis experiences. The 3DG maximizes the internal design process, enables ergonomic testing, and increases internal collaboration.

“We are using the technology more for internal design reviews than we anticipated, which is creating a lot more opportunity for our teams to work together,” says Each. “Because more people are reviewing designs in the virtual world before we build one of our robotic systems, we are seeing fewer design errors and more optimized solutions.”

Traditionally, Genesis’ engineers and product designers would take lead on customizing a solution for their customers. After working on a concept design with their customer, they would provide a more detailed model to other small teams to work with, creating a disjointed process. The 3DG allows all of Genesis’ employees to take a more versatile, agile approach, providing insight every step of the way:

• Engineers and designers easily plan for production and make design recommendations
• Technicians plan for cable runs earlier in the process instead of waiting for a fabricated solution
• Applications engineers begin programming requirements with a much more clear direction of what the final solution will consist of

“Our goal is to have minimal design changes from concept to fabrication,” says Each. “Because our teams are working together more closely, we are seeing that goal come to life.”
As a result of a more unified project process, the Genesis team is seeing a drop in errors, time spent, and cost. Their success reflects back onto their clients through shortened project cycles, a more complete design, and dramatically lowered risk. The success of both Genesis and the customer mutually benefits the other, creating a cyclical pattern of rewards.

“We are finding that once our customers experience it once,” says Mike Jacobsen, Director of Operations – Versa Factory, “they want to use it again and again in their process.”

Driving ROI in the 3DG

Genesis’ and Mechdyne’s close partnership and consultative approach now enables Genesis to deliver a similar experience for their customers. As a result, Genesis is reaping the benefits of engaging more closely with their customers and each other.

“We had two large sales in one day, and it is tied back to seeing the designs in the 3DG, knowing exactly how the solutions were going to work, and what our process would be,” says Andrea Petersen, Communications Manager. “Our sales process was cut by two months, and we walked away with a record sales day, two robotic automation programs totaling over $10 million. That’s credited to the improved way we work together within Genesis.”

About Mechdyne

Mechdyne is one of the world’s leading providers of innovative visual information technologies. Mechdyne bends technology to our will in ways that transform complex data into insights and ideas. To ensure our customers succeed, Mechdyne provides comprehensive, customized solutions that include consulting, software, technical services, and hardware integration.