

## **Electrical Industry Case Study**

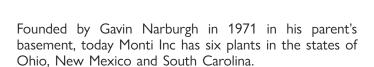
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Company Profile
Company: Monti Inc.

Location: USA

Machine: Planar P220.35,

P150.35, OS1000.35



Monti Inc is a leading manufacturer and fabricator of copper and aluminium conductors, electrical insulation and steel components for the electrical industry. Services offered include copper bus bar and sheet metal fabrication, CNC machining, stamping, powder coating, die design & build and assembly. With over 30,000 active sku's, Monti completes over 200 sku's daily in a high mix/low volume environment.



Figure 1: Outside the Monti plant in Cincinnati

Monti offers a wide range of machining, stamping and fabrication capabilities. Typical customers are large electrical OEMS such as ABB, Eaton, Siemens and Schneider Electric.

Industries served by Monti's ISO 9001:2015 certified facilities include electrical distribution, electric vehicles, material handling and green energy.

Ronnie Ball, Director of Quality at Monti Inc, explained that they were using a laser scanning machine and a CMM to inspect their parts. The laser scanner was not the correct fit for the business as it couldn't accurately

"The efficiency gained from the InspecVision machine allowed us to streamline our team by reducing the need for one Quality Technician"

Ronnie Ball, Director of Quality, Monti Inc.

measure copper parts. The CMM took a long time to program and didn't have the bed size for larger components.

The company was introduced to the InspecVision Planar machine by a local InspecVision distributor at FABTECH, North America's largest metal forming, fabricating, welding and finishing event.



Figure 2: Planar P220.35 measuring a copper part at Monti

The first machine, a Planar model P220.35 with SurfScan and 2D automatic repositioning options, was installed in their Cincinnati plant in January 2022. The benefits of the Planar machine were such that Monti installed a second machine, this time a P150.35, within five months. Four more machines followed in 2023, including a 2D and 3D combi system, in each of the remaining plants in Greenwood, Santa Teresa and Sumter.

Depending on the complexity of the component, Monti saves between two and twenty minutes inspection time per part and checks between two hundred and three hundred parts per week. The significant time saving has enabled the company to streamline their team as they now need one less Quality Technician than before.

According to Ronnie, it wasn't difficult to justify the investment as their old machine was out of date and payback on the machine was within one year. Most importantly, they find the machine very easy to use. All setup and machine operators as well as all quality technicians know how to operate the machine.

When asked if the InspecVision machines were easy to use, Ronnie replied "you just place the part on the glass in any orientation, including upside down, load the program and click run. It's extremely fast to program, making it more convenient for more inspections on the machine. Our InspecVision programmer creates forty to fifty programs per day."



Figure 3: Copper part being measured on Planar 2D

In terms of support, Ronnie commented that they've needed support only three to four times a year and usually receive a response by email within a couple of hours. The machine has no moving parts and despite some scratches starting to show on the table, accuracy has not been affected after two years of use.

For Monti, the main benefits have been the "drastically reduced inspection time" and "eliminating a second employee "buddy checking" the finished part.



Figure 4: Monti plant in Sumter, South Carolina

To find out more information about the Planar and how it can help your business; please download our online brochure and contact our sales team at sales@inspecvision.com.



"Due to the quicker inspection times and less down time, we've been able to add more load to the work schedule. I would recommend it to any metal fabricator that needs quick inspection"

Ronnie Ball, Director of Quality, Monti Inc.

