

Rittal – The System.

Faster – better – everywhere.

Over 40% Throughput Increase

Boosting Bentek's Efficiency with Rittal Automation Systems

SNAPSHOT

Bentek partnered with Rittal to automate their enclosure processing, resulting in an increase in throughput of more than 40% and enhanced overall production efficiency.



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INTRODUCTION

Bentek, a leading contract manufacturer in power distribution solutions, sought to overcome significant operational challenges to boost throughput, minimize labor requirements, and enhance safety measures. In order to meet their growth goals, Bentek partnered with Rittal and leveraged advanced automation solutions.

ABOUT BENTEK

Bentek stands out as a premier contract manufacturer in the realm of power distribution solutions and is renowned for its creation of robust, reliable, and safe products that meet the highest standards of quality and functionality. Their mission focuses on delivering top-tier engineering design, efficient material sourcing, comprehensive turnkey manufacturing, and support to forward-thinking, rapidly expanding companies. Bentek's unwavering dedication to quality and exceptional service is a hallmark of their approach. They guide customer designs through a thorough process development cycle, consistently aiming to surpass expectations and cultivate long-term partnerships, ensuring customers return for successive projects.



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THE CHALLENGE

“Our options were Rittal or Hoffman. After observing both machines in operation, we concluded that Rittal was the superior choice due to its robustness, reduced machining vibration noise, pre-installation vacuum system, and ease of operation for our staff.”

**- CHARLES HU,
MANUFACTURING
ENGINEERING
MANAGER AT BENTEK**

Bentek faced the challenge of optimizing the processing speed of plastic enclosures used for solar combiner boxes. Initially, Bentek utilized a plastic enclosure that required extensive modification, including drilling and cutting. To automate these processes, they invested in the RAS Perforex MT machine, which significantly increased processing speeds. However, Bentek required even higher efficiency to achieve their ambitious goal of producing 200 enclosures per day. Bentek required a solution that allowed for the simultaneous processing of multiple enclosures.

THE RITTAL SOLUTION

After evaluating various options, including nVent Hoffman, Bentek chose to collaborate with Rittal due to the superior features of their machinery. Rittal provided Bentek with the 9X Special Frame Fixture, a specially designed frame capable of holding up to nine enclosures at once, to be used in conjunction with the Perforex machine.

Charles Hu, Manufacturing Engineering Manager at Bentek, commented on why they chose to work with Rittal, stating, “*Our options were Rittal or Hoffman. After observing both machines in operation, we concluded that Rittal was the superior choice due to its robustness, reduced machining vibration noise, pre-installation vacuum system, and ease of operation for our staff.*”

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IMPLEMENTATION

“[Rittal’s] efforts have yielded remarkable results, and I want to acknowledge [their] expertise and commitment. Since the implementation of the 9X Special Frame Fixture, our production throughput has surged by an impressive 40%. This significant boost in efficiency directly reflects [their] hard work and proficiency.”

**- CHARLES HU,
MANUFACTURING
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The Perforex machine was installed at Bentek's San Jose facility in mid-July 2023, with the 9X Special Frame Fixture being implemented in mid-February 2024. With the new frame installed, Bentek could quickly, easily, and safely process up to nine enclosures simultaneously, significantly increasing their throughput, maximizing their production efficiency, and meeting their output goals.

THE RESULTS

The results of this collaboration were immediate and impactful. With the installation of the Perforex, Bentek experienced a 40% increase in throughput while saving on labor. The integration of the 9X Special Frame Fixture further boosted overall throughput by 50%. After a year of utilizing the Perforex machine, Bentek saw throughput enhancements exceeding 40%, improved yield, and consistent quality. With these growth opportunities realized, the company could continue to improve product quality while increasing customer opportunities and improving relations.

Charles Hu expressed gratitude for the benefits brought on by the partnership, stating, “*[Rittal’s] efforts have yielded remarkable results, and I want to acknowledge [their] expertise and commitment. Since the implementation of the 9X Special Frame Fixture, our production throughput has surged by an impressive 40%. This significant boost in efficiency directly reflects [their] hard work and proficiency.*”

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CONCLUSION



The partnership and strengthened relationship between Bentek and Rittal has proven to be a positive success for both companies and the customers Bentek serves. Thanks to the transformative impact of advanced automation solutions, Bentek's manufacturing processes and customer opportunities have only improved. By addressing critical growth challenges and implementing cutting-edge, innovative automation technology, Bentek not only achieved their production goals but also enhanced their overall operational efficiency and product quality. Rittal continues to enjoy a partnership with Bentek and looks forward to new projects.

Charles Hu continued, "*[Rittal's] contributions have a direct impact on our success, and we deeply appreciate [their] skills and knowledge.*"

CONTACT RITTAL FOR AUTOMATION EFFICIENCY

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**- CHARLES HU,
MANUFACTURING
ENGINEERING
MANAGER AT BENTEK**

Are you seeking to improve your business' production efficiency with a high return on investment? Rittal's advanced automation solutions can transform your manufacturing processes, just as they did for Bentek. Our state-of-the-art technology and comprehensive support ensure your operations reach their full potential with increased throughput, reduced labor costs, and enhanced safety measures. Contact us today to discover how Rittal can tailor solutions to meet your unique requirements and drive your business towards greater success.

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ABOUT RITTAL LLC

Rittal LLC is a global manufacturer of industrial and IT enclosures, racks, and accessories, including cooling solutions and power management systems for industrial, data center, outdoor, and hybrid applications. As the largest manufacturer of enclosures in the world, Rittal provides innovative, high-quality solutions for practically any industrial or IT infrastructure application, from single enclosures to comprehensive, mission critical systems. Products are tested and certified to the appropriate standards that apply, including UL, CSA, ATEX, NEMA, and more.

[Learn more at rittal.us.](http://www.rittal.us)



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