



MORROW ENGINEERING, INC.



“We’re not trying to become the biggest engineering company in the world. Our only goal is to be the best.”

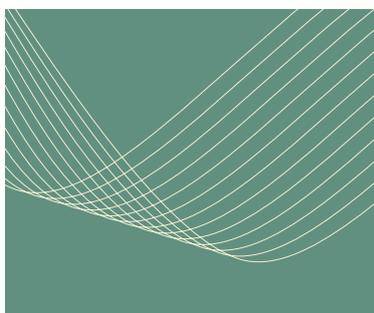


Making the Connection

Morrow Engineering was founded in 1986 to provide high quality electrical engineering for industrial distribution systems. In Morrow Engineering you will find a company of experts who specialize in electrical power distribution systems. And in Morrow Engineering you will also find a company of experts who specialize in automated control systems. Very few electrical engineering firms can cross the divide between the world of power electrical engineering and the universe of automated control. When you need to integrate high quality controls with high quality electrical systems, Morrow Engineering leads the way.

Bridging the gap requires a high level of understanding of both disciplines — an uncommon characteristic for any engineering firm. Today Morrow is a leader in integrating automated process control systems with electrical power systems.

Two specialties. A team of experts. Hundreds of complete connections.



Automated Control Systems



Moving the Goods

Can a company such as Morrow Engineering meet your specific precision demands? Can the Morrow engineers enhance the productivity of your operators? Can Morrow engineered control systems reduce loss and thereby increase efficiency?

Yes, yes and absolutely yes.

Morrow Engineering provides automated production and processing systems for material handling, food manufacturers, and all types of industrial processing plants. From receiving and inventory, to processing and packaging, to storage and shipping, Morrow Engineering has done it all — all with a level of precision required by

the nation's most demanding plants. No matter how simple or complex your production process might be, Morrow Engineering has the proven capability to master the art of solid, liquid and dry goods ingredient control. And whether you require continuous or batch type systems, Morrow Engineering provides experienced design and implementation at every step of the way, including weighing, mixing and conveyance controls. Does your production process include the challenge of moving product into packaging? Morrow Engineering can automate every step.

Morrow Engineering, Inc. is an electrical engineering firm with expertise in industrial, institutional, municipal and electrical power distribution systems and industrial automated control systems. The company is licensed, and is regularly employed, in multiple states throughout the country.



Automated Control Systems

“Morrow engineers personally do the job, training operators and maintenance personnel to oversee a smooth transition.”



Today, integration is more than simply connecting plant utility systems with production needs. Consider the benefits of providing a broader link between the production floor and the management corridor. Morrow Engineering can integrate state-of-the-art inventory control systems with your accounting software to allow critical information to pass from the production line to those who watch the bottom line, and vice versa. Integration can result in collection of numerous data, including levels of production and waste, which can be tracked, analyzed and adjusted, increasing productivity and reducing waste. Recipes and formulas can be downloaded to production control systems. The benefits are only limited by your imagination.





Morrow Engineering possesses the expertise to provide such benefits.

When you hire Morrow Engineering, you retain the expertise of engineers who are committed to providing the kind of service and solutions that increase efficiency, ensure quality and help you meet your production schedules day in and day out. To make good on such promises, Morrow Engineering designs and fabricates your control panels to your needs. This means quality and cost control is literally built in to every job. That quality control results in the delivery of automated systems that meet your construction schedule.

At every step of automation, Morrow engineers utilize state-of-the-art logic technology to provide the right



From receiving to processing, to drying and cooling, to distribution and packaging, to inventory and storage, Morrow has done it all.



Case Study: Dakota Growers Pasta Company

National Food Producer

Problem: New Plant

Solution: Power and automated control system design and engineering.



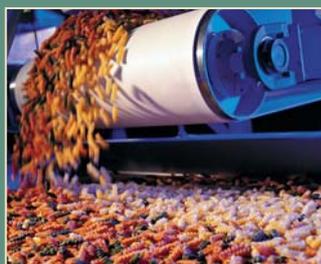
Lotsa Pasta

The Dakota Growers Pasta Company is the third largest pasta manufacturer in North America. When the company needed an engineering firm to create and implement power, lighting and automated control systems for their new plant, they chose Morrow Engineering. Why?

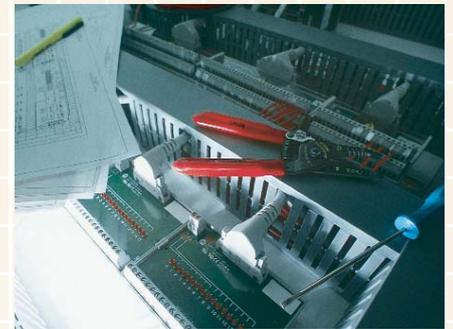
They knew Morrow Engineering would work closely with them to help them achieve their exacting goals. Dakota Growers was confident that the Morrow engineers could build



the infrastructure required to help them mill the semolina required to produce almost 1,000,000 pounds of pasta per day, organize the final product for packaging, and capitalize on pasta production byproducts. All while integrating a system that exceeds all standards for premium quality and safe food handling. The result? The world's first fully integrated, farmer-owned pasta plant. That's why Dakota Growers has an ongoing relationship with Morrow Engineering. They know that Morrow Engineering understands the complexity of their system and the importance of minimal downtime.



system for your unique needs. Morrow engineers take the added steps to simulate the actual process, equipment and your specific programming situations prior to installation. During the installation, Morrow engineers are on hand to calibrate all instruments, confirm field wiring systems, perform I/O checkout, and provide operator and maintenance training for your personnel. Morrow Engineering's thoroughness and precision integration of automated controls



and power distribution means decreased costs and start-up time. This, of course, also means that your automated control system performs as it was designed to perform from the moment it goes online.

Morrow Engineering can provide ongoing support after the job. You can even opt to have Morrow engineers available through 24/7 remote system support. And we can provide modifications at your request, along with in-lab simulations for immediate problem solving. Of course, Morrow Engineering is always available to offer expansion assistance, either for your processing system or an entire plant operation.

With Morrow engineers by your side, you'll receive the kind of service and solutions that are designed to integrate with existing conditions, increase production efficiency, and perform at optimum levels day after day.



Power Distribution Systems

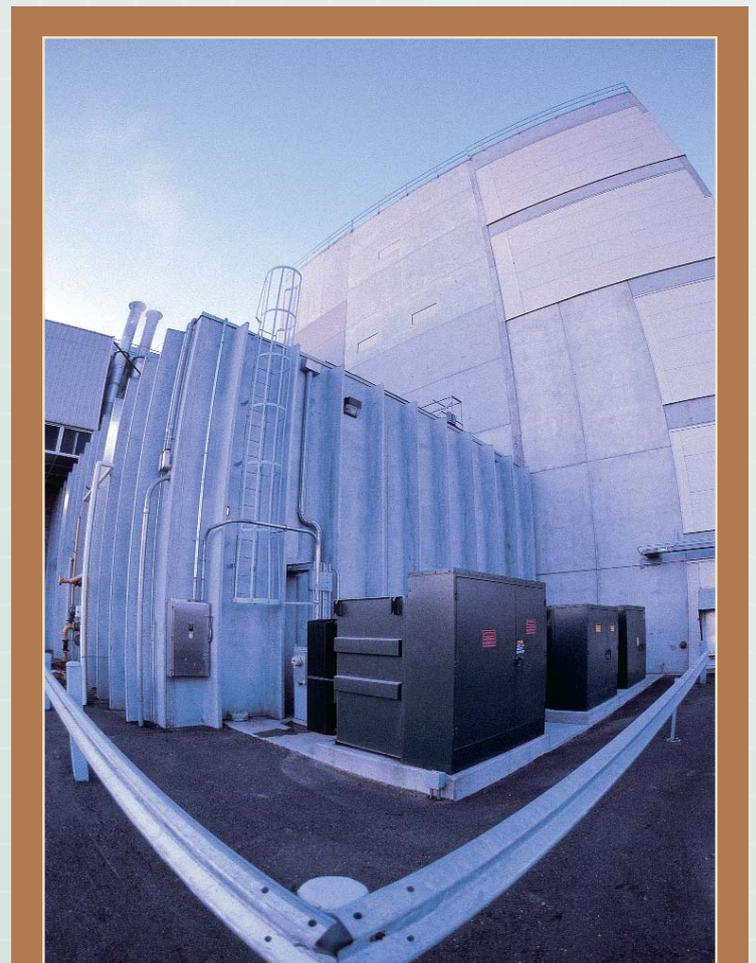
Mastering the Powerplan

Managing high power means accepting high stakes. Morrow Engineering welcomes the challenge. Morrow engineers' expertise ranges from utility-type transmission, distribution and substations to industrial power systems supplying multiple motor and lighting systems. Overhead or underground, radial, loop, primary or secondary selective, or secondary double-ended, it doesn't matter. The quality of your electrical system is only going to be as good as the quality of the engineers who design it. That is why every electrical system engineered by Morrow Engineering is unique and designed to maximize the benefits to our clients.

Whether you need a highly efficient, highly reliable state-of-the-art electrical power system, need to upgrade an obsolete system, or require an overall evaluation of your power distribution system, Morrow Engineering is the firm to contact.

Who can you trust to engineer or modify your power system? The skill level required to bring power online safely, securely and in a timely manner is high indeed. Morrow engineers possess the highest level of skill and experience so that you can be assured your power is in the hands of the right people.

The quality of your electrical system is only going to be as good as the quality of the engineers who design it.





*By calling on Morrow,
the old becomes new,
and the new becomes
comfortable.*

The quality of any power system is only as good as the quality of the installation. Morrow engineers take the utmost safety and security measures, drafting meticulous installation specifications. Scheduling, budgeting, safety, coordination, and standardization are the key facets of every Morrow Engineering project. And finally, installation is never complete unless those who are charged with operating and maintaining the system are also brought online with the new configuration. Morrow Engineering shares knowledge of the operating protocol and equipment demands and provides up-to-date system documentation.

All Morrow Engineering projects center on quality and safety. But other considerations are just as crucial. Budget



“We actually enjoy large-scale, highly challenging power conversions. Give us your most complicated power problem. We can handle it.”

Power Distribution Systems

considerations may seem to drive the outcome of what is possible or not. But Morrow engineers work within your budget to provide the highest level of performance and quality. Innovation is simply part of the task. And, of course, all power distribution assignments include the pressure of time — no downtime, no lag time, no spare time. Morrow Engineering is adept at creating and adhering to the schedule your production demands. Again, the skill level of the engineers you hire will determine the success of any project. Morrow engineers possess the knowledge, expertise and experience you can trust.



Case Study: Raytheon Aircraft Company

Business and Special Mission Aircraft

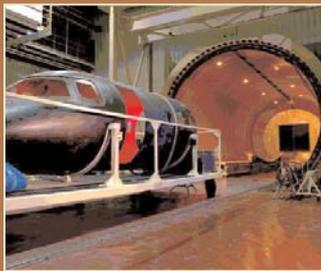
Problem: Large-Scale Industrial Electrical Distribution System

Solution: Electrical Consolidation, Upgrades and Expansion



Premier Power

For a company known for developing powerful innovations like the King Air, Hawker Horizon and the Premier I – winner of *Flying* magazine's Editor's Choice Award – overloaded and



outdated electrical systems simply wouldn't do.

Prior to 1992 the facility suffered from unexplained interruptions and disturbances in electrical power. Out-of-date substations

had no spare capacity and no room for expansion. The quickly growing aviation plant needed increased power capabilities, yesterday. And without any downtime.

The solution? The experts called in the experts.

Working closely with Raytheon Aircraft plant engineering and the local utility, Morrow Engineering re-engineered the entire power distribution system for increased reliability and capacity, consolidated multiple services into two underground primary selective utility circuits, redistributed loads and reconnected the electrical services to 18 buildings – all with no loss of production during installation.

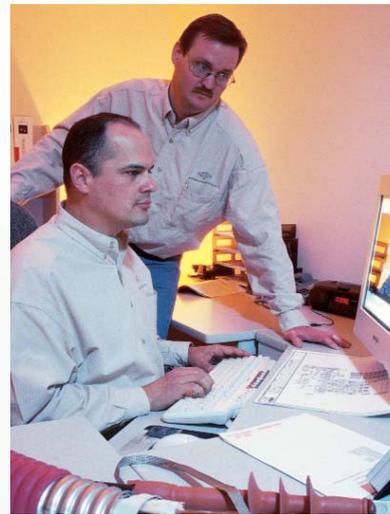
Morrow increased capacity by engineering new substations and increased the utilization of electrical power by completing a power distribution monitoring system that monitors more than 100 different points.

For more than ten years Raytheon Aircraft has continued to rely on Morrow Engineering to provide it with a steady supply of Premier Power.

Precision Under Pressure

When it is time to create, upgrade or modify either a complex automated processing system or an electrical distribution system, who should you call? Who do you trust to instill the highest level of quality? Who do you trust to deliver solutions within budget demands? What engineering company can perform with exacting precision under the most stringent constraints of time? What kind of company can integrate the demands of the job at hand today, and the needs you'll face tomorrow?

Morrow Engineering, Inc.



By specializing in automated processing, programming and power systems — and with the unique ability to integrate automation and power — Morrow is the name to trust. Morrow Engineering has built a remarkable track record for safe, innovative solutions, leading its

competitors throughout the land. By remaining flexible and demanding only the best from its engineers and maintaining ruthless standards of quality, Morrow Engineering is well qualified to lead your company to greater productivity, efficiency and quality, today and into tomorrow.

Make the connection with Morrow Engineering today.



