Custom Solutions for the Energy Industry // Brandt





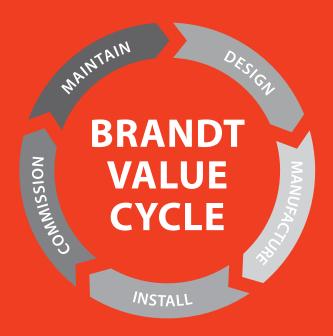


Success doesn't come easily; it is the outcome of careful planning and hard work. And, you have to have the right equipment for the job and know that it will work for you when you need it.

Brandt's complete life-cycle approach is the foundation for delivering consistent results for our customers. Whether it is as simple as a quick-turnaround repair for a key piece of equipment, or as complex as a custom Brandt-designed and built machine, we can help you gain a competitive edge or solve critical production problems.

Successful businesses around the world trust Brandt's team of engineers, project managers, technicians, machinists, millwrights, industrial mechanics, and welders because they know that we'll be there for them when it matters most.

It's what we do. We Build Confidence.



End-to-End Solutions for the Energy Industry

You can trust Brandt's comprehensive engineering, fabrication, and a true one-stop shop — start to finish. Our multidisciplinary team does it

scoping and design through to manufacturing, installation, and final strict quality control and ensure that nothing leaves our facility until it's 100% standards-compliant. Our team has decades of experience designing reliable equipment and configuring

it for customer facilities to maximize requirements, and meet targeted production rates, so you can work Brandt equipment.

Certificates:



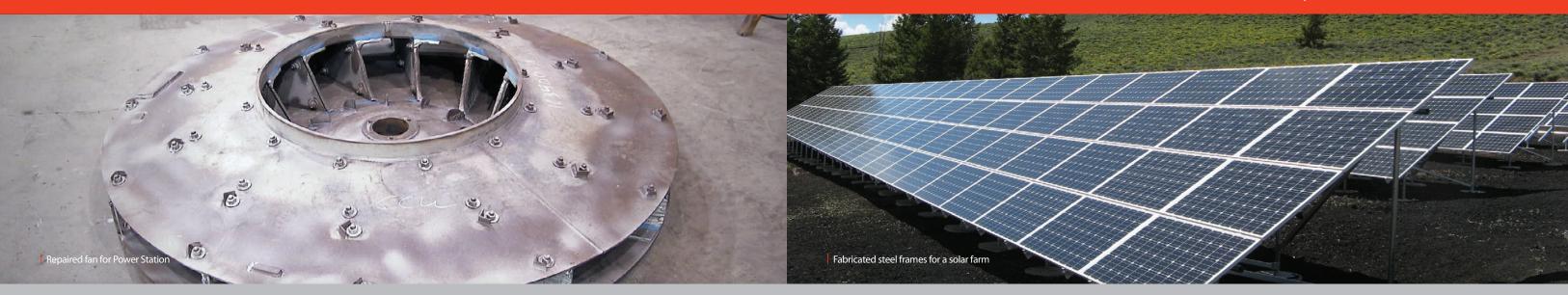








Coal & Natural Gas Renewables: Wind, Solar, & Hydro



Reliability and high capacity are hallmarks of the coal-and-natural-gasfired electricity industry and Brandt has built a long-standing reputation for excellence by providing the key support services that are vital to this success.

Brandt delivers:

- Outage support
- OEM-contract manufacturing
- Custom equipment fabrication
- Repair and refurbishment
- On-site services
- Structural steel
- Engineering service

Turbine & OEM Repair

Brandt provides machining and repair services for turbines, generators, rotors, shafts, compressor housing, and other large generating components.

Our Saskatoon facility — the bestequipped in Western Canada has the equipment and expert staff required to complete large and complex refurbishments to the rigorous standards of your operation. We also have strong relationships with key OEMs such as General Electric and Mitsubishi-Hitachi and can fabricate turbine components to OEM standards. And, Brandt's LEAN practices and dedication to our ISO 9001 certification ensure quality products in the production of all OEM parts.

Brandt deploys these services in a comprehensive range of solutions from basic repair and refurbishment to equipment design and optimization. Our unique production capabilities and collaborative approach allow us to deliver everything from the smallest repair to large, complex machining and refurbishment projects with absolute consistency.

The Brandt team collaborates with customers to assess opportunities and unique challenges, providing the full support that they need to deliver reliable, productive service.



Brandt refurbished casings

Brandt's long history in manufacturing and engineering consulting make us the perfect partner for renewable energy projects.

Brandt delivers:

- Two state-of-the-art facilities
- ISO 9001-certified
- CWB-certified
- Fully equipped to manufacture various renewable energy components
- Our facilities are Ideally positioned to serve the energy market

- Our extensive logistical expertise ensures that products are delivered complete and on-time so that project schedules are maintained and capital costs are minimized.
- We have unmatched regional manufacturing capacity and logistical advantages that enable us to fully serve the market.

Brandt provides a complete range of services for hydro generating station repair and capital improvements. We are well positioned to manufacture or refurbish components and provide onsite service and installation, either directly or in conjunction with OEMs or other contract service providers.

Transmission & Distribution

Brandt has a long track-record of success in supporting the transmission system, having manufactured thousands of transmission towers.

We create the innovative, highquality products needed to support the significant investment required in expanding and upgrading the transmission infrastructure.

Transmission towers are subject to the effects of extreme climatic conditions and require specialized coating solutions to ensure maximum longevity. To mitigate the risk of de-lamination of the below-ground coating on self-weathering tower structures, Brandt developed a coating process known as The Brandt Curve. The finish allows water to flow down a pole without penetrating the layers of coating, eliminating the problem of coating de-lamination.

This innovation — a first for this environment — has proven highlysuccessful and is now seen as the coating standard for direct embedded pole structures, resulting in significant long-term savings for utilities.

Turn-Key Solutions





TRANSMISSION STRUCTURE REPAIR

Canadian Utility Provider



Design

Unique Solutions for Unique Challenges

Brandt's multi-disciplinary Reginabased engineering team has over 100 members and utilizes state-ofthe-art tools and technologies to provide exceptional solutions for our customers. We work collaboratively to assess the opportunities and unique challenges, sharing knowledge across different departments and drawing on expertise from a variety of industries. The result is better technological solutions that will meet or exceed your requirements and ensure superior performance in the field.

Manufacturing

End-to-End Solutions

Brandt operates leading-edge manufacturing facilities in both Canada and the US, with a full suite of world-class capabilities for fabrication, machining, assembly and automation.

We deliver value to our customers with premium manufactured products that meet their needs, time after time. From plant equipment, to large-scale projects such as transmission structures, wind project components, hydro infrastructure, solar racking, maintenance facilities, and much more

Installation

Experience Matters

Brandt has extensive experience in industrial equipment installation in locations around the world. This long track record has given us the hands-on experience and in-depth product knowledge to quickly, safely and efficiently execute all project installations, wherever our customer's need takes us.

Industrial Repair

Proven Performance

Getting our customers back up and running sooner and for longer has always been our philosophy. With a wealth of first-hand process knowledge, we

design regular repair programs to extend equipment life while reducing operation and maintenance costs.

Our full-service repair and refurbishment team works closely with Brandt engineers and designers to ensure that every repaired component meets or exceeds OEM standards by incorporating productivity enhancing design improvements, as required.

Brandt delivers:

- On-site field services tailored to each particular repair
- · On-site machining and custom fabrication
- Large and small scale machining
- Scheduled outage support

Project Objectives

1 EFFICIENT AND SEAMLESS **RESPONSE**

Provide critical components required to restore the integrity of the transmission structures.

② ELIMINATE THE RISK OF DOWNTIME

Complete and install the solution quickly and effectively.

3 MAINTAIN COMMUNICATION

Ensure that the customer and supporting resources are aligned with the solution.



The Challenge

A transmission provider's towers were dented and sheared at the base by shifting ice — creating short-term risk of service interruptions and long-term risk to power grid integrity. Adding to the challenge, the imminent spring thaw would melt the ice and dramatically increase the chances of the towers toppling. The transmission provider turned to Brandt for a large-scale solution in a very short timeframe.

The Solution

Brandt quickly assessed the needs and designed support bracing solutions to replace the damaged members of the tower structures. Next, we fabricated the braces and deployed on-site crews to assist with the field installation process. From realization of the problem, there was a four week window for the braces to be designed, fabricated, and installed.

The Result

By placing a very high priority on this situation, we completed the entire project within the tight timeframe. As a result, the integrity of the transmission towers was restored and the utility did not incur a single failure. Brandt utilized many highly specialized processes to complete this project in time, including our extensive field repair service. This showcased our ability to respond quickly to customer needs while providing well engineered, quality solutions for the energy industry.



Commissioning

On-site Efficiency

Brandt's PMP-certified project management team is integrated into the engineering and design process to ensure the most efficient and cost-effective approach to the commissioning and hand-over phases for every Brandt project. They have direct access to the engineering and manufacturing teams throughout the process which allows for quick resolution to any issues and ensures the scope, schedule and budget targets are met.

OEM Support

Effective Partnerships

Brandt partners with OEMs to deliver key fabrication, machining and refurbishment services. Brandt delivers consistent, premium-quality support to strict OEM specifications and tolerances through a range of business best-practices that fully leverage our extensive LEAN programs and dedication to our ISO 9001 certification to ensure quality products and attention-to-detail in OEM parts production.

Repair & Refurbishment

Maximum Value, Minimum Time

Downtime is a profit-killer, so getting our customers back up and running sooner and for longer is a top priority for the team at Brandt. Our full-service repair and refurbishment team works closely with our engineers and designers to ensure that every repaired component is as good or better than new. With our ideal location next to scrap yard, steel mill, rolling mill, ERW and spiral pipe mills and pipe coating facilities, we've got a wealth of firsthand process knowledge.

Brandt Manufacturing & Repair Facilities



Regina, CAN (200,000 sq/ft on 38 acres)



Saskatoon, CAN (210,000 sq/ft on 22 acres)



Bloomington, USA (196,000 sq/ft on 45 acres)

For more information:
Call us at 1-877-512-9393
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Or visit us at www.brandt.ca

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ENERGY / INDUSTRIAL / OEM SERVICES / RAIL / STEEL

