# Custom Manufacturing Solutions







## WE BUILD CONFIDENCE.

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

In over 80 years of business, Brandt's complete life-cycle approach has been the foundation for delivering consistent results. 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.



## **Areas of Expertise:**

#### MANUFACTURING

- Machining
- Fabrication
- In-Field Services
- On-Site Welding
- Portable Machining
- Industrial Repair
- Painting/ Sandblasting

#### ENGINEERING

- Electrical
- Mechanical
- Hydraulic
- Automation & Controls
- Civil
- Structural
- FEA Analysis
- Manufacturing
- Project Management
- Turnkey Projects

#### INDUSTRIES

- Mining
- Tube and Pipe
- Steel
- Agriculture
- Food
- Rail
- Power Production
- Power Distribution
- Oil & Gas
- Forestry

## Manufacturing COMPLETE SOLUTIONS AT ANY SCALE



#### CASE NO: INDUSTRY 01 **Coal Mining**

### **WE BUILD STRUCTURAL SOLUTIONS**

**Need: Drag Line Boom** Outcome: Absolute precision, along with meticulous quality assurance and project management are a must in building complex components. These massive boom sections were designed by the customer and entrusted Brandt to execute the build. As assembly progressed, all components were rigorously X-ray tested and certified. Upon completion of the 380ft structure at our facilities, it was separated into multiple loads and transported to the mine site for final assembly.



#### In the world of business, time is a precious commodity.

Staying ahead demands working with a manufacturer that will do whatever it takes to produce the equipment you need, when you need it. That's Brandt. You can always trust our team to do it right, no matter how daunting the challenge.

Our work speaks for itself - we deliver value to our customers with premium products and services that meet their needs, time after time. From heavy and light equipment, to large-scale projects like baghouse ducting, pipe mill equipment, stainless steel processing equipment, custom hydraulic cylinders, conveyor systems and much, much more.

We are set up to ensure your success. Our large, versatile shop floor can be re-configured quickly, meaning faster turnaround from the moment you send us your project to the time it comes out of our facility. You can count on us.

#### CASE NO: INDUSTRY 02 **Food Services**

#### **WE BUILD STAINLESS STEEL PRODUCTS.**

**Need: Food-grade Structures** Outcome: The Brandt team has manufactured countless stainless steel conveyors, tanks chutes, and augers, as well as platforms and handrails for the food industry. We have extensive experience working with stainless steel, aluminum and other exotic materials in a wide variety of applications.

FACILITY STATS:

**40 TONNE CRANE CAPACITY**  180,000 SQUARE FEET 250 +**EMPLOYEES**  **60 FOOT** PAINT BOOTH

**60 FOOT** SHOT BLAST

## Machining Precision Machined components





### In a machine shop, there is only right or wrong; 'good enough' does not exist.

At least, that's how we see it at Brandt. When our team works on your project, it gets done right. From our well equipped, state-of-the-art facility to the highly trained and experienced technicians that run it, the focus is always on perfection.

We produce top-quality machined goods in a wide assortment of materials and configurations. Our specialties include large-scale machining, complex components, portable machining, one-offs and production runs.

CASE NO: INDUSTRY 03 **Power Generation** 

### **WE MACHINE COMPLEX COMPONENTS.**

**Need: Wicket Gate Links** Outcome: Brandt machinists were given the challenge of fabricating resettable wicket gate links to control water flow at a Hydro Station. The resettable links were designed to mechanically collapse instead of breaking and were manufactured with extreme tolerances. Our highly-skilled team and state-of-the-art facility enable us to deliver unique and demanding projects like this consistently and with the highest levels of precision.

**MACHINING EQUIPMENT:** 

MANUAL LATHES

CNC LATHES MANUAL VERTICAL MILLS

CNC VERTICAL MILLS

HORIZONTAL BORING MILLS

**FIVE AXIS** LATHE

## **Repair & Refurbishments** MAXIMUM VALUE, MINIMUM TIME





#### Nothing lasts forever... and then we fix it for you.

Downtime can be a major profit-killer. Getting you up and running sooner and keeping you running longer is often the difference between making money and losing it and that's where we come in. At Brandt, we can fix almost anything and repairs and refurbishing have been our specialty for over 80 years.

We're very proud of the work that we do and believe that some of our best and most innovative work started out with a broken piece of customer equipment. But, we don't stop at merely repairing what does not work; we'll also work to find ways to make it better - re-engineering and improving existing designs. When all is said and done, if you can break it, we can fix it, and it just might come back to you better than new!

#### CASE NO: INDUSTRY 04 Mining

### **WE REPAIR RING GEARS.**

**Need: Ring Gear Repair** Outcome: Brandt received ring gear segments from a coal mine dragline excavator. The complete 40' diameter ring was inspected for defects and dimensional errors and quickly machined back within original tolerances, all within the customer's shut-down schedule.

#### CASE NO: INDUSTRY 05 **Steel Mills**

### **WE REPAIR CYLINDERS.**

**Need: High-output Cylinders** Outcome: From repairs to existing cylinders to unique, all-new designs, Brandt efficiently produces hundreds of high-quality cylinders to exact specifications every year. Damaged units are thoroughly inspected, looking at failure modes and opportunities for design improvement. After assessing the unique need, our team engineers a solution resulting in tighter tolerances, and higher work output and productivity for our customer.

**REFURBISHMENT PROCESS** 

## RECEIVE $\rightarrow$ INSPECT $\rightarrow$ DIAGNOSE $\rightarrow$ IMPROVE DESIGN $\rightarrow$ MANUFACTURE $\rightarrow$ INSTALL $\rightarrow$ SUPPORT

## Engineering CUSTOM SOLUTIONS FOR UNIQUE CHALLENGES





#### Sometimes, the right tool for the job doesn't even exist.

That's when Brandt's multi-disciplinary engineering team steps forward with the ideas and expertise to create new solutions for your business.

Brandt engineers work closely with you to assess the opportunities and unique challenges within your operation. We share knowledge across many different departments, drawing on expertise from a variety of industries. The result is better technological solutions, proven through Finite Element Analysis and virtual stress testing, that will meet or exceed your requirements and ensure superior performance in the field.

And because we can do it all under one roof, we are efficient; saving you valuable time and keeping you a step ahead of the competition.

#### CASE NO: INDUSTRY 06 **Uranium Mining**

#### WE DESIGN: **CUSTOM SOLUTIONS.**

#### **Need: Boring Machine** Transporter

Outcome: Brandt's team of engineers created the high-capacity JBS (Jet Boring System) Transporter for an underground uranium mine. This ground-breaking project required innovative thinking and incorporated unique features hydraulic leveling, low ground clearance, and a hydraulically articulated hitch allowing for extra maneuverability.

### **ENGINEERING TEAM:**

Our engineering team includes the following disciplines: MECHANICAL / HYDRAULIC / PNEUMATIC ELECTRICAL / AUTOMATION / CIVIL / FEA

## Project Management ENSURING RESULTS, ADDING VALUE





### Successful project management is as much about people as it is about process.

Brandt Project Managers understand the needs of industry and will connect all the pieces of your enterprise, getting to know you and your operation and creating and executing a plan that is fully focused on your need. They understand manufacturing from beginning to end; from first need to engineering to machining and manufacturing to support, so you can be confident in a successful outcome.

In all of this, communication is key and our team will keep you up to date and fully informed, ensuring that the design delivered meets your need and gives you the competitive advantage to succeed in the marketplace.

#### CASE NO: INDUSTRY 07 **Power Distribution**

### WE LEAD: COMPLEX PROJECTS.

Need: Power Poles

Outcome: Brandt's diverse inhouse capabilities and efficient project management model allow us to adapt to the unique requirement of every project. These power pole structures posed several unique challenges including size, pole type and infield function. Our comprehensive project management process allowed us to manufacture these structures to the customer's specification and adapt to their changing on-site construction schedule. We took it a step further by implementing design improvements to increase unit lifespan and utilized LEAN manufacturing principles to offer just-in-time delivery.



**PROJECT INITIATION**  $\rightarrow$  **PROJECT PLANNING**  $\rightarrow$  **PROJECT EXECUTION**  $\rightarrow$ MONITORING, CONTROL & REPORTING  $\rightarrow$  COMMISSIONING  $\rightarrow$  PROJECT CLOSE

## Field Services | COMPREHENSIVE ONSITE SERVICES



#### CASE NO: INDUSTRY **08 Power Distribution**

### WE RESPOND TO: **EMERGENCY SITUATIONS.**

**Need: Emergency Transmission Tower Repair** 

**Outcome:** When transmission infrastructure has been compromised resulting in critical short-term service interruptions or longer-term risk to power grid integrity, Brandt has responded quickly by designing support bracing solutions and deploying on-site crews to safeguard essential services. In this instance, Brandt was tasked with providing a large-scale solution in a very short timeframe; four weeks to design a bracing system for at-risk transmission towers, manufacture the solution, and successfully field install the new braces.



### We go wherever the job takes us... just like you.

Brandt has a long history of building, installing, and repairing equipment for a wide variety of industries and customers. The result is a team with a wealth of valuable experience and a lot of miles under its belt. We know from years of experience that not all site work is the same. Whether we're operating in extreme cold, in the deserts of the Middle East, in steel mills or in underground mining operations, we can anticipate the issues and navigate them successfully.

Our ability to apply this knowledge to your shutdown and emergency field repair situations means that you enjoy greater operational effectiveness and feel completely confident in a Brandt support team that keeps you in the game wherever you happen to be.



## After Sales Support 24/7 CUSTOMER & PRODUCT ASSISTANCE



#### It's easy to relax when someone's got your back.

That is why Brandt created a customer support team to work with you, giving you access to over 100 trained professionals, 24 hours a day, 7 days a week and ensuring your satisfaction every time you work with us.

Always ready to work with you, the dedicated Customer Service Representatives at Brandt's centralized Customer Support Centre have hands-on experience with each project during the design and manufacturing stages. With a 24-hour, fully staffed call centre and dedicated parts warehouse, we can create comprehensive parts and service programs specific to your needs, ensuring maximum value when you need it most.

#### **CUSTOMER SUPPORT.**

Our Customer Support Centre is staffed with a team of professionally trained personnel, available 24/7, to help support our customers promptly.



**CUSTOMER SUPPORT CENTRE STATS:** 

WORLDWIDE SERVICE

12,000 CALLS/MONTH

136,000 SQ.FT. WAREHOUSE

100 +**EMPLOYEES** 

24/7 **OPERATION** 

## Case Study

## END-TO-END MANUFACTURING SOLUTIONS

CUSTOMER CASE NO 09

**Regina Pats** 

## WE BUILD: **SCORE CLOCKS**

Need: State-of-the-art video entertainment system.

The owners of a high-profile hockey franchise needed a one-stop partner to design, build, install and commission a custom-designed, state-ofthe-art score clock and digital entertainment system into an existing structure on a very short timeline, so they looked to Brandt.

Successful execution of this in-game entertainment system required a seasoned, multi-disciplinary team of project managers, engineers, and tradespeople. Utilizing our 230,000 sq/ft (21,000 sq/m) ISO 9001:2008 facility with its fully-equipped machine shop and highly-reconfigurable shop floor, Brandt designed, built and installed the unit within the very tight fivemonth window.

Throughout the process, Brandt executed the precision engineering and manufacturing processes with a high degree of accuracy and project-managed and exhaustively documented



multiple concurrent development streams. Brandt also managed the logistics of installing the clock's hefty 22,000-pound structure, which included reinforcing the arena's existing roof trusses and finding a solution for moving the mammoth system with a minimum degree of effort for non-hockey events where it might obstruct sightlines.

Managing the large and diverse production team while working around the very busy event schedule of the facility was a challenging task that had to be accomplished guickly in order to maximize the use of the clock during the current hockey season.

With our extensive production infrastructure and superior project management, Brandt is ideally suited to producing complex projects of this kind. In this case, the result was a game changing digital entertainment system featuring the largest suspended score clock in the region; 100 per cent designed, built and managed by Brandt.



10 **DISPLAY SCREENS**  **4.37 MILLION** PIXELS

23.4' × 17' DIMENSIONS

22,000 lbs WEIGHT

For more information call **1-306-791-7557** Email us at **engineeredproducts@brandt.ca** Or visit us at **www.brandt.ca** 

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# WEARE BRANDT.

The Brandt Group of Companies - headquartered in Regina, Saskatchewan, Canada is comprised of Brandt Engineered Products Ltd., Brandt Agricultural Products Ltd., Brandt Equipment Solutions Ltd., Brandt Road Rail Corporation, Brandt Developments, and Brandt Tractor Ltd. - the world's largest privately held John Deere construction and forestry equipment dealer. Brandt has 50 locations in Canada and the US, nearly 2000 employees and a growing international audience; serving the agriculture, forestry, rail, mining, construction, and tube & pipe industries with unique custom products. Brandt is one of Canada's largest privately owned companies and is among an elite group of Platinum Members of Canada's 50 Best Managed Companies.

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## Powerful Value. Delivered.