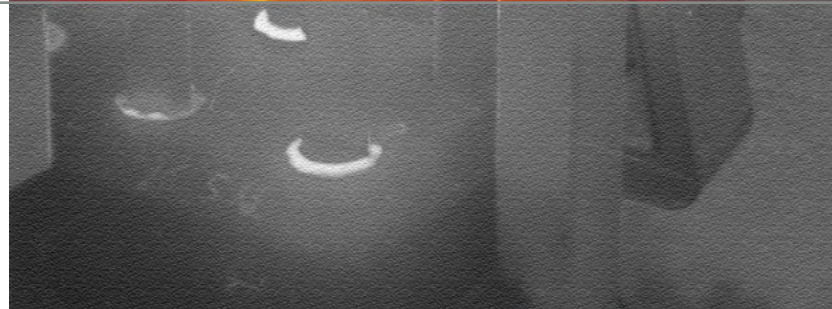


Turnkey Systems for Aluminium Carbon Plants



DAIFUKU

A World-class, single-source supplier

Daifuku has more than 50 years experience providing turnkey systems for aluminium carbon plant production. Our global workforce and advanced technology has made us a leading provider for aluminium companies such as Alcoa, BHP Billiton, Norsk Hydro, Rio Tinto, and more.

Whether you're constructing a new facility or upgrading an existing plant, Daifuku will work with you to design a system that meets your specific needs. We offer cost-effective products and services for your entire carbon plant – from the paste plant to the baking furnace to the rodding shop. Daifuku is your single-source supplier for carbon plant production systems.

And, equally important, you can count on Daifuku to be there long after your system is installed for parts and service. Daifuku Co., Ltd., is the largest material handling company in the world. When you choose Daifuku, you've got a global partner you can trust and depend on.

No one else comes close to matching the expertise or depth of work.



DAIFUKU

Experience that you can count on

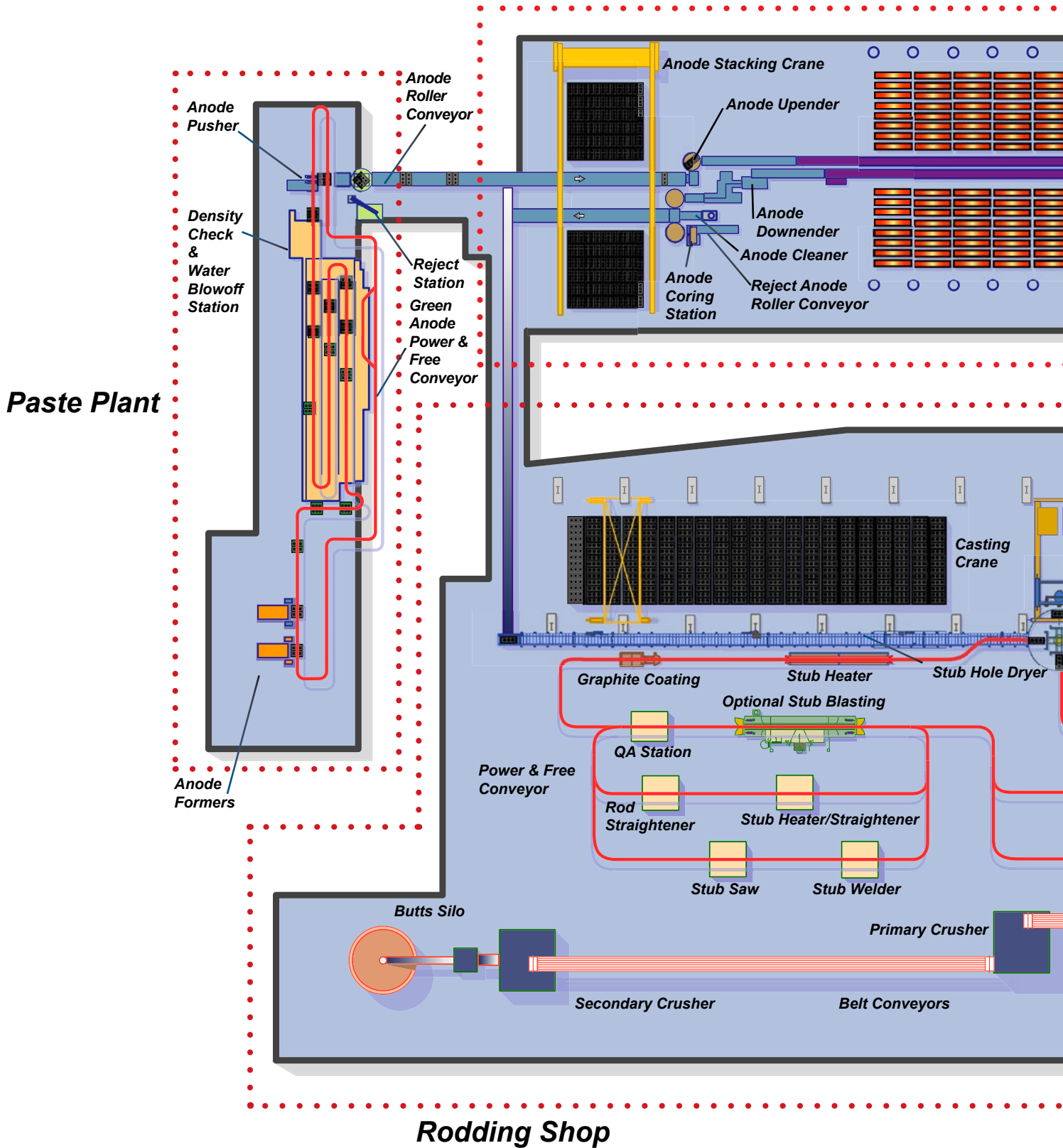
Daifuku engineers, manufactures and installs solutions for aluminium carbon plants throughout North America, South America, Europe, Asia, Africa and Australia to service aluminium plants around the world.

Daifuku is with you from start to finish. Our account managers are on hand to guide you through the project feasibility study and handle all your business-related queries and proposals. Our project managers are dedicated to overseeing the manufacturing and installation phases of your project, while keeping a close eye on the quality of work, budget and deadlines. Our skilled engineers look at your specific requirements and design effective solutions to meet your needs, keeping in mind your objective to reduce operating costs and improve productivity. Finally, our customer service staff is available with the parts and repairs that you need to keep your system up and running. Our professionals respond quickly to all inquiries and provide expert analysis and services to keep production moving forward.

List of Products

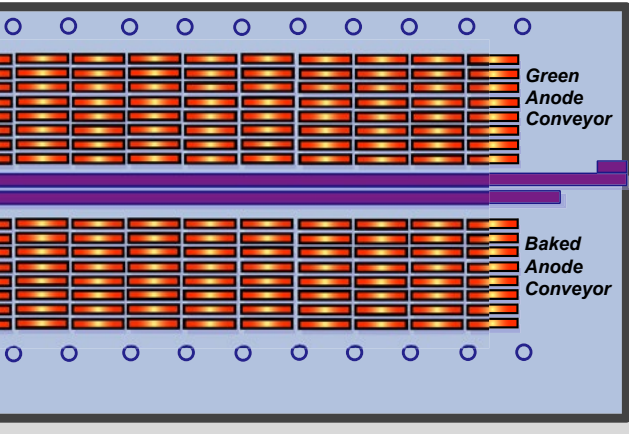
- Automatic and semi-automatic load/unload stations
- Automatic and manual butt presses
- Automatic thimble presses
- Automatic anode cleaning machines
- Rod repair and reconditioning equipment
- Automated or semi-automated casting systems
- Overhead and inverted power & free conveyors
- Heavy-duty roller conveyors
- Anode grouping conveyors
- Lifting / positioning devices
- Carousels
- Walking beams
- Cranes
- Automatic Guided Vehicles (AGVs)



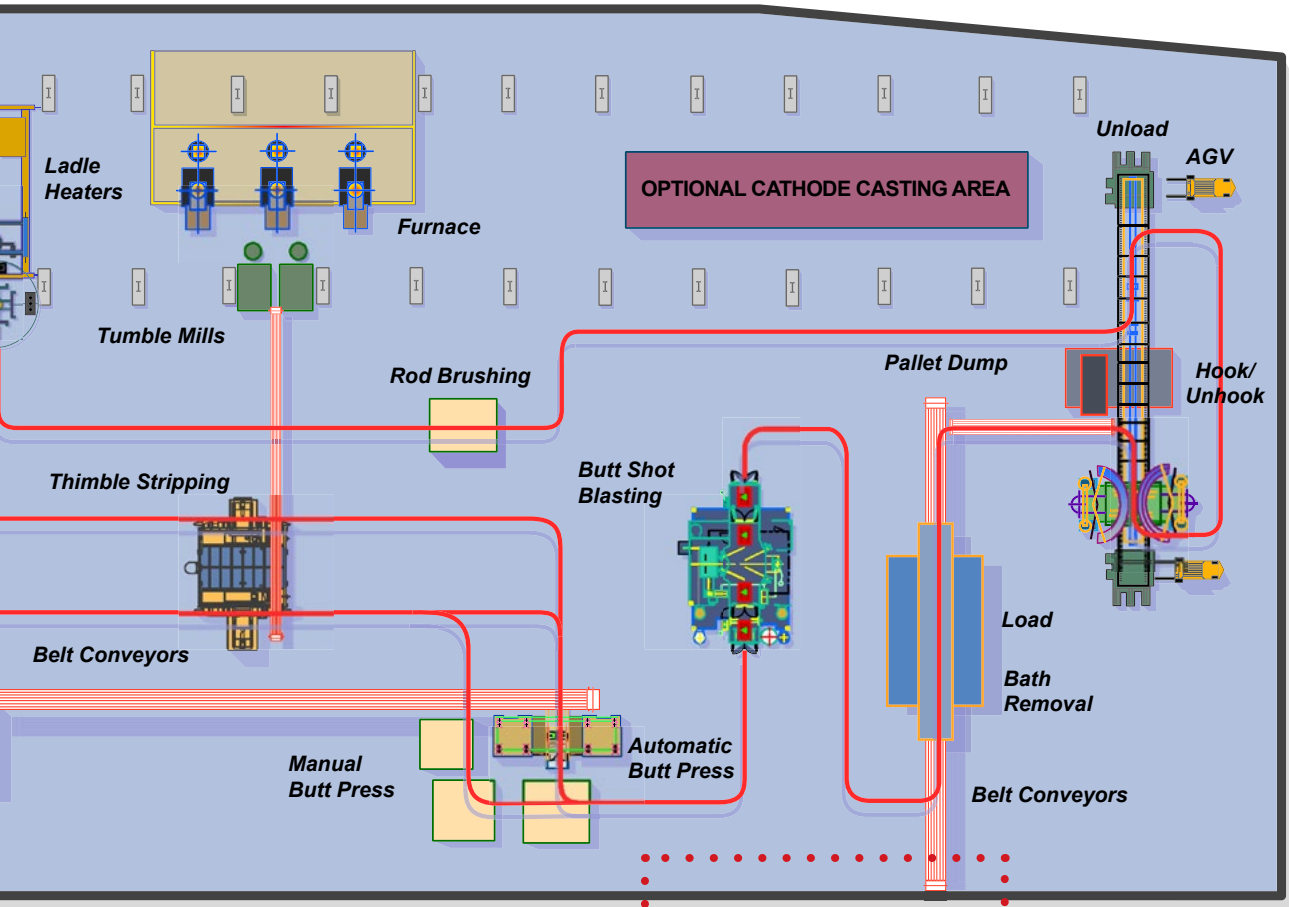


Paste Plant – Power & free conveyors transport green anodes from vibrocompactors through the cooling tunnel and to the roller conveyor. Only the anode itself is exposed to the cooling fluid bath. The operating components of the overhead conveyor system are located away from the coolant water to help extend conveyor life and increase operating efficiency.

Baking Furnace – Automatic stacker cranes, cleaning machines, lifting, turning and positioning devices as well as heavy-duty roller conveyors and grouping conveyors increase throughput and productivity. When it comes to delivering baked anodes to casting stations, inverted power & free conveyors provide controlled accumulation and accurate pouring positioning.



Baking Furnace



To Bath Plant

Delivery to Pot Room

Rodding Shop – Daifuku manufactures and/or supplies process machinery for automatic load/unload stations, casting stations, shotblast units, stub heating, butt and thimble removal presses as well as rod repair operations. Power & free conveyors offer high volume throughput, extreme durability, and they're simple to operate and maintain.

Anode delivery to Pot Room – Daifuku's rugged Automatic Guided Vehicles (AGVs) can transport fresh and spent anode assemblies to and from the pot room as well as take molten metal from the pot room to the casting house. Additionally, power & free conveyors automatically buffer the production capacity differentials between the rodding shop and the pot room.

Global Installations and Worldwide Locations



Daifuku Installations

Worldwide Locations

Daifuku / Jervis B. Webb Company

A Headquarters
30100 Cabot Drive
Novi, Michigan 48377
USA
+1-248-553-1000

B Boyne City Mfg. Plant
300 M75 South
Boyne City, Michigan 49712
USA

C Carisle Forging Plant
P.O. Box 400
Carlisle, South Carolina 29031
USA

D Hamilton Mfg. Plant
1647 Burlington Street, East
Hamilton, Ontario, L8H 7M5
CANADA

E Reynoldsburg Mfg. Plant
6700 Tussing Road
Reynoldsburg, OH 43608 USA

DAIFUKU



The Advantage of Daifuku

- Most experienced provider of carbon plant production systems in the aluminium industry
- Cost-effective solutions from a single-source provider that has resources all over the world
- Turnkey systems include combining material handling equipment with process machinery and integrated controls
- Most reliable and durable power & free conveyor systems available
- Top-of-the-line Automatic Guided Vehicles for heavy-duty loading and unloading of aluminium ingots or transporting of anodes
- Outstanding aftermarket service



DAIFUKU

30100 Cabot Drive
Novi, MI 48377 USA
Tel: +1-248-553-1232
dacproductsales@daifukuamerica.com
www.Daifuku.com