



# **BDR CAPABILITIES**

*Food and Beverage*

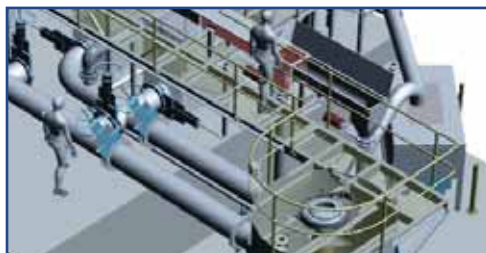


WE DELIVER  
COMPLETE SOLUTIONS

[www.bdrstainless.com.au](http://www.bdrstainless.com.au)



# OUR CAPABILITIES



## ENGINEERING / DESIGN

- 3D Design and Modelling
- 3D Laser Scanning
- Shop Detailing
- Mechanical Engineering
- Process Engineering
- HAZOP / CHAZOP / SID
- Structural Engineering
- RPEQ Certification
- Feasibility Studies
- Scope Development
- Reverse Engineering
- Engineering Management
- Project Management



## FABRICATION / WORKSHOP

- Structural Steel
- Access Systems
- CNC Brake Press, Guillotine
- Weld Positioners / Rollers
- Welding Machines, incl. Orbital
- Pressure Piping and Vessels
- Tanks, Chutes, Hoppers
- Hygienic Process Pipework
- Carbon Steel, Stainless
- Aluminium and Exotics
- NDT and Pressure Testing
- Full QA / QC / OH&S Process
- Factory Acceptance Test



## FABRICATION / INSTALLATION ON-SITE

- Water Infrastructure Installations
- Food & Beverage Installations
- On-site Fabrication & Installation
- Carbon Steel, Stainless
- Aluminium and Others
- Plant Shutdown Specialists
- Relocation & Decommissioning
- 3D Laser Scanning
- Fully Mobile Work Teams
- Full QA / QC / OH&S Process
- On-site Measure and Drafting
- On-site Commissioning
- Site Acceptance Test



## MAINTENANCE / SERVICES ON-SITE

- Emergency Services / Repairs
- Mechanical Breakdowns
- Mechanical Fitters
- Fabrication
- Planned Maintenance (PM's)
- RPZ Testing
- Fluid Clean Ups
- Pressure Cleaning
- Repairs to Valves and Pipes
- Line Marking
- Painting (Small Jobs)
- Full QA / QC / OH&S Process
- Project Management

## CONTACT US

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## OUR PROJECTS

### ICE SCREW CONVEYOR SYSTEM

**PROJECT TYPE:** Design, Engineer, Fabricate and Installation

**DESCRIPTION:** BDR Stainless was awarded the Design and Fabrication of a Cube Ice Conveying System which consisted of a large Hopper, 20m of sectional Incline and Horizontal Screw Conveyors.

**COMPLETED:** 2019

**CHALLENGES:** The greatest challenge was designing an anti-clogging conveying system to enable product to freely and continuously move from the Hopper through the Screw Conveyors to the Ice Bunker. Due to the sticky nature of Cube Ice, the design incorporated an Anti-Clogging Picker mounted inside the Hopper to agitate the Cube Ice and stop the Cubes from sticking together.



### PIPE GANTRY - ICE CREAM FACTORY

**PROJECT TYPE:** Design, Engineer, Fabricate and Installation

**DESCRIPTION:** BDR Stainless was awarded the Design, Engineering, Fabrication and Installation of the Pipe Gantry System running c. 2.5km of hygienic process piping.

**COMPLETED:** 2018

**CHALLENGES:** BDR Stainless designed and engineered the Pipe Gantry System to be prefabricated in our Tingalpa workshop with the absolute confidence that when craning the 6m modules on-site between, around and through a complex maze of existing building infrastructure, process piping, electrical trays, access systems and tanks etc, the Pipe Gantry System would not impede any of the infrastructure and fit perfectly into place. This was achieved with single crane lift and no rework.





## OUR PROJECTS

### STAINLESS STEEL ACCESS SYSTEM

**PROJECT TYPE:** Design, Engineer, Fabricate, Installation and RPEQ Certification (Form 15 & 16)

**DESCRIPTION:** BDR Stainless was awarded the Design and Construct of an Anti-Corrosive Access System on top of two 15m Silos.

**COMPLETED:** 2019

**CHALLENGES:** The greatest challenge was maintaining safety and was considered one of the biggest risks on this project. This was due to most of the work, being conducted at height using 220t cranes with 96m lifts. This work was completed using BDR Stainless's standard accredited AS 4801 Safety, AS 14001 Environment and ISO 9002 Quality Systems.



### LASER SCANNING AND 3D MODELLING

**PROJECT TYPE:** Design, Engineer as well as Drafting of IFF (Issued for Fabrication) and IFC (Issued for Construction) Drawings.

**DESCRIPTION:** BDR offers Laser Scanning, 3D Modelling, FEA (Finite Element Analysis), Collision Detection and Fabrication/Construction Drawings.

**CHALLENGES:** The greatest challenge with Designing a Concept is to ensure that the structure/equipment will fit within the factory space. Laser Scanning and 3D Modelling manages the risk in fabricating structures/equipment and provides a visualisation which the customer can review prior to Project commencement. FEA and Collision Detection further manages the risks allowing Design and Engineering to be harmonised.







## OUR PROJECTS

### ALUMINIUM, STAINLESS STEEL AND MILD STEEL ACCESS SYSTEMS

**PROJECT TYPE:** Design, Engineer, Fabricate, Installation and RPEQ Certification (Form 15 & 16)

**DESCRIPTION:** BDR Stainless Design and Engineer access systems to meet the requirements of AS1657 and AS1554 utilising BDR Stainless Standard Accredited AS 4801 Safety, AS 14001 Environment and ISO 9002 Quality Systems.

**CHALLENGES:** The greatest challenge is Designing the Concept to meet all Australian Standards as well as meeting the customer's requirements for usability, factory layout/footprint as well as utilising the appropriate materials for the Access System. The BDR Stainless factory segregates areas within the workshop for Ferrous and Non-Ferrous materials to eliminate cross contamination of materials.



### BDR - INSULATION

**PROJECT TYPE:** Design, Engineer, Fabrication, Installation

**DESCRIPTION:** BDR Stainless is an insulation supplier that designs, fabricates and installs a wide variety of insulation solutions to service customer needs in a timely fashion with products that will meet their specific Hot or Cold requirements.

**CHALLENGES:** BDR Stainless specialises in Thermobreak, Phenolic and Rockwool insulation to meet AS4426 across a diverse range of industries including Commercial/Craft Breweries, Diaries, Commercial Air Conditioning/Refrigeration and other Food and Beverage markets. We also offer Polyurethane Injection, Polyurethane Spraying as well as Industrial Insulation for Boilers and Tanks.





## OUR PROJECTS

### VALVE MANIFOLD SKID AND HOLDING TANK

**PROJECT TYPE:** Consultation, Fabrication and Installation

**DESCRIPTION:** BDR Stainless was awarded the Fabrication and Installation of a Valve Manifold Skid and Holding Tank for Syrup Manufacturing.

**COMPLETED:** 2019

**CHALLENGES:** The greatest challenge was to fabricate and install within a very tight time period to meet the factory shutdown window. BDR worked with the customer, suppliers and our own Tradesman to ensure the Design and Shop Drawings were adequate to meet the fabrication process and time lines as well as all materials arriving at our workshop - just in time - so that our Tradesman who were working extended hours could fabricate the Skid and Tank to meet the factory shutdown.



### TUBE IN TUBE HEAT EXCHANGER CARRYING CHILLED WATER AND PRODUCT

**PROJECT TYPE:** Design, Engineer, Fabricate, Installation

**DESCRIPTION:** BDR were awarded the Design, Fabrication and Installation of a Tube in Tube Cooling System to lower the product (Yeast) temperature utilising Chilled Water.

**COMPLETED:** 2017

**CHALLENGES:** The greatest challenge was to Design and Fabricate the Heat Exchanger to ensure the out temperature meets the product specification through the length of tubing woven through the Heat Exchanger as well as Designing the actual size of the Heat Exchanger to fit into a tight area within the factory foot print. As with all Food Fabrication, but particularly Yeast, requires a high Sanitary weld process ensuring that no bacterial growth can occur within the tube system.



**Workshop Fabrications - Tube in Tube**





## OUR PROJECTS

### GAS METERING SKID WITH MILD STEEL FRAME AND STANLESS PIPE

**PROJECT TYPE:** Consultation in Design and Fabrication

**DESCRIPTION:** BDR was awarded the Fabrication and mechanical assembly of a Custody Gas Metering Skid

**COMPLETED:** 2018

**CHALLENGES:** The greatest challenge was working with the customer to deliver a system utilising new and experimental metering technology. The Mechanical fit out required fabrication with very tight tolerance of fabrication to facilitate the ideal conditions for accurate metering. Which included smooth internal pipe geometries and bespoke Laminar Flow Plate / Water Gas Separator.



### SPENT GRAIN (BY-PRODUCT) TANK AND ACCESS SYSTEM

**PROJECT TYPE:** Fabrication and Installation

**DESCRIPTION:** BDR were awarded the Fabrication and Installation of 2 x 12m High and 3m Wide Tanks and Supporting Access Systems.

**COMPLETED:** 2017

**CHALLENGES:** The greatest challenge was maintaining safety and was considered one of the biggest risks on this project. This was due to most of the work, being conducted at height using 220t cranes with 96m lifts. This work was completed using BDR Stainless's standard accredited AS 4801 Safety, AS 14001 Environment and ISO 9002 Quality Systems.



# **BDR** **STAINLESS** **(Aust) PTY LTD**

## **BDR** **SKILLED HIRE**

*Labour with Equipment and Tools*

### **CONTACT US**

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