

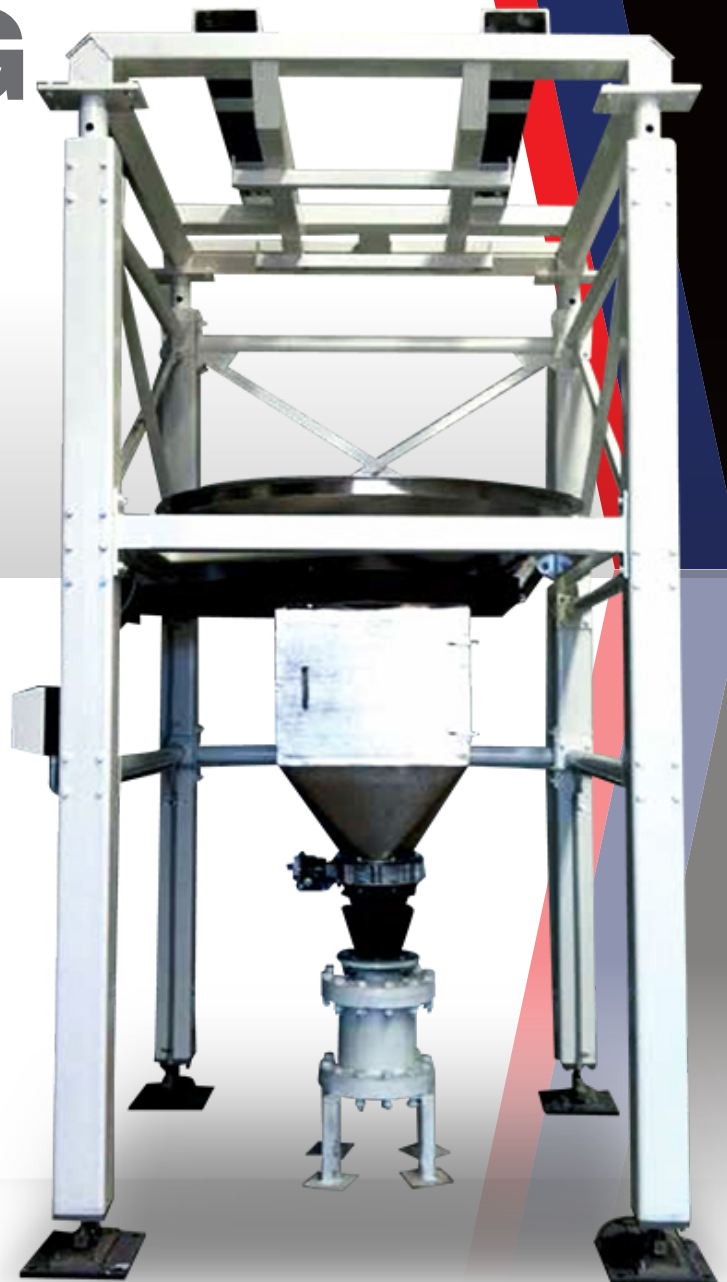


**AUSTRALIAN
WEIGHING
EQUIPMENT**
Way ahead in Weighing

PRODUCT GUIDE

BULK BAG EMPTYING SYSTEMS

A clean, efficient and effective means for discharging free flowing dry solid materials & powders contained in Bulk Bags.





■ ABOUT THE BULK BAG EMPTYING SYSTEMS

Bulk Bag Emptying Systems offer a clean, efficient and effective means for discharging free flowing dry solid materials & powders contained in Bulk Bags.

Bradwood Packaging has been manufacturing Bulk Bag Emptying System for 30 years and has the experience to offer the best system for your product. Our Bulk Bag Emptying System are one of the world's most effective solutions for emptying bulk bags.

Bulk Bag Emptying System are ideal for free flowing products and powders, in large quantities.

The Bulk Bag Emptying System can handle Bulk bags up to 2000mm high and weighing up to 2000kg.

Bulk Bag Emptying System or Bulk Bag Dischargers are also commonly known as Bulk Bag Unloaders, Big Bag Dumpers, Bag Frames, FIBC Dischargers, and FIBC Unloaders.



Bag Untie Access Door For Bulk Bag Emptying System

- Bradwood Packaging uses universal and industrial components to give the machinery extra long life cycles the way machinery should be built, this way you're not locked into expensive proprietary systems.
- Manufactured to comply with Australian and International Machine Safety & Electrical Standards.
- Bradwood Packaging prides itself on providing plain English proposals, there's no hidden surprises. You'll know what you're getting.
- Bradwood Packaging manufactures complete lines from filling, sealing through to palletising.

Bulk Bag Emptying Systems offer a clean, efficient and effective means for discharging free flowing dry solid materials & powders contained in Bulk Bags.

The Bulk Bag Emptying System's frame supports the bulk bags, by hooks. The bags can be lifted onto the Bulk Bag Emptying frame, by Forklift, Hoists or Cranes.

The Bulk Bag Emptying System can handle Bulk bags up to 2000mm high and weighing up to 2000kg.

Bradwood Packaging builds machinery to comply with Australian and International Standards. Safety is a critical issue when supplying any emptying system. Simplicity is still kept in mind for fast and safe operation but with the durability to last.

Our systems are available to operate in isolation, or can be designed to work in conjunction with a number of feeding solutions such as IBC'S, Silos and Tanks, Big Bag and Sack Handling Products.

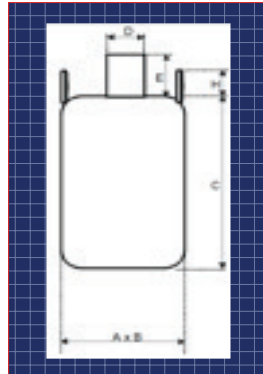


Bulk Bag Emptying Systems

■ WHY SHOULD YOU USE BULK BAG EMPTYING SYSTEMS



Bulk Bag Emptying Systems
End View Of Auger



Bulk Bag Emptying Systems

Total Evacuation

Bulk Bag systems fully evacuate the surge hopper being discharged and the conveyor line. This limits cross contamination of multiingredient systems. Complete transfer of material also ensures accurate transfer of single or multiple ingredients, maximising quality with minimal waste.

High Reliability and Ease of Maintenance

Bulk Bag systems allow for easy cleaning and maintenance through easy to maintain equipment and associated accessories.

Mobile and Custom Configuration

Self-contained Bulk Bag systems are available pre-engineered and configured on castor mounted frames for mobility within your plant or forklift moveable as a standard option. Packages include many options from the options list.

Designed, Constructed and Finished to Industrial and Sanitary Standards

Bulk Bag Filling systems are available in carbon steel with durable industrial finishes or stainless steel to standards required for food, dairy and pharmaceutical applications.

■ APPLICATIONS ACROSS MANY INDUSTRIES

Bulk Bag filling systems successfully transfer an enormous range of products, both free-flowing, clumping, powdery or otherwise, across many industries. They are noted for their efficiency and ease of operation.

In the food, pharmaceutical and fine chemical industries, a virtually unlimited range of materials can be handled. Applications include salt, sugar, flour, starch, spices (food) or yeast granules, glucose, talc, paracetamol (pharmacy) etc. Other sectors using this system include the chemical, plastic, water and mineral industries, PVC resins, lime, silica sands, soda ash, iron oxides, calcium carbonates, quartz, fly ash, talcs, detergents etc.

All installations for conveying and feeding have the ability for single or multiple point feeding and discharge points allowing huge flexibility with minimal additional componentry. The units can be ordered as basic units and can have options added to the units at a later date when factory expansion requires. Discuss this with your local Bradwood Packaging Sales representative.

■ SUPPORT FRAME



To protect your Workers from OH&S issues involved in placing and removing bulk bags, the Bulk Bag Emptying system should be designed to keep them safe at all times.

Upper and lower bulk bag unloader frame combine to safely support and contain the bulk bag and its materials. The bulk bag is loaded into the bag frame by a dedicated hoist, forklift, crane or persons, depending on speeds required.

Forklift Loading

The Frame of Bulk Bag Emptying System has been designed with a standard capacity of 2000 kg and is constructed of 100mm RHS. The upper frame section has 1000mm of height adjustability to accommodate the different size bags.

Dedicated Hoist Loading

The A-frame design has a capacity of 2000 kg and is engineered to exceed the Australian Standards specifications for under-hung cranes and monorail systems. Various hoist and trolley options are available for ease of positioning the bag into the frame.

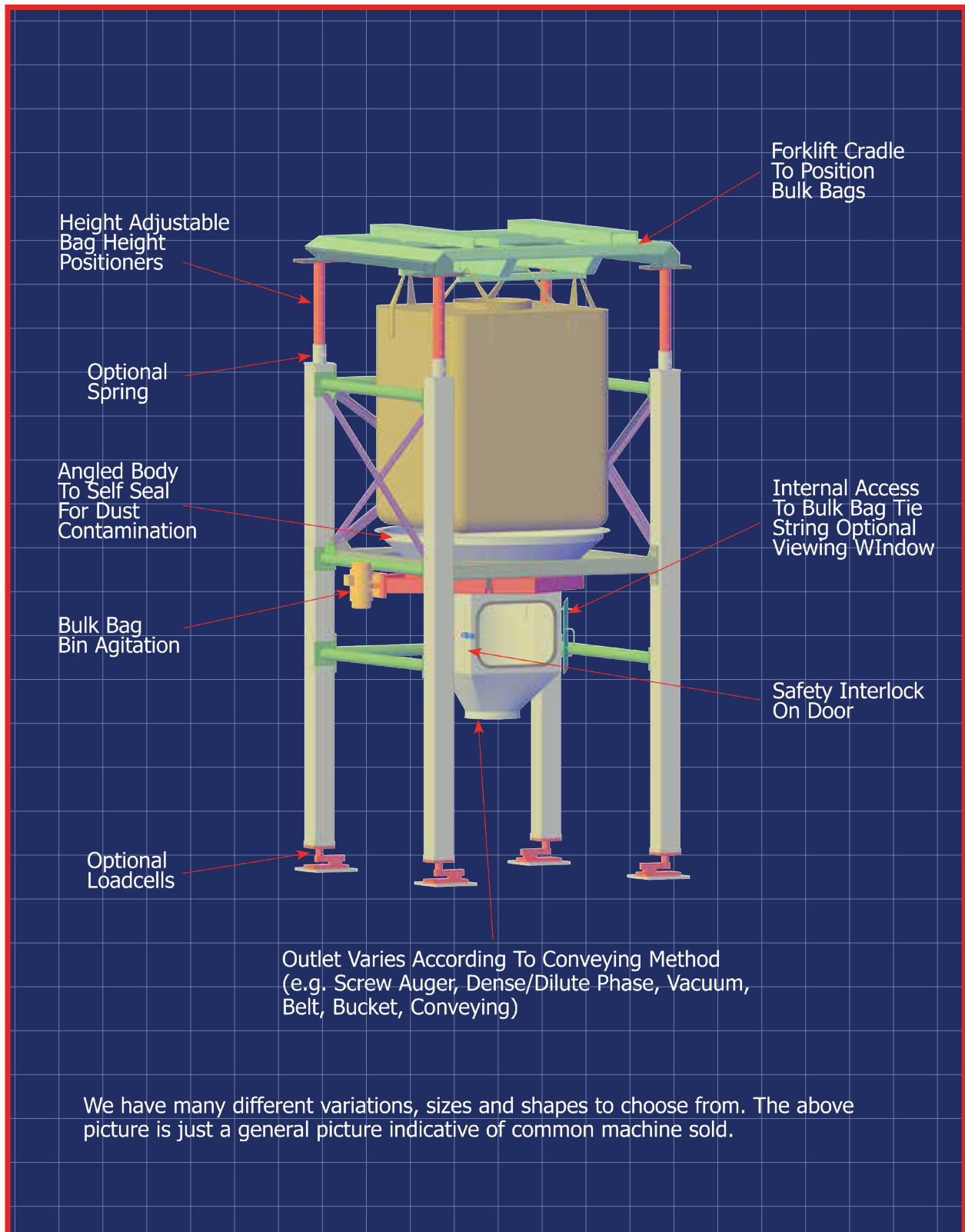
Cranes

A complete lower frame is available for applications where customers have an existing Crane Hoist Monorail System.



Bulk Bag Emptying Systems

■ BULK BAG EMPTYING SYSTEMS





■ **BULK BAG HANGERS**

The bulk bag is attached to a bag hanger for raising and positioning the bag into the Bulk Bag Emptying support frame. All bag hangers allow easy attachment of the bag loops while securely holding the bag in place within the Bulk Bag Emptying System.

Bag hangers can add options to retain bulk bag liners and prevent bag liners from extruding through the discharge spout into the downstream process equipment during bulk bag emptying.

Forklift Bag Hanger (Standard)

The standard fork lift-bag hanger includes all necessary guides to allow easy loading of the bag into the framework. Bulk Bag support hooks can be manually adjusted for various bag sizes.

Forklift Bag Hanger, Loop Retractor (Optional)

The Bulk Bag Emptying System can be fitted with an automatic loop retractor system for the Forklift Bag Hanger. The Forklift Bag Hanger Loop Retractor forms the bag into a conical shape aiding in a complete material discharge. The automatic operation draws the corners of the bag upward and inward as the product is discharged.

Dedicated Hoist Bag Hanger (Standard)

The standard hoist bag hanger has a Crossbrace Frame with overlapping bag loop retainers to safely hold the bag loops regardless of the loop strap tension.

Dedicated Hoist Bag Hanger, Loop Retractor (Optional)

The Bulk Bag Emptying System can be fitted with an automatic loop retractor system for the Dedicated Hoist Bag Hanger. The Hoist Bag Hanger Loop Retractor forms the bag into a conical shape aiding in a complete material discharge. The automatic operation draws the corners of the bag upward and inward as the product is discharged.

Low Profile Dedicated Hoist Bag Hanger

The Low Profile Dedicated Hoist Bag Hanger, is ideal for low-headroom applications. The low-profile crossbrace frame minimises vertical space required to safely hang the bag in the support frame.

Bradwood Packaging systems go beyond simple bulk storage systems with further componentry for a complete materials handling solution from start to finish. Other products in our range include bulk bags fillers / emptiers, storage bins and hoppers, rotary valves, mixers, diverter valves, bin activation, augers, mechanical & pneumatic conveyors, bucket elevators, batch weighers, packaging machinery. Please see our videos of our bulk materials equipment as well as our turn key plant solutions.



■ **BULK BAG SPOUT ACCESS**

The operator has various options to access the discharge spout of the Bulk Bag Emptying system, depending on the bag style and dry material flow characteristics. The Bulk Bag Emptying System has been designed to give user-friendly access to open and seal the bulk bag's spout. It provides dust-free and complete material discharge from the bag as well.

Untie Box

The untie box provides an enclosed area for the operator to access the tie strings of the bulk bag's discharge spout. The untie box has a large hinged door, allowing a safe access to the bag spout for the operator. The top of the untie box is flanged for connection to a flow control valve while the bottom is flanged for connection to existing process equipment or material transfer systems.

Iris-Type Flow Control Valve

Iris-Type Flow Control Valves for fast and efficient tie string removal.

Body Material Options: Aluminum or Stainless Steel.

Sizes available: 100mm, 150mm, 200mm, 250mm, 300mm

Pinch-Type Spout Control Valve

The Pinch-Type spout lump deblocker breaks apart lumps that get wedged in the discharge spout of the bag.



Inflatable Bladder Seal

The inflatable bladder seal provides dust control when used with lined bags. The operator places the spout of the bag inside the untie box pulling the outer liner over the bladder seal. The bladder seal is inflated against the spout forming a dust tight seal.

Bulk Bag Support Pan

The sloped support pan safely holds the bulk bag in the discharge position within the bag framework.

Bulk Bag Piercing Hopper

Bulk Bag Piercing Hopper has a removable triangular blade assembly, which pierces the center of unspouted bags allowing the material to discharge. The bottom of the bulk bag is fitted with a large diaphragm, to reduce dust during the discharge process. The blade ruptures the membrane of the bags diaphragm causing the product to be discharged.



■ **CONVEYING AND PROCESSING INTERFACES**

A wide variety of options are available to integrate bulk bag unloaders with material conveying systems and downstream process equipment. The material flow characteristics and the specifics of the customer's bulk bag emptying application dictate the type of bulk bag discharger interface utilised.

Surge Hopper

Surge Hoppers with various capacity, can be utilised to provide continuous material supply while removing empty bags and loading full bags into the Bulk Bag Emptier. The inlet to the surge hoppers are typically connected to a bag spout interface option while the discharge is often connected to a conveying system.

Agitator Hopper

This U-shaped hopper has a mechanical agitator which eliminates the potential of material bridging or forming a rat hole above the inlet to material conveying equipment. The design of the agitator draws the material away from the sides, directing it through the center discharge on a consistent and reliable basis.

Combination Hopper

The combination hopper allows emptying of small bags, sacks, drums, and other containers in addition to bulk bags. Combination hoppers can be fitted integral dust collectors or tube stubs for connection to centralized dust collection systems.

Size Reduction Equipment

Rotating shaft(s) with staggered breaker bars deagglomerates materials as they pass through stators to reduce materials to a conveyable particle size.

Feeder Systems

Volumetric and loss-in-weight feeders are utilised to control the transfer of materials directly from the bulk bag discharger to conveying or downstream process equipment.

■ **ASSOCIATED EQUIPMENTS**

- Sack/Box tip and bulk bag combination stations
- Rigid bin and bulk bag combination stations
- Bulk bag and rigid IBC filling equipment

Bradwood Packaging offers more solutions in a wide range of Bulk Bag filling or filling, vacuum pressurised systems, to mechanical based feeding and conveying.



Bulk Bag frame



■ **WE DO EVERYTHING TO ENSURE SAFE OPERATION**

We take safety seriously, because we know accidents can have deadly and expensive consequences. Keeping your workers safe increases your productivity.

The safety of bulk bag filling operators during the entire sequence of handling, loading, untying, filling, retying, and removing bulk bags is paramount in bulk bag filling design. From safety interlocks to structurally sound discharger design and construction, process equipment operator safety is considered during every step of the bulk bag filling process.

All Bradwood Packaging machinery complies with the latest local and international standards. Dust-free operation is highest in mind when supplying any filling system, simplicity is still kept in mind for fast and safe operation but with the durability to last.

Safety Interlock Switches

Our machinery is fitted with safety interlock switches to prevent the operator from accessing moving mechanical equipment.

Bag Present Sensors

Bag present sensors disables moving mechanical equipment unless the bulk bag is in the proper location for discharging.

Exceeds Structural Standards

The Bradwood Packaging Bulk Bagging Filling System has been designed and built to exceed Australian Standards.

Frame-mounted Hoist Controls

The Hard-wired controls are mounted on the lower framework of the Bulk Bag Filling System. The Hard-wired controls prevents the operator from standing under a bulk bag when it's ready positioned for discharging.

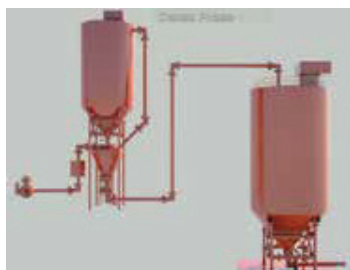
Integrated Dust Collector

Protect surrounding facilities, equipment, and operators from escaped airborne material, reduce maintenance and ensure ongoing operation.



Bulk Bag Emptying Systems

■ OPTIONS



Dense Phase pressure
Pneumatic Conveying
systems(O)



Silo / Hopper Plant Receiving
System



AGX1 Shearbeam Load Cell

1. Robust & Safe Lifting frame provides safe bag handling (s)
2. Iris-Type Flow Control Valves for fast and efficient tie string removal (o)
3. Gloved hoppers eliminate operator exposure to product (o)
4. Enclosure over bulk bag for removal of exposure to hazardous material (o)
5. Electric hoists(o)
6. Lifting cross(o)
7. Forklift frames(s)
8. Spring loaded frames (o)
9. Bag splitters with variations of pneumatic operations and automatic(o)
10. Bag Agitators for efficient emptying(o)
11. Vibrators on main hopper(o)
12. Aeration on main hopper pneumatic(o)
13. Dense Phase pressure Pneumatic Conveying systems(O)
14. Dense Phase Vacuum pneumatic conveying systems(O)
15. Dilute Phase pressure Pneumatic conveying Systems(O)
16. Dilute phase Vacuum Pneumatic conveying systems(O)
17. Dust collection (O)
18. Dust collection points(S)
19. Inflatable throats on bulk bag outlets(o)
20. Screw Feeders/augers (o)
21. Load cells & batching systems(o)
22. Portable designs(o)
23. Hydraulic or Pneumatic Bulk Bag conditioning (o)
24. Gravity hoppers with quick opening doors(s)
25. Painted mild steel construction (s)
26. Galvanized or stainless steel frames(o)
27. Flat discharge hopper(s)
28. Conical discharge hopper (more suitable for varying bulk bag sizes)
29. Sizes / poor flowing products) (o)

(o) = optional

(s) = standard


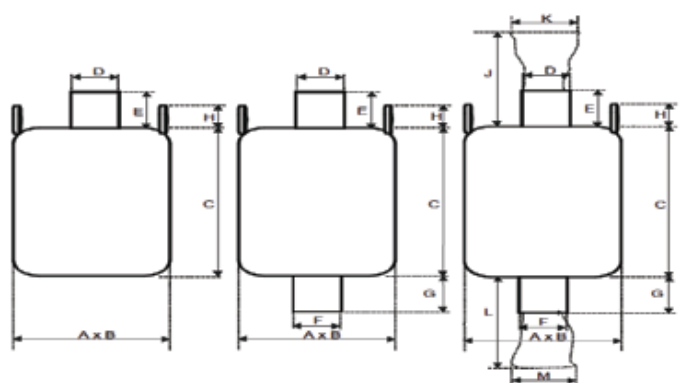


Bulk Bag Emptying Systems

■ BULK BAG DATA SHEET

Consult with our Bradwood Packaging sales engineers for sizing, correct feeding methods, particle sizes, densities, air pressure, or types of componentry to be used.

We recommend filling out the attached basic data sheet to assist you best with your specific requirements.

 <p>AUSTRALIAN WEIGHING EQUIPMENT Way ahead in Weighing Also trading as Rite-Weigh Scales Pty Ltd.</p> <p>INQUIRY FORM</p> <p><input type="checkbox"/> Firm Quote <input type="checkbox"/> Budget Quote</p>	<p>Date: _____ Quotation Due Date: _____ Name: _____ Company: _____ Phone: _____ Job Reference: _____ QUOTE TO: _____ _____ Phone: _____ Fax: _____</p>	<p>NOTE If there are any Special Fabrication, Structure, Engineering or Testing Requirements, Please Attach Data to This Sheet</p>
Support Style	Material Characteristics	
<input type="checkbox"/> Structural Legs (4) <input type="checkbox"/> Structure to be quoted <input type="checkbox"/> Full Skirt <input type="checkbox"/> 4-Short Legs <input type="checkbox"/> Short Skirt <input type="checkbox"/> Structures By Others	<input type="checkbox"/> Free Flowing <input type="checkbox"/> Abrasive <input type="checkbox"/> Corrosive <input type="checkbox"/> Explosive	
Material Data		
Material to be stored _____ Angle of Repose _____ Bulk Density _____ t/m ³ Coefficient of Friction ____ (30° STD)		
Bulk Bag Specification		
Bulk Bag Type <input type="checkbox"/> Single Trip <input type="checkbox"/> Spouted Bulk Bag <input type="checkbox"/> Bulk Bag with Liner		
	<p>Bag Weight (filled) _____ Kgs</p> <p>Bag Size</p> <p>Width (A) _____ mm Length (B) _____ mm (A x B) _____ mm²</p> <p>Seam Height (C) _____ mm</p> <p>Inlet Spout</p> <p>Diam (D) _____ mm Length (E) _____ mm (D x E) _____ mm²</p> <p>Outlet Spout</p> <p>Diam (F) _____ mm Length (G) _____ mm (F x G) _____ mm²</p> <p>No of Loops _____</p> <p>Length of Loop (H) _____ mm</p> <p>Liner Specification (If fitted)</p> <p>Liner Length Inlet (J) _____ mm Liner Inlet Diam (K) _____ mm Liner Length Outlet (L) _____ mm Liner Inlet Diam (M) _____ mm</p>	
Machine Specification		
Product Contact Parts <input type="checkbox"/> Steel <input type="checkbox"/> Stainless Steel <input type="checkbox"/> Food Quality Yes / No Required Capacity Bags / Hour Capacity (t/hour)		
Loading Method <input type="checkbox"/> Forklift <input type="checkbox"/> Gantry <input type="checkbox"/> Hoist <input type="checkbox"/> Hand Feeding Method <input type="checkbox"/> Auger <input type="checkbox"/> Bucket Elevators <input type="checkbox"/> Gravity <input type="checkbox"/> Pneumatic Conveying <input type="checkbox"/> Rotary Valve <input type="checkbox"/> Vibratory Vibration Required Yes / No Different Bag Sizes Yes / No Weighing Required Yes / No Clamping Mechanism Yes / No Operator Platform Yes / No Containment Enclosures No		
Area Specification		
Available Floor Space Width _____ mm Length _____ mm Available Height _____ mm Zoning Area Classification <input type="checkbox"/> Zone 0 <input type="checkbox"/> Zone 1 <input type="checkbox"/> Zone 2 <input type="checkbox"/> Zone 20 <input type="checkbox"/> Zone 21 <input type="checkbox"/> Zone 22 Area Protection Class <input type="checkbox"/> None <input type="checkbox"/> EEx-d <input type="checkbox"/> EEx-de <input type="checkbox"/> EEx-e <input type="checkbox"/> EEx-nA <input type="checkbox"/> EEx-p Temp Classification <input type="checkbox"/> T1 - 415oC <input type="checkbox"/> T2 - 300oC <input type="checkbox"/> T3 - 2005oC <input type="checkbox"/> T4 - 135oC <input type="checkbox"/> T5 - 100oC <input type="checkbox"/> T6 - 85oC Gas Grouping <input type="checkbox"/> I <input type="checkbox"/> IIA <input type="checkbox"/> IIB <input type="checkbox"/> IIC Ingress Protection Codes <input type="checkbox"/> IP 54 <input type="checkbox"/> IP 55 <input type="checkbox"/> IP 56 <input type="checkbox"/> IP65		



■ **AWE - THE BEST IN THE BUSINESS**

AWE has built a reputation in providing world class products and services to customers from a wide range of industries for many unique applications. All the products come with AWE Quality Guarantee- giving you the assurance that they have been tested to meet or exceed the specifications and requirements of your application. At AWE, it's more than just delivering perfectly-designed equipment, it also requires a team of dedicated people who will back you up with great service and support. Any servicing, installation and technical support issues you encounter can be addressed either onsite or remotely by our engineers and tradesmen who carry qualifications as:

- Licensed Tradesmen
- Mechanical Engineers
- Electrical Engineers
- Structural Engineers
- Draftsmen
- Fitter & Turners
- Boilermakers
- Fully Qualified Scale Makers
- Electronic Technicians
- Instrument Fitters
- Electricians
- Service Technicians
- Project Managers
- Formworkers
- Concreters

Call AWE today.



If you have questions about

- **weighing equipment**
- **packaging equipment**
- **bulk materials handling**
- **componentry**

call the sales team at *AWE Group* to find the right solution for your individual needs.

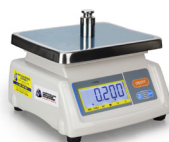
■ **AWE PRODUCT RANGE**



Weighbridges



Load Cells



Scales



Crane Scales



Indicators



Packaging Equipment



Onboard Weighing



Batching Consoles



Test Weight



Maintenance



■ WHO IS “AUSTRALIAN WEIGHING EQUIPMENT GROUP”

Jeff & Trevor Baillie started Australian Weighing Equipment (or AWE) in 1981, focusing on weighing solutions based on engineering principles. For nearly 40 years AWE has built its reputation as a leading supplier of robust weighing, packaging & bulk handling equipment. Our innovative engineering and continuous product developments have led to designs that will stand up to the rigours and demands of your applications.

AWE has increased its investment in manufacturing facilities with a new 3,200sq/m factory in Sydney which has

- A CNC Machine Shop
- Heavy Metal Fabrication Shop
- Larger work areas for our team of qualified tradesman

Acquisitions of Bradwood Packaging and Dendy Packaging and Design Engineering has increased our packaging and engineering experience.

In 2008, AWE established a manufacturing facility in China - AWE Group Packaging and Bulk Materials Handling Equipment, a purpose-built 5,000sq/m factory in Suzhou China (70kms From Shanghai).

All of the products we offer are Australian designed and manufactured under our strict quality control system in our own factories both locally and internationally.

■ LOCATIONS OF AUSTRALIAN WEIGHING EQUIPMENT



Australian Weighing
Equipment - Sydney Office

8 Heald Road
Ingleburn NSW 2565



Australian Weighing
Equipment - Melbourne Office

37 Barrie Road
Tullamarine, VIC, 3043



Australian Weighing
Equipment - Brisbane Office

7 Darnick Street
Underwood, QLD1 4119

■ AUSTRALIAN WEIGHING EQUIPMENT ON SOCIAL MEDIA



@AustralianWeighingEquipment



@australianweighingequipment



/company/awegrouppaustralia



www.youtube.com/AustWeighing



www.awe.com.au

Dealer's Information:

SCAN HERE



www.awe.com.au

Brochure: 150920
Version: 140820