



Offer Document

BAC600 40ft Container Bagging Unit



<u>For the Attention Of:</u>	<u>Prepared By:</u>
Martin Schrooder	Brian Rees
L C Packaging UK Ltd Bridge Road Long Sutton PE12 9EF	Unit 7 Parc Hafren Ind Est, Llanidloes SY18 6RB
Email mschrooder@lcpackaging.com	Email: brian@bulkautomation.co.uk
Tel: 01406 366217	Tel: +44 (0) 1686 413 399
Mobile: +44 (0) 7971 497220	Mobile: +44 (0) 7981 857531

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Unit 7, Parc Hafren, Llanidloes, Powys. SY18 6RB

Telephone: +44 (0) 1686 413 399

sales@bulkautomation.co.uk

www.bulkautomation.co.uk

Section 1

Project Brief

To supply, install and fully commission semi-automated Packaging System in a 40ft container – to be dosed automatically to load cell bag clamp suitable for pre-made bags. The system will transport filled, sealed bags via product conveyors to a fully automatic robot palletizing system.

System comprising of the following:

- 10T Hopper and infeed conveyor
- 40' Container
- Load cell bag clamp
- Filled bag preparation system to include, Filled bag Conveyor, Bag turner, Bag flattener Transfer and pick-up Conveyor
- ABB Robot Palletizing system Pallet magazine with Pallet conveying.
- Compressor
- Lighting
- Distribution board and 240v sockets

<u>Specifications</u>	
Product	Sand
Bulk density	NA
Weighments	25kg
Free Flowing	Poor
Throughput	10-12bags/min
Operators required	One to supervise the line. One FLT operator



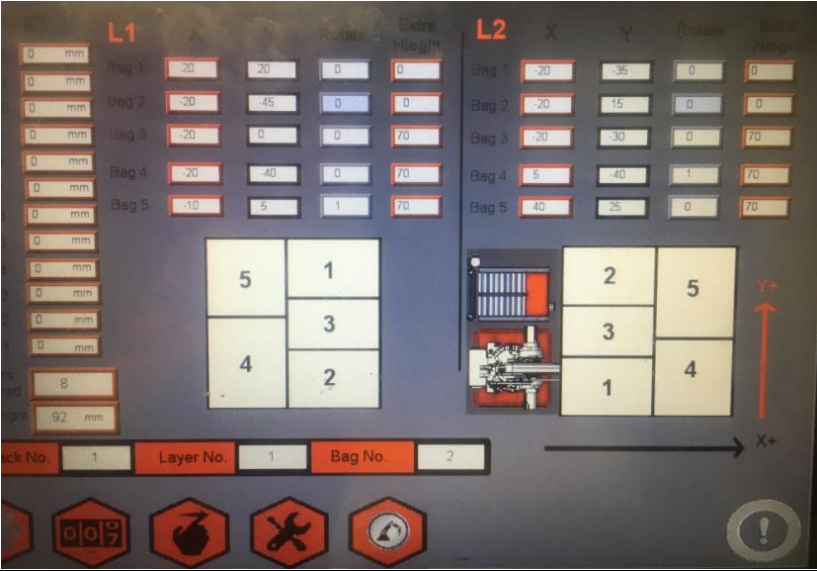
Bulk Automation Ltd. Packaging Machinery supplied and serviced.
Tel: +44 (0)1686 413399 Email: info@bulkautomation.co.uk



<u>Section 2</u>	<u>System Description</u>
<u>Item 1</u>	<u>Bulk Hopper and infeed conveyor</u> Robust mild steel hopper, loading height at 3300mm. 10m3 capacity. Greedy boards to provide maximum capacity. • Available as standard end load or side loading • Integrated conveying system with variable speed.
<u>Item 2</u>	<u>40' Container</u> Hi-Cube Container to house the bag clamp and robot palletising system, complete with bag preparation and automatic pallet magazine. The container will consist of the following: • Personal door for access to bagger • Electrical distribution board • Lighting • Compressor • Roller shutter door

<u>Item 3</u>	<u>Bag Clamp</u> The bag clamp will receive product from the hopper and infeed conveyor. The operator will place pre-made bag onto the filling spout, once the bag is on the spout/bag clamp the feed conveyor will start fill to the desired weight of the customer. Once the bag is full it will automatically drop the bag on the fill bag conveyor ready for sealing. The actual weight will be displayed on the panel next to clamp and can be fully adjusted off the screen.
<u>Item 4</u>	<u>Bag Sealing Conveyor.</u> This will be constructed in Mild Steel and fit below the Bag Sealer and Filling Spout; this will carry the filled bags through the Hot Air Sealer and to the turner, the filled bag conveyor will be adjustable if required.
<u>Item 5</u>	<u>Inline Bag Turner</u> Bag turning system to transfer the bags at ninety degrees laid flat, onto the bag flattening conveyor. New concept turner designed to suit all products. Bag flattening conveyor approx. 1.5m long to suit your products.
<u>Item 6</u>	<u>Bag Flattener</u> Bag flattening conveyor flattens the bag to aid a neat pallet stack. The air is expelled out of the bag whilst travelling horizontally between two belt conveyors. The bag flattener is fitted with motorised raise and lower which is adjusted from the operator touch screen.
<u>Item 7</u>	<u>Transfer Conveyor</u> A smooth belt conveyor approx. 600mm long. Complete with adjustable side guides. The conveyor suitably aligns the bags ready for the pick-up conveyor.
<u>Item 8</u>	<u>Pick-up Conveyor</u> Designed in conjunction with the standard robot sack hand, rollers are spaced to allow the sack hand support fingers access to the underside of the bag. Bag detection is by PEC or micro-switch
<u>Item 9</u>	<u>Standard Sack Hand</u> Designed in conjunction with the standard robot sack hand, rollers are spaced to allow the sack hand support fingers access to the underside of the bag. Bag detection is by PEC or micro-switch

<u>Item 10</u>	<u>Re-furbished Palletising Robot</u> <u>Model: ABB – 6400</u> 6 axes multifunctional robot, ideal for end-of-line palletising. • Re-furbished and tested in house by Bulk Automation • High precision movement • Speed: Approximately 12 cycles / minute – layout dependent • Base mount to suit application 
<u>Item 11</u>	<u>Pallet Magazine</u> Designed to hold up to 10 pallets, standard size 1200mm x 1000mm. Unit comes complete with 2.5m powered roller transfer to palletising section, Pallet guides to ease loading, fork truck wheel stop & empty dispenser warning light or buzzer. Pallets must be of good quality with no broken boards or exposed nails. The cell will be meshed and have a gate on the front for safety. 
<u>Item 12</u>	<u>Palletising Loading Section</u> 1x 2.5m pallet roller conveyor section A pallet is automatically transferred from the pallet magazine and stopped in the correct position for accurate palletising by the robot.
<u>Item 13</u>	<u>Gravity Accumulation Conveyor</u> The accumulation section can hold up to 2 pallets. Bump stop at fork lift offload position

<u>Item 14</u>	<u>Cell General</u> • Speed door so when the pallet is ready it will open Automatically and dispense the pallet. • Safety Light Guard – Providing a safe access procedure for quick and easy pallet exchange. • Control Panel
<u>Item 15</u>	<u>System Control Panel</u> Main control of the palletizing cell and robot interface, This system is offered with the “Pro-Stack” 10inch HMI touch screen (See details below) Teaching of the robot is normally carried out using the ABB remote programming pendant although “pro stack” allows operators to carry this out using the HMI. The control panel also houses mains power isolator Monitor and control for the robot cell safety circuits and safety relays Interfaces with upstream systems. 
<u>Item 16</u>	<u>Robot Cell Safety</u> The robot palletising system will be housed in a single safety cell consisting 1 operating zone. Interlocked operator gate for robot zone access All mesh guards minimum 2m high Full safety system monitoring and control by safety relays Safe system of access by request and dual Fortress key Hard wired safety interface between all system components.

<u>Item 17</u>	<u>Automatic stitching unit</u>  We can provide a Newlong DS9C Stitcher (Heavy Duty) complete with: - Heavy Duty Stand 0.3 kw motor 2 cone holders for thread - Handle Height Adjustment - Electrical panel - Remote Stop/Start - Logic PLC - Inverter Drive for stitcher motor control - Photocell for stop & start - Cutter Solenoid Valve - Safety Relay and Reset - Feeder Belt under the Stitcher - With Timing belts - Direct drive - Fitted to swivel plate - Inverter Speed Control
<u>Item 18</u>	<u>Air Compressor</u> Rotary Screw type air Compressors, all mounted in to a large steel cabinet for very low noise output, powered by a 2.2- 3-hp three phase motors, fitted with auto stop start control, capacity airflow 11 cfm. At 120 psi. All mounted onto a large 200lt air receiver tank. And comes complete with a built in dryer unit as standard.

<u>SECTION 3</u>		<u>Project Pricing</u>	
Item	Description	Qty.	Price
1-18	Complete system as listed in section 2, items 1 - 18 Including: • Delivery • 12-month manufacturer's warranty 6 Months on used equipment • Operator training • Installation • Commissioning	1	£171,985.00

All prices excluding UK VAT

<u>SECTION 4</u>	<u>General Sales Terms</u>
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- DELIVERY:** 16 weeks from receipt of deposit. TBC at Point of Order
- PAYMENT:** 50% of the total as advance with order. 40% of the total due on notification of the completed machine build payable before shipment will commence. 10% following successful commissioning or 30 days from delivery, whichever is sooner, ALL INVOICES WILL BE PROCESSED WITHIN 7 DAYS.
- VALIDITY OF THE OFFER:** Valid for 30 days. This is a draft budget quotation subject to further project analysis, after which, a definitive quotation will be produced
- TRANSPORT:** Included
- PACKING:** Included
- INSTALLATION:** Included
- DOCUMENTATION INCLUDED:** Operating manual, electrical drawings, assembly drawings.
- GOODS AND SERVICES EXCLUDED FROM THE SUPPLY IF NOT EXPRESSLY INCLUDED**
 - Cleaning the site and/or dismantling of existing equipment.
 - Preparing the site to receive our supply.
 - Frames and structures not expressly mentioned in the offer
 - Utilities: Supply & termination of power, compressed air, dust extraction, water etc
- CERTIFICATIONS:** All equipment of this offer is in compliance with European safety regulations and bears the CE mark.
- WARRANTIES:**

New Machinery: Any new equipment will be covered by 12 months parts and labour warranty

Used Machinery: All used machinery will be covered by 6 month warranty

Warranty will commence from date of delivery.