



## 1.0 RFQ SUMMARY

█ has requested the following requirements for the Extruded Deck Board Stacking System.

### 1.1 Board Specification

- 1.1.1 Lengths = 12 ft, 16 ft, and 20 ft
- 1.1.2 Width = 5.5 in
- 1.1.3 Thickness = 1"
- 1.1.4 Weight = 2.3 lbs. / ft
- 1.1.5 Temperature = 135°-150° F

### 1.2 Stack Sizes

- 1.2.1 Maximum Stack Layers = 12

### 1.3 Cart Dimensions

- 1.3.1 Length = 18 ft – 4 in
- 1.3.2 Width = 44 in
- 1.3.3 Cart bottom is 21 inches from floor.

### 1.4 Cycle Time

- 1.4.1 Pick 8 boards every 2.5 minutes

## 2.0 SYSTEM DESCRIPTION

- 2.1 Alliance Automation will provide █ with design, assembly, and installation of an Extruded Deck Board Stacking System.
- 2.2 The system would be installed in the █ facility.
- 2.3 The board stacking system hardware and controls will be identical to the hardware supplied on Alliance Automation █ with the exception that the system will be designed to have only one unload/load bay instead of two. See the concept drawing in Section 4.0 for details.
- 2.4 The stacking system will use a 2-axis gantry. A carriage on top of the gantry will hold the end of arm tool.
- 2.5 The end of arm tool will consist of (4) 48-inch-long x 3.5-inch-wide vacuum gripper pads. The pads are connected to a vacuum motor via flexible tubing.
- 2.6 The carriage Y axis will be driven by an AC motors. Sensors will be used for stopping positions. For additional cost the carriage can be supplied with encoders to allow for programmable stopping positions.
- 2.7 The gantry cycle time will be capable of picking and placing a single layer of 8 boards in 2.5 minutes or less.
- 2.8 The gantry system will have an electrical disconnect enclosure with a single programmable logic controller and a 10" operator interface.

**2.9** The gantry system will be guarded using a safety light curtains and free-standing wire mesh panels.

### **3.0 SYSTEM COMPONENTS**

#### **3.1 (1) 2-Axis Gantry System**

- 3.1.1 (1) 24' x 16' Gantry Frame
- 3.1.2 (1) 5.3' Y Axis Movement
- 3.1.3 (1) 20" Z Axis Pneumatic Actuation
- 3.1.4 (1) AC Motor, Drive, and Gearbox

#### **3.2 (1) End of Arm Tool**

- 3.2.1 (4) 48"L x 3.5"W Joulin Vacuum Gripper Pads
- 3.2.2 (1) Regenerative Blower, 12.6 kw

#### **3.3 (1) Cart Dock Station**

- 3.3.1 (1) Cart Locating Frame
- 3.3.2 (2) Docking Pins
- 3.3.3 (2) Cart Present Sensor

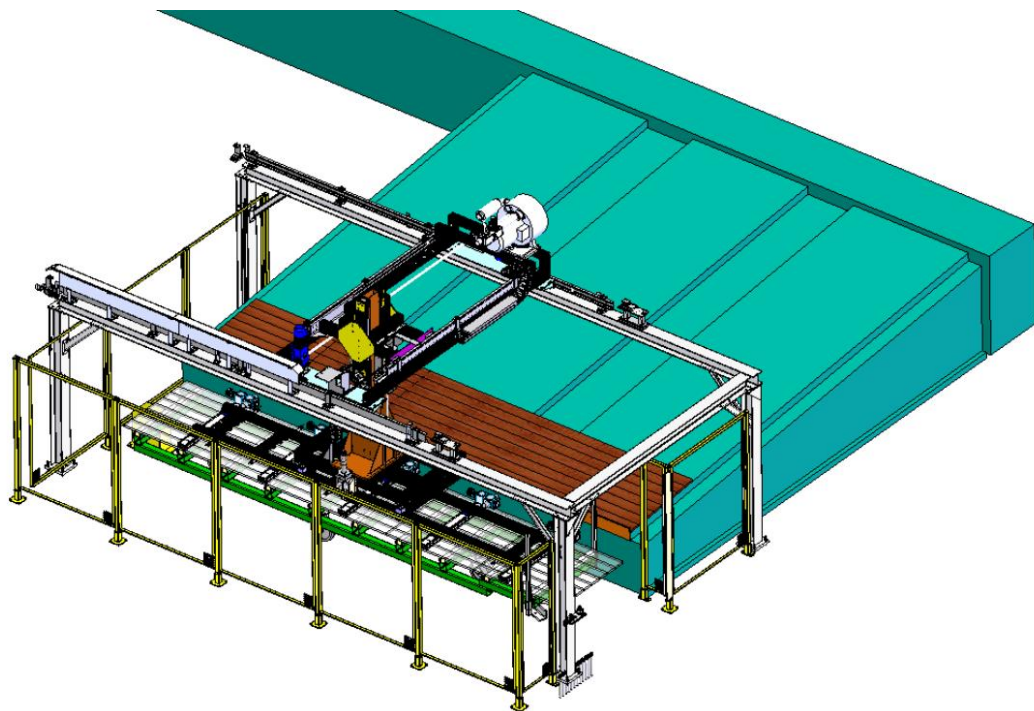
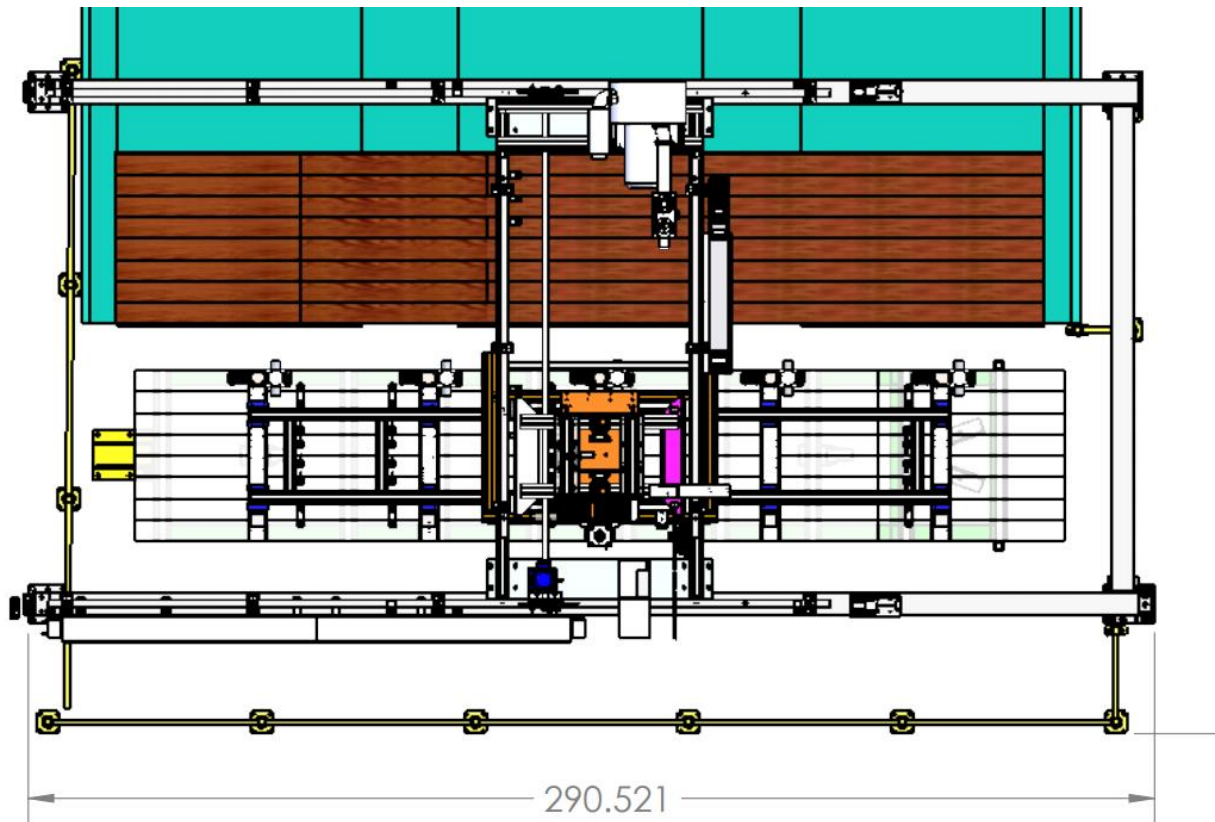
#### **3.4 (1) Control System**

- 3.4.1 (1) Allen Bradley CompactLogix PLC
- 3.4.2 (1) Allen-Bradley 10" Operator Interface
- 3.4.3 (1) Electrical Disconnect Enclosure
- 3.4.4 (1) Pneumatic Valve Stack

#### **3.5 (1) Guarding**

- 3.5.1 (Lot) Free Standing Safety Fence
- 3.5.2 (1) Safety Light Curtain

#### 4.0 CONCEPT DRAWING



## **5.0 PART REQUIREMENTS**

- 5.1** ■■■ is responsible for all parts required for testing and evaluation in the design phase of the equipment to prove process capability including but not limited to initial process testing, production run testing, equipment sizing & capability testing, and other equipment capable approval process requirements, and all runoff tests. Quantities required and delivery dates will be determined by Project Manager. Customer-supplied components must be properly identified and accompanied by an inventory sheet including part numbers and quantities. If sample parts are not available Alliance and customer will review, and possibly modify the timeline and project cost.
- 5.2** ■■■ is responsible for providing sample parts of each part number on or before the project kick-off meeting with Alliance Automation. Project timing and cost could be affected if parts are not available at the kickoff meeting.
- 5.3** Additional parts may be needed for feeding, vision, and special applications testing. The overall project timing and cost could be impacted if parts are not received per the requested dates.
- 5.4** ■■■ is responsible for supplying all calibration or pass/fail type parts.

## **6.0 CUSTOMER ACCEPTANCE, APPROVAL PROCESS**

- 6.1** Customer Approval of machine or system built by Alliance Automation will be documented through a sign-off process. All parties are encouraged to process approvals promptly to maintain the project timeline.
- 6.2** Mechanical Design Review Sign-off occurs when the mechanical design is to a level of completion that Alliance Automation and the customer are comfortable with scheduling approval and is based on the project timeline.
- 6.3** Electrical Design Review Sign-off occurs when the electrical design is to a level of completion that Alliance Automation and the customer are comfortable with scheduling approval and is based on the project timeline.
- 6.4** Run-Off at Alliance Automation: The customer and Alliance Automation agree to define requirements of Customer Acceptance during kick-off meeting for the project. At a minimum, the equipment must meet cycle time, safety, and functional requirements laid forth in this proposal. Acceptance will be documented with signatures on the runoff document.
- 6.5** Run-Off at Customer Facility will Include: Machine Installation, Start-up, and Final Machine Acceptance.
- 6.6** If the system contains any customer-supplied equipment, the customer must address any deficiencies with the supplied equipment on a timeline agreed to by both parties.
- 6.7** Customer is responsible for supplying all necessary parts and labor for all runoffs.
- 6.8** The system acceptance shall apply only to work provided under this quotation. In the system acceptance testing phase of this project, any downtime due to breakdowns of ancillary equipment, interfacing equipment, or, in general, any equipment not provided by Alliance Automation, and/or by damaged/defective product shall not be included in the determination of acceptance testing.
- 6.9** The customer is responsible for reimbursing Alliance for any additional labor and or travel expenses incurred in the event the customer does not supply the pre-determined number of parts necessary to perform any run-off requirements. This includes run-offs performed at Alliance Automation and customer facility.

- 6.10** The customer and Alliance Automation agree to define requirements of Customer Acceptance before receipt of P.O. At a minimum, the equipment must meet cycle time, safety, and functional requirements. Runoff at the Customers facility will occur immediately following machine installation and on-site training.
- 6.11** This sign-off signifies the contractual obligation of both parties have been satisfied, and the Customer agrees to proceed with final payment.

## 7.0 SHIPPING, INSTALLATION & TRAINING

### 7.1 Shipping

- 7.1.1 Shipping will be F.O.B. Alliance Automation, Van Wert Ohio. Customer will be responsible for shipping arrangements.
- 7.1.2 Alliance will be responsible for rigging equipment onto the truck at Alliance Automation in Van Wert, Ohio.
- 7.1.3 [REDACTED] will be responsible for rigging equipment and placing the equipment on the floor where it is to be installed. Customer is responsible for providing all required rigging equipment needed during installation. In the event the customer cannot provide this equipment Alliance Automation will provide the equipment at an additional cost to the customer.

### 7.2 Installation

- 7.2.1 [REDACTED] is responsible for all electrical, communication, air, and plumbing service drops required for the proposed assembly equipment.
- 7.2.2 [REDACTED] will be responsible for the electrical connection from the facility buss bar to the main panel disconnect lugs.
- 7.2.3 All other internal cell connections and termination will be made by Alliance during Alliance Set-up and Start-up.
- 7.2.4 [REDACTED] will be responsible for the pneumatic connection from the facility air supply (plant air) to the Alliance cell drip leg connection.
- 7.2.5 All other internal cell pneumatic connections are the responsibility of Alliance during Alliance Set-up and Start-up.
- 7.2.6 The installation will be performed during non-holiday 1st shift working hours, Monday - Friday. Installation hours requested outside of this time will be quoted as an additional cost.

### 7.3 Training

- 7.3.1 Unless otherwise specified training for operators and maintenance personnel can be scheduled and performed by our technicians, if needed. Training will be billed at our normal rates and can be quoted upon request.
- 7.3.2 Bilingual Training is available but not included in the original cost.
- 7.3.3 Training will be performed during 1st shift working hours, Monday - Friday. Training hours requested outside of this time will be quoted as an additional cost.

## 8.0 DELIVERY

- 8.1 Delivery is based upon current workload and purchased component availability at the time of order; however normal delivery will be approximately **20 weeks** from the project kick-off meeting.
- 8.2 If the equipment is requested to be shipped before achieving the agreed-upon runoff criteria at Alliance.
- 8.3 Machine runoff at Alliance may be provisionally accepted by the Customer with a mutually agreed-upon open items list that Alliance will agree to accomplish before final acceptance.

## 9.0 ESTIMATED PRICING

ITEM #	DESCRIPTION	QTY	UNIT PRICE	TOTAL
1	Extruded Deck Board Stacking System	1		
2				
3				
4				
5				
<b>TOTAL SYSTEM PRICE</b>				
<b>PURCHASING OPTIONS</b>				
6				
7				

## 10.0 CONFIRMATION OF PRICING AND DELIVERY

- 10.1.1 **Due to most of our vendors only providing valid quotes for 24 hours all purchased parts pricing will be confirmed at time of purchased parts order. Any price increase will be passed to the customer as a change order. Upon request Alliance Automation will provide quote documents of the purchased parts.**
- 10.1.2 **Due to the unpredictable state of purchased part lead times delivery of all purchased parts will be confirmed at time of purchased parts order. The customer will be notified if an updated lead time has an impact on the overall project delivery.**

## 11.0 PROPOSED PAYMENT TERMS, agreed upon before receipt of P.O.

- 30% Invoiced upon Receipt of Purchase Order, Due Net 0 Days
- 30% Invoiced upon design approval, Due Net 30 Days.
- 30% Invoiced after run-off (at Alliance) or shipment of equipment, whichever occurs first. If multiple shipments are required invoice will be sent upon the first shipment. Due Net 30 Days
- 10% Invoiced upon completion of installation & final run-off, not longer than 30 days after delivery, Due Net 30 Days.
- Payments must be in U.S. Dollars



## **12.0 ALLIANCE AUTOMATION STANDARD DOCUMENTATION**

### **12.1 Mechanical Documentation (1 electronic copy)**

- 12.1.1 Mechanical CAD drawings
- 12.1.2 Cell Layout
- 12.1.3 Assembly Prints
- 12.1.4 Detail Prints
- 12.1.5 Spare Parts List

### **12.2 Controls Documentation (1 electronic copy)**

- 12.2.1 Electrical CAD drawings (1 electronic copy)
- 12.2.2 Panel layouts
- 12.2.3 I/O
- 12.2.4 AC/DC power distribution
- 12.2.5 PLC program
- 12.2.6 HMI program

## **13.0 PROJECT MANAGEMENT, Upon Receipt of P.O.**

- 13.1** The project timeline will be developed with the receipt of the purchase order and down payment.
- 13.2** The project timeline will not start until part prints, part models, and part samples have been received, unless a mutual agreement is made between the customer and the Alliance Project Manager.
- 13.3** A kick-off meeting will be scheduled to review the design concept, system operation, and obligations/expectations of both parties.
- 13.4** Each project at Alliance Automation is assigned a Project Team consisting of a Project Manager, Mechanical Engineer, and Controls Engineer. The Project Manager is responsible for acting as the main point of communication with the customer regarding, project schedule, resources, and informing the Mechanical and Controls Engineer of any project changes.
- 13.5** The project team will meet regularly to review the schedule, review milestones, review progress, and identify issues.
- 13.6** Additional design review meetings, as determined by the team, will be scheduled with times convenient to both the customer and Alliance Automation. All design review meetings must occur before the start of manufacturing.
- 13.7 Project Resources**
  - 13.7.1** The PM will create and maintain an "Open Issue" list. This list will be used to track and address information requests and responses, design changes, changes in project scope, and customer-supplied equipment and inventory.
  - 13.7.2** The Mechanical Engineer is responsible for the Mechanical design of the equipment, ensures adherence to the customer's specifications. The Mechanical Engineer is also responsible for monitoring the manufacturing of details and fielding questions from the



shop as well as directing the assembly technicians during the assembly and debug of the equipment.

- 13.7.3 The Controls Engineer is responsible for the Controls design of the equipment, ensures adherence to the customer's specifications. The Controls Engineer is also responsible for monitoring panel build and fielding questions from the shop as well as directing the electricians during the assembly and debug of the equipment.

## **14.0 PROJECT COMMENTS**

- 14.1 Alliance Automation will provide a system designed to operate as stated within this proposal. Unless otherwise specified the stated cycle time is calculated at an 85% efficiency rating to allow for machine downtime, rejected parts, operator breaks, operator stoppages, operator load/unload time, scheduled machine maintenance, and set-up time.
- 14.2 If Customer build specification is not available, Alliance will provide a build specification that must be agreed upon before receipt of the P.O.
- 14.3 This proposal represents Alliance Automation's best effort to address the specified requirements and is based on available information to date. Alliance Automation reserves the right to modify or substitute concepts, methods, or components as appropriate based on discovery, new information, material availability, or engineering principles. Any changes requiring cost adjustments will only be done on a mutually agreed-upon basis.
- 14.4 Bilingual HMI programming, Manuals, signage, placards are available but not included in the original cost.
- 14.5 In the event a change of scope is requested by the Customer. The change order process will take place.
  - 14.5.1 A change order document noting requested change and associated costs will be provided to the Customer. The change order must be signed by the Customer.
  - 14.5.2 If the request causes additional costs, a purchase order will be required before proceeding with the change.
  - 14.5.3 If the request reduces costs, the sell price difference will be mutually agreed upon by the Alliance project manager and the customer.
  - 14.5.4 Alliance Automation reserves the right to reference the award of any contracts in public documents such as sales brochures, marketing literature, and press releases. At no time will the value of any orders be released to the general public.
  - 14.5.5 Alliance Automation reserves the right to use photographs, drawings, and other images of their products in public documents such as sales brochures, marketing literature, and press releases. Photographs that show the customer's products being manufactured will not be used until such product is made available by the customer to the general public.

## 15.0 CUSTOMER REQUIREMENTS

- 15.1 ■■■ is responsible for the plant layout and machine placement, operator instructions, and all part dunnage.
- 15.2 ■■■ is responsible for providing operators able to feed/load the proposed system to allow the machine to run at the required cycle time.
- 15.3 ■■■ must supply the specified input power and clean dry air. Other voltages shall be obtained by transformers and power supplies within the control enclosure. The control voltage will be 24 VDC. The customer facility must be capable of supplying the necessary utilities to run the equipment.
- 15.4 ■■■ is encouraged to provide a VPN connection to the control panel for remote access to the system. The VPN connection can provide remote support efficiently and be more cost-effective. The customer may incur additional costs for onsite service if a VPN connection is not provided.
- 15.5 ■■■ is responsible for all floor preparations (concrete/building modifications where needed) and area preparations. Alliance Automation will provide all modification specifications and will add delivery of such specifications to the project timeline.

## **16.0 WARRANTY PROCESS**

### **16.1 The warranty Process begins on the date of shipment.**

- 16.1.1 Contact Alliance Automation Service department to initiate the warranty claim.
- 16.1.2 All warranty claims will be treated as “service” until an evaluation has been performed by an Alliance representative, and it has been mutually agreed that the incident is warranty.
- 16.1.3 If the claim is deemed to qualify as a warranty claim any purchase order submitted to Alliance will be returned; no cost to the Customer will be incurred.
- 16.1.4 Customer issues PO to Alliance Automation for a replacement part. The part will be shipped to the customer with standard lead time.
- 16.1.5 Alliance Automation will issue an RMA for the part and begin processing procurement for replacement part.
- 16.1.6 Customer will ship part to Alliance Automation with RMA. Parts must be returned within 14 days to Alliance Automation otherwise an invoice will be sent for the part.
- 16.1.7 Alliance Automation will return part to vendor/manufacturer for warranty inspection.
- 16.1.8 If vendor/manufacturer warranties the part under conditions of their warranty, Alliance Automation will send replacement to customer.
- 16.1.9 Equipment not manufactured by the Seller shall carry the warranty of the manufacturer thereof.

### **16.2 Support**

- 16.2.1 Alliance Automation service office hours are from 8:00a.m to 5:00p.m eastern, Monday through Friday.
- 16.2.2 Phone support and service requests must be coordinated through the service manager.
- 16.2.3 support@allianceautomation.com
- 16.2.4 A purchase order must be received before service can be scheduled or performed.
- 16.2.5 The service work will be limited to the issue reported on the request form.
- 16.2.6 If additional services are requested while technician is on site, an additional service request must be submitted.
- 16.2.7 The terms and acceptance of the additional services will be at the discretion of the service manager.
- 16.2.8 The service period begins after final signoff.

## 17.0 WARRANTY, TERMS, and CONDITIONS

**WARRANTY:** Alliance Automation, LLC (hereafter Seller) warrants for **one year** from date of shipment, the mechanical and electrical equipment of its own manufacture against defects in workmanship or material, its obligation being limited solely to repair or replacement of defective parts. The seller warrants for **one year** from date of shipment the engineering design of the equipment and will replace or repair any component not properly designed or applied in the intended process. The seller shall not be liable for any other damages, direct, indirect, or consequential. Equipment not manufactured by the Seller shall carry the warranty of the manufacturer thereof. Deterioration caused by misuse, abuse or improper operating procedures does not constitute a defect. This warranty, which is given expressly and in lieu of all other warranties, expressed or implied, of merchantability and fitness for particular purpose, constitutes the only warranty made by the Seller. It is further agreed that there are no understandings, agreements, or representations, express or implied, not specified herein respecting this order and this instrument contains the entire agreement between the parties.

**DELIVERY:** Except as otherwise specified in this quotation, delivery will be FOB, Alliance Automation, Van Wert, OH. Shipping dates are approximate and are based upon receipt of all information and necessary approvals.

**TERMS:** Except as otherwise specified in this quotation, the terms of payment shall be balance net within 60 days from date of invoice, depending upon standard terms or progressive terms. Amounts past due and older will be charged a finance charge of 1.5% of the outstanding balance per month.

**FORCE MAJEURE:** Seller will not be responsible or liable for any delays in delivery or manufacture due to any cause or condition beyond its control, including, without limitation, strikes or other labor difficulties, or unavailability, flood, earthquake, inability to secure transportation facilities, shortage of materials or supplies, riot or other civil disturbance, war, acts of God or nature, accident, or any acts of any government. Seller will also not be held responsible or liable for scheduled installation completion dates if at any time during the project process the seller's timeline is put on hold by the seller due to lack of information, sample run-off material delays, machine downtime, untimely review process, change in scope and/or customer support. (Installation completion dates will move the same number of days as project is on hold or adjusted for scope change.)

**ACCEPTANCE:** This quotation shall expire 30 days after its date, unless otherwise stated herein.

**PRICES:** The prices specified herein do not include sales, use, occupation, license, excise, or other taxes in respect to manufacture, sale, or delivery, all of which shall be paid by the Purchaser, unless a proper exemption certificate is furnished.

**TITLE:** The equipment shall remain personal property, regardless of how affixed to any realty or structure. Title thereto shall remain with the Seller until the purchase price has been fully paid.

**RIGHT TO RESTRICT USE:** In order to provide additional security for both Interim and Final Payments, Alliance may install a software registration key in the equipment furnished under this proposal. In the event of payment default by the customer Alliance may, at its discretion, limit use of the equipment using programmatic methods incorporated in such software. These methods include, without limitation, the restriction of the use of controller software contained in the equipment by the withholding of additional software registration keys necessary to continue to operate the equipment. This restriction may make the equipment incapable of operating for its intended purpose. If Alliance exercises the right to restrict use, and upon satisfaction of all customer payment and nonpayment obligations under this proposal, Alliance will at its sole expense provide customer with a software registration key having no expiration date.

**CANCELLATION AND TERMINATION:** Upon cancellation of all or a portion of an order placed with Alliance Automation, LLC the customer becomes liable for payment of reasonable cancellation charges, which shall take into account, expenses already incurred, and commitments made by Alliance Automation, LLC relating to the subject order. If Alliance Automation, LLC experiences any restocking, cancellation, or associated charges from a related vendor contracted to supply material or labor for a specific customer's order, these charges shall become the full responsibility of the customer. No termination by the customer for default shall be effective unless and until Alliance Automation, LLC shall have failed to correct such alleged default within 30 days after receipt of a written notice specifying the default and required corrective measure.