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Proposal #

Company Name

Prepared for

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Description

**PINES® - NEW MODEL 1 EXTRUSION - HYBRID
ROTARY BENDING MACHINE**



Pines® Model 1 Extrusion Bender with 18' Carriage Travel

PINES® MODEL 1 EXTRUSION BENDING MACHINE with a two axis PLC control customized to bend aluminum extrusions and profile shapes. Standard machine is arranged for Counterclockwise Rotation with 8-inch maximum radius capability. The machine comes complete with carriage for positioning of tubes with multiple bend configurations, clamp and pressure die holders, automatic slide lubricator, all necessary hydraulics, valves, piping, and cylinders. Complete bender operations are self-contained in the machine base and includes water-cooled heat exchanger for the hydraulic oil.

MACHINE CONTROL

DIAL-A-BEND® 7+ CONTROL (DAB-7+)

Pines Numerically Controlled machines are equipped with a Dial-a-Bend 7+ PLC (DAB-7+) control and features state of the art Intelligent Motion Control. The large 7" color touch screen allows for easy programming and machine operation. It has user friendly functionality and can store up to 200 different bending programs with alpha-numeric part numbers. Program memory is searchable to speed the retrieval of stored part programs. Springback calculation, Springback compensation, and Parts Counter are all standard.



Full manual control of all machine functions is provided with machine sequence interlocks where required. This reduces the chance of damaging the machine through inattention, lack of operator training, or improper tool setup. Tooling can be jogged in manual mode. The operator can even make a bend in manual mode that will stop at the preset bend angle.

The Pines Dial-a-Bend 7+ control uses advanced hardware and PLC logic to eliminate the problems normally associated with an Emergency Stop situation. On most machines, an Emergency Stop or loss of hydraulic pressure will result in the loss of the part being bent. The tools must be opened manually, and the part thrown on the scrap pile. Not so with the Pines Dial-A-Bend. Just restart the pump motor and press the Cycle Forward button to resume the bend. The tools will remain closed at the correct pressure and all machine options will function as though the bend had not been interrupted. The bend die will stop at the correct position with no loss of accuracy.

The Pines Dial-a-Bend control allows for simplified electrical circuitry. When combined with intelligent machine "in sequence" and "error" messages, time spent troubleshooting is greatly reduced.

PINES "PRESS AND HOLD" FEATURE - Operating a tube bending machine poses several hazards to the machine operator. In keeping with OSHA and other machine building standards, the Pines controller has several features designed to enhance operator safety. When moving the machines components in manual mode two hand control is required. In automatic mode the operator must often hold the part in position so requiring two hand control is not an effective solution. The Pines Press and Hold feature accomplishes much the same task. The operator must press the Cycle Forward pushbutton to start the automatic cycle of operation.

The operator must hold this pushbutton down until the tools have closed fully. Once the bend die starts rotating the operator can release the button. If the operator sees any reason to stop the bend sequence before the tooling is fully closed he can merely release the pushbutton and the tools will automatically open fully.

HYDRAULIC SYSTEM - High quality valves, cylinders, pumps, filters, and fittings from reputable national brands are used throughout the machine. A 15 HP motor drives a balanced vane pump for control of main system pressure. The system is designed to minimize power consumption when full system pressure is not required. A thermostatically controlled water-cooled heat exchanger is incorporated to keep the oil at a safe operating temperature.

Y-AXIS (LINEAR FEED TUBE CARRIAGE) - The y-axis is driven by a modular rail system for a faster, yet more precise feed. The carriage has a standard 18' of travel at a maximum rate of up to 1200 IPM. The collet/chuck mechanism features replaceable pads to match the size and shape of the profile being bent.

C-AXIS (SWING ARM) - The swing arm is equipped with an inline slide system. The inline slide is toggle actuated through a hydraulic clamp cylinder. The mechanical lock of the toggles eliminates the possibility of the clamp backing off during the bend cycle. The die boss includes a replaceable surface that can be customized to accept various types of tool mounts.

HYDRAULIC SPLIT DIE ACTUATOR - When bending extruded part shapes, it is often necessary to split the bend die (radial plates) into multiple sections. At a minimum, an upper and lower half. These are separated to facilitate part removal after bending. The split die actuator automatically closes the die halves before bending and opens them after the bend is completed.

MACHINE INCLUDES THE FOLLOWING STANDARD EQUIPMENT

▪	SPRINGBACK COMPENSATION
▪	SELF DIAGNOSTIC PROGRAM
▪	SAFETY SCANNER
▪	WATER COOLED HEAT EXCHANGER
▪	COUNTER CLOCKWISE ROTATION
▪	DUAL PALM REMOTE OPERATOR CONTROL
▪	AUTOMATIC SLIDE LUBRICATOR
▪	LONG ARMS & CARRIAGE ADJUSTMENT TO COVER 8" RADIUS
▪	STANDARD MODEL 1 CLAMP DIE HOLDER
▪	STANDARD MODEL 1 PRESSURE DIE HOLDER w/ MASTERBAR
▪	Y-AXIS CARRIAGE - 18 FT. OF TRAVEL
▪	HYDRAULIC UNDER NOSE SPLIT DIE ACTUATOR
▪	DAB 7+ PLC CONTROL

Machine and Standard Equipment:

Model Pines #1 Extrusion Bending Machine Base Price

Included Optional Equipment:

ONE SET OF CARRIAGE GRIPPER PADS – Designed to accommodate at a minimum: one extrusion profile

Optional Equipment Subtotal:

Total Package Price - Model #1 Extrusion w/ Options

Custom Extrusion Bender Notes & Requirements:

Note: Quote valid for 45 days. Machine prices do not include tooling unless otherwise noted.

OWNERS MANUAL

One electronic copy of the owner’s manual is furnished at time of shipment. The manual includes electrical and hydraulic circuit prints, lubrication charts, installation and operating instructions, troubleshooting notes, and parts lists of electrical, hydraulic and mechanical components. (English version).

MACHINE CUSTOMIZATION:

Pines customers vary across industries. We realize that a standard bender package cannot fit the needs of every customer. The Model 1 Extrusion Bender includes as standard, the most common options for an extrusion bender. The additional option packages listed represent only a small offering of our most popular options. We have a wide variety of carriage travel lengths, tool holder designs, and accessories to meet your exact requirements. If you do not need all included options or need additional options, features, speeds, or machine requirements do not hesitate to ask your Pines sales representative.

OPTIONAL EQUIPMENT:	
Feature	Price
WIPE BENDING ADAPTER KIT - <i>CONVERSION TO COMPRESSION BENDING</i> - Includes: Riser package, step stud, alignment bushing, bearings, adapter ring, bridge plate for actuator, pressure die holder mounted on swing arm with pressure die return mechanism and customized masterbar, clamp die holder mounted on stationary arm, wiper die mounting base plate and clamp holder to mount on the wiper die base plate.	
CARRIAGE GRIPPER PADS - Based on extrusion profile (~ \$/Set)	
SAFETY MAT	
OVERHEAD TIE BAR	
FAN COOLED HEAT EXCHANGER	
CLOCKWISE ROTATION (right hand) OF SWINGING ARM	

DESCRIPTION OF OPTIONAL EQUIPMENT:

WIPE BENDING ADAPTER KIT - With the profile of the extrusions desired to be bent, it is recommended to use the wipe bending (compression) process rather than the customary draw bending process. The machine is converted to the wipe bending process with the use of custom tool holders and a wipe bending adapter kit.

SAFETY MAT OR LASER SAFETY SCANNER - The Pines Bender can be equipped with a laser safety scanner or safety mat positioned near the front of the machine. The scanners invisible laser beam sweeps out an area in front of the bender and prohibits machine operation while in the exclusion zone. This reduces the risk of the operator or other personnel wandering into the machines danger zone while the machine is operating. Once activated the machine will come to a Cycle Stop. The operator can restart the cycle by pressing the cycle forward pushbutton once the safety zone is cleared. The scan area can be configured with a laptop or personal computer to the proper size and shape as mandated by your safety department. The Pines Slow Clamp feature can still be utilized in the exclusion zone.

OVERHEAD TIE BAR - The overhead tie bar reinforces the bend die stud to prevent the bend die from heeling when bending tight radii or using extreme clamping pressures. Overhead tie bars can be added to the stationary and/or bend arms.

FAN COOLED HEAT EXCHANGER - This option replaces the standard water cooled heat exchanger option. A thermostatically controlled electric fan blows air across a radiator to cool the hydraulic oil temperature. This is a popular option where water costs are high and the customer does not have a pre-installed water tower or cooling loop.

CLOCKWISE ROTATION - Pines benders are built as counter-clockwise (left hand) oriented machines. Some part designs cannot be bent on this style of machine due to machine or floor interference. Pines offers a clockwise (right hand) version of this machine to accommodate those part designs.

Specifications

- Maximum radius - 8" Includes Long Arm Option
- Minimum radius to diameter ratio - 1D
- Maximum bend angle - 190°
- Bend arm repeatability - +/- .1°
- Carriage repeatability - +/- .01"
- Bend arm forward speed - 20 RPM
- Tool mounting - Standard #1 CCW
- Y-Axis travel: 18' - Speed: 1200 IPM
- Motor horsepower - 7.5 HP

Capacities

- Round tubing, mild steel Y.P. to 40,000 psi - 1 1/2" x .109"
- Round Tubing, non-ferrous Y.P. to 25,000 psi - 1 5/8" x .187"
- Round tubing, Stainless steel Y.P. to 60,000 psi - 1 3/8" x .065
- Steel pipe, schedule 80 - 1
- Square tubing, mild steel - 1 1/8" x .120

Safety Features

- Safety scanner protecting swing arm area.
- Safety plates protecting both bend and return sides of swing arm.
- All electrical components in power panel are "finger-safe" and are in accordance with NFPA standards.
- Machine is properly labeled with pinch and hazard points. ANSI Z535.4
- Machine safety guidelines are in accordance with ANSI B11.15

ADDITIONAL INFORMATION:

- Dimensions - ~ 26' L x 4' W x 4' H
- Working height ~ 34"
- Maximum radius, standard - 8" w/ Long Arm Option
- Horsepower of pump motor - 7.5 HP
- RPM of bending arm (average for 180° and return) - 9.7
- Weight - Approximately 2,750 lbs
- Oil reservoir - Completely sealed reservoir with 44-gallon capacity

TERMS AND CONDITIONS

1. **ORDERS AND ACCEPTANCE:**
 - a) **THE FOLLOWING TERMS AND CONDITIONS SHALL BE A PART OF ANY CONTRACT OF SALE ("Order") FOR GOODS AND/OR SERVICES WHICH MAY BE ENTERED INTO BETWEEN BUYER AND AJAX TOCCO MAGNETHERMIC CORPORATION dba PINES ENGINEERING ("ATM") WHETHER PURSUANT TO ANY PROPOSAL, RESPONSE TO REQUEST FOR QUOTATION, PURCHASE ORDER OR OTHERWISE. ANY TERMS OR CONDITIONS IN BUYER'S PURCHASE ORDER, RELEASE DOCUMENT, ACKNOWLEDGMENT OR OTHER APPROVAL WHICH ARE IN CONFLICT OR INCONSISTENT WITH OR ADDITIONAL TO THE TERMS AND CONDITIONS HEREIN ARE EXPRESSLY REJECTED BY ATM AND WILL NOT BECOME A PART OF ANY RESULTING CONTRACT BETWEEN BUYER AND ATM WITHOUT ATM'S EXPRESS WRITTEN CONSENT.**
 - b) **NEITHER ACKNOWLEDGMENT OF BUYER'S ORDER NOR THE FILLING AND SHIPMENT OF SUCH ORDER SHALL CONSTITUTE ACCEPTANCE OF SUCH CONFLICTING, INCONSISTENT OR ADDITIONAL TERMS, NOR SHALL SUCH ACTIONS IN ANY WAY OPERATE TO MODIFY OR CHANGE THE TERMS AND CONDITIONS HEREIN.**
 - c) **BUYER'S ACCEPTANCE OF SHIPMENT, COMMENCEMENT OF SERVICES AND/OR PAYMENT FOR THE GOODS AND/OR SERVICES CONSTITUTES ACCEPTANCE OF ATM'S TERMS AND CONDITIONS.**
 - d) **NO ORDER SHALL BE BINDING UPON ATM UNTIL ACCEPTED IN WRITING BY AN AUTHORIZED REPRESENTATIVE OF ATM AND AN ACKNOWLEDGMENT SENT TO THE BUYER.**
2. **QUOTATIONS:** All written quotations shall automatically expire on the expiration date listed on the quotation, but in no event later than ninety (90) days after issuance, and are subject to withdrawal by notice within that period. ATM, at its sole option, may extend the effective date of written quotations up to six months. Prices shown on published price lists and other literature issued by ATM do not represent unconditional offers to sell, and are subject to change without notice. ATM's prices do not include installation or final on-site adjustment unless otherwise specified in the quotation.
3. **TAXES:** ATM's prices do not include federal, state, or local taxes, including sales, use, property, import/export, value added, excise or similar tax payments. ATM shall have the right at any time to bill Buyer for any and all such taxes as a separate invoice line item and Buyer agrees to pay and/or reimburse ATM for any such applicable taxes.
4. **PAYMENT:** Payment shall become due as stated in the Order Acknowledgement. ATM reserves the right at any time to demand full or partial payment or appropriate security before proceeding with the work to be performed hereunder, if in the sole judgment of ATM the financial condition of Buyer does not justify continuance under the terms of payment specified in the Order. If delivery is delayed or deferred by Buyer beyond the scheduled date, payment shall be due in full on the date when ATM is prepared to make delivery. ATM reserves the right to add a finance charge to all past due balances at a rate of 2% per month, or any fraction thereof, or at the maximum rate allowable under law, if less. Should the payments not be made in accordance with the schedule stated on the Order Acknowledgement, ATM reserves the right to terminate all or part of the Order, including the Warranty coverage.
5. **DELIVERY AND DELAYS:** Delivery of goods will be Ex Works (Incoterms 2010) ATM's shipping point; all shipping charges collect, unless otherwise specified. Buyer assumes all responsibility for risk of loss or damage to any goods furnished hereunder upon delivery to the carrier at ATM's shipping point. Delivery dates are approximate and are subject to confirmation. ATM shall not be responsible for excusable delays, nor shall Buyer refuse to accept delivery because of any such delays. "Excusable delays" include, without limitation, delays resulting from accidents, acts of God, strikes, fire, floods, weather disturbances, acts of terrorism, governmental controls, inability to obtain materials from suppliers, failure of materials correctly ordered by ATM to meet specifications, or other causes reasonably beyond ATM's control, including any delay attributable to the carrier. If Buyer delays shipment, Buyer will accept title to the equipment, the equipment will be invoiced and payment in full nevertheless shall be due thirty (30) days after the date of such invoice and the equipment shall be held at Buyer's risk and subject to reasonable storage charges. Any delays caused by Buyer will not extend the stated start-up or warranty period.
6. **CHANGES:** Requested changes made by Buyer to an Order are subject to ATM's approval and acceptance. Buyer shall reimburse ATM for all additional costs and expenses related to any such change.
7. **CANCELLATION:** Orders will not be subject to cancellation by Buyer, either in whole or in part, without ATM's written consent, and then only under terms that will reimburse ATM for all costs incurred by it, including, without limitation, preparation costs, costs of purchased materials, engineering costs, total factory costs of the items produced up to the date of acceptance of cancellation including factory direct labor and factory overhead, cancellation charges from ATM's subcontractors and suppliers, any other expenses, and an amount equal to ATM's customary profit, less the refund, if any, actually received by ATM on any purchased items which can be returned to vendors.
8. **OHSA:** Proper application will enable the equipment provided by ATM to meet OSHA Regulations existing as of the date of the Order as interpreted by ATM in connection with Buyer's stated requirements. Some of the OSHA requirements may or may not be applicable depending upon the OSHA inspector and his interpretations of the regulations.
9. **WARRANTIES AND REMEDIES:** Unless otherwise specified in ATM's quotation, ATM provides the following warranties, as applicable:
 - a) **Equipment:** The warranty provided by ATM is limited to the warranty specified in ATM's quotation or order acknowledgement. If no quotation or order acknowledgement was issued ATM warrants that the equipment manufactured by it shall, for a period of twelve (12) months from the date of shipment, be free from defects in material and workmanship. In the event that any part or parts, excepting expendable items such as, but not limited to coil liners, thermocouples, refractories and similar items, shall fail within the first twelve (12) months from date of shipment due to defects in material or workmanship, ATM shall at its option,

repair or replace FOB shipping point, such defective part or parts. The warranty obligations of ATM with respect to equipment not manufactured by ATM shall conform to and be limited to the warranty actually extended to ATM by its suppliers. Notice of a claim for alleged defective equipment must be given within fifteen (15) days after Buyer learns of the defect. THE DEFECTIVE PART OR PARTS SHALL BE RETURNED TO ATM, FREIGHT PREPAID, UNLESS OTHERWISE DIRECTED BY ATM.

- b) **Services:** ATM warrants that the technical field services performed by it will be performed in a good and workmanlike manner. In the event of a breach of this warranty within thirty (30) days, ATM will re-perform the services. ATM shall not be responsible for the acts and workmanship of the employees, contractors, subcontractors or agents of Buyer or the consequences thereof.
 - c) **Installation Drawings:** If ATM is, under the terms of the Order, required to prepare foundation and/or electrical and/or piping installation drawings to augment the equipment being furnished by it and/or others, it will prepare said drawings on the basis of the cost involved in the preparation of the drawings. In the event any said drawings are found to be in error due to the fault of ATM, then ATM warrants that it will modify or correct said drawings so that the final drawings represent the installation at the site.
 - d) **THE WARRANTIES SET FORTH IN THIS SECTION 10 SHALL BE EXCLUSIVE AND IN LIEU OF ANY OTHER WARRANTIES AND ATM MAKES NO WARRANTY OF MERCHANTABILITY OR WARRANTIES OF ANY OTHER KIND, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, WHICH EXTEND BEYOND THE WARRANTIES AS SET FORTH ABOVE.**
 - e) ATM shall have no obligation to Buyer if the equipment becomes defective in whole or in part as a result of installation or repairs not made by ATM, or as a result of the use of equipment or replacement parts not provided by ATM, or as a result of removal, operation above rated capacities, operation in conditions other than those recommended by ATM or misapplication or improper use of the equipment after it has been delivered to Buyer.
 - f) The obligations of ATM and Buyer's **SOLE AND EXCLUSIVE REMEDIES** hereunder, shall be limited, at ATM's option to the replacement or repair of any equipment or parts thereof, the re-performance of services, and the correction of drawings, all as set forth above in section 10.a) through c). Should the equipment or parts thereof be determined by ATM to be so defective as to preclude the remedying of warranted defects by replacement or repair, or should the re-performance of the services or correction of drawings be impossible or impractical, in ATM's sole discretion, Buyer's **SOLE AND EXCLUSIVE REMEDY** shall then be the refund of the purchase price or so much of the purchase price as Buyer has paid. **THE REMEDIES SET FORTH IN THIS PARAGRAPH CONSTITUTE ATM'S SOLE LIABILITY AND BUYER'S SOLE AND EXCLUSIVE REMEDIES AND ARE EXPRESSLY IN LIEU OF ALL OTHER REMEDIES BASED IN LAW OR EQUITY.**
10. **LIMITATION OF LIABILITY: IN NO EVENT SHALL ATM BE LIABLE FOR INDIRECT, INCIDENTAL, EXEMPLARY OR CONSEQUENTIAL DAMAGES INCLUDING, BUT NOT LIMITED TO LOSS OF PROFITS, SAVINGS OR REVENUE OR DOWNTIME. FURTHER, IN NO EVENT SHALL ATM BE LIABLE TO BUYER FOR ANY AMOUNT EXCEEDING THE NET AMOUNT OF THE ORDER.**
11. **BUYER'S DEFAULT:** If Buyer defaults in any payment of performance hereunder or becomes subject to any insolvency, receivership or bankruptcy proceeding or makes an assignment for the benefit of creditors or, without ATM's consent, voluntarily or involuntarily sells, transfers, leases or permits any lien or attachment on the equipment and/or parts delivered hereunder, ATM may terminate the Order with Buyer and treat all amounts then or thereafter that Buyer owes hereunder to be immediately due and payable (subject only to credits required by law) or ATM, at its option, without prejudice to any other lawful remedies, may defer delivery or cancel any Order then outstanding or repossess said equipment and/or parts by any means available by law. ATM shall be entitled to receive reimbursement for its reasonable and proper cancellation charges, plus, in any proceeding or action relating to a default by Buyer, ATM shall be reimbursed by Buyer for ATM's attorney's fees and cost incurred by ATM in respect thereof.
12. **INDEMNITY:** ATM shall indemnify and hold harmless Buyer, its affiliated companies and their respective officers, directors and employees from any claims, damages, losses or expenses for personal injury, death or property damage which are solely and directly caused by ATM's negligent supply of defective product or negligent provision of services. Buyer shall indemnify and hold harmless ATM, its affiliated companies and their respective officers, directors and employees from any claims, damages, losses or expenses which are caused by or arise out of any negligent or intentional act or omission of Buyer, or Buyer's agents, employees, subcontractors, and/or suppliers.
13. **PATENT INDEMNITY:** ATM agrees, at its own expense, to defend any suit against Buyer so far as based on a claim that Buyer by reason of the use of ATM's equipment for the particular use or application for which said equipment is specifically designed and sold by ATM, infringes any United States Patent, other than a product patent on an article manufactured by the use of said equipment, provided that ATM is notified promptly in writing of any such claim or suit and is permitted to assume the full direction and control of the defense against such claim and of any suit brought thereon and given authority, information and assistance by Buyer (at ATM's expense) for such defense. In the event any judgment against Buyer is rendered and becomes final (beyond right of appeal), ATM agrees to pay all damages and costs thereby awarded against Buyer up to the purchase price of said equipment. If, subject to the above limitations, said equipment, or any part thereof, shall be finally held in such suit to constitute an infringement, or believed to be an infringement by ATM, ATM shall have the right, at its sole option and expense, either (a) to procure for Buyer the right to continue using said equipment, without liability for infringement of such patent, (b) to replace said equipment with non-infringing equipment accomplishing the same purposes as the replaced equipment, (c) to modify said equipment, so that it becomes non-infringing or (d) to remove said equipment, and refund to Buyer the purchase price thereof.
14. **INTELLECTUAL PROPERTY/DRAWINGS AND CONFIDENTIALITY:**
- 1. All specifications, drawings, designs, data, information, ideas, methods, patterns and/or inventions made, conceived,

- developed, or acquired by ATM incident to procuring and/or carrying out an Order shall vest in and remain the property of ATM.
1. Should it be necessary during the performance of an Order for ATM to supply technical information to Buyer, then Buyer agrees (i) that the disclosure of such information is in confidence; (ii) such information is the sole and exclusive property of ATM and is subject to return upon demand; and (iii) such information is not to be used by Buyer, its employees or agents, nor copied or disclosed to third parties without the express written consent of ATM, except that prohibitions against disclosure shall not apply to information which is or becomes publicly available or is or becomes available to Buyer from a third party through no fault of Buyer. Similar undertakings shall exist on the part of ATM for confidential information received by ATM from Buyer.
 15. **ERRORS:** Clerical and stenographic errors are not binding and are subject to corrections.
 16. **RIGHT TO TERMINATION:** ATM shall be entitled to terminate the Order upon notification(s) from Buyer of its intent to delay shipment authorization for the goods and services covered by the Order beyond the agreed upon delivery date provided that any and all delays initiated by Buyer exceed 180 days from the date of the first notification. Upon termination of the Order Buyer shall be entitled to all work in progress and purchased materials acquired for this contract by ATM. Shipment of these materials would immediately be made to a location specified by Buyer at Buyer's expense, once payment for the work in process has been received.
 17. **GENERAL:** Notices to ATM and Buyer shall be given to the respective addresses herein set forth in the quotation or order acceptance or other document to which these Standard Terms and Conditions of Sale are attached and made a part. Any action resulting from any breach on the part of ATM as to equipment or parts delivered hereunder must be commenced within one (1) year after the cause of action has accrued.
 18. **WAIVER:** No condoning, excusing or waiver by ATM of any default, breach or nonobservance by Buyer at any time or times with respect to any covenants or conditions set forth herein shall operate as a waiver of ATM's rights with respect to any continuing or subsequent default, breach or nonobservance, and no waiver shall be inferred from or implied by any failure to exercise any of its rights by ATM.
 19. **SEVERABILITY:** Should any provision of these terms and conditions be declared by any court of competent jurisdiction to be invalid or unenforceable, the remaining provisions shall not be affected thereby, it being the intent of the parties that they would have executed the remaining portion without including any such part or portion which may for reason be declared invalid.
 20. **GOVERNING LAW:** For any Order where performance occurs in North America, these Terms and Conditions and the Order to which they apply shall be governed by and construed in accordance with the laws of the State of Ohio (excluding its conflict of laws provisions), including the provisions of the UCC in the State of Ohio. Any proceeding pertaining to any such claim shall be venued in Cleveland, Ohio. For any Order where performance occurs outside North America, any dispute, controversy, or claim arising out of or relating to these Terms and Conditions and the Order, or the breach, termination, or invalidity thereof, shall be settled by arbitration in accordance with the UNCITRAL Arbitration Rules in effect on the date of this contract. The appointing authority shall be the Secretary-General of the Permanent Court of Arbitration. The number of arbitrators shall be three; the place of arbitration shall be The Hague; and the language to be used in the arbitral proceedings shall be English. The United Nations Convention on Contracts for the International Sales of Goods does not apply to any Order.
 21. **ENTIRE AGREEMENT/AMENDMENT:** ATM and Buyer agree that the terms and conditions set forth herein constitute their complete and exclusive agreement regarding the subject matter of Buyer's order and supersede any prior communications, representations or agreements of the parties, whether oral or written and cannot be altered, amended, or modified except in writing executed by an authorized representative of each party.
 22. **ASSIGNABILITY:** No assignment of this order by Buyer without the consent of ATM in writing shall be binding. ATM reserves the right to (a) assign its rights, duties and obligations to any party purchasing substantially all of ATM's assets and (b) subcontract the manufacture of products. To the extent that assignment is permitted, this Agreement shall inure to the benefit of and be binding upon each party and its permitted successors and assigns.
 23. **HEADINGS:** Captions or headings are inserted only for convenience and shall not be construed as part of the foregoing terms and conditions or as a limitation upon the scope of the particular section to which they refer.

Rev. 9.25.2012