**SECTION 1**

**EQUIPMENT SOURCING**

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**EQUIPMENT SOURCING**

## 1.1 GENERAL

### Purpose

 The purpose of this manual is to provide the Supplier with AAM specifications to be used in preparing quotations for Standard Machines.

1.1.1.1 The manual is made up of Standards, Forms, and Checklists:

* **Standards** contain minimum or expected requirements that the Supplier is contractually required to meet. Exceptions will be considered if submitted in writing. Written AAM approval for any submitted exception is required for an exception to be allowed. (Refer to Deviation Request Form in Appendix)
* **Forms and Checklists** (refer to Appendix) are provided by AAM, and the applicable sections are to be completed by the Supplier and submitted with the quote. The completed checklists are a means for the Supplier to communicate to AAM the supplied standard features and available options found on the Supplier’s equipment. At the discretion of the AAM Lead Manufacturing Engineer (ME), alternative checklists or feature/pricing summary sheets may be requested, depending on the nature of the quoted equipment.

1.1.1.2 This manual supports the AAM Manufacturing System, based on Lean Manufacturing Principles. (Refer to AAM Guidelines for Designing Equipment for Lean Manufacturing.)

1.1.1.3 This manual is incorporated by reference into any purchase order (PO) issued by AAM to Suppliers for the purchase of standard machines. Only the terms of this manual and those of the POs issued by AAM to Suppliers will be part of the contract. All terms proposed by Suppliers that are different from or in addition to those of the PO and this manual are expressly rejected by AAM and will not become part of the contract. In the event any terms of this manual conflict with those in the PO, the terms of the PO shall govern.

1.1.1.4 In this section and throughout this manual, the word “shall” is understood as a requirement, the word “should” as a recommendation.

### 1.1.2 Scope

AAM will use the following categories A, B or C, to describe different types of machine procurement contracts. The scope of each of these contract types is detailed below. The Type A and B, or Standard Machines, are covered by this manual specifically. The scope of the C style is covered in the AAM Equipment Specification Manual (ESM) – Special Machines (Type C). Supplementary specifications may also be required for some equipment, and such specifications will be identified in the RFQ Purchase Specification. Individual, detailed purchase specifications for particular systems, machines, or services shall take precedence over this manual’s general specifications in the event of any conflicting items. AAM’s Standard PO Terms and Conditions will take precedence over this manual’s general specifications in the event of any conflicting items.

**1.1.2.1 TYPE A – STANDARD MACHINE**

Definition of “Standard Machine”: a particular model of machine or related equipment which has already been designed, developed, and sold as a “catalog” item to various customers on the national or global market. The primary purpose for distinguishing between “standard” machines (Type A or B) and “special” machines (Type C), is to minimize program cost in the event that AAM can accept a standard machine design rather than commissioning a custom-designed and built machine. In addition, AAM expects to benefit from the purchase of standard machines by realizing reduced equipment delivery times, and by reduced machine downtime resulting from the use of tested and proven designs. It should be noted that, while AAM will strive to accept as many of the standard “out-of-the-box” machine features and components as possible, the Supplier of a Type A or B machine may be required to make various changes or additions to the base machine design in order to meet the minimum AAM requirements as described in this section, or to satisfy the special requirements of the particular program as outlined in the applicable RFQ Purchase Specification. Examples of potential changes would be those related to safety requirements, or any special features or standards that may be needed to integrate the machine into a larger system. Note that it is possible to have standard machine(s) included as part of an overall “Type C” program, if warranted by the nature of any “non-standard” auxiliary equipment to be supplied as part of the order. It is the responsibility of AAM and the Supplier to clarify all aspects of such an arrangement at or before the time of the pre-award meeting. The Supplier shall then provide equipment which meets these requirements, according to the scope of the specific program.

* + - * 1. Supplier’s Responsibility:
* The Supplier adds auxiliary equipment as requested in the scope of work.
* The Supplier shall deliver, complete and ready for installation, equipment as quoted. Such equipment shall meet all applicable specifications found within this manual. Any additional AAM requirement shall be an included deliverable as contained in the specifications outlined in request for quotation (RFQ).
* The Supplier shall furnish the AAM Lead ME with information regarding the receiving of the equipment, unloading requirements, foundation outlines, conduit stub-ups, and certified anchor bolt layouts, including anchor bolt sizes. This requirement includes all related information to enable AAM to design and construct foundations.
	+ - * 1. AAM Responsibility:
* Construct foundations and set anchor bolts in accordance with certified drawing information furnished by the Supplier.
* Receive, unload, store, place, install, and run all equipment furnished by the Supplier, unless otherwise agreed upon, and conduct these activities as advised by the Supplier in the best means possible.
* Provide and connect to equipment all necessary utilities, including connections for coolant and filtration systems if these are not integral parts of the equipment furnished by the Supplier.

**1.1.2.2 TYPE B – STANDARD MACHINE WITH TURNKEY**

A “Type B” machine program is one which involves one or more standard machines as defined above, but which also includes the Supplier responsibility to develop a turnkey manufacturing process. In addition to the requirements for “Type A” machines, this includes, but may not be limited to:

* The Supplier will provide the equipment with all program-specific fixtures and tooling required, as specified in the RFQ Purchase Specification.
* The Supplier shall perform the process certification, usually on the Supplier’s floor, to demonstrate process capability. Gauges may or may not be included in the PO, at the discretion of the AAM Lead ME.
* The Supplier shall demonstrate that the process meets program cycle time (run-at-rate) requirements.
* Unless otherwise agreed, the Supplier shall provide (3) sets of perishable tooling. Perishable tooling is defined as all part-touching details or components with a one-year or less life expectancy in normal operation (e.g. cutting tools, inserts, part locators, collets, chuck jaws, dies, gage contacts, etc.).
* The specific list of all required items should be agreed upon by the time of the program pre-award meeting.

**1.1.2.3 Type C – Special Machines**

A Type C machine or equipment program is one in which the equipment is substantially custom designed and built especially for the specific AAM application. This includes machines and equipment similar to those sold to previous customers for similar applications, but never offered on the market as a standard product.

### 1.1.3 Confidentiality

 It is agreed by the recipient of this manual that any information, either business, technical or otherwise disclosed to them by AAM, which was not previously known to the recipient, and is not a matter of public knowledge, will be kept confidential and not be disclosed to others, or used for any other purpose, except to provide services or equipment to AAM. Recipients of this manual shall comply with AAM’s Standard PO Terms and Conditions.

## 1.2 QUOTE & AWARD PROCESS

 All quotations submitted by authorized Supplier personnel shall acknowledge in writing that the Supplier understands and will conform to this specification manual and the purchase specification, before AAM will consider the quotation. (See paragraph 1.2.1.1. for required Supplier Acknowledgement Statement.)

### 1.2.1 Quotation Requirements

A quotation cannot be considered unless it is specifically requested by, addressed to, and received by the request due date at the AAM buying facility’s purchasing department.

1.2.1.1 The Supplier’s quotation shall contain the following statement, “SELLER AGREES TO CONFORM TO ALL AAM SPECIFICATIONS.” If this is not possible, a detailed itemized list of deviations by manual section shall be provided and specifically identified as the only deviations to AAM specifications.

1.2.1.2 The Supplier shall clearly state in their quote the expected delivery time for the proposed equipment, stated in weeks from receipt of AAM PO.

1.2.1.3 Suppliers quote shall state agreement with Section 1.5, Payment Terms. If the Supplier would like to propose alternative terms, such a proposal shall be clearly stated and approved by the AAM Buyer.

1.2.1.4 Development of a spare parts list (refer to AAM-5FRef-151-AppE-35) shall be included. Spare parts lists are required to be submitted as part of the design process and included as a milestone in the Level-2 Design Approval 4-Square timing. Timely delivery of spare parts list is a priority permitting AAM to order and stock parts by the time of the proposed equipment delivery (See Section 5.).

1.2.1.5 Supplier shall include one set of perishable tooling in the base bid, and separate optional pricing for one (1) or two (2) additional sets of perishable tooling in the quotation.

### 1.2.2 Documentation Supplied with a Supplier’s Quotation

1.2.3.1 Type A – Standard Machine

* A completed set of applicable checklists (refer to Appendix). The AAM Lead ME will advise as to which checklists are required.
* All publicly available machine specifications, such as a detailed product brochure, or specification sheet. For machine tools, this should include information such as machine accuracy and repeatability, equipment layout and weight, axis travels, motor sizes, spindle specifications, CNC controls detail, power requirements, etc.
* Pricing sheet, in AAM standard format or as specified in the RFQ. This shall include itemized pricing for all included or requested machine options.

1.2.3.2 Type B – Standard Machine with Turnkey

 In addition to information included with Type A machines, the Supplier shall provide the following documentation with all Type B quotations:

• Reference the name of operation or operations to be performed, part number, and part name. The Supplier shall also list any AAM part print and tool process sheets, and dates of same, used for quotation.

• Estimate of production and cycle time at 100 % operating capacity. Show elemental time used for load, index, locate and clamp, approach, machine, return, unclamp, and unload (see scope of work in Manufacturing Equipment Purchase Specification found in specific RFQ). Note that AAM and the Supplier shall agree at the pre-award meeting to a specific maximum process cycle time target which will be used at the time of machine certification to determine acceptance of the machine.

* Method of chucking, clamping, locating of part and any assists for loading or unloading.
* Itemized pricing for all tooling, fixtures, gauges, certification, plant support, etc. per AAM quotation format or as specified in the RFQ.

### 1.2.3 Award

1.2.3.1 A pre-award meeting will be held and the Purchasing Pre-Award Checklist shall be completed and signed before the AAM buyer will issue a PO to the selected Supplier.

1.2.3.2 Intellectual Property. Suppliers shall be subject to AAM rights found in AAM Standard PO Terms and Conditions available on the AAM Portal (http://www.aam.com/Suppliers/Doing-Business-with-AAM-135).

### 1.2.4 Modifications / Revisions / Cancellations

1.2.4.1 After issuance of the PO, modifications and revisions shall be processed according to the terms described in AAM Standard PO Terms and Conditions.

1.2.4.2 Pricing for requested changes shall segregate material and labor and be submitted on the Purchasing Order Change Request (OCR).

1.2.4.3 Any cancellations will follow terms in AAM Standard PO Terms and Conditions.

## 1.3 PROGRAM MANAGEMENT

In support of AAM’s commitment to meet and exceed customer requirements, AAM applies an Integrated Program Management (IPM) system to all programs. The IPM system is designed for open and early identification of issues and includes standardized methods for Work Breakdown Structure (WBS) and schedule communication with AAM’s 4-Square reporting system. This standardization provides an efficient and effective communication method between the Supplier and AAM to achieve on-time delivery of equipment and supporting deliverables. AAM recognizes the role of Suppliers in overall program success, and the importance of effective communication. The methods described are intended to facilitate plan development and communication methods to provide early identification and resolution of issues.

### 1.3.1 Program Start

Within two (2) weeks of the Award process (reference paragraph 1.2.3) the Supplier and AAM Lead ME shall develop and complete the following:

* Level 1 (New Equipment), Level 2 (Supplier Build), and Level 2 Controls Development Cycle (CDC), Equipment 4-Square documents with planned dates for each element that support of AAM program launch milestones
* “AAM/Supplier Launch Team” document identifying Supplier and AAM personnel
* AAM Supplier Equipment Certification Plan with lead responsibility and planned dates
* Schedule date for the first Executive Review and schedule identifying follow-up Executive Reviews at approximately one month intervals

### 1.3.2 AAM 4-Square

AAM 4-Square is a management reporting tool to monitor and report progress of activity. It details scheduled start and finish dates of activities for identified standardized milestones within the program plan and reports actual start, % complete, and actual finish dates. It is a straight forward, exception-only reporting tool that concisely summarizes milestone progress, and focuses on incomplete activities that may impact the success of a program. 4-Square is the chosen AAM Supplier Management reporting tool that allows for effective communication to AAM and supports a rapid response to resolve issues before they impact program timing. AAM 4-Square Forms are available in from the Lead ME.

#### **1.3.2.1 WBS 4-Square Levels**

The Supplier 4-Square standard template includes three cascading WBS levels for reporting; Level 1 New Equipment provides overall program overview with nine (9) milestones, Level 2 Supplier Build, and Level 2 CDC provide Supplier detail milestones for the specific tasks, and Level 3 duplicates Level 2 for a major equipment sub-Supplier when applicable. Each level provides added detail to the preceding level.

#### **1.3.2.2 4-Square Process**

The 4-Square process consolidates information into milestone activity that identifies planned start and finish dates, and actual start and finish dates. The process is explained in a square that is divided into four (4) quadrants, or adjacent squares. The quadrant is shaded gray when the activity is finished, see Figure.

Start and Finish Square Pairs are shaded gray when both Plan and Actual dates are complete

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Plan** | **Actual** |  | **Plan** | **Actual** |
| Start | 1. Planned Activity Start DateDay- Month - Year | 2. Actual Activity Start DateDay – Month - Year |  Start | 24-Oct-14 | 21-Oct-14 |
| Finish | 3. Planned Activity Finish DateDay- Month - Year | 4. Activity %Complete while in processXX % | Finish | 5-Dec-14 | 50% |

Once the initial plan is developed and approved by AAM the planned dates are not changed. This constitutes the baseline program plan for the equipment design, build, and commissioning process. Additional recovery plans shall be communicated by the 4-Square system as a separate activity plan.

#### **1.3.2.3 4-Square Risk Criteria**

The 4-Square reporting process communicates program schedule risk with color coding, yellow indicating low risk, red indicating high risk. The Supplier shall inform AAM of any high risk as soon as identified, a Program Alert Bulletin (see paragraph 1.3.3) shall be issued for identified high risks. Criteria for assessing risk and 4-Square reporting:

Low Risk (Yellow) is used to communicate schedule deviation for which a recovery plan exists and program timing is not impacted.

* Any activity scheduled to Start that has not started is identified as low risk and highlighted in yellow (unless identified as high risk).
* Any activity scheduled to Finish that is not completed is identified as low risk and highlighted in yellow (unless identified as high risk).
* Any activity with risk of completion by required Finish date and will not impact timing is highlighted in yellow.

High Risk (**Red**) is used to communicate schedule deviation that impacts program timing.

* Any activity scheduled to Start that has not started and will impact program timing is identified as high risk and highlighted in red.
* Any activity scheduled to Finish that has not completed and will impact program timing is identified as high risk and highlighted in red.
* Any activity that is programed to not complete by the planned Finish date and will impact program timing is highlighted in red.

|  |  |  |
| --- | --- | --- |
| **Late Low Risk Example:**Activity was started five business days late; a plan exists to complete task by December 10. Though late, there is no impact to program timing. | **Plan** | **Actual** |
| **Start** | **24-Oct-14** | **29-Oct-14** |
| **Finish** | **5-Dec-14** | **40%** |

**Late High Risk Example:**

Activity was started five days late; a plan exists to complete task by December 20. This is programed to impact program timing. Additional corrective action and recovery planning required.

|  |  |  |
| --- | --- | --- |
|  | **Plan** | **Actual** |
| **Start** | **5-Nov-14** | **10-Nov-14** |
| **Finish** | **15-Dec-14** | **30%** |

###

### 1.3.3 Program Alert Bulletin

The AAM Program Alert Bulletin is the process for Supplier communication of high risk schedule issues and other items that have the potential for impacting safety, delivery, quality, or cost to AAM of the equipment provided. The purpose of the Program Alert Bulletin is to communicate issues that cannot be resolved through normal processes or have a high risk of impacting the program. The Supplier shall communicate the risk item via the Program Alert Bulletin to the AAM Lead ME and Program Manager.

### 1.3.4 Open Issues Tracking

The Supplier will track open issues on the AAM Open Issues Log and report the status to the AAM Lead ME on a weekly basis. The template provides a standardized form for identifying issues and tracking responsibilities until issue closure.

### 1.3.5 Progress Reporting

The Supplier shall provide weekly updates of the 4-Squares, Open Issues, and other status documents required to communicate progress. During the equipment Build phase, status of release, fabrication, and procurement of details will be reported on the Executive Review Scorecard (AAM-5FRef-403-03-03).

### 1.3.6 Executive Reviews

The Supplier shall support regular reviews with members of the AAM executive team. The reviews provide a periodic review of progress and provide an effective communication tool for the Supplier and AAM executive management. The standardized forms described in this section are the base documents for this review. The AAM Executive Reviews follow an established agenda outlined on the AAM Executive Review Agenda (AAM-5Ref-403-03-04).

## 1.4 SHIPPING AND INSTALLATION INSTRUCTIONS

### 1.4.1 Shipping Terms

1.4.1.1 The Supplier shall prepare the equipment and ancillary contents for shipping. The Supplier responsibilities may increase based on the specific contractual shipping terms and final destination. Unless otherwise noted in the Equipment Purchase Specification (EPS), the Supplier will load equipment onto a carrier selected by AAM per Incoterm®.

1.4.1.2 Refer to the RFQ or contact AAM’s Logistics and Transportation department for specific shipping terms and conditions. International shipments will adhere to the latest INCOTERMS.

### 1.4.2 Shipment Preparation

1.4.2.1 Individual units or packages are to be identified with the AAM’s PO number, AAM’s Equipment Brass Tag (BT) number, and the number of each package out of the total number of packages in the shipment (i.e., 1 of 8, 2 of 8, etc.).

1.4.2.2 While the Supplier is expected to minimize volume and weight to reduce shipping costs, the equipment shall be evenly distributed and properly blocked, braced, and secured onto a heavy duty skid.

1.4.2.3 Overall packaging dimensions shall be considered when shipping in international containers; sea and air containers come in different dimensions. The container door opening may have different dimensions than the actual container interior.

1.4.2.4 For international equipment shipping, all solid wood packaging material shall be treated and marked with a certified stamp per International Plant Protection Convention (IPPC) Global Standards.

1.4.2.5 The Supplier shall provide adequate packaging that prevents breakage during handling, damage due to moisture, and pilferage.

1.4.2.6 The Supplier shall apply a rust inhibitor to bare steel and properly wrap equipment in a corrosion prevention material. Equipment shipping across international boundaries or in containerized vessels shall be contained in suitable vapor corrosion inhibitor wrap or bag.

### 1.4.3 Shipping Documentation

Items not specifically listed on the PO (i.e. runoff, setup, or spare parts) or items that are not considered to be part of the purchased equipment, shall be packaged and shipped separately when shipping outside the U.S. The Supplier shall coordinate all shipments for terms not included in the PO with AAM prior to shipment.

1.4.3.1 Proof of insurance, indicating adequate coverage, is required when shipping and handling is the responsibility of the equipment Supplier, and shall be submitted to the AAM Lead ME.

1.4.3.2 The Supplier shall submit shipping documents (i.e., Commercial Invoice, packing list, and equipment brochure or instruction manual, Free Trade Agreement Certificates, export license information, Customs Classifications, country of manufacture, etc.) to the AAM Customs and Duties department for approval, two weeks minimum prior to shipment.

1.3.3.3 Suppliers who wish to include shipping costs to the AAM build facility in their quote shall complete the AAM Freight Analysis Form (available from AAM Logistics).

## 1.5 PAYMENT TERMS

### 1.5.1 Payment Terms Based on Contract Types

1.5.1.1 **90-10 Type A: Standard Machine**

* Upon successful completion of equipment certification at the Supplier’s plant, delivery of equipment to the AAM buyer’s plant, delivery of the appropriate documents and approvals obtained (refer to “Type A” 90-10 Summary of Deliverables), the Supplier will be paid **90%** of the PO amount.
* Upon successful equipment installation and Standard Machine certification on the AAM buyer’s floor, and delivery of the applicable documents approvals obtained, and closure of all outstanding open issues, the Supplier will be paid the remaining **10%** of the PO amount.
* All payments will be made on the 2nd day of the 2nd month following Buyer’s receipt of goods or services.

1.5.1.2 **90-10** **Type B: Standard Machine with Turnkey**

* Upon successful equipment certification runoff at the Supplier’s plant, delivery of equipment to the AAM manufacturing plant, delivery of the appropriate documents and approvals obtained (refer to “Types B and C” 90-10 Summary of Deliverables), the Supplier will be paid  **90%** of the PO amount.
* Upon successful equipment installation and part certification on AAM’s manufacturing floor, and delivery of the applicable documents and approvals obtained, and closure of all open issues, the Supplier will be paid the remaining **10%** of the PO amount.
* All payments made will be on the 2nd day of the 2nd month following Buyer’s receipt of the goods or services as indicated above.

## 1.6 WARRANTY

### 1.6.1 Commencement of Manufacturer’s Warranty

**1.6.1.1 Type A – Standard Machines**

* The Warranty shall begin on the date each piece of equipment or machine successfully completes all requirements for the final 10% of payment as specified in the PO.

**1.6.1.2 Type B – Standard Machines with Turnkey**

* The warranty shall begin on the date each piece of equipment or machine successfully completes all requirements for the final 10% of payment as specified in the PO.

#### **1.6.1.3 Minimum Inclusion in Supplier’s Warranty**

* Supplier’s warranty coverage shall include all parts and components purchased by Supplier from other sub-contracted manufacturers.
* Supplier’s standard workmanship and material warranty coverage for all parts and components manufactured by the Supplier.
* Supplier’s warranty for all workmanship and material shall be one (1) year from the date the equipment or machine achieves requirements stated in Paragraph 1.6.1, unless otherwise specified in PO.
* Supplier will provide the cost, if any, and detail of a two (2) year warranty in their quote.

## 1.7 SPECIFICATION EXCEPTIONS

 These AAM specifications are not intended to limit or inhibit Supplier’s equipment designs or the advancement in engineering technology within the global machine tool industry.

### 1.7.1 Deviation Requests

Deviations or exceptions to these specifications (i.e., identified within this equipment specification manual or accompanying manufacturing equipment purchase specifications) will be considered by AAM, when clearly identified, appropriately justified, and individually listed in writing, as a specified requirement. If it is necessary to modify the Supplier’s standard equipment to comply with these specifications, itemized costs will be submitted by the Supplier in writing. Only those deviations that are conveyed in writing, and authorized in writing by appropriate AAM representatives will be reviewed and considered.

All Supplier deviations or exceptions shall be clearly stated when the Supplier bid is submitted. Lack of any exceptions detailed in the Supplier’s RFQ response via AAM Deviation Request Form constitutes as complete compliance to all AAM specifications.

The Deviation Request Form (AAM-5FRef-151-AppE-09) shall list the page number of this manual for request being made. Any accompanying documentation shall be listed on the worksheet, and the worksheet becomes a cover page of the deviation request.

Only one specification deviation request shall be submitted per worksheet.

Deviation requests for items identified during the design process shall be submitted following the procedure outlined in this section and submitted to the AAM Lead ME for assignment of an appropriate deviation number. Only approved deviations are acceptable.

## 1.8 ADDITIONAL TERMS

### 1.8.1 Supplier Agreement.

In addition to the Supplier’s written agreement to conform to AAM specifications, the following terms will become a part of any PO.

*Purchaser’s review and/or approval of seller’s estimates, drawings, descriptions, prints, specifications, or scope of work notwithstanding, seller understands that it is warranting that the equipment supplied hereunder shall meet, in every respect, the performance specifications established by the purchaser. Accordingly, it is seller’s sole responsibility to provide all items (e.g., parts, components, systems, etc.) which are required to achieve conformance with the terms, conditions and specifications described in AAM’s request for proposal. The equipment purchased shall, at a minimum, contain all items described in seller’s proposal and shall conform to the design set forth in seller’s proposal. In the event that this is determined through testing, usage, or otherwise that the equipment ordered requires re-engineering, redesign, or the installation of additional items (e.g., parts, components, systems, etc.) in order for the equipment to achieve compliance with the terms, conditions, and specifications described in said proposals, including any consequent modifications, then seller shall supply same at no extra charge to purchaser*.

### 1.8.2 Delivery Performance Agreement

Introduction: Supplier shall meet regularly with the AAM purchasing buyer and Lead Manufacturing Engineer (Lead Engineer or Lead ME) to discuss progress towards completion and delivery of the equipment and/or machines included hereof. The AAM 4 Square Timing format will be the method for the Supplier to present / update program progress. The delivery performance agreement below is incorporated by reference into all requests for quotations that lead to a Purchase Order unless otherwise agreed to by buyer in writing.

 A. TIME IS OF THE ESSENCE IN THIS AGREEMENT. Seller shall meet regularly with Buyer to discuss progress toward completion and delivery of the subject matter hereof. Notwithstanding the foregoing, Seller acknowledges that Buyer shall have no obligation to accept delivery of the subject matter hereof unless and until it meets with all of Buyer’s specifications including, without limitation, up time, quality and productivity.

 B. In the event of late delivery Seller shall be liable for and pay on demand without offset all damages suffered by Buyer including, without limitation, incidental and consequential damages, the cost of cover and all costs, expenses and attorneys’ fees incurred by Buyer in enforcing its rights hereunder.

 C. Because the exact amount of compensatory damages Buyer will suffer in the event of late delivery is difficult to ascertain, Seller agrees to pay Buyer as total liquidated damages for late delivery on demand and without offset, or allow Buyer, at Buyer’s option, to withhold from any amount owed to Seller hereunder or otherwise, 1% for each week delivery as set forth herein is late, not to exceed 5% max., unless the delay was caused by Buyer. In the event the line for the amount of liquidated damages is not completed (under Section C) or the amount set forth therein is ambiguous, Seller shall be liable for all damages suffered by Buyer for late delivery as referenced above under Section “B”.

 D. Any amount not paid by Seller when due shall bear interest at the maximum rate allowed by law.

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