

Machine & Supply, Inc.

**Established in 1907** 

# **Quality Manual**

Atlas Machine & Supply, Inc. Corporate Address: 7000 Global Drive Louisville, KY 40258

www.atlasmachine.com

Phone: 502-584-7262

### Table of Contents

Description	Section	Page #
Quality Statement		3
Purpose & Scope	1.0	4
Responsibility & Authority	2.0	5
Quality Documentation Control	3.0	6
Training	4.0	7-8
Order Processing	5.0	9
Engineering Drawings	6.0	10
Incoming Inspection	7.0	11-12
Inventory Control	8.0	13-14
Final Inspection	9.0	15-19
Identification, Packaging, & Shipping	10.0	20-26
Billing	11.0	27
Tool Calibration	12.0	28
General Workmanship Standards	13.0	29
Field Service	14.0	30-34
Corrective Action Procedures	15.0	35
Non-Conformance Process	16.0	36
Internal Audit System	17.0	37
Revisions	18.0	38



# "Atlas Quality Statement"

Dedicated to prompt delivery of quality

products through empowered, skilled

craftsman and a firm commitment to

continuous improvement.

**Richie Gimmel** 

President

### Section 1.0

# **Scope of Manual**

- <u>1.1</u> The purpose of this manual is to demonstrate and document the ability of Atlas Machine and Supply, Inc. to provide a consistently high quality of work in accordance with the requirements and expectations of their customers.
- <u>1.2</u> The quality control practices and standard operating procedures described in the manual apply to all aspects of Atlas Machine & Supply, including: order processing, work order creation, distribution of drawings or technical information, preliminary inspection, ordering/issuing of materials, the manufacturing process, final inspection, packaging, shipping, and billing.
- <u>1.3</u> Tool calibration is fundamental to ensuring a high-quality product. The methods of obtaining and maintaining calibrated equipment are documented herein.
- <u>1.4</u> Atlas Machine and Supply, Inc. values a culture of continuous improvement. Any quality issues, whether internal or external, are indicative of an opportunity for improvement. This manual's corrective actions ensure that any issues are systematically evaluated, and the relevant processes are reviewed.
- <u>1.5</u> The internal audit system described herein proactively verifies that all standard operating procedures are being followed regularly.
- 1.6 All relevant documents are to be included in line with their associated sections.

### Section 2.0

# **Responsibility & Authority**

- 2.1 The Quality Engineer reports to the Vice President of Operation and serves as the manager responsible for oversight and direction regarding quality control.
- 2.2 The Quality Engineer responsibilities consist of the following:
  - a. Communication of all expectations related to quality control.
  - b. Investigate any quality issues to determine the root cause.
  - c. Identify and implement corrective actions necessary to resolve a quality issue.
  - d. Responds to any customer inquiries regarding our quality control methods and procedures.
  - e. Coordinates any customer-initiated audits of our quality systems.
  - f. Oversees the maintenance of calibration records for measuring equipment.

g. Generates customer-specific incoming/outgoing inspection reports to be filled out by shop personnel.

h. Ensures work order instructions are consistent with customer expectations.

- <u>2.3</u> Human Resources and Department Heads that report to the VP of Operations bear the responsibility for training on this manual and conducting internal audits for compliance, at his/her discretion.
- <u>2.4</u> All managers, supervisors, and employees are required to comply with all provisions of this Quality Manual as it relates to their specific operational responsibilities.
- <u>2.5</u> If a process is unable to be followed, the individual that found the issue is responsible for reporting the problem. They are to report the problem to their supervisor and/or the Quality Engineer before any further action is performed.

### Section 3.0

# **Quality Documentation Control**

- 3.1 The Quality Engineer controls all quality documents. Any revision changes to a controlled document are referenced by the date the revision was made and a revision number.
- 3.2 Only the current revision should be used when performing a process or procedure.
- <u>3.3</u> All controlled documents are presented in PDF form to ensure that the records cannot be altered.
- <u>3.4</u> All controlled documents are located on a shared drive to allow them to be accessed companywide. (<u>Share drive for all quality documents</u>)
- 3.5 The Quality Engineer evaluates quality documents annually to confirm the records are still applicable to the operations they are referencing and if any revisions need to be made.

### Section 4.0

# **Training**

- 4.1 All employees are to be trained on the contents of this manual when hired.
- <u>4.2</u> Each employee is to be given a copy of this manual for reference.
- <u>4.3</u> Follow-up training may be carried out in the event of revisions to the manual.
- <u>4.4</u> The training program is conducted by Human Resources, Department Head, or Quality Engineer.
- <u>4.5</u> Training records will be filled out for all new training, and the Quality Engineer will keep the documents. (<u>GTR-4/28/20-KB</u>)





# **Group Training Record**

Date: \_\_\_\_\_

Course Title: \_\_\_\_\_

Person preforming the Training: \_\_\_\_\_

Employee Name (Print)	Signature

### Section 5.0

# Order Processing

- 5.1 All jobs, both quoted and time & material, require the customer to furnish a purchase order or written authorization from a qualified customer representative. (Written permissions are only used if the company cannot provide a purchase order number.)
- 5.2 Any purchase orders received via fax or email are to be forwarded to the appropriate engineer for processing. This is determined by which engineer worked on the customer's last job and sent in the Order.
- 5.3 All customer purchase orders, or written authorizations, are scanned to our job software.
- <u>5.4</u> Upon releasing a purchase order, the customer provides Atlas with any necessary documents required to complete the work, such as customer drawings, specifications, or requirements. All customer information is confidential and is only used by Atlas to meet the desired job.
- 5.5 A work order is generated by an Assigned Engineer, using the quote for reference. The work order is to be reviewed for accuracy via the purchase order by the assigned engineer. The customer will be notified in the event of any discrepancies.
- 5.6 Once the work order is generated, an order acknowledgment is sent to the customer for review to confirm the work's scope, expected completion dates, and price.
- 5.7 The work order is then distributed to the shop floor and any other supplementary documents (such as drawings or inspection sheets) and serves as the governing document regarding the job.
- 5.8 Jobs are specified by the following letters at the end of each job number "CD" (Corporate Development), "CR" (Cladded Roles), "FS" (Field Service), "FR" (Furnace Rolls), "PR" (Pot Rolls), "RD" (Research and Development), and "RW" (Rework). Standard core jobs will only have a job number.
- 5.9 The customer must confirm changes to the work scope with written authorization from a qualified customer representative.
- 5.10 Any changes are documented via a revision to the work order, traveler, and drawing if applicable. All existing work orders, travelers, and drawings are to be pulled from production and replaced with the revised documents. The revision is confirmed to the customer by sending a new order acknowledgment; internal confirmation is achieved via an email to relevant parties.

### Section 6.0

# **Engineering Drawings**

- 6.1 All engineering drawings are kept in our drawing files. These drawing files are managed and maintained by Engineering Groups. (The assigned engineer on the job must approve any drawing that is created.) CDG (Corporate Development Group) manages/supports their own drawings and CAD models. All drawings are confidential, and any customer-owned drawings are treated with extreme privacy. (All government-owned drawings are stored **only** with the job that is being performed and only with the engineer assigned to the job.)
- 6.1.1 Atlas CDG is responsible for all CGL (Continuous Galvanizing Line) equipment and any R&D (Research and Development) projects.
- 6.1.2 Atlas Core Department is responsible for all other in-shop machine work and emergency repair.

#### \* Unless otherwise stated, all rules apply to both groups. \*

- 6.2 A copy of the drawing/digital part file applicable to each job is attached to the relevant job file for reference and history. (Unless otherwise specified by the customer)
- 6.3 Any CAD drawing or a sketch produced by Atlas Engineering is assigned a drawing number and stored in the drawing files. Any CDG drawings are held in a separate location.
- 6.4 Copies of drawings are provided to the floor in the traveler (if available).
- <u>6.5</u> If drawings for a job are unavailable, work must be performed according to the specifications documented on the work order, from working sketches, and per customer instructions.
- <u>6.6</u> Drawing layouts are as follows: Drawing layouts are established if the part does not have a drawing and the customer requests one. These drawings are stored on an Atlas CDG share drive if the CDG team developed them. If the CORE team creates the drawing, the drawings are kept in the oxygen drive and can be found with the following path-<u>\OXYGEN\Users\CORE-ENG\AutoCAD Drawings</u> and can be found by anyone that has access to that share drive and the oxygen drive.
- 6.7 The ideas, information, designs, drawings, specifications, and any other data or business and manufacturing information supplied by a customer shall remain customers' property. Such data shall be retained in confidence by Atlas and shall not be disclosed to any other person or entity and shall not be used or incorporated into any product or item that is manufactured for or supplied to anyone other than the customer. Atlas shall not use any customer part number for any purpose other than the current job.

**Drafter Number-Assembly Number-Sub Assembly Number-Part Number** 00-0000-00-000

### Section 7.0

# **Incoming Inspection**

- 7.1 All customer equipment received with intent to repair must be cleaned and inspected as needed to properly evaluate the part or system's condition.
- <u>7.2</u> Each part that is received is provided a "shipping incoming inspection sheet" that will travel throughout the process. (<u>SIFR-07/01/2020</u>) All material received also follows <u>SOP 1511</u> upon its arrival.
- <u>7.3</u> Incoming inspection reports are filled out during the receipt of the material. The receiving team fills out these reports.
- <u>7.4</u> Customer-supplied incoming inspection sheets and processes will be completed as requested, provided the request is made prior to quoting the job. In the event that the customer supplies no inspection sheet(s), the standard Atlas inspection sheet can be used.
- <u>7.5</u> Customized incoming inspection processes can be developed by Atlas if requested by the customer.
- <u>7.6</u> Once the part(s) is completed, the inspection sheet's bottom part will be completed, with the outgoing inspection portion filled out. It will then be scanned to the job for documentation purposes.



Louisville 7000 Global Dr. Louisville, KY 40258 1-855-GO-ATLAS (462-8527) Fax (502) 589-0310

# **Incoming Shipment Report**

	•	Delivery Method
Atlas	UPS	Customer Delivered
Truck Common Carrier:		
Other:		
		Job Identificatio
Customer:	Job Numb	er Assigned:
Number of Pallets: Nu	mber of Crates:	Number of Parts:
Description:		
Note		
		Part Detail
Specialized Pallet/Crate?	Yes No	
Were pictures taken?	Yes No	
Weight(s) of part(s) under 2,500 lbs.?	Yes No If no, ac	tual weight:
Department staging area job was placed	l (Circle one): Center Bay / 40-	Ton Bay / Wash Bay / Shipping /Outside
	Other:	
Shipping Employee: Printed:		Date:
	OUTGOING	
		Notes:
Is job identified with finish tag?		
All paperwork with job.		
Job appears to be of good quality.		
Part placed on/in container in whic	h it arrived and securely wrapp	ped.
Outgoing photos were taken		
Shipping Employee: Printed:		Date:
12		REV:00 ISR-07/01/2020

### Section 8.0

# **Inventory Control**

- <u>8.1</u> Atlas Receiving Specialists verify all incoming stock materials for correct dimensional accuracy and verify that they match PO descriptions. (Via <u>SOP 1510</u>)
- <u>8.2</u> Once verified, all materials are to be received into inventory and stored in their designated locations.
- 8.3 All incoming materials ordered for specific jobs must be identified with a description, a job number and are to be placed in the staging area, away from standard stock. (SOP 1512)
- <u>8.4</u> Raw material certifications will be provided to the customer only on an as-requested basis. Requests for credentials must be made prior to the pricing of the job.
- 8.5 All materials must be ordered via a purchase order placed through Purchasing or the engineer responsible for the job. A PO request form or email must be used to request any material purchases.
- <u>8.6</u> Material inventory is audited quarterly to compare system records to physical stock.
- 8.7 All Government Controlled Property will be processed in accordance with our <u>GPCS-6/2/20-KB-</u> <u>REV.00</u> form. This describes how any government property will be handled during its time at Atlas.



### **GOVERNMENT PROPERTY CONTROL SYSTEM**

All property furnished to Atlas Machine & Supply belonging to the Federal Government shall be maintained per the following:

- When such items are received by Atlas Machine, they will be clearly marked with the government entity it belongs to and a designated Atlas job#.
- This designated job# will be entered into our system with all pertinent documentation attached.
- All furnished property will be stored safely, separated from any Atlas Machine property within our receiving department.
- All furnished property in Atlas Machine's possession or control will be kept in good and serviceable condition.
- Any furnished property that is to be modified per the customer's instructions will require a written purchase order in order to proceed with such modifications. These items will be clearly marked linking it with the PO and designated Atlas job#.
- Any furnished property that is not to be modified will be returned in the same condition as originally received except for reasonable wear and tear.
- At any time, all furnished property will be available to be returned when directed.



Machine & Supply, Inc.

### Section 9.0

# **Final Inspection**

- 9.1 All work is to be performed in accordance with customer specifications.
- <u>9.2</u> If no customer drawing is available, work must be performed according to the specifications documented on the work order, working sketches, and/or customer instructions.
- <u>9.3</u> Upon completion, all work must be final inspected by the employee performing the work. Customer-supplied final inspection sheets will be used given the request is made prior to quoting the job. If the customer supplies no inspection sheet, the standard Atlas final inspection sheet will be used.
- <u>9.4</u> For equipment repair work, the standard final inspection scope includes only dimensions affected by the work performed at Atlas.
- <u>9.5</u> For new parts made, the final inspection scope includes all machined features and drawing dimensions. For multiple parts orders, 100% of parts will be inspected unless otherwise specified on the PO.
- <u>9.6</u> In the event parts contain features that cannot be measured with conventional measuring tools, shop management will develop an inspection plan or outsource the inspection requirements.
- <u>9.7</u> Customized inspection programs for equipment or projects will be developed as requested by the customer. Such requests must be made before pricing the job.
- <u>9.8</u> Engineering will supply Job-specific expectations for any in-process inspection.
- <u>9.9</u> Each job that necessitates welding is to have a Weld Shop Inspection Report along with an Atlas Weld Procedure (AWP) completed and kept on file and with the work order.
- <u>9.10</u> Each job that necessitates thermal spray is to have a Thermal Spray Process Sheet completed and kept on file and with the work order.
- <u>9.11</u> At the completion of each job, the assigned supervisor reviews the work to verify that it has been carried out as instructed on the work order and that all work was performed correctly and with good workmanship.



#### **Final Inspection** Date: Customer: Job Number: \_\_\_\_\_ Part Serial Number (If Applicable): \_\_\_\_\_ **Part Description: Repair?** Make New? Yes Yes No No If yes, type of testing: NDT checked? Yes No

Print Name	Description of Measurement Location	Finish Size Dimension and Tolerance	As Measured

### Comments:\_\_\_\_\_





TECH	DIMENSION	TOLERANCE	AS MEASURED	SIZE CONFIRMED

Comments:





7000 Global Drive Louisville, KY 40258 Phone: (502) 584-7262

- Pre-Inspection Report
- Final Inspection Report
- Roughing Report
- Internal Report

# Weld Dept. Inspection Report

Atlas .	Job #	Date:
Custo	mer:	
Part D	escription:	
1.	AWP used:	
2.	Preheat temp:	
3.	Undercut Dimension:	
4.	Finished Dimension Required:	
5.	Finished Dimension of Welded Surface:	

Comments:

Work Performed & Inspected By:





7000 Global Drive Louisville, KY 40258 Phone: (502) 584-7262

- Pre-Inspection Report
- Final Inspection Report
- Roughing Report
- Internal Report

# **Thermal Spray Dept. Inspection Report**

Atlas Job #	Date:
Customer:	PO#
Part Description:	
1. Part Base Material:	
2. Undercut Dimension Diameter:	
3. Undercut Dimension Flat:	
4. Finished Dimension Required:	
5. If bond coat required, record dimension:	
6. Finished Dimension of Sprayed Surface:	
7. Spray Material Used:	
Comments:	

Work Performed & Inspected By:

### Section 10.0

# **Identification, Packaging, and Shipping**

- <u>10.1</u> All work is clearly marked with the customer name and a job number immediately upon arrival by the receiving team.
- 10.2 A work order and traveler are to be generated promptly once the scope of work is determined.
- <u>10.3</u> The traveler is to be sleeved and attached to the job on the floor. It is to stay with the work throughout the manufacturing and/or repair process. If a job is divided among work centers, multiple copies of the traveler are distributed so that each person working on the job has an available copy.
- <u>10.4</u> Atlas machinists will apply a rust-preventative compound to all machined or ground surfaces as a standard practice unless requested otherwise by the customer.
- <u>10.5</u> Work received in a customer-supplied container will be returned to the customer in the same box.
- <u>10.6</u> The planned shipping jobs method is outlined on the "Order Acknowledgement" and listed on the work order, which is sent to each customer at the onset of a job. On quoted jobs, the shipping method is defined on the quote. Additional shipping charges may apply for jobs outside of our standard delivery region, jobs that require transport on a semi-trailer, or jobs that were received with insufficient packaging.
- <u>10.7</u> Upon completion, all work is to be packaged per the purchase order instructions. If no specific packaging instructions are specified on the PO, Atlas will package the equipment using Atlas Standard Packaging/Wrapping process (<u>WI-5-13-20-KB</u>). These packaging instructions are to be added to the work order by the tech responsible for the job.
- <u>10.8</u> When a job is delivered, the driver handling the material gives a copy of a packing list documenting the parts shipped to the customer. A signed copy (by the customer) of the packing list is kept in Atlas's job files to confirm the customer's delivery.



# 6 Standard Packaging/ Wrapping Methods:

-Standard packaging processes:

All parts completed by Atlas machine must have the following to comply with minimum packaging requirements.

(Minimum Requirements)

- Parts must be secured to a pallet. (Strapping must be used to secure the part(s) to the pallet)
- Parts must have a clean presentable appearance.
- Parts must be covered completely by wrapping / plastic.
- Plastic / wrapping must have a "Atlas" sticker applied to the exterior.
- Plastic must have "Atlas" tape applied to any area that requires it.
- Any applicable protective coating that needs to be applied to the part or component (Engineer to Specify in job notes)
- Parts shall have individual inspections sheets attached (if required by the customer.)

Description of preferred methods:

- (A) "Wrapping of Rolls"-Any roll that is completed and ready to be shipped to a customer.
- (B) "Packaging of things that can go on a standard pallet"- Any part that can be put on a standard pallet and secured for shipping.
- (C) "Parts that are to be shipped in special provided boxes from the customer"- Parts that are to be shipped back to a customer in their special box or packaging.
- (D) "Things that are too large for a standard pallet"- Any parts that are too large to fit on a standard purchased pallet
- (E) "Parts that can be loaded on trucks"- Any parts that are not packaged or that cannot go onto a pallet and that are loaded on to a truck of some sort.
- (F) "Parts that are to be packaged with NO ATLAS identification on them." (Customer requested)

Any parts that are to be sent to the following customers please inquire with the shipping supervisor regarding method of packaging. (Reference for shipping method F)

- Minster Machine
- Schuler
- Ube



#### Instructions for Method $*\underline{A}*$

- 1- <u>As a roll is completed it is to be wrapped based as described below.</u>
  - a. Coated roll- Wrap the roll with "blue board" to protect the RA and the roll from damage.
  - b. Wrap the blue board with Atlas white paper (cosmetic) for completion of the wrapping of the roll body.
  - c. Wrapping the journals with cardboard for protection.
  - d. Attach the traveler to the top pf the roll to ensure it can be identified. (photo below of completed roll)











#### Instructions for Method $*\underline{B}*$

- 1- Any part that can be put on a standard skid
  - a. Part are to be staked on the pallet in layers that will not allow the material to move.
  - b. If the materials are rolls that can fit on a skid, the rolls need to be secured on the sides with 2x4's or other wood blocks to prevent the rolls from moving.
  - c. Once the rolls are secured, they are to be wrapped with a protective coating of plastic. (this should ensure that the parts do not move)
  - d. Apply the "Atlas" logo sticker to the outside of the packaging.
  - e. Adherer the traveler to the opposite side of the package upon completion. (Photos showing final process is below.)







#### Instructions for Method \*C\*

- 1) Parts that are to be shipped in special provided boxes from the customer
  - a) Parts are to be stored and moved with the customer supplied create or box.
  - b) Once the parts are completed and all work is preformed, the parts and the packaging need to be inspected before the parts are released to be shipped back to the customer.
  - c) The exterior of the packaging should include the pack list and "GREEN Completed" sticker. (This will identify that the parts are ready to be shipped back to the customer.

(Photos showing process below)





#### Instructions for Method \*D\*

- 1- <u>Any part that will not fit on a standard pallet size.</u>
  - a. Parts are evaluated to see what pallet is going to be best used for shipping of the parts.
  - b. If the pallet must be put together in the pallet assembly area.
  - c. The pallet must be made to accommodate the parts size. No area of the part should be hanging off the pallet.
  - d. The part must be secure to the pallet in every possible way.





#### Instructions for Method \*E\*

- 1- Parts that can be loaded on trucks.
  - a. Parts that are too large and possibly have been delivered by a customer on or in a truck.
  - b. Parts must be arranged in such a way to prevent the outside elements from damaging the parts. (Unless customer specifies otherwise.)
  - c. Parts must be secured to the truck to prevent any damage during transit.



Instructions for Method \*F\*

- 1- Parts that are to be packaged with NO ATLAS identification on them. (Customer request)
  - a. Any parts that our customer requests to not have any Atlas signage on.
  - b. Do not put any stickers or any material that has Atlas name on it.
  - c. Wrap and package the parts are the customer requests.

### Section 11.0

# <u>Billing</u>

- <u>11.1</u> The job is not finished until the invoice is sent. All invoices will be sent promptly and accurately to the appropriate contact once the material is shipped.
- <u>11.2</u> Each bill is expected to clearly describe the services rendered and accurate pricing for these services.
- <u>11.3</u> On-Time and Material jobs, a price update is available at any time upon customer request.
- <u>11.4</u> Appropriate customer documents or a purchase order number is to be referenced on the invoice.

### Section 12.0

# **Tool Calibration**

- <u>12.1</u> A restricted area (Tool Room) is maintained for the control of all tooling and gages. A sign out system is in place to control the issue and return of all equipment released from this area. (Form TRCL-6/29/20)
- <u>12.2</u> All standards are certified annually. Certification documents are kept on file in the Tool Room and are available for customer review upon request.
- <u>12.3</u> Micrometers are checked using the following two methods: Personal tools are reviewed quarterly, and the tool room supervisor documents the results. Company-owned tools are checked and set every time they are removed from the tool room. These records are maintained and stored in the tool room.
- <u>12.4</u> The tool room manager ensures that micrometers are appropriately set to a standard each time a micrometer is checked out of the Tool Room. Tools that are on the shop floor are found and checked quarterly.
- <u>12.5</u> Quarterly training is done to ensure that all necessary personnel knows how to set micrometers to standards properly.
- <u>12.6</u> Reference the Master Equipment Calibration List to see a full list of all calibrated equipment. (This list is kept in our "gagelist" software. This is a web-based software that the tool room supervisor and quality engineer have access to.)
- <u>12.7</u> All other equipment that requires calibration are as follows: JP system, laser trackers (LT), furnace, OES machine. These tools are calibrated by using an external calibration company, and each tool is certified annually. The tools listed in this section have individuals responsible for calibrating these tools or outsourcing the tools listed with their names.

ΤοοΙ	Owner	Title
JP System & Furnace	Erick Lawson	Director of Safety & Security
Optical Emission Spectroscopy Machine	Michael Almli	R&D Engineer
Laser Tracker	Matt Kennedy	Field Machine Supervisor
Field Machining Equipment	Matt Kennedy	Field Machine Supervisor

### Section 13.0

# **General Workmanship Standards**

<u>13.1</u> Unless otherwise indicated on engineering drawings, all Shop work is to conform to the general workmanship standards.

#### 13.2 Machining:

a. All machined surfaces are to be free of nicks and scratches and have a 125 micro-inch Ra finish or better.

- b. All sharp edges to be broken and deburred.
- c. All chips removed from any holes present in the part.
- d. Any cosmetic differences in the appearance of the material is matched to spec.

#### 13.3 Grinding:

- a. All ground surfaces are to have a 32 Ra finish or better unless specified otherwise.
- b. All ground surfaces are to be free of traverse lines and chatter marks.
- c. All sharp edges to be broken and deburred.

#### <u>13.4</u> Disassembly/Reassembly:

a. All components to be dimensionally checked for proper fits before assembly.

b. When installing bearings and seals, all manufacturer-recommended standard practices are to be observed. This includes recommended bearing fits.

c. All fasteners are to be torqued to industry standards per their size, thread pitch, and grade. Thread locking compounds may be used depending on customer requests and the application.

#### 13.5 Welding:

a. All welds are to be free of slag, inclusions, and porosity.

b. Weld beads are to be uniform and consistent in accordance with the assigned AWP (Atlas Weld Procedure).

c. All material is to be preheated and post-heated in accordance with sound welding practices for the given materials.

d. All weld jobs are to have a Weld inspection sheet to provide information regarding what AWP was used.

#### <u>13.6</u> Thermal Spray:

- a. All thermal spray coatings are to be uniform and consistent.
- b. Coating roughness should be in accordance with process specifications.
- c. Coatings should be free of coarse grains indicative of improper application.
- d. All thermal spray jobs are to have inspection sheets to show the finished coating.
- e. Process sheets are available for review following all Thermal Spray Jobs.

#### \*\*This section only indicates the default standards Atlas offers if NO specific customer callout is addressed in the PO process. \*\*

### Section 14.0

# Field Service

- <u>14.1</u> Atlas Field service operates on-site service repair for customer equipment that cannot be brought to the Louisville shop location, or anything that a customer deems can not be shipped.
- <u>14.2</u> Field service teams perform work described in our work orders by the same process the MS (machine shop) uses for general in-housework.
- <u>14.3</u> Atlas field service teams provide multiple safety checks to begin every job. These checks are documented by using a Safety Report (<u>SAFE-01/07/2021-REV 01</u>). This report is filled out for every job completed and stored in the system with all other job details for reference. Customers layout these safety requirements before the start of any job.
- <u>14.4</u> A Daily Field service report (<u>DFSR-09/01/18-REV 00</u>) is filled out by the team that is performing the work. These forms are completed daily by the field service team that performed the work. At the end of the job, all documents are given to the customer to sign off and approve. These forms are then attached to the work order to be scanned into JobBoss for documentation.
- <u>14.5</u> Laser tracking is available for any customer upon request. Atlas laser tracking can scan any parts and provide a detailed report regarding alignment and/or position.
- <u>14.6</u> Calibration of all field service equipment is maintained through our "gagelist" software and overseen by the field service supervisor and the quality engineer.

Safe Report (Safety Assessment Field Evaluation Report)



Nam	eCustomerDate/TimeCustomer	Job I	No			
Desc	ription of Task Permit N	umber				
Revie	ew Emergency/Alarms/Phone No Wind Direction	_ My Esca	ape Route	e(s)		
Prim	ary Evacuation Secondary Evacuation					
Emei	rgency Eyewash Location Eme	rgency Pl	hone No.			
	BEFORE YOU START WORK, THINK THROUGH THE TASK	Yes	s Yes	No	No	
<b>≜</b> e	/ &urefity caun dits a ital slyitzabry pressemptetta rota toy cararty adlute alluin explicites distasks?					
Have	e Mavesignæslignæshöhbæreshbreatin echore thærstræpsötlecjæsti?cies?					
ίΩ γ	oDofykbyu úrublye ustale ofstaled at ble at skla atchæmd ælhstelpistepset of openform?					
Do y	oDdhave baverk verkniteandtvaockvirostkurostionostipros/edoced?ures?					
êo y	oDdnave taxedneecoppetappetandstoorlyfortable(tagk(s)?					
🔑 y	oDohave bake andes and a leitable actes to evide knave a rea?					
δyγe	e alayze avepologias torodsliftidgifterag beænktæstede stredi ianspielotspel?ted?					
Are	iAsteafidseseidvææh/sastet/safledyvæhdøæntloca(s)dm(o)/km2wn?					
	STOP HAZARDS		Yes		No	
Is lo	ktsoko tyktengint/etagelicy.ucidate//yeeequ/inpequence of thissa tabyised at ka?l required tasks?					
Is the	e Istatinataylo la staginidadzialikāta (1611st2e)(drīvstosaictinanskaictinant la ekstitzee publikai, pitām.)					
Coul	d Coourdets binly thailder fallearikite in teaching and you have sells set eps to perform?					
Am	læn vidnag blægs i waidig præginnaidda virank blirag direg pri ods dures?					
Am	manyland by availity the agout the agout the agout the standard by a standa					
Am	se og vildtinggidening vitætodec og ut esissto eilogen værenegæysettivselt?					
Aret	han the second					
Coul						
Are	interne tonerrer optiersophersophersopherson wighting energies and a the source of the sensitive and the source of					
	CCCUBCER paper control of the second and the second se					
<b>H</b>	b Current Mais and Market Mariner and Schamical Landing mothods?					
	d/daddootamaalagaagaadadaadagaagaagaagaagaagaagaagaaga					
Am	Ameliate and the second se					
Am	workingerendigerendigerenden steren versteren of over exert myser.					
Sol	Isidenidithationtente infathemveniveningen (tothese keepings filo op Bonditions)					
Do a	neloiethteinettibiernettiseeterverteinergintelerateen who present a risk?					
ls a g	asomich sibe or a light fight of the second state of the second st					
Is the	e Gotth left in Detx in the second the interval in the interval interval in the interval interval in the interval interval in the interval in the interval in the interval interval interval interval in the interval interval interval in the interval interv					
Are	i gintersig heiviels leviels op hatter fazet telfeutsiske tensikels or materials?					
Are	a A he set his bed in the last result week hods?					
Are	maned a woold a second to a sopial decepter side reactive section and the second s					
Are	hane tangesting inta contaited spectral tradition of the spectral spectras spectral spectrad spectral spectras spectral spectrad spectrad					
Mob	ilenter and the second se					
Mar	listica provident to other personnel?					
Fork	li <b>Eocalificiepotaettificieliðfie</b> ct?eate any hazards?					
	Is a gas monitor required? Type Bump test Y/N					
	Is the air OK for me to breathe where I will be working?					

Are my coworkers or other persons fit and safe to work?

Arelighting levels adequate for the task?

Are all loads secure using correct methods?

num Suits	enermear doogles	Survey Shoes	Nictatal Sals	
Personal Monitor	Hearing protection	Safety Gloves	Tools	Gas Monitor
Step 3 – PPE Selection	(Single/Double)		Tethered	
HBarricade/Tapes/Signs/Contes Glass Harricade/Tapes/Signs/Contes Glass Harricade Full Face Rain Suits Lungue Chemical Go	bes Dust Googles Breathing A	Personne <sup>e Shields</sup> afety Glasses Cooling/Heating Metatarsals	Clean <sup>Dust</sup> Shav <del>en <sup>Tyvek</sup>  Fall P</del>	Mask Su <b>Dust Googl</b> e rotection
Vehicle Flags, Flashing lights or —Half Flagentor — Hearing prot	ection (Single/Double) Fu	ull Face <sup>Tools Tethere</sup>	d Gas M	<sup>Aoni</sup> Breathing A
	Safety Gloves	nemical Google	2S	Safety Shoe
Personal Monitor	be lights H	earing protecti	ooling/Heating ON	Safety Glov
Other	(S	ingle/Double)		<b>i</b>
ဖြှုန်းရောက်များရှိ ကျောက်များများ	Cones Hazard Control	Measures	Residual R	<sub>isk</sub> Personnel
			High/Med/	LowCooling/He
Vehicle Flags, Flashing li	ghts or			
Strobe lights				
<b>Ö</b> Other				
Significant Ha	zard	Hazard (	Control Me	easures
ίο				
Completed by Employee	Employee	E	mployee	·····
Reviewed with customer				
ARE YOU AND YOUR COWORKERS SA	AFE?			
End of Day Checklist				
All Safety Devices Tested	Final Repair Procedure	es Reviewed	All Tools Acco	unted for
Area cleaned up	All Limits and Function	s Tested and Noted	Barricades Re	emoved
	49945Repairagocedure	serviewedAIPTor	ols Accounted for	Bervice
	ceduAllAlinitsendFBnction	rs <sup>i</sup> Tèsted <sup>1</sup> a/ndBarric	ades Removed	
End of Day Checklist Completed By A	All E <b>note</b> ees			
Deviations for she Notified	Locks and Tags Remov	red		
Additions afety Manual or Repair				
Employeed protection (If Required) Y	_			
Employee Approval				
All Safety Devices Tester	d	Final Repair Pr	ocedures l	Reviewe
customer signatured up	Super	All Limits and F	-unctions	Tested and
		Noted		
Plamt Personnel Notified	4	Locks and Tags	Removed	REV 4
	A			04/07/2024 DEV 04



### Safe Report (Safety Assessment Field Evaluation Report) COVID – 19 Supplemental

Name	Date/Time	Customer

Job No.\_\_\_\_\_

Description of Task\_\_\_\_\_\_

	STOP AND VERIFY	Yes	No
cific	Are appropriate handwashing facilities available?		
9 Spe	Are you able to maintain appropriate social distancing?		
10 – 19	Are supplies available for proper disinfecting of equipment and tools?		
CO	Is COVID – 19 PPE required?		
	Are their any other risk/concerns related to COVID – 19?		





Louisville 7000 Global Dr. Louisville, KY 40258 1-855-GO-ATLAS (462-8527)

# **Daily Field Service Report**

Customer:	Date:	
Address:		
Atlas Job #:	Customer P.O.#:	
Daily Report/Final Inspection:		
		-
		-
		_
		_
		-
		-
		-

### **Time Record**

TECHNICIAN	START TIME	FINISH TIME	ON-SITE HOURS	TECHNICIAN	START TIME	FINISH TIME	ON-SITE HOURS

Materials	Qty.	Materials	Qty.
Mileage:			
Work area cleaned and ins	pected by: Atlas	Customer	

Lead Man Signature	Atlas – White Copy
Customer Signature:	Customer – Yellow Copy
34	REV 4
	DFSR-09/01/18-REV00

### Section 15.0

# **Corrective Action Procedures**

- <u>15.1</u> All possible precautions are taken to ensure that quality concerns never occur. In the event that an issue does occur, the highest priority is given to getting a good part to the customer as soon as possible. A discussion is held between the supervisor and the applications engineer to determine the best disposition to get the customer a good part.
- <u>15.2</u> As part of our continuous improvement philosophy, any quality issue is viewed as a potential to improve and documented with the quality assurance rework analysis form. (<u>Blank Rework Form</u> <u>03-09-21</u>) This information is monitored by the Quality Engineer and logged for data collection.
- <u>15.3</u> For any quality issue, whether discovered internally or by a customer, a rework analysis is performed. This analysis aims to understand the root cause of the issue and identify measures that can be taken to prevent similar problems from occurring in the future.
- <u>15.4</u> The rework analysis is performed by completing the Rework Analysis Sheet, along with a Quality Alert sheet. These sheets are to be completed by the supervisor in charge of the job. These could lead to anything from employee training to a process change based on the root cause identified by the forms submitted.
- <u>15.5</u> All completed Rework Analysis Sheets are to be reviewed and signed by the Quality Engineer. The sheets are then stored in a database and the job files. The analysis sheet is attached to the Job Boss system to reference any rework performed on the job.
- <u>15.6</u> Root causes, as identified on the Rework Analysis Sheet, are categorized and logged into a database for tracking.
- <u>15.7</u> All rework hours on jobs are to be flagged on the completed work orders during the prelim portion of approval for appropriate tracking.

### Section 16.0

# **Non-Conformance Process**

- <u>16.1</u> Any new material made with a discrepancy between the print and the part is deemed to be NON-CONFORMING. The process is documented in <u>SOP 1810</u>.
- <u>16.2</u> Any part(s) found to be NON-CONFORMING is identified with a non-conforming tag attached to the part's traveler. These tags are applied by the supervisor that found the non-conformance.
- <u>16.3</u> This NON-CONFORMING tag cannot be removed from the part(s) until a disposition is determined by the Quality Engineer or the jobs assigned Applications Engineer. This is done by evaluating the part and discussing the issue with the customer if necessary. If a discussion with the applications engineer can achieve the disposition, it is documented in the work order or by rework.
- <u>16.4</u> Once a disposition is agreed upon, the tag can be removed, and it can then be taken to the next operation in the process.
- <u>16.5</u> All NON-CONFORMANCES are tracked by the reworked form that is submitted by the individual that found the non-conformance. The records are tracked and kept in an excel sheet that can be extracted upon request.
- <u>16.6</u> In most (but not all) cases of a non-conformance, a potential corrective action request can be issued. (Reference Corrective Action process in section 13).

### Section 17.0

# Internal Audit System

- <u>17.1</u> An internal audit system is in place (and performed at will) to verify that the policies and practices outlined in this manual are being carried out. All Audits are performed by checking the process against the documented process. This is documented by using form <u>IASR-07/02/2020</u>.
- <u>17.2</u> The Quality Engineer assumes the responsibility for conducting and reviewing internal audits.
- <u>17.3</u> Full audits are to be conducted annually. Partial audits may be performed if concerns of adherence to specific areas of the program arise or if a process has been deemed an issue by multiple rework forms. This is done in accordance with <u>SOP 1811</u>
- <u>17.4</u> Once complete, audits are reviewed by management. Any concerns identified during the audit will be addressed by the VP of Operations and relayed to the department heads as needed.
- <u>17.5</u> All completed audit paperwork will be kept on file in the Quality Engineer or Human Resources office.

### Section 18.0

# **Revisions**

- 18.1 All revisions to this manual are to be documented in the table below.
- <u>18.2</u> The revision number of the document is to be displayed in each page's footer and is to be updated with each revision.

<u>REV#</u>	Date	Section	Description
0	3/11/2010	All	Issue of completed manual.
1	12/22/2011	7	Clarified final inspection requirements, changed inspection sheets to include new and repair.
2	7/9/2012	22.3,3,7,12.5	2.3: Changer his to his/her. 7: Add a revised field machining inspection report. 12.5: Change to only require a signature from one VP.
3	3/20/2013	7	Replaced inspection forms with the newest revisions.
4	1/12/2021	ALL	Addition of sections Quality Policy, 3-Controlling of Quality Documents,14-Field Service, 16-Non- Conformance Process, 17-Internal Audit Process, and Multiple wording changes in every section due to age of last manual update.