PSP INC. **Precision Swiss Products, Inc.**	Document # **SOP-3.0-002** Revision **1** Effective Date **12/12/23**
Document Title **Finishing Process**	Document Type **Standard Operating Procedure**

1. **Purpose:**
   To ensure all product is finished in controlled conditions and fulfills the customer and regulatory requirements prior to release of product to the customer.

2. **Scope:**
   This process covers the Finishing department processes which includes cleaning, polishing, tumbling, and deburring, and overall department requirements. Step by step work instructions are separate from this procedure.

3. **Terms, Acronyms and Definitions:**
   a. First Article Inspection (FAI): A First Article Inspection (FAI) is a design verification process for verifying that a new or modified production process produces conforming parts that meet the manufacturing specification detailed in technical or engineering drawings. Typically, a supplier performs the FAI, and the purchaser reviews the report.

   b. Enterprise Resource Planning (ERP): Type of software that organizations use to manage day-to-day business activities such as accounting, procurement, and supply chain operations. It ties together multiple business processes and enables the flow of data between them

   c. Station Cleaning: It is a standardized procedure in manufacturing for ensuring equipment and work areas are free of products, documents, and materials from a previous process. It helps operators prepare for the next scheduled process and avoid mislabeling or cross-contamination of products.

4. **References:**
   a. AS9100 rev D
   b. ISO 13485:2016
   c. ISO 9001:2015
   d. FOD Cleaning Matrix
   e. Polishing and Deburring Tool Matrix
   f. Tumbler Machine Work Instructions
   g. Parts Washer Operating Instructions

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h. Ultrasonic Cleaner Guidelines

5. Responsibilities and Authority:

a. Department Leads/Supervisors: responsible for ensuring all employees are following the requirements of this procedure and all applicable work instructions related to this procedure. Provide resources necessary to ensure their team has the capability to complete their assigned duties in a timely manner and escalate when issues arise.

b. Finishers: responsible for reviewing all documentation (job travelers, drawings, work instructions) and material(s) provided during the finishing process for accuracy to customer and QMS requirements. Must follow all aspects of this procedure and escalate when appropriate.

6. Inputs:

a. Customer drawing and contract requirements
b. ERP job traveler

7. Job Traveler Review:

The Finishing Department is provided with all required information to ensure the accuracy and control of all products to be cleaned, deburred, and finished and any additional services to be performed such as assembly, and polishing.

This information is an output of the Operational Planning Process and Risk Management Process and is communicated in the ERP System through job travelers, ballooned drawings and any other customer documentation that is required to produce a conforming product.

Finishers are required to read all instructions and information before starting their work every day and follow all instructions for special handling of sensitive material or assembly instructions (if applicable).

a. Job travelers provide the operations necessary to produce a conforming part and communicate:
    a. The manufacturing process flow including any applicable Finishing requirements
    b. Overview of activities to be performed
    c. Defining where a Quality Control inspection step is required
    d. Reference to any applicable written standards, work instructions, flow charts, or sample parts to assist with the production of the part
b. Balloon drawings are provided to finishing which communicate:
    a. Product conformity requirements.
c. Various matrices and work instructions outline specific deburring, polishing, and cleaning techniques

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8. First Article Inspection (FAI):

FAI is required on all finished and cleaned parts, excluding prototype, RPM and ERF parts unless deemed necessary by the customer, to verify that the products, processes, and production documentation can produce parts and assemblies that meet requirements.
Every finisher that completes an operation must submit their own FAI to QC.
For finishing operations, the FAI is not typically a dimensional submission, rather a submission for visual inspection to ensure that the part has been deburred/polished in the manner that would be deemed acceptable to the customer.

Note: Not all Finishing steps require an FAI submission. Always check your traveler work instructions to see when an FAI is required for any Finishing step.

If a part is rejected, the nonconformance must be corrected and a new first article submitted. The FAI must be accepted prior to the production run. If the FAI has failed 3 times, escalation to management is required.

9. Station Cleaning

Station cleaning is required for all employees to ensure that the station they are working at is clear of all prior job-related items to prevent any mislabeling and cross-contamination.

10. Disposal of cleaning substances:

All cleaning substances require a label describing what substance is in the container. All new bins/containers used for cleaning substances must be labeled when they are put into use with the appropriate cleaning solution that they will be used for, as well as appropriate disposal time/date (when applicable).

Any open containers that are used must be filled with the appropriate substances and labeled with an “empty by” date. Minimum disposal of all open containers shall be at the end of every day. This is dependent upon the cleanliness state from when the parts arrive off the machine. If the cleaning substance looks dirty with debris in the container, then the substance must be emptied and disposed of properly.

Shelf life of solutions and chemicals: All containers that store cleaning solutions/chemicals have the manufacturer’s expiration date on them. If they do not arrive with an expiration date, PSP must use the Chemical Expiration Guide (DOC-5.4-009) to determine the appropriate expiration date and create a label for the container. If the guide does not have the solution in question, PSP will then research the expiration time online and place an internal label with expiration date on the solution. If no expiration is online either, then it is deemed as “NO EXPIRATION.”

Spray bottles with specific cleaning solution in them shall be cleaned with soap and water after each bottle is finished prior to filling with a new cleaning solution. Bottles or containers that are not emptied daily are required to have an expiration label added to them. The expiration is based on the original container the solution is being extracted from.

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11. Logging Jobs:

All Finishers are required to log in on a job as soon as they start working on parts.
Once they are finished with that job or are done with their shift, they must also log out all the parts they have completed for that day including any scrap pieces and move all good parts to their next operation.

12. **Outputs:**

The outputs of this process are parts that conform to customer, statutory and regulatory requirements.

13. Flow Chart:



14. Quality Records:

Record Name	Owner	Location	Record Media
Job traveler	Operations	ERP System	Electronic
ERP Login	Operations	ERP System	Electronic

Revision History			
Revision	**Description of Change**	**Approver**	**Effective Date**
1	Initial Release	Daniela Kozar	12/12/23

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COMPREHENSION TEST/TRAINING RECORD

Submit to Supervisor once complete

Comprehension test is only required for new employees, initial release training and major revision updates. If comprehension test is not required for an up rev for current employees, it will state as such in the "description of change" section on the revision history above.

Each answer is worth 1 point. If a question has multiple answers, and the employee gets part of the question correct, they will receive a point for each correct answer in that question.

100% is considered a passing grade. If 100% is not achieved, the employee must retake the training and gate test.

1. The purpose of the Finishing SOP is to ensure all product is _____ in _____conditions and fulfills the customer and _____requirements prior to release of product to the customer.

2. Finishers are required to read all _____ and _____ before starting their work and follow all instructions for special handling of sensitive material or assembly instructions.

3. Finishers are required to submit an FAI
    a. True
    b. False

4. The First Article Inspection (FAI) is a process for verifying that a new or modified production process produces conforming parts
    a. True
    b. False

5. Station Cleaning is required in order to prevent any:
    a. Misreading and cross-pollination
    b. Misalignment and cross-examination
    c. Mislabeling and cross-contamination

6. All cleaning substances require a _____ describing what substance is in the container.

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7. All containers that store cleaning solutions/chemicals have the _____ expiration date on them.

8. In your own words, why is it important to follow the work instructions on your job traveler?

   _____

   _____

   _____

Please give the completed and graded test to Training Coordinator/Doc Control for saving

Employee Print Name:	**Employee Signature:**
Trainer Print Name:	**Trainer Signature:**
Training Date:	**SCORE: _____ / _____ _____%**

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