

**Supplier Quality Requirements****AS8.4-7****1. PURPOSE & SCOPE****1.1. Teton Machine Company Quality Policy**

Teton Machine Company is committed to satisfying the machining needs of our customers with high quality products, delivered on time while providing a work environment that promotes personal growth to our employees and continual improvement of our quality management system. Our production partners are key to realizing these objectives. Per SAE AS9100, Teton Machine is to define the processes needed to ensure that outsourced products and processes consistently meet the requirements of our customers.

1.2. Purpose

Teton Machine strives to meet the expectations of our Customers with high quality products delivered on time (Quality Policy). This procedure flows down general requirements deemed necessary to ensure product and service quality to ensure customer satisfaction. Our production partners must agree to uphold these requirements in the production of products for Teton Machine Company.

1.3. Scope

The scope of this procedure is all suppliers who provide products and/or services to Teton Machine Company that affect Teton product quality.

2. GENERAL REQUIREMENTS**2.1. Approval of Product and/or Service****2.1.1. Machined, Ground and Fabricated Components:**

- Product Compliant to Print and Purchase Order requirements
 - Inspection records showing conformance must be provided with every shipment.
- Records of Supplier inspection process showing product conformance, Records shall indicate results of inspection of all print characteristics. It is recommended these records validate the results of First Article Inspection, In-process Inspection and Final Inspection results.
- Any material and process certifications. Materials must remain traceable at all times and mill/manufacturer certification provided with every shipment. This applies for all materials and components (i.e. dowel pins, helical inserts, etc.) used to manufacture the product or subassembly.

2.1.2. Processing: Services such as heat treatment, plating and coatings shall be provided with a certificate of conformance defining the requirements that have been met. Teton is unable to verify many of these processes and require these certifications as records of validation.

2.2. Qualification of Personnel

2.2.1. Teton relies on the Supplier to have a system in place for the qualification of personnel. This system shall make individuals aware of their importance to quality and product safety.

2.3. Quality Management System

Recommended that Suppliers shall maintain a Quality Management System (QMS) suitable to the products and services provided to Teton Machine Company. A defined QMS helps ensure processes to ensure consistent quality have been defined and are followed.

2.3.1. Aerospace Contracts

Printed copies of procedures are to be considered uncontrolled unless stamped **CONTROLLED** in red.
The user is responsible to verify correct revision prior to use.

For Machined/Fabricated components for the Aerospace industry to be awarded to a supplier, the supplier must meet and maintain one of the following requirements:

- 2.3.1.1. AS9100 Accredited QMS system
- 2.3.1.2. AS9100 compliant process for the following processes must be maintained and approved by Teton Machine
 - Competence and Awareness (Training)
 - Control of Documented Information (Record Control)
 - Control of External Providers (Material/Plating/HT, etc.)
 - Identification and Traceability
 - Purchasing
 - Control of Non-Conforming Output
 - Foreign Object Debris, FOD Management
 - Control of Counterfeit Materials
 - Monitoring and Measurement (Product Inspection)
 - Control of Monitoring and Measurement Devices (Calibration)
 - Corrective Action

2.4. Materials / Purchasing

2.4.1. Purchasing –

- 2.4.1.1. Teton Supplier must flow down all applicable requirements to supplier for purchasing of materials and components. This includes the needs for, but not limited to:
 - Print Requirements
 - Teton Purchase Order Requirements (ie. RoHS compliance, etc).
 - Need for certifications declaring conformance of the purchased material. Mill certification will be required for raw materials.
- 2.4.1.2. **Approved Suppliers** – All materials and components purchased for use in manufacturing or assembly products for Teton Machine Company **MUST** be purchased from a Teton Approved Supplier. Refer to Appendix A for a list of approved material suppliers, if circumstances prevent the use of these suppliers, please contact Teton to discuss alternate options.
- 2.4.1.3. **Counterfeit Materials Prevention** - Teton CNC machine partners must perform due diligence in prevention and detection of counterfeit materials. The first step to prevent counterfeit materials is to purchase from reputable sources (Only used Teton Approved Suppliers 2.4.1.2). Teton also has defined a counterfeit material testing program, and may require random testing of materials purchased by suppliers (Shall be defined on purchase order). If material is suspect of being counterfeit, please report findings to Teton.

2.4.2. Material Handling and Traceability

- 2.4.2.1. Teton Supplier is required to have a system in place to ensure material and product traceability throughout the product cycle, this includes:
 - Raw material traceability
 - Secondary process traceability, such as plating and heat treatment
 - Production lot traceability
 - Revision control
 - Product preservation throughout the production cycle and inventory.

2.4.3. Non-Conforming Material

- 2.4.3.1. Authorization must be obtained from Teton prior to shipping any non-conforming material. Material must be clearly identified.

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2.5. Notification of Changes in Which Product Quality Can be compromised

2.5.1. Changes in facility location, changes in supplier must be communicated so that appropriate actions can be taken to manage risks.

2.5.2. Any change in supplier we require flow down of all Teton requirements.

2.6. Records Retention

2.6.1. Teton Machine does not require or define what records suppliers are to maintained and leave this to the Suppliers and the requirements of any certification they may hold. Teton does recommend that material, product test and inspection, calibration and employee competency records be retained (Teton maintains these quality records for a minimum of 10 years).

2.7. Right of Access

2.7.1. Teton Machine, Teton Machine Customers and regulatory agencies reserve the right to have unlimited access to the Supplier's and relevant sub-tier supplier's facility and records as necessary. The Supplier is subject to initial and periodic reviews including but not limited to onsite audits, offsite reviews of quality documents, quality system surveys and source inspections in order to verify and validate the effectiveness of the quality management system.

2.8. Code of Ethics – Teton Machine recognizes that the employees of Teton and our Supplier Partners make the difference in our success. As we grow we embrace the following core values:

2.8.1. Maintaining a “Golden Rule Culture” in all relationships:

- Treating others with the highest degree of dignity, equality, trust and respect.
- Always act with honesty and integrity, never compromising our reputation
- Maintain the highest level of ethical and moral standards – “It’s never too late to do the right thing”
- Win as a team and support each other as a team
- Give back to our community

2.8.2. Embracing “Ownership Accountability” for our actions and results by:

- Taking responsibility and ownership for our actions and decisions
- Looking for opportunities to grow
- Fixing the problem when we see it and not passing-off responsibility/risk to others
- Demonstrating leadership at all levels of the organization
- Never compromising our reputation
- Asking ourselves, “What else can I do to make it better?”

2.8.3. “Pursuing Excellence” in all facets of our business by:

- Continuous Improvement – Strive to perform better today than yesterday
- Looking for opportunities to learn and grow...especially when we run into problems
- Acting with an appropriate Sense-of-Urgency at all times
- Focusing on what’s really important
- Maintaining open communication in all situations and at all levels

2.8.4. Exuding a “Positive Attitude”:

- Focus on the roses not the thorns
- Be an encourager and have a positive, can-do attitude every day
- Remember that my attitude is contagious!

3. CNC AND FABRICATED PARTS AND COMPONENTS.

3.1. Compliance to requirements – Teton Machine requires all applicable requirements defined on the Purchasing Documents (Purchase Order, Prints, Standards, etc) to be met. Teton uses sampling plans on all drawing requirements.

3.1.1. Recommended Sampling Plans

Acceptable Quality Level (AQL)				
Recommended Tol.		<.005	.005-.010	>.010
Production Qty		1.00%	2.5%	6.5%
Lot Size	1 to 8	ALL	FA – LA	FA
	9 to 15	13	5	FA
	16 to 25	13	5	5
	26 to 50	13	7	5
	51 to 90	13	11	6
	91 to 150	13	13	7
	151 to 280	20	16	9
	281 to 500	29	19	11
	501 to 1,200	34	23	13
	1,201 to 3,200	42	29	15
	3,201 to 10,000	50	35	15
	10,001 to 35,000	60	40	15
	35,001 to 150,000	74	40	15
	150,001 to 500,000	90	40	15

3.1.2. Critical Features – Critical features shall be identified on the print or purchase order. These features have been deemed safety critical and must be controlled. It is recommended that 100% inspection, statistical methods or other means to ensure conformance.

3.2. Methods of Inspection –

3.2.1. Rule of 10 – Teton utilizes the rule of 10 for the selection of measurement tools, this requires that a measurement tool have 10x the accuracy of the total tolerance (ie. $\pm .005 = .010$ total tolerance x10 accuracy, tool should be have $\pm .001$ accuracy).

3.2.2. Calibration – Teton requires the supplier to have a defined calibration system for all measurement tools and gages (excluding pin gages). Teton recommends annual calibration for all measurement tools to ensure measurement accuracy.

3.2. Workmanship Standards (where appropriate) –

3.2.3. Burr Free

3.2.4. Clean of oil and debris/chips (rust inhibitors are acceptable)

3.2.5. Packaged in a way to prevent damage

3.3. Undocumented Characteristics – Where appropriate, Teton adheres to the following when not defined on print.

3.2.6. Finishes – Uniform finish, 63 micro inch Ra. Chatter and Tool marks should be avoided.

3.2.7. Concentricity and Runout – 0.005” T.I.R.

3.2.8. Edge Breaks – 0.015” Max

3.2.9. Fillets – 0.010” Max

3.2.10. Angles - $\pm 2^\circ$

3.2.11. Form (Perpendicularity, Flatness, Straightness, Parallel) – 0.005” Max

4. REVISION HISTORY

Revision	Reason for Change	Description of Change	Initiated by / Date	Approved by / Date	Flow Down by / Date
03	Continual Improvement	<ul style="list-style-type: none"> - 1.1: Added last sentence, "Our production partners are key to realizing these objectives." - 1.2: Changed wording to state that procedure flows down requirements instead of defines. - 2.1.1: Clarified the requirements for a supplier of machined or fabricated component. - 2.3.1: Added this section to define what is required to be awards aerospace work. - 2.6.1: Added reference that Teton maintains the listed quality records for 10 years. - 3.1.1: Revised recommended tolerance to have 2.5AQL a range of .005 to .010 TOT. Was ".010" 	J. Boles 02/26/2019	J. Franklin 02/26/2019	Prior to AS4.4.2-1, Rev 16
04	Continual Improvement	<ul style="list-style-type: none"> - 2.1.1 Added "Inspection records showing conformance must be provided with every shipment." & "Any material and process certifications. Materials must remain traceable at all times and mill/manufacturer certification provided with every shipment. This applies for all materials and components used to manufacture the product or subassembly." - 2.4 – Added this section to detail purchasing and material handling requirements. 	J. Boles 03/01/2021	J. Franklin 03/04/2021	J. Boles 03/04/2021
05	Continual Improvement / Purchasing Process Changes	<ul style="list-style-type: none"> - 1.1 – Added "Per SAE AS9100, Teton Machine is to define the processes needed to ensure that outsourced products and processes consistently meet the requirements of our customers." - 1.2 – Added "Our production partners must agree to uphold these requirements in the production of products for Teton Machine Company." - 2.4.1.2 – Revise this section from Approval of Suppliers to define that suppliers need to use Teton Approved Suppliers. - 3.2 – Added section on measurement methods and calibration. - 2.4.1.3 – Moved and revised Counterfeit Material Prevention from section 2.9. - Removed revision history of version 01 and 02. 	J. Boles 01/27/2023	A. Oyervides 01/30/2023	J. Boles 01/31/2023

Appendix A: Approved Material Suppliers

The following list of approved suppliers shall be used for the purchasing of all material used for the production and manufacture of products purchased by Teton Machine Company. Please contact Teton Machine Company if there that is not on this list due to timing, cost or availability, contact Teton Customer Service (Customerservice@tetonmachine.com) or call 208-602-0042 to discuss options.

AAVID THERMALLOY, LLC	MI TECH TUNGSTEN METALS, LLC.
AFFILIATED METALS	MICROGROUP, INC.
ALASKA COPPER & BRASS INC	NATIONAL ELECTRONIC ALLOY, INC.
AVIVA METALS INC.	NGK METALS CORP
BANNER SERVICE CORPORATION	PACIFIC MACHINE & TOOL STEEL
BOEDEKER PLASTICS	PARKER STEEL
BOWERS MANUFACTURING CO., INC	PERFORMANCE TITANIUM GROUP LLC
BRUSH WELLMAN, INC ENGINEERED	PRESIDENT TITANIUM CO., INC.
CADI COMPANY, INC	PROFESSIONAL PLASTICS, INC.
CASTLE METALS, INC.	QUALITY ROD & GEAR
CMI SPECIALTY PRODUCTS	ROLLED ALLOYS
COAST ALUMINUM, INC	RPM GRINDING CO., INC.
COMMERCIAL MILITARY SUPPLY	RYERSON METALS
DIVERSIFIED INDUSTRIAL PRODUCT	SERVICE STEEL AEROSPACE CORP
ED FAGAN, INC.	SPECIALTY STEEL CO.
FINKELSTEIN METALS, LTD	SWISS STEEL USA, INC.
FORTE PRECISION METALS, INC.	T&D MATERIALS MFG
FRY STEEL COMPANY, INC	TCI PRECISION METALS
GROB INC.	THYSSEN KRUPP ONLINE METALS LL
HUDSON TOOL STEEL CORP	TITANIUM INDUSTRIES, INC.
INTERSTATE PLASTICS , INC.	TITANIUM PROCESSING CENTER
JORGENSEN, EARL M	TMX DIVISION (COPPER & BRASS
LAIRD PLASTICS	TOOL STEEL SERVICE INC
LEADING EDGE METALS, INC.	TRI STAR METALS, LLC
M. VINCENT & ASSOCIATES, LTD,	TUBE SERVICE, INC
MARKETECH INTERNATIONAL, INC.	UNITED PERFORMANCE METALS
MC MASTER-CARR SUPPLY CO, INC.	YARDE METALS, INC
METAL SUPERMARKETS	