QAM-00001

Revision 13



Where Quality is a Way of Life

Quality Manual

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QUALITY MANUAL SIGNATURES

Bill Jones	President / CEO	
James Mahan	Executive Vice President	
Michael Gore	Executive Vice President and CFO	
Charles Phillips	Vice President	
Jesse Rothschild	Vice President	
David Delaney	Corporate Quality Manager	
Jim McKain	Human Resource Manager	

Quality Policy

"We are committed to quality in everything we do. We believe that quality is more than just a policy but a way of life."

Penn United is committed to:

- Providing products and service which consistently meet or exceed the needs of our customers.
- Involving all of Penn United Employees in never-ending improvement in the quality of the products and services we provide.
- Employing the best people and providing each with the training and tools necessary to contribute to this quality effort.

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I. CORPORATE PROFILE

Penn United Technologies Inc. is an industry leading manufacturing facility that provides precision metal manufacturing solutions for customers around the world; from prototype to production. Our complete range of manufacturing services allows customers to simplify their supply chain logistics by using Penn United's "one-stop shop" manufacturing services.

Whether the need is for a single prototyped piece, millions of precision metal components, or a complete turnkey assembly operation, Penn United Technologies offers a highly skilled work force that takes pride in responding to customers' toughest applications. Above all, Penn United Technologies Inc. is founded on its core value of integrity - and that's what gets passed on to every customer.

II. INTRODUCTION

This manual defines the requirements and structure for the Penn United Business System (PUBS).

Penn United's system is designed to apply policies and procedures from ISO-9001, ISO-14001, CFR Title 21 Part 820, ITAR 22 CFR 120, ATF Publication 5300.4, AS 9100, NQA1, and additional standards as required by our customers.

This manual defines corporate-level quality system policies. The detail of how these policies are implemented is described in corporate, organizational, and process level procedures. The description of these key processes is further supported by work instructions, flowcharts, and process maps. Evidence that these key processes are operational and effective is provided by Penn United's QMS System. The figure below is a representation of this structure.



III. SCOPE

Penn United locations at 799 North Pike Road, Cabot PA 16023 and 196 Alwine Road, Saxonburg, PA 16056, have the following scope to the ISO 9001:2015 Standard with no exclusions:

Penn United Technologies, Inc. provides stamping, plating, precision assembly, carbide components, carbide and steel assemblies, production machining, tooling, automation processes, additive manufacturing (3-D printing) as well as the design to customer specifications, manufacturing, and development of dies.

Penn United Location at 799 North Pike Road, Cabot PA 16023 has the following scope to AS9100 with exclusions of 8.3 Design with justification that Customer prints and specifications are used to make stamped aerospace components and Penn United has no design responsibility, and 8.5.1.2 Validation and Control of Special Process with justification that there are no special processes involved in stamping of aerospace components

Penn United Technologies, Inc performs stamping of aerospace components

Penn United locations at 799 North Pike Road, Cabot PA 16023 has the following scope to the ISO 14001:2015 Standard with no exclusions:

Penn United Technologies, Inc. preforms stamping, plating, precision assembly, carbide components, carbide components, production machining, tooling, automation processes, additive manufacturing (3-D printing) as well as the design to customer specifications, manufacturing, and development of dies.

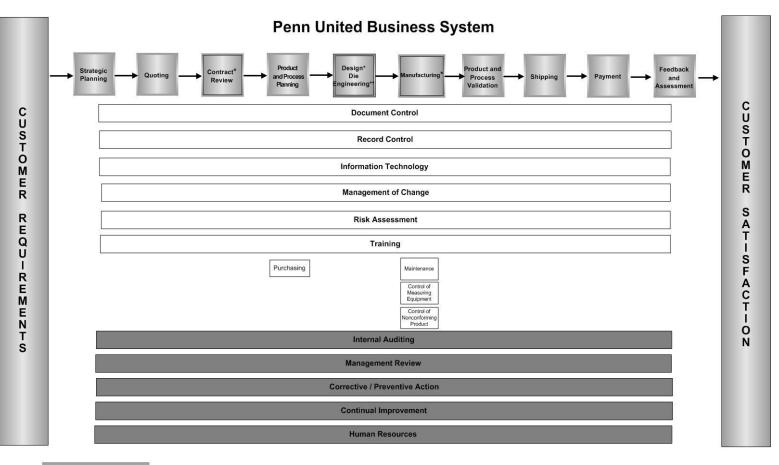
IV. PROCESS INTERACTION AND MEASURES

Penn United Technologies Inc. has established, documented, implemented, and is maintaining the following Quality Management System (QMS) as a means of implementing the processes necessary to ensure that product and services conform to specified requirements. The PUBS diagrams define the interaction of key processes demanded in order to meet the requirements of our customers and this international standard.

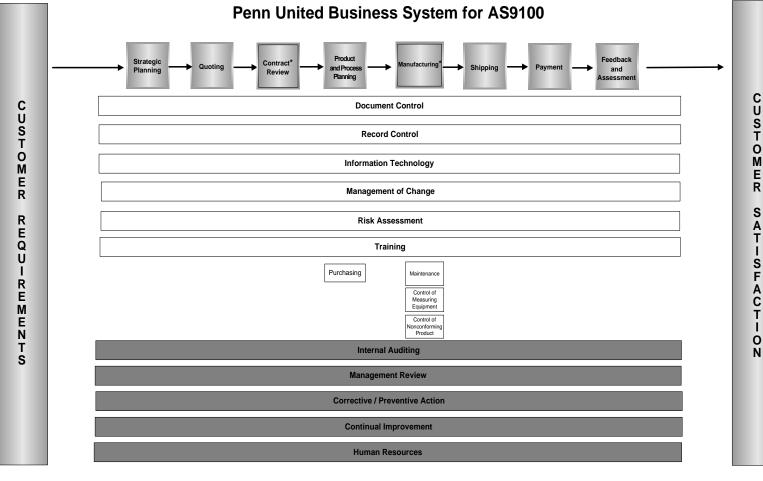
Penn United Technologies Inc. has established effectiveness and efficiency measures to achieve the quality objectives key to the business, which were set forth by Executive Management. Objectives shall be consistent with the quality policy, measurable (if practicable), planned, monitored, communicated and updated as appropriate.

QUALITY ASSURANCE MANUAL

A. Penn United Business System For ISO-9001



* Key Processes **Design pertains to Die Engineering only



B. Penn United Business System For AS-9100

* Key Processes **Design pertains to Die Engineering only

V. RESPONSIBILITY, AUTHORITY AND COMMUNICATION

A. Executive Management (President, Vice President and Chief Financial Officer) -

- Define the Quality Policy.
- Ensure the communication and understanding of the quality policy.
- Establish quality objectives and the plan/measurements required to meet objectives.
- Promote awareness of Penn United Technologies, Inc. QMS.

B. Management Representative (Corporate Quality Manager)-

- Responsibility and authority to ensure processes needed for the QMS are established, implemented and maintained.

- Performance of the QMS and any need for improvement.

-Ensure the promotion of awareness of customer requirements throughout the organization during management review or as part of the feedback and assessment process.

-The Management Representative acts as the liaison between Penn United and external parties on matters and or changes related to the Quality Management System.

-Communication to external parties will be via email or other documented form.

C. Customer Representatives (Operations Managers)-

-They have the responsibility and authority to ensure that customer requirements are addressed. -Including selection of special characteristics, setting quality objectives and related training, corrective and prevent action to ensure customer satisfaction.

-Work instructions and procedures define responsibilities and authorities for communication. -PUT will communicate changes to the QMS and Context of the Organization to relevant interested

parties at its own discretion doing so in an electronic format

D. Training (Human Resource Manager)-

- Orientations, job descriptions and employee surveys/reviews.
- Hire appropriate personnel and implement/maintain training programs to support the QMS.

E. HS&E (Manager Environmental Health and Safety)-

- Define and maintain the Health, Safety and Environmental program.

F. Responsible Managers, Team Leaders and Coordinators (Process Owner) -

- Implement the Penn United Technologies, Inc. QMS.
- Obtain and communicate company objectives, requirements, measurements and results to the appropriate personnel or functional organization.
- Ensure that resources are available to implement the QMS.

- Ensure that products satisfy customer requirements including quality, safety, cost, schedule, performance, reliability, durability, accuracy and maintainability while considering internal and external issues, needs of interested parties and customer focus.

- Facilitate the disposition on nonconforming material which may include communication with the customer, assembling a team to determine course of action/disposition, external deviation/concession requests or replacement/recovery plan.

- Ensure that personnel comply with applicable standards, regulations, specifications and documented procedures/work instructions.

F. All Employees-

- Ensure the quality of work.
- Operate in conformance with the requirements of the QMS.

- Put product or operations on hold or make appropriate notifications when quality requirements are not being met.

- Support and initiate continual improvement.

- Understand their area measurements required to meet the company objectives. Seek clarification if necessary.

VI. PROCEDURE OVERVIEW

A. Strategic Planning (OP-00001)

This document procedure defines the market analysis process and the process for annual updates to the PUBS. It explains the process for setting targets for top quality objectives.

B. Quoting Process (OP-00002)

This operating procedure defines how Penn United provides pricing and delivery at the customer's request.

C. Contract Review Process (OP-00003) * KEY PROCESS

This document establishes a procedure for following contract review activities such as reviewing changes on existing contracts, customer communications, and solutions for any unresolved issues.

D. Product and Process Planning (OP-00004)

Penn United's product and process planning is defined in this procedure. The document pertains to product and process planning performed within Penn United.

E. Manufacturing Process (OP-00005) * KEY PROCESS

This procedure provides a process for manufacturing to be performed in a controlled manner through the implementation of the Quality Plan and Control Plan.

F. Product and Process Validation (OP-00006)

The information in this procedure applies to the steps necessary to produce the Qualification Plan. The steps in the product and process qualifications and approval steps are defined.

G. Shipping Process (OP-00007)

This procedure describes Penn United Technologies Inc. process to ship product. This includes all product including prints, parts, dies, and so forth.

H. Payment Process (OP-00008)

This procedure establishes the steps for the payment process for Penn United customers and suppliers.

I. Feedback and Assessment Process (OP-00009)

Penn United's external customer satisfaction structure is defined in the procedure. It applies to external customer satisfaction activities performed by Penn United.

J. Internal Auditing (OP-00010)

This procedure has been established to define the processes of scheduling and conducting internal audits of Penn United's Quality Management System. These include system, product, and process audits. Follow-up audit activities are implemented and tracked for effectiveness if a corrective action is issued. Each audit process is defined and their frequency established in this Internal Auditing procedure.

K. Management Review (OP-00011)

The process of reviewing the business systems of Penn United Technologies Inc. is defined in this procedure. It includes group and executive management review.

L. Corrective and Preventive Action (OP-00012)

This procedure identifies corrective and preventive action (CAR & PAR) steps. On-time completion and review along with CAR and PAR effectiveness are the objectives.

M. Continual & Safety Improvement (OP-00013)

This procedure pertains to continuous improvement projects within Penn United Technologies Inc. and defines the process objectives.

N. Human Resources (OP-00014)

The planning performed by Human Resources within Penn United is defined in this document. Responsibilities for hiring, orientations, training programs, job descriptions, employee surveys and performance evaluations, along with health, safety and environmental issues are defined.

O. Document Control (OP-00015)

Internal and external documents required by the Quality Management System are controlled. This procedure establishes the steps necessary to ensure documents are approved for adequacy prior to release. External documents are identified and their distribution controlled to prevent the unintended use of obsolete documents.

P. Record Control (OP-00016)

Records required by the international standard (ISO) 9001 have been established, maintained and are controlled. A documented procedure has been established to define the controls needed for the identification, storage, protection, retrieval, retention time and disposition of records.

Q. Training Competency (OP-00017)

This procedure pertains to training activities performed at Penn United Technologies Inc. The needs of all employees are identified and training is scheduled, performed and evaluated accordingly.

R. Information Technology (OP-00018)

Penn United's information technology process is defined in this procedure. It defines the inputs and outputs for Penn United's information technology support.

S. Purchasing (OP-00019)

The process used for suppliers is explained in this procedure. The purchasing process and the supplier management process are defined.

T. Control of Measuring Equipment and Systems (OP-00020)

This procedure establishes and maintains a system to control, calibrate, and maintain the Inspection, Measuring and Test equipment (IM & TE) within Penn United Technologies Inc.

U. Control of Nonconforming Product (OP-00021)

Penn United ensures products that do not conform, are identified, or suspect of not conforming to the requirements are identified and controlled to prevent unintended use or delivery. The controls and related responsibilities and authorities in dealing with nonconforming product are defined in this procedure. This procedure defines the methods of disposition and the process to be followed in the event nonconforming product is detected after delivery or manufacturing has started.

V. Maintenance (OP-00022)

Key equipment, the preventative and predictive maintenance processes within Penn United Technologies are established in this document. Routine maintenance on specified equipment is defined. Equipment receiving maintenance within Penn United is relevant to this procedure.

W. Risk Assessment (OP-00025)

This document defines the use of Risk Assessment at Penn United Technologies, Inc. to enhance the utilization of risk management techniques to further support and improve outcome for Penn United Technologies and its customers.

X. Management of Change (OP-00026)

This document defines the process of change management at Penn United Technologies, Inc. to ensure proper implementation of change, evaluation of risk and communication with interested parties. The focus of change management is to effectively evaluate and implement changes to strengthen Penn United's business.

Penn United Procedure Mix

NQA-1/10 CFR 50 Apx B		Penn United QMS		
Section	Section Title	Doc #	Document Title	
I	Organization	QAM-00001	Quality Manual	
		QAM-00002	Penn United Organizational Chart	
		QAM-00003	Context of Penn United Technologies Inc.	
		CP-00002	Contingency Plan	
Ш	Quality Assurance Program	QAM-00001	Quality Manual	
		QAM-00002	Penn United Organizational Chart	
		OP-00014	Human Resources	
III	Design Control	N/A		
IV	Procurement Document Control	OP-00019	Purchasing and Supplier Management	
		SPD-00004	PUT Terms and Conditions of Purchase	
		SPD-00002	Supplier Requirements Manual	
v	Instructions, Procedures and Drawings	OP-00015	Document Control	
VI	Document Control	OP-00015	Document Control	
		OP-00016	Record Control	
VII	Control Purchased Mat'l, Equipment & Services	SPD-00002	Supplier Requirements Manual	
VIII	Identification & Control of Mat'l, Parts, Components	OP-00005	Manufacturing Process	
IX	Control of Special Processes	N/A		
Х	Inspection	OP-00005	Manufacturing Process	
		OP-00006	Product & Process Validation	
XI	Test Control	OP-00006	Product & Process Validation	
		OP-00005	Manufacturing Process	
XII	Control of Measurement & Test Equipment	OP-00020	Control of Measuring Equipment & Systems	
XIII	Handling, Storage and Shipping	OP-00007	Shipping Process	
XIV	Inspection, Test and Operation Status	OP-00005	Manufacturing Process	
XV	Nonconforming Material, Parts or Components	OP-00021	Control of Nonconforming Product	
XVI	Corrective Actions	OP-00012	Corrective & Preventive Action	
XVII	Quality Assurance Records	OP-00016	Record Control	
XVIII	Audits	OP-00010	Internal Auditing	