QUALITY MANUAL

Based on AS9100d requirements

Last Modified: March 8, 2020

NAICS 333999 All Other Miscellaneous General Purpose Machinery Manufacturing

SIC Code 28.9

Cage Code 381R1

1.1 Introduction to Organization

Web Site www.genesis-systems.com

LOCATIONS

Launch Center Works	**Versa Factory**	**AMP**
8900 Harrison Street	**7310 Vine Street Court**	**284 E. 90th Street**
Davenport, Iowa 52806	**Davenport, Iowa 52806**	**Davenport, Iowa 52806**

About Genesis Systems, IPG Photonics Company

In business since 1983, Genesis specializes in factory automation with robots for integrated robotic arc, spot and laser welding/cutting, non-destructive inspection, including robotic ultrasonic inspection of carbon fiber composites, adhesive application, material removal and material handling. With the governing objective to help clients win the productivity race, in-house capabilities and expertise are centered on the design, manufacture, and implementation of integrated robot work cells.

In addition, Genesis specializes in process related services such as computer aided engineering, (CAE) process simulation, lean manufacturing and other variation reduction techniques. With business units serving Transportation, General Industry, and Aviation, Space & Defense industries, Genesis has designed, engineered, manufactured and supported integrated robotic solutions for over 35 years. Genesis is also an RIA Certified Integrator, AS9100D and ISO 9001:2015 Certified.

Genesis engages in the production and distribution of integrated robotic systems and engineered solutions in 42 states and 17 countries. We have over 4900+ robotic system installations.

Our products and services include integrated robotic arc welding/cutting machinery and engineered solutions. Standard products, such as robotic servo-controlled positioning equipment and automation peripherals contribute to worldwide distribution. The company designs, engineers, and builds robotic production and assembly systems including integrated jigs, fixtures and automated controls.

Further, the company manufactures robotic arc welding, plasma cutting, and servo-controlled assembly systems designed and built specifically for use in automotive assembly operations both domestically and abroad. Genesis provides service for its installed systems in the field directly and through supplier partners. Products and services are marketed directly as well as through distributors and other channel partners.

1.2 Table of Contents

1.3 Quality System and Structure

This Quality Manual describes Genesis Systems IPG Photonics Company polices and the company-wide control mechanism for the (QMS) Quality Management System at Genesis Systems, IPG Photonics Company. Our (QMS) Quality Management System complies with the International Standard AS9100d model for quality assurance.

The Quality Manual defines the overall management commitment to a (QMS) Quality Management System and contains a macro overview of the processes used to achieve all applicable elements of the Standard.

This document is electronically controlled through SharePoint. Any recommendations for changes or inclusion can be sent to the Quality Manager for consideration. All printed copies are uncontrolled and will be considered for reference only. Recipients of uncontrolled copies **will not** receive any updates.

Quality Scope

Launch Center

Genesis Systems, IPG Photonics Company **designs**, **manufactures, and services** robotic automated equipment for use in agricultural, aviation, space, defense, automotive, construction & forestry, primary metals, furniture, energy and other general industry applications.

Versa Factory

Genesis Systems, IPG Photonics Company **designs**, and **manufactures tooling, components and standard systems** for robotic automated equipment for use in agricultural, aviation, space, defense, automotive, construction & forestry, primary metals, furniture, energy and other general industry applications.

Note: Occasionally product(s) may be built at Versa and shipped direct to commercial customers.

AMP Works

Genesis Systems IPG Photonics Company **manufactures, and services** robotic automated equipment for use in agricultural, aviation, space, defense, automotive, construction & forestry, primary metals, furniture, energy and other general industry applications.

1.4 Quality Policy

Genesis Systems, IPG Photonics Company believes quality is a **continuous process**. The process begins with customer collaboration and is **continually improved** through the lifecycle of the project. This belief leads Genesis to a dynamic "in process" approach which is **verified in real-time**. By following **right-person, right-place** principles, Genesis delivers world-class quality solutions to exceed the expectations of our customers.

1.5 Quality Objectives

Objectives

(Ctrl Click to link to connect)

2.0 **Responsibility and Authority**

The General Manager, Pat Pollock, is Top Management for all AS9100d activities and communications. (5.3)

The GSI internal audit team has completed AS9100 and 9101 training. These individuals are representative of a cross section of various areas within the company.

The GSI Quality Manager is the Management Representative and Oasis Administrator. The Management Representative, irrespective of other responsibilities shall have responsibility and authority that includes: ensuring that processes needed for the QMS are established, implemented and maintained; reporting to top management on the performance of the QMS and any need for improvement; ensuring the promotion of awareness of customer requirements throughout the organization; and the organizational freedom and unrestricted access to top management to resolve quality management issues.

Training and skill requirements/responsibilities for each position within Genesis are shared and thoroughly discussed during the interview process, where perspective employees must demonstrate adequate qualification for the position. (7.2) (8.5.1) Any additional training that occurs during employment with Genesis Systems IPG Photonics Company is reviewed and then documented in individual employee files within the Human Resources Department and the LearnUpon LMS.

Each member of the Genesis team has the authority to do what is required to fulfill their responsibility of delivering solutions to the customer that will meet or exceed their expectations. Based on the logical skills expectation that is established for each role at their time of hire; employees within the Production and Design Processes are authorized to work out of sequence (4.4), validate changes, test equipment, and make decisions to ensure the quality and safety of our products during each step of product realization. Where changes impact multiple areas and/or will be referenced in future work the ECR ECO Sub Process has been established and shall be followed. (8.5.1)

Based on the logical skills expectation that is established for each role at their time of hire; employees within the Purchasing Process are authorized to work out of sequence, consult members of the Production and Design processes as necessary, and make decisions to ensure the quality, on-time delivery, cost effectiveness for all purchases required during product realization. Employees within the Purchasing process are expected to abide by the established Spending Policy. (8.5.1)

The Genesis Systems, IPG Photonics Company Quality Audit will follow each system through the Production Process to validate regulatory and quality requirements. This work transfer document is required for approval to ship. (8.5.1)

2.1 Quality Management System Procedures

Control of Documented Information

Corrective Action

Internal Audit Control

Control of Non-Conforming Product

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2.2 Monitoring and Measuring Guideline

The Manufacturing Manager is responsible for the calibration of required tools and equipment arrangements and/or tracking at each facility. Physical verification of applicable calibrations will be completed as stated within the Monitoring and Measurement Guideline. Final calibration documents will be recorded at completion of the verification and the Genesis Calibration Log will be updated accordingly. Any tool or piece of equipment without an applicable calibration sticker will be considered for reference only and will not be used to validate customer equipment. (7.1.5.2)

3.0 **Process Engineering**

Process Engineering Process

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3.1 Design

Design Process

(Ctrl Click to link to connect)

3.2 Purchasing

Purchasing Process

(Ctrl Click to link to connect)

Materials are inspected for fitness for use at the point of use. Further, Genesis requires supplier inspection for machined and fabricated items and visual inspection upon receipt.

3.3 Production

Production Process

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Our processes are verified at intervals throughout the cycle depending on the complexity of the project. The main intervals are considered build complete, engineering complete, and ready to ship.

3.4 Support

Support Process

(Ctrl Click to link to connect)

4.0 Definitions

OE – Objective Evidence

Proof that the process requirement has been completed in the form of a record.

CB – Registrar

Certification Body or Company that will audit Genesis and hold certification for AS9100/ISO 9001.

Relevant and Interested Parties

Relevant and interested parties include, but are not limited to our Customers (Contract, Specifications, Requirements), Suppliers, Employees, Share Holders (ROI), and Industry Regulatory Bodies (Legislative, State, Industry).

Reference Appendix A attachment for a more detailed breakdown of Genesis Systems IPG Photonics Company QMS Section Handling.