



2025

SUPPLIER QUALITY REQUIREMENTS

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Foreword

Hyliion Quality Focus

Hyliion Inc. ("Hyliion") expects to deliver premium products to its customers with industry leading manufacturing quality and product reliability. In addition, Hyliion's products operate in regulated and safety critical industries, demanding the utmost from the [KARNO] system and every component.

This quality focus will be accomplished by:

- Exceeding end customer expectations by delivering innovative, and high-quality products and services that contribute to the customer's success.
- Developing and maintaining a shared commitment by all Hyliion employees to continuously improve performance and achieve defect-free processes, products, and services.
- Developing highly skilled employees with industry-leading abilities building a strong supply chain by selecting dependable and skilled suppliers that: (1) produce and deliver defect free products and high-quality services nearly 100% of the time, (2) have adopted reliable and sustainable processes and (3) demonstrate commitment to collaborate with Hyliion.

Hyliion's commitment is to prevent quality issues rather than to correct them.

Core strategic elements are:

Defect Free Suppliers <ul style="list-style-type: none">- Select- Monitor- Develop	<ul style="list-style-type: none">• Quality processes based on the ISO 9001 standard• Highly skilled quality personnel• Responsiveness, technical error proofing• Continuous Improvement, Supplier Development
Defect Free Launches <ul style="list-style-type: none">- Capable Design- Capable Process	<ul style="list-style-type: none">• Cross-functional design reviews to ensure requirements are met.• Cooperate to match design and process capabilities.• Control processes to deliver quality products
Continuous Improvement	<ul style="list-style-type: none">• Regularly assess risk factors and identify methods to strengthen performance• Ensure problem solving capability, communication
Configuration Management and Control	<ul style="list-style-type: none">• Faithful and complete execution per drawings and requirements• Documentation and communication of requirement non-conformances• Control of non-conforming product to prevent quality escapes and product substitution

Suppliers are an essential part of Hyliion's success.

Hyliion relies heavily on suppliers for the thousands of parts that go into our systems. Therefore, to ensure quality, we adhere to quality management standards and aim for zero supplier defects.

Hyliion's quality goals can only be achieved if quality requirements are communicated to sub-tier suppliers throughout the supply chain. Hyliion strongly recommends each supplier apply the requirements set forth in this Supplier Quality Requirements document to their own suppliers as it relates to Hyliion's business and ensure adherence.

What is the intent of this document?

This document is intended to define Hyliion's quality related expectations and requirements for suppliers. We look forward to collaborating with you to achieve excellence together. These requirements are applicable (in addition to all other agreements – contract, technical discussions, etc. - between the supplier and Hyliion) and valid for all products and components.

Status: April 2, 2025

1. Hyliion Quality Requirements

Below is a summary of the quality related sections set forth in this document.

Supplier set up:

- 1.1. Quality Management System implemented (ISO 9001 certification preferred)
- 1.2. Supplier Self-Assessment (Hyliion Form-2002)
- 1.3. Quality Meet-and-Greet (if requested)

First component delivery:

- 1.4. First Article Inspection (FAI) Report
- 1.5. Material Certificate (if applicable)
- 1.6. Test Report (if applicable)
- 1.7. Process documentation of special processes

For Series production:

- 1.8. Certificate of Conformance (CoC) with each delivery
- 1.9. Inspection Report with each delivery
- 1.5. Material Certificate (if applicable) with each delivery
- 1.6. Test Report (if applicable) with each delivery

All documentation must be provided prior to shipment. If there are any non-conformances on a component, a final disposition must be received from Hyliion and included with the CoC prior to shipment.

Please confirm in your documentation that the factory test results are from parts made on production intent tooling and processes.

1.1. Quality Management System

Hyliion requires their suppliers to maintain a Quality Management System that is based on the requirements in the ISO 9001 standard, preferable ISO 9001 certification. If requested by Hyliion, Hyliion and the supplier will work on a supplier development plan to improve the Quality Management System on the supplier side to meet or exceed these requirements.

1.2. Supplier Assessment

Hyliion implemented a supplier qualification process that starts with the Supplier Self-assessment. This self-assessment is a questionnaire based on the ISO 9001 standard and provides Hyliion information about the maturity of the suppliers Quality Management System.

Hyliion reserves the right to schedule audits at the supplier site to confirm process and product conformity.

1.3. Quality Meet-and-Greet

For high and medium risk suppliers a meet-and-greet with the Quality Team is required. This meeting can be handled by Teams call, remote walkthrough or in-person visit. This is determined by the Hyliion Quality Team depending on the risk assessment for the supplier and component.

1.4. First Article Inspection (FAI) Reporting

A First Article Inspection (FAI) Report is required for all custom components for first delivery. If design changes occur throughout the parts life, a new FAI is required to the new release design.

FAI parts must run on production intent tooling and processes.

The FAI includes:

- A full dimensional check (all characteristics and notes on the drawing) with reporting on qty. 2 – 10, (label FAI parts)
- All characteristics must be controlled in the manufacturing process; the FAI report must include the method of control and its evidence (the list shows examples of methods and its evidence)

Method	Evidence
Statistical Process Control (SPC)	P_{pk} / C_{pk} Report (min. sample size 30 parts) <u>PO quantity <30 parts</u> : build sample size of min. 30 over next POs and establish P_{pk} / C_{pk} of 1.67 <u>PO quantity 30-150 parts</u> : min. 30 parts and establish P_{pk} / C_{pk} of 1.67 <u>PO quantity \geq 151 parts</u> : Follow sampling table (3.1) and establish P_{pk} / C_{pk} of 1.67
Go / No-go gauge	Report on Design and effectiveness
Poka Yoke	Report / Instruction with proof of effectiveness
Monitoring machine process variables via sensors	Description of monitoring process with proof of effectiveness
Tool / Equipment design	Report on Design and effectiveness
Process controls to set variables in process (e.g. current, voltage)	Description of process controls with proof of effectiveness
Visual controls	Description of visual controls with proof of effectiveness

Note for machined parts: take samples from beginning, middle and end of the run

- 100% visual inspection
- 100% inspection on marking (if applicable)
- 100% go/no-go gauge check (if applicable)
- a material certification (if applicable see 1.5)
- a report on additional test results (if applicable see 1.6)

Additional requirements on wire harnesses:

- 100% continuity check
- 100% Hi-Pot test (on HV cables)
- Sample size pull test

Any additional FAI inspections required for a specific product will be detailed in the technical review between Hyllion's and the supplier's Engineering and Quality Teams. The additional requirements will be communicated in an additional document.

FAI approval by Hyllion needed to move into series production.

1.5. Material Certificate

A Material Certificate must be provided with each delivery (if applicable per the requirements below).

A Material Certificate is required for:

- Plastics (Examples: Polycarbonate, PTFE, Formex, Delrin, injection molded, cellular silicone, Poron, etc.)
- Metals (Examples: fabricated sheet metal, aluminum, extrusions, non-standard steel mixes, etc.)
- Raw materials

Material certificates are NOT required for customized cable assemblies, special electronic components, or circuit boards.

Minimum data requirement for the material certificate:

- Identification of the raw material batch
- Source of the material batch
- Material composition and chemical testing documents from raw material manufacturer.

Note: Even if a shipment from the raw material manufacturer can be used to build multiple orders for Hyliion, the material certificates MUST be provided with each shipment.

1.6. Test Report

Test Reports are required for components/assemblies where this quality requirements document or the drawing calls out a functional test requirement. A Test Report must be provided with each delivery.

Minimum data requirement for the test report:

- PO number from Hyliion
- Part number and Revision
- Quantity assessed.
- Equipment/method used
- Test results
- Pass/Fail decision
- Date

Note: If a 100% pass/fail test is done during production, the result may be noted in the CoC comments instead of using a test report.

1.7. Process documentation of special processes

Special processes must be identified in the technical review between Hyliion's and the supplier's Engineering and Quality Teams. The process documentation and reports of the process evaluation must be provided to Hyliion during the First Article phase.

1.8. Certificate of Conformance (CoC)

A Certificate of Conformance (CoC) must be provided with each delivery.
Minimum data requirement for the CoC:

- PO number from Hyliion
- Part number and Revision
- Quantity
- Country of origin
- Date
- Reference to Material Certificate; typically, batch number (if applicable according to 1.5)
- Non-conformance disposition from Hyliion (as required)

Note: If a 100% pass/fail test is done during production, the result may be noted in the CoC comments instead of using a test report.

1.9. Inspection Report

An Inspection Report is required for all custom components for series production deliveries.
It includes:

- Dimensional checks for all characteristics that are controlled by SPC
Sample size as below.

Production Qty.	≤10 parts	11-29 parts	≥ 30 parts
Sample size	100%	50%	Follow sampling table (3.1)
Statistical requirement?	Maintain C_{pk} 1.33 on characteristics	Maintain C_{pk} 1.33 on characteristics	Maintain C_{pk} 1.33 on characteristics
Documentation	Inspection report Rolling statistical report for characteristics (C_p/C_{pk}) [pull data from previous shipments to have a better statistical output]	Inspection report Rolling statistical report for characteristics (C_p/C_{pk}) [pull data from previous shipments to have a better statistical output]	Inspection report Statistical report for characteristics (C_p/C_{pk})

Note for machined parts: take samples from beginning, middle and end of the run

- All characteristics that are controlled through different methods (e.g. Poka Yoke, Monitoring machine process variables via sensors, Tool / Equipment design, Visual controls) must meet the requirements and the effectiveness of the methods must be evaluated frequently
- 100% visual inspection
- 100% inspection on marking (if applicable)
- 100% go/no-go gauge check (if applicable)

Additional requirements on wire harnesses:

- 100% continuity check
- 100% Hi-Pot test (on HV cables)
- Sample size pull test

Any additional inspections required for a specific product will be detailed in the technical review between Hyliion's and the supplier's Engineering and Quality Teams. The additional requirements will then be communicated in an additional document.

2. Non-conformities

Non-conformities must be communicated prior to shipment and need deviation approval by Hyliion.

3. References

Sampling (based on AQL) with zero failure strategy

Lot size			Inspection level
2	to	5	100%
6	to	10	100%
11	to	29	50%
30	to	50	8
51	to	90	13
91	to	150	20
151	to	280	32
281	to	500	50
501	to	1,200	80
1,201	to	3,200	125
3,201	to	10,000	200
10,001	to	35,000	315
35,001	to	150,000	500
150,000	to	500,000	800
500,001	and	over	1250

[stated above]

If non-conformities are found in the sample size, the supplier is required to measure the failed characteristic 100% and report findings to Hyliion as non-conformities (see Section 2.).