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| **Inventory Control** | | | |
| **Document Number:** | SRF-09-PR-001 | **Effective Date:** | DD Mmm YYYY |
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| **Document Owner:** | Phil Denny | **Department Owner:** | SRF Operations |

# Purpose

This procedure describes the requirements for inventory control for production parts used by SRF Operations. From an operational and quality assurance standpoint, there are many benefits to a well- established and highly-organized inventory system. The SRF inventory system enables effective and efficient control of component flow. These controls assure that the receipt, storage, and usage of components is documented and that traceability is maintained.

This procedure supports the Quality Management System as described in SRF-01-ML-001 Quality Manual.

# Scope

This procedure applies to the controlled inventory of project related components, whether made using the Lab’s procurement requisition process, Web-Stock purchase, E-Commerce, or by other means.

This procedure does not apply to precious metals such as gold, silver, niobium, platinum, palladium, etc. and their associated alloys that are controlled by the JLab Policy 302.08 Control of Precious Metals.

# Terms and Definitions

The following terms have specific meanings within this procedure.

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| **Term** | **Definition** |
| **Pansophy** | Custom web-based system that integrates several commercial software packages (i.e. ColdFusion, Oracle, etc…) for user applications such as  inventory control, shop floor travelers, and data analysis. |
| **PRIMeS** | Production Inventory Management System to keep track of components used for cavity and cryomodule production projects. |
| **Travelers** | Structured format for documenting fabrication process steps, data entry, file uploads, and links to reference documents. |
| **Inventory** | As referenced in this document. Includes individual components, parts, and sub-assemblies that are controlled within SRF for project use. Inventory controlled components and parts are used in cryomodule and cavity assemblies. |
| **NCR** | Non-conforming report (NCR) is in reference to non-conforming parts that have been tagged for special disposition. |

# Roles and Responsibilities

The following roles have responsibilities described in this document.

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| **Role** | **Responsibility** |
| Inventory Control Coordinator (ICC) | Receives, inspects, electronically logs, stores, and issues parts to production for assembly. |
| Subcontracting Officer Technical  Representative (SOTR) | Provides anticipated shipping schedule to ICC, ensures  vendors provide all required |

# Procedure

The SRF Inventory Control System consist of personnel, database software, and storage locations to secure and account for project parts and components.

Receiving

Generally, parts and components purchased or subcontracted by the project are delivered to the Shipping and Receiving department and then forwarded to SRF Inventory Control. The Inventory Control Coordinator (ICC) will inspect the shipment and formally receive it into the Inventory Control System by recording all pertinent information into the PRIMeS database.

Alternatively, parts and components can be received from non-subcontracted sources. These may be reworked parts, parts from disassembly, in-house fabricated, or parts supplied from a partner lab.

The ICC will store the parts in the inventory area or satellite location until the item is requested. The request is usually an “issue” to production or an inventory “move” to a Work Center such as Inspection.

Typically, after inspection of a part, it is returned to inventory to await being issued to production, rejected, or return to vendor. Alternatively, the part may be moved to another Work Center or directly issued to Production.

Inventory Storage Locations

Inventory is typically stored in three areas. The primary storage location is the caged area in the 2nd floor North Annex of the Test Lab (Bldg 58). Access to this area is controlled via JLab Access Control. This area primarily stores inventory items small enough to be shelved.

Large inventory items (i.e. vacuum vessels, space frames, etc..) may be physically stored in the Test Lab High Bay or offsite satellite storage location. Typically, larger inventory items need a crane, forklift, or other material handling equipment to be moved. However, they are still controlled within the inventory PRIMeS database.

Finally, satellite inventory locations may be setup within the test lab for moderately sized inventory items (i.e. cavities), parts that need special protection (i.e. cleanroom), or parts awaiting inspection.

Travelers & PRIMeS

PRIMeS and the Traveler System are databases and interfaces under the Pansophy system. PRIMeS and Travelers work together to maintain part status, quantity, location, and traceability. Inventory control uses the PRIMeS database for current and historical part information. When the part is issued to Production, the Traveler system is used to provide traceability.

Traceability

PRIMeS maintains traceability from incoming receiving until the inventory items are issued to Production. Serial numbers are transferred from PRIMeS into the Traveler System.

Serialization is described in SRF-09-PR-001 Serialization. It is typically done either by the vendor as a contract requirement or by SRF OPs staff upon receiving into inventory.

When parts are issued from Inventory to Production, traceability is maintained by the use of the Traveler System at the various Work Centers.

SRF OPs establishes and maintains the level of traceability requirements for components, sub- assemblies, or finished products. The requirements can come from the customer, specific project expectations, and/or by internal needs. The requirements for each project are described in the respective Project Execution Plan.

For CEBAF projects, it is common to disassemble, refurbish, and reuse parts from existing cryomodules. Traceability of disassembled and reworked cryomodules parts, including radiation- controlled inventory items, will be traced via the Traveler System at the discretion of the project. Disassembled parts which are sent back to Inventory Control will be tracked via PRIMeS until they are issued back to Production.

Records

The following records are created as an output of this procedure.

* PRIMeS inventory data

# Process Flow

Subcontracted parts arrive at Inventory Control

ICC performs receiving inspection for quantity, documentation, condition, etc…

ICC issues NCRs and rejects unsuitable parts

Non-subcontracted parts sent to Inventory Control (i.e. reworked, disassembled, or in- house fabricated parts)

ICC enters part data into PRIMeS

QC Inspection

Technician inspects or tests part

YES

Inspection or test required

Technician issues NCRs and rejects unsuitable parts

NO

ICC stores parts and/or updates PRIMeS

ICC issues suitable parts to production

# References

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| **Document No.** | **Title** |
| SRF-01-ML-001 | SRF Quality Manual |
| [SRF-09-PR-002](https://jlabdoc.jlab.org/docushare/dsweb/View/Collection-57480) | Serialization Procedure |
| [SRF-09-PR-003](https://jlabdoc.jlab.org/docushare/dsweb/View/Collection-57481) | Identification and Traceability Procedure |

# Release and Revision History

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| **Rev #** | **Major Changes** | **Revision Date:** |
| 1 | Initial version (Edited from old procedure PR-005 Rev C) | 15 Jul 2021 |
| 2 | Clarified move and issue (sec 5.1), Referenced PEP (sec 5.4), Simplified training (sec 5.5), fixed flow chart (sec 6) | 17 Feb 2023 |
| 3 | Updated Template (SRF-07-FM-002 QMS Process Procedure Template, R3) (VDB) | 05 Apr 2025 |
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# Approvals

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| **Approved by:** | **Name:** |
| Document Owner | Phil Denny |
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