

# College Point Acceptance Test Procedure Primer

*for the New York Times College Point Facility*

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# 1. General Information

## 1.1 Overview

### 1.1.1 Purpose

The purpose of the New York Times Test Program is to provide a complete College Point testing approach that will comply with the appropriate contract requirements. The College Point Test Program does not preclude requirements for equipment quality control or quality inspections at both the manufacturer site and at the College Point facility.

### 1.1.2 Objective

The object of the College Point Test Program is to demonstrate that the functional and operations capabilities of the various systems work properly within the constraints of the system performance parameters resulting in acceptance by the New York Times.

The New York Times Test Program provides a structured approach in the form of test phases that checkout discrete system components at the lowest level then moves to testing of major system interfaces at the highest levels. This hierarchy of test phases will ensure that the College Point computer systems, related system and application software, emulation packages, manufacturing equipment subsystems and communication equipment all interface properly to provide a total system that meets the New York Times functional and operational objectives.

### 1.1.3 Test Program Document

The Test Program document into which this document will be incorporated is primarily comprised of individual Test Plans categorized by test phases for specific College Point components, subsystems and systems depending upon the test phase.

For the Manufacturing / Development Facility Testing phase, vendors will submit summaries of the Quality Control Reports. This will be followed by Test Plans for the Subsystem Onsite Functional, Subsystem Onsite Throughput, Subsystem Onsite Reliability, and Integrated Performance test phases.

The Test Program document can therefore be viewed as a binder that expands in the form of inspection of Quality Control Summary Reports for the Manufacturing / Development phase and Test Plans for the other phases as testing progresses through the test phase hierarchy.

### 1.1.4 Organization Of This Primer

This primer is intended to provide a reference to Volume II testing requirements and a brief introduction into the administration of those requirements. Section 2 entitled "Testing and Acceptance" reiterates verbatim the contract Volume II Section 8 testing requirements. Section 3, provides an introductory insight into the process by which individual tests will be identified, created, approved, scheduled, and performed.

## 2. Testing And Acceptance

### 2.1 Introduction

This section describes The New York Times' philosophy regarding the minimum level of system testing required to assure system functionality and reliability. This section is a high-level overview, as the detailed requirements for each level of testing shall be defined, planned, scheduled and finalized in a formal Acceptance Test Procedure (ATP) document to be developed by The New York Times.

The testing described herein shall not be construed as contractual acceptance of the equipment or subsystems. Rather, the purpose of this testing is to clarify the readiness of each subsystem and the overall integrated system functionality. The testing methods outlined in this section are intended to identify the philosophical approach and minimum testing levels expected to qualify each subsystem's readiness. It shall act as a guide for SUPPLIERS to demonstrate the performance of their subsystems.

### 2.2 General Supplier Requirements

In general, the SUPPLIER shall review the design, and test each subsystem in a stand-alone mode and again where applicable, in an integrated mode as part of the entire production environment. The subsystem testing shall consist of the following stages as applicable:

- 1) Subsystem design review(s)
- 2) SUPPLIER's manufacturing/development facility testing
- 3) Subsystem onsite component testing (Static and Dynamic)
- 4) Subsystem onsite functional testing
- 5) Subsystem onsite throughput testing
- 6) Subsystem onsite reliability testing
- 7) Integrated system performance testing

Each of these stages is described in more detail in this section. The following paragraphs shall apply for each of the identified stages.

The SUPPLIER shall write and provide suggested test documentation appropriate to the supplied subsystem sixty(60) days prior to the scheduled subsystem test stage. The New York Times shall review the provided test documentation and reserves the right to modify or add additional tests deemed necessary to demonstrate the specified functionality, throughput, and reliability.

The SUPPLIER shall supply all personnel and any support equipment required to conduct the specified tests and will maintain written records of tests. The New York Times shall be provided two(2) weeks notice of readiness for each stage of testing to schedule the appropriate representation to witness the testing.

The SUPPLIER shall resolve all punchlisted items with the approval of The New York Times prior to proceeding with the next stage of testing. Note that any changes in design of either equipment, control, or software may at the request of The New York Times require repeating one or more stages of testing. Therefore, strict configuration control of all control and/or software modules shall be adhered to during all levels of testing.

## 2.3 Subsystem Design Review(s)

The New York Times reserves the right to review the design of any or all mechanical equipment components and/or control/software of a subsystem prior to the manufacture or development of each component. The intent of this stage is to assure the proposed design meets the specified requirements.

### 2.3.1 Scope

The SUPPLIER shall provide design documentation and schedule design reviews at appropriate intervals to confirm for The New York Times that the subsystem design will meet the specified requirements. The review will at least cover the following elements:

- 1) Compliance to Specifications
- 2) The use of common components/modules.
- 3) Method of meeting the defined functionality
- 4) Clearance/Interference
- 5) Ease of maintainability
- 6) Safety/Human factors

### 2.3.2 Test Acceptance Standards

All reviews shall be documented by the SUPPLIER and conducted with The New York Times. The intent of the review is to maximize the probability that the proposed subsystem will meet the specified requirements when installed on the College Point site.

**The New York Times approval of a design at this stage shall in no way be construed as acceptance of the subsystem, nor modification of any specifications or requirements under the contract.**

## 2.4 Supplier Manufacturing/Development Facility Testing

The following paragraphs outline the minimum SUPPLIER manufacturing or development facility testing requirements.

### 2.4.1 Supplier Facility Equipment Inspections

The New York Times reserves the right to inspect any or all mechanical equipment components of a subsystem prior to the shipment of each component from the SUPPLIER/ or Subcontractor facilities to The New York Times College Point Site. Actual shipment of mechanical components shall not occur if The New York Times disapproves any element of the inspection.

**This inspection may include a formal test of the control/software and equipment performance characteristics.**

#### 2.4.1.1 Scope

The scope of these inspections may include any and all mechanical components which the SUPPLIER is providing. Site inspections will be of particular importance for those components unique to this project which can not be inspected elsewhere in an actual production environment.

The intent of this requirement is to determine the “fit and form” of the provided subsystem components (particularly new or significantly enhanced elements) to meet the specified performance requirements prior to delivery and installation on the College Point site. This requirement shall in no way be construed as supplanting the need for onsite component or integrated testing.

#### 2.4.1.2 Test Acceptance Standards

All inspection results shall be documented by the SUPPLIER. The inspection shall consist of at least the following:

- 1) Compliance to Specifications (may include performance testing)
- 2) General workmanship
- 3) Paint finish
- 4) Bolt tightness or weld integrity (as applicable)
- 5) Clearance/Interference
- 6) Ease of maintainability
- 7) Vibration levels
- 8) Sound levels
- 9) Safety/Human factors

## **2.4.2 Supplier Facility Performance Testing**

For the equipment components that The New York Times exercises its right to test the performance characteristics prior to shipment to the College Point site, at a minimum the following testing will be performed to assure the functional capabilities of the equipment.

### **2.4.2.1 Scope**

The scope of this testing may include any and all mechanical components which the SUPPLIER is providing. Again, performance testing will be of particular importance for those components unique to this project which can not be observed in an actual production environment.

All testing shall performed with real product in a simulated production environment (process air, power, water, etc. and feed and take away rates).

The intent of this requirement is to confirm the functional and where appropriate the throughput capabilities of the provided subsystem components prior to their delivery and installation on the College Point site. This requirement shall in no way be construed as supplanting the need for onsite component or integrated testing.

### **2.4.2.2 Test Acceptance Standards**

All testing results shall be documented by the SUPPLIER. The testing shall consist of at least the following:

- 1) Compliance to Specifications
- 2) Functionally perform all required activities
- 3) Meet or exceed throughput rates



### 2.4.3 Supplier Facility Control/Software Testing

For the equipment components and control/software that The New York Times exercises its right to test prior to installation on the College Point site, at a minimum the following testing will be performed to assure the functional capabilities of the control/software.

#### 2.4.3.1 Scope

The SUPPLIER Facility Control/Software Testing shall confirm all The New York Times control hardware and control/software elements that comprise the subsystem control platform. These tests may not need to include a formal test of mechanical hardware as described previously.

Where appropriate, or as directed by The New York Times, the test will use hardware emulators to simulate the actual operation of the subsystem equipment. Any emulators employed for this testing shall become a deliverable under this contract and be provided to The New York Times with the shipment of mechanical components and prior to the start of the Integrated System testing at The New York Times College Point Site.

The control hardware and control/software configuration shall be representative of the approved The New York Times control architecture resulting from the Detail Design document.

All control / software testing shall performed in a simulated production environment (network interfaces, data transfers, user interaction, expected fault condition, etc.). Functional tests shall include as appropriate, but not be limited to the following:

- 1) Successful startup and shutdown of the control platform including power on, off, and fail over.
- 2) Actual or emulated equipment control.
- 3) All on-line screen initiated User Functions.
- 4) All reporting capabilities inherent to the subsystem.
- 5) Database backup and recovery capabilities.
- 6) Archival of historic data.
- 7) Retrieval of archived data.
- 8) Radio Frequency capability to remote devices.
- 9) Catastrophic error recovery of the subsystem.
  - Power outages.
  - Complete subsystems failure.
  - Database failure while processing User transactions.
  - Control hardware failure.
- 10) Performance of Security Administration functions.
- 11) Statistical reporting capability.
- 12) Subsystem performance characteristics at production volumes.

The intent of this requirement is to confirm the functional and where appropriate the throughput capabilities of the provided subsystem control/software prior to delivery and installation on the College Point site. This requirement shall in no way be construed as supplanting the need for onsite component and integrated testing.

#### 2.4.3.2 Test Acceptance Standards

All tests shall be documented by the SUPPLIER and witnessed by The New York Times. The tests shall be graded on a pass/fail basis where one failure of any of the above test elements **may** invalidate the entire test, and require retesting until it is satisfactorily passed.

## 2.5 Subsystem Onsite Component Testing

During installation, the SUPPLIER shall perform periodic Static and Dynamic inspections to ensure that equipment is installed according to specifications. These Static and Dynamic inspections will take place on an on-going basis as the major system equipment components are completed during implementation. Any discrepancies related to the quality of the components or workmanship shall be identified during these inspections. SUPPLIER will coordinate the resolution of any/all such discrepancies that originated from SUPPLIER provided equipment or services.

### 2.5.1 Scope

Such inspections shall be conducted as equipment is installed, or equipment may be specifically started up for inspection when appropriate and practical. They shall be scheduled to permit The New York Times to formally witness. The SUPPLIER shall include Static and Dynamic inspection criteria and schedules in the appropriate Acceptance Test Procedure document submitted for The New York Times approval.

The Static component inspection would typically include observation of the following items for each sub-system component:

- 1) General workmanship
- 2) Compliance to Specifications
- 3) Housekeeping and cleanliness
- 4) Location with respect to building
- 5) Paint finish
- 6) Bolt tightness or weld integrity (as applicable)
- 7) Interface with other equipment
- 8) Clearance/Interference
- 9) Ease of maintainability, including complete component exchange.
- 10) Safety/Human factors

The Dynamic component inspection would typically include demonstration of the following items for each subsystem component:

- 1) Emergency stops, all safety interlocks and all other safety devices for all equipment.
- 2) Manual equipment manipulation using the local control.
- 3) Equipment operation at specified sound and vibration levels.
- 4) Equipment operation at maximum rated load capabilities.
- 5) Equipment operation at maximum rated cycle speeds.
- 6) Positioning accuracy for equipment.

### 2.5.2 Test Acceptance Standards

All tests shall be documented by the SUPPLIER, in compliance with The New York Times approved Acceptance Test Procedure document and observed by The New York Times. All tests shall be graded on a pass/fail basis, where one failure **may** invalidate the entire test. In addition, any modification made to the subsystem to resolve the punchlist may require the SUPPLIER retest and thoroughly redocument for The New York Times' approval.

## 2.6 Subsystem Onsite Functional Testing

After the physical inspections have been completed, tests will be conducted which include the major functions of the individual system components. The purpose of the Subsystem Onsite Functional Testing is to demonstrate that the subsystem meets the specified functional requirements and is ready for integration into the full production system.

### 2.6.1 Scope

The SUPPLIER shall demonstrate the subsystem to be installed and operating properly. Safety devices, maintenance controls, and operator interfaces will be demonstrated to be operating as specified while the subsystem meets all of its designed functions during this test.

Prior to the beginning of this stage and during all subsequent testing, the SUPPLIER shall have on site the subsystem recommended spare parts to assure the replacement of any components within one day of diagnosed failure, thus minimizing any potential for delays in testing.

The scope of this test shall include, but not be limited to the following:

- 1) The subsystem's maintenance mode controls will be tested to confirm that the controls allow a maintenance technician to diagnose, repair, and confirm proper equipment operation.
- 2) All subsystem production related activities will be performed to demonstrate full functionality without damage to real product.
- 3) The New York Times will provide realistic data for all database requirements associated with testing of the subsystem information flow.
- 4) Successful startup and shutdown of the control platform including power on, off, and fail over.
- 5) All on-line screen initiated User Functions.
- 6) All reporting capabilities inherent to the subsystem.
- 7) Database backup and recovery capabilities.
- 8) Archival of historic data.
- 9) Retrieval of archived data.
- 10) Radio Frequency capability to remote devices.
- 11) Catastrophic error recovery of the subsystem.
  - Power outages.
  - Complete subsystems failure.
  - Database failure while processing User transactions.
  - Control hardware failure.
- 12) Performance of Security Administration functions.
- 13) Statistical reporting capability.

### 2.6.2 Test Acceptance Standards

All testing results shall be documented by the SUPPLIER and witnessed by The New York Times. Since the intent of this stage of testing is to demonstrate each subsystem's readiness for integration into the full production system, the tests shall be graded on a pass/fail basis and any failure **will** require retesting until success is achieved prior to the Integrated System Performance Testing.

## 2.7 Subsystem Onsite Throughput Testing

The purpose this stage of testing is to verify the throughput capability of the subsystem control and equipment. The SUPPLIER will demonstrate that the provided subsystem in and of itself is capable of supporting the throughput requirement. The intent is to demonstrate that the subsystem is ready for integration into the full production system.

### 2.7.1 Scope

The SUPPLIER may perform this test with the subsystem control in a stand alone mode of operation. The New York Times host system software need not be used but, may be employed if desirable and available. A SUPPLIER developed host software driver may be used to emulate transactions between the subsystem and the host system.

The throughput will be based upon the total observed flow of real product achieved over a consecutive five (5) hour period. The SUPPLIER shall be responsible for feeding the subsystem with real product and handling the subsystem output of processed product at rates which exceed the capabilities of the subsystem.

### 2.7.2 Test Acceptance Standards

All tests shall be documented by the SUPPLIER and witnessed by The New York Times. The observed throughput shall at least meet the subsystem rate determined by The New York Times full production system simulation model without damage to the product. The simulation model will be based on the SUPPLIERS provided subsystems' performance characteristics which meet the design throughput.

Since the intent of this stage of testing is to demonstrate each subsystem's readiness for integration into the full production system, the tests shall be graded on a pass/fail basis and any failure **will** require retesting until success is achieved prior to the Integrated System Performance Testing.

## 2.8 Subsystem Onsite Reliability Testing

The purpose of this stage of testing is to verify the reliability of the subsystem control and equipment. The SUPPLIER will demonstrate that the provided subsystem is of sound design and reliable components to assure that production performance requirements will be met. The intent of this stage is to demonstrate that the subsystem is ready for integration into the full production system.

### 2.8.1 Scope

The SUPPLIER may perform this test with the subsystem control in a stand alone mode of operation. The New York Times host system software need not be used but, may be employed if desirable and available. A SUPPLIER developed host software driver may be used to emulate transactions between the subsystem and the host system.

The subsystem reliability test will run for a period of twenty (20) consecutive hours of real product flow. The SUPPLIER shall be responsible for feeding the subsystem with real product and handling the subsystem output of processed product. The SUPPLIER shall also make all equipment repairs during the test period.

### 2.8.2 Test Acceptance Standards

All tests shall be documented by the SUPPLIER and witnessed by The New York Times. The product flow rate during the reliability testing shall at least meet the subsystem rate and durations determined by The New York Times full production system simulation model. The provided subsystem design shall permit a minimum level of failure and repair, or replacement without impairing product flow. The following is intended as a guide which will be more completely defined in the Acceptance Test Procedure document:

- 1) A more stringent subsystem up time will be required of the last five (5) consecutive hour period than of the preceding fifteen (15) hours of the test.
- 2) Minor failures of the subsystem shall be resolved by repair or replacement of components without significantly impairing product flow.
- 3) All subsystem failures shall be capable of being repaired within a four (4) hour period.

Since the intent of this stage of testing is to demonstrate each subsystem's readiness for integration into the full production system, the tests shall be graded on a pass/fail basis and any failure **will** require retesting until success is achieved prior to the Integrated System Performance Testing.

## 2.9 Integrated System Performance Testing

The intent of The New York Times is to obtain a fully integrated production system capable of meeting the specified requirements. The system is comprised of multiple subsystems provided by various SUPPLIERS and each is dependent upon the others for overall system performance. While these Equipment Acceptance and Performance Requirements are written to assure to the greatest extent possible that each subsystem fully meets the specified requirements, until the integrated system demonstrates its capabilities, the individual subsystems may not be accepted.

During the development of the Acceptance Test Procedure document, every attempt will be made to group subsystems together into independent systems of the full production system. Thus, the Integrated System Performance Testing will become less dependent upon all of the various subsystems and directly related to the required interdependent functionality.

### 2.9.1 Scope

The Integrated System Performance Testing shall at a minimum run for a full week of real or simulated production.

- 1) All training and education shall be completed, prior to the start of the test, including but not limited to: The New York Times operators, maintenance technicians, management, and other support personnel.
- 2) The SUPPLIER shall have delivered to The New York Times, and obtained The New York Times approval on all contractual deliverable documentation no less than two (2) weeks before the start of the test.
- 3) The week will begin with the production of the Monday product on Sunday night and end the following Sunday morning with production of the Sunday product.
- 4) The test shall be conducted by The New York Times personnel working in the normal production environment with the assistance of SUPPLIER support personnel. These operators shall perform all user functions, simulating full production.
- 5) The assignment of The New York Times operators to workstations and the duration of these operator assignments shall be made at the discretion of The New York Times management.
- 6) The SUPPLIER support personnel shall include maintenance, electrical, and computer hardware and software technicians. All SUPPLIER support personnel shall be on-site during the tests.
- 7) The SUPPLIER personnel support is defined as assisting The New York Times operations and maintenance personnel in conducting system operation, maintenance, and troubleshooting. SUPPLIER support personnel is not intended to replace The New York Times operations and maintenance personnel.
- 8) The SUPPLIER shall conduct at least daily a review of the system alarm logs with The New York Times. The cause of all alarms will be diagnosed and documented in at least a weekly report.
- 9) An action plan will be prepared for items that have not been corrected to identify any throughput or reliability problems that remain.

### 2.9.2 Test Acceptance Standards

The test shall be documented by the SUPPLIER and witnessed by The New York Times. The product flow rate during the testing shall vary to match the production schedule for the week as determined by The New York Times. The following is intended as a guide which will be more completely defined in the Acceptance Test Procedure document:

- 1) The various subsystem functional requirements shall apply.
- 2) The various subsystem throughput requirements shall apply.
- 3) The various subsystem reliability requirements shall apply.

Since the intent of this stage of testing is to demonstrate the full production system performance, the test shall be graded on a pass/fail basis and any failure **will** require retesting until success is achieved.

## **2.10 Summary**

The New York Times intends through the described Equipment Acceptance and Performance Requirements to assure the successful installation of an integrated production system at its proposed College Point Facility. With this overview, the SUPPLIER should be better prepared to assist in meeting The New York Times goal.

### 3. Testing Program Details

This section describes details regarding how the overall College Point Testing Program shall be administered. It describes the identification and creations of test plans followed by information regarding the plans approval, scheduling, and final execution at the College Point facility.

#### 3.1 Identifying The Tests To Be Conducted

The New York Times shall initially identify the individual tests to be conducted for the overall Testing Program. For each test identified, the New York Times shall specify the following attributes:

- 1) the test name;
- 2) the test purpose;
- 3) the testing phase in which the test has been categorized;
- 4) a unique test number assigned to the test for tracking purposes;
- 5) an initial estimate of the time required to execute the test;
- 6) the vendor functional or NYT Specification reference authority for the test;
- 7) the vendor and subsystem responsible for completing and conducting the test.

The New York Times shall keep a central database of the above information as part of our administration of the overall testing program. This data shall also be used to generate test plan templates from which the individual test plans will be generated.

#### 3.2 Receiving The Test Plan Templates

The Test Plan templates shall be distributed to all vendors in April 1996 via Federal Express. Among the items in this package shall be a single IBM PC formatted floppy containing the test plan templates in Microsoft Word 6.x format. Packages should arrive to all vendors no later than April 15<sup>th</sup>, 1995. For those vendors which have not received their packages by this time, please contact the New York Times using the For More Information section of this document.

#### 3.3 Requesting Changes To The List Of Tests Required

Vendors shall review the list of tests required and are encouraged to suggest the addition, combination, or deletion of tests to insure the overall thoroughness of the testing effort by the most optimal means. Instructions for submitting your requests for the modification of the lists of tests follows within this section.

##### 3.3.1 Adding Tests Not Identified

Vendors are encouraged to identify additional tests to be conducted to insure the thoroughness of the overall testing program. For each additional test identified, the vendor shall specify the information (excluding the unique test number) delineated in Section 3.1 of this document along with a brief description of why the test should be performed. This information shall be forwarded to the New York Times for review using the For More Information Section of this document. If the New York Times concurs with the inclusion of the test, the New York Times shall enter the information into the overall testing program database and will generate Test Plan Templates from the information provided.

The New York Times will inform the Vendor of the acceptance or rejection of the request within 5 business days following the receipt of the request. Also within this time-frame for those tests which are accepted, Test Plan Templates for additional tests shall be distributed to the vendor by the New York Times along with the acceptance notification.



### 3.3.2 Adding Tests Due To Scheduling

As originally envisioned, the procedures developed to verify functionality shall be executed upon each instance of the associated production equipment. As example, inserter testing shall be conducted on each inserter - thus the same procedure will be executed a minimum of eight times.

The test as initially created will assume that the formal testing of these machines will be performed within a contiguous time period. If however, the scheduling of the test needs to be unique by instance of machine, separate tests should be defined (which may use the same test procedures) such that unique scheduling data may be maintained for each. Refer to Section 6 for more information on submitting this request.

### 3.3.3 Combining Tests Into A Single Test

Vendors are discouraged from requesting that several identified test be combined into one test with a larger scope. The New York Times desires to keep the scope of each test as close as possible to a one-for-one correspondence to the definition of a functional requirement within the Functional Specifications developed during the design phase of the project.

However, it is noted that efficiencies in testing can be made by the reduction of initialization and setup procedures if the operation of equipment within a defined time period would support a broad range of tests. As such, two examples follow of test procedure designs which are encouraged which result in unique tests being essentially “combined” during execution.

#### 3.3.3.1 Combining Tests Via A Finish-Start Precedence

Vendors are encouraged to develop test procedures in such a way that the outcome of a particular test be used (upon successful completion) as the initialization of a subsequent test if practical. This allows the continued separation of the tests as defined while preserving some efficiencies in execution.

#### 3.3.3.2 Combining Test Via A Concurrent Precedence

Vendors are also encouraged to develop test procedures in such a way that the entirety of a simple test be “contained” within the execution of a second much larger test procedure. As example, a test for the layout of a single dialog screen and its associated field verification algorithms could be performed during the input of test data for a much larger testing initialization sequence. These tests would be conducted concurrently but be retained as separate procedures.

### 3.3.4 Deleting Tests

Tests may be deleted from this program without justification at the sole discretion of the New York Times. Wherein the deletion of tests causes subsequent remaining tests to be accelerated in schedule, the vendor will be given written notice of such schedule advancements at the time the deletions are made. Any difficulties in accommodating the new schedule dates should be made described in writing to the New York Times within one week of notification receipt.

### 3.3.5 Moving Tests To A Different Test Phase

As described within the Volume II Section 8 Specifications, the test procedures have been categorized into test phases based upon an increasing level of integration from static to dynamic test executed within a component to system approach. This organizational approach best insures that significant time and energy is not wasted in the latter stages of testing finding lower level component problems.

By Specification , the satisfactory completion of tests within a test phase must be accomplished before testing may begin within a subsequent phase. The moving of a defined test between designated phases jeopardizes the most optimal and efficient means of completing the overall testing program. As such, the initial defining or subsequent redefining of the test phase for a particular test will be made solely by the New York Times.

Request for resignation of any test may be made to the New York Times no later than three weeks before the currently scheduled test commencement date. Adequate explanation along with the Test ID of the procedure in question should accompany the request.

## 3.4 Completing The Test Plan Templates

The completing of Test Plan templates requires coordination between the New York Times and each respective vendor. To insure overall program administration the New York Times has created an integrated Test Plan Development environment which aids in the creation, generation, scheduling, and execution of all tests to be conducted for the College Point facility.

As an outcome of the joint responsibility for conducting these tests, certain information concerning the test procedures themselves will be designated by the New York Times. In addition to this information, detailed procedures and vendor related preferences concerning scheduling of the tests need to be received from the vendors for each test procedure defined. The Test Plan Template header sheet is the repository for this information.

Following in this section are definitions for the New York Times and Vendor fields contained within the test procedure header along with general instructions for completing the overall test template. A sample Test Plan Template is contained within this document. The Test Plan Template shown is divided into five sections or information blocks. These blocks are as follows:

- Section 1: Title Information
- Section 2: Resource Information
- Section 3: Schedule Information
- Section 4: Acceptance Information
- Section 5: Test Procedure

### **3.4.1 The Title Information Section**

The Title Information Section contains the NYT and Vendor mailing addresses, a Test Name or title for the test, a description of the test purpose, a unique test ID or number for the test, and an indication of the test phase to which the test has been categorized. All of these fields will be predefined by the New York Times prior to the vendor receiving the test plan templates.

### **3.4.2 The Resource Information Section**

The Resource Information Section contains an itemization of the resources required in order to conduct the test. The vendor shall be responsible for completing this section of the test template. Resources shall be categorized into three categories as follows:

- Category 1: People
- Category 2: Equipment
- Category 3: Consumables

A list of standard naming conventions for these resources will be included in the next release of this document to be submitted to all vendors in January, 1996.

### **3.4.3 The Schedule Information Section**

The Schedule Information Section maintains the NYT initial estimate and vendor requested dates for the commencement and completion of the test. Initially, the New York Times will provide an estimate as to when the test potentially could be executed. These dates will be used to initially schedule all test for the facility and to create a general picture overall for the magnitude of the entire testing effort.

During the drafting of the procedure portion of the test plan template by the vendor, the vendor may request specific dates for the anticipated start and end of the test. The Vendor Requested Dates Section is where these dates (if any) are to be filled in before the completed test plan template is returned to the New York Times.

In addition to dates within this section, an initial estimate of the duration of the test will also be made by the New York Times under the heading of "Hour Est." As with the Vendor Requested Dates, each vendor is free to provide their own estimate for the test duration by entering their estimate in the "Vendor\_Hour\_Est" field.

Once all test plans are returned and the test plan template in its completed form along with the procedural portion is accepted, the test will be scheduled for commencement as described in Section 3.6. Actual dates being tracked for the test will be maintained within the overall scheduling system and will be automatically printed in the "Project Calculated Dates" whenever an accepted test plan is printed or redistributed.

### **3.4.4 The Acceptance Information Section**

The Acceptance Information Section will be used during the actual execution of the test. It will either signify the successful completion of the test or the deficiencies encountered which must be corrected before the test can be repeated. In order for the test to be completed, one official copy of the test plan must be signed by both the New York Times and Vendor representatives. This copy will be retained within the Acceptance Test Program document.

### 3.4.5 The Test Procedure Section

The Test Procedure Section contains the step-by-step procedural description of the actual test. Although the contents of this section will slightly change depending on the Test Phase, these procedures will primarily be written using the following four fields:

Field 1: Step

Field 2: Operator Action

Field 3: System Response

Field 4: Accepted

The Step Field is used primarily for a reference mark. It should start at numeral 1 and continue to be incremented by one for each step of the procedure.

The Operator Action Paragraph should contain the necessary instructions for an operator to perform for a single step within a test. For static tests associated with the Subsystem Onsite Component test phase, this paragraph will most likely contain an inspection to be carried out for a piece of equipment in accordance with the Specifications. For dynamic test associated with the Subsystem Onsite Functional test phase, this paragraph will contain one of many sequential operator instructions which when performed from the first to last step, should carry out the testing procedure for the test in total.

The System Response Paragraph should contain a description of what the systems should have done as a result of the operator action it is associated with.

The Accepted Field is primarily a check-mark holder for use during the actual test. A check may be made in this field for each successfully completed step of the procedure. Once the overall test is complete, the reviewer may refer back to the procedural portion for notes or unchecked items to recall any deficiencies encountered during the test.

### **3.5 Submitting Completed Test Plans For Approval**

Once the test plan templates have been received and completed by the vendors, they must be returned to the New York Times for approval and incorporation into the overall testing program schedule. Below are instructions for completing this submittal.

#### **3.5.1 Where To Send Completed Test Plan Files**

Completed Test Plan Templates shall be returned to the New York Times on either IBM or Macintosh formatted diskettes using the following address.

Attention: Gary D. Schlender  
Enclosed: Acceptance Test Procedures  
The New York Times  
3003 Woodbridge Avenue  
Edison, NJ 08837-3401

Alternatively, completed Test Plan Templates may be E-mailed to the New York Times. Test plan files should be compressed in either a Zip or Stuffit archive and sent as an attached file to an E-mail message to the following Internet address:

[schlenderg@aol.com](mailto:schlenderg@aol.com)

#### **3.5.2 When To Send Completed Test Plan Files**

Completed test plans should be returned to the New York Times as soon as possible but no later than 60 days prior to the scheduled Start Date.

#### **3.5.3 Verifying NYT Receipt Of Submitted Test Plan Files.**

The New York Times will send notification of receipt for all test plans received. This notification will be sent to the vendor Project Manager using either E-mail, Fax, or both acknowledging the receipt date. In addition, The New York Times will maintain a listing of all tests to be conducted for the facility and the status of each test. This list will be distributed to the vendors weekly to insure that vendors are informed as to the progress of the testing program by both the New York Times and other respective vendors.

#### **3.5.4 New York Times Review Time For Approval Of Test Procedures**

The New York Times will require a minimum of one week to review all submitted test plans. After this review period, the status of the test plan will be changed to reflect its approval or need for resubmittal. Approved test plans will be retained within the Acceptance Test Procedure document and copies will be returned to the vendor prior to the test commencement date.

#### **3.5.5 Resubmittal Of Non-Approved Test Procedures.**

Test Plans which after review by the New York Times are found to need revisions will be returned to the Vendors along with explanations of the requested changes following the one week review period. If a significant number of tests are found to be in need of modification, the New York Times may request a meeting to discuss the shortcomings and methods for improving the likelihood of approval on the test plans resubmittal.

The New York Times will again review the resubmitted test plans within one week of receipt. If this reiterative reviewing causes to the test to be under review within 60 days prior to its scheduled commencement date, the commencement date will be adjusted to the next available scheduling window outside this 60 day period.

### **3.6 Scheduling Of Approved Test Plans**

Scheduling and coordination of all vendor testing for the College Point facility will be a large undertaking and will utilize commercially available scheduling packages to help coordinate this effort. This schedule will insure tracking of all College Point Tests to be conducted regardless of vendor for the duration of the overall testing period. This overall schedule will be refined in a great amount of detail for the two week period following its progress date. This detailed schedule shall be used and distributed to all vendors to insure that the testing effort is understood by all any conflicts which may arise due to resource constraints may be eliminated in advance of the test. Both the overall and detailed schedules will be progressed daily during the actual testing window to reflect any changes which will have occurred during that days testing. Updated schedules will be distributed to all testing participants.

#### **3.6.1 Requesting Specific Schedule Dates For Test Commencement**

In order to begin to estimate and schedule the overall testing program in advance of having received the completed test procedures from the vendors, the New York Times will internally estimate the duration of each individual test and will assign to each test a tentative testing window within Section 3 of the Test Plan Template.

It is crucial that vendor have input into the scheduling of these test however, and that this feedback be gained by the New York Times at any time the when changes to this schedule need to be made because of vendor progress.

Several opportunities will exists for vendors to provide this feedback. The first opportunity will be on submittal of the completed Test Plan Template. For each test defined, the vendor may request specific dates for testing within Section 3 of the Test Header sheet. Secondly, schedule review meetings will be help regularly to insure that the schedule is maintain up-to-date based upon on all site activity. Vendor involvement with these schedule progress meetings will allow ample opportunities for vendors to request changes to the documented testing dates.

#### **3.6.2 Scheduling Considerations In Granting Vendor Requested Commencement Dates**

The New York Times will make every effort to satisfy vendor requested commencement date for individual tests. However, several consideration will be taken into account in determining the actual schedule dates. These constraints include but are not limited to the following:

- 1) The successful completion of all tests within a prior test phase;
- 2) The logical dependencies between tests within a test phase such that all preceding test have been successfully completed;
- 3) The completion of adequate training prior to the test such that testing personnel are properly instructed in the use of vendor equipment prior to the test commencement.
- 4) The availability of both vendor and NYT personnel given the many concurrent testing efforts such that adequate human resources are available to conduct the test;
- 5) The availability of upstream or downstream production equipment necessary to “source” or “sink” material in support of the scheduled test.

#### **3.6.3 Scheduling Of Test For Which No Vendor Commencement Dates Have Been Requested**

If no vendor commencement dates have been requested upon initial receipt of the completed Test Plan Templates, the NYT suggested dates will be utilized for the initial scheduling activities. During the course of the test program implementation, the vendor will again have opportunities to request modifications to the schedule dates assigned. Refer to Section 3.6.1.

### **3.6.4 Receiving Approved Schedule Dates For Test Commencement**

Approved schedule dates will be published weekly via the overall testing program schedule. This schedule will be automatically sent each week to all participating vendors. A single copy will be distributed to each vendors Project Manager.

### **3.6.5 Submitting Requests For A Changes In Scheduled Commencement Dates**

Requests for a change in a scheduled commencement date should be made in writing to the New York Times. Please indicate within the request the reason for the change, the new dates which are requested, and the test number of the test in question. This request should be sent to the New York Times per the instructions found in Section 3.5.1.

### **3.6.6 Rescheduling Of Approved Tests Due To Non-Readiness Of Vendor**

If any vendor is found to be unable to conduct a test on the scheduled commencement date, the test will be rescheduled following our normal scheduling procedures and in conjunction with the scheduling considerations outlined in Section 3.6.2. Please be advised, significant delays in the completion of the testing effort are certain to be on the critical path for any vendors overall project completion. Considerations should be made as to the impact of delays in scheduled testing with respect to other vendor dependencies and any damages which may result.

### **3.6.7 Rescheduling Of Approved Tests Due To Other Vendor Dependency**

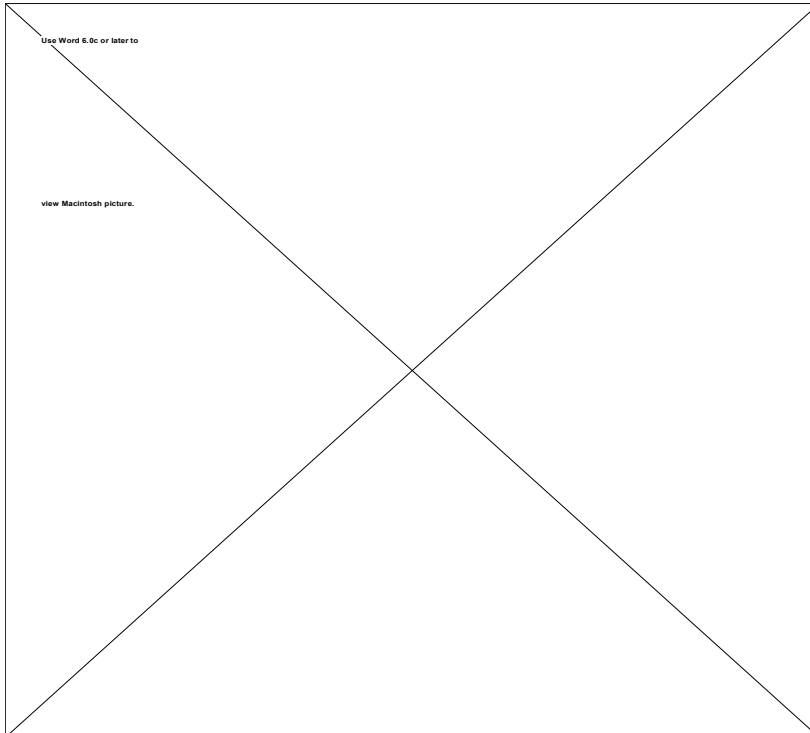
Wherein a test may not be conducted due to the unavailability of other dependent resources outside the control of the vendor in question, the test will be rescheduled and a record of the change will be maintained indicating the reason for the change. Slips in the overall program testing schedule due to other vendor dependencies will be accredited to the vendor systems which are causing the delay.

This list of schedule changes will be published along with the progressed overall schedule on a weekly basis. Contested reasons for schedule delays should be made in writing to the New York Times within one week of the published progress schedule.

## 4. Test Plan Development Environment

The following diagram depicts the test plan development environment currently in use by the New York Times. All vendors will be provided test plan templates partially completed from data residing in the New York Times project database. Vendors will require either a IBM or Macintosh version of Microsoft Word 6.x in order to utilize these templates.

Scheduling of all tests will be tracked using Microsoft Project 4.0. Vendors who are so equipped may elect to receive electronic updates of the overall testing schedule in lieu of receiving hard copy versions.



## 5. Systems To Be Tested

Testing will include the ability to test equipment, subsystems and systems individually and collectively to demonstrate that all interfaces work properly and provide a completely integrated and operational College Point system.

The following systems will undergo testing in accordance with these Specifications:

- 1) Newsprint Storage
- 2) Press Delivery
- 3) Ink
- 4) Press
- 5) Conveyors
- 6) Free Standing Inserts
- 7) Print Wheel Storage
- 8) Inserters
- 9) Stackers
- 10) Front End
- 11) Palletizers



## 6. For More Information

For more information regarding any aspect of the New York Times overall testing program, please contact the New York Times at the following address:

Attention: Gary D. Schlender  
Testing Program Clarifications  
The New York Times  
1 New York Times Plaza  
Flushing, NY 11354

Alternatively, questions may be E-mailed to the New York Times to the following Internet address:

[gary.schlender@nytimes.com](mailto:gary.schlender@nytimes.com)

## 7. Equipment Resource Listing

|    |                                  |           |
|----|----------------------------------|-----------|
| 1  | The New York Times               | NYT       |
| 2  | HK Systems                       | HKS       |
| 3  | FMC                              | FMC       |
| 4  | Rockwell / GOSS                  | GOSS      |
| 5  | GMA                              | GMA       |
| 6  | Quipp                            | QUIP      |
| 7  | Dynaric                          | DYN       |
| 8  | Machine Design / Carneige Mellon | MDSI      |
| 9  | Western Atlas                    | WA        |
| 11 | Excell Crane 1                   | srm1      |
| 12 | Excell Crane 2                   | srm2      |
| 13 | ASRS Storage Rack                | rack1     |
| 14 | Newsprint Conveyor1              | cnv1      |
| 15 | Stripping Station 1              | strp1     |
| 16 | Stripping Station 2              | strp2     |
| 17 | Stripping Station 3              | strp3     |
| 18 | Press Delivery Vehicle 1         | pdv1      |
| 19 | Press Delivery Vehicle 2         | pdv2      |
| 20 | Press Delivery Vehicle 3         | pdv3      |
| 21 | Press Delivery Vehicle 4         | pdv4      |
| 22 | Press Delivery Vehicle 5         | pdv5      |
| 23 | Press Delivery Vehicle 6         | pdv6      |
| 24 | Press Delivery Vehicle 7         | pdv7      |
| 25 | Press Delivery Vehicle 8         | pdv8      |
| 26 | Press Delivery Vehicle 9         | pdv9      |
| 27 | Press Delivery Vehicle 10        | pdv10     |
| 28 | Press Delivery Vehicle 11        | pdv11     |
| 29 | Press Delivery Vehicle 12        | pdv12     |
| 30 | Press Delivery Vehicle 13        | pdv13     |
| 31 | Press Delivery Vehicle 14        | pdv14     |
| 32 | Press Delivery Vehicle 15        | pdv15     |
| 33 | Press Delivery Vehicle 16        | pdv16     |
| 34 | C93 Press 40 Unit 1&2            | c93400102 |
| 35 | C93 Press 40 Unit 3&4            | c93400304 |
| 36 | C93 Press 40 Unit 5&6            | c93400506 |
| 37 | C93 Press 40 Unit 7&8            | c93400708 |
| 38 | C93 Press 40 Unit 9&10           | c93400910 |
| 39 | C93 Press 40 Unit 11&12          | c93401112 |
| 40 | C93 Press 41 Unit 1&2            | c93410102 |
| 41 | C93 Press 41 Unit 3&4            | c93410304 |
| 42 | C93 Press 41 Unit 5&6            | c93410506 |
| 43 | C93 Press 41 Unit 7&8            | c93410708 |
| 44 | C93 Press 41 Unit 9&10           | c93410910 |
| 45 | C93 Press 41 Unit 11&12          | c93411112 |
| 46 | C93 Press 42 Unit 1&2            | c93420102 |
| 47 | C93 Press 42 Unit 3&4            | c93420304 |
| 48 | C93 Press 42 Unit 5&6            | c93420506 |
| 49 | C93 Press 42 Unit 7&8            | c93420708 |
| 50 | C93 Press 42 Unit 9&10           | c93420910 |
| 51 | C93 Press 42 Unit 11&12          | c93421112 |
| 52 | C93 Press 43 Unit 1&2            | c93430102 |
| 53 | C93 Press 43 Unit 3&4            | c93430304 |
| 54 | C93 Press 43 Unit 5&6            | c93430506 |
| 55 | C93 Press 43 Unit 7&8            | c93430708 |
| 56 | C93 Press 43 Unit 9&10           | c93430910 |

|     |                         |           |
|-----|-------------------------|-----------|
| 57  | C93 Press 43 Unit 11&12 | c93431112 |
| 58  | C93 Press 44 Unit 1&2   | c93440102 |
| 59  | C93 Press 44 Unit 3&4   | c93440304 |
| 60  | C93 Press 44 Unit 5&6   | c93440506 |
| 61  | C93 Press 44 Unit 7&8   | c93440708 |
| 62  | C93 Press 44 Unit 9&10  | c93440910 |
| 63  | C93 Press 44 Unit 11&12 | c93441112 |
| 64  | Press 40                | p40       |
| 65  | Press Unit 4001         | pu4001    |
| 66  | Press Unit 4002         | pu4002    |
| 67  | Press Unit 4003         | pu4003    |
| 68  | Press Unit 4004         | pu4004    |
| 69  | Press Unit 4005         | pu4005    |
| 70  | Press Unit 4006         | pu4006    |
| 71  | Press Unit 4007         | pu4007    |
| 72  | Press Unit 4008         | pu4008    |
| 73  | Press Unit 4009         | pu4009    |
| 74  | Press Unit 4010         | pu4010    |
| 75  | Press Unit 4011         | pu4011    |
| 76  | Press Unit 4012         | pu4012    |
| 77  | Press 41                | p41       |
| 78  | Press Unit 4101         | pu4101    |
| 79  | Press Unit 4102         | pu4102    |
| 80  | Press Unit 4103         | pu4103    |
| 81  | Press Unit 4104         | pu4104    |
| 82  | Press Unit 4105         | pu4105    |
| 83  | Press Unit 4106         | pu4106    |
| 84  | Press Unit 4107         | pu4107    |
| 85  | Press Unit 4108         | pu4108    |
| 86  | Press Unit 4109         | pu4109    |
| 87  | Press Unit 4110         | pu4110    |
| 88  | Press Unit 4111         | pu4111    |
| 89  | Press Unit 4112         | pu4112    |
| 90  | Press 42                | p42       |
| 91  | Press Unit 4201         | pu4201    |
| 92  | Press Unit 4202         | pu4202    |
| 93  | Press Unit 4203         | pu4203    |
| 94  | Press Unit 4204         | pu4204    |
| 95  | Press Unit 4205         | pu4205    |
| 96  | Press Unit 4206         | pu4206    |
| 97  | Press Unit 4207         | pu4207    |
| 98  | Press Unit 4208         | pu4208    |
| 99  | Press Unit 4209         | pu4209    |
| 100 | Press Unit 4210         | pu4210    |
| 101 | Press Unit 4211         | pu4211    |
| 102 | Press Unit 4212         | pu4212    |
| 103 | Press 43                | p43       |
| 104 | Press Unit 4301         | pu4301    |
| 105 | Press Unit 4302         | pu4302    |
| 106 | Press Unit 4303         | pu4303    |
| 107 | Press Unit 4304         | pu4304    |
| 108 | Press Unit 4305         | pu4305    |
| 109 | Press Unit 4306         | pu4306    |
| 110 | Press Unit 4307         | pu4307    |
| 111 | Press Unit 4308         | pu4308    |
| 112 | Press Unit 4309         | pu4309    |
| 113 | Press Unit 4310         | pu4310    |
| 114 | Press Unit 4311         | pu4311    |

|     |   |        |
|-----|---|--------|
| 115 | Press Unit 4312                                 | pu4312 |
| 116 | Press 44  | p44    |
| 117 | Press Unit 4401                                 | pu4401 |
| 118 | Press Unit 4402                                 | pu4402 |
| 119 | Press Unit 4403                                 | pu4403 |
| 120 | Press Unit 4404                                 | pu4404 |
| 121 | Press Unit 4405                                 | pu4405 |
| 122 | Press Unit 4406                                 | pu4406 |
| 123 | Press Unit 4407                                 | pu4407 |
| 124 | Press Unit 4408                                 | pu4408 |
| 125 | Press Unit 4409                                 | pu4409 |
| 126 | Press Unit 4410                                 | pu4410 |
| 127 | Press Unit 4411                                 | pu4411 |
| 128 | Press Unit 4412                                 | pu4412 |
| 129 | Conveyor 40                                     | cnv40  |
| 130 | Conveyor 41                                     | cnv41  |
| 131 | Conveyor 42                                     | cnv42  |
| 132 | Conveyor 43                                     | cnv43  |
| 133 | Conveyor 44                                     | cnv44  |
| 134 | Conveyor Waste                                  | cnvW   |
| 135 | Wind / Unwind 11                                | dws11  |
| 136 | Buffer 1  | buf1   |
| 137 | Buffer 2  | buf2   |
| 138 | Wind / Unwind 14                                | dws14  |
| 139 | Buffer 3  | buf3   |
| 140 | Buffer 4  | buf4   |
| 141 | Print Roll Carrier 1                            | prc1   |
| 142 | Print Roll Carrier 2                            | prc2   |
| 143 | Print Roll Carrier 3                            | prc3   |
| 144 | Print Roll Carrier 4                            | prc4   |
| 145 | Print Roll Carrier 5                            | prc5   |
| 146 | Print Roll Storage                              | rack3  |
| 147 | Conveyor Buffer 1 to Inserter 1 headsheet       | h1 SIU |
| 148 | Conveyor Buffer 1 to Inserter 1 first preprint  | i1 SIU |
| 149 | Conveyor Buffer 1 to Inserter 2 headsheet       | h2 SIU |
| 150 | Conveyor Buffer 1 to Inserter 2 first preprint  | i2 SIU |
| 151 | Conveyor Buffer 2 to Inserter 3 headsheet       | h3 SIU |
| 152 | Conveyor Buffer 2 to Inserter 3 first preprint  | i3 SIU |
| 153 | Conveyor Buffer 2 to Inserter 3 second preprint | j3 SIU |
| 154 | Conveyor Buffer 2 to Inserter 4 headsheet       | h4 SIU |
| 155 | Conveyor Buffer 2 to Inserter 4 first preprint  | i4 SIU |
| 156 | Conveyor Buffer 2 to Inserter 4 second preprint | j4 SIU |
| 157 | Conveyor Buffer 3 to Inserter 5 headsheet       | h5 SIU |
| 158 | Conveyor Buffer 3 to Inserter 5 first preprint  | i5 SIU |
| 159 | Conveyor Buffer 3 to Inserter 6 headsheet       | h6 SIU |
| 160 | Conveyor Buffer 3 to Inserter 6 first preprint  | i6 SIU |
| 161 | Conveyor Buffer 3 to Inserter 6 second preprint | j6 SIU |
| 162 | Conveyor Buffer 4 to Inserter 7 headsheet       | h7 SIU |
| 163 | Conveyor Buffer 4 to Inserter 7 first preprint  | i7 SIU |
| 164 | Conveyor Buffer 4 to Inserter 7 second preprint | j7 SIU |
| 165 | Conveyor Buffer 4 to Inserter 8 headsheet       | h8 SIU |
| 166 | Conveyor Buffer 4 to Inserter 8 first preprint  | i8 SIU |
| 167 | Conveyor Buffer 4 to Inserter 8 second preprint | j8 SIU |
| 168 | Conveyor Waste from Double Wind Station 14      | nw14   |
| 169 | Inserter 1                                      | ins1   |
| 170 | Inserter 2                                      | ins2   |
| 171 | Inserter 3                                      | ins3   |
| 172 | Inserter 4                                      | ins4   |

|     |                                |       |
|-----|--------------------------------|-------|
| 173 | Insertor 5                     | ins5  |
| 174 | Insertor 6                     | ins6  |
| 175 | Insertor 7                     | ins7  |
| 176 | Insertor 8                     | ins8  |
| 177 | FSI Delivery Vehicle 1         | fdv1  |
| 178 | FSI Delivery Vehicle 2         | fdv2  |
| 179 | FSI Delivery Vehicle 3         | fdv3  |
| 180 | FSI Delivery Vehicle 4         | fdv4  |
| 181 | FSI Delivery Vehicle 5         | fdv5  |
| 182 | FSI Delivery Vehicle 6         | fdv6  |
| 183 | FSI Delivery Vehicle 7         | fdv7  |
| 184 | FSI Delivery Vehicle 8         | fdv8  |
| 185 | FSI Delivery Vehicle 9         | fdv9  |
| 186 | FSI Delivery Vehicle 10        | fdv10 |
| 187 | FSI Receiving Conveyor 1       | cnv2  |
| 188 | FSI Receiving Conveyor 2       | cnv3  |
| 189 | Pallet Collector / Dispenser 1 | pcd1  |
| 190 | Pallet Collector / Dispenser 2 | pcd2  |
| 191 | FSI Slave Pallet Conveyor 1    | cnv4  |
| 192 | FSI Slave Pallet Conveyor 2    | cnv5  |
| 193 | FSI Storage Rack               | rack2 |
| 194 | FSI Slave Pallets              | slv1  |
| 195 | Stacker 1A                     | stk1  |
| 196 | Stacker 1B                     | stk2  |
| 197 | Stacker 2A                     | stk3  |
| 198 | Stacker 2B                     | stk4  |
| 199 | Stacker 3A                     | stk5  |
| 200 | Stacker 3B                     | stk6  |
| 201 | Stacker 4A                     | stk7  |
| 202 | Stacker 4B                     | stk8  |
| 203 | Stacker 5A                     | stk9  |
| 204 | Stacker 5B                     | stk10 |
| 205 | Stacker 6A                     | stk11 |
| 206 | Stacker 6B                     | stk12 |
| 207 | Stacker 7A                     | stk13 |
| 208 | Stacker 7B                     | stk14 |
| 209 | Stacker 8A                     | stk15 |
| 210 | Stacker 8B                     | stk16 |
| 211 | Stacker 40A                    | stk17 |
| 212 | Stacker 40B                    | stk18 |
| 213 | Stacker 41A                    | stk19 |
| 214 | Stacker 41B                    | stk20 |
| 215 | Stacker 42A                    | stk21 |
| 216 | Stacker 42B                    | stk22 |
| 217 | Stacker 43A                    | stk23 |
| 218 | Stacker 43B                    | stk24 |
| 219 | Stacker 44A                    | stk25 |
| 220 | Stacker 44B                    | stk26 |
| 221 | Stacker S1                     | stk27 |
| 222 | Stacker S2                     | stk28 |
| 223 | Stacker S3                     | stk29 |
| 224 | Strapper 1A-1                  | stp1  |
| 225 | Strapper 1B-1                  | stp2  |
| 226 | Strapper 2A-1                  | stp3  |
| 227 | Strapper 2B-1                  | stp4  |
| 228 | Strapper 3A-1                  | stp5  |
| 229 | Strapper 3B-1                  | stp6  |
| 230 | Strapper 4A-1                  | stp7  |

|     |                |       |
|-----|----------------|-------|
| 231 | Strapper 4B-1  | stp8  |
| 232 | Strapper 5A-1  | stp9  |
| 233 | Strapper 5B-1  | stp10 |
| 234 | Strapper 6A-1  | stp11 |
| 235 | Strapper 6B-1  | stp12 |
| 236 | Strapper 7A-1  | stp13 |
| 237 | Strapper 7B-1  | stp14 |
| 238 | Strapper 8A-1  | stp15 |
| 239 | Strapper 8B-1  | stp16 |
| 240 | Strapper 40A-1 | stp17 |
| 241 | Strapper 40B-1 | stp18 |
| 242 | Strapper 41A-1 | stp19 |
| 243 | Strapper 41B-1 | stp20 |
| 244 | Strapper 42A-1 | stp21 |
| 245 | Strapper 42B-1 | stp22 |
| 246 | Strapper 43A-1 | stp23 |
| 247 | Strapper 43B-1 | stp24 |
| 248 | Strapper 44A-1 | stp25 |
| 249 | Strapper 44B-1 | stp26 |
| 250 | Strapper S1-1  | stp27 |
| 251 | Strapper S2-1  | stp28 |
| 252 | Strapper S3-1  | stp29 |
| 253 | Strapper 1A-2  | stp30 |
| 254 | Strapper 1B-2  | stp31 |
| 255 | Strapper 2A-2  | stp32 |
| 256 | Strapper 2B-2  | stp33 |
| 257 | Strapper 3A-2  | stp34 |
| 258 | Strapper 3B-2  | stp35 |
| 259 | Strapper 4A-2  | stp36 |
| 260 | Strapper 4B-2  | stp37 |
| 261 | Strapper 5A-2  | stp38 |
| 262 | Strapper 5B-2  | stp39 |
| 263 | Strapper 6A-2  | stp40 |
| 264 | Strapper 6B-2  | stp41 |
| 265 | Strapper 7A-2  | stp42 |
| 266 | Strapper 7B-2  | stp43 |
| 267 | Strapper 8A-2  | stp44 |
| 268 | Strapper 8B-2  | stp45 |
| 269 | Strapper 40A-2 | stp46 |
| 270 | Strapper 40B-2 | stp47 |
| 271 | Strapper 41A-2 | stp48 |
| 272 | Strapper 41B-2 | stp49 |
| 273 | Strapper 42A-2 | stp50 |
| 274 | Strapper 42B-2 | stp51 |
| 275 | Strapper 43A-2 | stp52 |
| 276 | Strapper 43B-2 | stp53 |
| 277 | Strapper 44A-2 | stp54 |
| 278 | Strapper 44B-2 | stp55 |
| 279 | Strapper S1-2  | stp56 |
| 280 | Strapper S2-2  | stp57 |
| 281 | Strapper S3-2  | stp58 |
| 282 | Wrapper 1A     | wrp1  |
| 283 | Wrapper 1B     | wrp2  |
| 284 | Wrapper 2A     | wrp3  |
| 285 | Wrapper 2B     | wrp4  |
| 286 | Wrapper 3A     | wrp5  |
| 287 | Wrapper 3B     | wrp6  |
| 288 | Wrapper 4A     | wrp7  |

|     |                    |       |
|-----|--------------------|-------|
| 289 | Wrapper 4B         | wrp8  |
| 290 | Wrapper 5A         | wrp9  |
| 291 | Wrapper 5B         | wrp10 |
| 292 | Wrapper 6A         | wrp11 |
| 293 | Wrapper 6B         | wrp12 |
| 294 | Wrapper 7A         | wrp13 |
| 295 | Wrapper 7B         | wrp14 |
| 296 | Wrapper 8A         | wrp15 |
| 297 | Wrapper 8B         | wrp16 |
| 298 | Wrapper 40A        | wrp17 |
| 299 | Wrapper 40B        | wrp18 |
| 300 | Wrapper 41A        | wrp19 |
| 301 | Wrapper 41B        | wrp20 |
| 302 | Wrapper 42A        | wrp21 |
| 303 | Wrapper 42B        | wrp22 |
| 304 | Wrapper 43A        | wrp23 |
| 305 | Wrapper 43B        | wrp24 |
| 306 | Wrapper 44A        | wrp25 |
| 307 | Wrapper 44B        | wrp26 |
| 308 | Wrapper S1         | wrp27 |
| 309 | Wrapper S2         | wrp28 |
| 310 | Wrapper S3         | wrp29 |
| 311 | Tie Line 1A        | tl1A  |
| 312 | Tie Line 1B        | tl1B  |
| 313 | Tie Line 2A        | tl2A  |
| 314 | Tie Line 2B        | tl2B  |
| 315 | Tie Line 3A        | tl3A  |
| 316 | Tie Line 3B        | tl3B  |
| 317 | Tie Line 4A        | tl4A  |
| 318 | Tie Line 4B        | tl4B  |
| 319 | Tie Line 5A        | tl5A  |
| 320 | Tie Line 5B        | tl5B  |
| 321 | Tie Line 6A        | tl6A  |
| 322 | Tie Line 6B        | tl6B  |
| 323 | Tie Line 7A        | tl7A  |
| 324 | Tie Line 7B        | tl7B  |
| 325 | Tie Line 8A        | tl8A  |
| 326 | Tie Line 8B        | tl8B  |
| 327 | Tie Line 40A       | tl40A |
| 328 | Tie Line 40B       | tl40B |
| 329 | Tie Line 41A       | tl41A |
| 330 | Tie Line 41B       | tl41B |
| 331 | Tie Line 42A       | tl42A |
| 332 | Tie Line 42B       | tl42B |
| 333 | Tie Line 43A       | tl43A |
| 334 | Tie Line 43B       | tl43B |
| 335 | Tie Line 44A       | tl44A |
| 336 | Tie Line 44B       | tl44B |
| 337 | Tie Line S1        | tlS1  |
| 338 | Tie Line S2        | tlS2  |
| 339 | Tie Line S3        | tlS3  |
| 340 | Input Cross Belt 1 | icb1  |
| 341 | Input Cross Belt 2 | icb2  |
| 342 | Input Cross Belt 3 | icb3  |
| 343 | Input Cross Belt 4 | icb4  |
| 344 | Input Cross Belt 5 | icb5  |
| 345 | Input Cross Belt 6 | icb6  |
| 346 | Input Cross Belt 7 | icb7  |

|     |                      |        |
|-----|----------------------|--------|
| 347 | Input Cross Belt 8   | icb8   |
| 348 | Input Cross Belt 40S | icb40S |
| 349 | Input Cross Belt 40N | icb40N |
| 350 | Input Cross Belt 42  | icb42  |
| 351 | Input Cross Belt 43  | icb43  |
| 352 | Input Cross Belt 44  | icb44  |
| 353 | Input Cross Belt S2  | icbS2  |
| 354 | Input Cross Belt S3  | icbS3  |
| 355 | Bundle Loader 1U     | bl1U   |
| 356 | Bundle Loader 1L     | bl1L   |
| 357 | Bundle Loader 2U     | bl2U   |
| 358 | Bundle Loader 2L     | bl2L   |
| 359 | Bundle Loader 3U     | bl3U   |
| 360 | Bundle Loader 3L     | bl3L   |
| 361 | Bundle Loader 4U     | bl4U   |
| 362 | Bundle Loader 4L     | bl4L   |
| 363 | Bundle Loader 40SU   | bl40SU |
| 364 | Bundle Loader 40SL   | bl40SL |
| 365 | Bundle Loader 40NU   | bl40NU |
| 366 | Bundle Loader 40NL   | bl40NL |
| 367 | Bundle Loader 42U    | bl42U  |
| 368 | Bundle Loader 42L    | bl42L  |
| 369 | Bundle Loader 41U    | bl41U  |
| 370 | Bundle Loader 41L    | bl41L  |
| 371 | Bundle Loader 5U     | bl5U   |
| 372 | Bundle Loader 5L     | bl5L   |
| 373 | Bundle Loader 6U     | bl6U   |
| 374 | Bundle Loader 6L     | bl6L   |
| 375 | Bundle Loader 7U     | bl7U   |
| 376 | Bundle Loader 7L     | bl7L   |
| 377 | Bundle Loader 8U     | bl8U   |
| 378 | Bundle Loader 8L     | bl8L   |
| 379 | Bundle Loader 43U    | bl43U  |
| 380 | Bundle Loader 43L    | bl43L  |
| 381 | Bundle Loader 44U    | bl44U  |
| 382 | Bundle Loader 44L    | bl44L  |
| 383 | Tray Upper           | trayU  |
| 384 | Tray Lower           | taryL  |
| 385 | Tripper 21           | trp21  |
| 386 | Tripper 22           | trp22  |
| 387 | Tripper 23           | trp23  |
| 388 | Tripper 24           | trp24  |
| 389 | Tripper 25           | trp25  |
| 390 | Tripper 26           | trp26  |
| 391 | Tripper 27           | trp27  |
| 392 | Tripper 28           | trp28  |
| 393 | Tripper 31           | trp31  |
| 394 | Tripper 32           | trp32  |
| 395 | Tripper 33           | trp33  |
| 396 | Tripper 34           | trp34  |
| 397 | Tripper 35           | trp35  |
| 398 | Tripper 36           | trp36  |
| 399 | Tripper 37           | trp37  |
| 400 | Tripper 38           | trp38  |
| 401 | Tripper 41           | trp41  |
| 402 | Tripper 42           | trp42  |
| 403 | Tripper 43           | trp43  |
| 404 | Tripper 44           | trp44  |



|     |                      |       |
|-----|----------------------|-------|
| 405 | Tripper 45           | trp45 |
| 406 | Tripper 46           | trp46 |
| 407 | Tripper 47           | trp47 |
| 408 | Tripper 48           | trp48 |
| 409 | Tripper 51           | trp51 |
| 410 | Tripper 52           | trp52 |
| 411 | Tripper 53           | trp53 |
| 412 | Tripper 54           | trp54 |
| 413 | Tripper 55           | trp55 |
| 414 | Tripper 56           | trp56 |
| 415 | Tripper 57           | trp57 |
| 416 | Tripper 58           | trp58 |
| 417 | Tripper 61           | trp61 |
| 418 | Tripper 62           | trp62 |
| 419 | Tripper 63           | trp63 |
| 420 | Tripper 64           | trp64 |
| 421 | Tripper 65           | trp65 |
| 422 | Tripper 66           | trp66 |
| 423 | Tripper 67           | trp67 |
| 424 | Tripper 68           | trp68 |
| 425 | Tripper P1           | trpP1 |
| 426 | Tripper P2           | trpP2 |
| 427 | Tripper P3           | trpP3 |
| 428 | Tripper P4           | trpP4 |
| 429 | Tripper 71           | trp71 |
| 430 | Tripper 72           | trp72 |
| 431 | Tripper 73           | trp73 |
| 432 | Tripper 74           | trp74 |
| 433 | Tripper 75           | trp75 |
| 434 | Tripper 76           | trp76 |
| 435 | Tripper 77           | trp77 |
| 436 | Tripper 78           | trp78 |
| 437 | Tripper 81           | trp81 |
| 438 | Tripper 82           | trp82 |
| 439 | Tripper 83           | trp83 |
| 440 | Tripper 84           | trp84 |
| 441 | Tripper 85           | trp85 |
| 442 | Tripper 86           | trp86 |
| 443 | Tripper 87           | trp87 |
| 444 | Tripper 88           | trp88 |
| 445 | Accumulation Lane 21 | acc21 |
| 446 | Accumulation Lane 22 | acc22 |
| 447 | Accumulation Lane 23 | acc23 |
| 448 | Accumulation Lane 24 | acc24 |
| 449 | Accumulation Lane 25 | acc25 |
| 450 | Accumulation Lane 26 | acc26 |
| 451 | Accumulation Lane 27 | acc27 |
| 452 | Accumulation Lane 28 | acc28 |
| 453 | Accumulation Lane 31 | acc31 |
| 454 | Accumulation Lane 32 | acc32 |
| 455 | Accumulation Lane 33 | acc33 |
| 456 | Accumulation Lane 34 | acc34 |
| 457 | Accumulation Lane 35 | acc35 |
| 458 | Accumulation Lane 36 | acc36 |
| 459 | Accumulation Lane 37 | acc37 |
| 460 | Accumulation Lane 38 | acc38 |
| 461 | Accumulation Lane 41 | acc41 |
| 462 | Accumulation Lane 42 | acc42 |

|     |                      |       |
|-----|----------------------|-------|
| 463 | Accumulation Lane 43 | acc43 |
| 464 | Accumulation Lane 44 | acc44 |
| 465 | Accumulation Lane 45 | acc45 |
| 466 | Accumulation Lane 46 | acc46 |
| 467 | Accumulation Lane 47 | acc47 |
| 468 | Accumulation Lane 48 | acc48 |
| 469 | Accumulation Lane 51 | acc51 |
| 470 | Accumulation Lane 52 | acc52 |
| 471 | Accumulation Lane 53 | acc53 |
| 472 | Accumulation Lane 54 | acc54 |
| 473 | Accumulation Lane 55 | acc55 |
| 474 | Accumulation Lane 56 | acc56 |
| 475 | Accumulation Lane 57 | acc57 |
| 476 | Accumulation Lane 58 | acc58 |
| 477 | Accumulation Lane 61 | acc61 |
| 478 | Accumulation Lane 62 | acc62 |
| 479 | Accumulation Lane 63 | acc63 |
| 480 | Accumulation Lane 64 | acc64 |
| 481 | Accumulation Lane 65 | acc65 |
| 482 | Accumulation Lane 66 | acc66 |
| 483 | Accumulation Lane 67 | acc67 |
| 484 | Accumulation Lane 68 | acc68 |
| 485 | Accumulation Lane P1 | accP1 |
| 486 | Accumulation Lane P2 | accP2 |
| 487 | Accumulation Lane P3 | accP3 |
| 488 | Accumulation Lane P4 | accP4 |
| 489 | Accumulation Lane 71 | acc71 |
| 490 | Accumulation Lane 72 | acc72 |
| 491 | Accumulation Lane 73 | acc73 |
| 492 | Accumulation Lane 74 | acc74 |
| 493 | Accumulation Lane 75 | acc75 |
| 494 | Accumulation Lane 76 | acc76 |
| 495 | Accumulation Lane 77 | acc77 |
| 496 | Accumulation Lane 78 | acc78 |
| 497 | Accumulation Lane 81 | acc81 |
| 498 | Accumulation Lane 82 | acc82 |
| 499 | Accumulation Lane 83 | acc83 |
| 500 | Accumulation Lane 84 | acc84 |
| 501 | Accumulation Lane 85 | acc85 |
| 502 | Accumulation Lane 86 | acc86 |
| 503 | Accumulation Lane 87 | acc87 |
| 504 | Accumulation Lane 88 | acc88 |
| 505 | Output Cross Belt 21 | ocb21 |
| 506 | Output Cross Belt 22 | ocb22 |
| 507 | Output Cross Belt 23 | ocb23 |
| 508 | Output Cross Belt 24 | ocb24 |
| 509 | Output Cross Belt 31 | ocb31 |
| 510 | Output Cross Belt 32 | ocb32 |
| 511 | Output Cross Belt 33 | ocb33 |
| 512 | Output Cross Belt 34 | ocb34 |
| 513 | Output Cross Belt 41 | ocb41 |
| 514 | Output Cross Belt 42 | ocb42 |
| 515 | Output Cross Belt 43 | ocb43 |
| 516 | Output Cross Belt 44 | ocb44 |
| 517 | Output Cross Belt 51 | ocb51 |
| 518 | Output Cross Belt 52 | ocb52 |
| 519 | Output Cross Belt 53 | ocb53 |
| 520 | Output Cross Belt 54 | ocb54 |

|     |                      |       |
|-----|----------------------|-------|
| 521 | Output Cross Belt 61 | ocb61 |
| 522 | Output Cross Belt 62 | ocb62 |
| 523 | Output Cross Belt 63 | ocb63 |
| 524 | Output Cross Belt 64 | ocb64 |
| 525 | Output Cross Belt 71 | ocb71 |
| 526 | Output Cross Belt 72 | ocb72 |
| 527 | Output Cross Belt 73 | ocb73 |
| 528 | Output Cross Belt 74 | ocb74 |
| 529 | Output Cross Belt 81 | ocb81 |
| 530 | Output Cross Belt 82 | ocb82 |
| 531 | Output Cross Belt 83 | ocb83 |
| 532 | Output Cross Belt 84 | ocb84 |
| 533 | Palletizer Infeed 2  | inf2  |
| 534 | Palletizer Infeed 3  | inf3  |
| 535 | Palletizer Infeed 4  | inf4  |
| 536 | Palletizer Infeed 5  | inf5  |
| 537 | Palletizer Infeed 6  | inf6  |
| 538 | Palletizer Infeed 7  | inf7  |
| 539 | Palletizer Infeed 8  | inf8  |
| 540 | Palletizer 2         | pal2  |
| 541 | Palletizer 3         | pal3  |
| 542 | Palletizer 4         | pal4  |
| 543 | Palletizer 5         | pal5  |
| 544 | Palletizer 6         | pal6  |
| 545 | Palletizer 7         | pal7  |
| 546 | Palletizer 8         | pal8  |
| 547 | Field Service        | F     |
| 548 | Training             | T     |
| 549 | New York Times       | N     |

## 8. Test Plan Listing

|     |   |         |  |        |
|-----|---|---------|--|--------|
| 201 | 1 | 1       | Newsprint Storage Subsystem Tests              | 180h   |
| 215 | 2 | 1.1     | Newsprint Subsystem Onsite Component Tests     | 66h    |
| 463 | 3 | 1.1.1   | Mechanical Inspection: Excell Crane            | 16h    |
| 2   |   |         |  |        |
| 566 | 4 | 1.1.1.1 | Mechanical Inspection: Excell Crane 1          | 8h     |
| 567 | 4 | 1.1.1.2 | Mechanical Inspection: Excell Crane 2          | 8h     |
| 568 | 3 | 1.1.2   | Mechanical Inspection: ASRS Storage Rack       | 8h     |
| 569 | 3 | 1.1.3   | Mechanical Inspection: Newsprint Conveyor1     | 8h     |
| 463 | 3 | 1.1.4   | Electrical Inspection: Excell Crane            | 16h    |
| 3   |   |         |  |        |
| 126 | 4 | 1.1.4.1 | Electrical Inspection: Excell Crane 1          | 8h     |
| 9   |   |         |  |        |
| 127 | 4 | 1.1.4.2 | Electrical Inspection: Excell Crane 2          | 8h     |
| 0   |   |         |  |        |
| 127 | 3 | 1.1.5   | Electrical Inspection: ASRS Storage Rack       | 1h     |
| 1   |   |         |  |        |
| 127 | 3 | 1.1.6   | Electrical Inspection: Newsprint Conveyor1     | 8h     |
| 2   |   |         |  |        |
| 219 | 3 | 1.1.7   | Computer Control System                        | 1h     |
| 222 | 3 | 1.1.8   | Reject Workstation Control Hardware            | 1h     |
| 463 | 3 | 1.1.9   | Fire Protection System                         | 4h     |
| 5   |   |         |  |        |
| 223 | 3 | 1.1.10  | Computer Operator Workstation Control Hardware | 1h     |
| 224 | 2 | 1.2     | Newsprint Subsystem Onsite Functional Tests    | 90.25h |
| 225 | 3 | 1.2.1   | Roll Storage Cycle                             | 4h     |
| 226 | 3 | 1.2.2   | Roll Reject Cycle                              | 1h     |
| 227 | 3 | 1.2.3   | Roll Retrieval Cycle                           | 4h     |
| 228 | 3 | 1.2.4   | Conveyor Tracking                              | 4h     |
| 229 | 3 | 1.2.5   | Roll Barcode to Attributes Translation Dialog  | 2h     |
| 230 | 3 | 1.2.6   | Semi-Automatic Operations Dialog               | 4h     |
| 231 | 3 | 1.2.7   | Reject Roll History Report                     | 1h     |
| 232 | 3 | 1.2.8   | Alarm Logs                                     | 4h     |
| 233 | 3 | 1.2.9   | Database                                       | 1h     |
| 234 | 3 | 1.2.10  | Roll Replenishment Request Transaction         | 1h     |
| 235 | 3 | 1.2.11  | Roll Data Request Transaction                  | 1h     |
| 236 | 3 | 1.2.12  | Roll Replenishment Response Transaction        | 1h     |
| 237 | 3 | 1.2.13  | Roll Data Response Transaction                 | 1h     |
| 238 | 3 | 1.2.14  | AS/RS Inventory Summary Request Transaction    | 1h     |
| 239 | 3 | 1.2.15  | AS/RS Inventory Summary Response Transaction   | 1h     |
| 240 | 3 | 1.2.16  | S/RM Status's and Modes                        | 4h     |
| 241 | 3 | 1.2.17  | S/RM Faults                                    | 4h     |
| 242 | 3 | 1.2.18  | S/RM Fault Recoveries                          | 4h     |
| 243 | 3 | 1.2.19  | Conveyor Status's and Their Effects            | 2h     |
| 244 | 3 | 1.2.20  | S/RM Work Scheduling                           | 2h     |
| 245 | 3 | 1.2.21  | Conveyor Decision / Control Points             | 1h     |
| 246 | 3 | 1.2.22  | Conveyor Faults                                | 4h     |
| 247 | 3 | 1.2.23  | Semi-Automatic Mode of Operation               | 4h     |
| 248 | 3 | 1.2.24  | Manual Mode of Operation                       | 4h     |
| 249 | 3 | 1.2.25  | Clamp Truck Interface                          | 1h     |
| 250 | 3 | 1.2.26  | Roll Height Check                              | 1h     |
| 251 | 3 | 1.2.27  | Roll Profile Check                             | 1h     |
| 252 | 3 | 1.2.28  | Size / Weight Failure                          | 1h     |
| 253 | 3 | 1.2.29  | Barcode Scanner Station                        | 1h     |
| 254 | 3 | 1.2.30  | S/RM Pickup                                    | 1h     |
| 255 | 3 | 1.2.31  | Storage - Selection of Aisle                   | 0.5h   |
| 256 | 3 | 1.2.32  | Storage - Selection of Storage Location        | 0.5h   |

|     |   |          |  |       |
|-----|---|----------|--|-------|
| 257 | 3 | 1.2.33   | Retrieval to Prep Stations                       | 0.5h  |
| 258 | 3 | 1.2.34   | Logon / Main Menu                                | 0.25h |
| 259 | 3 | 1.2.35   | Display / Edit Roll Storage Inventory            | 0.5h  |
| 260 | 3 | 1.2.36   | Display / Edit Roll Replenishment Data           | 0.5h  |
| 261 | 3 | 1.2.37   | Display / Edit System Parameters                 | 0.5h  |
| 262 | 3 | 1.2.38   | Display / Edit System Status                     | 0.5h  |
| 263 | 3 | 1.2.39   | Display / Edit Employee Authorization File       | 0.5h  |
| 264 | 3 | 1.2.40   | Display / Edit Conveyor Tracking                 | 0.5h  |
| 265 | 3 | 1.2.41   | Display / Edit Vendor Data                       | 0.5h  |
| 266 | 3 | 1.2.42   | Display / Edit Mill Data                         | 0.5h  |
| 267 | 3 | 1.2.43   | Display / Edit Required Attributes Table         | 0.5h  |
| 268 | 3 | 1.2.44   | Display / Edit Roll Data                         | 0.5h  |
| 269 | 3 | 1.2.45   | Display / Modify PLC Reject Reasons              | 0.5h  |
| 270 | 3 | 1.2.46   | Display / Edit Operator Reject Reasons           | 0.5h  |
| 271 | 3 | 1.2.47   | Display / Edit Roll Repair Descriptions          | 0.5h  |
| 272 | 3 | 1.2.48   | Reject Dialog                                    | 0.5h  |
| 273 | 3 | 1.2.49   | Retrieve Inventory Hold Rolls Dialog             | 1h    |
| 274 | 3 | 1.2.50   | Roll Receiving / Induction Dialog                | 1h    |
| 275 | 3 | 1.2.51   | Display / Edit Roll Position to Cut Translation  | 1h    |
| 276 | 3 | 1.2.52   | Display/ Edit Roll Type Definitions              | 1h    |
| 277 | 3 | 1.2.53   | Inventory Report                                 | 1h    |
| 278 | 3 | 1.2.54   | Roll Type Inventory Report                       | 0.5h  |
| 279 | 3 | 1.2.55   | Roll Replenishment Data Report                   | 0.5h  |
| 280 | 3 | 1.2.56   | Reject Roll History Report                       | 0.5h  |
| 281 | 3 | 1.2.57   | Alarm Log Report                                 | 1h    |
| 497 | 2 | 1.3      | Newsprint Subsystem Onsite Throughput Tests      | 19h   |
| 463 | 3 | 1.3.1    | Excell Crane Throughput Test                     | 9h    |
| 6   |   |          |  |       |
| 345 | 4 | 1.3.1.1  | Excell Crane 1 Throughput Test                   | 5eh   |
| 8   |   |          |  |       |
| 345 | 4 | 1.3.1.2  | Excell Crane 2 Throughput Test                   | 5eh   |
| 9   |   |          |  |       |
| 346 | 3 | 1.3.2    | Newsprint Conveyor Throughput Test               | 5eh   |
| 0   |   |          |  |       |
| 463 | 3 | 1.3.3    | Newsprint Subsystem Input Throughput Test        | 5eh   |
| 4   |   |          |  |       |
| 346 | 3 | 1.3.4    | Newsprint Subsystem Output Throughput Test       | 5eh   |
| 1   |   |          |  |       |
| 498 | 2 | 1.4      | Newsprint Subsystem Onsite Reliability Test      | 20eh  |
| 209 | 1 | 2        | Press Delivery Subsystem Tests                   | 312h  |
| 284 | 2 | 2.1      | Press Delivery Subsystem Onsite Component Tests  | 228h  |
| 275 | 3 | 2.1.1    | Mechanical Inspection: Stripping Stations        | 6h    |
| 3   |   |          |  |       |
| 570 | 4 | 2.1.1.1  | Mechanical Inspection: Stripping Station 1       | 2h    |
| 571 | 4 | 2.1.1.2  | Mechanical Inspection: Stripping Station 2       | 2h    |
| 572 | 4 | 2.1.1.3  | Mechanical Inspection: Stripping Station 3       | 2h    |
| 275 | 3 | 2.1.2    | Mechanical Inspection: Press Delivery Vehicles   | 40h   |
| 4   |   |          |  |       |
| 573 | 4 | 2.1.2.1  | Mechanical Inspection: Press Delivery Vehicle 1  | 2h    |
| 574 | 4 | 2.1.2.2  | Mechanical Inspection: Press Delivery Vehicle 2  | 2h    |
| 575 | 4 | 2.1.2.3  | Mechanical Inspection: Press Delivery Vehicle 3  | 2h    |
| 576 | 4 | 2.1.2.4  | Mechanical Inspection: Press Delivery Vehicle 4  | 2h    |
| 577 | 4 | 2.1.2.5  | Mechanical Inspection: Press Delivery Vehicle 5  | 2h    |
| 578 | 4 | 2.1.2.6  | Mechanical Inspection: Press Delivery Vehicle 6  | 2h    |
| 579 | 4 | 2.1.2.7  | Mechanical Inspection: Press Delivery Vehicle 7  | 2h    |
| 580 | 4 | 2.1.2.8  | Mechanical Inspection: Press Delivery Vehicle 8  | 2h    |
| 581 | 4 | 2.1.2.9  | Mechanical Inspection: Press Delivery Vehicle 9  | 2h    |
| 582 | 4 | 2.1.2.10 | Mechanical Inspection: Press Delivery Vehicle 10 | 2h    |

|     |   |          |  |     |
|-----|---|----------|--|-----|
| 583 | 4 | 2.1.2.11 | Mechanical Inspection: Press Delivery Vehicle 11 | 2h  |
| 584 | 4 | 2.1.2.12 | Mechanical Inspection: Press Delivery Vehicle 12 | 2h  |
| 585 | 4 | 2.1.2.13 | Mechanical Inspection: Press Delivery Vehicle 13 | 2h  |
| 586 | 4 | 2.1.2.14 | Mechanical Inspection: Press Delivery Vehicle 14 | 2h  |
| 587 | 4 | 2.1.2.15 | Mechanical Inspection: Press Delivery Vehicle 15 | 2h  |
| 588 | 4 | 2.1.2.16 | Mechanical Inspection: Press Delivery Vehicle 16 | 2h  |
| 275 | 3 | 2.1.3    | Mechanical Inspection: C93s                      | 60h |
| 5   |   |          |  |     |
| 589 | 4 | 2.1.3.1  | Mechanical Inspection: C93 Press 40 Unit 1&2     | 2h  |
| 590 | 4 | 2.1.3.2  | Mechanical Inspection: C93 Press 40 Unit 3&4     | 2h  |
| 591 | 4 | 2.1.3.3  | Mechanical Inspection: C93 Press 40 Unit 5&6     | 2h  |
| 592 | 4 | 2.1.3.4  | Mechanical Inspection: C93 Press 40 Unit 7&8     | 2h  |
| 593 | 4 | 2.1.3.5  | Mechanical Inspection: C93 Press 40 Unit 9&10    | 2h  |
| 594 | 4 | 2.1.3.6  | Mechanical Inspection: C93 Press 40 Unit 11&12   | 2h  |
| 595 | 4 | 2.1.3.7  | Mechanical Inspection: C93 Press 41 Unit 1&2     | 2h  |
| 596 | 4 | 2.1.3.8  | Mechanical Inspection: C93 Press 41 Unit 3&4     | 2h  |
| 597 | 4 | 2.1.3.9  | Mechanical Inspection: C93 Press 41 Unit 5&6     | 2h  |
| 598 | 4 | 2.1.3.10 | Mechanical Inspection: C93 Press 41 Unit 7&8     | 2h  |
| 599 | 4 | 2.1.3.11 | Mechanical Inspection: C93 Press 41 Unit 9&10    | 2h  |
| 600 | 4 | 2.1.3.12 | Mechanical Inspection: C93 Press 41 Unit 11&12   | 2h  |
| 601 | 4 | 2.1.3.13 | Mechanical Inspection: C93 Press 42 Unit 1&2     | 2h  |
| 602 | 4 | 2.1.3.14 | Mechanical Inspection: C93 Press 42 Unit 3&4     | 2h  |
| 603 | 4 | 2.1.3.15 | Mechanical Inspection: C93 Press 42 Unit 5&6     | 2h  |
| 604 | 4 | 2.1.3.16 | Mechanical Inspection: C93 Press 42 Unit 7&8     | 2h  |
| 605 | 4 | 2.1.3.17 | Mechanical Inspection: C93 Press 42 Unit 9&10    | 2h  |
| 606 | 4 | 2.1.3.18 | Mechanical Inspection: C93 Press 42 Unit 11&12   | 2h  |
| 607 | 4 | 2.1.3.19 | Mechanical Inspection: C93 Press 43 Unit 1&2     | 2h  |
| 608 | 4 | 2.1.3.20 | Mechanical Inspection: C93 Press 43 Unit 3&4     | 2h  |
| 609 | 4 | 2.1.3.21 | Mechanical Inspection: C93 Press 43 Unit 5&6     | 2h  |
| 610 | 4 | 2.1.3.22 | Mechanical Inspection: C93 Press 43 Unit 7&8     | 2h  |
| 611 | 4 | 2.1.3.23 | Mechanical Inspection: C93 Press 43 Unit 9&10    | 2h  |
| 612 | 4 | 2.1.3.24 | Mechanical Inspection: C93 Press 43 Unit 11&12   | 2h  |
| 613 | 4 | 2.1.3.25 | Mechanical Inspection: C93 Press 44 Unit 1&2     | 2h  |
| 614 | 4 | 2.1.3.26 | Mechanical Inspection: C93 Press 44 Unit 3&4     | 2h  |
| 615 | 4 | 2.1.3.27 | Mechanical Inspection: C93 Press 44 Unit 5&6     | 2h  |
| 616 | 4 | 2.1.3.28 | Mechanical Inspection: C93 Press 44 Unit 7&8     | 2h  |
| 617 | 4 | 2.1.3.29 | Mechanical Inspection: C93 Press 44 Unit 9&10    | 2h  |
| 618 | 4 | 2.1.3.30 | Mechanical Inspection: C93 Press 44 Unit 11&12   | 2h  |
| 470 | 3 | 2.1.4    | Mechanical Inspection: Laydown Rack              | 4eh |
| 2   |   |          |  |     |
| 275 | 3 | 2.1.5    | Electrical Inspection: Stripping Stations        | 6h  |
| 6   |   |          |  |     |
| 127 | 4 | 2.1.5.1  | Electrical Inspection: Stripping Station 1       | 2h  |
| 3   |   |          |  |     |
| 127 | 4 | 2.1.5.2  | Electrical Inspection: Stripping Station 2       | 2h  |
| 4   |   |          |  |     |
| 127 | 4 | 2.1.5.3  | Electrical Inspection: Stripping Station 3       | 2h  |
| 5   |   |          |  |     |
| 275 | 3 | 2.1.6    | Electrical Inspection: Press Delivery Vehicles   | 48h |
| 7   |   |          |  |     |
| 127 | 4 | 2.1.6.1  | Electrical Inspection: Press Delivery Vehicle 1  | 3h  |
| 6   |   |          |  |     |
| 127 | 4 | 2.1.6.2  | Electrical Inspection: Press Delivery Vehicle 2  | 3h  |
| 7   |   |          |  |     |
| 127 | 4 | 2.1.6.3  | Electrical Inspection: Press Delivery Vehicle 3  | 3h  |
| 8   |   |          |  |     |
| 127 | 4 | 2.1.6.4  | Electrical Inspection: Press Delivery Vehicle 4  | 3h  |
| 9   |   |          |  |     |

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| 128<br>0 | 4 | 2.1.6.5  | Electrical Inspection: Press Delivery Vehicle 5  | 3h  |
| 128<br>1 | 4 | 2.1.6.6  | Electrical Inspection: Press Delivery Vehicle 6  | 3h  |
| 128<br>2 | 4 | 2.1.6.7  | Electrical Inspection: Press Delivery Vehicle 7  | 3h  |
| 128<br>3 | 4 | 2.1.6.8  | Electrical Inspection: Press Delivery Vehicle 8  | 3h  |
| 128<br>4 | 4 | 2.1.6.9  | Electrical Inspection: Press Delivery Vehicle 9  | 3h  |
| 128<br>5 | 4 | 2.1.6.10 | Electrical Inspection: Press Delivery Vehicle 10 | 3h  |
| 128<br>6 | 4 | 2.1.6.11 | Electrical Inspection: Press Delivery Vehicle 11 | 3h  |
| 128<br>7 | 4 | 2.1.6.12 | Electrical Inspection: Press Delivery Vehicle 12 | 3h  |
| 128<br>8 | 4 | 2.1.6.13 | Electrical Inspection: Press Delivery Vehicle 13 | 3h  |
| 128<br>9 | 4 | 2.1.6.14 | Electrical Inspection: Press Delivery Vehicle 14 | 3h  |
| 129<br>0 | 4 | 2.1.6.15 | Electrical Inspection: Press Delivery Vehicle 15 | 3h  |
| 129<br>1 | 4 | 2.1.6.16 | Electrical Inspection: Press Delivery Vehicle 16 | 3h  |
| 275<br>8 | 3 | 2.1.7    | Electrical Inspection: C93's                     | 60h |
| 129<br>2 | 4 | 2.1.7.1  | Electrical Inspection: C93 Press 40 Unit 1&2     | 2h  |
| 129<br>3 | 4 | 2.1.7.2  | Electrical Inspection: C93 Press 40 Unit 3&4     | 2h  |
| 129<br>4 | 4 | 2.1.7.3  | Electrical Inspection: C93 Press 40 Unit 5&6     | 2h  |
| 129<br>5 | 4 | 2.1.7.4  | Electrical Inspection: C93 Press 40 Unit 7&8     | 2h  |
| 129<br>6 | 4 | 2.1.7.5  | Electrical Inspection: C93 Press 40 Unit 9&10    | 2h  |
| 129<br>7 | 4 | 2.1.7.6  | Electrical Inspection: C93 Press 40 Unit 11&12   | 2h  |
| 129<br>8 | 4 | 2.1.7.7  | Electrical Inspection: C93 Press 41 Unit 1&2     | 2h  |
| 129<br>9 | 4 | 2.1.7.8  | Electrical Inspection: C93 Press 41 Unit 3&4     | 2h  |
| 130<br>0 | 4 | 2.1.7.9  | Electrical Inspection: C93 Press 41 Unit 5&6     | 2h  |
| 130<br>1 | 4 | 2.1.7.10 | Electrical Inspection: C93 Press 41 Unit 7&8     | 2h  |
| 130<br>2 | 4 | 2.1.7.11 | Electrical Inspection: C93 Press 41 Unit 9&10    | 2h  |
| 130<br>3 | 4 | 2.1.7.12 | Electrical Inspection: C93 Press 41 Unit 11&12   | 2h  |
| 130<br>4 | 4 | 2.1.7.13 | Electrical Inspection: C93 Press 42 Unit 1&2     | 2h  |
| 130<br>5 | 4 | 2.1.7.14 | Electrical Inspection: C93 Press 42 Unit 3&4     | 2h  |
| 130<br>6 | 4 | 2.1.7.15 | Electrical Inspection: C93 Press 42 Unit 5&6     | 2h  |
| 130<br>7 | 4 | 2.1.7.16 | Electrical Inspection: C93 Press 42 Unit 7&8     | 2h  |

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| 130<br>8 | 4 | 2.1.7.17 | Electrical Inspection: C93 Press 42 Unit 9&10    | 2h  |
| 130<br>9 | 4 | 2.1.7.18 | Electrical Inspection: C93 Press 42 Unit 11&12   | 2h  |
| 131<br>0 | 4 | 2.1.7.19 | Electrical Inspection: C93 Press 43 Unit 1&2     | 2h  |
| 131<br>1 | 4 | 2.1.7.20 | Electrical Inspection: C93 Press 43 Unit 3&4     | 2h  |
| 131<br>2 | 4 | 2.1.7.21 | Electrical Inspection: C93 Press 43 Unit 5&6     | 2h  |
| 131<br>3 | 4 | 2.1.7.22 | Electrical Inspection: C93 Press 43 Unit 7&8     | 2h  |
| 131<br>4 | 4 | 2.1.7.23 | Electrical Inspection: C93 Press 43 Unit 9&10    | 2h  |
| 131<br>5 | 4 | 2.1.7.24 | Electrical Inspection: C93 Press 43 Unit 11&12   | 2h  |
| 131<br>6 | 4 | 2.1.7.25 | Electrical Inspection: C93 Press 44 Unit 1&2     | 2h  |
| 131<br>7 | 4 | 2.1.7.26 | Electrical Inspection: C93 Press 44 Unit 3&4     | 2h  |
| 131<br>8 | 4 | 2.1.7.27 | Electrical Inspection: C93 Press 44 Unit 5&6     | 2h  |
| 131<br>9 | 4 | 2.1.7.28 | Electrical Inspection: C93 Press 44 Unit 7&8     | 2h  |
| 132<br>0 | 4 | 2.1.7.29 | Electrical Inspection: C93 Press 44 Unit 9&10    | 2h  |
| 132<br>1 | 4 | 2.1.7.30 | Electrical Inspection: C93 Press 44 Unit 11&12   | 2h  |
| 561      | 3 | 2.1.8    | Electrical Inspection: Reelstand I/O             | 8h  |
| 470<br>6 | 3 | 2.1.9    | Computer Control System                          | 4h  |
| 285      | 2 | 2.2      | Press Delivery Subsystem Onsite Functional Tests | 71h |
| 542      | 3 | 2.2.1    | System Status                                    | 4h  |
| 543      | 3 | 2.2.2    | Run Definition                                   | 2h  |
| 544      | 3 | 2.2.3    | Run Activation                                   | 1h  |
| 545      | 3 | 2.2.4    | Press Overview                                   | 2h  |
| 546      | 3 | 2.2.5    | Reelstand Status and Inventory Modify            | 4h  |
| 547      | 3 | 2.2.6    | Lane Status                                      | 4h  |
| 548      | 3 | 2.2.7    | Lane Modify                                      | 2h  |
| 549      | 3 | 2.2.8    | Lane Inventory Modify                            | 1h  |
| 550      | 3 | 2.2.9    | Reject Lane                                      | 1h  |
| 551      | 3 | 2.2.10   | Laydown Roll Reserve                             | 1h  |
| 552      | 3 | 2.2.11   | Roll Type Substitution                           | 2h  |
| 553      | 3 | 2.2.12   | Roll Type Color Palette                          | 1h  |
| 554      | 3 | 2.2.13   | GOSS Download Status                             | 3h  |
| 555      | 3 | 2.2.14   | Roll Barcode Information                         | 2h  |
| 556      | 3 | 2.2.15   | AGV Error Counts                                 | 3h  |
| 557      | 3 | 2.2.16   | C-93 Error Counts                                | 4h  |
| 558      | 3 | 2.2.17   | C-93 Defined Positions                           | 1h  |
| 559      | 3 | 2.2.18   | C-93 Status Polling                              | 2h  |
| 560      | 3 | 2.2.19   | C-93 to AGVs Commands                            | 3h  |
| 562      | 3 | 2.2.20   | Reelroom Laydown and Traffic Flow                | 8h  |
| 563      | 3 | 2.2.21   | Reelroom Laydown Lane Management                 | 8h  |
| 564      | 3 | 2.2.22   | Roll Ordering From ASRS                          | 8h  |
| 565      | 3 | 2.2.23   | Order Flow and Assignment                        | 4h  |
| 470<br>4 | 3 | 2.2.24   | C93 Charging                                     | 8h  |
| 470      | 3 | 2.2.25   | PDV AGV Charging                                 | 8h  |



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| 5   |   |          |  |      |
| 286 | 2 | 2.3      | Press Delivery Subsystem Onsite Throughput Tests | 5h   |
| 469 | 3 | 2.3.1    | C93 Throughput Test                              | 5h   |
| 9   |   |          |  |      |
| 469 | 3 | 2.3.2    | PDV AGV Throughput Test                          | 5h   |
| 8   |   |          |  |      |
| 470 | 3 | 2.3.3    | PDV Subsystem Throughput Test                    | 5h   |
| 1   |   |          |  |      |
| 287 | 2 | 2.4      | Press Delivery Subsystem Onsite Reliability Test | 20eh |
| 288 | 1 | 3        | Ink Subsystem Tests                              | 0h   |
| 294 | 2 | 3.1      | Ink Subsystem Onsite Component Tests             | 0h   |
| 295 | 2 | 3.2      | Ink Subsystem Onsite Functional Tests            | 0h   |
| 296 | 2 | 3.3      | Ink Subsystem Onsite Throughput Tests            | 0h   |
| 297 | 2 | 3.4      | Ink Subsystem Onsite Reliability Test            | 0h   |
| 298 | 1 | 4        | Press Subsystem Tests                            | 520h |
| 304 | 2 | 4.1      | Press Subsystem Onsite Component Tests           | 408h |
| 275 | 3 | 4.1.1    | Mechanical Inspection: Assembled Press           | 80h  |
| 9   |   |          |  |      |
| 625 | 4 | 4.1.1.1  | Mechanical Inspection: Press 40                  | 16h  |
| 638 | 4 | 4.1.1.2  | Mechanical Inspection: Press 41                  | 16h  |
| 651 | 4 | 4.1.1.3  | Mechanical Inspection: Press 42                  | 16h  |
| 664 | 4 | 4.1.1.4  | Mechanical Inspection: Press 43                  | 16h  |
| 677 | 4 | 4.1.1.5  | Mechanical Inspection: Press 44                  | 16h  |
| 276 | 3 | 4.1.2    | Mechanical Inspection: Press Units               | 128h |
| 4   |   |          |  |      |
| 626 | 4 | 4.1.2.1  | Mechanical Inspection: Press Unit 4001           | 2h   |
| 627 | 4 | 4.1.2.2  | Mechanical Inspection: Press Unit 4002           | 2h   |
| 628 | 4 | 4.1.2.3  | Mechanical Inspection: Press Unit 4003           | 2h   |
| 629 | 4 | 4.1.2.4  | Mechanical Inspection: Press Unit 4004           | 2h   |
| 630 | 4 | 4.1.2.5  | Mechanical Inspection: Press Unit 4005           | 2h   |
| 631 | 4 | 4.1.2.6  | Mechanical Inspection: Press Unit 4006           | 2h   |
| 632 | 4 | 4.1.2.7  | Mechanical Inspection: Press Unit 4007           | 2h   |
| 633 | 4 | 4.1.2.8  | Mechanical Inspection: Press Unit 4008           | 2h   |
| 634 | 4 | 4.1.2.9  | Mechanical Inspection: Press Unit 4009           | 2h   |
| 635 | 4 | 4.1.2.10 | Mechanical Inspection: Press Unit 4010           | 2h   |
| 636 | 4 | 4.1.2.11 | Mechanical Inspection: Press Unit 4011           | 2h   |
| 637 | 4 | 4.1.2.12 | Mechanical Inspection: Press Unit 4012           | 2h   |
| 639 | 4 | 4.1.2.13 | Mechanical Inspection: Press Unit 4101           | 2h   |
| 640 | 4 | 4.1.2.14 | Mechanical Inspection: Press Unit 4102           | 2h   |
| 641 | 4 | 4.1.2.15 | Mechanical Inspection: Press Unit 4103           | 2h   |
| 642 | 4 | 4.1.2.16 | Mechanical Inspection: Press Unit 4104           | 2h   |
| 643 | 4 | 4.1.2.17 | Mechanical Inspection: Press Unit 4105           | 2h   |
| 644 | 4 | 4.1.2.18 | Mechanical Inspection: Press Unit 4106           | 2h   |
| 645 | 4 | 4.1.2.19 | Mechanical Inspection: Press Unit 4107           | 2h   |
| 646 | 4 | 4.1.2.20 | Mechanical Inspection: Press Unit 4108           | 2h   |
| 647 | 4 | 4.1.2.21 | Mechanical Inspection: Press Unit 4109           | 2h   |
| 648 | 4 | 4.1.2.22 | Mechanical Inspection: Press Unit 4110           | 2h   |
| 649 | 4 | 4.1.2.23 | Mechanical Inspection: Press Unit 4111           | 2h   |
| 650 | 4 | 4.1.2.24 | Mechanical Inspection: Press Unit 4112           | 2h   |
| 652 | 4 | 4.1.2.25 | Mechanical Inspection: Press Unit 4201           | 2h   |
| 653 | 4 | 4.1.2.26 | Mechanical Inspection: Press Unit 4202           | 2h   |
| 654 | 4 | 4.1.2.27 | Mechanical Inspection: Press Unit 4203           | 2h   |
| 655 | 4 | 4.1.2.28 | Mechanical Inspection: Press Unit 4204           | 2h   |
| 656 | 4 | 4.1.2.29 | Mechanical Inspection: Press Unit 4205           | 2h   |
| 657 | 4 | 4.1.2.30 | Mechanical Inspection: Press Unit 4206           | 2h   |
| 658 | 4 | 4.1.2.31 | Mechanical Inspection: Press Unit 4207           | 2h   |
| 659 | 4 | 4.1.2.32 | Mechanical Inspection: Press Unit 4208           | 2h   |
| 660 | 4 | 4.1.2.33 | Mechanical Inspection: Press Unit 4209           | 2h   |

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| 661 | 4 | 4.1.2.34 | Mechanical Inspection: Press Unit 4210 | 2h   |
| 662 | 4 | 4.1.2.35 | Mechanical Inspection: Press Unit 4211 | 2h   |
| 663 | 4 | 4.1.2.36 | Mechanical Inspection: Press Unit 4212 | 2h   |
| 665 | 4 | 4.1.2.37 | Mechanical Inspection: Press Unit 4301 | 2h   |
| 666 | 4 | 4.1.2.38 | Mechanical Inspection: Press Unit 4302 | 2h   |
| 667 | 4 | 4.1.2.39 | Mechanical Inspection: Press Unit 4303 | 2h   |
| 668 | 4 | 4.1.2.40 | Mechanical Inspection: Press Unit 4304 | 2h   |
| 669 | 4 | 4.1.2.41 | Mechanical Inspection: Press Unit 4305 | 2h   |
| 670 | 4 | 4.1.2.42 | Mechanical Inspection: Press Unit 4306 | 2h   |
| 671 | 4 | 4.1.2.43 | Mechanical Inspection: Press Unit 4307 | 2h   |
| 672 | 4 | 4.1.2.44 | Mechanical Inspection: Press Unit 4308 | 2h   |
| 673 | 4 | 4.1.2.45 | Mechanical Inspection: Press Unit 4309 | 2h   |
| 674 | 4 | 4.1.2.46 | Mechanical Inspection: Press Unit 4310 | 2h   |
| 675 | 4 | 4.1.2.47 | Mechanical Inspection: Press Unit 4311 | 2h   |
| 676 | 4 | 4.1.2.48 | Mechanical Inspection: Press Unit 4312 | 2h   |
| 678 | 4 | 4.1.2.49 | Mechanical Inspection: Press Unit 4401 | 2h   |
| 679 | 4 | 4.1.2.50 | Mechanical Inspection: Press Unit 4402 | 2h   |
| 680 | 4 | 4.1.2.51 | Mechanical Inspection: Press Unit 4403 | 2h   |
| 681 | 4 | 4.1.2.52 | Mechanical Inspection: Press Unit 4404 | 2h   |
| 682 | 4 | 4.1.2.53 | Mechanical Inspection: Press Unit 4405 | 2h   |
| 683 | 4 | 4.1.2.54 | Mechanical Inspection: Press Unit 4406 | 2h   |
| 684 | 4 | 4.1.2.55 | Mechanical Inspection: Press Unit 4407 | 2h   |
| 685 | 4 | 4.1.2.56 | Mechanical Inspection: Press Unit 4408 | 2h   |
| 686 | 4 | 4.1.2.57 | Mechanical Inspection: Press Unit 4409 | 2h   |
| 687 | 4 | 4.1.2.58 | Mechanical Inspection: Press Unit 4410 | 2h   |
| 688 | 4 | 4.1.2.59 | Mechanical Inspection: Press Unit 4411 | 2h   |
| 689 | 4 | 4.1.2.60 | Mechanical Inspection: Press Unit 4412 | 2h   |
| 276 | 3 | 4.1.3    | Electrical Inspection: Assembled Press | 80h  |
| 5   |   |          |  |      |
| 132 | 4 | 4.1.3.1  | Electrical Inspection: Press 40        | 16h  |
| 8   |   |          |  |      |
| 134 | 4 | 4.1.3.2  | Electrical Inspection: Press 41        | 16h  |
| 1   |   |          |  |      |
| 135 | 4 | 4.1.3.3  | Electrical Inspection: Press 42        | 16h  |
| 4   |   |          |  |      |
| 136 | 4 | 4.1.3.4  | Electrical Inspection: Press 43        | 16h  |
| 7   |   |          |  |      |
| 138 | 4 | 4.1.3.5  | Electrical Inspection: Press 44        | 16h  |
| 0   |   |          |  |      |
| 277 | 3 | 4.1.4    | Electrical Inspection: Press Units     | 120h |
| 0   |   |          |  |      |
| 132 | 4 | 4.1.4.1  | Electrical Inspection: Press Unit 4001 | 2h   |
| 9   |   |          |  |      |
| 133 | 4 | 4.1.4.2  | Electrical Inspection: Press Unit 4002 | 2h   |
| 0   |   |          |  |      |
| 133 | 4 | 4.1.4.3  | Electrical Inspection: Press Unit 4003 | 2h   |
| 1   |   |          |  |      |
| 133 | 4 | 4.1.4.4  | Electrical Inspection: Press Unit 4004 | 2h   |
| 2   |   |          |  |      |
| 133 | 4 | 4.1.4.5  | Electrical Inspection: Press Unit 4005 | 2h   |
| 3   |   |          |  |      |
| 133 | 4 | 4.1.4.6  | Electrical Inspection: Press Unit 4006 | 2h   |
| 4   |   |          |  |      |
| 133 | 4 | 4.1.4.7  | Electrical Inspection: Press Unit 4007 | 2h   |
| 5   |   |          |  |      |
| 133 | 4 | 4.1.4.8  | Electrical Inspection: Press Unit 4008 | 2h   |
| 6   |   |          |  |      |
| 133 | 4 | 4.1.4.9  | Electrical Inspection: Press Unit 4009 | 2h   |

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| 7   |   |          |  |  |    |
| 133 | 4 | 4.1.4.10 | Electrical Inspection: Press Unit 4010 |  | 2h |
| 8   |   |          |  |  |    |
| 133 | 4 | 4.1.4.11 | Electrical Inspection: Press Unit 4011 |  | 2h |
| 9   |   |          |  |  |    |
| 134 | 4 | 4.1.4.12 | Electrical Inspection: Press Unit 4012 |  | 2h |
| 0   |   |          |  |  |    |
| 134 | 4 | 4.1.4.13 | Electrical Inspection: Press Unit 4101 |  | 2h |
| 2   |   |          |  |  |    |
| 134 | 4 | 4.1.4.14 | Electrical Inspection: Press Unit 4102 |  | 2h |
| 3   |   |          |  |  |    |
| 134 | 4 | 4.1.4.15 | Electrical Inspection: Press Unit 4103 |  | 2h |
| 4   |   |          |  |  |    |
| 134 | 4 | 4.1.4.16 | Electrical Inspection: Press Unit 4104 |  | 2h |
| 5   |   |          |  |  |    |
| 134 | 4 | 4.1.4.17 | Electrical Inspection: Press Unit 4105 |  | 2h |
| 6   |   |          |  |  |    |
| 134 | 4 | 4.1.4.18 | Electrical Inspection: Press Unit 4106 |  | 2h |
| 7   |   |          |  |  |    |
| 134 | 4 | 4.1.4.19 | Electrical Inspection: Press Unit 4107 |  | 2h |
| 8   |   |          |  |  |    |
| 134 | 4 | 4.1.4.20 | Electrical Inspection: Press Unit 4108 |  | 2h |
| 9   |   |          |  |  |    |
| 135 | 4 | 4.1.4.21 | Electrical Inspection: Press Unit 4109 |  | 2h |
| 0   |   |          |  |  |    |
| 135 | 4 | 4.1.4.22 | Electrical Inspection: Press Unit 4110 |  | 2h |
| 1   |   |          |  |  |    |
| 135 | 4 | 4.1.4.23 | Electrical Inspection: Press Unit 4111 |  | 2h |
| 2   |   |          |  |  |    |
| 135 | 4 | 4.1.4.24 | Electrical Inspection: Press Unit 4112 |  | 2h |
| 3   |   |          |  |  |    |
| 135 | 4 | 4.1.4.25 | Electrical Inspection: Press Unit 4201 |  | 2h |
| 5   |   |          |  |  |    |
| 135 | 4 | 4.1.4.26 | Electrical Inspection: Press Unit 4202 |  | 2h |
| 6   |   |          |  |  |    |
| 135 | 4 | 4.1.4.27 | Electrical Inspection: Press Unit 4203 |  | 2h |
| 7   |   |          |  |  |    |
| 135 | 4 | 4.1.4.28 | Electrical Inspection: Press Unit 4204 |  | 2h |
| 8   |   |          |  |  |    |
| 135 | 4 | 4.1.4.29 | Electrical Inspection: Press Unit 4205 |  | 2h |
| 9   |   |          |  |  |    |
| 136 | 4 | 4.1.4.30 | Electrical Inspection: Press Unit 4206 |  | 2h |
| 0   |   |          |  |  |    |
| 136 | 4 | 4.1.4.31 | Electrical Inspection: Press Unit 4207 |  | 2h |
| 1   |   |          |  |  |    |
| 136 | 4 | 4.1.4.32 | Electrical Inspection: Press Unit 4208 |  | 2h |
| 2   |   |          |  |  |    |
| 136 | 4 | 4.1.4.33 | Electrical Inspection: Press Unit 4209 |  | 2h |
| 3   |   |          |  |  |    |
| 136 | 4 | 4.1.4.34 | Electrical Inspection: Press Unit 4210 |  | 2h |
| 4   |   |          |  |  |    |
| 136 | 4 | 4.1.4.35 | Electrical Inspection: Press Unit 4211 |  | 2h |
| 5   |   |          |  |  |    |
| 136 | 4 | 4.1.4.36 | Electrical Inspection: Press Unit 4212 |  | 2h |
| 6   |   |          |  |  |    |
| 136 | 4 | 4.1.4.37 | Electrical Inspection: Press Unit 4301 |  | 2h |
| 8   |   |          |  |  |    |
| 136 | 4 | 4.1.4.38 | Electrical Inspection: Press Unit 4302 |  | 2h |

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| 9   |   |          |   |     |
| 137 | 4 | 4.1.4.39 | Electrical Inspection: Press Unit 4303  | 2h  |
| 0   |   |          |   |     |
| 137 | 4 | 4.1.4.40 | Electrical Inspection: Press Unit 4304  | 2h  |
| 1   |   |          |   |     |
| 137 | 4 | 4.1.4.41 | Electrical Inspection: Press Unit 4305  | 2h  |
| 2   |   |          |   |     |
| 137 | 4 | 4.1.4.42 | Electrical Inspection: Press Unit 4306  | 2h  |
| 3   |   |          |   |     |
| 137 | 4 | 4.1.4.43 | Electrical Inspection: Press Unit 4307  | 2h  |
| 4   |   |          |   |     |
| 137 | 4 | 4.1.4.44 | Electrical Inspection: Press Unit 4308  | 2h  |
| 5   |   |          |   |     |
| 137 | 4 | 4.1.4.45 | Electrical Inspection: Press Unit 4309  | 2h  |
| 6   |   |          |   |     |
| 137 | 4 | 4.1.4.46 | Electrical Inspection: Press Unit 4310  | 2h  |
| 7   |   |          |   |     |
| 137 | 4 | 4.1.4.47 | Electrical Inspection: Press Unit 4311  | 2h  |
| 8   |   |          |   |     |
| 137 | 4 | 4.1.4.48 | Electrical Inspection: Press Unit 4312  | 2h  |
| 9   |   |          |   |     |
| 138 | 4 | 4.1.4.49 | Electrical Inspection: Press Unit 4401  | 2h  |
| 1   |   |          |   |     |
| 138 | 4 | 4.1.4.50 | Electrical Inspection: Press Unit 4402  | 2h  |
| 2   |   |          |   |     |
| 138 | 4 | 4.1.4.51 | Electrical Inspection: Press Unit 4403  | 2h  |
| 3   |   |          |   |     |
| 138 | 4 | 4.1.4.52 | Electrical Inspection: Press Unit 4404  | 2h  |
| 4   |   |          |   |     |
| 138 | 4 | 4.1.4.53 | Electrical Inspection: Press Unit 4405  | 2h  |
| 5   |   |          |   |     |
| 138 | 4 | 4.1.4.54 | Electrical Inspection: Press Unit 4406  | 2h  |
| 6   |   |          |   |     |
| 138 | 4 | 4.1.4.55 | Electrical Inspection: Press Unit 4407  | 2h  |
| 7   |   |          |   |     |
| 138 | 4 | 4.1.4.56 | Electrical Inspection: Press Unit 4408  | 2h  |
| 8   |   |          |   |     |
| 138 | 4 | 4.1.4.57 | Electrical Inspection: Press Unit 4409  | 2h  |
| 9   |   |          |   |     |
| 139 | 4 | 4.1.4.58 | Electrical Inspection: Press Unit 4410  | 2h  |
| 0   |   |          |   |     |
| 139 | 4 | 4.1.4.59 | Electrical Inspection: Press Unit 4411  | 2h  |
| 1   |   |          |   |     |
| 139 | 4 | 4.1.4.60 | Electrical Inspection: Press Unit 4412  | 2h  |
| 2   |   |          |   |     |
| 305 | 2 | 4.2      | Press Subsystem Onsite Functional Tests | 0h  |
| 306 | 2 | 4.3      | Press Subsystem Onsite Throughput Tests | 24h |
| 460 | 3 | 4.3.1    | Throughput Test: Press                  | 24h |
| 4   |   |          |   |     |
| 333 | 4 | 4.3.1.1  | Press 40 Throughput Test                | 5eh |
| 1   |   |          |   |     |
| 333 | 4 | 4.3.1.2  | Press 41 Throughput Test                | 5eh |
| 2   |   |          |   |     |
| 333 | 4 | 4.3.1.3  | Press 42 Throughput Test                | 5eh |
| 3   |   |          |   |     |
| 333 | 4 | 4.3.1.4  | Press 43 Throughput Test                | 5eh |
| 4   |   |          |   |     |
| 333 | 4 | 4.3.1.5  | Press 44 Throughput Test                | 5eh |

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| 5   |   |          |   |      |
| 307 | 2 | 4.4      | Press Subsystem Onsite Reliability Test         | 87h  |
| 460 | 3 | 4.4.1    | Reliability Test: Press                         | 87h  |
| 5   |   |          |   |      |
| 333 | 4 | 4.4.1.1  | Press 40 Reliability Test                       | 20eh |
| 6   |   |          |   |      |
| 333 | 4 | 4.4.1.2  | Press 41 Reliability Test                       | 20eh |
| 7   |   |          |   |      |
| 333 | 4 | 4.4.1.3  | Press 42 Reliability Test                       | 20eh |
| 8   |   |          |   |      |
| 333 | 4 | 4.4.1.4  | Press 43 Reliability Test                       | 20eh |
| 9   |   |          |   |      |
| 334 | 4 | 4.4.1.5  | Press 44 Reliability Test                       | 20eh |
| 0   |   |          |   |      |
| 308 | 1 | 5        | Conveyor Subsystem Tests                        | 179h |
| 309 | 2 | 5.1      | Conveyor Subsystem Onsite Component Tests       | 36h  |
| 435 | 3 | 5.1.1    | Mechanical Inspection: Press Delivery Conveyors | 24h  |
| 8   |   |          |   |      |
| 690 | 4 | 5.1.1.1  | Mechanical Inspection: Conveyor 40              | 4h   |
| 691 | 4 | 5.1.1.2  | Mechanical Inspection: Conveyor 41              | 4h   |
| 692 | 4 | 5.1.1.3  | Mechanical Inspection: Conveyor 42              | 4h   |
| 693 | 4 | 5.1.1.4  | Mechanical Inspection: Conveyor 43              | 4h   |
| 694 | 4 | 5.1.1.5  | Mechanical Inspection: Conveyor 44              | 4h   |
| 695 | 4 | 5.1.1.6  | Mechanical Inspection: Conveyor Waste           | 4h   |
| 445 | 3 | 5.1.2    | Mechanical Inspection: SIU's                    | 4h   |
| 0   |   |          |   |      |
| 436 | 4 | 5.1.2.1  | Mechanical Inspection: h1 SIU                   | 4h   |
| 2   |   |          |   |      |
| 436 | 4 | 5.1.2.2  | Mechanical Inspection: i1 SIU                   | 4h   |
| 3   |   |          |   |      |
| 436 | 4 | 5.1.2.3  | Mechanical Inspection: h2 SIU                   | 4h   |
| 4   |   |          |   |      |
| 436 | 4 | 5.1.2.4  | Mechanical Inspection: i2 SIU                   | 4h   |
| 5   |   |          |   |      |
| 436 | 4 | 5.1.2.5  | Mechanical Inspection: h3 SIU                   | 4h   |
| 6   |   |          |   |      |
| 436 | 4 | 5.1.2.6  | Mechanical Inspection: i3 SIU                   | 4h   |
| 7   |   |          |   |      |
| 436 | 4 | 5.1.2.7  | Mechanical Inspection: j3 SIU                   | 4h   |
| 8   |   |          |   |      |
| 436 | 4 | 5.1.2.8  | Mechanical Inspection: h4 SIU                   | 4h   |
| 9   |   |          |   |      |
| 437 | 4 | 5.1.2.9  | Mechanical Inspection: i4 SIU                   | 4h   |
| 0   |   |          |   |      |
| 437 | 4 | 5.1.2.10 | Mechanical Inspection: j4 SIU                   | 4h   |
| 1   |   |          |   |      |
| 437 | 4 | 5.1.2.11 | Mechanical Inspection: h5 SIU                   | 4h   |
| 2   |   |          |   |      |
| 437 | 4 | 5.1.2.12 | Mechanical Inspection: i5 SIU                   | 4h   |
| 3   |   |          |   |      |
| 437 | 4 | 5.1.2.13 | Mechanical Inspection: h6 SIU                   | 4h   |
| 4   |   |          |   |      |
| 437 | 4 | 5.1.2.14 | Mechanical Inspection: i6 SIU                   | 4h   |
| 5   |   |          |   |      |
| 437 | 4 | 5.1.2.15 | Mechanical Inspection: j6 SIU                   | 4h   |
| 6   |   |          |   |      |
| 437 | 4 | 5.1.2.16 | Mechanical Inspection: h7 SIU                   | 4h   |
| 7   |   |          |   |      |

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| 437<br>8 | 4 | 5.1.2.17 | Mechanical Inspection: i7 SIU                   | 4h  |
| 437<br>9 | 4 | 5.1.2.18 | Mechanical Inspection: j7 SIU                   | 4h  |
| 438<br>0 | 4 | 5.1.2.19 | Mechanical Inspection: h8 SIU                   | 4h  |
| 438<br>1 | 4 | 5.1.2.20 | Mechanical Inspection: i8 SIU                   | 4h  |
| 438<br>2 | 4 | 5.1.2.21 | Mechanical Inspection: j8 SIU                   | 4h  |
| 438<br>3 | 4 | 5.1.2.22 | Mechanical Inspection: nw14                     | 4h  |
| 435<br>9 | 3 | 5.1.3    | Electrical Inspection: Press Delivery Conveyors | 12h |
| 139<br>3 | 4 | 5.1.3.1  | Electrical Inspection: Conveyor 40              | 2h  |
| 139<br>4 | 4 | 5.1.3.2  | Electrical Inspection: Conveyor 41              | 2h  |
| 139<br>5 | 4 | 5.1.3.3  | Electrical Inspection: Conveyor 42              | 2h  |
| 139<br>6 | 4 | 5.1.3.4  | Electrical Inspection: Conveyor 43              | 2h  |
| 139<br>7 | 4 | 5.1.3.5  | Electrical Inspection: Conveyor 44              | 2h  |
| 139<br>8 | 4 | 5.1.3.6  | Electrical Inspection: Conveyor Waste           | 2h  |
| 447<br>3 | 3 | 5.1.4    | Electrical Inspection: SIU's                    | 4h  |
| 438<br>4 | 4 | 5.1.4.1  | Electrical Inspection: h1 SIU                   | 4h  |
| 438<br>5 | 4 | 5.1.4.2  | Electrical Inspection: i1 SIU                   | 4h  |
| 438<br>6 | 4 | 5.1.4.3  | Electrical Inspection: h2 SIU                   | 4h  |
| 438<br>7 | 4 | 5.1.4.4  | Electrical Inspection: i2 SIU                   | 4h  |
| 438<br>8 | 4 | 5.1.4.5  | Electrical Inspection: h3 SIU                   | 4h  |
| 438<br>9 | 4 | 5.1.4.6  | Electrical Inspection: i3 SIU                   | 4h  |
| 439<br>0 | 4 | 5.1.4.7  | Electrical Inspection: j3 SIU                   | 4h  |
| 439<br>1 | 4 | 5.1.4.8  | Electrical Inspection: h4 SIU                   | 4h  |
| 439<br>2 | 4 | 5.1.4.9  | Electrical Inspection: i4 SIU                   | 4h  |
| 439<br>3 | 4 | 5.1.4.10 | Electrical Inspection: j4 SIU                   | 4h  |
| 439<br>4 | 4 | 5.1.4.11 | Electrical Inspection: h5 SIU                   | 4h  |
| 439<br>5 | 4 | 5.1.4.12 | Electrical Inspection: i5 SIU                   | 4h  |
| 439<br>6 | 4 | 5.1.4.13 | Electrical Inspection: h6 SIU                   | 4h  |
| 439<br>7 | 4 | 5.1.4.14 | Electrical Inspection: i6 SIU                   | 4h  |
| 439<br>8 | 4 | 5.1.4.15 | Electrical Inspection: j6 SIU                   | 4h  |

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| 439<br>9 | 4 | 5.1.4.16 | Electrical Inspection: h7 SIU                    | 4h    |
| 440<br>0 | 4 | 5.1.4.17 | Electrical Inspection: i7 SIU                    | 4h    |
| 440<br>1 | 4 | 5.1.4.18 | Electrical Inspection: j7 SIU                    | 4h    |
| 440<br>2 | 4 | 5.1.4.19 | Electrical Inspection: h8 SIU                    | 4h    |
| 440<br>3 | 4 | 5.1.4.20 | Electrical Inspection: i8 SIU                    | 4h    |
| 440<br>4 | 4 | 5.1.4.21 | Electrical Inspection: j8 SIU                    | 4h    |
| 440<br>5 | 4 | 5.1.4.22 | Electrical Inspection: nw14                      | 4h    |
| 310      | 2 | 5.2      | Conveyor Subsystem Onsite Functional Tests       | 1h    |
| 473<br>2 | 3 | 5.2.1    | SAM/CCS: Conveyor Allocation Message             | 0.25h |
| 473<br>3 | 3 | 5.2.2    | SAM/CCS: Product Parameters Message              | 0.25h |
| 473<br>4 | 3 | 5.2.3    | SAM/CCS: Conveyor Mode Message                   | 0.25h |
| 473<br>5 | 3 | 5.2.4    | SAM/CCS: Bundle Parameters Message               | 0.25h |
| 473<br>6 | 3 | 5.2.5    | SAM/CCS: Stacker Infeed Mode Message             | 0.25h |
| 473<br>7 | 3 | 5.2.6    | SAM/CCS: Waste Override Mode Message             | 0.25h |
| 473<br>8 | 3 | 5.2.7    | SAM/CCS: Conveyor De-allocation Message          | 0.25h |
| 473<br>9 | 3 | 5.2.8    | SAM/CCS: Press Slowdown Message                  | 0.25h |
| 474<br>0 | 3 | 5.2.9    | SAM/CCS: Press Slowdown Override Message         | 0.25h |
| 474<br>1 | 3 | 5.2.10   | SAM/CCS: Press Stop Message                      | 0.25h |
| 474<br>2 | 3 | 5.2.11   | SAM/CCS: Conveyor Dump Gate Message              | 0.25h |
| 474<br>3 | 3 | 5.2.12   | CCS/SAM: CCS Operational Mode Message            | 0.25h |
| 474<br>4 | 3 | 5.2.13   | CCS/SAM: CCS Configuration Status Message        | 0.25h |
| 474<br>5 | 3 | 5.2.14   | CCS/SAM: Conveyor Run Status Message             | 0.25h |
| 474<br>6 | 3 | 5.2.15   | CCS/SAM: Conveyor Speed Message                  | 0.25h |
| 474<br>7 | 3 | 5.2.16   | CCS/SAM: Configuration Transition Status Message | 0.25h |
| 474<br>8 | 3 | 5.2.17   | CCS/SAM: Status of Release Points Message        | 0.25h |
| 474<br>9 | 3 | 5.2.18   | CCS/SAM: Release Points Receiving Papers Message | 0.25h |
| 475<br>0 | 3 | 5.2.19   | CCS/SAM: Stacker Infeed Status Message           | 0.25h |
| 475<br>1 | 3 | 5.2.20   | CCS/SAM: Press Conveyor Faults Message           | 0.25h |
| 475<br>2 | 3 | 5.2.21   | CCS/SAM: Production Totals Message               | 0.25h |
| 475      | 3 | 5.2.22   | CCS/SAM: Waste Override Alarm Timer Message      | 0.25h |

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| 3   |   |        |   |       |
| 475 | 3 | 5.2.23 | CCS/SAM: Stacker Values Message                 | 0.25h |
| 4   |   |        |   |       |
| 475 | 3 | 5.2.24 | CCS/SAM: Waste Release Failure Alarm Message    | 0.25h |
| 5   |   |        |   |       |
| 475 | 3 | 5.2.25 | CCS/SAM: Dump Site Alarm Message                | 0.25h |
| 6   |   |        |   |       |
| 475 | 3 | 5.2.26 | CCS/PDS: Communication with PDS                 | 0.25h |
| 7   |   |        |   |       |
| 475 | 3 | 5.2.27 | CCS/PICS: Press Stop Request Message            | 0.25h |
| 8   |   |        |   |       |
| 475 | 3 | 5.2.28 | CCS/PICS: Press Slowdown Hold Message           | 0.25h |
| 9   |   |        |   |       |
| 476 | 3 | 5.2.29 | CCS/PICS: Slowdown Request Message              | 0.25h |
| 0   |   |        |   |       |
| 476 | 3 | 5.2.30 | CCS/PICS: Multiple Slowdown Request Arbitration | 0.25h |
| 1   |   |        |   |       |
| 476 | 3 | 5.2.31 | CCS/PICS: CCS to PICS Status                    | 0.25h |
| 2   |   |        |   |       |
| 476 | 3 | 5.2.32 | CCS/PICS: PICS to CCS Status                    | 0.25h |
| 3   |   |        |   |       |
| 476 | 3 | 5.2.33 | CCS/Stacker: CCS to SStacker Infeed Message     | 0.25h |
| 4   |   |        |   |       |
| 476 | 3 | 5.2.34 | CCS/Stacker: Stacker Infeed to Stacker Message  | 0.25h |
| 5   |   |        |   |       |
| 476 | 3 | 5.2.35 | CCS/SStacker: Stacker to Stacker Infeed Message | 0.25h |
| 6   |   |        |   |       |
| 476 | 3 | 5.2.36 | CCS/Stacker: Shared Infeed Functionality        | 0.25h |
| 7   |   |        |   |       |
| 476 | 3 | 5.2.37 | CCS/Stacker: Press Stop & Slow Inerface         | 0.25h |
| 8   |   |        |   |       |
| 476 | 3 | 5.2.38 | Miscellaneous Communications                    | 0.25h |
| 9   |   |        |   |       |
| 477 | 3 | 5.2.39 | Pickup  | 1h    |
| 0   |   |        |   |       |
| 477 | 3 | 5.2.40 | Automatic Clearout                              | 1h    |
| 1   |   |        |   |       |
| 477 | 3 | 5.2.41 | Immediate Wasre                                 | 1h    |
| 2   |   |        |   |       |
| 477 | 3 | 5.2.42 | Tracked Waste                                   | 1h    |
| 3   |   |        |   |       |
| 477 | 3 | 5.2.43 | Good Copy                                       | 1h    |
| 4   |   |        |   |       |
| 477 | 3 | 5.2.44 | Automatic Waste Determination                   | 1h    |
| 5   |   |        |   |       |
| 477 | 3 | 5.2.45 | Going from Good Copy to Waste                   | 1h    |
| 6   |   |        |   |       |
| 477 | 3 | 5.2.46 | Waste Override                                  | 1h    |
| 7   |   |        |   |       |
| 477 | 3 | 5.2.47 | Waste Belt Interface                            | 1h    |
| 8   |   |        |   |       |
| 477 | 3 | 5.2.48 | Inhibits to Press Operation                     | 1h    |
| 9   |   |        |   |       |
| 478 | 3 | 5.2.49 | Paster Detector Assmebly                        | 1h    |
| 0   |   |        |   |       |
| 478 | 3 | 5.2.50 | Tracking Gripper Status                         | 1h    |
| 1   |   |        |   |       |
| 478 | 3 | 5.2.51 | Waste Release Failure Alarm                     | 1h    |



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| 2   |   |         |  |     |
| 478 | 3 | 5.2.52  | Check Copy                                     | 1h  |
| 3   |   |         |  |     |
| 478 | 3 | 5.2.53  | Off Mode                                       | 1h  |
| 4   |   |         |  |     |
| 478 | 3 | 5.2.54  | Maintenance Mode                               | 1h  |
| 5   |   |         |  |     |
| 478 | 3 | 5.2.55  | Run Mode                                       | 1h  |
| 6   |   |         |  |     |
| 478 | 3 | 5.2.56  | Switching between Manual to Auto Modes         | 1h  |
| 7   |   |         |  |     |
| 478 | 3 | 5.2.57  | Configuration Status                           | 1h  |
| 8   |   |         |  |     |
| 478 | 3 | 5.2.58  | Press Conveyor Fault Indication                | 1h  |
| 9   |   |         |  |     |
| 479 | 3 | 5.2.59  | Conveyor Stops                                 | 1h  |
| 0   |   |         |  |     |
| 479 | 3 | 5.2.60  | Daverio Conveyor Interface                     | 1h  |
| 1   |   |         |  |     |
| 479 | 3 | 5.2.61  | Diagnostics                                    | 1h  |
| 2   |   |         |  |     |
| 479 | 3 | 5.2.62  | Infeed Belt                                    | 1h  |
| 3   |   |         |  |     |
| 479 | 3 | 5.2.63  | Stream Aligner                                 | 1h  |
| 4   |   |         |  |     |
| 479 | 3 | 5.2.64  | Pressing Unit                                  | 1h  |
| 5   |   |         |  |     |
| 479 | 3 | 5.2.65  | Stacker Infeed Production Configuration        | 1h  |
| 6   |   |         |  |     |
| 479 | 3 | 5.2.66  | Stacker Infeed Operator Controls               | 1h  |
| 7   |   |         |  |     |
| 479 | 3 | 5.2.67  | Stacker Infeed Valid Production Configurations | 1h  |
| 8   |   |         |  |     |
| 479 | 3 | 5.2.68  | Common (Shared) Stacker Infeed                 | 1h  |
| 9   |   |         |  |     |
| 480 | 3 | 5.2.69  | Stacker Counts                                 | 1h  |
| 0   |   |         |  |     |
| 480 | 3 | 5.2.70  | Stacker Infeed Status                          | 1h  |
| 1   |   |         |  |     |
| 480 | 3 | 5.2.71  | Stacker Infeed Jam Detection                   | 1h  |
| 2   |   |         |  |     |
| 480 | 3 | 5.2.72  | Stacker Infeed Diagnostics                     | 1h  |
| 3   |   |         |  |     |
| 311 | 2 | 5.3     | Conveyor Subsystem Onsite Throughput Tests     | 27h |
| 436 | 3 | 5.3.1   | Throughput Test: Press Delivery Conveyors      | 27h |
| 0   |   |         |  |     |
| 334 | 4 | 5.3.1.1 | Conveyor 40 Throughput Test                    | 5eh |
| 1   |   |         |  |     |
| 334 | 4 | 5.3.1.2 | Conveyor 41 Throughput Test                    | 5eh |
| 2   |   |         |  |     |
| 334 | 4 | 5.3.1.3 | Conveyor 42 Throughput Test                    | 5eh |
| 3   |   |         |  |     |
| 334 | 4 | 5.3.1.4 | Conveyor 43 Throughput Test                    | 5eh |
| 4   |   |         |  |     |
| 334 | 4 | 5.3.1.5 | Conveyor 44 Throughput Test                    | 5eh |
| 5   |   |         |  |     |
| 334 | 4 | 5.3.1.6 | Conveyor Waste Throughput Test                 | 5eh |
| 6   |   |         |  |     |

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| 449<br>6 | 3 | 5.3.2    | Throughput Test: SIU's                     | 3h   |
| 440<br>6 | 4 | 5.3.2.1  | Throughput Test: h1 SIU                    | 5eh  |
| 440<br>7 | 4 | 5.3.2.2  | Throughput Test: i1 SIU                    | 5eh  |
| 440<br>8 | 4 | 5.3.2.3  | Throughput Test: h2 SIU                    | 5eh  |
| 440<br>9 | 4 | 5.3.2.4  | Throughput Test: i2 SIU                    | 5eh  |
| 441<br>0 | 4 | 5.3.2.5  | Throughput Test: h3 SIU                    | 5eh  |
| 441<br>1 | 4 | 5.3.2.6  | Throughput Test: i3 SIU                    | 5eh  |
| 441<br>2 | 4 | 5.3.2.7  | Throughput Test: j3 SIU                    | 5eh  |
| 441<br>3 | 4 | 5.3.2.8  | Throughput Test: h4 SIU                    | 5eh  |
| 441<br>4 | 4 | 5.3.2.9  | Throughput Test: i4 SIU                    | 5eh  |
| 441<br>5 | 4 | 5.3.2.10 | Throughput Test: j4 SIU                    | 5eh  |
| 441<br>6 | 4 | 5.3.2.11 | Throughput Test: h5 SIU                    | 5eh  |
| 441<br>7 | 4 | 5.3.2.12 | Throughput Test: i5 SIU                    | 5eh  |
| 441<br>8 | 4 | 5.3.2.13 | Throughput Test: h6 SIU                    | 5eh  |
| 441<br>9 | 4 | 5.3.2.14 | Throughput Test: i6 SIU                    | 5eh  |
| 442<br>0 | 4 | 5.3.2.15 | Throughput Test: j6 SIU                    | 5eh  |
| 442<br>1 | 4 | 5.3.2.16 | Throughput Test: h7 SIU                    | 5eh  |
| 442<br>2 | 4 | 5.3.2.17 | Throughput Test: i7 SIU                    | 5eh  |
| 442<br>3 | 4 | 5.3.2.18 | Throughput Test: j7 SIU                    | 5eh  |
| 442<br>4 | 4 | 5.3.2.19 | Throughput Test: h8 SIU                    | 5eh  |
| 442<br>5 | 4 | 5.3.2.20 | Throughput Test: i8 SIU                    | 5eh  |
| 442<br>6 | 4 | 5.3.2.21 | Throughput Test: j8 SIU                    | 5eh  |
| 442<br>7 | 4 | 5.3.2.22 | Throughput Test: nw14                      | 5eh  |
| 312      | 2 | 5.4      | Conveyor Subsystem Onsite Reliability Test | 115h |
| 436<br>1 | 3 | 5.4.1    | Reliability Test: Press Delivery Conveyors | 113h |
| 334<br>8 | 4 | 5.4.1.1  | Conveyor 40 Reliability Test               | 20eh |
| 334<br>9 | 4 | 5.4.1.2  | Conveyor 41 Reliability Test               | 20eh |
| 335<br>0 | 4 | 5.4.1.3  | Conveyor 42 Reliability Test               | 20eh |
| 335<br>1 | 4 | 5.4.1.4  | Conveyor 43 Reliability Test               | 20eh |
| 335      | 4 | 5.4.1.5  | Conveyor 44 Reliability Test               | 20eh |

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| 2   |   |          |   |      |
| 335 | 4 | 5.4.1.6  | Conveyor Waste Reliability Test               | 20eh |
| 3   |   |          |   |      |
| 451 | 3 | 5.4.2    | Reliability Test: SIU's                       | 8h   |
| 9   |   |          |   |      |
| 442 | 4 | 5.4.2.1  | Reliability Test: h1 SIU                      | 20eh |
| 8   |   |          |   |      |
| 442 | 4 | 5.4.2.2  | Reliability Test: i1 SIU                      | 20eh |
| 9   |   |          |   |      |
| 443 | 4 | 5.4.2.3  | Reliability Test: h2 SIU                      | 20eh |
| 0   |   |          |   |      |
| 443 | 4 | 5.4.2.4  | Reliability Test: i2 SIU                      | 20eh |
| 1   |   |          |   |      |
| 443 | 4 | 5.4.2.5  | Reliability Test: h3 SIU                      | 20eh |
| 2   |   |          |   |      |
| 443 | 4 | 5.4.2.6  | Reliability Test: i3 SIU                      | 20eh |
| 3   |   |          |   |      |
| 443 | 4 | 5.4.2.7  | Reliability Test: j3 SIU                      | 20eh |
| 4   |   |          |   |      |
| 443 | 4 | 5.4.2.8  | Reliability Test: h4 SIU                      | 20eh |
| 5   |   |          |   |      |
| 443 | 4 | 5.4.2.9  | Reliability Test: i4 SIU                      | 20eh |
| 6   |   |          |   |      |
| 443 | 4 | 5.4.2.10 | Reliability Test: j4 SIU                      | 20eh |
| 7   |   |          |   |      |
| 443 | 4 | 5.4.2.11 | Reliability Test: h5 SIU                      | 20eh |
| 8   |   |          |   |      |
| 443 | 4 | 5.4.2.12 | Reliability Test: i5 SIU                      | 20eh |
| 9   |   |          |   |      |
| 444 | 4 | 5.4.2.13 | Reliability Test: h6 SIU                      | 20eh |
| 0   |   |          |   |      |
| 444 | 4 | 5.4.2.14 | Reliability Test: i6 SIU                      | 20eh |
| 1   |   |          |   |      |
| 444 | 4 | 5.4.2.15 | Reliability Test: j6 SIU                      | 20eh |
| 2   |   |          |   |      |
| 444 | 4 | 5.4.2.16 | Reliability Test: h7 SIU                      | 20eh |
| 3   |   |          |   |      |
| 444 | 4 | 5.4.2.17 | Reliability Test: i7 SIU                      | 20eh |
| 4   |   |          |   |      |
| 444 | 4 | 5.4.2.18 | Reliability Test: j7 SIU                      | 20eh |
| 5   |   |          |   |      |
| 444 | 4 | 5.4.2.19 | Reliability Test: h8 SIU                      | 20eh |
| 6   |   |          |   |      |
| 444 | 4 | 5.4.2.20 | Reliability Test: i8 SIU                      | 20eh |
| 7   |   |          |   |      |
| 444 | 4 | 5.4.2.21 | Reliability Test: j8 SIU                      | 20eh |
| 8   |   |          |   |      |
| 444 | 4 | 5.4.2.22 | Reliability Test: nw14                        | 20eh |
| 9   |   |          |   |      |
| 318 | 1 | 6        | FSI Subsystem Tests                           | 96h  |
| 324 | 2 | 6.1      | FSI Subsystem Onsite Component Tests          | 78h  |
| 277 | 3 | 6.1.1    | Mechanical Inspection: FSI Delivery Vehicles  | 30h  |
| 1   |   |          |   |      |
| 710 | 4 | 6.1.1.1  | Mechanical Inspection: FSI Delivery Vehicle 1 | 3h   |
| 711 | 4 | 6.1.1.2  | Mechanical Inspection: FSI Delivery Vehicle 2 | 3h   |
| 712 | 4 | 6.1.1.3  | Mechanical Inspection: FSI Delivery Vehicle 3 | 3h   |
| 713 | 4 | 6.1.1.4  | Mechanical Inspection: FSI Delivery Vehicle 4 | 3h   |
| 714 | 4 | 6.1.1.5  | Mechanical Inspection: FSI Delivery Vehicle 5 | 3h   |

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| 715 | 4 | 6.1.1.6  | Mechanical Inspection: FSI Delivery Vehicle 6         | 3h  |
| 716 | 4 | 6.1.1.7  | Mechanical Inspection: FSI Delivery Vehicle 7         | 3h  |
| 717 | 4 | 6.1.1.8  | Mechanical Inspection: FSI Delivery Vehicle 8         | 3h  |
| 718 | 4 | 6.1.1.9  | Mechanical Inspection: FSI Delivery Vehicle 9         | 3h  |
| 719 | 4 | 6.1.1.10 | Mechanical Inspection: FSI Delivery Vehicle 10        | 3h  |
| 460 | 3 | 6.1.2    | Mechanical Inspection: Receiving Conveyors            | 2h  |
| 6   |   |          |   |     |
| 720 | 4 | 6.1.2.1  | Mechanical Inspection: FSI Receiving Conveyor 1       | 1h  |
| 721 | 4 | 6.1.2.2  | Mechanical Inspection: FSI Receiving Conveyor 2       | 1h  |
| 460 | 3 | 6.1.3    | Mechanical Inspection: Collector / Dispenser          | 4h  |
| 7   |   |          |   |     |
| 722 | 4 | 6.1.3.1  | Mechanical Inspection: Pallet Collector / Dispenser 1 | 2h  |
| 723 | 4 | 6.1.3.2  | Mechanical Inspection: Pallet Collector / Dispenser 2 | 2h  |
| 460 | 3 | 6.1.4    | Mechanical Inspection: Slave Pallet Conveyor          | 2h  |
| 8   |   |          |   |     |
| 724 | 4 | 6.1.4.1  | Mechanical Inspection: FSI Slave Pallet Conveyor 1    | 1h  |
| 725 | 4 | 6.1.4.2  | Mechanical Inspection: FSI Slave Pallet Conveyor 2    | 1h  |
| 726 | 3 | 6.1.5    | Mechanical Inspection: FSI Storage Rack               | 4h  |
| 727 | 3 | 6.1.6    | Mechanical Inspection: FSI Slave Pallets              | 4h  |
| 469 | 3 | 6.1.7    | Mechanical Inspection: FSI Inserter P&D's             | 8h  |
| 3   |   |          |   |     |
| 277 | 3 | 6.1.8    | Electrical Inspection: FSI Delivery Vehicles          | 20h |
| 2   |   |          |   |     |
| 141 | 4 | 6.1.8.1  | Electrical Inspection: FSI Delivery Vehicle 1         | 2h  |
| 9   |   |          |   |     |
| 142 | 4 | 6.1.8.2  | Electrical Inspection: FSI Delivery Vehicle 2         | 2h  |
| 0   |   |          |   |     |
| 142 | 4 | 6.1.8.3  | Electrical Inspection: FSI Delivery Vehicle 3         | 2h  |
| 1   |   |          |   |     |
| 142 | 4 | 6.1.8.4  | Electrical Inspection: FSI Delivery Vehicle 4         | 2h  |
| 2   |   |          |   |     |
| 142 | 4 | 6.1.8.5  | Electrical Inspection: FSI Delivery Vehicle 5         | 2h  |
| 3   |   |          |   |     |
| 142 | 4 | 6.1.8.6  | Electrical Inspection: FSI Delivery Vehicle 6         | 2h  |
| 4   |   |          |   |     |
| 142 | 4 | 6.1.8.7  | Electrical Inspection: FSI Delivery Vehicle 7         | 2h  |
| 5   |   |          |   |     |
| 142 | 4 | 6.1.8.8  | Electrical Inspection: FSI Delivery Vehicle 8         | 2h  |
| 6   |   |          |   |     |
| 142 | 4 | 6.1.8.9  | Electrical Inspection: FSI Delivery Vehicle 9         | 2h  |
| 7   |   |          |   |     |
| 142 | 4 | 6.1.8.10 | Electrical Inspection: FSI Delivery Vehicle 10        | 2h  |
| 8   |   |          |   |     |
| 460 | 3 | 6.1.9    | Electrical Inspection: Receiving Conveyors            | 4h  |
| 9   |   |          |   |     |
| 142 | 4 | 6.1.9.1  | Electrical Inspection: FSI Receiving Conveyor 1       | 2h  |
| 9   |   |          |   |     |
| 143 | 4 | 6.1.9.2  | Electrical Inspection: FSI Receiving Conveyor 2       | 2h  |
| 0   |   |          |   |     |
| 461 | 3 | 6.1.10   | Electrical Inspection: Collector / Dispenser          | 4h  |
| 0   |   |          |   |     |
| 143 | 4 | 6.1.10.1 | Electrical Inspection: Pallet Collector / Dispenser 1 | 2h  |
| 1   |   |          |   |     |
| 143 | 4 | 6.1.10.2 | Electrical Inspection: Pallet Collector / Dispenser 2 | 2h  |
| 2   |   |          |   |     |
| 461 | 3 | 6.1.11   | Electrical Inspection: Slave Pallet Conveyor          | 4h  |
| 1   |   |          |   |     |
| 469 | 4 | 6.1.11.1 | Electrical Inspection: FSI Slave Pallet Conveyor 1    | 2h  |

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| 5   |   |          |  |    |
| 469 | 4 | 6.1.11.2 | Electrical Inspection: FSI Slave Pallet Conveyor 2 | 2h |
| 6   |   |          |  |    |
| 469 | 3 | 6.1.12   | Electrical Inspection: FSI Inserter P&D's          | 8h |
| 7   |   |          |  |    |
| 470 | 3 | 6.1.13   | Computer Control System                            | 4h |
| 7   |   |          |  |    |
| 325 | 2 | 6.2      | FSI Subsystem Onsite Functional Tests              | 8h |
| 463 | 3 | 6.2.1    | Rack Inventory Table                               | 2h |
| 8   |   |          |  |    |
| 463 | 3 | 6.2.2    | Order Request Table                                | 2h |
| 9   |   |          |  |    |
| 464 | 3 | 6.2.3    | Messaging  | 4h |
| 0   |   |          |  |    |
| 464 | 3 | 6.2.4    | Receiving  | 2h |
| 1   |   |          |  |    |
| 464 | 3 | 6.2.5    | Conveyor Assignment                                | 4h |
| 2   |   |          |  |    |
| 464 | 3 | 6.2.6    | Product Information from FMS                       | 2h |
| 3   |   |          |  |    |
| 464 | 3 | 6.2.7    | Semi-Auto Mode Product Information Entry           | 2h |
| 4   |   |          |  |    |
| 464 | 3 | 6.2.8    | Order Generation and Vehicle Dispatch              | 8h |
| 5   |   |          |  |    |
| 464 | 3 | 6.2.9    | Call Stations                                      | 2h |
| 6   |   |          |  |    |
| 464 | 3 | 6.2.10   | Call Request                                       | 2h |
| 7   |   |          |  |    |
| 464 | 3 | 6.2.11   | Semi-Auto Call Request Initiation                  | 2h |
| 8   |   |          |  |    |
| 464 | 3 | 6.2.12   | Canceling a Request                                | 2h |
| 9   |   |          |  |    |
| 465 | 3 | 6.2.13   | Altering the Priority of a Request                 | 2h |
| 0   |   |          |  |    |
| 465 | 3 | 6.2.14   | Returning Product to Storage                       | 2h |
| 1   |   |          |  |    |
| 465 | 3 | 6.2.15   | Shipping Product to Another Plant                  | 4h |
| 2   |   |          |  |    |
| 465 | 3 | 6.2.16   | Empty Slave Pallet Returns                         | 2h |
| 3   |   |          |  |    |
| 465 | 3 | 6.2.17   | Vehicles   | 2h |
| 4   |   |          |  |    |
| 465 | 3 | 6.2.18   | Display Current Inventory                          | 2h |
| 5   |   |          |  |    |
| 465 | 3 | 6.2.19   | Modify Current Inventory                           | 2h |
| 6   |   |          |  |    |
| 465 | 3 | 6.2.20   | Product Storage Lane Selection Algorithm           | 4h |
| 7   |   |          |  |    |
| 465 | 3 | 6.2.21   | Product Consolidation                              | 4h |
| 8   |   |          |  |    |
| 465 | 3 | 6.2.22   | Clearing Lanes                                     | 4h |
| 9   |   |          |  |    |
| 466 | 3 | 6.2.23   | Reject Area  | 2h |
| 0   |   |          |  |    |
| 466 | 3 | 6.2.24   | Label Printer                                      | 2h |
| 1   |   |          |  |    |
| 466 | 3 | 6.2.25   | Label Re-Print Request                             | 1h |
| 2   |   |          |  |    |

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| 466<br>3 | 3 | 6.2.26  | Equipment Status                            | 4h   |
| 469<br>2 | 3 | 6.2.27  | Vehicle Charging                            | 8h   |
| 326      | 2 | 6.3     | FSI Subsystem Onsite Throughput Tests       | 2h   |
| 469<br>1 | 3 | 6.3.1   | Vehicle Call Response Test                  | 5eh  |
| 469<br>0 | 3 | 6.3.2   | FSI Subsystem Throughput Test               | 5eh  |
| 327      | 2 | 6.4     | FSI Subsystem Onsite Reliability Test       | 20eh |
| 462      | 1 | 7       | Buffer Subsystem Tests                      | 204h |
| 468      | 2 | 7.1     | Buffer Subsystem Onsite Component Tests     | 195h |
| 461<br>2 | 3 | 7.1.1   | Mechanical Inspection: Wind / Unwind        | 32h  |
| 696      | 4 | 7.1.1.1 | Mechanical Inspection: Wind / Unwind 1      | 8h   |
| 699      | 4 | 7.1.1.2 | Mechanical Inspection: Wind / Unwind 2      | 8h   |
| 461<br>4 | 3 | 7.1.2   | Mechanical Inspection: Buffer               | 48h  |
| 697      | 4 | 7.1.2.1 | Mechanical Inspection: Buffer 1             | 8h   |
| 698      | 4 | 7.1.2.2 | Mechanical Inspection: Buffer 2             | 8h   |
| 700      | 4 | 7.1.2.3 | Mechanical Inspection: Buffer 3             | 8h   |
| 701      | 4 | 7.1.2.4 | Mechanical Inspection: Buffer 4             | 8h   |
| 277<br>3 | 3 | 7.1.3   | Mechanical Inspection: Print Roll Carriers  | 3h   |
| 126<br>2 | 4 | 7.1.3.1 | Mechanical Inspection: Print Roll Carrier 1 | 3h   |
| 126<br>3 | 4 | 7.1.3.2 | Mechanical Inspection: Print Roll Carrier 2 | 3h   |
| 126<br>4 | 4 | 7.1.3.3 | Mechanical Inspection: Print Roll Carrier 3 | 3h   |
| 126<br>5 | 4 | 7.1.3.4 | Mechanical Inspection: Print Roll Carrier 4 | 3h   |
| 126<br>6 | 4 | 7.1.3.5 | Mechanical Inspection: Print Roll Carrier 5 | 3h   |
| 126<br>7 | 3 | 7.1.4   | Mechanical Inspection: Print Roll Storage   | 8h   |
| 461<br>5 | 3 | 7.1.5   | Electrical Inspection: Wind / Unwind        | 32h  |
| 139<br>9 | 4 | 7.1.5.1 | Electrical Inspection: Wind / Unwind 1      | 8h   |
| 140<br>2 | 4 | 7.1.5.2 | Electrical Inspection: Wind / Unwind 2      | 8h   |
| 461<br>7 | 3 | 7.1.6   | Electrical Inspection: Buffer               | 40h  |
| 140<br>0 | 4 | 7.1.6.1 | Electrical Inspection: Buffer 1             | 8h   |
| 140<br>1 | 4 | 7.1.6.2 | Electrical Inspection: Buffer 2             | 8h   |
| 140<br>3 | 4 | 7.1.6.3 | Electrical Inspection: Buffer 3             | 8h   |
| 140<br>4 | 4 | 7.1.6.4 | Electrical Inspection: Buffer 4             | 8h   |
| 277<br>4 | 3 | 7.1.7   | Electrical Inspection: Print Roll Carriers  | 3h   |
| 140<br>5 | 4 | 7.1.7.1 | Electrical Inspection: Print Roll Carrier 1 | 3h   |
| 140<br>6 | 4 | 7.1.7.2 | Electrical Inspection: Print Roll Carrier 2 | 3h   |

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| 140<br>7 | 4 | 7.1.7.3 | Electrical Inspection: Print Roll Carrier 3 | 3h   |
| 140<br>8 | 4 | 7.1.7.4 | Electrical Inspection: Print Roll Carrier 4 | 3h   |
| 140<br>9 | 4 | 7.1.7.5 | Electrical Inspection: Print Roll Carrier 5 | 3h   |
| 141<br>0 | 3 | 7.1.8   | Electrical Inspection: Print Roll Storage   | 4h   |
| 469      | 2 | 7.2     | Buffer Subsystem Onsite Functional Tests    | 0h   |
| 470      | 2 | 7.3     | Buffer Subsystem Onsite Throughput Tests    | 4h   |
| 461<br>8 | 3 | 7.3.1   | Throughput Test: Print Roll Carrier         | 4h   |
| 335<br>4 | 4 | 7.3.1.1 | Print Roll Carrier 1 Throughput Test        | 5eh  |
| 335<br>5 | 4 | 7.3.1.2 | Print Roll Carrier 2 Throughput Test        | 5eh  |
| 335<br>6 | 4 | 7.3.1.3 | Print Roll Carrier 3 Throughput Test        | 5eh  |
| 335<br>7 | 4 | 7.3.1.4 | Print Roll Carrier 4 Throughput Test        | 5eh  |
| 335<br>8 | 4 | 7.3.1.5 | Print Roll Carrier 5 Throughput Test        | 5eh  |
| 461<br>9 | 3 | 7.3.2   | Throughput Test: Wind / Unwind              | 4h   |
| 335<br>9 | 4 | 7.3.2.1 | Wind / Unwind 1 Throughput Test             | 5eh  |
| 336<br>2 | 4 | 7.3.2.2 | Wind / Unwind 2 Throughput Test             | 5eh  |
| 462<br>1 | 3 | 7.3.3   | Throughput Test: Buffer                     | 4h   |
| 336<br>0 | 4 | 7.3.3.1 | Buffer 1 Throughput Test                    | 5eh  |
| 336<br>1 | 4 | 7.3.3.2 | Buffer 2 Throughput Test                    | 5eh  |
| 336<br>3 | 4 | 7.3.3.3 | Buffer 3 Throughput Test                    | 5eh  |
| 336<br>4 | 4 | 7.3.3.4 | Buffer 4 Throughput Test                    | 5eh  |
| 471      | 2 | 7.4     | Buffer Subsystem Onsite Reliability Test    | 5h   |
| 462<br>2 | 3 | 7.4.1   | Reliability Test: Print Roll Carrier        | 5h   |
| 336<br>5 | 4 | 7.4.1.1 | Print Roll Carrier 1 Reliability Test       | 20eh |
| 336<br>6 | 4 | 7.4.1.2 | Print Roll Carrier 2 Reliability Test       | 20eh |
| 336<br>7 | 4 | 7.4.1.3 | Print Roll Carrier 3 Reliability Test       | 20eh |
| 336<br>8 | 4 | 7.4.1.4 | Print Roll Carrier 4 Reliability Test       | 20eh |
| 336<br>9 | 4 | 7.4.1.5 | Print Roll Carrier 5 Reliability Test       | 20eh |
| 462<br>3 | 3 | 7.4.2   | Reliability Test: Wind / Unwind             | 5h   |
| 337<br>0 | 4 | 7.4.2.1 | Wind / Unwind 1 Reliability Test            | 20eh |
| 337<br>3 | 4 | 7.4.2.2 | Wind / Unwind 2 Reliability Test            | 20eh |
| 462      | 3 | 7.4.3   | Reliability Test: Buffer                    | 5h   |

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| 5   |   |         |   |      |
| 337 | 4 | 7.4.3.1 | Buffer 1 Reliability Test                     | 20eh |
| 1   |   |         |   |      |
| 337 | 4 | 7.4.3.2 | Buffer 2 Reliability Test                     | 20eh |
| 2   |   |         |   |      |
| 337 | 4 | 7.4.3.3 | Buffer 3 Reliability Test                     | 20eh |
| 4   |   |         |   |      |
| 337 | 4 | 7.4.3.4 | Buffer 4 Reliability Test                     | 20eh |
| 5   |   |         |   |      |
| 204 | 1 | 8       | Inserter Subsystem Tests                      | 488h |
| 493 | 2 | 8.1     | Inserter Subsystem Onsite Component Tests     | 191h |
| 277 | 3 | 8.1.1   | Mechanical Inspection: Inserters              | 48h  |
| 5   |   |         |   |      |
| 702 | 4 | 8.1.1.1 | Mechanical Inspection: Inserter 1             | 6h   |
| 703 | 4 | 8.1.1.2 | Mechanical Inspection: Inserter 2             | 6h   |
| 704 | 4 | 8.1.1.3 | Mechanical Inspection: Inserter 3             | 6h   |
| 705 | 4 | 8.1.1.4 | Mechanical Inspection: Inserter 4             | 6h   |
| 706 | 4 | 8.1.1.5 | Mechanical Inspection: Inserter 5             | 6h   |
| 707 | 4 | 8.1.1.6 | Mechanical Inspection: Inserter 6             | 6h   |
| 708 | 4 | 8.1.1.7 | Mechanical Inspection: Inserter 7             | 6h   |
| 709 | 4 | 8.1.1.8 | Mechanical Inspection: Inserter 8             | 6h   |
| 277 | 3 | 8.1.2   | Electrical Inspection: Inserters              | 24h  |
| 6   |   |         |   |      |
| 141 | 4 | 8.1.2.1 | Electrical Inspection: Inserter 1             | 3h   |
| 1   |   |         |   |      |
| 141 | 4 | 8.1.2.2 | Electrical Inspection: Inserter 2             | 3h   |
| 2   |   |         |   |      |
| 141 | 4 | 8.1.2.3 | Electrical Inspection: Inserter 3             | 3h   |
| 3   |   |         |   |      |
| 141 | 4 | 8.1.2.4 | Electrical Inspection: Inserter 4             | 3h   |
| 4   |   |         |   |      |
| 141 | 4 | 8.1.2.5 | Electrical Inspection: Inserter 5             | 3h   |
| 5   |   |         |   |      |
| 141 | 4 | 8.1.2.6 | Electrical Inspection: Inserter 6             | 3h   |
| 6   |   |         |   |      |
| 141 | 4 | 8.1.2.7 | Electrical Inspection: Inserter 7             | 3h   |
| 7   |   |         |   |      |
| 141 | 4 | 8.1.2.8 | Electrical Inspection: Inserter 8             | 3h   |
| 8   |   |         |   |      |
| 534 | 3 | 8.1.3   | Control Processor Inspection                  | 1h   |
| 535 | 3 | 8.1.4   | Graphical User Interface Processor Inspection | 1h   |
| 536 | 3 | 8.1.5   | Interprocess Communications                   | 1h   |
| 537 | 3 | 8.1.6   | System Hardware                               | 1h   |
| 538 | 3 | 8.1.7   | Inserter I/O                                  | 1h   |
| 539 | 3 | 8.1.8   | Control Processor Application Software        | 1h   |
| 540 | 3 | 8.1.9   | GUI Application Software                      | 1h   |
| 494 | 2 | 8.2     | Inserter Subsystem Onsite Functional Tests    | 108h |
| 499 | 3 | 8.2.1   | Insert Assignments                            | 4h   |
| 500 | 3 | 8.2.2   | Misses and Doubles Threshold                  | 4h   |
| 501 | 3 | 8.2.3   | Packet Definition                             | 4h   |
| 502 | 3 | 8.2.4   | Production Zone Definition                    | 4h   |
| 503 | 3 | 8.2.5   | Selecting Zone Change Modes                   | 4h   |
| 504 | 3 | 8.2.6   | Package Repair Options                        | 4h   |
| 505 | 3 | 8.2.7   | Gripper Silencing                             | 4h   |
| 506 | 3 | 8.2.8   | Pocket Silencing                              | 4h   |
| 507 | 3 | 8.2.9   | Configuration Options                         | 4h   |
| 508 | 3 | 8.2.10  | Stop Codes                                    | 4h   |
| 509 | 3 | 8.2.11  | Machine Speed Change                          | 4h   |



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| 510 | 3 | 8.2.12  | Zone Execution                             | 4h   |
| 511 | 3 | 8.2.13  | Zone Re-Sequencing                         | 4h   |
| 512 | 3 | 8.2.14  | Zone Modification                          | 4h   |
| 513 | 3 | 8.2.15  | Zone Addition                              | 4h   |
| 514 | 3 | 8.2.16  | Zone Deactivation                          | 4h   |
| 515 | 3 | 8.2.17  | Zone Suspension                            | 4h   |
| 516 | 3 | 8.2.18  | Zone Re-order                              | 4h   |
| 517 | 3 | 8.2.19  | Zone Filtering                             | 4h   |
| 518 | 3 | 8.2.20  | Zone Clear-out                             | 4h   |
| 519 | 3 | 8.2.21  | Run-Time Statistics                        | 4h   |
| 520 | 3 | 8.2.22  | Error Recovery                             | 4h   |
| 525 | 3 | 8.2.23  | Post Production Mode                       | 4h   |
| 521 | 3 | 8.2.24  | Mechanical Configuration Data              | 4h   |
| 522 | 3 | 8.2.25  | Timing the Inserter                        | 4h   |
| 523 | 3 | 8.2.26  | Input / Output Diagnostics                 | 4h   |
| 524 | 3 | 8.2.27  | Error Handling                             | 4h   |
| 495 | 2 | 8.3     | Inserter Subsystem Onsite Throughput Tests | 39h  |
| 462 | 3 | 8.3.1   | Throughput Test: Inserter                  | 39h  |
| 6   |   |         |  |      |
| 526 | 4 | 8.3.1.1 | Inserter 1 Throughput Test                 | 5eh  |
| 527 | 4 | 8.3.1.2 | Inserter 2 Throughput Test                 | 5eh  |
| 528 | 4 | 8.3.1.3 | Inserter 3 Throughput Test                 | 5eh  |
| 529 | 4 | 8.3.1.4 | Inserter 4 Throughput Test                 | 5eh  |
| 530 | 4 | 8.3.1.5 | Inserter 5 Throughput Test                 | 5eh  |
| 531 | 4 | 8.3.1.6 | Inserter 6 Throughput Test                 | 5eh  |
| 532 | 4 | 8.3.1.7 | Inserter 7 Throughput Test                 | 5eh  |
| 533 | 4 | 8.3.1.8 | Inserter 8 Throughput Test                 | 5eh  |
| 496 | 2 | 8.4     | Inserter Subsystem Onsite Reliability Test | 145h |
| 462 | 3 | 8.4.1   | Reliability Test: Inserter                 | 145h |
| 7   |   |         |  |      |
| 278 | 4 | 8.4.1.1 | Inserter 1 Reliability Test                | 20eh |
| 2   |   |         |  |      |
| 278 | 4 | 8.4.1.2 | Inserter 2 Reliability Test                | 20eh |
| 3   |   |         |  |      |
| 278 | 4 | 8.4.1.3 | Inserter 3 Reliability Test                | 20eh |
| 4   |   |         |  |      |
| 278 | 4 | 8.4.1.4 | Inserter 4 Reliability Test                | 20eh |
| 5   |   |         |  |      |
| 278 | 4 | 8.4.1.5 | Inserter 5 Reliability Test                | 20eh |
| 6   |   |         |  |      |
| 278 | 4 | 8.4.1.6 | Inserter 6 Reliability Test                | 20eh |
| 7   |   |         |  |      |
| 278 | 4 | 8.4.1.7 | Inserter 7 Reliability Test                | 20eh |
| 8   |   |         |  |      |
| 278 | 4 | 8.4.1.8 | Inserter 8 Reliability Test                | 20eh |
| 9   |   |         |  |      |
| 482 | 1 | 9       | Stacker Subsystem Tests                    | 842h |
| 488 | 2 | 9.1     | Stacker Subsystem Onsite Component Tests   | 116h |
| 277 | 3 | 9.1.1   | Mechanical Inspection: Stackers            | 58h  |
| 7   |   |         |  |      |
| 728 | 4 | 9.1.1.1 | Mechanical Inspection: Stacker 1A          | 2h   |
| 729 | 4 | 9.1.1.2 | Mechanical Inspection: Stacker 1B          | 2h   |
| 730 | 4 | 9.1.1.3 | Mechanical Inspection: Stacker 2A          | 2h   |
| 731 | 4 | 9.1.1.4 | Mechanical Inspection: Stacker 2B          | 2h   |
| 732 | 4 | 9.1.1.5 | Mechanical Inspection: Stacker 3A          | 2h   |
| 733 | 4 | 9.1.1.6 | Mechanical Inspection: Stacker 3B          | 2h   |
| 734 | 4 | 9.1.1.7 | Mechanical Inspection: Stacker 4A          | 2h   |
| 735 | 4 | 9.1.1.8 | Mechanical Inspection: Stacker 4B          | 2h   |

|     |   |          |                                    |     |
|-----|---|----------|------------------------------------|-----|
| 736 | 4 | 9.1.1.9  | Mechanical Inspection: Stacker 5A  | 2h  |
| 737 | 4 | 9.1.1.10 | Mechanical Inspection: Stacker 5B  | 2h  |
| 738 | 4 | 9.1.1.11 | Mechanical Inspection: Stacker 6A  | 2h  |
| 739 | 4 | 9.1.1.12 | Mechanical Inspection: Stacker 6B  | 2h  |
| 740 | 4 | 9.1.1.13 | Mechanical Inspection: Stacker 7A  | 2h  |
| 741 | 4 | 9.1.1.14 | Mechanical Inspection: Stacker 7B  | 2h  |
| 742 | 4 | 9.1.1.15 | Mechanical Inspection: Stacker 8A  | 2h  |
| 743 | 4 | 9.1.1.16 | Mechanical Inspection: Stacker 8B  | 2h  |
| 744 | 4 | 9.1.1.17 | Mechanical Inspection: Stacker 40A | 2h  |
| 745 | 4 | 9.1.1.18 | Mechanical Inspection: Stacker 40B | 2h  |
| 746 | 4 | 9.1.1.19 | Mechanical Inspection: Stacker 41A | 2h  |
| 747 | 4 | 9.1.1.20 | Mechanical Inspection: Stacker 41B | 2h  |
| 748 | 4 | 9.1.1.21 | Mechanical Inspection: Stacker 42A | 2h  |
| 749 | 4 | 9.1.1.22 | Mechanical Inspection: Stacker 42B | 2h  |
| 750 | 4 | 9.1.1.23 | Mechanical Inspection: Stacker 43A | 2h  |
| 751 | 4 | 9.1.1.24 | Mechanical Inspection: Stacker 43B | 2h  |
| 752 | 4 | 9.1.1.25 | Mechanical Inspection: Stacker 44A | 2h  |
| 753 | 4 | 9.1.1.26 | Mechanical Inspection: Stacker 44B | 2h  |
| 754 | 4 | 9.1.1.27 | Mechanical Inspection: Stacker S1  | 2h  |
| 755 | 4 | 9.1.1.28 | Mechanical Inspection: Stacker S2  | 2h  |
| 756 | 4 | 9.1.1.29 | Mechanical Inspection: Stacker S3  | 2h  |
| 277 | 3 | 9.1.2    | Electrical Inspection: Stackers    | 58h |
| 8   |   |          |                                    |     |
| 143 | 4 | 9.1.2.1  | Electrical Inspection: Stacker 1A  | 2h  |
| 7   |   |          |                                    |     |
| 143 | 4 | 9.1.2.2  | Electrical Inspection: Stacker 1B  | 2h  |
| 8   |   |          |                                    |     |
| 143 | 4 | 9.1.2.3  | Electrical Inspection: Stacker 2A  | 2h  |
| 9   |   |          |                                    |     |
| 144 | 4 | 9.1.2.4  | Electrical Inspection: Stacker 2B  | 2h  |
| 0   |   |          |                                    |     |
| 144 | 4 | 9.1.2.5  | Electrical Inspection: Stacker 3A  | 2h  |
| 1   |   |          |                                    |     |
| 144 | 4 | 9.1.2.6  | Electrical Inspection: Stacker 3B  | 2h  |
| 2   |   |          |                                    |     |
| 144 | 4 | 9.1.2.7  | Electrical Inspection: Stacker 4A  | 2h  |
| 3   |   |          |                                    |     |
| 144 | 4 | 9.1.2.8  | Electrical Inspection: Stacker 4B  | 2h  |
| 4   |   |          |                                    |     |
| 144 | 4 | 9.1.2.9  | Electrical Inspection: Stacker 5A  | 2h  |
| 5   |   |          |                                    |     |
| 144 | 4 | 9.1.2.10 | Electrical Inspection: Stacker 5B  | 2h  |
| 6   |   |          |                                    |     |
| 144 | 4 | 9.1.2.11 | Electrical Inspection: Stacker 6A  | 2h  |
| 7   |   |          |                                    |     |
| 144 | 4 | 9.1.2.12 | Electrical Inspection: Stacker 6B  | 2h  |
| 8   |   |          |                                    |     |
| 144 | 4 | 9.1.2.13 | Electrical Inspection: Stacker 7A  | 2h  |
| 9   |   |          |                                    |     |
| 145 | 4 | 9.1.2.14 | Electrical Inspection: Stacker 7B  | 2h  |
| 0   |   |          |                                    |     |
| 145 | 4 | 9.1.2.15 | Electrical Inspection: Stacker 8A  | 2h  |
| 1   |   |          |                                    |     |
| 145 | 4 | 9.1.2.16 | Electrical Inspection: Stacker 8B  | 2h  |
| 2   |   |          |                                    |     |
| 145 | 4 | 9.1.2.17 | Electrical Inspection: Stacker 40A | 2h  |
| 3   |   |          |                                    |     |
| 145 | 4 | 9.1.2.18 | Electrical Inspection: Stacker 40B | 2h  |

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|-----|---|----------|---|------|
| 4   |   |          |   |      |
| 145 | 4 | 9.1.2.19 | Electrical Inspection: Stacker 41A        | 2h   |
| 5   |   |          |   |      |
| 145 | 4 | 9.1.2.20 | Electrical Inspection: Stacker 41B        | 2h   |
| 6   |   |          |   |      |
| 145 | 4 | 9.1.2.21 | Electrical Inspection: Stacker 42A        | 2h   |
| 7   |   |          |   |      |
| 145 | 4 | 9.1.2.22 | Electrical Inspection: Stacker 42B        | 2h   |
| 8   |   |          |   |      |
| 145 | 4 | 9.1.2.23 | Electrical Inspection: Stacker 43A        | 2h   |
| 9   |   |          |   |      |
| 146 | 4 | 9.1.2.24 | Electrical Inspection: Stacker 43B        | 2h   |
| 0   |   |          |   |      |
| 146 | 4 | 9.1.2.25 | Electrical Inspection: Stacker 44A        | 2h   |
| 1   |   |          |   |      |
| 146 | 4 | 9.1.2.26 | Electrical Inspection: Stacker 44B        | 2h   |
| 2   |   |          |   |      |
| 146 | 4 | 9.1.2.27 | Electrical Inspection: Stacker S1         | 2h   |
| 3   |   |          |   |      |
| 146 | 4 | 9.1.2.28 | Electrical Inspection: Stacker S2         | 2h   |
| 4   |   |          |   |      |
| 146 | 4 | 9.1.2.29 | Electrical Inspection: Stacker S3         | 2h   |
| 5   |   |          |   |      |
| 489 | 2 | 9.2      | Stacker Subsystem Onsite Functional Tests | 0h   |
| 490 | 2 | 9.3      | Stacker Subsystem Onsite Throughput Tests | 152h |
| 462 | 3 | 9.3.1    | Throughput Test: Stackers                 | 152h |
| 8   |   |          |   |      |
| 337 | 4 | 9.3.1.1  | Stacker 1A Throughput Test                | 5eh  |
| 6   |   |          |   |      |
| 337 | 4 | 9.3.1.2  | Stacker1B Throughput Test                 | 5eh  |
| 7   |   |          |   |      |
| 337 | 4 | 9.3.1.3  | Stacker 2A Throughput Test                | 5eh  |
| 8   |   |          |   |      |
| 337 | 4 | 9.3.1.4  | Stacker 2B Throughput Test                | 5eh  |
| 9   |   |          |   |      |
| 338 | 4 | 9.3.1.5  | Stacker 3A Throughput Test                | 5eh  |
| 0   |   |          |   |      |
| 338 | 4 | 9.3.1.6  | Stacker 3B Throughput Test                | 5eh  |
| 1   |   |          |   |      |
| 338 | 4 | 9.3.1.7  | Stacker 4A Throughput Test                | 5eh  |
| 2   |   |          |   |      |
| 338 | 4 | 9.3.1.8  | Stacker 4B Throughput Test                | 5eh  |
| 3   |   |          |   |      |
| 338 | 4 | 9.3.1.9  | Stacker 5A Throughput Test                | 5eh  |
| 4   |   |          |   |      |
| 338 | 4 | 9.3.1.10 | Stacker 5B Throughput Test                | 5eh  |
| 5   |   |          |   |      |
| 338 | 4 | 9.3.1.11 | Stacker 6A Throughput Test                | 5eh  |
| 6   |   |          |   |      |
| 338 | 4 | 9.3.1.12 | Stacker 6B Throughput Test                | 5eh  |
| 7   |   |          |   |      |
| 338 | 4 | 9.3.1.13 | Stacker 7A Throughput Test                | 5eh  |
| 8   |   |          |   |      |
| 338 | 4 | 9.3.1.14 | Stacker 7B Throughput Test                | 5eh  |
| 9   |   |          |   |      |
| 339 | 4 | 9.3.1.15 | Stacker 8A Throughput Test                | 5eh  |
| 0   |   |          |   |      |
| 339 | 4 | 9.3.1.16 | Stacker 8B Throughput Test                | 5eh  |

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|-----|---|----------|---|------|
| 1   |   |          |   |      |
| 339 | 4 | 9.3.1.17 | Stacker 40A Throughput Test               | 5eh  |
| 2   |   |          |   |      |
| 339 | 4 | 9.3.1.18 | Stacker 40B Throughput Test               | 5eh  |
| 3   |   |          |   |      |
| 339 | 4 | 9.3.1.19 | Stacker 41A Throughput Test               | 5eh  |
| 4   |   |          |   |      |
| 339 | 4 | 9.3.1.20 | Stacker 41B Throughput Test               | 5eh  |
| 5   |   |          |   |      |
| 339 | 4 | 9.3.1.21 | Stacker 42A Throughput Test               | 5eh  |
| 6   |   |          |   |      |
| 339 | 4 | 9.3.1.22 | Stacker 42B Throughput Test               | 5eh  |
| 7   |   |          |   |      |
| 339 | 4 | 9.3.1.23 | Stacker 43A Throughput Test               | 5eh  |
| 8   |   |          |   |      |
| 339 | 4 | 9.3.1.24 | Stacker 43B Throughput Test               | 5eh  |
| 9   |   |          |   |      |
| 340 | 4 | 9.3.1.25 | Stacker 44A Throughput Test               | 5eh  |
| 0   |   |          |   |      |
| 340 | 4 | 9.3.1.26 | Stacker 44B Throughput Test               | 5eh  |
| 1   |   |          |   |      |
| 340 | 4 | 9.3.1.27 | Stacker S1 Throughput Test                | 5eh  |
| 2   |   |          |   |      |
| 340 | 4 | 9.3.1.28 | Stacker S2 Throughput Test                | 5eh  |
| 3   |   |          |   |      |
| 340 | 4 | 9.3.1.29 | Stacker S3 Throughput Test                | 5eh  |
| 4   |   |          |   |      |
| 491 | 2 | 9.4      | Stacker Subsystem Onsite Reliability Test | 573h |
| 462 | 3 | 9.4.1    | Reliability Test: Stackers                | 573h |
| 9   |   |          |   |      |
| 340 | 4 | 9.4.1.1  | Stacker 1A Throughput Test                | 20eh |
| 5   |   |          |   |      |
| 340 | 4 | 9.4.1.2  | Stacker1B Throughput Test                 | 20eh |
| 6   |   |          |   |      |
| 340 | 4 | 9.4.1.3  | Stacker 2A Throughput Test                | 20eh |
| 7   |   |          |   |      |
| 340 | 4 | 9.4.1.4  | Stacker 2B Throughput Test                | 20eh |
| 8   |   |          |   |      |
| 340 | 4 | 9.4.1.5  | Stacker 3A Throughput Test                | 20eh |
| 9   |   |          |   |      |
| 341 | 4 | 9.4.1.6  | Stacker 3B Throughput Test                | 20eh |
| 0   |   |          |   |      |
| 341 | 4 | 9.4.1.7  | Stacker 4A Throughput Test                | 20eh |
| 1   |   |          |   |      |
| 341 | 4 | 9.4.1.8  | Stacker 4B Throughput Test                | 20eh |
| 2   |   |          |   |      |
| 341 | 4 | 9.4.1.9  | Stacker 5A Throughput Test                | 20eh |
| 3   |   |          |   |      |
| 341 | 4 | 9.4.1.10 | Stacker 5B Throughput Test                | 20eh |
| 4   |   |          |   |      |
| 341 | 4 | 9.4.1.11 | Stacker 6A Throughput Test                | 20eh |
| 5   |   |          |   |      |
| 341 | 4 | 9.4.1.12 | Stacker 6B Throughput Test                | 20eh |
| 6   |   |          |   |      |
| 341 | 4 | 9.4.1.13 | Stacker 7A Throughput Test                | 20eh |
| 7   |   |          |   |      |
| 341 | 4 | 9.4.1.14 | Stacker 7B Throughput Test                | 20eh |
| 8   |   |          |   |      |

|          |   |           |                                      |      |
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| 341<br>9 | 4 | 9.4.1.15  | Stacker 8A Throughput Test           | 20eh |
| 342<br>0 | 4 | 9.4.1.16  | Stacker 8B Throughput Test           | 20eh |
| 342<br>1 | 4 | 9.4.1.17  | Stacker 40A Throughput Test          | 20eh |
| 342<br>2 | 4 | 9.4.1.18  | Stacker 40B Throughput Test          | 20eh |
| 342<br>3 | 4 | 9.4.1.19  | Stacker 41A Throughput Test          | 20eh |
| 342<br>4 | 4 | 9.4.1.20  | Stacker 41B Throughput Test          | 20eh |
| 342<br>5 | 4 | 9.4.1.21  | Stacker 42A Throughput Test          | 20eh |
| 342<br>6 | 4 | 9.4.1.22  | Stacker 42B Throughput Test          | 20eh |
| 342<br>7 | 4 | 9.4.1.23  | Stacker 43A Throughput Test          | 20eh |
| 342<br>8 | 4 | 9.4.1.24  | Stacker 43B Throughput Test          | 20eh |
| 342<br>9 | 4 | 9.4.1.25  | Stacker 44A Throughput Test          | 20eh |
| 343<br>0 | 4 | 9.4.1.26  | Stacker 44B Throughput Test          | 20eh |
| 343<br>1 | 4 | 9.4.1.27  | Stacker S1 Throughput Test           | 20eh |
| 343<br>2 | 4 | 9.4.1.28  | Stacker S2 Throughput Test           | 20eh |
| 343<br>3 | 4 | 9.4.1.29  | Stacker S3 Throughput Test           | 20eh |
| 313<br>2 | 1 | 10        | Strapper Subsystem Tests             | 116h |
| 313<br>5 | 2 | 10.1      | Strapper Onsite Component Tests      | 116h |
| 313<br>6 | 3 | 10.1.1    | Mechanical Inspection: Strappers     | 58h  |
| 313<br>7 | 4 | 10.1.1.1  | Mechanical Inspection: Strapper 1A-1 | 1h   |
| 313<br>8 | 4 | 10.1.1.2  | Mechanical Inspection: Strapper 1B-1 | 1h   |
| 313<br>9 | 4 | 10.1.1.3  | Mechanical Inspection: Strapper 2A-1 | 1h   |
| 314<br>0 | 4 | 10.1.1.4  | Mechanical Inspection: Strapper 2B-1 | 1h   |
| 314<br>1 | 4 | 10.1.1.5  | Mechanical Inspection: Strapper 3A-1 | 1h   |
| 314<br>2 | 4 | 10.1.1.6  | Mechanical Inspection: Strapper 3B-1 | 1h   |
| 314<br>3 | 4 | 10.1.1.7  | Mechanical Inspection: Strapper 4A-1 | 1h   |
| 314<br>4 | 4 | 10.1.1.8  | Mechanical Inspection: Strapper 4B-1 | 1h   |
| 314<br>5 | 4 | 10.1.1.9  | Mechanical Inspection: Strapper 5A-1 | 1h   |
| 314<br>6 | 4 | 10.1.1.10 | Mechanical Inspection: Strapper 5B-1 | 1h   |
| 314<br>7 | 4 | 10.1.1.11 | Mechanical Inspection: Strapper 6A-1 | 1h   |

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| 314<br>8 | 4 | 10.1.1.12 | Mechanical Inspection: Strapper 6B-1  | 1h |
| 314<br>9 | 4 | 10.1.1.13 | Mechanical Inspection: Strapper 7A-1  | 1h |
| 315<br>0 | 4 | 10.1.1.14 | Mechanical Inspection: Strapper 7B-1  | 1h |
| 315<br>1 | 4 | 10.1.1.15 | Mechanical Inspection: Strapper 8A-1  | 1h |
| 315<br>2 | 4 | 10.1.1.16 | Mechanical Inspection: Strapper 8B-1  | 1h |
| 315<br>3 | 4 | 10.1.1.17 | Mechanical Inspection: Strapper 40A-1 | 1h |
| 315<br>4 | 4 | 10.1.1.18 | Mechanical Inspection: Strapper 40B-1 | 1h |
| 315<br>5 | 4 | 10.1.1.19 | Mechanical Inspection: Strapper 41A-1 | 1h |
| 315<br>6 | 4 | 10.1.1.20 | Mechanical Inspection: Strapper 41B-1 | 1h |
| 315<br>7 | 4 | 10.1.1.21 | Mechanical Inspection: Strapper 42A-1 | 1h |
| 315<br>8 | 4 | 10.1.1.22 | Mechanical Inspection: Strapper 42B-1 | 1h |
| 315<br>9 | 4 | 10.1.1.23 | Mechanical Inspection: Strapper 43A-1 | 1h |
| 316<br>0 | 4 | 10.1.1.24 | Mechanical Inspection: Strapper 43B-1 | 1h |
| 316<br>1 | 4 | 10.1.1.25 | Mechanical Inspection: Strapper 44A-1 | 1h |
| 316<br>2 | 4 | 10.1.1.26 | Mechanical Inspection: Strapper 44B-1 | 1h |
| 316<br>3 | 4 | 10.1.1.27 | Mechanical Inspection: Strapper S1-1  | 1h |
| 316<br>4 | 4 | 10.1.1.28 | Mechanical Inspection: Strapper S2-1  | 1h |
| 316<br>5 | 4 | 10.1.1.29 | Mechanical Inspection: Strapper S3-1  | 1h |
| 316<br>6 | 4 | 10.1.1.30 | Mechanical Inspection: Strapper 1A-2  | 1h |
| 316<br>7 | 4 | 10.1.1.31 | Mechanical Inspection: Strapper 1B-2  | 1h |
| 316<br>8 | 4 | 10.1.1.32 | Mechanical Inspection: Strapper 2A-2  | 1h |
| 316<br>9 | 4 | 10.1.1.33 | Mechanical Inspection: Strapper 2B-2  | 1h |
| 317<br>0 | 4 | 10.1.1.34 | Mechanical Inspection: Strapper 3A-2  | 1h |
| 317<br>1 | 4 | 10.1.1.35 | Mechanical Inspection: Strapper 3B-2  | 1h |
| 317<br>2 | 4 | 10.1.1.36 | Mechanical Inspection: Strapper 4A-2  | 1h |
| 317<br>3 | 4 | 10.1.1.37 | Mechanical Inspection: Strapper 4B-2  | 1h |
| 317<br>4 | 4 | 10.1.1.38 | Mechanical Inspection: Strapper 5A-2  | 1h |
| 317<br>5 | 4 | 10.1.1.39 | Mechanical Inspection: Strapper 5B-2  | 1h |
| 317<br>6 | 4 | 10.1.1.40 | Mechanical Inspection: Strapper 6A-2  | 1h |

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| 317<br>7 | 4 | 10.1.1.41 | Mechanical Inspection: Strapper 6B-2  | 1h  |
| 317<br>8 | 4 | 10.1.1.42 | Mechanical Inspection: Strapper 7A-2  | 1h  |
| 317<br>9 | 4 | 10.1.1.43 | Mechanical Inspection: Strapper 7B-2  | 1h  |
| 318<br>0 | 4 | 10.1.1.44 | Mechanical Inspection: Strapper 8A-2  | 1h  |
| 318<br>1 | 4 | 10.1.1.45 | Mechanical Inspection: Strapper 8B-2  | 1h  |
| 318<br>2 | 4 | 10.1.1.46 | Mechanical Inspection: Strapper 40A-2 | 1h  |
| 318<br>3 | 4 | 10.1.1.47 | Mechanical Inspection: Strapper 40B-2 | 1h  |
| 318<br>4 | 4 | 10.1.1.48 | Mechanical Inspection: Strapper 41A-2 | 1h  |
| 318<br>5 | 4 | 10.1.1.49 | Mechanical Inspection: Strapper 41B-2 | 1h  |
| 318<br>6 | 4 | 10.1.1.50 | Mechanical Inspection: Strapper 42A-2 | 1h  |
| 318<br>7 | 4 | 10.1.1.51 | Mechanical Inspection: Strapper 42B-2 | 1h  |
| 318<br>8 | 4 | 10.1.1.52 | Mechanical Inspection: Strapper 43A-2 | 1h  |
| 318<br>9 | 4 | 10.1.1.53 | Mechanical Inspection: Strapper 43B-2 | 1h  |
| 319<br>0 | 4 | 10.1.1.54 | Mechanical Inspection: Strapper 44A-2 | 1h  |
| 319<br>1 | 4 | 10.1.1.55 | Mechanical Inspection: Strapper 44B-2 | 1h  |
| 319<br>2 | 4 | 10.1.1.56 | Mechanical Inspection: Strapper S1-2  | 1h  |
| 319<br>3 | 4 | 10.1.1.57 | Mechanical Inspection: Strapper S2-2  | 1h  |
| 319<br>4 | 4 | 10.1.1.58 | Mechanical Inspection: Strapper S3-2  | 1h  |
| 319<br>5 | 3 | 10.1.2    | Electrical Inspection: Strappers      | 58h |
| 319<br>6 | 4 | 10.1.2.1  | Electrical Inspection: Strapper 1A-1  | 1h  |
| 319<br>7 | 4 | 10.1.2.2  | Electrical Inspection: Strapper 1B-1  | 1h  |
| 319<br>8 | 4 | 10.1.2.3  | Electrical Inspection: Strapper 2A-1  | 1h  |
| 319<br>9 | 4 | 10.1.2.4  | Electrical Inspection: Strapper 2B-1  | 1h  |
| 320<br>0 | 4 | 10.1.2.5  | Electrical Inspection: Strapper 3A-1  | 1h  |
| 320<br>1 | 4 | 10.1.2.6  | Electrical Inspection: Strapper 3B-1  | 1h  |
| 320<br>2 | 4 | 10.1.2.7  | Electrical Inspection: Strapper 4A-1  | 1h  |
| 320<br>3 | 4 | 10.1.2.8  | Electrical Inspection: Strapper 4B-1  | 1h  |
| 320<br>4 | 4 | 10.1.2.9  | Electrical Inspection: Strapper 5A-1  | 1h  |
| 320<br>5 | 4 | 10.1.2.10 | Electrical Inspection: Strapper 5B-1  | 1h  |

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|----------|---|-----------|---------------------------------------|----|
| 320<br>6 | 4 | 10.1.2.11 | Electrical Inspection: Strapper 6A-1  | 1h |
| 320<br>7 | 4 | 10.1.2.12 | Electrical Inspection: Strapper 6B-1  | 1h |
| 320<br>8 | 4 | 10.1.2.13 | Electrical Inspection: Strapper 7A-1  | 1h |
| 320<br>9 | 4 | 10.1.2.14 | Electrical Inspection: Strapper 7B-1  | 1h |
| 321<br>0 | 4 | 10.1.2.15 | Electrical Inspection: Strapper 8A-1  | 1h |
| 321<br>1 | 4 | 10.1.2.16 | Electrical Inspection: Strapper 8B-1  | 1h |
| 321<br>2 | 4 | 10.1.2.17 | Electrical Inspection: Strapper 40A-1 | 1h |
| 321<br>3 | 4 | 10.1.2.18 | Electrical Inspection: Strapper 40B-1 | 1h |
| 321<br>4 | 4 | 10.1.2.19 | Electrical Inspection: Strapper 41A-1 | 1h |
| 321<br>5 | 4 | 10.1.2.20 | Electrical Inspection: Strapper 41B-1 | 1h |
| 321<br>6 | 4 | 10.1.2.21 | Electrical Inspection: Strapper 42A-1 | 1h |
| 321<br>7 | 4 | 10.1.2.22 | Electrical Inspection: Strapper 42B-1 | 1h |
| 321<br>8 | 4 | 10.1.2.23 | Electrical Inspection: Strapper 43A-1 | 1h |
| 321<br>9 | 4 | 10.1.2.24 | Electrical Inspection: Strapper 43B-1 | 1h |
| 322<br>0 | 4 | 10.1.2.25 | Electrical Inspection: Strapper 44A-1 | 1h |
| 322<br>1 | 4 | 10.1.2.26 | Electrical Inspection: Strapper 44B-1 | 1h |
| 322<br>2 | 4 | 10.1.2.27 | Electrical Inspection: Strapper S1-1  | 1h |
| 322<br>3 | 4 | 10.1.2.28 | Electrical Inspection: Strapper S2-1  | 1h |
| 322<br>4 | 4 | 10.1.2.29 | Electrical Inspection: Strapper S3-1  | 1h |
| 322<br>5 | 4 | 10.1.2.30 | Electrical Inspection: Strapper 1A-2  | 1h |
| 322<br>6 | 4 | 10.1.2.31 | Electrical Inspection: Strapper 1B-2  | 1h |
| 322<br>7 | 4 | 10.1.2.32 | Electrical Inspection: Strapper 2A-2  | 1h |
| 322<br>8 | 4 | 10.1.2.33 | Electrical Inspection: Strapper 2B-2  | 1h |
| 322<br>9 | 4 | 10.1.2.34 | Electrical Inspection: Strapper 3A-2  | 1h |
| 323<br>0 | 4 | 10.1.2.35 | Electrical Inspection: Strapper 3B-2  | 1h |
| 323<br>1 | 4 | 10.1.2.36 | Electrical Inspection: Strapper 4A-2  | 1h |
| 323<br>2 | 4 | 10.1.2.37 | Electrical Inspection: Strapper 4B-2  | 1h |
| 323<br>3 | 4 | 10.1.2.38 | Electrical Inspection: Strapper 5A-2  | 1h |
| 323<br>4 | 4 | 10.1.2.39 | Electrical Inspection: Strapper 5B-2  | 1h |



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| 323<br>5 | 4 | 10.1.2.40 | Electrical Inspection: Strapper 6A-2  | 1h  |
| 323<br>6 | 4 | 10.1.2.41 | Electrical Inspection: Strapper 6B-2  | 1h  |
| 323<br>7 | 4 | 10.1.2.42 | Electrical Inspection: Strapper 7A-2  | 1h  |
| 323<br>8 | 4 | 10.1.2.43 | Electrical Inspection: Strapper 7B-2  | 1h  |
| 323<br>9 | 4 | 10.1.2.44 | Electrical Inspection: Strapper 8A-2  | 1h  |
| 324<br>0 | 4 | 10.1.2.45 | Electrical Inspection: Strapper 8B-2  | 1h  |
| 324<br>1 | 4 | 10.1.2.46 | Electrical Inspection: Strapper 40A-2 | 1h  |
| 324<br>2 | 4 | 10.1.2.47 | Electrical Inspection: Strapper 40B-2 | 1h  |
| 324<br>3 | 4 | 10.1.2.48 | Electrical Inspection: Strapper 41A-2 | 1h  |
| 324<br>4 | 4 | 10.1.2.49 | Electrical Inspection: Strapper 41B-2 | 1h  |
| 324<br>5 | 4 | 10.1.2.50 | Electrical Inspection: Strapper 42A-2 | 1h  |
| 324<br>6 | 4 | 10.1.2.51 | Electrical Inspection: Strapper 42B-2 | 1h  |
| 324<br>7 | 4 | 10.1.2.52 | Electrical Inspection: Strapper 43A-2 | 1h  |
| 324<br>8 | 4 | 10.1.2.53 | Electrical Inspection: Strapper 43B-2 | 1h  |
| 324<br>9 | 4 | 10.1.2.54 | Electrical Inspection: Strapper 44A-2 | 1h  |
| 325<br>0 | 4 | 10.1.2.55 | Electrical Inspection: Strapper 44B-2 | 1h  |
| 325<br>1 | 4 | 10.1.2.56 | Electrical Inspection: Strapper S1-2  | 1h  |
| 325<br>2 | 4 | 10.1.2.57 | Electrical Inspection: Strapper S2-2  | 1h  |
| 325<br>3 | 4 | 10.1.2.58 | Electrical Inspection: Strapper S3-2  | 1h  |
| 313<br>3 | 1 | 11        | Wrapper Subsystem Tests               | 58h |
| 325<br>5 | 2 | 11.1      | Wrapper Onsite Component Tests        | 58h |
| 325<br>6 | 3 | 11.1.1    | Mechanical Inspection: Wrappers       | 29h |
| 325<br>7 | 4 | 11.1.1.1  | Mechanical Inspection: Wrapper 1A     | 1h  |
| 325<br>8 | 4 | 11.1.1.2  | Mechanical Inspection: Wrapper 1B     | 1h  |
| 325<br>9 | 4 | 11.1.1.3  | Mechanical Inspection: Wrapper 2A     | 1h  |
| 326<br>0 | 4 | 11.1.1.4  | Mechanical Inspection: Wrapper 2B     | 1h  |
| 326<br>1 | 4 | 11.1.1.5  | Mechanical Inspection: Wrapper 3A     | 1h  |
| 326<br>2 | 4 | 11.1.1.6  | Mechanical Inspection: Wrapper 3B     | 1h  |
| 326<br>3 | 4 | 11.1.1.7  | Mechanical Inspection: Wrapper 4A     | 1h  |

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| 326<br>4 | 4 | 11.1.1.8  | Mechanical Inspection: Wrapper 4B  | 1h  |
| 326<br>5 | 4 | 11.1.1.9  | Mechanical Inspection: Wrapper 5A  | 1h  |
| 326<br>6 | 4 | 11.1.1.10 | Mechanical Inspection: Wrapper 5B  | 1h  |
| 326<br>7 | 4 | 11.1.1.11 | Mechanical Inspection: Wrapper 6A  | 1h  |
| 326<br>8 | 4 | 11.1.1.12 | Mechanical Inspection: Wrapper 6B  | 1h  |
| 326<br>9 | 4 | 11.1.1.13 | Mechanical Inspection: Wrapper 7A  | 1h  |
| 327<br>0 | 4 | 11.1.1.14 | Mechanical Inspection: Wrapper 7B  | 1h  |
| 327<br>1 | 4 | 11.1.1.15 | Mechanical Inspection: Wrapper 8A  | 1h  |
| 327<br>2 | 4 | 11.1.1.16 | Mechanical Inspection: Wrapper 8B  | 1h  |
| 327<br>3 | 4 | 11.1.1.17 | Mechanical Inspection: Wrapper 40A | 1h  |
| 327<br>4 | 4 | 11.1.1.18 | Mechanical Inspection: Wrapper 40B | 1h  |
| 327<br>5 | 4 | 11.1.1.19 | Mechanical Inspection: Wrapper 41A | 1h  |
| 327<br>6 | 4 | 11.1.1.20 | Mechanical Inspection: Wrapper 41B | 1h  |
| 327<br>7 | 4 | 11.1.1.21 | Mechanical Inspection: Wrapper 42A | 1h  |
| 327<br>8 | 4 | 11.1.1.22 | Mechanical Inspection: Wrapper 42B | 1h  |
| 327<br>9 | 4 | 11.1.1.23 | Mechanical Inspection: Wrapper 43A | 1h  |
| 328<br>0 | 4 | 11.1.1.24 | Mechanical Inspection: Wrapper 43B | 1h  |
| 328<br>1 | 4 | 11.1.1.25 | Mechanical Inspection: Wrapper 44A | 1h  |
| 328<br>2 | 4 | 11.1.1.26 | Mechanical Inspection: Wrapper 44B | 1h  |
| 328<br>3 | 4 | 11.1.1.27 | Mechanical Inspection: Wrapper S1  | 1h  |
| 328<br>4 | 4 | 11.1.1.28 | Mechanical Inspection: Wrapper S2  | 1h  |
| 328<br>5 | 4 | 11.1.1.29 | Mechanical Inspection: Wrapper S3  | 1h  |
| 328<br>6 | 3 | 11.1.2    | Electrical Inspection: Wrappers    | 29h |
| 328<br>7 | 4 | 11.1.2.1  | Electrical Inspection: Wrapper 1A  | 1h  |
| 328<br>8 | 4 | 11.1.2.2  | Electrical Inspection: Wrapper 1B  | 1h  |
| 328<br>9 | 4 | 11.1.2.3  | Electrical Inspection: Wrapper 2A  | 1h  |
| 329<br>0 | 4 | 11.1.2.4  | Electrical Inspection: Wrapper 2B  | 1h  |
| 329<br>1 | 4 | 11.1.2.5  | Electrical Inspection: Wrapper 3A  | 1h  |
| 329<br>2 | 4 | 11.1.2.6  | Electrical Inspection: Wrapper 3B  | 1h  |

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| 329<br>3 | 4 | 11.1.2.7  | Electrical Inspection: Wrapper 4A          | 1h      |
| 329<br>4 | 4 | 11.1.2.8  | Electrical Inspection: Wrapper 4B          | 1h      |
| 329<br>5 | 4 | 11.1.2.9  | Electrical Inspection: Wrapper 5A          | 1h      |
| 329<br>6 | 4 | 11.1.2.10 | Electrical Inspection: Wrapper 5B          | 1h      |
| 329<br>7 | 4 | 11.1.2.11 | Electrical Inspection: Wrapper 6A          | 1h      |
| 329<br>8 | 4 | 11.1.2.12 | Electrical Inspection: Wrapper 6B          | 1h      |
| 329<br>9 | 4 | 11.1.2.13 | Electrical Inspection: Wrapper 7A          | 1h      |
| 330<br>0 | 4 | 11.1.2.14 | Electrical Inspection: Wrapper 7B          | 1h      |
| 330<br>1 | 4 | 11.1.2.15 | Electrical Inspection: Wrapper 8A          | 1h      |
| 330<br>2 | 4 | 11.1.2.16 | Electrical Inspection: Wrapper 8B          | 1h      |
| 330<br>3 | 4 | 11.1.2.17 | Electrical Inspection: Wrapper 40A         | 1h      |
| 330<br>4 | 4 | 11.1.2.18 | Electrical Inspection: Wrapper 40B         | 1h      |
| 330<br>5 | 4 | 11.1.2.19 | Electrical Inspection: Wrapper 41A         | 1h      |
| 330<br>6 | 4 | 11.1.2.20 | Electrical Inspection: Wrapper 41B         | 1h      |
| 330<br>7 | 4 | 11.1.2.21 | Electrical Inspection: Wrapper 42A         | 1h      |
| 330<br>8 | 4 | 11.1.2.22 | Electrical Inspection: Wrapper 42B         | 1h      |
| 330<br>9 | 4 | 11.1.2.23 | Electrical Inspection: Wrapper 43A         | 1h      |
| 331<br>0 | 4 | 11.1.2.24 | Electrical Inspection: Wrapper 43B         | 1h      |
| 331<br>1 | 4 | 11.1.2.25 | Electrical Inspection: Wrapper 44A         | 1h      |
| 331<br>2 | 4 | 11.1.2.26 | Electrical Inspection: Wrapper 44B         | 1h      |
| 331<br>3 | 4 | 11.1.2.27 | Electrical Inspection: Wrapper S1          | 1h      |
| 331<br>4 | 4 | 11.1.2.28 | Electrical Inspection: Wrapper S2          | 1h      |
| 331<br>5 | 4 | 11.1.2.29 | Electrical Inspection: Wrapper S3          | 1h      |
| 200      | 1 | 12        | Front End Subsystem Tests                  | 577.25h |
| 329      | 2 | 12.1      | Front End Subsystem Onsite Component Tests | 230h    |
| 728<br>9 | 3 | 12.1.1    | Mechanical Inspection: Input Cell 1        | 8h      |
| 729<br>0 | 3 | 12.1.2    | Mechanical Inspection: Input Cell 2        | 8h      |
| 729<br>1 | 3 | 12.1.3    | Mechanical Inspection: Input Cell 3        | 8h      |
| 729<br>2 | 3 | 12.1.4    | Mechanical Inspection: Input Cell 4        | 8h      |
| 729<br>3 | 3 | 12.1.5    | Mechanical Inspection: Input Cell 5        | 8h      |

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| 729<br>4 | 3 | 12.1.6  | Mechanical Inpsection: Input Cell 6   | 8h |
| 729<br>5 | 3 | 12.1.7  | Mechanical Inspection: Input Cell 7   | 8h |
| 830      | 3 | 12.1.8  | Mechanical Inspection: Tray Upper     | 4h |
| 831      | 3 | 12.1.9  | Mechanical Inspection: Tray Lower     | 4h |
| 729<br>6 | 3 | 12.1.10 | Mechanical Inspection: Output Cell 1  | 8h |
| 729<br>7 | 3 | 12.1.11 | Mechanical Inspection: Output Cell 2  | 8h |
| 729<br>8 | 3 | 12.1.12 | Mechanical Inspection: Output Cell 3  | 8h |
| 729<br>9 | 3 | 12.1.13 | Mechanical Inspection: Output Cell 4  | 8h |
| 730<br>0 | 3 | 12.1.14 | Electrical Inspection: Input Cell 1   | 8h |
| 730<br>1 | 3 | 12.1.15 | Electrical Inspection: Input Cell 2   | 8h |
| 730<br>2 | 3 | 12.1.16 | Electrical Inspection: Input Cell 3   | 8h |
| 730<br>3 | 3 | 12.1.17 | Electrical Inspection: Input Cell 4   | 8h |
| 730<br>4 | 3 | 12.1.18 | Electrical Inspection: Input Cell 5   | 8h |
| 730<br>5 | 3 | 12.1.19 | Electrical Inpsection: Input Cell 6   | 8h |
| 730<br>6 | 3 | 12.1.20 | Electrical Inspection: Input Cell 7   | 8h |
| 730<br>7 | 3 | 12.1.21 | Electrical Inspection: Tray Upper     | 4h |
| 730<br>8 | 3 | 12.1.22 | Electrical Inspection: Tray Lower     | 4h |
| 730<br>9 | 3 | 12.1.23 | Electrical Inspection: Output Cell 1  | 8h |
| 731<br>0 | 3 | 12.1.24 | Electrical Inspection: Output Cell 2  | 8h |
| 731<br>1 | 3 | 12.1.25 | Electrical Inspection: Output Cell 3  | 8h |
| 731<br>2 | 3 | 12.1.26 | Electrical Inspection: Output Cell 4  | 8h |
| 330      | 3 | 12.1.27 | FCS Palletizer Displays               | 1h |
| 331      | 3 | 12.1.28 | FCS Dock Door Displays                | 1h |
| 332      | 3 | 12.1.29 | FCS Operator Terminals - Control Room | 1h |
| 333      | 3 | 12.1.30 | FCS Operator Terminals - Plant Floor  | 1h |
| 334      | 3 | 12.1.31 | FCS Backup System                     | 1h |
| 335      | 3 | 12.1.32 | Rollertop Conveyor                    | 1h |
| 336      | 3 | 12.1.33 | Utility Tower                         | 1h |
| 337      | 3 | 12.1.34 | Belt Speeds and Bundle Orientation    | 1h |
| 338      | 3 | 12.1.35 | Bundle Orientation Devices            | 1h |
| 339      | 3 | 12.1.36 | Walkthrough Area Conveyors            | 1h |
| 340      | 3 | 12.1.37 | Bundle Conveyors                      | 1h |
| 341      | 3 | 12.1.38 | Traffic Control Bundle Pacers         | 1h |
| 342      | 3 | 12.1.39 | Hinge Belt with Pacer                 | 1h |
| 343      | 3 | 12.1.40 | Tray Bundle Loaders                   | 1h |
| 344      | 3 | 12.1.41 | Bundle Loader Controls                | 1h |
| 345      | 3 | 12.1.42 | LIM Drives                            | 1h |
| 346      | 3 | 12.1.43 | Tray Carriages                        | 1h |
| 347      | 3 | 12.1.44 | Tray Straighteners                    | 1h |

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| 348 | 3 | 12.1.45 | Tray Bundle Sidewalls                          | 1h      |
| 349 | 3 | 12.1.46 | Discharge Diverters                            | 1h      |
| 350 | 3 | 12.1.47 | Double Bundle Conveyor Lanes                   | 1h      |
| 351 | 3 | 12.1.48 | Filling Logical Queues                         | 8h      |
| 352 | 3 | 12.1.49 | Emptying Logical Queues                        | 8h      |
| 353 | 3 | 12.1.50 | Palletizers                                    | 4h      |
| 354 | 2 | 12.2    | Front End Subsystem Onsite Functional Tests    | 307.25h |
| 355 | 3 | 12.2.1  | User Interface Security                        | 1h      |
| 356 | 3 | 12.2.2  | System Startup                                 | 1h      |
| 357 | 3 | 12.2.3  | System Shutdown                                | 1h      |
| 358 | 3 | 12.2.4  | Product Summary Report                         | 1h      |
| 359 | 3 | 12.2.5  | Truck Drop Summary Report                      | 1h      |
| 360 | 3 | 12.2.6  | Loader Failure Report                          | 2h      |
| 361 | 3 | 12.2.7  | Equipment Usage Report                         | 2h      |
| 362 | 3 | 12.2.8  | Backup System Functionality                    | 8h      |
| 363 | 3 | 12.2.9  | Set Loader Product Code                        | 3h      |
| 364 | 3 | 12.2.10 | Set Tie Line Next Product Code                 | 3h      |
| 365 | 3 | 12.2.11 | Set Tie Line Product Code                      | 3h      |
| 366 | 3 | 12.2.12 | Set Recirculation Limit                        | 4h      |
| 367 | 3 | 12.2.13 | Set Truck Drop Priority                        | 4h      |
| 368 | 3 | 12.2.14 | Reenter  | 2h      |
| 369 | 3 | 12.2.15 | Release Queue                                  | 2h      |
| 370 | 3 | 12.2.16 | Substitute Product                             | 2h      |
| 371 | 3 | 12.2.17 | Purge Palletizer                               | 2h      |
| 372 | 3 | 12.2.18 | Purge Tray by Loader                           | 2h      |
| 373 | 3 | 12.2.19 | Purge Tray by Product                          | 2h      |
| 374 | 3 | 12.2.20 | Purge Tray by Product over Recirculation Limit | 2h      |
| 375 | 3 | 12.2.21 | Purge Tray by Product of n Bundles             | 2h      |
| 376 | 3 | 12.2.22 | Purge Tray by Tray                             | 2h      |
| 377 | 3 | 12.2.23 | Purge Tray - All                               | 2h      |
| 378 | 3 | 12.2.24 | Purge Tray - Cancel                            | 2h      |
| 379 | 3 | 12.2.25 | Change Tray by Loader                          | 2h      |
| 380 | 3 | 12.2.26 | Change Tray by Product                         | 2h      |
| 381 | 3 | 12.2.27 | Change Tray by Tray                            | 2h      |
| 382 | 3 | 12.2.28 | Add Run  | 2h      |
| 383 | 3 | 12.2.29 | Remove Run                                     | 2h      |
| 384 | 3 | 12.2.30 | Add Truck Drop                                 | 2h      |
| 385 | 3 | 12.2.31 | Remove Truck Drop                              | 2h      |
| 386 | 3 | 12.2.32 | Modify Truck Drop                              | 2h      |
| 387 | 3 | 12.2.33 | Display Message at Palletizer                  | 1h      |
| 388 | 3 | 12.2.34 | Login  | 1h      |
| 389 | 3 | 12.2.35 | Logout   | 1h      |
| 390 | 3 | 12.2.36 | Enable/Disable Event Log List File             | 0.25h   |
| 391 | 3 | 12.2.37 | Enable/Disable Database Logging                | 0.25h   |
| 392 | 3 | 12.2.38 | Enable/Disable Log Printer                     | 0.25h   |
| 393 | 3 | 12.2.39 | Enable New Event Log List File                 | 0.25h   |
| 394 | 3 | 12.2.40 | Flush Event Log Cache                          | 0.25h   |
| 395 | 3 | 12.2.41 | Set Tray Speed                                 | 4h      |
| 396 | 3 | 12.2.42 | Shutdown                                       | 0.25h   |
| 397 | 3 | 12.2.43 | Zero Loader Counters                           | 0.25h   |
| 398 | 3 | 12.2.44 | Zero Tripper Counters                          | 0.25h   |
| 399 | 3 | 12.2.45 | Enable Hinge Belt Motion                       | 1h      |
| 400 | 3 | 12.2.46 | Initialize Device                              | 1h      |
| 401 | 3 | 12.2.47 | Set Default Recirculation Limit                | 1h      |
| 402 | 3 | 12.2.48 | Set Allocation Bounds                          | 1h      |
| 403 | 3 | 12.2.49 | Disable/Enable Pallet Reservation Confirmation | 0.25h   |
| 404 | 3 | 12.2.50 | Set Loader Cross Belt Direction                | 4h      |
| 405 | 3 | 12.2.51 | Enable/Disable Spare Accumulation Lane         | 4h      |

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| 406 | 3 | 12.2.52  | Set Queue Cross Belt Direction           | 2h    |
| 407 | 3 | 12.2.53  | Hold/Release Product Loading             | 2h    |
| 408 | 3 | 12.2.54  | Hold/Release Product Delivery            | 2h    |
| 409 | 3 | 12.2.55  | Hold/Release Truck Drop Delivery         | 2h    |
| 410 | 3 | 12.2.56  | Hold/Release Logical Queue               | 2h    |
| 411 | 3 | 12.2.57  | Hold/Release Palletizer                  | 2h    |
| 412 | 3 | 12.2.58  | Disable/Enable Loader Product Change     | 1h    |
| 413 | 3 | 12.2.59  | Disable/Enable Truck Dock                | 1h    |
| 414 | 3 | 12.2.60  | Disable/Enable Tie Line                  | 1h    |
| 415 | 3 | 12.2.61  | Disable/Enable Loader                    | 1h    |
| 416 | 3 | 12.2.62  | Disable/Enable Tray Top                  | 1h    |
| 417 | 3 | 12.2.63  | Disable/Enable Verify Station            | 1h    |
| 418 | 3 | 12.2.64  | Disable/Enable Tripper                   | 1h    |
| 419 | 3 | 12.2.65  | Disable/Enable Accumulation Lane         | 1h    |
| 420 | 3 | 12.2.66  | Disable/Enable Logical Queue             | 1h    |
| 421 | 3 | 12.2.67  | Disable/Enable Palletizer                | 1h    |
| 422 | 3 | 12.2.68  | Checkin                                  | 2h    |
| 423 | 3 | 12.2.69  | Checkout                                 | 2h    |
| 424 | 3 | 12.2.70  | Deliver                                  | 2h    |
| 425 | 3 | 12.2.71  | Modify Accumulation Lane Count           | 4h    |
| 426 | 3 | 12.2.72  | Modify Palletizer Bundle Count           | 4h    |
| 427 | 3 | 12.2.73  | Reallocate Pallet                        | 4h    |
| 428 | 3 | 12.2.74  | Stacker / Tie Line Status Window         | 1h    |
| 429 | 3 | 12.2.75  | Tray Top Command Window                  | 1h    |
| 430 | 3 | 12.2.76  | Stacker / Tie Line Command Window        | 1h    |
| 431 | 3 | 12.2.77  | Loader Cross Belt Status Window          | 1h    |
| 432 | 3 | 12.2.78  | Loader Cross Belt Command Window         | 1h    |
| 433 | 3 | 12.2.79  | Bundle Loader Status Window              | 1h    |
| 434 | 3 | 12.2.80  | Bundle Loader Command Window             | 1h    |
| 435 | 3 | 12.2.81  | Tray Loop Status Window                  | 1h    |
| 436 | 3 | 12.2.82  | Tray Loop Command Window                 | 1h    |
| 437 | 3 | 12.2.83  | Tray Top Status Window                   | 1h    |
| 438 | 3 | 12.2.84  | Queue Cross Belt Command Window          | 1h    |
| 439 | 3 | 12.2.85  | Palletizer Status Window                 | 1h    |
| 440 | 3 | 12.2.86  | Palletizer Command Window                | 1h    |
| 441 | 3 | 12.2.87  | Tripper/Accumulation Lane Status Window  | 1h    |
| 442 | 3 | 12.2.88  | Tripper/Accumulation Lane Command Window | 1h    |
| 443 | 3 | 12.2.89  | Logical Queue Status Window              | 1h    |
| 444 | 3 | 12.2.90  | Logical Queue Command Window             | 1h    |
| 445 | 3 | 12.2.91  | Queue Cross Belt Status Window           | 1h    |
| 446 | 3 | 12.2.92  | Dock Summary Display                     | 1h    |
| 447 | 3 | 12.2.93  | Dock Command Display                     | 1h    |
| 448 | 3 | 12.2.94  | Product Code Display                     | 1h    |
| 449 | 3 | 12.2.95  | Product Code Command Window              | 1h    |
| 450 | 3 | 12.2.96  | System Message Display                   | 1h    |
| 451 | 3 | 12.2.97  | Truck Detail / Truck Drop Detail Display | 1h    |
| 705 | 3 | 12.2.98  | Dock N Window                            | 0.25h |
| 9   |   |          |  |       |
| 706 | 3 | 12.2.99  | Drops in Run Window                      | 0.25h |
| 0   |   |          |  |       |
| 706 | 3 | 12.2.100 | Print Events Window                      | 0.25h |
| 1   |   |          |  |       |
| 706 | 3 | 12.2.101 | Login Window                             | 0.25h |
| 2   |   |          |  |       |
| 706 | 3 | 12.2.102 | Purge Lane Availability Window           | 0.25h |
| 3   |   |          |  |       |
| 706 | 3 | 12.2.103 | System Commands Window                   | 0.25h |
| 4   |   |          |  |       |

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| 706 | 3 | 12.2.104 | Overall System Information Window           | 0.25h  |
| 5   |   |          |   |        |
| 709 | 3 | 12.2.105 | Modify Pallet Test                          | 0.25h  |
| 4   |   |          |   |        |
| 709 | 3 | 12.2.106 | Terminate Loading Test                      | 0.25h  |
| 5   |   |          |   |        |
| 709 | 3 | 12.2.107 | Input to Output Routing Test                | 0.25h  |
| 6   |   |          |   |        |
| 709 | 3 | 12.2.108 | Emergency Manifest Editing Test             | 0.25h  |
| 7   |   |          |   |        |
| 741 | 3 | 12.2.109 | Purge Tray - Exception Processing           | 0.25h  |
| 9   |   |          |   |        |
| 742 | 3 | 12.2.110 | Undeliver                                   | 0.25h  |
| 0   |   |          |   |        |
| 742 | 3 | 12.2.111 | Product Interleaving                        | 0.25h  |
| 1   |   |          |   |        |
| 742 | 3 | 12.2.112 | Bundle Size Changes                         | 0.25h  |
| 2   |   |          |   |        |
| 742 | 3 | 12.2.113 | Pallet Size Changes                         | 0.25h  |
| 3   |   |          |   |        |
| 742 | 3 | 12.2.114 | Speculative Queue Assignment                | 0.25h  |
| 4   |   |          |   |        |
| 742 | 3 | 12.2.115 | Bounds                                      | 0.25h  |
| 5   |   |          |   |        |
| 742 | 3 | 12.2.116 | Reservation / Confirmation                  | 0.25h  |
| 6   |   |          |   |        |
| 742 | 3 | 12.2.117 | Assignment of Shared Palletizer             | 0.25h  |
| 7   |   |          |   |        |
| 742 | 3 | 12.2.118 | Changing Pallet Types                       | 0.25h  |
| 8   |   |          |   |        |
| 742 | 3 | 12.2.119 | Pallet Count Exceptions                     | 0.25h  |
| 9   |   |          |   |        |
| 452 | 2 | 12.3     | Front End Subsystem Onsite Throughput Tests | 30.75h |
| 453 | 3 | 12.3.1   | Front End Throughput                        | 5eh    |
| 454 | 3 | 12.3.2   | Bundle Conveyors                            | 5eh    |
| 455 | 3 | 12.3.3   | Bundle Loaders                              | 5eh    |
| 456 | 3 | 12.3.4   | Tray Speeds                                 | 5eh    |
| 457 | 3 | 12.3.5   | Tray Trip Rates                             | 5eh    |
| 458 | 3 | 12.3.6   | Bundle Accumulation Rates and Capacity      | 5eh    |
| 459 | 3 | 12.3.7   | Bundle Release Rate                         | 5eh    |
| 460 | 2 | 12.4     | Front End Subsystem Onsite Reliability Test | 5h     |
| 461 | 3 | 12.4.1   | Front End Reliability                       | 20eh   |
| 472 | 1 | 13       | Palletizer Subsystem Tests                  | 784h   |
| 478 | 2 | 13.1     | Palletizer Subsystem Onsite Component Tests | 1h     |
| 549 | 3 | 13.1.1   | Mechanical General Arrangement Verification | 0.5h   |
| 4   |   |          |   |        |
| 549 | 3 | 13.1.2   | Structural Design Considerations            | 0.5h   |
| 6   |   |          |   |        |
| 549 | 3 | 13.1.3   | Maintenance Access and Maintainability      | 0.5h   |
| 7   |   |          |   |        |
| 549 | 3 | 13.1.4   | Longevity of Design Components              | 0.5h   |
| 8   |   |          |   |        |
| 549 | 3 | 13.1.5   | General Device Mounting                     | 0.5h   |
| 9   |   |          |   |        |
| 550 | 3 | 13.1.6   | Safety Placards and Guarding                | 0.5h   |
| 0   |   |          |   |        |
| 550 | 3 | 13.1.7   | Paint                                       | 0.5h   |
| 1   |   |          |   |        |

|          |   |         |  |       |
|----------|---|---------|--|-------|
| 549<br>5 | 3 | 13.1.8  | Electrical Drawing Package Verification      | 1h    |
| 550<br>2 | 3 | 13.1.9  | Device Wiring and Mounting                   | 0.5h  |
| 550<br>3 | 3 | 13.1.10 | Device Labeling                              | 0.5h  |
| 550<br>4 | 3 | 13.1.11 | Safety and Program Device Interlocks         | 1h    |
| 550<br>5 | 3 | 13.1.12 | Manual Mode Jogging                          | 0.5h  |
| 550<br>6 | 3 | 13.1.13 | Program File Structure and Walk Through      | 1h    |
| 479      | 2 | 13.2    | Palletizer Subsystem Onsite Functional Tests | 1h    |
| 550<br>7 | 3 | 13.2.1  | Pallet Detection                             | 0.5h  |
| 550<br>8 | 3 | 13.2.2  | Pallet Loading and Removal                   | 0.5h  |
| 550<br>9 | 3 | 13.2.3  | Tracking and Advacement of Loads             | 0.5h  |
| 551<br>0 | 3 | 13.2.4  | Advacement of Common Stack Types             | 0.5h  |
| 551<br>1 | 3 | 13.2.5  | Advacement of Mixed Stack Types              | 0.5h  |
| 551<br>2 | 3 | 13.2.6  | Correction of Stack Skews                    | 0.5h  |
| 551<br>3 | 3 | 13.2.7  | Recovery from Manual Jogging                 | 1h    |
| 551<br>4 | 3 | 13.2.8  | Dispensing of Wood Pallets                   | 1h    |
| 551<br>5 | 3 | 13.2.9  | Dispensing of Plastic Pallets                | 1h    |
| 551<br>6 | 3 | 13.2.10 | Dispensing of Fiber Pallets                  | 1h    |
| 551<br>7 | 3 | 13.2.11 | Belt Infeed Section                          | 0.25h |
| 551<br>8 | 3 | 13.2.12 | Slat Sorter Section                          | 0.25h |
| 551<br>9 | 3 | 13.2.13 | Case Turner Operation                        | 0.25h |
| 552<br>0 | 3 | 13.2.14 | Rake Accumulator Section                     | 0.25h |
| 552<br>1 | 3 | 13.2.15 | Hoist Scissor Lift Section                   | 0.25h |
| 552<br>2 | 3 | 13.2.16 | Stretch Wrap Mechanism                       | 0.25h |
| 552<br>3 | 3 | 13.2.17 | Discharge Conveyor Section                   | 0.25h |
| 552<br>4 | 3 | 13.2.18 | Pallet Labeling Mechanism                    | 0.5h  |
| 552<br>5 | 3 | 13.2.19 | Push Button Stations                         | 1h    |
| 552<br>6 | 3 | 13.2.20 | Panel View Operations                        | 1h    |
| 552<br>7 | 3 | 13.2.21 | Recovery from Power Loss                     | 0.5h  |
| 552<br>8 | 3 | 13.2.22 | Recovery from Air Loss                       | 0.5h  |
| 552      | 3 | 13.2.23 | Recovery from E-Stops                        | 0.5h  |



|     |   |           |  |      |
|-----|---|-----------|--|------|
| 9   |   |           |  |      |
| 553 | 3 | 13.2.24   | Pallet Build Operation                       | 1h   |
| 0   |   |           |  |      |
| 480 | 2 | 13.3      | Palletizer Subsystem Onsite Throughput Tests | 36h  |
| 463 | 3 | 13.3.1    | Throughput Test: Palletizer                  | 36h  |
| 0   |   |           |  |      |
| 344 | 4 | 13.3.1.1  | Palletizer 2 Throughput Test                 | 5eh  |
| 3   |   |           |  |      |
| 344 | 4 | 13.3.1.2  | Palletizer 3 Throughput Test                 | 5eh  |
| 4   |   |           |  |      |
| 344 | 4 | 13.3.1.3  | Palletizer 4 Throughput Test                 | 5eh  |
| 5   |   |           |  |      |
| 344 | 4 | 13.3.1.4  | Palletizer 5 Throughput Test                 | 5eh  |
| 6   |   |           |  |      |
| 344 | 4 | 13.3.1.5  | Palletizer 6 Throughput Test                 | 5eh  |
| 7   |   |           |  |      |
| 344 | 4 | 13.3.1.6  | Palletizer 7 Throughput Test                 | 5eh  |
| 8   |   |           |  |      |
| 344 | 4 | 13.3.1.7  | Palletizer 8 Throughput Test                 | 5eh  |
| 9   |   |           |  |      |
| 553 | 4 | 13.3.1.8  | Palletizer S/N 3056 Throughput               | 5h   |
| 1   |   |           |  |      |
| 553 | 4 | 13.3.1.9  | Palletizer S/N 3057 Throughput               | 5h   |
| 2   |   |           |  |      |
| 553 | 4 | 13.3.1.10 | Palletizer S/N 3058 Throughput               | 5h   |
| 3   |   |           |  |      |
| 553 | 4 | 13.3.1.11 | Palletizer S/N 3059 Throughput               | 5h   |
| 4   |   |           |  |      |
| 553 | 4 | 13.3.1.12 | Palletizer S/N 3060 Throughput               | 5h   |
| 5   |   |           |  |      |
| 553 | 4 | 13.3.1.13 | Palletizer S/N 3061 Throughput               | 5h   |
| 6   |   |           |  |      |
| 481 | 2 | 13.4      | Palletizer Subsystem Onsite Reliability Test | 164h |
| 463 | 3 | 13.4.1    | Reliability Test: Palletizer                 | 164h |
| 1   |   |           |  |      |
| 345 | 4 | 13.4.1.1  | Palletizer 2 Reliability Test                | 20eh |
| 1   |   |           |  |      |
| 345 | 4 | 13.4.1.2  | Palletizer 3 Reliability Test                | 20eh |
| 2   |   |           |  |      |
| 345 | 4 | 13.4.1.3  | Palletizer 4 Reliability Test                | 20eh |
| 3   |   |           |  |      |
| 345 | 4 | 13.4.1.4  | Palletizer 5 Reliability Test                | 20eh |
| 4   |   |           |  |      |
| 345 | 4 | 13.4.1.5  | Palletizer 6 Reliability Test                | 20eh |
| 5   |   |           |  |      |
| 345 | 4 | 13.4.1.6  | Palletizer 7 Reliability Test                | 20eh |
| 6   |   |           |  |      |
| 345 | 4 | 13.4.1.7  | Palletizer 8 Reliability Test                | 20eh |
| 7   |   |           |  |      |
| 553 | 4 | 13.4.1.8  | Palletizer S/N 3056 Reliability              | 20h  |
| 9   |   |           |  |      |
| 554 | 4 | 13.4.1.9  | Palletizer S/N 3057 Reliability              | 20h  |
| 0   |   |           |  |      |
| 554 | 4 | 13.4.1.10 | Palletizer S/N 3058 Reliability              | 20h  |
| 1   |   |           |  |      |
| 554 | 4 | 13.4.1.11 | Palletizer S/N 3059 Reliability              | 20h  |
| 2   |   |           |  |      |
| 554 | 4 | 13.4.1.12 | Palletizer S/N 3060 Reliability              | 20h  |

|     |   |           |                                       |     |
|-----|---|-----------|---------------------------------------|-----|
| 3   |   |           |                                       |     |
| 554 | 4 | 13.4.1.13 | Palletizer S/N 3061 Reliability       | 20h |
| 4   |   |           |                                       |     |
| 541 | 1 | 14        | Setup and Monitoring (SAM) Tests      | 0h  |
| 278 | 1 | 15        | Integrated System Performance Testing | 7ed |
| 1   |   |           |                                       |     |