

FPPSPR320A Prepare and start up stock preparation system for production

Release: 1



FPPSPR320A Prepare and start up stock preparation system for production

Modification History

Not Applicable

Unit Descriptor

Unit descriptor

This unit describes the outcomes required to prepare and start up stock preparation system for production in the pulp and paper industry

General legislation, regulatory, licensing and certification requirements applicable to this unit are detailed in the range statement

Specific high risk and (non-high risk) load shifting licensing requirements for this unit may be applicable and are to be met separately and prior to the achievement of this unit

Application of the Unit

Application of the unit

This unit applies to operators who prepare and start up stock preparation systems in the pulp and paper industry. This work typically involves complex integrated equipment and continuous operations
This unit generally applies to those who:

- determine production requirements
- · inspect and prepare systems for startup, and
- start up stock preparation operations

to meet safety, quality and productivity requirements It does not include monitoring and controlling, shutting down or troubleshooting and rectifying stock preparation systems

Licensing/Regulatory Information

Refer to Unit Descriptor

Approved Page 2 of 12

Pre-Requisites

Not Applicable

Employability Skills Information

Employability skills This unit contains employability skills

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Approved Page 3 of 12

Elements and Performance Criteria

ELEMENT

PERFORMANCE CRITERIA

- 1. Determine production requirements
- 1.1. Production requirements are determined within Occupational Health and Safety (OHS) regulations, environmental and safe working requirements/practices, Standard Operating Procedures (SOP), and housekeeping requirements
- 1.2. Planned production requirements are confirmed and communicated to relevant personnel
- 1.3. Availability of machine supplies are confirmed
- 2. Inspect and prepare systems for startup
- 2.1.Systems are inspected and prepared for startup within OHS regulations, environmental and safe working requirements/practices, SOP, and housekeeping requirements
- 2.2. Isolations are removed as required
- 2.3. Operational settings are made and confirmed
- 2.4. Pre-startup checks are completed
- 2.5. Monitoring devices and systems are checked and confirmed operational
- 2.6. Faults are identified and rectified, as required
- 2.7. Raw material supply requirements are staged ready for use as required
- 2.8. Operational readiness is confirmed and communicated to relevant personnel
- 3. Start up stock preparation operations
- 3.1. Stock preparation operations are started up within OHS regulations, environmental and safe working requirements/practices, SOP, and housekeeping requirements
- 3.2. Stock, chemical and water systems startups are coordinated and implemented as required
- 3.3. System functions are confirmed by monitoring plant, equipment and control systems/display monitors
- 3.4. Test samples taken and test results interpreted and recorded as required
- 3.5. Process operation is communicated to relevant personnel
- 3.6. Production start up details are documented as required

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

Approved Page 4 of 12

REQUIRED SKILLS AND KNOWLEDGE

This describes the skills and knowledge required for this unit.

Required skills

- Uses required forms of communication in preparing and starting up stock preparation systems
- Reads and interprets required documentation, procedures and reports
- Interprets instruments, gauges and data recording equipment
- Accesses, navigates and enters computer-based information
- Identifies and actions problems within level of responsibility
- Takes samples, conducts tests, interprets and records results
- Identifies and monitors process control points
- Plans and organises startup
- Maintains situational awareness in the work area
- Operates high risk (and non-high risk) load shifting equipment as required
- Analyses and uses sensory information to adjust process to maintain and coordinate safety, quality and productivity
- Uses electronic and other control systems to control equipment and processes as required

Required knowledge

- Procedures, regulations and legislative requirements relevant to stock preparation systems including OHS, environmental including relevant sustainability requirements/practices, SOP, isolation procedures, safe working requirements, risks and hazard identification and housekeeping
- Relevant forms of communication
- Basic problem-solving techniques consistent with level of responsibility
- Sampling and testing process for plant and system operations, and process monitoring purpose, standards and procedures as per site agreements
- Working knowledge of stock preparation plant, processes, layout and associated services sufficient to carry out startup activities within level of responsibility
- Quality requirements
- Application of high risk (and non-high risk) load shifting equipment as required
- Sensory information that indicates a deviation from standard operating parameters
- Sufficient knowledge of electronic and other control systems, operation and application to make appropriate adjustments that control stock preparation systems, within level of responsibility

Evidence Guide

Approved Page 5 of 12

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

evidence required to demonstrate competency in this unit

Critical aspects for assessment and Evidence should be relevant to the work. It should satisfy the requirements of the elements and performance criteria and include consideration of:

- the required knowledge and skills tailored to the needs of the specific workplace
- applicable OHS regulations, environmental and safe working requirements/practices, SOP and housekeeping requirements
- applicable aspects of the range statement
- practical workplace demonstration of skills in the preparation and startup of stock preparation systems

Context of and specific resources for assessment

A workplace assessment must be used to assess:

- the application of required knowledge on the job
- the application of skills on the job, over time and under a range of typical conditions that may be experienced in stock preparation systems

Access to the full range of equipment involved in integrated continuous manufacturing of stock preparation systems in a pulp or paper mill is required

Method of assessment

A combination of assessment methods should be used. The following examples are appropriate for this unit:

- observation of applied skills and knowledge on the
- workplace demonstrations via a mock-up or simulation that replicate part/s of the job
- answers to written or verbal questions about specific skills and knowledge
- third-party reports from relevant and skilled personnel
- written evidence e.g. log sheet entries, checklist entries, test results

Assessment processes and techniques must be culturally appropriate and in keeping with the language and literacy capacity of the learner and the work being

Page 6 of 12

EVIDENCE GUIDE

performed. This includes conducting an assessment in a manner that allows thoughts to be conveyed verbally so that the learner can both understand and be understood by the assessor (e.g. use plain English and terminology used on the job)

A holistic assessment with other units relevant to the pulp and paper industry, mill and job role is recommended

Additional information on approaches to assessment for the pulp and paper industry is provided in the Assessment Guidelines for this Training Package

Range Statement

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Productivity requirements may include:

- energy efficiency
- waste minimisation
- evaporation minimisation, including landfill and waste water reduction
- environmentally safe waste disposal
- consideration of resource utilisation, including fibre efficiency
- minimising delays
- · chemical recovery maximisation
- meeting key performance indicators
- line speed
- handovers
- quality checks
- meeting output targets i.e. net tonnes per employee per annum
- machine/process time availability i.e. time the machine or process is making product
- machine/process production rate

Systems and functions involved

refining systems

Approved Page 7 of 12

in stock preparation may include: •

- blending system
- proportioning system
- broke system
- stock chests
- water chests
- cleaning system
- water recovery system
- chemical and additive plants
- bale handler
- broke baler
- wire coiler

Approved Page 8 of 12

Materials and supplies may include:

- water
- stock
- · compressed air
- chemicals
- additives
- steam
- baled pulp
- Equipment may include:
- refiners
- pumps
- valves
- chests
- . . .
- agitators
- pulpers
- screens
- cleaners
- showers
- disc deckers
- consistency controllers
- screw press
- water recovery equipment
- computer systems
- electronic screens and alarms
- process control systems
- fully automated, semi-automated, manually operated plant and equipment appropriate to stock preparation systems

Electronic control systems may include:

- Digital Control System (DCS)
- · touch screens
- robotics

Hazards and risks involved in stock preparation may include:

- steam and/or gas leaks
- fires
- nip points
- · compressed air
- hot surfaces
- electrical
- entanglement
- slip hazards/falls
- energy
- pressures
- chemicals

Approved Page 9 of 12

- fumes
- confined spaces
- dust

Approved Page 10 of 12

Legislation, regulatory, licensing and certification requirements may include:

- OHS and environmental requirements (local, state and commonwealth)
- activity or task specific high risk and (non-high risk) load shifting licensing requirements

Documentation, procedures and reports may include:

- SOP
- site policy and procedures
- environmental sustainability requirements/practices
- plant manufacturing operating manuals
- confined space requirements
- vendor documentation
- · reference manual
- grade specifications
- quality procedures
- oil or chemical spills and disposal guidelines
- plant isolation documentation
- housekeeping
- safe work documentation e.g. plant clearance, job safety analysis, permit systems
- maintenance logs
- job sheets
- operating log
- production instructions
- Materials Safety Data Sheets (MSDS)
- process and instrument diagrams
- Maintenance may include:
- operator level maintenance as per site agreements
- operator maintenance schedules
- maintenance systems
- maintenance suppliers
- pro-active maintenance strategies e.g. Total Productive Maintenance (TPM), Reliability Centred Maintenance (RCM)
- Actions may include:
- process adjustments
- reporting to authorised person
- rectifying problem within level of responsibility

Communications may include

interaction with:

- team members
- production/service co-ordinators

Approved Page 11 of 12

- internal/external customers and suppliers
- maintenance services
- operational management
- statutory authorities

Situational awareness may include

awareness of:

- traffic
- pedestrians
- location of equipment
- product
- hazards
- obstructions
- unexpected movement

Sensory information may include: •

- visual
- sound
- feel
- touch
- smell
- vibration
- temperature

Forms of communications may include:

- written e.g. log books, emails, incident and other reports, run sheets, data entry
- reading and interpreting documentation e.g. standard operating procedures, manuals, checklists, drawings
- verbal e.g. radio skills, telephone, face to face, handover
- non-verbal e.g. hand signals, alarms, observations
- signage e.g. safety, access

Unit Sector(s)

Not Applicable

Approved Page 12 of 12