

QUALIFICATIONS PACK - OCCUPATIONAL STANDARDS FOR TEXTILE SECTOR

What are Occupational Standards(OS)?

- OS describe what individuals need to do, know and understand in order to carry out a particular job role or function
- OS are performance standards that individuals must achieve when carrying out functions in the workplace, together with specifications of the underpinning knowledge and understanding

Contact Us:

Textile SSC

E-mail: ceo@texskill.in



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Introduction

Qualifications Pack – Jigger Machine Operator

SECTOR: TEXTILE

SUB-SECTOR: PROCESSING

OCCUPATION: DYEING & PRINTING

REFERENCE ID: TSC/ Q 5201

ALIGNED TO: NCO-2004 / 8264.68

Brief Job Description: A Jigger Machine Operator is responsible for scouring, bleaching and dyeing or any other process carried out on fabric on this machine. This job requires the individual to have thorough knowledge of process flow and material flow in a processing mill for fabric production and he should know the important functions and operations of a jigger machine.

Personal Attributes: A Jigger Machine Operator should have good eyesight, motor skills and vision. He/she should also have good interpersonal skills.

Job Details	Qualifications Pack Code	TSC/Q 5201		
	Job Role	Jigger Machine Operator		
	Credits (NSQF)	TBD	Version number	1.0
	Sector	Textile	Drafted on	15/12/15
	Sub-sector	Processing	Last reviewed on	25/02/15
	Occupation	Dyeing & Printing	Next review date	01/03/16
	Job Role	Jigger Machine Operator		
	Role Description	To carry out scouring, bleaching and dyeing of fabric using a Jigger Machine, as specified under Job Order.		
	NSQF level	4		
	Minimum Educational Qualifications	10 th standard, preferably		
	Maximum Educational Qualifications	N/A		
	Training (Suggested but not mandatory)	Three to six months of training in textile processing.		
	Experience	Preferably 2-3 years in textile processing		
	National Occupational Standards (NOS)	Compulsory: <ol style="list-style-type: none"> 1. TSC/N5201 Taking charge of shift and handing over shift to Jigger Machine Operator 2. TSC/N5202 Operating the Jigger Machine 3. TSC/N5203 Check the quality of a sample of the fabric processed on the Jigger 4. TSC/ N9001 Maintain work area, tools and machines 5. TSC/ N9002 Working in a team 6. TSC/ N9003 Maintain health, safety and security at workplace 7. TSC/ N9004 Comply with industry and organizational requirement Optional: Not Applicable		
	Performance Criteria	As described in the relevant OS units		

Table 1: Glossary of Key Terms

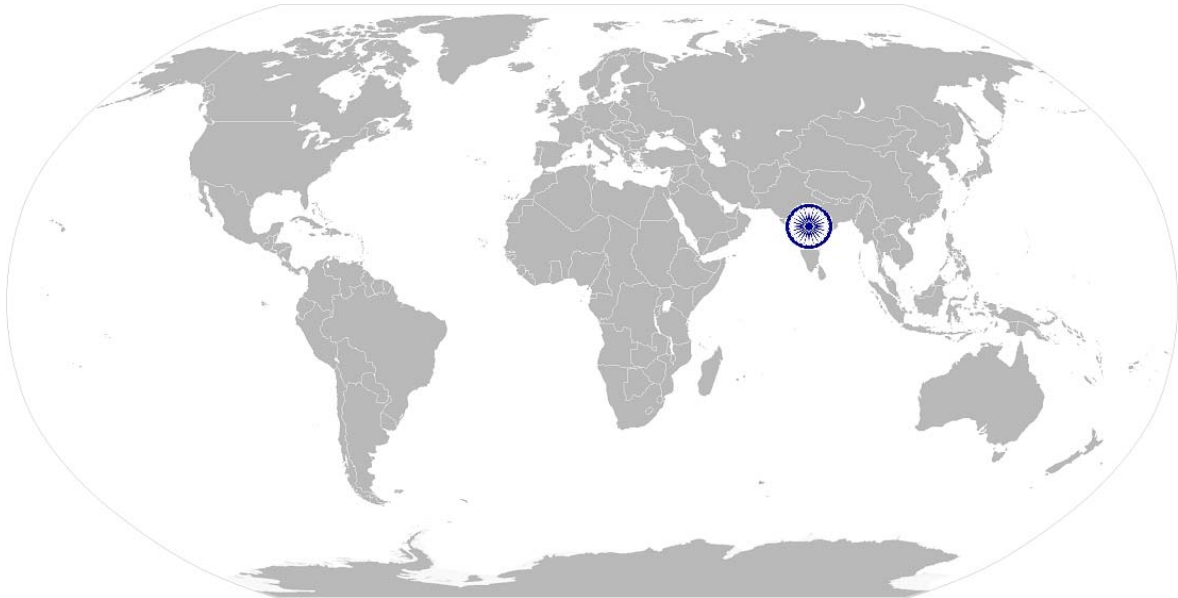
Definitions	Keywords /Terms	Description
	Sector	Sector is a conglomeration of different business operations having similar businesses and interests. It may also be defined as a distinct subset of the economy whose components share similar characteristics and interests.
	Sub-sector	Sub-sector is derived from a further breakdown based on the characteristics and interests of its components.
	Vertical	Vertical may exist within a sub-sector representing different domain areas or the client industries served by the industry.
	Occupation	Occupation is a set of job roles, which perform similar/related set of functions in an industry.
	Function	Function is an activity necessary for achieving the key purpose of the sector, occupation, or area of work, which can be carried out by a person or a group of persons. Functions are identified through functional analysis and form the basis of OS.
	Sub-functions	Sub-functions are sub-activities essential to fulfill the achieving the objectives of the function.
	Job role	Job role defines a unique set of functions that together form a unique employment opportunity in an organization.
	Occupational Standards (OS)	OS specify the standards of performance an individual must achieve when carrying out a function in the workplace, together with the knowledge and understanding they need to meet that standard consistently. Occupational Standards are applicable both in the Indian and global contexts.
	Performance Criteria	Performance Criteria are statements that together specify the standard of performance required when carrying out a task.
	National Occupational Standards (NOS)	NOS are Occupational Standards which apply uniquely in the Indian context.
	Qualifications Pack Code	Qualifications Pack Code is a unique reference code that identifies a qualifications pack.
	Qualifications Pack(QP)	Qualifications Pack comprises the set of OS, together with the educational, training and other criteria required to perform a job role. A Qualifications Pack is assigned a unique qualification pack code.
	Unit Code	Unit Code is a unique identifier for an OS unit, which can be denoted with either an 'O' or an 'N'.
	Unit Title	Unit Title gives a clear overall statement about what the incumbent should be able to do.

Description	Description gives a short summary of the unit content. This would be helpful to anyone searching on a database to verify that this is the appropriate OS they are looking for.
Scope	Scope is the set of statements specifying the range of variables that an individual may have to deal with in carrying out the function which have a critical impact on the quality of performance required.
Knowledge and Understanding	Knowledge and Understanding are statements which together specify the technical, generic, professional and organizational specific knowledge that an individual needs in order to perform to the required standard.
Organizational Context	Organizational Context includes the way the organization is structured and how it operates, including the extent of operative knowledge managers have of their relevant areas of responsibility.
Technical Knowledge	Technical Knowledge is the specific knowledge needed to accomplish specific designated responsibilities.
Core Skills/Generic Skills	Core Skills or Generic Skills are a group of skills that are key to learning and working in today's world. These skills are typically needed in any work environment. In the context of the OS, these include communication related skills that are applicable to most job roles.
Helpdesk	Helpdesk is an entity to which the customers will report their IT problems. IT Service Helpdesk Attendant is responsible for managing the helpdesk.
Keywords /Terms	Description
SSC	Sector Skill Council
OS	Occupational Standard(s)
NOS	National Occupational Standard(s)
QP	Qualifications Pack
NSQF	National Skill Qualifications Framework
NCO	National Classifications of Occupation
TBD	To Be Determined
TSC	Textile Sector Skill Council
NSDC	National Skill Development Corporation

TSC/ N5201

Taking charge of shift and handing over shift to Jigger Machine Operator

National Occupational Standard



Overview

This unit is about taking charge of shift from previous shift Jigger machine operator and relieving the responsibilities to the next shift Jigger machine operator

TSC/ N5201 Taking charge of shift and handing over shift to Jigger Machine Operator

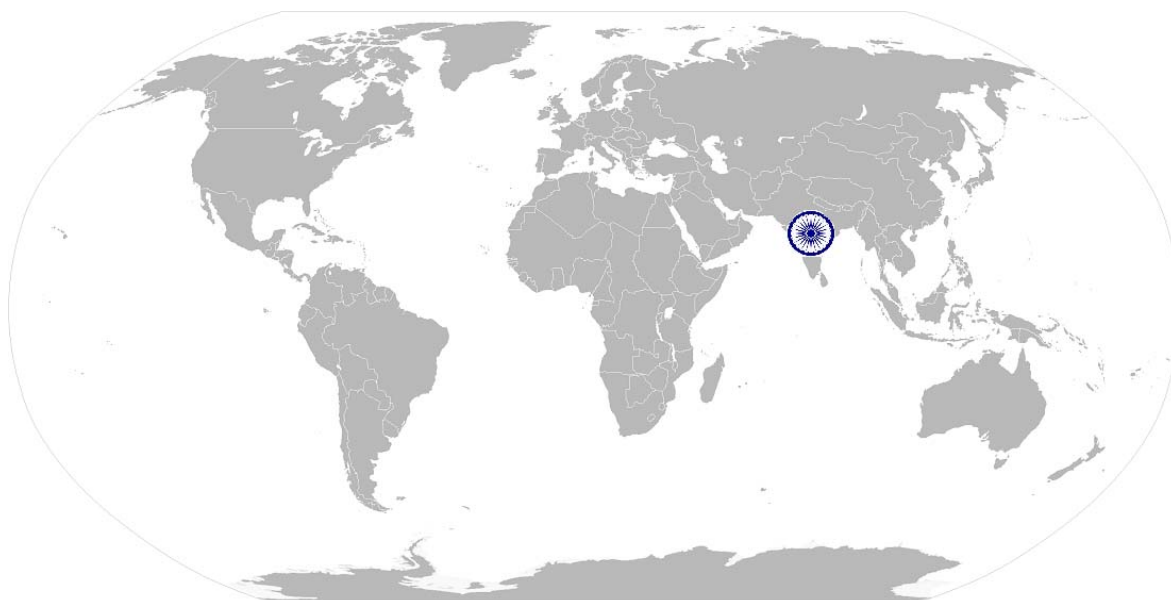
Unit Code	TSC/ N5201
Unit Title (Task)	Taking charge of shift and handing over shift to Jigger Machine Operator
Description	This unit is about taking charge of shift from previous shift Jigger machine operator and relieving the responsibilities to the next shift Jigger machine operator
Scope	This unit/task covers the following: <ul style="list-style-type: none"> taking charge of shift from Jigger machine operator handing over shift to Jigger machine operator
Elements	Performance Criteria
Taking charge of shift from Jigger machine operator	<p>to be competent, you must be able to:</p> <p>PC1. come at least 10 - 15 minutes earlier to the work place</p> <p>PC2. bring the necessary operational tools to the department</p> <p>PC3. meet the previous shift operator and discuss with him/ her regarding the issues faced by him with respect to the quality, production, spare, safety or any other specific instruction etc.</p> <p>PC4. understand the fabric being processed & process running on the machine</p> <p>PC5. ensure the technical details are mentioned on the job card display on the machine</p> <p>PC6. check for the availability of the spare trolley/batching trolley for unloading the fabric</p> <p>PC7. check the next batch to be processed is ready near the machine</p> <p>PC8. ensure the required dyes & chemicals are already weighed & prepared</p> <p>PC9. check the cleanliness of the machines & other work areas</p> <p>PC10. question the previous shift operator for any deviation in the above and bring the same to the knowledge of his/ her shift superior as well as that of the previous shift.</p> <p>PC11. take over the shift from the outgoing operator in a proper manner</p>
Handing Over Shift to Jigger machine operator	<p>PC12. ensure proper communication regarding fabric quality & the process running on the machine while providing the details</p> <p>PC13. provide all relevant information regarding the stoppages or breakdown in the machine, any damage to the fabric or machine.</p> <p>PC14. ensure the empty trolley is near the machine for unloading the fabric</p> <p>PC15. ensure the next lot to be processed, which is already stitched & arranged properly is ready near the machine</p> <p>PC16. ensure the required dyes & chemicals for the next lot or next process are weighed & prepared</p> <p>PC17. get clearance from the incoming counterpart before leaving the work spot</p> <p>PC18. report to his/ her shift superiors as well as that of the incoming shift operator in case his/ her counterpart doesn't report for the incoming shift</p> <p>PC19. ensure the shift has to be properly handed over to the incoming shift operator</p> <p>PC20. report to his/ her shift superior about the quality / production / safety issues/ any other issue faced in his/ her shift and leave the department only after getting concurrence for the same from his/ her superiors</p>

TSC/ N5201 Taking charge of shift and handing over shift to Jigger Machine Operator

	PC21. collect the wastes from waste collection bags, weigh them and transport to storage area PC22. ensure the machine and its work place is clean
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company/ organization and its processes)	you need to know and understand: KA1. standard operating procedure (SOP) and regulations in a processing unit KA2. safe working practices to be adopted in processing unit KA3. quality systems and other processes practiced in the processing unit KA4. reporting to the supervisor or higher authority in case of emergency KA5. color coding adopted for different products in the processing unit
B. Technical Knowledge	You need to know and understand: KB1. the importance of quality & productivity KB2. various defects in the fabric due to yarn, weaving or processing KB3. reasons for various defects in the fabric due to processing & their remedy KB4. process flow in a processing unit KB5. material flow in a processing unit KB6. functions of various controls of the machine KB7. importance of material handling and types of material handling equipment being used KB8. importance of cleanliness at workplace KB9. functions and methodology for operating different material handling equipment KB10. the functions of various alarm signals KB11. guidelines for operating the machine KB12. guidelines for taking charge of shift from previous shift operator KB13. guidelines for handing over the shift to the next shift operator KB14. safety procedures to be followed while operating the machine
Skills (S)	
A. Core Skills/ Generic Skills	Writing Skills
	You need to know and understand how to: SA1. write clear and short sentences
	Reading Skills
	You need to know and understand how to: SA2. read and comprehend written instructions
	Oral Communication (Listening and Speaking skills)
	You need to know and understand how to: SA3. communicate with supervisor appropriately SA4. talk to others to convey information effectively
B. Professional Skills	Problem Solving
	You need to know and understand how to: SB1. apply problem-solving approaches in different situations SB2. refer anomalies to the supervisor SB3. seek clarification on problems from others
	Attention to Detail
	You need to know and understand how to:

TSC/ N5201 Taking charge of shift and handing over shift to Jigger Machine Operator

	<p>SB4. apply good attention to detail</p> <p>SB5. check your work is complete and free from errors</p>
	<p>You need to know and understand:</p> <p>SB6. operation of machine</p> <p>SB7. how to operate various valve & traps</p> <p>SB8. how to operate different material handling tools and equipment</p> <p>SB9. how to check the quality of processed fabric</p> <p>SB10. maintenance of cleanliness at work place</p>

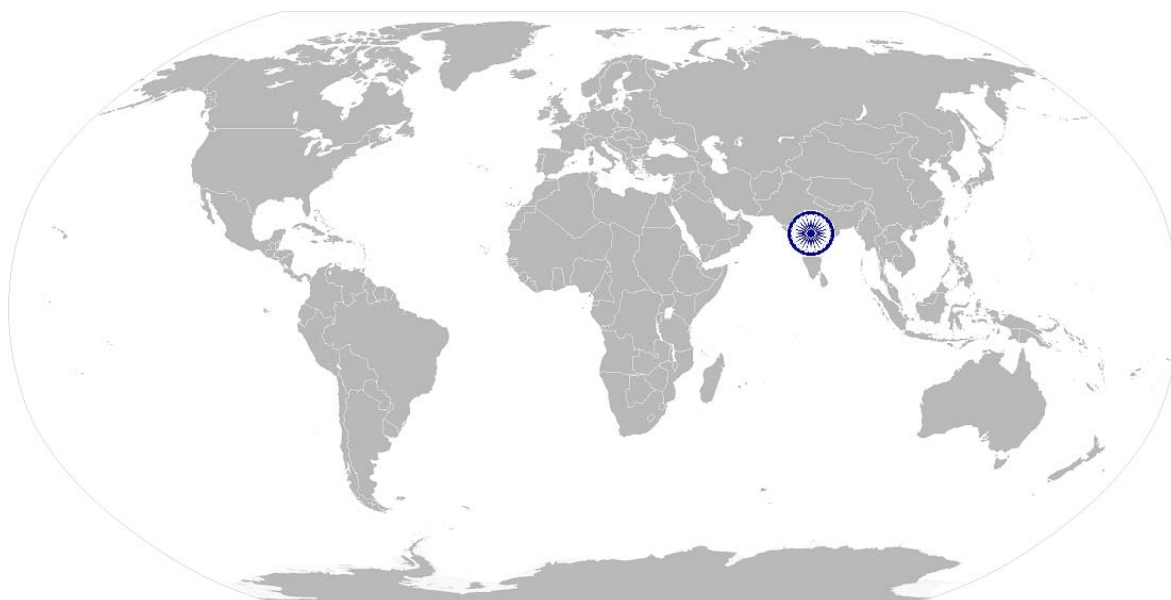


TSC/ N5201

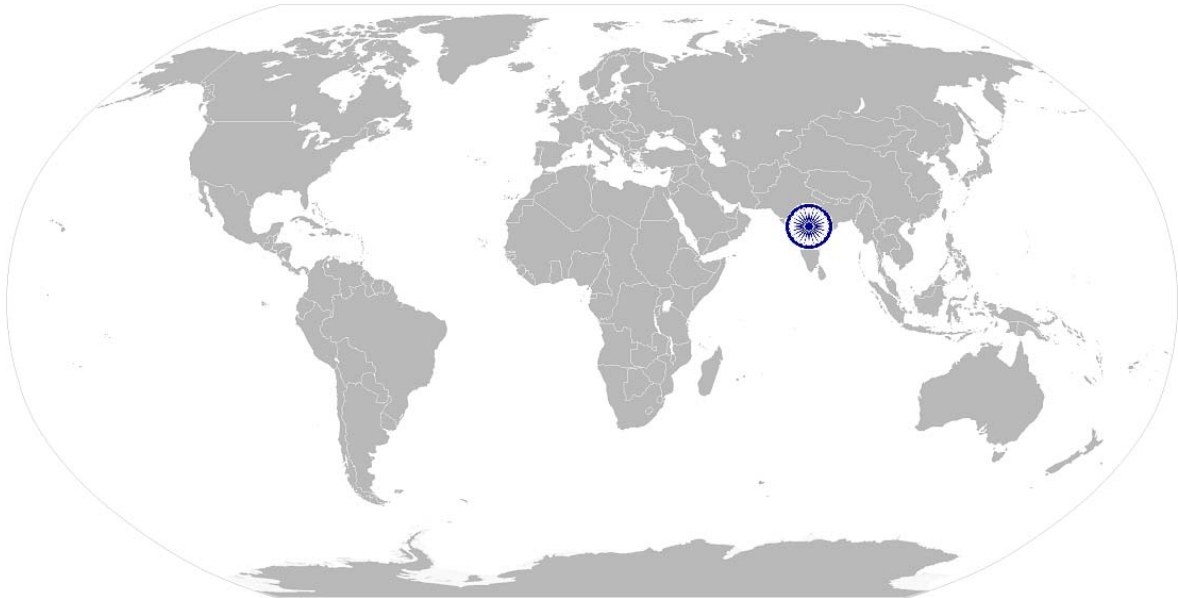
Taking charge of shift and handing over shift to Jigger Machine Operator

NOS Code	TSC/ N5201		
Credits (NSQF)	TBD	Version number	1.0
Industry	Textile	Drafted on	15/12/15
Industry Sub-sector	Processing	Last reviewed on	25/02/15
Occupation	Dyeing & Printing	Next review date	01/03/16

NOS Version Control



National Occupational Standard



Overview

This unit is about operating the Jigger Machine

TSC/ N5202

Operating Jigger Machine

Unit Code	TSC/ N5202
Unit Title (Task)	Operating the Jigger Machine
Description	This unit is about operating the Jigger Machine
Scope	This unit/task covers the following: <ul style="list-style-type: none"> carry out preparatory activities for operations in the machine operate the machine for the specified task as per work order clean the machine & carryout preventive maintenance activities
Performance Criteria (PC) w.r.t. the Scope	
Elements	Performance Criteria
Carry out preparatory activities for operations in the machine	To be competent, you must be able to: PC1. understand the task mentioned in the work order PC2. ensure that the machine is empty & clean PC3. load the fabric from the batch trolley in the center of the machine PC4. ensure fabric is crease-less and evenly fed onto the machine PC5. prepare the chemical/dye-stuff required for the batch PC6. inject the chemical in the machine tank/dispenser
Operate the machine for specified tasks as per Work Order	PC7. know the operations of the machine & the plc/ control mechanism programs PC8. read & understand the process being followed to do the task PC9. check the ph, temp & other parameters during the process PC10. maintain even temp across the width of machine PC11. maintain even & minimum tension on the fabric PC12. drain the machine once sample is approved PC13. unload the fabric from the machine after completion of the process
Clean the machine on a regular basis and carryout preventive maintenance activities	PC14. make sure the machine is kept clean at all times ,before loading, while running & after unloading the fabric PC15. follow the preventive maintenance schedule & ensure the machine is running smoothly PC16. check that all controls are functioning properly PC17. ensure the right quality of water , steam & air is available for proper functioning of machine PC18. cool down the machine after completion of job
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company/ organization and its processes)	You need to know and understand: KA1. standard operating procedure (SOP) and regulations in processing unit KA2. procedure followed to get the final output in processing unit KA3. safe working practices to be adopted in processing unit KA4. how to report to the supervisor or higher authority about any grievances faced
B. Technical Knowledge	You need to know and understand: KB1. importance of discipline & punctuality KB2. importance of take over & handover in achieving quality & productivity KB3. Knowledge about uneven or patchy dyeing, stoppage marks, csv, crease marks, colour specks etc.

TSC/ N5202

Operating Jigger Machine

	<p>KB4. Various types of fiber, yarn and fabric</p> <p>KB5. process of scouring, bleaching & dyeing & washing</p> <p>KB6. functioning of various control of machine</p> <p>KB7. knowledge about various controls of machine</p> <p>KB8. knowledge about the operations & functions of jigger dyeing machine</p> <p>KB9. knowledge about injection / dosing according to the depth of the shade</p> <p>KB10. understanding of various processes</p> <p>KB11. functions and methodology for operating different material handling equipments</p> <p>KB12. understanding the functions of different signal lamps</p> <p>KB13. use of various checking tools such as thermometer, ph paper etc.</p> <p>KB14. proper circulation of liquor either manually or by pump</p> <p>KB15. adjusting of brake drums</p> <p>KB16. spare the machine when it's due for maintenance</p> <p>KB17. controls functions of machine</p> <p>KB18. requirement of water, steam & air pressure for functioning of various operations</p>
Skills (S)	
A. Core Skills/ Generic Skills	Reading Skills
	<p>You need to know and understand how to:</p> <p>SA1. comprehend written instructions</p> <p>SA2. read any application sent by other colleagues</p>
	Oral Communication (Listening and Speaking skills)
	<p>You need to know and understand how to:</p> <p>SA3. communicate in basic language orally</p> <p>SA4. communicate with supervisor appropriately</p> <p>SA5. talk to others to convey information effectively</p>
C. Professional Skills	Problem Solving
	<p>You need to know and understand how to:</p> <p>SB1. identify the real reason of problem faced</p> <p>SB2. apply problem-solving approaches in different situations</p> <p>SB3. refer anomalies to the supervisor</p> <p>SB4. seek clarification on problems from others</p>
	Attention to Detail
	<p>You need to know and understand how to:</p> <p>SB5. apply good attention to detail</p> <p>SB6. check your work is complete and free from errors</p> <p>SB7. make sure every kind of communication is error free</p> <p>You need to know and understand :</p> <p>SB8. the various faults & their correction during operating</p> <p>SB9. use the correct tools for cleaning the machine</p> <p>SB10. use of proper cleaning tools</p> <p>SB11. Effective communication</p> <p>SB12. apply leadership skills wherever required</p> <p>SB13. take initiative at the right place</p>

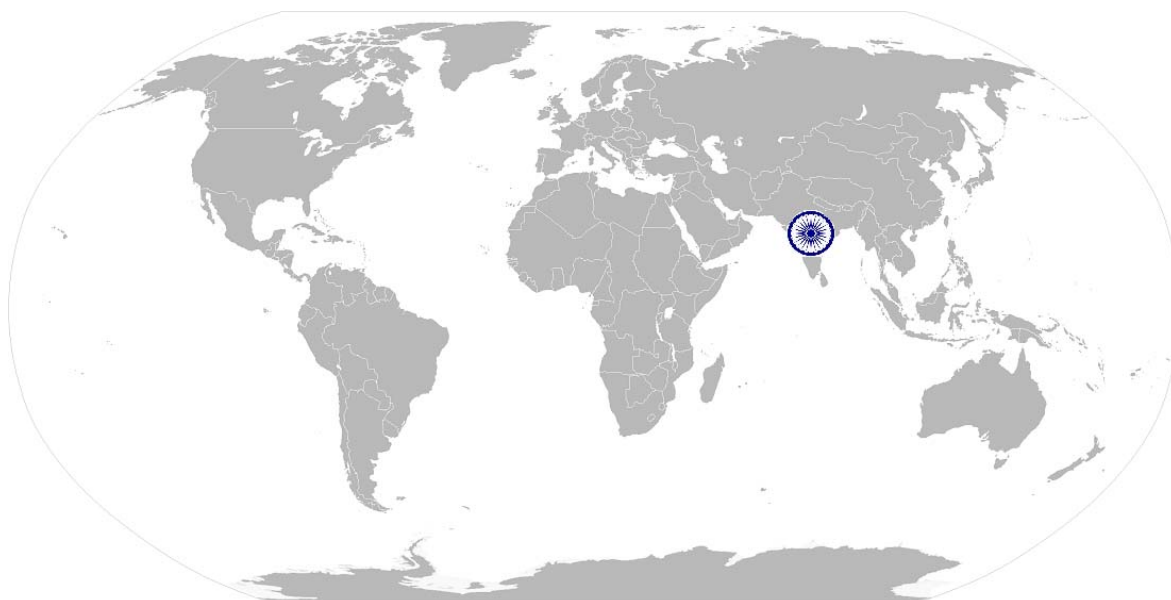
TSC/ N5202

Operating Jigger Machine

SB14. the requirement of operation

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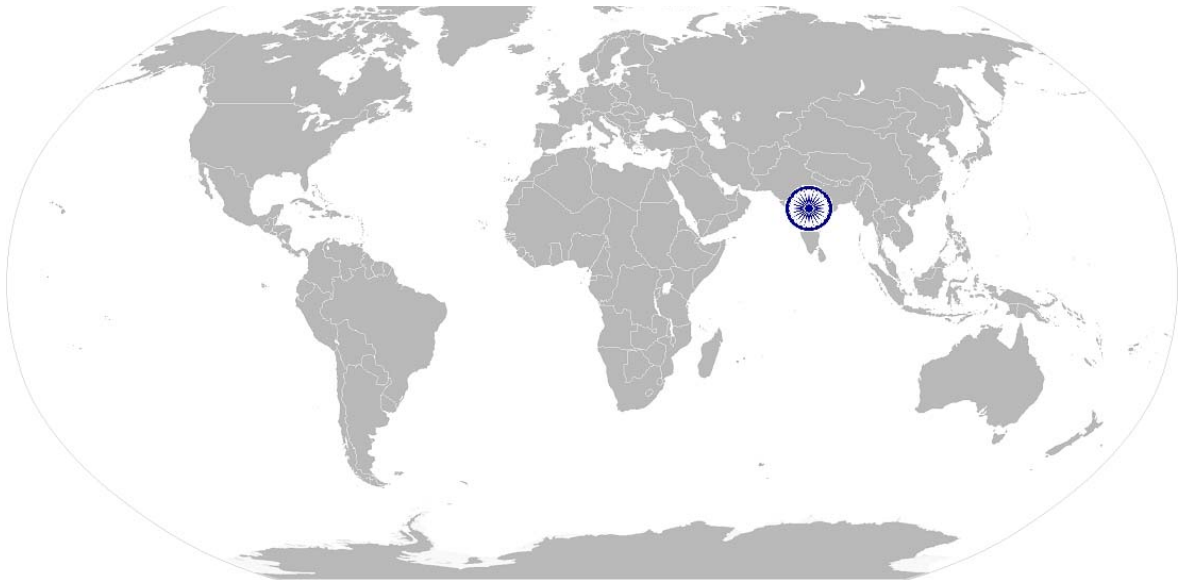
NOS Code	TSC/ N5202		
Credits (NSQF)	TBD	Version number	1.0
Industry	Textile	Drafted on	15/12/15
Industry Sub-sector	Processing	Last reviewed on	25/02/15
Occupation	Dyeing & Printing	Next review date	01/03/16



TSC/ N 5203

Check the quality of a sample of the fabric processed at Jigger

National Occupational Standard



Overview

This unit is about cutting, developing & checking the sample

TSC/ N 5203

Check the quality of a sample of the fabric processed at Jigger

National Occupational Standard

Unit Code	TSC/ N5203
Unit Title (Task)	Check the quality of a sample of the fabric processed at Jigger
Description	This unit is about cutting, developing & checking the sample
Scope	This unit/task covers the following: <ul style="list-style-type: none"> cutting the sample after specified time /no. of turns developing ,soaping, washing & drying the sample comparing the sample with the standard
Performance Criteria (PC) w.r.t. the Scope	
Elements	Performance Criteria
Cutting the sample after specified time/ no. of turns	To be competent, you must be able to: PC1. cut sample as per the time / no. of turn mentioned in the work order to avoid any delay PC2. cut proper size of the sample PC3. cut the sample from same place every time PC4. clean hands or cutting tools to avoid soiling of the sample
Developing , soaping, washing & drying the sample	PC5. Develop the sample as per developing techniques for various types of dyestuffs used in the process such as direct, reactive, vat, sulphur etc. PC6. Soap the sample as per SOP for various types of dyestuffs PC7. Dry the sample at clean & dust free place
Comparing the sample with the standard	PC8. compare the sample with the standard attached to the work order or in the master file PC9. take the sample to your supervisor if the sample is not matching to the standard for decision
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company/ organization and its processes)	You need to know and understand: KA1. procedure followed to get the final output in processing unit KA2. standard operating procedure (SOP) and regulations in processing unit KA3. safe working practices to be adopted in processing unit KA4. how to report to the supervisor or higher authority about any grievances faced
B. Technical Knowledge	You need to know and understand: KB1. various dyestuffs used & the time or no. of turns required for exhaustion/ fixation of color. KB2. effect of chemicals/ detergents , time & temp of soaping /washing on the dyed fabric KB3. sample should neither be too small or too big KB4. sample to be cut from the middle of the batch KB5. use of proper cutting tools such as scissor, knife etc. KB6. dry the sample in clean & dust free place at specified temp without soiling KB7. necessity of good eye sight & shouldn't be colour blind KB8. how to take the sample to the supervisor immediately to avoid waste of time & production loss
Skills (S)	

TSC/ N 5203

Check the quality of a sample of the fabric processed at Jigger

	Reading Skills
	You need to know and understand how to: SA1. comprehend written instructions SA2. read any application sent by other colleagues
	Oral Communication (Listening and Speaking skills)
	You need to know and understand how to: SA3. communicate with supervisor appropriately SA4. talk to others to convey information effectively
C. Professional Skills	Problem Solving
	You need to know and understand how to: SB1. identify the real reason of problem faced SB2. apply problem-solving approaches in different situations SB3. refer anomalies to the supervisor SB4. seek clarification on problems from others
	Attention to Detail
	You need to know and understand how to: SB5. apply good attention to detail SB6. check your work is complete and free from errors SB7. make sure every kind of communication is error free You need to know and understand : SB8. methods and chemicals used for developing different types of dyestuffs SB9. good matching skills & knowledge about the colours

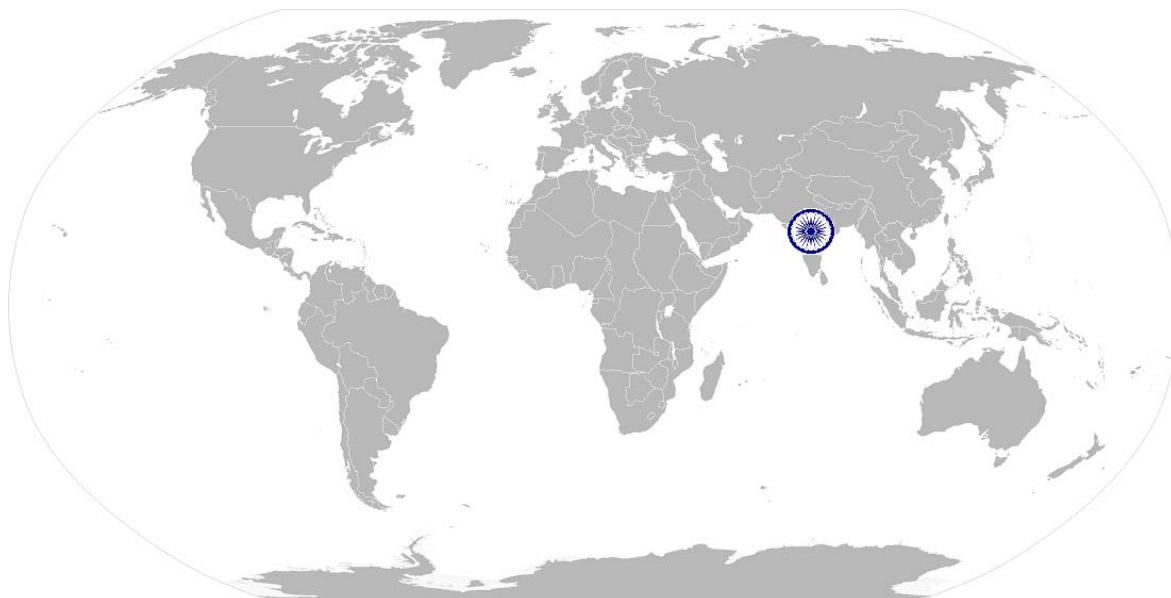


TSC/ N 5203

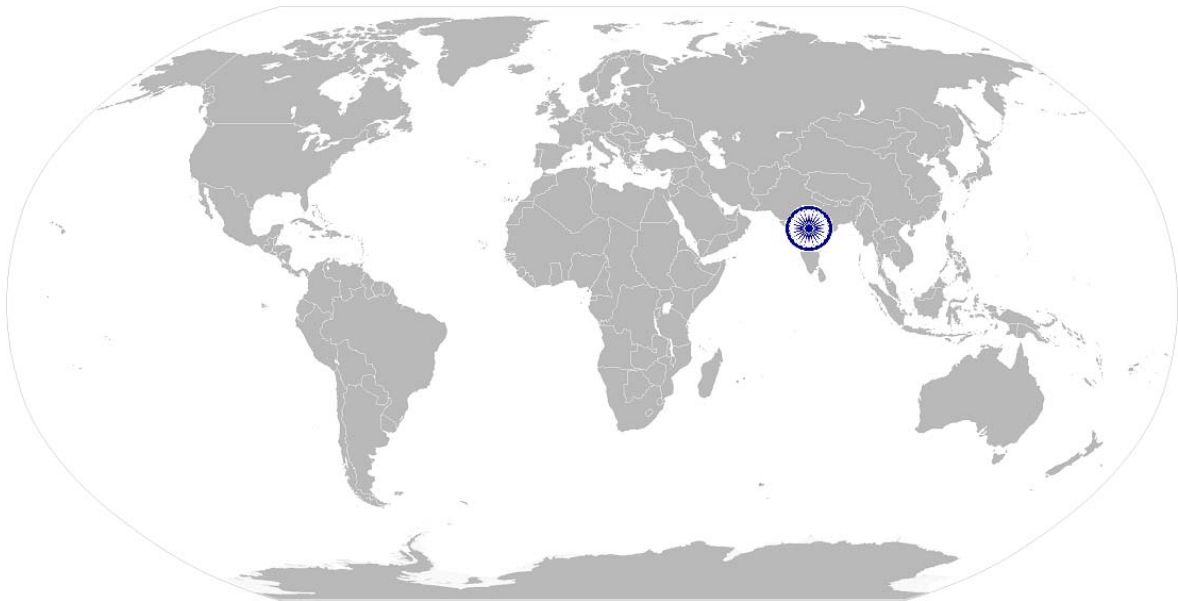
Check the quality of a sample of the fabric processed at Jigger

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NOS Code	TSC/N 5203		
Credits (NSQF)	TBD	Version number	1.0
Industry	Textile	Drafted on	15/12/15
Industry Sub-sector	Processing	Last reviewed on	25/02/15
Occupation	Dyeing & Printing	Next review date	01/03/16



National Occupational Standard



Overview

This unit is about maintaining work areas and activities to ensure tools and machines are maintained as per norms.

TSC/ N 9001

Maintaining work area, tools and machine

National Occupational Standard

Unit Code	TSC/ N9001
Unit Title (Task)	Maintaining work area, tools and machines
Description	This unit provides performance criteria, knowledge & understanding and skills & abilities required to organise/ maintain work areas and activities to ensure tools and machines are maintained as per norms
Scope	This unit/task covers the following: <ul style="list-style-type: none"> Maintain the work area, tools and machines
Performance Criteria (PC) w.r.t. the Scope	
Elements	Performance Criteria
Maintain the work area, tools and machines	<p>To be competent, you must be able to:</p> <p>PC1. handle materials, machinery, equipment and tools with care and use them in the correct way</p> <p>PC2. use correct lifting and handling procedures</p> <p>PC3. use materials to minimize waste</p> <p>PC4. maintain a clean and hazard free working area</p> <p>PC5. maintain tools and equipment</p> <p>PC6. carry out running maintenance within agreed schedules</p> <p>PC7. carry out maintenance and/or cleaning within one's responsibility</p> <p>PC8. report unsafe equipment and other dangerous occurrences</p> <p>PC9. ensure that the correct machine guards are in place</p> <p>PC10. work in a comfortable position with the correct posture</p> <p>PC11. use cleaning equipment and methods appropriate for the work to be carried out</p> <p>PC12. dispose of waste safely in the designated location</p> <p>PC13. store cleaning equipment safely after use</p> <p>PC14. carry out cleaning according to schedules and limits of responsibility</p>
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company/ organization and its processes)	<p>You need to know and understand:</p> <p>KA1. personal hygiene and duty of care</p> <p>KA2. safe working practices and organisational procedures</p> <p>KA3. limits of your own responsibility</p> <p>KA4. ways of resolving problems within the work area</p> <p>KA5. the production process and the specific work activities that relate to the whole process</p> <p>KA6. the importance of effective communication with supervisors</p> <p>KA7. the lines of communication, authority and reporting procedures</p> <p>KA8. the organisation's rules, codes and guidelines (including timekeeping)</p> <p>KA9. the company's quality standards</p> <p>KA10. the importance of complying with written instructions</p> <p>KA11. equipment operating procedures / supervisor's instructions</p>
B. Technical Knowledge	<p>You need to know and understand:</p> <p>KB1. work instructions and specifications and interpret them accurately</p> <p>KB2. relation between work role and the overall manufacturing process</p>

TSC/ N 9001

Maintaining work area, tools and machine

	<p>KB3. hazards likely to be encountered when conducting routine maintenance</p> <p>KB4. the importance of taking action when problems are identified</p> <p>KB5. different ways of minimising waste</p> <p>KB6. the importance of running maintenance and regular cleaning</p> <p>KB7. effects of contamination on products i.e. machine oil, dirt, foreign materials</p> <p>KB8. common faults with equipment and the method to rectify</p> <p>KB9. maintenance procedures</p> <p>KB10. different types of cleaning equipment and substances and their use</p> <p>KB11. safe working practices for cleaning and the method of carrying them out</p>
Skills (S)	
A. Core Skills/ Generic Skills	Reading Skills
	You need to know and understand how to:
	SA1. comprehend written instructions
	SA2. read any application sent by other colleagues
B. Professional Skills	Oral Communication (Listening and Speaking skills)
	You need to know and understand how to:
	SA3. communicate with supervisor appropriately
	SA4. talk to others to convey information effectively
B. Professional Skills	Problem Solving
	You need to know and understand how to:
	SB1. identify the real reason of problem faced
	SB2. apply problem-solving approaches in different situations
B. Professional Skills	Attention to Detail
	You need to know and understand how to:
	SB5. apply good attention to detail
	SB6. check your work is complete and free from errors
B. Professional Skills	Attention to Detail
	You need to know and understand how to:
	SB7. make sure every kind of communication is error free
	SB8. application of leadership skills wherever required
B. Professional Skills	Attention to Detail
	You need to know and understand how to:
	SB9. how to take initiative at the right place
	SB10. the requirement to be creative

TSC/ N 9001

Maintaining work area, tools and machine

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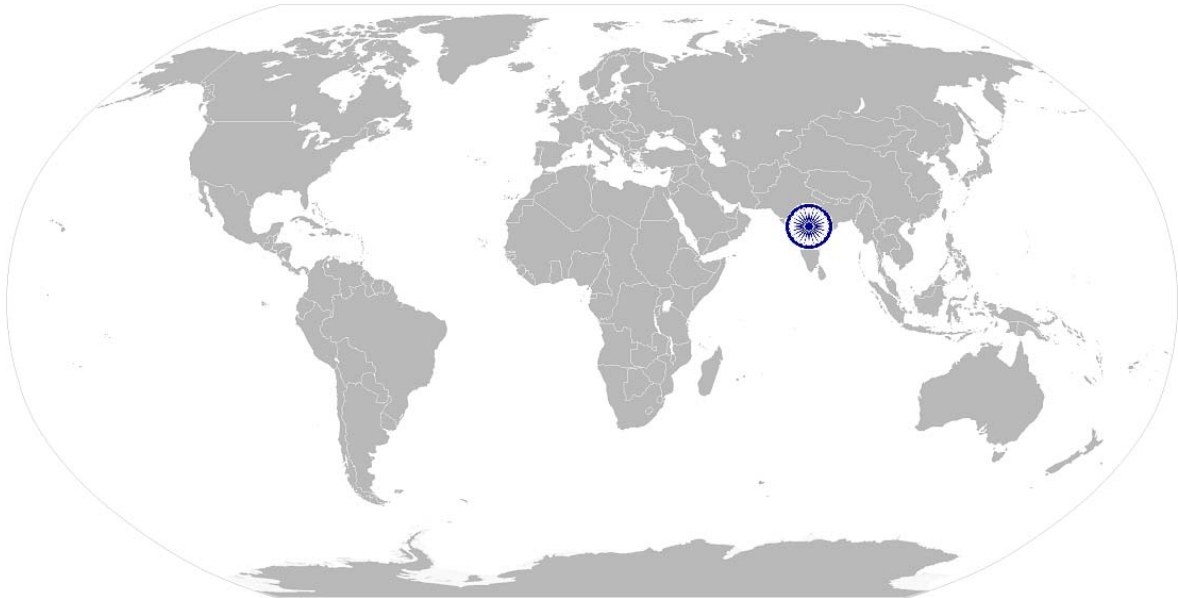
NOS Code	TSC/ N9001		
Credits (NSQF)	TBD	Version number	1.0
Industry	Textile	Drafted on	15/12/15
Industry Sub-sector	Processing	Last reviewed on	25/02/15
Occupation	Dyeing & Printing	Next review date	01/03/16



TSC/ N 9002

Working in a team

National Occupational Standard



Overview

This unit is about working as part of a team in the textile industry.

TSC/ N 9002

Working in a team

National Occupational Standard

Unit Code	TSC/ N9002
Unit Title (Task)	Working in a team
Description	This unit is about working as a team member in the role of machine in a processing unit operator in the textile industry
Scope	This unit/task covers the following: <ul style="list-style-type: none"> Commitment and trust Communication Adaptability Creative freedom
Performance Criteria (PC) w.r.t. the Scope	
Elements	Performance Criteria
Commitment and trust	to be competent, you must be able to: PC1. be accountable to the own role in whole process PC2. perform all roles with full responsibility PC3. perform effectively and efficiently at workplace
Communication	PC4. properly communicate about company policies PC5. report all problems faced during the process PC6. talk politely with other team members and colleagues PC7. submit daily report of own performance
Adaptability	PC8. adjust in different work situations PC9. give due importance to others' point of view PC10. avoid conflicting situations PC11. collaborate with colleagues performing the pre-required and post-required duty of machine as a processing unit tender/ operator
Creative freedom	PC12. develop new ideas for work procedures PC13. improve upon the existing techniques to increase process efficiency
Knowledge and Understanding (K)	
A. Organizational Context	You need to know and understand: KA1. standard operating procedure (SOP) and regulations in a textile mill KA2. procedure followed to get the final output in the textile mill KA3. safe working practices to be adopted in textile mill KA4. report to the supervisor or higher authority about any grievances faced
B. Technical Knowledge	You need to know and understand: KB1. the importance of the previous and next step of the process KB2. process flow in a textile mill and the concerned workers KB3. material flow in a textile mill and the required person KB4. functions of different parts of machines KB5. tools and equipments used KB6. guidelines for operating the machine KB7. safety procedures to be followed in a machine
Skills (S)	
A. Core Skills/	Writing Skills
	You need to know and understand how to:

TSC/ N 9002

Working in a team

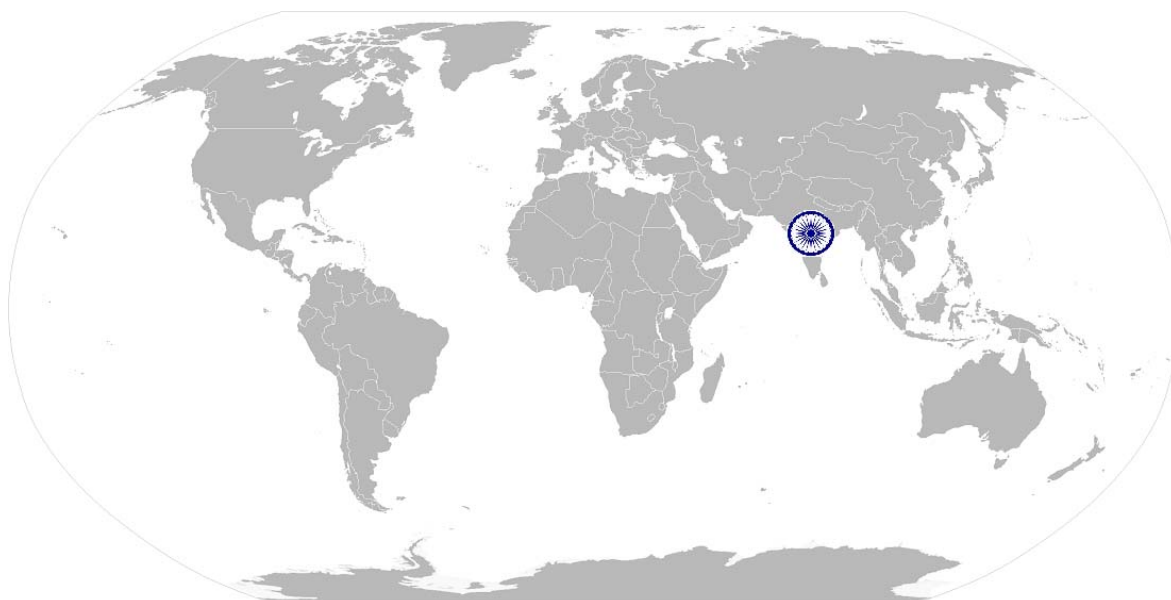
Generic Skills	SA1. write clear and short sentences SA2. write daily work report SA3. write grievance complaint application
	Reading Skills
	You need to know and understand how to: SA4. comprehend written instructions SA5. read any application sent by other colleagues
	Oral Communication (Listening and Speaking skills)
	You need to know and understand how to: SA6. communicate with supervisor appropriately SA7. talk to co-workers to convey information effectively
B. Professional Skills	Problem Solving
	You need to know and understand how to: SB1. identify the real reason of problem faced SB2. be able to find the most effective solution to the problems faced
	Attention to Detail
	You need to know and understand how to: SB3. apply good attention to detail SB4. ensure every kind of communication is error free
	You need to know and understand how to: SB5. communicate effectively SB6. apply leadership skills wherever required SB7. take initiative at the right place SB8. understand the requirement to be creative

TSC/ N 9002

Working in a team

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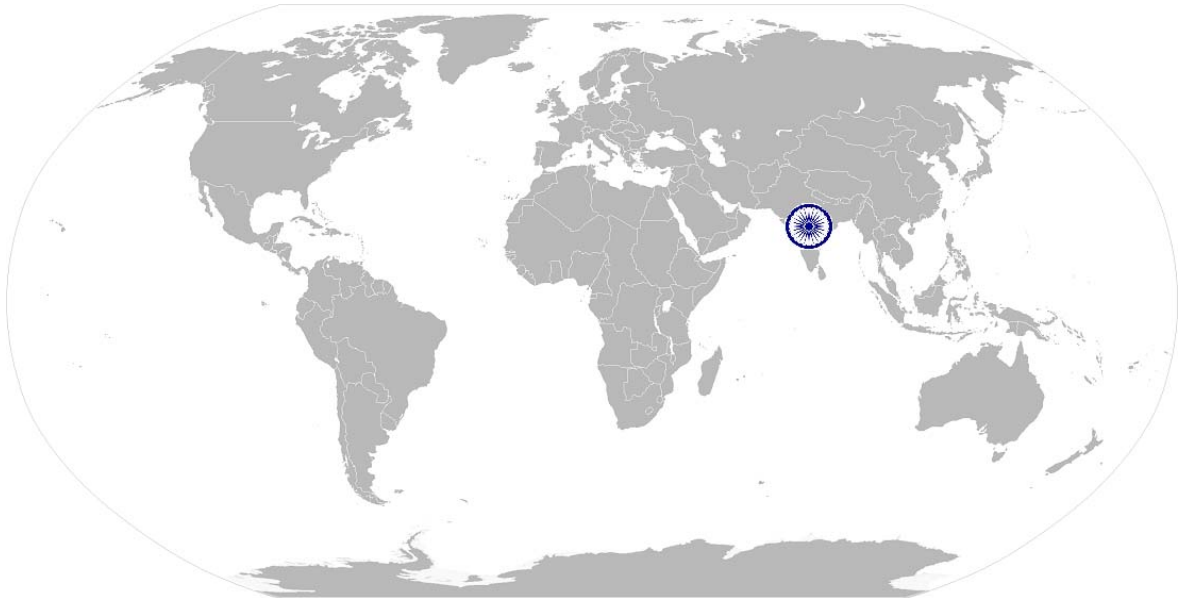
NOS Code	TSC/ N9002		
Credits (NSQF)	TBD	Version number	1.0
Industry	Textile	Drafted on	15/12/15
Industry Sub-sector	Processing	Last reviewed on	25/02/15
Occupation	Dyeing & Printing	Next review date	01/03/16



TSC/ N 9003

Maintain health, safety and security at work place

National Occupational Standard



Overview

This unit is about maintaining health, safety, and security standards at workplace.

TSC/ N 9003

Maintain health, safety and security at work place

Unit Code	TSC/ N9003
Unit Title (Task)	Maintain health, safety and security at work place
Description	This unit provides performance criteria, knowledge & understanding and skills & abilities required to comply with health, safety and security requirements at the workplace and covers procedures to prevent, control and minimize risk to self and others.
Scope	This unit/task covers the following: <ul style="list-style-type: none"> comply with health, safety and security requirements at work recognizing the hazards planning the safety techniques implementing the programs
Performance Criteria (PC) w.r.t. the Scope	
Elements	Performance Criteria
Comply with health, Safety and security requirements at work	<p>To be competent, operator must be able to:</p> <p>PC1. comply with health and safety related instructions applicable to the workplace</p> <p>PC2. use and maintain personal protective equipment such as “ ear plug” “ nose mask “ “ head cap” etc., as per protocol</p> <p>PC3. carry out own activities in line with approved guidelines and procedures</p> <p>PC4. maintain a healthy lifestyle and guard against dependency on intoxicants</p> <p>PC5. follow environment management system related procedures</p> <p>PC6. identify and correct (if possible) malfunctions in machinery and equipment</p> <p>PC7. report any service malfunctions that cannot be rectified</p> <p>PC8. store materials and equipment in line with organisational requirements</p> <p>PC9. safely handle and remove waste</p> <p>PC10. minimize health and safety risks to self and others due to own actions</p> <p>PC11. seek clarifications, from supervisors or other authorized personnel in case of perceived risks</p> <p>PC12. monitor the workplace and work processes for potential risks and threat</p> <p>PC13. carry out periodic walk-through to keep work area free from hazards and obstructions, if assigned</p> <p>PC14. report hazards and potential risks/ threats to supervisors or other authorized personnel</p> <p>PC15. participate in mock drills/ evacuation procedures organized at the workplace</p> <p>PC16. undertake first aid, fire-fighting and emergency response training, if asked to do so</p> <p>PC17. take action based on instructions in the event of fire, emergencies or accidents</p> <p>PC18. follow organisation procedures for shutdown and evacuation when required</p>
Recognizing the hazards	<p>PC19. identify different kinds of possible hazards (environmental, personal, ergonomic, chemical) of the industry</p> <p>PC20. recognise other possible security issues existing in the workplace</p>
Planning the safety techniques	PC21. recognise different measures to curb the hazards

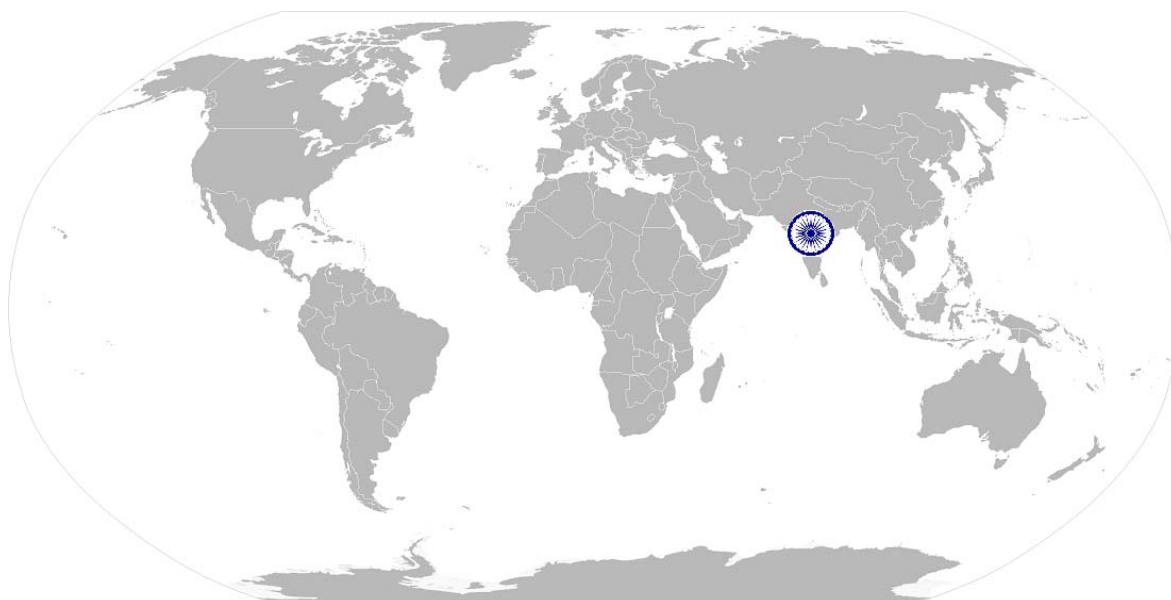
TSC/ N 9003
Maintain health, safety and security at work place

Implementing the programs	PC22. communicate the safety plan to everyone PC23. attach disciplinary rules with the implementation
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company/ organization and its processes)	<p>You need to know and understand:</p> <p>KA1. standard operating procedure (SOP) and regulations in a textile mill</p> <p>KA2. safe working practices to be adopted in textile mill</p> <p>KA4. quality systems and other processes practiced in the textile mill</p> <p>KA5. health and safety related practices applicable at the workplace</p> <p>KA6. potential hazards, risks and threats based on nature of operations</p> <p>KA7. organizational procedures for safe handling of equipment and machine operations</p> <p>KA8. potential risks due to own actions and methods to minimize these</p> <p>KA9. environmental management system related procedures at the workplace</p> <p>KA10. layout of the plant and details of emergency exits, escape routes, emergency equipment and assembly points</p> <p>KA11. potential accidents and emergencies and response to these scenarios</p> <p>KA12. reporting protocol and documentation required</p> <p>KA13. details of personnel trained in first aid, fire-fighting and emergency response</p> <p>KA14. actions to take in the event of a mock drills/ evacuation procedures or actual accident, emergency or fire</p>
B. Technical Knowledge	<p>You need to know and understand:</p> <p>KB1. occupational health and safety risks and methods</p> <p>KB2. personal protective equipment and method of use</p> <p>KB3. identification, handling and storage of hazardous substances</p> <p>KB4. proper disposal system for waste and by-products</p> <p>KB5. signage related to health and safety and their meaning</p> <p>KB6. importance of sound health, hygiene and good habits</p> <p>KB7. ill-effects of alcohol, tobacco and drugs</p>
Skills (S)	
A. Core Skills/ Generic Skills	Writing Skills
	You need to know and understand how to:
	SA1. write clear and short sentences
	Reading Skills
	<p>You need to know how to:</p> <p>SA2. read and understand the company instructions</p> <p>SA3. read and understand the basic language</p> <p>SA4. read and understand the safety guidelines</p>
B. Professional Skills	Oral Communication (Listening and Speaking skills)
	SA1. listen to others attentively
	SA2. respond to emergencies, accidents or fire at the workplace
	SA3. evacuate the premises and help others in need while doing so
	SA4. the value of physical fitness, personal hygiene and good habits
B. Professional Skills	Decision Making
	SB1. identify correct safety measure for particular hazard

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Maintain health, safety and security at work place

	SB2. make required safety plans as and when required
	SB3. raise alarm in case of emergency
	Analytical Thinking
	SB4. know the use of correct safety measure whenever required
	Attention to Detail
	SB5. be attentive to details SB6. be careful to avoid occurrence of hazards You need to know and understand : SB7. maintain neatness at work SB8. procedure for reporting unwanted behavior

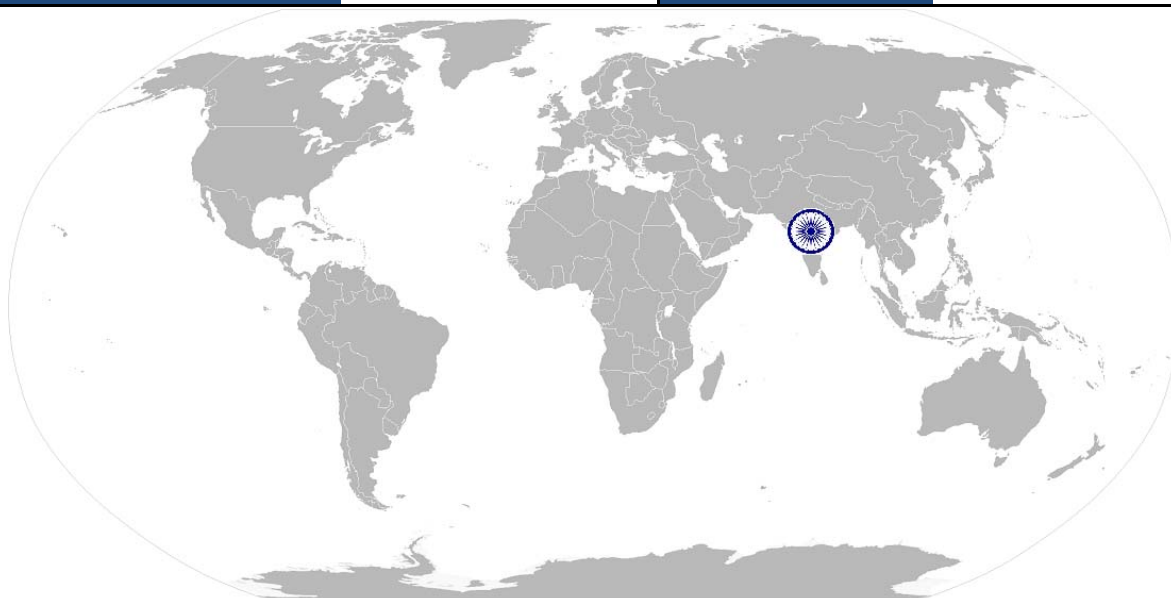


TSC/ N 9003

Maintain health, safety and security at work place

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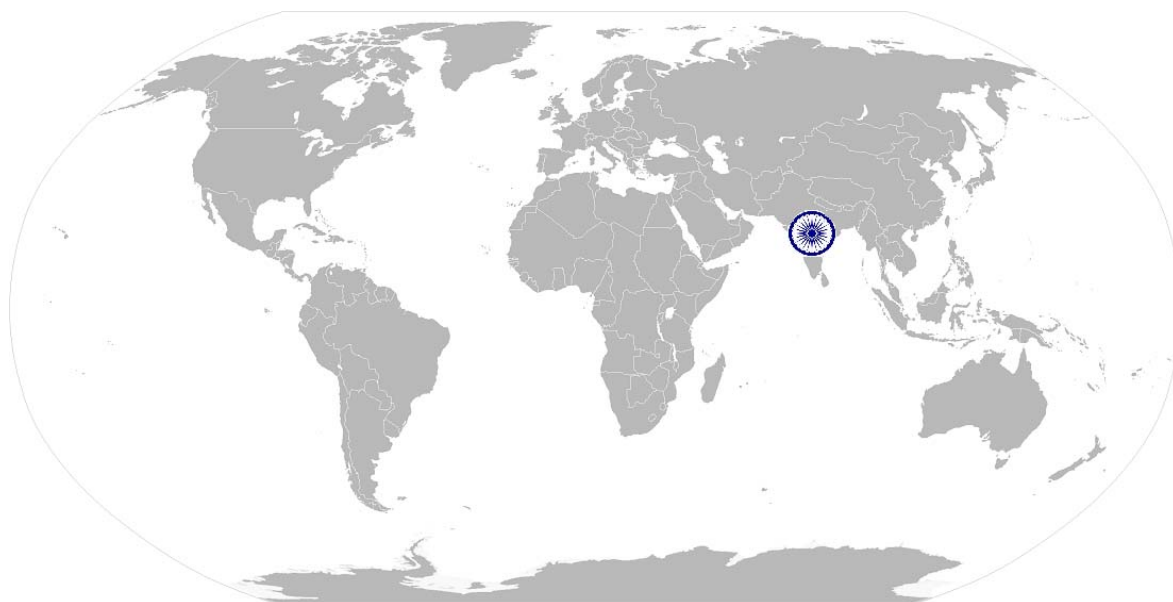
NOS Code	TSC/ N9003		
Credits (NSQF) [OPTIONAL]	TBD	Version number	1.0
Industry	Textile	Drafted on	15/12/15
Industry Sub-sector	Processing	Last reviewed on	25/02/15
Occupation	Dyeing & Printing	Next review date	01/03/16



TSC/ N 9004

Comply with industry and organizational requirements

National Occupational Standard



Overview

This unit is about knowing, understanding, and complying with the requirements of the organization and the textile industry

TSC/ N 9004

Comply with industry and organizational requirements

National Occupational Standard	Unit Code	TSC/ N9004
	Unit Title (Task)	Comply with industry and organizational requirements
	Description	This unit is about knowing, understanding, and complying with the requirements of the organization and the textile industry
	Scope	This unit/task covers the following: <ul style="list-style-type: none"> self development team work organizational standards industry standards
	Performance Criteria (PC) w.r.t. the Scope	
	Elements	Performance Criteria
	Self- development	To be competent, you must be able to: PC1. perform own duties effectively PC2. take responsibility for own actions PC3. be accountable towards the job role and assigned duties PC4. take initiative and innovate the existing methods PC5. focus on self-learning and improvement
	Team work	PC6. co-ordinate with all the team members and colleagues PC7. communicate politely PC8. avoid conflicts and miscommunication
	Organisational standards	PC9. know the organisational standards PC10. implement them in your performance PC11. motivate others to follow them
	Industry standards	PC12. know the industry standards PC13. align them with organisation standards
	Knowledge and Understanding (K)	
	A. Organizational Context (Knowledge of the company/ organization and its processes)	You need to know and understand: KA1. standard operating procedure (SOP) and regulations in a textile mill KA2. report to the supervisor or higher authority KA3. knowledge of organisational standards KA4. knowledge of industry standards
	B. Technical Knowledge	You need to know and understand: KB1. process and material flow in a textile mill KB2. importance of complying with the standards KB3. guidelines for cleaning the various part of machine in
	Skills (S)	
	A. Core Skills/ Generic Skills	Writing Skills
		You need to know and understand how to: SA1. write reports

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Comply with industry and organizational requirements

	SA2. write clear and short sentences
	Reading Skills
	You need to know and understand how to: SA3. read the basic language SA4. read one more language than the basic language SA5. read and comprehend the standards and rules
	Oral Communication (Listening and Speaking skills)
	You need to know and understand how to: SA6. talk effectively with others SA7. put forward your point SA8. listen to others You need to know and understand : SA9. procedure of preparing the industry standards SA10. procedure to follow the given standards SA11. procedure to comply with the standards

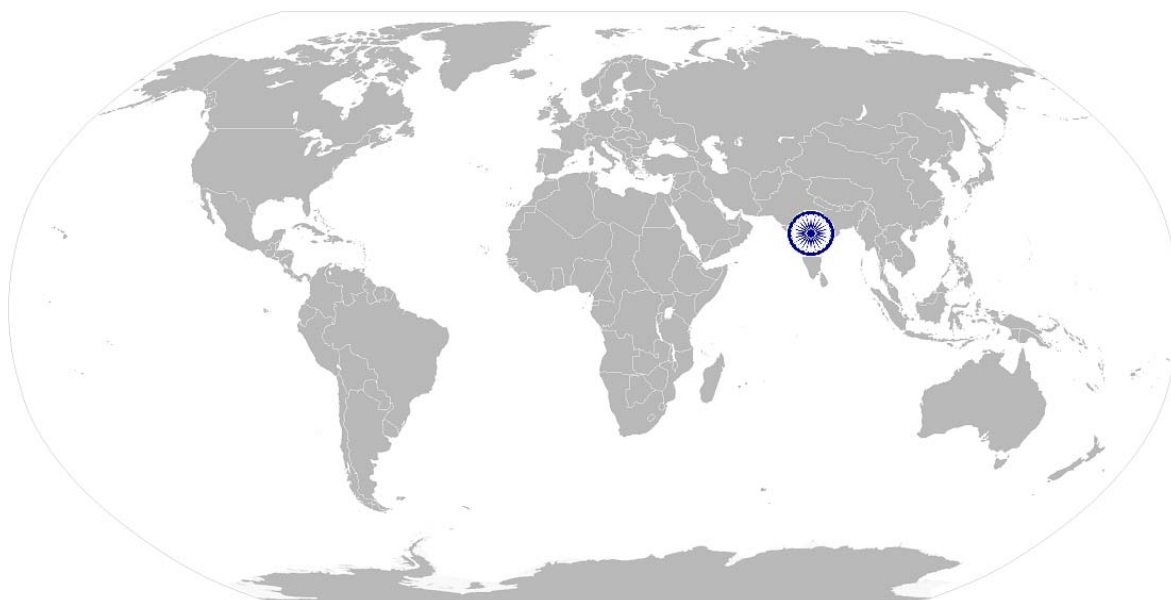


TSC/ N 9004

Comply with industry and organizational requirements

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NOS Code	TSC/N 9004		
Credits (NSQF) [OPTIONAL]	TBD	Version number	1.0
Industry	Textile	Drafted on	15/12/15
Industry Sub-sector	Processing	Last reviewed on	25/02/15
Occupation	Dyeing & Printing	Next review date	01/03/16



Assessment Criteria

Job Role: Jigger Machine Operator
Qualification Pack: Jigger Machine Operator
Sector Skill Council: Textile Sector Skill Council

Guidelines for assessment :-

1. Criteria for assessment for each qualification pack will be created by the Sector Skill Council. Each performance criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for theory & skill practical for each PC.
2. The assessment for the theory part will be based on knowledge bank of question created by the SSC.
3. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training centre (as per assessment criteria below).
4. To pass the qualification pack, every trainee should score a minimum of 80%.

National Occupational Standards (NOS)	Performance Criteria (PC)	Total Marks	Out Of	Marks Allocation		
				Theory	Skills Practical	Viva
1. TSC/ N5201 Taking charge of shift and handing over shift to Jigger Machine Operator	PC1. come at least 10 - 15 minutes earlier to the work place	37	2	0	2	0
	PC2. bring the necessary operational tools to the department		1	0	1	0
	PC3. meet the previous shift operator and discuss with him/ her regarding the issues faced by him with respect to the quality, production ,spare, safety or any other specific instruction etc.		3	1	1	1
	PC4. understand the fabric being processed & process running on the machine		2	0	1	1
	PC5. ensure the technical details are mentioned on the job card display on the machine		2	1	0	1
	PC6. check for the availability of the spare trolley/batching trolley for unloading the fabric		1	1	0	0
	PC7. check the next batch to be processed is ready near the machine		1	1	0	0
	PC8. ensure the required dyes & chemicals are already weighed & prepared		1	1	0	0
	PC9. check the cleanliness of the machines & other work areas		2	0	2	0

	PC10. question the previous shift operator for any deviation in the above and bring the same to the knowledge of his/ her shift superior as well as that of the previous shift		2	0	2	0
	PC11. take over the shift from the outgoing operator in a proper manner		2	0	2	0
	PC12. ensure proper communication regarding fabric quality & the process running on the machine while providing the details		3	1	1	1
	PC13. provide all relevant information regarding the stoppages or breakdown in the machine, any damage to the fabric or machine.		2	0	2	0
	PC14. ensure the empty trolley is near the machine for unloading the fabric		1	0	1	0
	PC15. ensure the next lot to be processed, which is already stitched & arranged properly is ready near the machine		1	0	1	0
	PC16. ensure the required dyes & chemicals for the next lot or next process are weighed & prepared		1	0	1	0
	PC17. get clearance from the incoming counterpart before leaving the work spot		2	0	2	0
	PC18. report to his/ her shift superiors as well as that of the incoming shift operator in case his/ her counterpart doesn't report for the incoming shift		2	0	2	0
	PC19. ensure the shift has to be properly handed over to the incoming shift operator		1	1	0	0
	PC20. report to his/ her shift superior about the quality / production / safety issues/ any other issue faced in his/ her shift and leave the department only after getting concurrence for the same from his/ her superiors		2	0	2	0
	PC21. collect the wastes from waste collection bags, weigh them and transport to storage area		1	0	1	0
	PC22. ensure the machine and its work place is clean		2	0	2	0
	Total		37	7	26	4
	Weightage %			19%	70%	11%

2. TSC/ N5202 Operating the Jigger Machine	PC1. understand the task mentioned in the work order	35	2	1	1	0
	PC2. ensure that the machine is empty & clean		2	0	2	0
	PC3. load the fabric from the batch trolley in the center of the machine		2	0	2	0
	PC4. ensure fabric is crease-less and evenly fed onto the machine		2	0	2	0
	PC5. prepare the chemical/dye-stuff required for the batch		2	0	2	0
	PC6. inject the chemical in the machine tank/dispenser		2	0	2	0
	PC7. know the operations of the machine & the plc/ control mechanism programs		2	0	2	0
	PC8. read & understand the process being followed to do the task		3	1	1	1
	PC9. check the ph, temp & other parameters during the process		3	1	1	1
	PC10. maintain even temp across the width of machine		2	0	2	0
	PC11. maintain even & minimum tension on the fabric		2	0	2	0
	PC12. drain the machine once sample is approved		1	0	1	0
	PC13. unload the fabric from the machine after completion of the process		1	0	1	0
	PC14. make sure the machine is kept clean at all times ,before loading, while running & after unloading the fabric		2	0	2	0
	PC15. follow the preventive maintenance schedule & ensure the machine is running smoothly		2	0	2	0
	PC16. check that all controls are functioning properly		2	0	2	0
	PC17. ensure the right quality of water , steam & air is available for proper functioning of machine		2	0	1	1
	PC18. cool down the machine after completion of job		1	0	1	0
	Total		35	3	29	3
		Weightage %		9%	82%	9%
3. TSC/N 5203 Check the	PC1. cut sample as per the time / no. of turn mentioned in the work order to	19	3	1	1	1

quality of a sample of the fabric processed at Jigger	avoid any delay					
	PC2. cut proper size of the sample		1	0	1	0
	PC3. cut the sample from same place every time		1	0	1	0
	PC4. clean hands or cutting tools to avoid soiling of the sample		2	0	2	0
	PC5. Develop the sample as per developing techniques for various types of dyestuffs used in the process such as direct, reactive, vat, sulphur etc.		3	1	1	1
	PC6. Soap the sample as per SOP for various types of dyestuffs		3	1	1	1
	PC7. Dry the sample at clean & dust free place		3	1	1	1
	PC8. compare the sample with the standard attached to the work order or in the master file		2	0	2	0
	PC9. take the sample to your supervisor if the sample is not matching to the standard for decision		1	0	1	0
	Total		19	4	11	4
	Weightage %			21%	58%	21%
4. TSC/ N9001 Maintain work area, tools and machines	PC1. handle materials, machinery, equipment and tools with care and use them in the correct way	29	3	1	2	0
	PC2. use correct lifting and handling procedures		1	0	1	0
	PC3. use materials to minimize waste		2	1	1	0
	PC4. maintain a clean and hazard free working area		3	1	1	1
	PC5. maintain tools and equipment		3	1	2	0
	PC6. carry out running maintenance within agreed schedules		2	1	1	0
	PC7. carry out maintenance and/or cleaning within one's responsibility		1	0	1	0
	PC8. report unsafe equipment and other dangerous occurrences		1	1	0	0
	PC9. ensure that the correct machine guards are in place		2	1	1	0
	PC10. work in a comfortable position with the correct posture		3	1	2	0
	PC11. use cleaning equipment and methods appropriate for the work to be carried out		2	1	1	0

	PC12.dispose of waste safely in the designated location		2	0	2	0
	PC13.store cleaning equipment safely after use		2	0	2	0
	PC14.carry out cleaning according to schedules and limits of responsibility		2	1	1	0
	Total		29	10	18	1
		Weightage %		35%	62%	3%
5.TSC/ N9002 Working in a team	PC1. be accountable to the own role in whole process	26	2	1	1	0
	PC2. perform all roles with full responsibility		3	1	2	0
	PC3. perform effectively and efficiently at workplace		4	1	2	1
	PC4. properly communicate about company policies		2	1	0	1
	PC5. report all problems faced during the process		1	1	0	0
	PC6. talk politely with other team members and colleagues		2	1	1	0
	PC7. submit daily report of own performance		1	0	1	0
	PC8. adjust in different work situations		2	0	2	0
	PC9. give due importance to others' point of view		2	1	0	1
	PC10.avoid conflicting situations		3	1	1	1
	PC11.collaborate with colleagues performing the pre-required and post-required		2	1	1	0
	PC12.develop new ideas for work procedures		1	0	1	0
	PC13.improve upon the existing techniques to increase process efficiency		1	1	0	0
	Total		26	10	12	4
		Weightage %		39%	46%	15%
6. TSC/ N9003 Maintain health, safety and security at workplace	PC1. comply with health and safety related instructions applicable to the workplace	71	5	1	3	1
	PC2. use and maintain personal protective equipment such as " ear plug" " nose mask " " head cap" etc., as per protocol		5	1	3	1
	PC3. carry out own activities in line with		3	1	2	0

	approved guidelines and procedures					
	PC4. maintain a healthy lifestyle and guard against dependency on intoxicants		2	1	0	1
	PC5. follow environment management system related procedures		3	1	2	0
	PC6. identify and correct (if possible) malfunctions in machinery and equipment		3	1	1	1
	PC7. report any service malfunctions that cannot be rectified		2	1	0	1
	PC8. store materials and equipment in line with organisational requirements		2	0	1	1
	PC9. safely handle and remove waste		2	0	2	0
	PC10. minimize health and safety risks to self and others due to own actions		3	1	1	1
	PC11. seek clarifications, from supervisors or other authorized personnel in case of perceived risks		3	1	1	1
	PC12. monitor the workplace and work processes for potential risks and threat		2	0	2	0
	PC13. carry out periodic walk-through to keep work area free from hazards and obstructions, if assigned		3	2	0	1
	PC14. report hazards and potential risks/ threats to supervisors or other authorized personnel		3	2	0	1
	PC15. participate in mock drills/ evacuation procedures organized at the workplace		3	1	2	0
	PC16. undertake first aid, fire-fighting and emergency response training, if asked to do so		5	2	2	1
	PC17. take action based on instructions in the event of fire, emergencies or accidents		4	1	2	1
	PC18. follow organisation procedures for shutdown and evacuation when required		2	0	2	0
	PC19. identify different kinds of possible hazards (environmental, personal, ergonomic, chemical) of the industry		5	1	3	1
	PC20. recognise other possible security issues existing in the workplace		3	1	1	1
	PC21. recognise different measures to curb the hazards		3	1	2	0
	PC22. communicate the safety plan to		3	2	0	1

	everyone					
	PC23. attach disciplinary rules with the implementation		2	1	1	0
	Total		71	23	33	15
		Weightage %		32%	47%	21%
7. TSC/ N9004 Comply with industry and organisational requirements	PC1. perform own duties effectively	39	4	1	2	1
	PC2. take responsibility for own actions		4	1	2	1
	PC3. be accountable towards the job role and assigned duties		3	1	1	1
	PC4. take initiative and innovate the existing methods		4	1	2	1
	PC5. focus on self-learning and improvement		3	1	1	1
	PC6. co-ordinate with all the team members and colleagues		3	1	2	0
	PC7. communicate politely		3	1	2	0
	PC8. avoid conflicts and miscommunication		3	1	2	0
	PC9. know the organisational standards		2	1	1	0
	PC10. implement them in your performance		3	1	2	0
	PC11. motivate others to follow them		3	1	2	0
	PC12. know the industry standards		2	1	0	1
	PC13. align them with organisation standards		2	0	2	0
	Total		39	12	21	6
		Weightage %		31%	54%	15%
Grand Total			256	150	69	37