



Model Curriculum

Stacker / Reclaimer Operator

SECTOR: IRON & STEEL
**SUB-SECTOR: STEEL, SPONGE IRON, FERRO ALLOYS,
RE-ROLLERS, REFRACTORY**
OCCUPATION: RAW MATERIAL HANDLING
REF ID: ISC/Q0104
NSQF LEVEL: 3



  

Certificate

**CURRICULUM COMPLIANCE TO
QUALIFICATION PACK – NATIONAL OCCUPATIONAL
STANDARDS**

is hereby issued by the
INDIAN IRON AND STEEL SECTOR SKILL COUNCIL
for the
MODEL CURRICULUM

Complying to National Occupational Standards of
Job Role/ Qualification Pack: 'Stacker/Reclaimer Operator' QP No. 'ISC/Q0104 NSQF Level 3'

Date of Issuance: **December 22nd, 2015**
Valid up to: **December 21st, 2016**

** Valid up to the next review date of the Qualification Pack*


Authorised Signatory
(Indian Iron and Steel Sector Skill Council)



TABLE OF CONTENTS

1. Curriculum	04
2. Trainer Prerequisites	06
3. Annexure: Assessment Criteria	07

Stacker / Reclaimer Operator

CURRICULUM / SYLLABUS

This program is aimed at training candidates for the job of a “Stacker / Reclaimer Operator”, in the “Iron & Steel” Sector/Industry and aims at building the following key competencies amongst the learner.

Program Name	Stacker / Reclaimer Operator		
Qualification Pack Name & Reference ID.	Stacker / Reclaimer Operator ISC/Q0104		
Version No.	1.0	Version Update Date	01-04-2017
Pre-requisites to Training	Minimum qualification – ITI (Mechanical) Pass		
Training Outcomes	After completing this programme, participants will be able to: <ul style="list-style-type: none"> • Prepare for the stacker / re-claimer operation • Carry out stacker / re-claimer operation • Use basic health and safety practices at the work place • Works effectively with others 		

This course encompasses 4 out of 4 National Occupational Standards (NOS) of “Stacker / Reclaimer Operator” Qualification Pack issued by “Indian Iron & Steel Sector Skill Council”.

Sr. No.	Module	Key Learning Outcomes	Equipment Required
1	Over view of Iron & Steel Industry Theory Duration (hh:mm) 04:00 Practical Duration (hh:mm) 00:00 Corresponding NOS Code	<ul style="list-style-type: none"> • Understanding Iron & steel industry • Understanding types of Iron & Steel Industry • Understanding products of Iron & Steel industry • Activities in Iron & Steel Industry 	PPTs of Iron and steel manufacturing, Charts showing the same
2	Occupational, Health and Safety (OHAS) Theory Duration (hh:mm) 08:00 Practical Duration (hh:mm) 12:00	<ul style="list-style-type: none"> • Understanding the Occupational health & Safety • Understand What is hazard • Documentation for Health and safety • Working at Heights, confined spaces • Remedies for fire at work place 	PPTs for OHAS related to Job Role, Display Material for PPEs related to Job Role, Safety Material



Sr. No.	Module	Key Learning Outcomes	Equipment Required
	Corresponding NOS Code ISC/N0008		
3	5S & House keeping Theory Duration (hh:mm) 08:00 Practical Duration (hh:mm) 12:00 Corresponding NOS Code ISC/N0008	<ul style="list-style-type: none"> • Identification of bottlenecks in functioning of work place • Various methods of housekeeping both pre-work & post-work as well 	PPTs of 5S, Display Charts of 5S, Audit Checklists of 5S
4	Prepares for the stacker / re-claimer operation Theory Duration (hh:mm) 35:00 Practical Duration (hh:mm) 110:00 Corresponding NOS Code ISC/N0108	<ul style="list-style-type: none"> • Understand the assigned job in accordance with the instructions / checklist • Identify the tools and tackles that are required to carry out the assigned job • Reach the site and inspect the equipment for operation readiness • Obtain clearances before operating the stacker / re-claimer 	conveyor idlers, guide pulleys, belt joints, drums, tools and tackles
5	Carry out stacker / re-claimer operation Theory Duration (hh:mm) 35:00 Practical Duration (hh:mm) 130:00 Corresponding NOS Code ISC/N0109	<ul style="list-style-type: none"> • Inspect the Stacker / Re-Claimer before starting the assigned job • Obtain clearances before starting the conveyor • Communicate to supervisor on completion of the assigned job 	conveyor idlers, guide pulleys, belt joints, drums, tools and tackles
6	Use basic health and safety practices at the workplace Duration (hh:mm) 08:00 Practical Duration (hh:mm) 08:00	<ul style="list-style-type: none"> • Health and safety procedures • Fire safety procedures • Emergencies, rescue and first aid procedures 	PPE, Different Type of Safety Sign, First Aid Box, Safety instrument and clothing, Step Ladder, Sample Accident reports, Fire Extinguishers, Items required for fire extinguisher and fire Safety

Sr. No.	Module	Key Learning Outcomes	Equipment Required
	Corresponding NOS Code ISC/N0008		
7	Work effectively with others Duration (hh:mm) 08:00 Practical Duration (hh:mm) 12:00 Corresponding NOS Code ISC/N0009	<ul style="list-style-type: none"> Ensure appropriate communication with superiors, peers and others as applicable at work place Demonstrate appropriate behaviour and etiquette at work place 	Communication skills PPTs, Posters Team management posters
	Total Duration Theory Duration 106:00 Practical Duration 284:00	Unique Equipment Required: <ul style="list-style-type: none"> Mechanical Drawings, Blueprints, Basic Tools and Equipment's, measuring tools & precision measurement tools, Material and Equipment for cleaning, lifting machines PPE, Safety Sign, First Aid Box, Fire Extinguishers 	

Grand Total Course Duration: **390Hours, 0 Minutes**

(This syllabus/ curriculum has been approved by [Indian Iron and Steel Sector Skills Council](#))

Trainer Prerequisites for Job role: “Stacker / Reclaimer Operator” mapped to Qualification Pack: “ISC/Q0104”

Sr. No.	Area	Details
1	Description	To deliver accredited training service, mapping to the curriculum detailed above, in accordance with the Qualification Pack “ISC/Q0104”.
2	Personal Attributes	Aptitude for conducting training, and pre/ post work to ensure competent, employable candidates at the end of the training. Strong communication skills, interpersonal skills, ability to work as part of a team; a passion for quality and for developing others; well-organised and focused, eager to learn and keep oneself updated with the latest in the mentioned field.
3	Minimum Educational Qualifications	Min. ITI pass and preferably CTI/ATI cleared/ Diploma Mechanical
4a	Domain Certification	Certified for Job Role: “Stacker / Reclaimer Operator” mapped to QP: “ISC/Q0104”. Minimum accepted score is 80%
4b	Platform Certification	Recommended that the Trainer is certified for the Job Role: “Trainer”, mapped to the Qualification Pack: “SSC/1402”. Minimum accepted score is 80%
5	Experience	Min. 5 years industry experience and minimum 2 years’ experience as Trained or un trained for same Job Role/ Trade



Annexure: Assessment Criteria

Assessment Criteria	
Job Role	Stacker / Reclaimer Operator
Qualification Pack	ISC/Q0104
Sector Skill Council	Indian Iron & Steel Sector Skill Council

Sr. No.	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 and Skills Practical for each PC.
2	The assessment for the theory part will be based on knowledge bank of questions created by the SSC
3	Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training centre (as per assessment criteria below)
4	Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training centre based on these criteria.
5	To pass the Qualification Pack , every trainee should score a minimum of 60% in every NOS.
6	In case of successfully passing only certain number of NOS's, the trainee is eligible to take subsequent assessment on the balance NOS's to pass the Qualification Pack.

Assessment outcome (nos)	Assessment criteria	Total marks	Out of	Marks allocation	
				Theory	Skills practical
ISC/N0108: Prepares for the stacker / reclaimer operation	PC1. Interpret the checklist and understand the job requirements	300	10	5	5
	PC2. Make a work plan to carry out the job		10	5	5
	PC3. Identify tools, tackles & equipment required to perform the operation		15	5	10
	PC4. Asks helper to carry tools required to the desired work site		15	5	10
	PC5. Report to stores in case of non-availability of tools & tackles or stock-out		15	5	10
	PC6. Reach the specific job site for conducting inspection		15	5	10



Assessment outcome (nos)	Assessment criteria	Total marks	Out of	Marks allocation	
				Theory	Skills practical
	PC7. Inspect the parts of the stacker / Re-Claimer before starting		25	5	20
	PC8. By visual inspection, ensures that the parts are not defective		25	5	20
	PC9. Inspect the material that is likely to be conveyed (moisture content, quality, boulders, etc.)		25	5	20
	PC10. Ensure conveyor idlers, guide pulleys, belt joints, drums etc. are in proper working condition		25	5	20
	PC11. Obtain clearances from service departments before the start of the conveyor		25	5	20
	PC12. Check physical damage if any and report to appropriate authority		25	5	20
	PC13. Report damaged / defective components of equipment as per the escalation matrix		25	5	20
	PC14. Ensure that the site is free from obstructions for the movement of stacker / Re-Claimer		25	5	20
	PC15. Ensure safety of stacker (derailment, tripping etc.)		20	5	15
	NOS Total Marks	Total	300	75	225
ISC/N0109: Carry out stacker / re-claimer operation	PC1. Understand the stacking system and how it works	450	35	10	25
	PC2. Understand the material that (properties) is being conveyed and stacked		35	10	25



Assessment outcome (nos)	Assessment criteria	Total marks	Out of	Marks allocation	
				Theory	Skills practical
	PC3. Inspect all critical parts of the stacker		45	10	35
	PC4. Identify any defective parts and escalate for suitable replacement		45	10	35
	PC5. Ensure fitness		35	10	25
	PC6. Ensure the area is clear from obstructions		35	10	25
	PC7. Obtain clearances from service departments about the fitness of the equipment		35	10	25
	PC8. Check the material that is being conveyed		45	10	35
	PC9. Start the stacker / Re-Claimer		40	10	30
	PC10. Stack the material as prescribed by the superior		40	10	30
	PC11. Ensure all activities are complete according to checklist		15	10	5
	PC12. Record the activity logs in the log book for record		15	10	5
	PC13. Communicate to supervisor on completion of given job		15	10	5
	PC14. Escalate if any deviations to immediate supervisor		15	10	5
	NOS Total Marks	Total	450	140	310



Assessment outcome (nos)	Assessment criteria	Total marks	Out of	Marks allocation	
				Theory	Skills practical
ISC/N0008: Use basic health and safety practices at the workplace	PC1. Use protective clothing/equipment for specific tasks and work conditions	150	10	5	5
	PC2. State the name and location of people responsible for health and safety in the workplace		5	0	5
	PC3. State the names and location of documents that refer to health and safety in the workplace		1	0	1
	PC4. Identify job-site hazardous work and state possible causes of risk or accident in the workplace		9	5	4
	PC5. Carry out safe working practices while dealing with hazards to ensure the safety of self and others state methods of accident prevention in the work environment of the job role		10	5	5
	PC6. State location of general health and safety equipment in the workplace		5	0	5
	PC7. Inspect for faults, set up and safely use steps and ladders in general use		5	0	5
	PC8. Work safely in and around trenches, elevated places and confined areas		5	0	5
	PC9. Lift heavy objects safely using correct procedures		5	0	5
	PC10. Apply good housekeeping practices at all times		1	0	1
	PC11. Identify common hazard signs displayed in various areas		6	5	1



Assessment outcome (nos)	Assessment criteria	Total marks	Out of	Marks allocation	
				Theory	Skills practical
	PC12. Retrieve and/or point out documents that refer to health and safety in the workplace		4	0	4
	PC13. Use the various appropriate fire extinguishers on different types of fires correctly		9	5	4
	PC14. Demonstrate rescue techniques applied during fire hazard		10	5	5
	PC15. Demonstrate good housekeeping in order to prevent fire hazards		1	0	1
	PC16. Demonstrate the correct use of a fire extinguisher		4	0	4
	PC17. Demonstrate how to free a person from electrocution		5	0	5
	PC18. Administer appropriate first aid to victims as required e.g. in case of bleeding, burns, choking, electric shock, poisoning etc.		10	5	5
	PC19. Demonstrate basic techniques of bandaging		5	0	5
	PC20. Respond promptly and appropriately to an accident situation or medical emergency in real or simulated environments		10	5	5
	PC21. Perform and organize loss minimization or rescue activity during an accident in real or simulated environments		5	0	5



Assessment outcome (nos)	Assessment criteria	Total marks	Out of	Marks allocation	
				Theory	Skills practical
	PC22. Administer first aid to victims in case of a heart attack or cardiac arrest due to electric shock, before the arrival of emergency services in real or simulated cases		5	0	5
	PC23. Demonstrate the artificial respiration and the CPR Process		5	0	5
	PC24. Participate in emergency procedures		5	0	5
	PC25. Complete a written accident/incident report or dictate a report to another person, and send report to person responsible		9	5	4
	PC26. Demonstrate correct method to move injured people and others during an emergency		1	0	1
	NOS Total Marks	Total	150	45	105
ISC/N0009: Work effectively with others	PC1. Accurately receive information and instructions from the supervisor and fellow workers, getting clarification where required	100	10	5	5
	PC2. Accurately pass on information to authorized persons who require it and within agreed timescale and confirm its receipt		10	5	5
	PC3. Provide information to others clearly, at a pace and in a manner that helps them to understand		10	0	10
	PC4. Display helpful behavior by assisting others in performing tasks in a positive manner, where required and possible		10	5	5



Assessment outcome (nos)	Assessment criteria	Total marks	Out of	Marks allocation	
				Theory	Skills practical
	PC5. Consult with and assist others to maximize effectiveness and efficiency in carrying out tasks.		10	5	5
	PC6. Display appropriate communication etiquette while working		10	0	10
	PC7. Display active listening skills while interacting with others at work		10	0	10
	PC8. Use appropriate tone, pitch and language to convey politeness, assertiveness, care and professionalism		10	5	5
	PC9. Demonstrate responsible and disciplined behaviors at the workplace		15	5	10
	PC10. Escalate grievances and problems to		5	0	5
	NOS Total Marks	Total	100	30	70
	Grand Total	1000	1000	290	710
	Percentage Weightage:			50%	50%
	Minimum Pass% to qualify (aggregate):			60%	