



Model Curriculum

House Keeping with Mechanised Equipment

SECTOR: IRON & STEEL
SUB-SECTOR: STEEL

OCCUPATION: IRON MAKING
REF ID: ISC/Q0408
NSQF LEVEL: 2



  

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: 'Housekeeping With Mechanised Equipment' QP No. 'ISC/Q0408 NSQF Level 2'

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	07
3. Annexure: Assessment Criteria	08

House Keeping with Mechanised Equipment

CURRICULUM / SYLLABUS

This program is aimed at training candidates for the job of a “House Keeping with Mechanised Equipment”, in the “Iron & Steel” Sector/Industry and aims at building the following key competencies amongst the learner.

Program Name	House Keeping with Mechanised Equipment		
Qualification Pack Name & Reference ID.	House Keeping with Mechanised Equipment ISC/Q0408		
Version No.	1.0	Version Update Date	01-04-2017
Pre-requisites to Training	Minimum qualification – 8th Pass		
Training Outcomes	After completing this programme, participants will be able to: <ul style="list-style-type: none"> • Understand the assigned job of housekeeping with mechanised equipment • Prepare for operation of housekeeping with mechanised equipment • Carry out the assigned job of housekeeping with mechanised equipment • Use basic health and safety practices at the work place • Works effectively with others 		

This course encompasses 5 out of 5 National Occupational Standards (NOS) of “House Keeping with Mechanised Equipment” 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	<ul style="list-style-type: none"> • Understanding the Occupational health & Safety • Understand What is hazard • Documentation for Health and safety 	PPTs for OHAS related to Job Role, Display Material for PPEs



Sr. No.	Module	Key Learning Outcomes	Equipment Required
	(hh:mm) 08:00 Practical Duration (hh:mm) 12:00 Corresponding NOS Code ISC/N0008	<ul style="list-style-type: none"> Working at Heights, confined spaces Remedies for fire at work place 	related to Job Role, Safety Material
3	5S & House keeping Theory Duration (hh:mm) 06:00 Practical Duration (hh:mm) 06:00 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	Understand the assigned job of housekeeping with mechanised equipment Theory Duration (hh:mm) 18:00 Practical Duration (hh:mm) 50:00 Corresponding NOS Code ISC/N0427	<ul style="list-style-type: none"> Understand the job requirement for housekeeping with mechanised equipment Plan for housekeeping/cleaning the work site for uninterrupted operation 	PPTs for various types of drawings, Flipper, Portable vacuum machine, Mopping machine (electrically/battery operated), mobile IVC (Industrial Vacuum Machine), Jetting machine, coolant, grease, oil
5	Prepares for operation of housekeeping with mechanised equipment Theory Duration (hh:mm) 25:00 Practical Duration (hh:mm) 60:00 Corresponding NOS Code ISC/N0428	<ul style="list-style-type: none"> Check the handling equipment before starting the operation Plan to stack the material at the desired location as per company procedure Prepare the working area within the timeframe for maintaining the production schedule 	Flipper, Portable vacuum machine, Mopping machine (electrically/battery operated), mobile IVC (Industrial Vacuum Machine), Jetting machine, coolant, grease, oil
6	Carry out the assigned	<ul style="list-style-type: none"> Start and drive the mechanised 	Flipper, Portable



Sr. No.	Module	Key Learning Outcomes	Equipment Required
	<p>job of housekeeping with mechanised equipment</p> <p>Theory Duration (hh:mm) 25:00</p> <p>Practical Duration (hh:mm) 58:00</p> <p>Corresponding NOS Code ISC/N0429</p>	<p>equipments for housekeeping and cleaning operations</p> <ul style="list-style-type: none"> Remove the scraps, debris from the work site, shifting/unloading waste/debris in designated place/bin (without mixing up materials) Perform the post housekeeping/ cleaning activities 	<p>vacuum machine, Mopping machine (electrically/battery operated), mobile IVC (Industrial Vacuum Machine), Jetting machine, coolant, grease, oil</p>
7	<p>Use basic health and safety practices at the workplace</p> <p>Duration (hh:mm) 04:00</p> <p>Practical Duration (hh:mm) 08:00</p> <p>Corresponding NOS Code ISC/N0008</p>	<ul style="list-style-type: none"> Health and safety procedures Fire safety procedures Emergencies, rescue and first aid procedures 	<p>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</p>
8	<p>Work effectively with others</p> <p>Duration (hh:mm) 08:00</p> <p>Practical Duration (hh:mm) 08:00</p> <p>Corresponding NOS Code ISC/N0009</p>	<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 	<p>Communication skills PPTs, Posters Team management posters</p>
	<p>Total Duration</p> <p>Theory Duration 98:00</p> <p>Practical Duration 202:00</p>	<p>Unique Equipment Required:</p> <ul style="list-style-type: none"> Mechanical Drawings, Blueprints, Basic Tools and Equipment's, measuring tools& precision measurement tools, Assembling tools Lubricant and coolant Material and Equipment for cleaning, Bearing pulling, lifting machines PPE, Safety Sign, First Aid Box, Fire Extinguishers 	

Grand Total Course Duration: **300Hours, 0 Minutes**



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

Trainer Prerequisites for Job role: “House Keeping with Mechanised Equipment” mapped to Qualification Pack: “ISC/Q0408”

Sr. No.	Area	Details
1	Description	To deliver accredited training service, mapping to the curriculum detailed above, in accordance with the Qualification Pack “ISC/Q0408”.
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: “House Keeping with Mechanised Equipment” mapped to QP: “ISC/Q0408”. 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	House Keeping with Mechanised Equipment
Qualification Pack	ISC/Q0408
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/N0427: Understand the assigned job of housekeeping with mechanised equipment	PC1. Interpret the previous shift log book report for the area to be cleaned	200	30	10	20
	PC2. Understand the use of mechanised equipments for housekeeping in uneven cast house floor with open runners		35	10	25
	PC3. Seek clarification from the supervisor in case of any doubt		35	10	25
	PC4. Plan as appropriate to carry out the housekeeping job as per schedule		35	10	25
	PC5. List out the tackles required for housekeeping and ensure availability at the work site		35	10	25



Assessment outcome (nos)	Assessment criteria	Total marks	Out of	Marks allocation	
				Theory	Skills practical
	PC6. Ensure mobility of mechanised equipments with easy access to all areas at the work site (cast house, stock house, conveyor galleries, rail tracks etc.)		30	10	20
	NOS Total Marks	Total	200	60	140
ISC/N0428: Prepares for operation of housekeeping with mechanised equipment	PC1. Check the mechanised equipments to be used for the housekeeping/cleaning operation before starting the assigned job	200	30	10	20
	PC2. Check the components for the mechanised equipments e.g. engine, controls, brake system, lighting, lubricants, vacuum system, water pressure etc. before starting the assigned job		35	10	25
	PC3. Check necessary tackles to be used is in proper working condition		30	10	20
	PC4. Stack the material (iron scraps, dusts, slags and debris) on the desired location as per company procedure		35	10	25
	PC5. Prepare the working area for proper housekeeping to achieve the scheduled production target		35	10	25
	PC6. Prepare necessary equipment and tackles to be used for housekeeping job within scheduled time for achieving the production target		35	10	25
	NOS Total Marks	Total	200	60	140
ISC/N0429: Carry out the assigned job of housekeeping	PC1. Interpret the previous shift log book for starting the housekeeping activities	350	30	10	20



Assessment outcome (nos)	Assessment criteria	Total marks	Out of	Marks allocation	
				Theory	Skills practical
with mechanised equipment	PC2. Plan as appropriate to carry out the housekeeping job as per schedule		30	10	20
	PC3. Maintain sequence of housekeeping/cleaning as per plan		30	10	20
	PC4. Use proper tackles for housekeeping/cleaning		25	5	20
	PC5. Drive the mechanised equipment following all safety norms		30	10	20
	PC6. Use buzzer and signalling lights of the mechanised equipment while in operation as safety measure		25	5	20
	PC7. Segregate the material (iron scrap, slag, dust and debris) for proper disposal		25	5	20
	PC8. Dispose the scrap and debris as per plan		25	5	20
	PC9. Load the scrap and debris in the tripper/wagon etc.		25	5	20
	PC10. Ensure safety precautions during handling the materials		25	5	20
	PC11. Ensure removing the mechanised equipments and tackles being used for the housekeeping/ cleaning from the work site before handing over		30	10	20
	PC12. Inform supervisor and concerned person regarding the job completion		25	5	20
	PC13. Record the activities in the log book as per company procedure		25	5	20
	NOS Total Marks		Total	350	90



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



Assessment outcome (nos)	Assessment criteria	Total marks	Out of	Marks allocation	
				Theory	Skills practical
	PC11. Identify common hazard signs displayed in various areas		6	5	1
	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



Assessment outcome (nos)	Assessment criteria	Total marks	Out of	Marks allocation	
				Theory	Skills practical
	PC21. Perform and organize loss minimization or rescue activity during an accident in real or simulated environments		5	0	5
	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



Assessment outcome (nos)	Assessment criteria	Total marks	Out of	Marks allocation	
				Theory	Skills practical
	PC4. Display helpful behavior by assisting others in performing tasks in a positive manner, where required and possible		10	5	5
	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	285	715
	Percentage Weightage:			50%	50%
	Minimum Pass% to qualify (aggregate):			60%	