



Model Curriculum

Coil Packaging Machine Operator: Rolling Mills

SECTOR: IRON & STEEL
SUB-SECTOR: STEEL

OCCUPATION: COLD ROLLING MILL
REF ID: ISC/Q0702
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: 'Coil Packaging Machine Operator: Rolling Mills' QP No. 'ISC/Q0702 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	07
3. Annexure: Assessment Criteria	08

Coil Packaging Machine Operator: Rolling Mills

CURRICULUM / SYLLABUS

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

Program Name	Coil Packaging Machine Operator: Rolling Mills		
Qualification Pack Name & Reference ID.	Coil Packaging Machine Operator: Rolling Mills ISC/Q0702		
Version No.	1.0	Version Update Date	01-04-2017
Pre-requisites to Training	Minimum qualification – 10th Pass		
Training Outcomes	After completing this programme, participants will be able to: <ul style="list-style-type: none"> • Check specifications, weights and physical condition of the Coil • Carry out coil master operation • Carry out metal jacketing & strapping operation • Ensure wagon unitisation • Use basic health and safety practices at the work place • Works effectively with others 		

This course encompasses 6 out of 6 National Occupational Standards (NOS) of “Coil Packaging Machine Operator: Rolling Mills” 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)	<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 	PPTs for OHAS related to Job Role, Display Material for PPEs related to Job



Sr. No.	Module	Key Learning Outcomes	Equipment Required
	08:00 Practical Duration (hh:mm) 06:00 Corresponding NOS Code ISC/N0008	<ul style="list-style-type: none"> Remedies for fire at work place 	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	Checks specifications, weights and physical condition of the coil Theory Duration (hh:mm) 12:00 Practical Duration (hh:mm) 35:00 Corresponding NOS Code ISC/N0704	<ul style="list-style-type: none"> Match the specifications of the coil to given details Check the physical condition of the coil to meet customer's expectations 	PPTs for various types of drawings, Blue prints and respective machines Hand tools and machines, various measuring instruments, protective covers e.g. VCI, HDPE , Coil master
5	Carry out coil master operation Duration (hh:mm) 10:00 Practical Duration (hh:mm) 30:00 Corresponding NOS Code ISC/N0705	<ul style="list-style-type: none"> Load the coil according to specifications Apply appropriate protective cover/s for packaging and ensure coil fit for next operation 	Hand tools and machines, various measuring instruments, protective covers e.g. VCI, HDPE , Coil master
6	Carry out metal jacketing & strapping operation Duration (hh:mm)	<ul style="list-style-type: none"> Using sheet metal to provide a covering jacket to the coil Using ID, OD & side disc protector to secure the packing in place Using metal straps to hold the entire 	Hand tools and machines, various measuring instruments, protective covers



Sr. No.	Module	Key Learning Outcomes	Equipment Required
	20:00 Practical Duration (hh:mm) 60:00 Corresponding NOS Code ISC/N0710	packing consumables in place	e.g. VCI, HDPE , Coil master
7	Ensure wagon unitisation Duration (hh:mm) 20:00 Practical Duration (hh:mm) 59:00 Corresponding NOS Code ISC/N0711	<ul style="list-style-type: none"> • Loading of the coil on wooden saddle in safe condition • Wrapping of the coil with HDPE to protect from environmental effects • Welding of steel consumables on wagon floor/body to unitise the coil with strap • Strapping of the coil to secure it is safe in the wagon 	Hand tools and machines, various measuring instruments, protective covers e.g. VCI, HDPE , Coil master
8	Use basic health and safety practices at the workplace Duration (hh:mm) 04:00 Practical Duration (hh:mm) 08:00 Corresponding NOS Code ISC/N0008	<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
9	Work effectively with others Duration (hh:mm) 06:00 Practical Duration (hh:mm) 06:00 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 90:00	Unique Equipment Required: <ul style="list-style-type: none"> • Mechanical Drawings, Blueprints, • Basic Tools and Equipment's, • measuring tools& precision measurement tools, 	



Sr. No.	Module	Key Learning Outcomes	Equipment Required
	Practical Duration 210:00	<ul style="list-style-type: none">Assembling tools Lubricant and coolantMaterial and Equipment for cleaning, lifting machinesPPE, 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: “Coil Packaging Machine Operator: Rolling Mills” mapped to Qualification Pack: “ISC/Q0702”

Sr. No.	Area	Details
1	Description	To deliver accredited training service, mapping to the curriculum detailed above, in accordance with the Qualification Pack “ISC/Q0702”.
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: “Coil Packaging Machine Operator: Rolling Mills” mapped to QP: “ISC/Q0702”. 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	Coil Packaging Machine Operator: Rolling Mills
Qualification Pack	ISC/Q0702
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/N0704: Checks specifications, weights and physical condition of the coil	PC1. Check all specifications of the coil with the label of the previous line to ensure it matches the system data	150	30	10	20
	PC2. Take necessary actions to correct the deviations from desired specifications		10	0	10
	PC3. Report issues precisely to supervisor in case the problem is beyond his scope		30	10	20
	PC4. Ensure the quality of the coil by visual check to meet the standard		30	10	20



Assessment outcome (nos)	Assessment criteria	Total marks	Out of	Marks allocation	
				Theory	Skills practical
	PC5. Take necessary actions to correct the deviations from desired conditions		20	5	15
	PC6. Report issues precisely to supervisor in case the problem is beyond his scope		30	10	20
	NOS Total Marks	Total	150	45	105
ISC/N0705: Carry out coil master operation	PC1. Load the coil in the Coil Master station with the help of Walking Beam/Coil Car	100	40	10	30
	PC2. Apply protective cover (VCI/non-VCI film), as per SPI		60	10	50
	NOS Total Marks	Total	100	20	80
ISC/N0710: Carry out metal jacketing & strapping operation	PC1. Use proper sheet metal to cover the coil completely as per standard using proper PPE's	250	60	10	50
	PC2. Locate the ID protector, OD Protector, Side Disc to be used for the coil		65	15	50
	PC3. Use the consumables to secure the coil according to the SOP		65	15	50
	PC4. Use metal straps around the packed coil to secure the packing consumables in place		60	10	50
	NOS Total Marks		Total	250	50
ISC/N0711: Ensure wagon unitisation	PC1. Ensure wagon floor is in good condition	250	20	0	20
	PC2. Use proper wooden saddles to load the coil		60	10	50
	PC3. Use right quality and		50	10	40



Assessment outcome (nos)	Assessment criteria	Total marks	Out of	Marks allocation	
				Theory	Skills practical
	proper width of HDPE to wrap the coil				
	PC4. Weld hook/cleat properly onto the wagon floor following the SOP		70	20	50
	PC5. Use proper size of strap around the coil for securement on wagon		50	10	40
	NOS Total Marks	Total	250	50	200
ISC/N0008: Use basic health and safety practices at the workplace	PC1. Use protective clothing/equipment for specific tasks and work conditions	150	9	4	5
	PC2. State the name and location of people responsible for health and safety in the workplace		6	1	5
	PC3. State the names and location of documents that refer to health and safety in the workplace		2	1	1
	PC4. Identify job-site hazardous work and state possible causes of risk or accident in the workplace		8	4	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		6	1	5
	PC6. State location of general health and safety equipment in the workplace		6	1	5
	PC7. Inspect for faults, set up and safely use steps and ladders in general use		6	1	5
	PC8. Work safely in and around trenches, elevated places and confined areas		6	1	5



Assessment outcome (nos)	Assessment criteria	Total marks	Marks allocation		
			Out of	Theory	Skills practical
	PC9. Lift heavy objects safely using correct procedures		6	1	5
	PC10. Apply good housekeeping practices at all times		2	1	1
	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		5	1	4
	PC13. Use the various appropriate fire extinguishers on different types of fires correctly		9	4	5
	PC14. Demonstrate rescue techniques applied during fire hazard		8	4	4
	PC15. Demonstrate good housekeeping in order to prevent fire hazards		2	1	1
	PC16. Demonstrate the correct use of a fire extinguisher		6	1	5
	PC17. Demonstrate how to free a person from electrocution		6	1	5
	PC18. Administer appropriate first aid to victims as required e.g. in case of bleeding, burns, choking, electric shock, poisoning etc.		8	3	5
	PC19. Demonstrate basic techniques of bandaging		6	1	5



Assessment outcome (nos)	Assessment criteria	Total marks	Marks allocation		
			Out of	Theory	Skills practical
	PC20. Respond promptly and appropriately to an accident situation or medical emergency in real or simulated environments		7	2	5
	PC21. Perform and organize loss minimization or rescue activity during an accident in real or simulated environments		6	1	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		6	1	5
	PC23. Demonstrate the artificial respiration and the CPR Process		6	1	5
	PC24. Participate in emergency procedures		6	1	5
	PC25. Complete a written accident/incident report or dictate a report to another person, and send report to person responsible		4	1	3
	PC26. Demonstrate correct method to move injured people and others during an emergency		2	1	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	240	760
	Percentage Weightage:			50%	50%
	Minimum Pass% to qualify (aggregate):			60%	