

# Model Curriculum

## 1. Stamping Operator (Metal Handicrafts)

**SECTOR: HANDICRAFTS AND CARPET**  
**SUB-SECTOR: METALWARE**  
**OCCUPATION: METAL CASTING AND STAMPING**  
**REF ID: HCS/Q2802, V1.0**  
**NSQF LEVEL: 4**



## Certificate

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

is hereby issued by the

**HANDICRAFTS AND CARPET SECTOR SKILL COUNCIL**

for the

### MODEL CURRICULUM

Complying to National Occupational Standards of  
Job Role/ Qualification Pack: 'Stamping Operator (Metal Handicrafts)' No. 'HCS/ Q 2802 NSQF Level 4'

Date of Issuance: **May 27<sup>th</sup>, 2015**

Valid up to: **May 26<sup>th</sup>, 2017**

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



Authorised Signatory  
(Handicrafts and Carpet Sector Skill Council)

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# Stamping Operator (Metal Handicrafts)

## CURRICULUM / SYLLABUS

This program is aimed at training candidates for the job of a “Stamping Operator (Metal Handicrafts)”, in the “Handicrafts and Carpet” Sector/Industry and aims at building the following key competencies amongst the learner

<b>Program Name</b>	<b>Stamping Operator (Metal Handicrafts)</b>		
<b>Qualification Pack Name &amp; Reference ID. ID</b>	HCS/Q2802, v1.0		
<b>Version No.</b>	1.0	<b>Version Update Date</b>	27/05/2015
<b>Pre-requisites to Training</b>	Basic literacy, preferably 5th class pass		
<b>Training Outcomes</b>	<p><b>After completing this programme, participants will be able to:</b></p> <ul style="list-style-type: none"> <li>• Follow work instructions strictly to reduce the amount of pollution at the work place e.g. wet the rock / craft material before working on it</li> <li>• Wear protective goggles over eyes and replace them when scratches on it obscure the vision</li> <li>• Wear gloves as per the materials used for making handicraft to avoid blisters; scratches and cuts</li> <li>• Proper Handling of tools</li> <li>• Sharpening of tools</li> <li>• Decide on the relevant stamping process to be performed from hydraulic, mechanical, etc.</li> <li>• Set the stamping machine if using machine</li> <li>• Turn on the machine to perform the stamping</li> <li>• Cut and bend the metal sheet forming it to the desired shape</li> <li>• Use the appropriate stamping tool</li> <li>• Ensure to align and space the sheet metal at the appropriate position</li> <li>• Arrange the metal stamps in the order of using them</li> <li>• Select the appropriate color to be stamped on the metal in such a way that it is easily seen</li> <li>• Ensure to wipe off the excess ink if color is given manually to the stamped work</li> <li>• Insert the flat metal sheet into the die</li> <li>• Allot work to the employees of the unit according to their skill and experience</li> <li>• Train the employees of his/her unit with the appropriate skills required to make market relevant and quality products</li> <li>• Motivate the employees</li> <li>• Handle the grievances/issues that are raised by the employees</li> </ul>		

This course encompasses 5 out of 5 NOS (National Occupational Standards) of “Stamping Operator (Metal Handicrafts)” Qualification Pack issued by “Handicrafts and Carpet Sector Skill Council”.

Sr. No.	Module	Key Learning Outcomes	Equipment Required
1	<p><b>Introduction</b></p> <p><b>Theory Duration</b> (hh:mm) 05:00</p> <p><b>Practical Duration</b> (hh:mm) 05:00</p> <p><b>Corresponding NOS Code</b> Bridge Module</p>	<ul style="list-style-type: none"> <li>Learn about the role Stamping Operator in industry.</li> <li>Identify the minimum requirement to become a certified stamping operator.</li> <li>Describe the work area of Stamping Operator.</li> <li>Identify the opportunities available for Stamping Operator.</li> </ul>	Laptop, PowerPoint & Hand-outs, posters, film clips, white board, marker, projector
2	<p><b>Perform stamping on the metal surface</b></p> <p><b>Theory Duration</b> (hh:mm) 20:00</p> <p><b>Practical Duration</b> (hh:mm) 80:00</p> <p><b>Corresponding NOS Code</b> HCS/N2803</p>	<ul style="list-style-type: none"> <li>Receive instructions on work requirement from superior</li> <li>Identify the job sheet and the stamping methods</li> <li>Plan the target on number of pieces to be completed.</li> <li>Select the appropriate tool and machine for stamping such as die, puncher, etc.</li> <li>Collect and arrange the materials to begin the process</li> <li>Report on any shortage or defect of raw materials or machine to the concerned person</li> <li>Ensure to stock the required materials in advance</li> <li>Collect the metal product to be stamped</li> <li>Decide on the relevant stamping process to be performed from hydraulic, mechanical, etc.</li> <li>Set the stamping machine if using machine</li> <li>Turn on the machine to perform the stamping</li> <li>Cut and bend the metal sheet forming it to the desired shape</li> <li>Use the appropriate stamping tool</li> <li>Ensure to align and space the sheet metal at the appropriate position</li> <li>Arrange the metal stamps in the order of using them</li> <li>Select the appropriate color to be stamped on the metal in such a way that it is easily seen</li> <li>Ensure to wipe off the excess ink if color is given manually to the stamped work</li> <li>Insert the flat metal sheet into the die</li> <li>Activate the stamping machine to create the design</li> <li>Ensure the appropriate speed is set for</li> </ul>	PPTs, Handbook, Videos, Stamping equipments

Sr. No.	Module	Key Learning Outcomes	Equipment Required
		<p>the stamp</p> <ul style="list-style-type: none"> <li>• Check for defects such as wrinkles, splits, material thinning, etc.</li> <li>• Check the metal after stamping, if it matches requirement</li> <li>• Ensure to stamp or punches die the target number of pieces</li> <li>• Ensure the output delivered is defect free and hazard free</li> </ul>	
3	<p><b>Coordinate with colleagues and work as a team</b></p> <p><b>Theory Duration</b> (hh:mm) 04:00</p> <p><b>Practical Duration</b> (hh:mm) 08:00</p> <p><b>Corresponding NOS Code</b> HCS/N9901</p>	<ul style="list-style-type: none"> <li>• Receive job order and instructions from reporting supervisor</li> <li>• Understand the work output requirements, targets, performance indicators and incentives</li> <li>• Deliver quality work on time and report any anticipated reasons for delays</li> <li>• Report on any grievances, production defects and any potential hazards</li> <li>• Communicate on process flow improvements</li> <li>• Communicate maintenance and repair schedule proactively to the supervisor</li> <li>• Receive feedback on work standards</li> <li>• Interact and clarify doubts on design, usage of materials &amp; tools, quality &amp; standards compliance, etc.</li> <li>• Report in time for shortage or need of raw materials</li> </ul>	Laptop, white board, marker, projector
4	<p><b>Maintain safe work environment</b></p> <p><b>Theory Duration</b> (hh:mm) 05:00</p> <p><b>Practical Duration</b> (hh:mm) 09:00</p> <p><b>Corresponding NOS Code</b> HCS/N9902</p>	<ul style="list-style-type: none"> <li>• Comply with safety procedures while on work to prevent accidents</li> <li>• Take adequate safety measures while handling materials, chemicals and tools</li> <li>• Wear appropriate personal protective gears such as gloves, protective goggles, masks etc. while working</li> <li>• Undertake basic safety checks before operation of all tools and electrical equipment</li> <li>• Wear appropriate and recommended clothing as per the work environment (eg: working in a furnace area )</li> </ul>	PPTs, Handbook, Protective gears like goggles, mask, gloves. Cleaning tools, electricity tester, accident report sheet
5	<p><b>Maintain personal health</b></p> <p><b>Theory Duration</b> (hh:mm) 14:00</p> <p><b>Practical Duration</b> (hh:mm) 20:00</p> <p><b>Corresponding NOS Code</b></p>	<ul style="list-style-type: none"> <li>• Cover the mouth and nose with a dust mask while working and keep on changing when it gets blocked with dust</li> <li>• Follow work instructions strictly to reduce the amount of pollution at the work place e.g. wet the rock / craft material before working on it</li> <li>• Wear protective goggles over eyes and replace them when scratches on it obscure the vision</li> <li>• Wear gloves as per the materials used for making handicraft to avoid blisters;</li> </ul>	PPTs, Handbook, PPE for chemical work and machining, Fire Extinguisher, First-Aid Kit

Sr. No.	Module	Key Learning Outcomes	Equipment Required
	HCS/N9903	<p>scratches and cuts</p> <ul style="list-style-type: none"> <li>Follow SOPs for dealing with blisters; scratches; accidental fires or any other type of emergencies at work</li> <li>Ensure no productivity loss or absenteeism from work due to illness</li> <li>Ensure no long term ill effect on the personal health</li> </ul>	
6	<p><b>Basic business management</b></p> <p><b>Theory Duration</b> (hh:mm) 10:00</p> <p><b>Practical Duration</b> (hh:mm) 20:00</p> <p><b>Corresponding NOS Code</b> HCS/N9904</p>	<ul style="list-style-type: none"> <li>Allot work to the employees of the unit according to their skill and experience</li> <li>Train the employees of his/her unit with the appropriate skills required to make market relevant and quality products</li> <li>Motivate the employees</li> <li>Handle the grievances/issues that are raised by the employees</li> <li>Manage the employee expectations</li> <li>Gather and analyze the cues from the market</li> <li>Ascertain the customer preference</li> <li>Create product lines based on current market preference</li> <li>Identify the right locations/agents from where the raw materials can be procured</li> <li>Negotiate to get the best price</li> <li>Ensure quality materials are procured</li> <li>Ensure the procured materials are stored in appropriate conditions</li> <li>Maintain the bills and record the prices of procurement for future reference</li> <li>Maintain healthy vendor relationships</li> <li>Identify the nearest market</li> <li>Analyze the prevalent price for product lines</li> <li>Decide on the most effective means to access the market</li> </ul>	Laptop, white board, marker, projector, PPTs. Handbook
	<p><b>COMPULSORY NOS:</b></p> <p><b>Total Duration</b></p> <p><b>Theory Duration</b> <b>58:00</b></p> <p><b>Practical Duration</b> <b>142:00</b></p>	<p><b>Unique Equipment Required:</b> Laptop, white board, marker, projector, PPTs, Handbook, first-aid kit, stamping machine,</p>	

**Grand Total Course Duration: 200 Hours, 0 Minutes**

*(This syllabus/ curriculum has been approved by Handicrafts and Carpet Sector Skill Council)*

## Trainer Prerequisites for Job role: “Stamping Operator (Metal Handicrafts)” mapped to Qualification Pack: “HCS/Q2802, v1.0”

Sr. No.	Area	Details
1	<b>Description</b>	The individual at work is responsible for die punching on the metal surface and transforms the metal to desired shapes, designs and letters based on requirements and design specifications. The person ensures to achieve quality standards.
2	<b>Personal Attributes</b>	The job requires the individual to have: attention to details, good eyesight, steady hands, ability to sit in same position for longer hours and patience.
3	<b>Minimum Educational Qualifications</b>	10 <sup>th</sup> pass
4a	<b>Domain Certification</b>	Certified for Job Role: “ <u>Stamping Operator (Metal Handicrafts)</u> ” mapped to QP: “ <u>HCS/Q2802, v1.0</u> ”. Minimum accepted score is 80%
4b	<b>Platform Certification</b>	Recommended that the Trainer is certified for the Job Role: “Trainer”, mapped to the Qualification Pack: “SSC/Q1402”. Minimum accepted % as per respective SSC guidelines is 70%.
5	<b>Experience</b>	<ul style="list-style-type: none"> <li>• Total 3 Years experience,</li> <li>• 2 Years of sector-specific experience,</li> <li>• Min. 1 year of teaching experience</li> </ul>



## Annexure: Assessment Criteria

### CRITERIA FOR ASSESSMENT OF TRAINEES

**Job Role : Stamping Operator (Metal Handicrafts)**  
**Qualification Pack : HCS/Q2802**  
**Sector Skill Council : Handicrafts and Carpet 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 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 center (as per assessment criteria below)
4. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training center based on this criteria
5. To pass the Qualification Pack , every trainee should score a minimum of 70% 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.

Assessable Outcomes	Assessment Criteria	Total Marks (500)	Out Of	Theory	Skills Practical
<b>HCS / N2803</b> <b>Perform stamping on the metal surface</b>	PC1. receive instructions on work requirement from superior	<b>100</b>	2	1	1
	PC2. receive and understand the design specifications		2	1	1
	PC3. understand the job sheet and the stamping methods		2	1	1
	PC4. plan the target on number of pieces to be completed		2	1	1
	PC5. select the appropriate tool and machine for stamping such as die, puncher, etc.		2	1	1
	PC6. collect and arrange the materials to begin the process		2	1	1
	PC7. report on any shortage or defect of raw materials or machine to the concerned person		2	1	1
	PC8. ensure to stock the required materials in advance		2	1	1
	PC9. collect the metal product to be stamped		2	1	1
	PC10. decide on the relevant stamping process to be performed from hydraulic, mechanical, etc.		2	1	1
	PC11. set the stamping machine if using machine		2	1	1
	PC12. turn on the machine to perform the stamping		2	1	1

PC13. cut and bend the metal sheet forming it to the desired shape	3	1	2
PC14. use the appropriate stamping tool	3	1	2
PC15. ensure to align and space the sheet metal at the appropriate position	3	1	2
PC16. arrange the metal stamps in the order of using them	3	1	2
PC17. select the appropriate color to be stamped on the metal in such a way that it is easily seen	3	1	2
PC18. ensure to wipe off the excess ink if color is given manually to the stamped work	3	1	2
PC19. insert the flat metal sheet into the die	3	1	2
PC20. activate the stamping machine to create the design	3	1	2
PC21. ensure the appropriate speed is set for the stamp	3	1	2
PC22. ensure the metal sheet inserted is of appropriate size and shape to fit the stamp machine	3	1	2
PC23. ensure to use the appropriate die to stamp the metal sheet if done by hand	2	1	1
PC24. ensure the appropriate punching force is applied when using a hand press	3	1	2
PC25. ensure the same amount of force is given to all the metal sheets	3	1	2
PC26. pierce holes where required for the finished part	3	1	2
PC27. ensure perform stamping in cold metal sheet	2	1	1
PC28. ensure to use the appropriate lubricant to protect the tool and die surface from scratching	2	1	1
PC29. ensure to take necessary safety precautions to perform stamping	3	1	2
PC30. check for defects such as wrinkles, splits, material thinning, etc.	3	1	2
PC31. check the metal after stamping, if it matches requirement	3	1	2
PC32. make necessary adjustments if any	2	1	1
PC33. rectify and rework if any mistakes are found un-matching the design specifications and requirements	2	1	1
PC34. ensure general maintenance of the machine	3	1	2

	PC35. ensure no shut down of machines due to improper maintenance		3	1	2
	PC36. perform regular cleaning process as prescribed by manufacturer		3	1	2
	PC37. ensure a proper finish as per requirement		3	1	2
	PC38. ensure to stamp or punches die the target number of pieces		3	1	2
	PC39. ensure the output delivered is defect free and hazard free		3	1	2
	<b>Total</b>		<b>100</b>	<b>39</b>	<b>61</b>
<b>HCS/N9901 Coordinate with colleagues and work as a team</b>	PC1. receive job order and instructions from reporting supervisor	<b>100</b>	4	3	1
	PC2. understand the work output requirements, targets, performance indicators and incentives		5	4	1
	PC3. deliver quality work on time and report any anticipated reasons for delays		5	1	4
	PC4. report on any grievances, production defects and any potential hazards		4	2	2
	PC5. communicate on process flow improvements		4	2	2
	PC6. communicate maintenance and repair schedule proactively to the supervisor		4	1	3
	PC7. receive feedback on work standards		4	2	2
	PC8. interact and clarify doubts on design, usage of materials & tools, quality & standards compliance, etc		5	2	3
	PC9. report in time for shortage or need of raw materials		4	1	3
	PC10. handover completed work to supervisor		4	2	2
	PC11. communicate to the colleagues from within and other departments, clearly and effectively on all aspects to carry out the work among the team		5	2	3
	PC12. maintain the etiquettes, use polite language, demonstrate responsible and disciplined behaviours to the colleagues		5	2	3
	PC13. interact with colleagues from different functions and understand the nature of their work		4	2	2
	PC14. put team over individual goals and multi task or share work where necessary supporting the colleagues		4	2	2
	PC15. resolve conflicts and ensure smooth workflow		4	1	3

	PC16. interact and understand the production requirement for the day from the previous and successive processing department and work accordingly		4	1	3
	PC17. communicate and discuss work flow related difficulties in order to find solutions with mutual agreement		4	1	3
	PC18. receive feedback from Quality Control and rework in order to complete work on time		5	1	4
	PC19. share information with colleagues to enable efficient delivery of work		6	3	3
	PC20. highlight any errors of colleagues, help to rectify and ensure quality output		4	2	2
	PC21. work with cooperation, coordination, communication and collaboration, with shared goals and supporting each others performance		4	1	3
	PC22. document all the details accurately relating to one's role as required		4	1	3
	PC23. report on the work completed and keep it in records		4	1	3
	<b>Total</b>		<b>100</b>	<b>40</b>	<b>60</b>
<b>HCS/N9902 Maintain safe work environment</b>	PC1. comply with safety procedures while on work to prevent accidents	<b>100</b>	8	2	6
	PC2. take adequate safety measures while handling materials, chemicals and tools		8	2	6
	PC3. wear appropriate personal protective gears such as gloves, protective goggles, masks etc. while working		8	2	6
	PC4. undertake basic safety checks before operation of all tools and electrical equipments		9	2	7
	PC5. wear appropriate and recommended clothing as per the work environment (eg: working in a furnace area )		9	2	7
	PC6. follow recommended material handling procedure to control material and personal damage		8	2	6
	PC7. perform all procedures as per company's work instructions for controlling operational risk		8	4	4
	PC8. perform the duties in a manner which minimizes environmental damage		6	2	4
	PC9. dispose of waste safely and correctly in a designated area as per company's SOP		8	2	6

	PC10. report any accidents, incidents or problems without delay to the supervisor and take necessary immediate action to reduce further danger		8	4	4
	PC11. ensure zero accident at workplace		10	2	8
	PC12. adhere to safety standards and ensure no material damage		10	2	8
		<b>Total</b>	<b>100</b>	<b>28</b>	<b>72</b>
<b>HCS/N9903</b>					
<b>Maintain personal health</b>	PC1. always cover the mouth and nose with a dust mask while working and keep on changing when it gets blocked with dust		12	4	8
	PC2. follow work instructions strictly to reduce the amount of pollution at the work place e.g. wet the rock / craft material before working on it		10	2	8
	PC3. wear protective goggles over eyes and replace them when scratches on it obscure the vision		10	2	8
	PC4. wear gloves as per the materials used for making handicraft to avoid blisters; scratches and cuts	<b>100</b>	10	2	8
	PC5. undergo preventive health checkups at regular intervals		10	2	8
	PC6. take prompt treatment from the doctor in case of illness		11	3	8
	PC7. follow SOPs for dealing with blisters; scratches; accidental fires or any other type of emergencies at work		11	4	7
	PC8. ensure no productivity loss or absenteeism from work due to illness		13	3	10
	PC9. ensure no long term ill effect on the personal health		13	3	10
		<b>Total</b>	<b>100</b>	<b>25</b>	<b>75</b>
<b>HCS/N9904</b>					
<b>Basic business management</b>	PC1. allot work to the employees of the unit according to their skill and experience		3	1	2
	PC2. train the employees of his/her unit with the appropriate skills required to make market relevant and quality products		3	1	2
	PC3. motivate the employees	<b>100</b>	2	1	1
	PC4. handle the grievances/issues that are raised by the employees		2	1	1
	PC5. manage the employee expectations		2	1	1
	PC6. gather and analyse the cues from the market		2	1	1
	PC7. ascertain the customer preference		3	1	2

PC8. create product lines based on current market preference	3	1	2
PC9. create product lines that are unique and able to price high	3	1	2
PC10. price the products according to market trends	3	1	2
PC11. decide the best way to market the product lines	3	1	2
PC12. make a list of raw materials required according to the product lines	2	0	2
PC13. ascertain the quantity and right price to procure the materials	3	1	2
PC14. identify the right locations/agents from where the raw materials can be procured	3	1	2
PC15. negotiate to get the best price	3	0	3
PC16. ensure quality materials are procured	4	1	3
PC17. ensure the procured materials are stored in appropriate conditions	3	1	2
PC18. maintain the bills and record the prices of procurement for future reference	3	1	2
PC19. maintain healthy vendor relationships	3	1	2
PC20. identify the nearest market	3	1	2
PC21. analyze the prevalent price for product lines	3	2	1
PC22. decide on the most effective means to access the market	2	1	1
PC23. plan for cost effective transportation to the market	3	1	2
PC24. position the product according to market requirements	3	1	2
PC25. manage customer expectations	2	0	2
PC26. analyze and ascertain the cost of production	3	1	2
PC27. maintain the book of accounts related to the business	3	1	2
PC28. own and operate a bank account	4	2	2
PC29. identify cost effective means of running business	3	1	2
PC30. identify various aspects of business that require recording	3	2	1
PC31. create formats for recording	3	2	1
PC32. make various records pertaining to all aspects of business	3	2	1

	PC33. maintain these records with periodic updation		3	2	1
	PC34. maintain necessary documents as per local government and regulatory requirement		3	2	1
	PC35. analyze the records and glean various trends from the same		3	2	1
		<b>Total</b>	<b>100</b>	<b>40</b>	<b>60</b>