

# Model Curriculum

## Stitching Operator (Footwear)

**SECTOR: LEATHER**  
**SUB-SECTOR: FOOTWEAR**  
**OCCUPATION: STITCHING**  
**REF ID: LSS/Q2501, V1.0**  
**NSQF LEVEL: 4**

## Certificate

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

is hereby issued by the

**LEATHER SECTOR SKILL COUNCIL**

for the

**MODEL CURRICULUM**

Complying to National Occupational Standards of

Job Role/ Qualification Pack: 'Stitching Operator (Footwear)' QP No. 'LSS/Q2501 NSQF LEVEL 4'

Date of Issuance: April 9<sup>th</sup>, 2016

Valid up to\*: April 10<sup>th</sup>, 2018

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

  
Authorised Signatory  
(Leather Sector Skill Council)

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# Stitching Operator (Footwear)

## CURRICULUM / SYLLABUS

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

<b>Program Name</b>	<b>Stitching Operator (Footwear)</b>		
<b>Qualification Pack Name &amp; Reference ID</b>	Stitching Operator (Footwear) LSS/Q2501, V1.0		
<b>Version No.</b>	1.0	<b>Version Update Date</b>	04-05-2017
<b>Pre-requisites to Training</b>	Class V with 2-3 Years prior experience as helper in footwear manufacturing.		
<b>Training Outcomes</b>	<p><b>After completing this programme, participants will be able to:</b></p> <ul style="list-style-type: none"> <li>• <b>Gain familiarity with the stitching trade:</b> Gain knowledge on over view of leather Industry/ generic skills and avail familiarity with stitching trade. General introduction to trade, leather manufacturing process, and role of a stitcher in leather industry.</li> <li>• <b>Become well versed with environment, health &amp; safety:</b> Well versed with health and safety measures in terms of personal safety and equipment safety relevant to stitching occupation.</li> <li>• <b>Carry out stitching operation using different machines:</b> Effectively identify, select the right sewing machine, needles, threads and bobbins for carrying out stitching operation.</li> <li>• <b>Achieve product quality in stitching operation:</b> Conduct a visual inspection on all aspects of the stitching process.</li> <li>• <b>Maintain the work area, tools and machines:</b> Organise/maintain work areas and activities to ensure tools and machines are maintained as per norms.</li> <li>• <b>Carry out work functions in accordance with legislation and regulations, organizational guidelines and procedures:</b> Follow policies and procedures within the work practices.</li> </ul>		

This course encompasses 5 out of 5 National Occupational Standards (NOS) of “Stitching Operator (Footwear)” Qualification Pack issued by “Leather Sector Skill Council”.

Sr. No.	Module	Key Learning Outcomes	Equipment Required
1	<p><b>Overview on Leather Industry and Generic Skills</b></p> <p><b>Theory Duration</b> (hh:mm) 12:00</p> <p><b>Practical Duration</b> (hh:mm) 10:00</p> <p><b>Corresponding NOS Code</b> Core skills/ Generic skills and Professional skills collated from all the NOS of the QP</p>	<ul style="list-style-type: none"> <li>Discuss the leather industry, stitching operation in footwear sector and generic skills</li> <li>Explain importance of leather industry and describe leather manufacturing process</li> <li>Explain general hazards or risk that can lead to accidents</li> <li>Follow basic safety, health and hygiene measures</li> <li>Wear and use PPE for safety</li> <li>Carry out communication effectively with co-workers in writing as well as orally</li> <li>Read the documents that are necessary for them to read to carry out operator's task</li> </ul>	Chairs, Trainers desk and computer, Student table, Projector, White projector screen, White board, Flip chart display stand, Safety hazard signs, Newspaper, Stationery, PPE set
2	<p><b>Carry-out Stitching Operations Using Different Machines</b></p> <p><b>Theory Duration</b> (hh:mm) 11:00</p> <p><b>Practical Duration</b> (hh:mm) 193:00</p> <p><b>Corresponding NOS Code</b> LSS/N 2501</p>	<ul style="list-style-type: none"> <li>Select the correct machine and equipment to be used and keep them in readiness</li> <li>Report defective machines, tools and equipment to the supervisor</li> <li>Select the right sewing machine, threads, needles and bobbins for the materials as per the specifications in the job card</li> <li>Set machine controls for the materials being stitched</li> <li>Check the upper components and conduct shade wise pairing</li> <li>Stitch the correct materials in the right sequence as required by the production specification/ sample</li> <li>Perform back joining/quarter back joining using zigzag machine/flatbed machine</li> <li>Sort and place work to the next stage of production and minimize the risk of damage</li> <li>Carry out basic maintenance of machinery and keep them clean after use</li> <li>Complete forms, records and other documentation</li> </ul>	Post bed sewing machine, Flat bed sewing machine, Cylinder bed type sewing machine, Sample leather pieces, Scissors, Stitching awl, Stitch maker, Spring divider, Steel rule, Khurpi, Wooden mallet, Indenting scissors, Hand clicking knife, Pricking awl, Lasting pincers, Shoe hammer, Channel opener, Edge setting iron, Welt knife, Heel iron, Nail puller, Leather thickness measuring gauge, Manchester nippers, Spring divider, Needles, Thread, Dendrite paste, Pasting brushes
3	<p><b>Contribute to Achieving Product Quality in Stitching Processes</b></p>	<ul style="list-style-type: none"> <li>Check the upper components are paired shade wise as per the specifications in the job card</li> <li>Check that the stitching is done properly as per the design specifications and no</li> </ul>	Sample leather defects materials, Leather thickness measuring gauge, Gloves, Helmet,



Sr. No.	Module	Key Learning Outcomes	Equipment Required
	02:00 <b>Corresponding NOS Code</b> LSS/N8701		
	<b>Total Duration</b>  <b>Theory Duration</b> 40:00  <b>Practical Duration</b> 260:00	<b>Unique Equipment Required:</b> Post bed sewing machine, Flat bed sewing machine, Cylinder bed type sewing machine , Sample leather pieces, Scissors, Stitching awl, Stitch maker, Spring divider, Steel rule, Khurpi, Wooden mallet , Indenting scissors, Hand clicking knife, Pricking awl, Lasting pincers, Shoe hammer, Channel opener, Edge setting iron, Welt knife, Heel iron, Nail puller, Leather thickness measuring gauge, Manchester nippers, Spring divider, Needles, Thread, Dendrite paste, Pasting brushes, Sample leather defects material, Leather thickness measuring gauge, Gloves, Helmet, Safety shoe, Ear plug, Apron, Goggles, Cleaning cloth, Water bucket, Cleaning materials, Mop, Dust bin, broom, First aid kit, Fire Extinguisher and Sample legal documents.	

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

(This syllabus/ curriculum has been approved by Leather Sector Skill Council)

## Trainer Prerequisites for Job role: “Stitching Operator (Footwear)” mapped to Qualification Pack: “LSS/Q2501, V1.0”

Sr. No.	Area	Details
1	<b>Description</b>	To deliver accredited training service, mapping to the curriculum detailed above, in accordance with the Qualification Pack “LSS/Q2501, Version 1.0”
2	<b>Personal Attributes</b>	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	<b>Minimum Educational Qualifications</b>	10th with 18 months certificate course in Footwear (any) and above.
4a	<b>Domain Certification</b>	Certified for Job Role: “Stitching Operator”, mapped to QP: “LSS/Q2501, Version 1.0”. The minimum accepted score should be as per the decision of the respective SSC guidelines.
4b	<b>Platform Certification</b>	Certified for Job Role: “Trainer”, mapped to QP: “SSC/Q1402”. The minimum accepted score should be as per the decision of the respective SSC guidelines.
5	<b>Experience</b>	Minimum 6 years site experience with Stitching Operator Level-4 qualified



### Annexure1: Assessment Criteria

<b>Assessment Criteria</b>	
<b>Job Role</b>	<b>Stitching Operator (Footwear)</b>
<b>Qualification Pack</b>	<b>LSS/Q2501, V1.0</b>
<b>Sector Skill Council</b>	<b>Leather</b>

<b>Sr. No.</b>	<b>Guidelines for Assessment</b>
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 50% aggregate.
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 Outcome	Assessment Criteria	Total Mark	Out Of	Marks Allocation	
				Theory	Practical Skills
<b>1. LSS/N2501: Carry out stitching operation using different machines</b>	PC1. Follow the instructions on the work ticket/ job card	100	2	0	2
	PC2. Make sure that the work area is free from hazards		2	0	2
	PC3. Ensure the materials used meet the specification matching <ul style="list-style-type: none"> <li>• within a product</li> <li>• between a pair of products where applicable</li> </ul>		2	0	2
	PC4. Agree and review agreed upon work targets with the supervisor		2	0	2
	PC5. Sort out the material and threads as per the specifications in the job card		7	5	2
	PC6. Select the right sewing machine, threads and bobbins for the materials as per the specifications in the job card		2	0	2
	PC7. Check the equipment prior to making the stitching, including: <ul style="list-style-type: none"> <li>• Correct controls</li> <li>• Correct attachments</li> <li>• Changing needles</li> <li>• Changing threads</li> <li>• Changing awls</li> <li>• Correct Timing</li> </ul>		2	0	2
	PC8. Set machine controls for the materials being stitched		2	0	2
	PC9. Perform a test run to ensure machine is operating correctly		7	5	2
	PC10. Adjust machine controls where necessary		2	0	2
	PC11. Operate machines safely and in accordance with guidelines		12	10	2
	PC12. Estimate the expected length of time for the process		2	0	2
	PC13. Optimize the positioning and layout of materials to ensure a smooth and rapid throughput		2	0	2
	PC14. Adjust the tension and stitch length		2	0	2
	PC15. Check the upper components and conduct shade wise pairing		2	0	2
	PC16. Stitch the correct materials in the right sequence as required by the production specification		2	0	2
	PC17. Perform back joining/quarter back joining using zigzag machine/flat bed machine		2	0	2
	PC18. Perform seam rubbing by machine if back joining done by flat bed machine		2	0	2
PC1. Check the upper components and conduct shade wise pairing	2	0	2		

Assessable Outcome	Assessment Criteria	Total Mark	Out Of	Marks Allocation	
				Theory	Practical Skills
	PC19. Attach vamp with tongue using flat bed machine		2	0	2
	PC20. Apply adhesives on the components		1	0	1
	PC21. Fold the components by hand/machine		2	0	2
	PC22. Join upper and lining using flat/post bed machine		2	0	2
	PC23. Join quarter with vamp using post bed machine		1	0	1
	PC24. Perform edge trimming operation by machine/hand		7	5	2
	PC25. Perform eyeleting by machine/hand		2	0	2
	PC26. Perform eyelet punching, eyelet putting and eyelet setting by hand		2	0	2
	PC27. Do lacing on the uppers		1	0	1
	PC28. Visual inspection as per specifications in the job card		1	0	1
	PC29. Respond accordingly where stitched items do not meet production specification		1	0	1
	PC30. Carry out basic maintenance of machinery and keep them clean after use		1	0	1
	PC31. Report risks/ problems likely to affect services to the relevant person promptly and accurately		2	0	2
	PC32. Complete forms, records and other documentation		2	0	2
	PC33. Follow company reporting procedures about defective tools and machines which affect work and report risks/ problems likely to affect services to the relevant person promptly and accurately		7	5	2
	PC34. Report defective machines, tools and/or equipment to the responsible person		2	0	2
	PC35. Sort and place work to the next stage of production and minimise the risk of damage		3	0	3
	PC36. Pass the stitched item to the next stage in the manufacturing process after validation		3	0	3
	<b>Total</b>		<b>100</b>	<b>30</b>	<b>70</b>
<b>2. LSS/N2502: Contribute to achieving product quality in stitching</b>	PC1. Ensure materials and component parts meet specifications	<b>50</b>	1	0	1
	PC2. Ensure that the quality and appearance of the uppers are not affected during materials movement		6	5	1
	PC3. Ensure the quality of the product		11	10	1



Assessable Outcome	Assessment Criteria	Total Mark	Out Of	Marks Allocation	
				Theory	Practical Skills
	PC8. Maintain tools and equipment		3	0	3
	PC9. Carry out running maintenance within agreed schedules		4	2	2
	PC10. Carry out maintenance and/or cleaning outside responsibility		2	1	1
	PC11. Report unsafe equipment and other dangerous occurrences		3	2	1
	PC12. Ensure that the correct machine guards are in place		1	0	1
	PC13. Work in a comfortable position with the correct posture		2	1	1
	PC14. Use cleaning equipment and methods appropriate for the work to be carried out		3	2	1
	PC15. Dispose of waste safely in the designated location		3	2	1
	PC16. Store cleaning equipment safely after use		2	1	1
	PC17. Complete and store accurate records and documentation		2	1	1
	PC18. Maintain proper lighting, ventilation to make sure general comfort is there while working		2	1	1
	PC19. Give inputs and assist in completing documentation		1	0	1
	PC20. Report the need for maintenance and/or cleaning outside your area of responsibility		1	0	1
	PC21. Ensure safe and correct handling of materials, equipment and tools		2	1	1
	PC22. Maintain appropriate environment to protect stock from pilfering, theft, damage and deterioration		2	1	1
	<b>Total</b>		<b>50</b>	<b>15</b>	<b>35</b>
<b>4. LSS/N8601: Maintain health, safety and security at workplace</b>	PC1. Comply with health and safety related instructions applicable to the workplace	<b>25</b>	1	0	1
	PC2. Use and maintain personal protective equipment as per protocol		1	0	1
	PC3. Carry out own activities in line with approved guidelines and procedures		1	0	1
	PC4. Maintain a healthy lifestyle and guard against dependency on intoxicants		0.5	0	0.5
	PC5. Follow environment management system related procedures		6	5	1
	PC6. Identify and correct (if possible) malfunctions in machinery and equipment		1	0	1
	PC7. Report any service malfunctions that cannot be rectified		1	0	1
	PC8. Store materials and equipment in line with manufacturer's and		0.5	0	0.5

Assessable Outcome	Assessment Criteria	Total Mark	Out Of	Marks Allocation	
				Theory	Practical Skills
	organizational requirements				
	PC9. Safely handle and move waste and debris		1	0	1
	PC10. Minimize health and safety risks to self and others due to own actions		1	0	1
	PC11. Seek clarifications, from supervisors or other authorized personnel in case of perceived risks		1	0	1
	PC12. Monitor the workplace and work processes for potential risks and threats		1	0	1
	PC13. Carry out periodic walk-through to keep work area free from hazards and obstructions, if assigned		0.5	0	0.5
	PC14. Report hazards and potential risks/ threats to supervisors or other authorized personnel		5.5	5	0.5
	PC15. Participate in mock drills/ evacuation procedures organized at the workplace		0.5	0	0.5
	PC16. Undertake first aid, fire-fighting and emergency response training, if asked to do so		1	0	1
	PC17. Take action based on instructions in the event of fire, emergencies or accidents		0.5	0	0.5
	PC18. Follow organization procedures for shutdown and evacuation when required		1	0	1
	<b>Total</b>		<b>25</b>	<b>10</b>	<b>15</b>
<b>5. LSS/N8701: Comply with industry, regulatory and organizational requirements</b>	PC1. Carry out work functions in accordance with legislation and regulations, organizational guidelines and procedures	<b>25</b>	10	5	5
	PC2. Seek and obtain clarifications on policies and procedures, from the supervisor or other authorized personnel		3	0	3
	PC3. Apply and follow these policies and procedures within the work practices		2	0	2
	PC4. Provide support to the supervisor and team members in enforcing these considerations		7	5	2
	PC5. Identify and report any possible deviation to these requirements		3	0	3
	<b>Total</b>		<b>25</b>	<b>10</b>	<b>15</b>
	<b>Grand Total</b>	<b>250</b>	<b>250</b>	<b>100</b>	<b>150</b>