Model Curriculum

Lasting Operator (Footwear)

SECTOR: LEATHER
SUB-SECTOR: FOOTWEAR
OCCUPATION: LASTING
REF ID: LSS/Q2701, 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: **'Lasting Operator (Footwear)'** QP No. **'LSS/Q2701 NSQF LEVEL 4'**

Date of Issuance: April 9th, 2016
Valid up to*: April 10th, 2018

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

Authorised Signatory
(Leather Sector Skill Council)

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Lasting Operator (Footwear)

CURRICULUM / SYLLABUS

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

Program Name	**Lasting Operator (Footwear)**		
Qualification Pack Name & Reference ID.	Lasting Operator (Footwear) LSS/Q2701, v 1.0		
Version No.	1.0	**Version Update Date**	16–06 – 2016
Pre-requisites to Training	Class V		
Training Outcomes	**After completing this programme, participants will be able to:** • **Gain knowledge on overview of leather industry and generic skills:** General instructions to importance of leather industry, general hazards in leather industry, basic health safety and hygiene precautions, generic skills to be followed in leather industry. • **Perform pre-operational activities:** Carry out the pre-operational checks required for lasting and follow standard procedure for the operations. • **Learn and perform lasting operation:** Carry out lasting operations appropriately. • **Handle work area, tools and machines appropriately:** Ensure correct handling of material, tools and machines, maintain clean and hazard free work area, proper usage of cleaning equipment, maintain correct usage of workplace tools and equipment. • **Contribute to achieve quality product in lasting process:** Ensure that lasting is done properly to go for next process, ensure quality checks and fault identification in lasting and maintain records and documents. • **Become well versed with environment, health, safety & security at work:** Well versed with health and safety measures in terms of personal safety and equipment safety relevant to lasting occupation. • **Follow industrial regularity and organizational requirements:** Carry out work in accordance with organizational guidelines and procedures, identify and report any possible deviation.		

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

Sr. No.	Module	Key Learning Outcomes	Equipment Required
1	**Overview on Leather Industry and Generic Skills** **Theory Duration** (hh:mm) 12:00 **Practical Duration** (hh:mm) 10:00 **Corresponding NOS Code** Core skills/ Generic skills and Professional skills collated from all the NOS of the QP	• Explain the importance of leather industry • Describe leather manufacturing process • Explain general hazards or risk that can lead to accidents • Follow basic safety, health and hygiene measures • Wear and use PPE for safety • Carry out communication effectively with co-workers in writing as well as orally • Read the documents that are necessary for them to read to carry out operator's task	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	**Carry out Lasting Operations Using Machine** **Theory Duration** (hh:mm) 04:00 **Practical Duration** (hh:mm) 80:00 **Corresponding NOS Code** LSS/N2701	• Describe tools and materials used in lasting operations • Identify hand tools and machines used in lasting operations • Prepare work area for lasting operations • Describe counter tightening, toe moulding, forepart lasting, seat lasting, side lasting, roughing, sole pressing, de-lasting operations • Perform counter tightening, toe moulding, forepart lasting, side lasting, seat lasting, roughing, sole pressing, de-lasting operations	Last, Upper, Tack hammer, PPE, Screwdriver, Lasting plier, Shoemaking pincher, Cutting nipper, Tack puller, Thickness measuring gauge, Leather shear, Scratch awl, Hex key, Spanner set, Knife, Last working mallet, Nails, Brush, PU adhesive, Toe cap, Foam, Counter tightening machine, Toe moulding machine, Forepart lasting machine, Seat and side lasting machine, Roughing m/c, Sole pressing machine, De-lasting machine, Blower, Cotton cloth, Iron, Shoe brush, Tape, Thread, Shank, Cork, Heel pad

Sr. No.	Module	Key Learning Outcomes	Equipment Required
3	**Contribute to Achieving Product Quality in Lasting Operations** **Theory Duration** (hh:mm) 02:00 **Practical Duration** (hh:mm) 30:00 **Corresponding NOS Code** LSS/N2702	• Operate machine in accordance with machine and workplace standards • Identify faults in materials and products • Maintain product quality • Explain ISO and 5S • Maintain equipment's • Document and report faulty materials and component parts to the supervisor	Sample footwear with defects after lasting operations, Inspection report documents, Gloves, Safety shoe, Ear plug, Apron
4	**Maintain the Work Area, Tools and Machines** **Theory Duration** (hh:mm) 04:00 **Practical Duration** (hh:mm) 20:00 **Corresponding NOS Code** LSS/N8501	• Ensure housekeeping and safety • Maintain workplace, tools and equipment	One set of tools and facility for arranging tools, Lasting machines, Gloves, Safety shoe, Ear plug, Apron, Cleaning cloth, Water bucket, Cleaning materials, Mop, Dust bin, Broom Grease Lubricate oil
5	**Maintain Health, Safety and Security at Workplace** **Theory Duration** (hh:mm) 10:00 **Practical Duration** (hh:mm) 25:00 **Corresponding NOS Code** LSS/N8601	• Identify and correct malfunctions in machinery and equipment • Minimize health and safety risks to self and others due to own actions • Monitor the workplace and work processes for potential risks and threats • Carry out periodic walk- through to keep work area free from hazards and obstructions, if assigned • Undertake first aid, fire-fighting and emergency response training, if asked to do so • Take action based on instructions in the event of fire, emergencies or accidents • Follow organisation procedures for shutdown and evacuation when required	First aid kit, Fire extinguisher, PPE Set
6	**Comply with Industry, Regulatory and Organizational Requirements** **Theory Duration**	• Carry out work functions in accordance with legislation and regulations, organizational guidelines and procedures • Apply and follow policies and procedures within the work practices	Sample legal documents

Sr. No.	Module	Key Learning Outcomes	Equipment Required
	(hh:mm) 01:00 **Practical Duration** (hh:mm) 02:00 **Corresponding NOS Code** LSS/N8701	• Identify and report any possible deviation to ethical requirements	
	Total Duration **Theory Duration** **33:00** **Practical Duration** **167:00**	**Unique Equipment Required:** Last, Upper, Tack hammer, Screwdriver, Lasting plier, Shoemaking pincher, Cutting nipper, Tack puller, Thickness measuring gauge, Leather shear, Scratch awl, Hex key, Spanner set, Knife, Last working mallet, Nails, PU adhesive, Brush, Toe cap, Foam, Counter tightening machine, Toe moulding machine, Forepart lasting machine, Seat and side lasting machine, Roughing machine, Sole pressing machine, De-lasting machine, tape, Blower, Cotton cloth, Iron, Shoe brush, Thread, Shank, Cork, Heel pad, Sample footwear with defects after lasting operations, Inspection report documents, Gloves, Safety shoe, Ear plug, Apron, Cleaning cloth, Water bucket, Cleaning materials, Mop, Dust bin, Broom, Grease ,Lubricate oil, First aid kit, Fire extinguisher, Sample legal documents	

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

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

Trainer Prerequisites for Job role: "Lasting Operator (Footwear)" mapped to Qualification Pack: "LSS/Q2701, Version 1.0"

Sr. No.	Area	Details
1	**Description**	To deliver accredited training service, mapping to the curriculum detailed above, in accordance with the Qualification Pack "LSS/Q2701, Version 1.0"
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**	10th with 18 months certificate course in Footwear (any) and above
4a	**Domain Certification**	Certified for Job Role: "Lasting Operator (Footwear)", mapped to QP: "LSS/Q2701, Version 1.0". The minimum accepted score should be as per the decision of the respective SSC guidelines.
4b	**Platform Certification**	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	**Experience**	Minimum 6 years site experience with Lasting (Footwear) Level-4 qualified

Annexure1: Assessment Criteria

Assessment Criteria	
Job Role	Lasting Operator (Footwear)
Qualification Pack	LSS/Q2701
Sector Skill Council	Leather

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 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	Skills Practical
1. LSS/N2701: Carry out lasting operations using machine	PC1. Make sure the work area is free from hazards	**100**	1	0	1
	PC2. Obtain and check the data on the work ticket or job card and carry out functions in line with the		2	0	2
	PC3. Ask questions to obtain more information on tasks when the instructions have are unclear		1	0	1
	PC4. Select and sort the tools and materials for the work		1	0	1
	PC5. Setup the equipment and machineries for lasting as per the job requirement		1	0	1
	PC6. Make sure that tools are safe and clean to use on the material		1	0	1
	PC7. Agree and review agreed upon work targets with supervisor		1	0	1
	PC8. Seek feedback from supervisor on work related performance		1	0	1
	PC9. Update and develop knowledge of the products		1	0	1
	PC10. Minimize wastage		1	0	1
	PC11. Produce the required batch of components to match the job card and the company's production targets		2	0	2
	PC12. Dispose of waste materials safely and return re-useable materials		1	0	1
	PC13. Work in conformance to legal requirements, organizational policies and procedures		1	0	1
	PC14. Carry out visual inspection to ensure the products are free from handling defects		1	0	1
	PC15. Hammer the back portion of the upper and place the counter inside the back portion of the upper		2	0	2
	PC16. Clamp the Upper onto the machine tightly		1	0	1
	PC17. Carry out Counter tightening operation by pressing the star button on the machine		1	0	1
	PC18. Ensure no creases are formed on the inside of the upper while performing counter tightening		2	0	2
	PC19. Remove the upper from the counter tightening machine		7	5	2
	PC20. Place the toe cap inside of the upper in between vamp and vamp lining		2	0	2

Assessable Outcome	Assessment Criteria	Total Mark	Out Of	Marks Allocation	
				Theory	Skills Practical
	PC21. Fix the vamp of the upper into the toe moulding machine		1	0	1
	PC22. Carryout the toe moulding operation by pressing the start button on the toe moulding machine		2	0	2
	PC23. Remove the upper from the toe moulding machine		1	0	1
	PC24. Select appropriate last according to the size of the upper		2	0	2
	PC25. Fix the upper on to the last		2	0	2
	PC26. Adjust the back height of the upper based on the mark on the last by pulling with pincher		1	0	1
	PC27. Fix the last in the machine for toe lasting operation		1	0	1
	PC28. Carryout toe lasting operation by pressing the start buttons of the machine with both hand and at the same time pressing the bottom start button of the machine with knee		12	10	2
	PC29. Remove the lasted upper from the machine		1	0	1
	PC30. Fix the toe lasted upper in the machine for seat lasting operation		1	0	1
	PC31. Carryout seat lasting operation by using the machine		2	0	2
	PC32. Remove the finished part from the machine		2	0	2
	PC33. Apply the adhesive on the insole and the inside of the upper		1	0	1
	PC34. Pull the sides of the upper and adjust it appropriately with pincher		2	0	2
	PC35. Hammer the sides of the upper to perform side lasting		1	0	1
	PC36. Ensure the condition of the grinding wheel or emery paper as per specification		1	0	1
	PC37. Operate the machine to roughen the finished part of the bottom portion of the lasted upper		1	0	1
	PC38. Ensure only a thin layer of the finished portion is roughed		1	0	1
	PC39. Ensure the edges of the lasted upper are roughed carefully		2	0	2
	PC40. Place the sole on the lasted upper to attach it temporarily		7	5	2
	PC41. Ensure the sole and the lasted upper is attached appropriately along the edges		2	0	2
	PC42. Place the temporary attached lasted upper and the sole into the		1	0	1

Assessable Outcome	Assessment Criteria	Total Mark	Out Of	Marks Allocation	
				Theory	Skills Practical
	pressing machine				
	PC43. Operate the machine to attach the sole and the upper by pressing the start button on the machine		2	0	2
	PC44. Remove the sole attached lasted upper		7	5	2
	PC45. Fix the shoe onto the de-lasting machine		1	0	1
	PC46. Carry out de-lasting operation by operating the de-lasting machine and Applying pressure on the toe portion of the shoe with hand simultaneously		2	0	2
	PC47. Remove the shoe from the last		1	0	1
	PC48. Report risks/ problems likely to affect services to the relevant person promptly and accurately		1	0	1
	PC49. Report defects in the tools and equipment that one do not have the authority to repair		6	5	1
	PC50. Carry out closedown procedures on completion of work		1	0	1
	PC51. Sort and place work to assist the next stage of production and minimize the risk of damage		1	0	1
	Total		**100**	**30**	**70**
2. LSS/N2702: Contribute to achieving product quality in lasting operation	PC1. Handle materials, machinery, equipment and tools safely and correctly	**50**	2	0	2
	PC2. Use correct lifting and handling procedures		2	0	2
	PC3. Use materials to minimize waste		3	0	3
	PC4. Prepare and organize work		2	0	2
	PC5. Maintain a clean and hazard free working area		3	0	3
	PC6. Deal with work interruptions		2	0	2
	PC7. Move around the workplace with care		3	0	3
	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

Assessable Outcome	Assessment Criteria	Total Mark	Out Of	Marks Allocation	
				Theory	Skills Practical
	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
	Total		**50**	**35**	**15**
3. LSS/N8501: Maintain the work area, tools and machines	PC1. Handle materials, machinery, equipment and tools safely and correctly	**50**	2	0	2
	PC2. Use correct lifting and handling procedures		2	0	2
	PC3. Use materials to minimize waste		3	0	3
	PC4. Prepare and organize work		2	0	2
	PC5. Maintain a clean and hazard free working area		3	0	3
	PC6. Deal with work interruptions		2	0	2
	PC7. Move around the workplace with care		3	0	3
	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

Assessable Outcome	Assessment Criteria	Total Mark	Out Of	Marks Allocation	
				Theory	Skills Practical
	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
	Total		**50**	**15**	**35**
4. LSS/N8601: Maintain health, safety and security at workplace	PC1. Comply with health and safety related instructions applicable to the workplace	**25**	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		1	0	1
	PC5. Follow environment management system related procedures		6	5	1
	PC6. Identify and correct (if possible) malfunctions in machinery and equipment		0.5	0	0.5
	PC7. Report any service malfunctions that cannot be rectified		1	0	1
	PC8. Store materials and equipment in line with manufacturer's and organizational requirements		1	0	1
	PC9. Safely handle and move waste and debris		0.5	0	0.5
	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

Assessable Outcome	Assessment Criteria	Total Mark	Out Of	Marks Allocation	
				Theory	Skills Practical
	PC12. Monitor the workplace and work processes for potential risks and threats		0.5	0	0.5
	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		6	5	1
	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
	Total		**25**	**10**	**15**
5. LSS/N8701: Comply with industry, regulatory and organizational requirements	PC1. Carry out work functions in accordance with legislation and regulations, organizational guidelines and procedures	**25**	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		8	5	3
	PC5. Identify and report any possible deviation to these requirements		2	0	2
	Total		**25**	**10**	**15**
	Grand Total	**250**	**250**	**100**	**150**