

Model Curriculum

Post Tanning Machine Operator

SECTOR: LEATHER
SUB-SECTOR: FINISHED LEATHER
OCCUPATION: POST TANNING MACHINE OPERATIONS
REF ID: LSS /Q0701, 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: 'Post Tanning Machine Operator' QP No. 'LSS/Q0701 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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Post Tanning Machine Operator

CURRICULUM / SYLLABUS

This program is aimed at training candidates for the job of a “Post Tanning Machine Operator”, in the “Leather” Sector/Industry and aims at building the following key competencies amongst the learner.

Program Name	Post Tanning Machine Operator		
Qualification Pack Name & Reference ID	Post Tanning Machine Operator LSS /Q0701, V1.0		
Version No.	1.0	Version Update Date	21-06-2016
Pre-requisites to Training	Class V		
Training Outcomes	<p>After completing this programme, participants will be able to:</p> <ul style="list-style-type: none"> • 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. • Carry out staking operations: Perform staking operations in preparing finished leather. • Carry out toggling operations: Perform toggling operations in preparing finished leather. • Carry out de-dusting operations: Perform de-dusting operations while preparing finished leather • Carry out embossing operations: Perform embossing operations while preparing finished leather • 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 post tanning operations: Monitor the quality of the production while undertaking post tanning operations to ensure products meet specifications. • Become well versed with environment, health, safety & security at workplace: Well versed with health and safety measures in terms of personal safety and equipment safety relevant to post tanning machine operations. • 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 8 out of 8 National Occupational Standards (NOS) of “Post Tanning Machine Operator” Qualification Pack issued by “Leather Sector Skill Council”.

Sr. No.	Module	Key Learning Outcomes	Equipment Required
1	<p>Overview on Leather Industry and Generic Skills</p> <p>Theory Duration (hh:mm) 08:00</p> <p>Practical Duration (hh:mm) 10:00</p> <p>Corresponding NOS Code Core skills/ Generic skills and Professional skills collated from all the NOS of the QP</p>	<ul style="list-style-type: none"> Explain the importance of leather industry and 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	<p>Carry-out Staking Operations</p> <p>Theory Duration (hh:mm) 03:00</p> <p>Practical Duration (hh:mm) 20:00</p> <p>Corresponding NOS Code LSS/N0701</p>	<ul style="list-style-type: none"> Identify tools and materials used in staking operations Carry out staking operation in preparing finished leather Follow safety guidelines while working on machines Do reporting and documentation Explain importance of house keeping Do sorting and placing of workplace 	Vibrating Staking Machine, Slow Comb Staking Machine Pre finished leather piece Thickness gauge Staking tools
3	<p>Carry-out Toggling Operations</p> <p>Theory Duration (hh:mm) 03:00</p> <p>Practical Duration (hh:mm) 20:00</p> <p>Corresponding NOS Code LSS/N0702</p>	<ul style="list-style-type: none"> Identify tools and materials used in toggling operations Carry out toggling operation in preparing finished leather Follow safety guidelines while working on machines Do reporting and documentation Explain importance of house keeping Do sorting and placing of workplace Maintain product quality and productivity 	Toggling machine Toggle clips Finished leather Gloves Safety shoes
4	<p>Carry-out De-dusting Operations</p> <p>Theory Duration (hh:mm) 03:00</p>	<ul style="list-style-type: none"> Identify tools and materials used in de-dusting operations Adjust working width, feed speed of de-dusting machine Carry out de-dusting operation in preparing finished leather Follow safety guidelines while working 	De-dusting machine, Buffed leather, Gloves Safety shoes

Sr. No.	Module	Key Learning Outcomes	Equipment Required
	<p>Practical Duration (hh:mm) 20:00</p> <p>Corresponding NOS Code LSS/N0703</p>	<p>on machines</p> <ul style="list-style-type: none"> Do reporting and documentation Explain importance of house keeping Do sorting and placing of workplace Maintain product quality and productivity 	
5	<p>Carry-out Embossing Operations</p> <p>Theory Duration (hh:mm) 03:00</p> <p>Practical Duration (hh:mm) 20:00</p> <p>Corresponding NOS Code LSS/N0704</p>	<ul style="list-style-type: none"> Identify tools and materials used in de-dusting operations Use de-dusting machine Adjust working width, feed speed of de-dusting machine Carry out de-dusting operation in preparing finished leather Follow safety guidelines while working on machines Do reporting and documentation Explain importance of house keeping Do sorting and placing of workplace Maintain product quality and productivity 	Embossing machine, Gloves, Safety shoes
6	<p>Contribute to Achieving Product Quality in Post Tanning</p> <p>Theory Duration (hh:mm) 04:00</p> <p>Practical Duration (hh:mm) 28:00</p> <p>Corresponding NOS Code LSS/N0705</p>	<ul style="list-style-type: none"> Identify tools, machines and material used in post tanning operations Identify different finished leather types Achieve quality parameters in post tanning operations Identify different quality issues found in finished leather like surface irregularities, texture mismatch, specification mismatch and surface defects Maintain product quality and productivity Do reporting and documentation 	Sample leather defects material, Leather thickness measuring gauge, Gloves, Helmet, Safety shoe, Ear plug, Apron, Goggles
7	<p>Maintain the Work Area, Tools and Machines</p> <p>Theory Duration (hh:mm) 04:00</p> <p>Practical Duration (hh:mm) 20:00</p> <p>Corresponding NOS Code LSS/N8501</p>	<ul style="list-style-type: none"> Ensure housekeeping and safety Maintain workplace, tools and equipment Identify the material requirements for cleaning the areas inspected by, considering risk, time, efficiency and type of stain. Ensure that the cleaning equipment is in proper working condition. Plan the sequence for cleaning the area to avoid re-soiling clean areas and surfaces. Display the appropriate signage for the work being conducted 	Gloves, Helmet, Safety shoe, Ear plug, Apron, Goggles, Cleaning cloth, Water bucket, Cleaning materials, Mop, Dust bin, Broom
8	<p>Maintain Health, Safety and Security at Workplace</p>	<ul style="list-style-type: none"> Identify and correct (if possible) malfunctions in machinery and equipment. 	First aid kit, Fire extinguisher, PPE Set

Sr. No.	Module	Key Learning Outcomes	Equipment Required
	Theory Duration (hh:mm) 06:00 Practical Duration (hh:mm) 25:00 Corresponding NOS Code LSS/N8601	<ul style="list-style-type: none"> 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-throughs 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 	
9	Comply with Industry, Regulatory and Organizational Requirements Theory Duration (hh:mm) 01:00 Practical Duration (hh:mm) 02:00 Corresponding NOS Code LSS/N8701	<ul style="list-style-type: none"> Carry out work functions in accordance with legislation and regulations, organizational guidelines and procedures Apply and follow policies and procedures within your work practices Identify and report any possible deviation to ethical requirements 	Sample legal documents
	Total Duration Theory Duration 35:00 Practical Duration 165:00	Unique Equipment Required: Chairs, Trainers desk and computer, Student table, Projector, White projector screen, White board, Flip chart display stand, Safety Hazard signs, Newspaper, Stationery, PPE set, Vibrating Staking Machine, Slow Comb Staking Machine, Pre finished leather piece, Thickness gauge, Staking tools, Toggling machine, Toggle clips, Finished leather, Gloves, Safety shoes, De-dusting machine, Buffed leather, Embossing machine, Sample leather defects material, Helmet, Ear plug, Apron, Goggle, Cleaning cloth, Water bucket, Cleaning materials, Mop, Dust bin, Broom, First aid kit, Fire extinguisher, PPE Set, 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: “Post Tanning Machine Operator” mapped to Qualification Pack: “LSS /Q0701, V1.0”

Sr. No.	Area	Details
1	Description	To deliver accredited training service, mapping to the curriculum detailed above, in accordance with the Qualification Pack “LSS /Q0701, 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	10 th with 18 months certificate course in Finished leather (any) and above
4a	Domain Certification	Certified for Job Role: “Post Tanning Machine Operator”, mapped to QP: “LSS /Q0701, 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 Post Tanning Machine Operator Level-4 qualified

Annexure1: Assessment Criteria

Assessment Criteria	
Job Role	Post Tanning Machine Operator
Qualification Pack	LSS/Q0701, V1.0
Sector Skill Council	Leather

Sr. No.	Guidelines for Assessment
1	Criteria for assessment for each qualification pack will be created b 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/N0701: Carry out staking operations	PC1. Make sure the work area is free from hazards	55	2	0	2
	PC2. Obtain and check the data on the work ticket or job card		5	3	2
	PC3. Ask questions to obtain more information on tasks when the instructions are unclear		2	0	2
	PC4. Select and sort the materials for the work		2	0	2
	PC5. Set the machine according to the use of the finished leather		2	0	2
	PC6. Make sure that tools are safe and clean to use on the material		2	0	2
	PC7. Ask questions to obtain more information on tasks when the instructions you have are unclear		4	2	2
	PC8. In case of a vibrating staking machine, feed in the pre finished leather piece into the machine		5	3	2
	PC9. In case of hand staking machine, hold the pre finished leather piece in the machine to get the quality of the leather		2	0	2
	PC10. Repeat process and adjust the prefinished leather piece to ensure staking of full piece		4	2	2
	PC11. Pile the staked pieces to assist the next operation		2	0	2
	PC12. Stake the pre finished leather to the quality standard required		2	0	2
	PC13. Produce the required batch of components to match the job card and the company's production targets		4	2	2
	PC14. Dispose of waste materials safely and return re-useable material		2	0	2
	PC15. Minimize wastage during staking		5	3	2
	PC16. Report any damaged work to the responsible person		2	0	2
	PC17. Follow company reporting procedures about defective tools and machines which affect work		2	0	2
	PC18. Sort and place work to assist the next stage of production and minimize the risk of damage		2	0	2
	PC19. Carry out closedown procedures on completion of work		2	0	2
	PC20. Leave work area safe and secure when work is complete		2	0	2
	Total		55	15	40
2. LSS/N0702: Carry out toggling operations	PC1. Make sure the work area is free from hazards		2	1	1
	PC2. Obtain and check the data on the work ticket or job card		3	2	1
	PC3. Ask questions to obtain more information on tasks when the instructions are unclear		2	0	2

Assessable Outcome	Assessment Criteria	Total Mark	Out Of	Marks Allocation		
				Theory	Skills Practical	
	PC4. Select and sort the materials for the work	50	2	0	2	
	PC5. Set the machine according to the use of the finished leather		2	0	2	
	PC6. Make sure that tools are safe and clean to use on the material		3	1	2	
	PC7. Ask questions to obtain more information on tasks when the instructions you have are unclear		3	2	1	
	PC8. Ensure that the raw material has undergone staking		5	3	2	
	PC9. Adjust temperature as per type of leather		2	0	2	
	PC10. Adjust run time and speed as per type of leather		2	1	1	
	PC11. Ensure that no creases are formed during toggling process		2	0	2	
	PC12. Perform toggling as per the quality standard required		2	0	2	
	PC13. Produce the required batch of components to match the job card and the company's production targets		3	2	1	
	PC14. Minimize wastage during toggling		2	0	2	
	PC15. Dispose of waste materials safely and return re-useable material		5	3	2	
	PC16. Report any damaged work to the responsible person		2	0	2	
	PC17. Follow company reporting procedures about defective tools and machines which affect work		2	0	2	
	PC18. Sort and place work to assist the next stage of production and minimise the risk of damage		2	0	2	
	PC19. Carry out closedown procedures of the toggling machine on completion of work		2	0	2	
	PC20. Leave work area safe and secure when work is complete		2	0	2	
	Total			50	15	35
3. LSS/N0703: Carry out de-dusting operations	PC1. Confirm that the identity and quantity of the material received matches the work ticket		25	4	2	2
	PC2. Accurately follow the information contained on the work ticket			2	1	1
	PC3. Handle and transport material, including hides, skins, leather, in the most effective manner and in the correct sequence	3		1	2	
	PC4. Follow the start-up sequences and operate the equipment controls correctly	5		3	2	
	PC5. Complete the process to the specified standard required for the next operation	3		1	2	
	PC6. Ask questions to obtain more information on tasks when the instructions you have are unclear	4		1	3	
	PC7. Report risks/ problems likely to affect	3		1	2	

Assessable Outcome	Assessment Criteria	Total Mark	Out Of	Marks Allocation	
				Theory	Skills Practical
	services to the relevant person promptly and accurately				
	PC8. Agree and review your agreed upon work targets with your supervisor		1	0	1
	Total		25	10	15
4. LSS/N0704: Carry out embossing operations	PC1. Confirm that the identity and quantity of the material received matches the work ticket	35	4	2	2
	PC2. Accurately follow the essential information contained on the work ticket		2	1	1
	PC3. Handle and transport material, including hides, skins, leather, in the most effective manner and in the correct sequence		3	1	2
	PC4. Follow the start-up sequences and operate the equipment controls correctly		5	3	2
	PC5. Change the embossing plates as per requirement		3	1	2
	PC6. Adjust temperature of embossing plates as per requirement		4	1	3
	PC7. Adjust pressure of embossing plates as per requirement		3	1	2
	PC8. Ask questions to obtain more information on tasks when the instructions you have are unclear		2	1	1
	PC9. Agree and review your agreed upon work targets with your supervisor		4	2	2
	PC10. Report risks/ problems likely to affect services to the relevant person, promptly and accurately		2	1	1
	PC11. Complete the process to the specified standard required for the next operation		3	1	2
	Total		35	15	20
5. LSS/N0705: Contribute to achieving product quality in post tanning operations	PC1. Set up and test equipment to meet quality standard	25	6	5	1
	PC2. Ensure materials and component parts meet specifications		1	0	1
	PC3. Ensure the quality of finished leather meets specification during production		0.5	0	0.5
	PC4. Maintain the required productivity and quality levels		1	0	1
	PC5. Maintain the continuity of production with minimum interruptions and downtime		5.5	5	0.5
	PC6. Identify faults and irregularities in equipment and machinery and take action within the limits of your responsibility		1	0	1
	PC7. Carry out quality checks at specified intervals according to instructions		1	0	1
	PC8. Identify faults in pre finished leather and other materials and products		1	0	1
	PC9. Ensure that the entire piece is uniformly staked, toggled, de-dusted and plated		1	0	1

Assessable Outcome	Assessment Criteria	Total Mark	Out Of	Marks Allocation	
				Theory	Skills Practical
	PC10. Ensure that the processes of staking, toggling and plating do not cause damage to the leather piece		1	0	1
	PC11.Maintain records and documentation		1	0	1
	PC12. Identify causes of faults to maintain product quality		1	0	1
	PC13. Follow reporting procedures where the cause of faults cannot be identified		1	0	1
	PC14. Identify and report potential solutions to rectify fault		1	0	1
	PC15. Report and replace faulty materials and component parts which do not meet specification		1	0	1
	PC16. Identify process problems in the quality of finished leather and report them promptly to appropriate people		1	0	1
	Total		25	10	15
6. LSS/N8501: Maintain the work area, tools and machines	PC1. Handle materials, machinery, equipment and tools safely and correctly	50	1	0	1
	PC2. Use correct lifting and handling procedures		2	0	2
	PC3. Use materials to minimize waste		2	0	2
	PC4. Prepare and organize work		7	5	2
	PC5. Maintain a clean and hazard free working area		2	0	2
	PC6. Deal with work interruptions		2	0	2
	PC7. Move around the workplace with care		2	0	2
	PC8. Maintain tools and equipment		2	0	2
	PC9. Carry out running maintenance within agreed schedules		2	0	2
	PC10. Carry out maintenance and/or cleaning outside responsibility		7	5	2
	PC11. Report unsafe equipment and other dangerous occurrences		7	5	2
	PC12. Ensure that the correct machine guards are in place		2	0	2
	PC13. Work in a comfortable position with the correct posture		1	0	1
	PC14. Use cleaning equipment and methods appropriate for the work to be carried out		1	0	1
	PC15. Dispose of waste safely in the designated location		2	0	2
	PC16. Store cleaning equipment safely after use		1	0	1
	PC17. Complete and store accurate records and documentation		2	0	2
	PC18. Maintain proper lighting, ventilation to make sure general comfort is there while working		1	0	1
	PC19. Give inputs and assist in completing documentation		1	0	1

Assessable Outcome	Assessment Criteria	Total Mark	Out Of	Marks Allocation	
				Theory	Skills Practical
	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		1	0	1
	PC22. Maintain appropriate environment to protect stock from pilfering, theft, damage and deterioration		1	0	1
	Total		50	15	35
7. LSS/N8601: Maintain health, safety and security at workplace	PC1. Comply with health and safety related instructions applicable to the workplace	20	2	1	1
	PC2. Use and maintain personal protective equipment as per protocol		2	1	1
	PC3. Carry out own activities in line with approved guidelines and procedures		0.5	0	0.5
	PC4. Maintain a healthy lifestyle and guard against dependency on intoxicants		1	0	1
	PC5. Follow environment management system related procedures		1.5	1	0.5
	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 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		2	1	1
	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		1	0	1
	PC14. Report hazards and potential risks/ threats to supervisors or other authorized personnel		0.5	0	0.5
	PC15. Participate in mock drills/ evacuation procedures organized at the workplace		2	1	1
	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		20	5	15

Assessable Outcome	Assessment Criteria	Total Mark	Out Of	Marks Allocation	
				Theory	Skills Practical
8. LSS/N8701: Comply with industry, regulatory and organizational requirements	PC1. Carry out work functions in accordance with legislation and regulations, organizational guidelines and procedures	10	2	1	1
	PC2. Seek and obtain clarifications on policies and procedures, from the supervisor or other authorized personnel		2	1	1
	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		2	1	1
	PC5. Identify and report any possible deviation to these requirements		2	1	1
	Total		10	4	6
	Grand Total	270	270	89	181