







### APPRENTICESHIP CURRICULUM

#### **FOR**

# STITCHING OPERATOR

# **Program**

**SECTOR:** Leather

**BLOCK I (Basic Training):** 

**COURSE NAME:** Stitching Operator

QP Name, QP Code and Version No., and NSQF Level: Stitching

Operator, LSS/Q2501 V1.0, NSQF

Level 4

**Training Duration:** 300 Hrs (3 months)

**BLOCK II (Training at Employer Location):** 

**COURSE NAME:** Stitching Operator

QP Name, QP Code and Version No., NSQF Level: Stitching

Operator, LSS/Q2501 V1.0, NSQF

Level 4

**Training Duration:** 960 Hrs (6 months)

**TOTAL PROGRAM DURATION:** 1260 Hrs (9 months)









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# PROGRAM CURRICULUM

Program Name	Stitching Operator		
Program Duration	1260 Hrs (9 months)		
Version No.	1.0	Version Update Date	18/10/2018
Entry Qualification			
Educational and/or Technical Qualification Required	Class V		
Block 1 Training Outcomes for Stitching Operator	Gain familiar over view of I with stitching manufacturing     Become well Well versed personal safe occupation.     Carry out s Effectively ide threads and b     Achieve provisual inspecti     Maintain tl Organise/main machines are     Carry out wo regulations, Follow policies	<ul> <li>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>Become well versed with environment, health and safety: Well versed with health and safety measures in terms of personal safety and equipment safety relevant to stitching occupation.</li> <li>Carry out stitching operation using different machines: Effectively identify, select the right sewing machine, needles, threads and bobbins for carrying out stitching operation.</li> <li>Achieve product quality in stitching operation: Conduct a visual inspection on all aspects of the stitching process.</li> <li>Maintain the work area, tools and machines: Organise/maintain work area and activities to ensure tools and machines are maintained as per norms.</li> </ul>	
Block II Training Outcomes for Stitching Operator	Read the job operations and Carry out procedures to ldentify differ bed, post bed     Identify differ manufacturing Productivity.     Spot difficulti Stitching meth the sample and Identify the differentiations as Identify the differentiations as Identify the differentiations as Use tools/manufacturing the sample and their producing stitching Use tools/manufacturing the differentiations and their producing stitching the differentiations and their producing stitching the differentiations are wing machine.	s programme, participan card to understand the sid methods of stitching operational checks a perform stitching operational, and zig zag (stitches with rent types of threads go of footwear to achieve swith respect to the mods to achieve correct quand specifications. If the specifications and inspection to ensure the per the specifications and offerent types of leather/insperties with respect to significant types of leather inspections. If the specifications and offerent types of leather inspections are goperations. In the specifications and offerent specifications and offerent types of leather inspections and specifications and offerent specifications and offerent types of leather inspections. In the specifications are goperations and machines used so united without any problem	pecifications for different eration. and standard operating ons. methods/machines-Flat nout pasting). and needle used in we correct Quality and practicality of different ality for each style as per achine. The accuracy of Stitching I sample. The accuracy of Stitching I sample. The accuracy of Stitching I sample while the sewing machine, flat bed that they are available









<ul> <li>Detect product/manufacturing defects and control manufacturing losses.</li> <li>Identify the different types of footwear styles and manufacturing methods.</li> </ul>
<ul> <li>Create reports of stitching operations for the day (documentations).</li> </ul>

**Note:** 1 week has 40 hours of learning (8 hrs a day x 5 days a week). For example:

S. No.	QP2 Durations (in hrs)	Weeks	Months
1	1440	36	9
2	960	24	6
3	2080	52	13

**Block I**: This is a training block done in the Instructor-Led training approach, with theory and practical sessions. The training sessions may be held at training provider's premises.

**Block II:** This is a training block done at the Employer location. This is largely hands-on with inputs/ guidance provided by the on-site mentors and supervisors. The employer may conduct instructor-led sessions in classrooms/ workshops and may also look at new age – technology-based performance support tools for additional support.









## **Basic Training (Block I)**

#### **General Information**

1. Course Name: Stitching Operator

2. QP Code with Version No. and QP Name: LSS/Q2501 V1.0, Stitching Operator

3. NSQF Level: 4

4. Theory hours: 40 Hrs

5. Practical hours: 260 Hrs

6. Batch Size: 30

7. Power Norms: 6 KW for Workshop

8. Space Norms: 10 (x20=200sq) feet

**9. Assessment:** QP based assessment is conducted by an Assessment Agency as deputed by the respective Sector Skill Council.

10. Tools, Equipment, and Machinery required: As per Annexure I

11. Trainer Qualification: Trainer Prerequisites for Course: Stitching Operator

Sr. No.	Area	Details
1	Job Description	To deliver accredited training service, mapping to the curriculum detailed above, in accordance with the Qualification Pack "LSS/Q2501", 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 <sup>th</sup> with 18 months certificate course in Footwear (any) and above
4a	Domain Certification	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	Platform Certification	Certified for Job Role: "Trainer", mapped to QP: "MEP/Q0102". The minimum accepted score should be as per the decision of the respective SSC guidelines.
5	Experience	Minimum 6 years site experience with Stitching Operator Level – 4 qualified









### Curriculum

Block I is aimed at training candidates for the course of a "Stitching Operator", in the "Leather" Sector/ Industry and aims at building the following key competencies amongst the learner.

S.	Module Name	Key Learning Outcomes	Equipment Required
No.			
1	Overview on Leather Industry and Generic Skills  Theory Duration (hh:mm) 12:00  Practical Duration (hh:mm) 10:00  Corresponding NOS Code Bridge Module	<ul> <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>	Computer, Projector, White projector screen, White board, Safety Hazard signs, Stationery, PPE
2	Carry out stitching operations using different machines  Theory Duration (hh:mm) 11:00  Practical Duration (hh:mm) 193:00  Corresponding NOS Code LSS/N2501	<ul> <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, Flatbed sewing machine, Zig zag machine, Sample leather pieces, Scissors, Measuring tape, Stitching awl, Stitch maker, Spring divider, Steel rule, Khurpi, Wooden mallet, Indenting scissors, Hand clicking knife, Shoe, Hammer, Pricking Awl, Welt knife, Nail puller, Manchester nippers, Needles, Thread, Dendrite paste, Pasting brushes, Screwdriver, Leather thickness measuring gauge, PPE
3	Contribute to Achieving Product Quality in stitching Processes Theory Duration (hh:mm) 02:00 Practical Duration	<ul> <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 damage happens to the appearance and quality</li> <li>Maintain the continuity of production with minimum interruptions and downtime</li> </ul>	Sample leather defects materials, Leather thickness measuring gauge, Gloves, Helmet, Safety shoe, Ear plug, Apron, Goggles









S.	Module Name	Voy Loarning Outcomes	Equipment Dequired
S. No.	Module Name	Key Learning Outcomes	Equipment Required
	(hh:mm) 20:00  Corresponding NOS Code LSS/N2502	<ul> <li>Carry out quality checks at specified intervals according to instructions/ sample</li> <li>Identify faults and take appropriate action for rectification</li> <li>Ensure less wastage and their proper disposal</li> </ul>	
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	<ul> <li>Ensure housekeeping and safety</li> <li>Maintain workplace, tools and equipment</li> </ul>	Gloves, Helmet, Safety shoe, Ear plug, Apron, Goggles, Cleaning cloth, Water bucket, Cleaning materials, Mop, Dust bin, Broom
5	Maintain Health, Safety and Security at Workplace Theory Duration (hh:mm) 10:00 Practical Duration (hh:mm) 15:00 Corresponding NOS Code LSS/N8601	<ul> <li>Identify and correct malfunctions in machinery and equipment</li> <li>Minimize health and safety risks to self and others due to own actions</li> <li>Monitor the workplace and work processes for potential risks and threats</li> <li>Carry out periodic walk-through to keep work area free from hazards and obstructions, if assigned</li> <li>Undertake first aid, fire-fighting and emergency response training, if asked to do so</li> <li>Take action based on instructions in the event of fire, emergencies or accidents</li> <li>Follow organization procedures for shutdown and evacuation when required</li> </ul>	First aid kit, Fire extinguisher, PPE set
6	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> <li>Carry out work functions in accordance with legislation and regulations, organizational guidelines and procedures</li> <li>Apply and follow policies and procedures within your work practices</li> <li>Identify and report any possible deviation to ethical requirements</li> </ul>	Sample legal documents









S. No.	Module Name	Key Learning Outcomes	Equipment Required
	Total Duration	Unique Equipment Required:  Post bed sewing machine, Flatbed sewing machine,	chine, Cylinder bed type
	Theory Duration 40:00	sewing machine, Sample leather pieces, Sciss Stitching awl, Stitch maker, Spring divider, Ste mallet, Indenting scissors, Hand clicking knife,	el rule, Khurpi, Wooden Shoe Hammer, Pricking
	Practical Duration 260:00	Awl, Welt knife, Nail puller, Manchester nipperson Dendrite paste, Pasting brushes, Screwdriver, measuring gauge, Sample leather defects mat Safety shoe, Ear plug, Apron, Goggles, Cleani Cleaning materials, Mop, Dust bin, Broom, First Sample legal documents	Leather thickness erials, Gloves, Helmet, ng cloth, Water bucket,

Grand Total Course Duration: 300 Hours, 0 Minutes









## **Hands-On at Employer Location (Block II)**

#### **General Information**

1. Name of the Course: Stitching Operator

2. QP Code with Version No. and QP Name: LSS/Q2501 V1.0, Stitching Operator

3. NSQF Level: 4

4. Training Duration: 960 Hrs

5. Batch Size: 30

**6. Assessment:** The Leather Sector Skill Council (LSSC) will conduct the assessment at the end of Block II.

7. Tools, Equipment, and Machinery required: As per Annexure II

8. Trainer Qualification: Trainer Prerequisites for course: Stitching Operator

Sr. No.	Area	Details
1	Job Description	To deliver accredited training service, mapping to the curriculum detailed above, in accordance with the Qualification Pack "LSS/Q2501", 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: "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	Platform Certification	Certified for Job Role: "Trainer", mapped to QP: "MEP/Q0102". The minimum accepted score should be as per the decision of the respective SSC guidelines.
5	Experience	Minimum 6 years site experience with Stitching Operator Level – 4 qualified









### Curriculum

Block II is aimed at training candidates for the course of a "Stitching Operator", in the "Leather" Sector/ Industry and aims at building the following key competencies amongst the learner.

S.	Module Name Key Learning Outcomes Equipment Required			
No.	Module Name	Key Learning Outcomes	Equipment Required	
Week 1	Stitching tools and equipment  Theory Duration (hh:mm) 03:00  Practical Duration (hh:mm) 37:00  Corresponding NOS Code LSS/N2501	<ul> <li>Explain the different types of stitching operation</li> <li>Describe tools and materials used in stitching operations</li> <li>Identify hand tools and equipment used in stitching operations</li> <li>Demonstrate the procedure of using tools and equipment used in stitching operation</li> </ul>	Post bed sewing machine, Flat bed sewing machine, Zig zag machine, Sample leather pieces, Scissors, Measuring tape, Stitching awl, Stitch maker, Spring divider, Steel rule, Khurpi, Wooden mallet, Indenting scissors, Hand clicking knife, Shoe, Hammer, Pricking Awl, Welt knife, Nail puller, Manchester nippers, Needles, Thread, Dendrite paste, Pasting brushes, Screwdriver, Leather thickness measuring gauge, PPE	
Week 2	Stitching supporting Operations-I Theory Duration (hh:mm) 03:00 Practical Duration (hh:mm) 37:00 Corresponding NOS Code LSS/N2501	<ul> <li>Describe the features of various stitching machines used for different materials and threads</li> <li>List the different types of needles and their numbers</li> <li>Check the data on the work ticket or job card</li> <li>Prepare the hazard free working area for stitching operation</li> <li>Check the materials with the following to meet the specification matching:         <ul> <li>within a product</li> <li>between a pair of products where applicable</li> </ul> </li> <li>Review the agreed upon work targets with supervisor</li> </ul>	Post bed sewing machine, Flat bed sewing machine, Zig zag machine, Sample leather pieces, Scissors, Measuring tape, Stitching awl, Stitch maker, Spring divider, Steel rule, Khurpi, Wooden mallet, Indenting scissors, Hand clicking knife, Shoe, Hammer, Pricking Awl, Welt knife, Nail puller, Manchester nippers, Needles, Thread, Dendrite paste, Pasting brushes, Screwdriver, Leather thickness measuring gauge, PPE	
Week 3	Stitching supporting Operations-II  Theory Duration (hh:mm) 00:00  Practical Duration (hh:mm)	<ul> <li>Sort the material and threads as per the specifications in the job card</li> <li>Select the right sewing machine, threads and bobbins for the materials as per the specifications in the job card</li> <li>Check the equipment for the following parameter before stitching:         <ul> <li>Correct controls</li> <li>Correct attachments</li> <li>Changing needles</li> </ul> </li> </ul>	Post bed sewing machine, Flat bed sewing machine, Zig zag machine, Sample leather pieces, Scissors, Measuring tape, Stitching awl, Stitch maker, Spring divider, Steel rule, Khurpi, Wooden mallet,	









S. No.	Module Name	Key Learning Outcomes	Equipment Required
	40:00 Corresponding NOS Code LSS/N2501	<ul> <li>Changing threads</li> <li>Changing awls</li> <li>Correct Timing</li> <li>Set the machine controls for the material being stitched</li> <li>Carry out a test run to ensure machine is operating correctly</li> </ul>	Indenting scissors, Hand clicking knife, Shoe, Hammer, Pricking Awl, Welt knife, Nail puller, Manchester nippers, Needles, Thread, Dendrite paste, Pasting brushes, Screwdriver, Leather thickness measuring gauge, PPE
Week 4	Machine controls and set up-I Theory Duration (hh:mm) 03:00 Practical Duration (hh:mm) 37:00 Corresponding NOS Code LSS/N2501	<ul> <li>Describe the manufacturer's instructions for setting up, adjusting and operating the equipment</li> <li>Explain the potential faults in the various processes and methods to avoid them</li> <li>Explain the different varieties of thread and their characteristics</li> <li>Adjust the machine controls wherever necessary</li> <li>Operate the machines safely and in accordance with manufacturer instructions</li> <li>Demonstrate the procedure of attaching a needle to the sewing machine</li> </ul>	Post bed sewing machine, Flat bed sewing machine, Sample leather pieces, Scissors, Measuring tape, Stitching awl, Stitch maker, Spring divider, Steel rule, Khurpi, Wooden mallet, Indenting scissors, Hand clicking knife, Shoe, Hammer, Pricking Awl, Welt knife, Nail puller, Manchester nippers, Needles, Thread, Dendrite paste, Pasting brushes, Screwdriver, Leather thickness measuring gauge, PPE
Week 5	Machine controls and set up-II  Theory Duration (hh:mm) 03:00  Practical Duration (hh:mm) 37:00  Corresponding NOS Code LSS/N2501	<ul> <li>Explain the importance of accuracy in stitching processes</li> <li>Estimate the expected length of time for stitching process</li> <li>Optimize the positioning and layout of materials to ensure a smooth and rapid throughput</li> <li>Adjust the tension and stitch length as per the specification</li> </ul>	Post bed sewing machine, Flat bed sewing machine, Zig zag machine, Sample leather pieces, Scissors, Measuring tape, Stitching awl, Stitch maker, Spring divider, Steel rule, Khurpi, Wooden mallet, Indenting scissors, Hand clicking knife, Shoe, Hammer, Pricking Awl, Welt knife, Nail puller, Manchester nippers, Needles, Thread, Dendrite paste, Pasting brushes, Screwdriver, Leather thickness measuring gauge, PPE
Week 6	Carry out Stitching Operations using Zigzag machine Theory Duration	<ul> <li>Check the upper components to conduct shade wise pairing</li> <li>Carry out stitching of correct materials in the right sequence as required by the production specification</li> </ul>	Post bed sewing machine, Flat bed sewing machine, Zig zag machine, Sample leather pieces,









S. No.	Module Name	Key Learning Outcomes	Equipment Required	
	(hh:mm) 00:00  Practical Duration (hh:mm) 40:00  Corresponding NOS Code LSS/N2501	<ul> <li>Perform back joining using zig zag machine</li> <li>Perform edge trimming operation</li> </ul>	Scissors, Measuring tape, Stitching awl, Stitch maker, Spring divider, Steel rule, Khurpi, Wooden mallet, Indenting scissors, Hand clicking knife, Shoe, Hammer, Pricking Awl, Welt knife, Nail puller, Manchester nippers, Needles, Thread, Dendrite paste, Pasting brushes, Screwdriver, Leather thickness	
Week 7	Carry out Stitching Operations using flat bed machine I  Theory Duration (hh:mm) 03:00  Practical Duration (hh:mm) 37:00  Corresponding NOS Code LSS/N2501	<ul> <li>Describe the process of flat bed stitching machine</li> <li>Describe back joining procedure</li> <li>Explain seam rubbing process</li> <li>Check the upper components to conduct shade wise pairing</li> <li>Carry out stitching of correct materials in the right sequence as required by the production specification</li> <li>Carry out back joining using flat bed machine</li> <li>Carry out seam rubbing using machine</li> <li>Carry out attachment of vamp with tongue using flat bed machine</li> </ul>	measuring gauge, PPE Post bed sewing machine, Flat bed sewing machine, Zig zag machine, Sample leather pieces, Scissors, Measuring tape, Stitching awl, Stitch maker, Spring divider, Steel rule, Khurpi, Wooden mallet, Indenting scissors, Hand clicking knife, Shoe, Hammer, Pricking Awl, Welt knife, Nail puller, Manchester nippers, Needles, Thread, Dendrite paste, Pasting brushes, Screwdriver, Leather thickness measuring gauge, PPE	
Week 8	Carry out Stitching Operations using flat bed machine II  Theory Duration (hh:mm) 00:00  Practical Duration (hh:mm) 40:00  Corresponding NOS Code LSS/N2501	<ul> <li>Apply adhesives on the components</li> <li>Carry out folding of components</li> <li>Carry out joining of upper and lining using flat bed machine</li> <li>Carry out edge trimming operation</li> </ul>	Post bed sewing machine, Flat bed sewing machine, Zig zag machine, Sample leather pieces, Scissors, Measuring tape, Stitching awl, Stitch maker, Spring divider, Steel rule, Khurpi, Wooden mallet, Indenting scissors, Hand clicking knife, Shoe, Hammer, Pricking Awl, Welt knife, Nail puller, Manchester nippers, Needles, Thread, Dendrite paste, Pasting brushes, Screwdriver, Leather thickness measuring gauge, PPE	









S. No.	Module Name	Key Learning Outcomes	Equipment Required		
Week 9	Carry out Stitching Operations using post bed machine  Theory Duration (hh:mm) 03:00  Practical Duration (hh:mm) 37:00  Corresponding NOS Code LSS/N2501	<ul> <li>Describe the process of post bed stitching machine</li> <li>List the tools and equipment used for the stitching process</li> <li>Check the upper components to conduct shade wise pairing</li> <li>Apply adhesives on the components</li> <li>Carry out folding of components</li> <li>Carry out joining of upper and lining using post bed machine</li> <li>Carry out joining of quarter and vamp using post bed machine</li> <li>Carry out edge trimming operation</li> </ul>	Post bed sewing machine, Flat bed sewing machine, Zig zag machine, Sample leather pieces, Scissors, Measuring tape, Stitching awl, Stitch maker, Spring divider, Steel rule, Khurpi, Wooden mallet, Indenting scissors, Hand clicking knife, Shoe, Hammer, Pricking Awl, Welt knife, Nail puller, Manchester nippers, Needles, Thread, Dendrite paste, Pasting brushes, Screwdriver, Leather thickness measuring gauge, PPE		
Week 10	Eyeleting and Lacing  Theory Duration (hh:mm) 03:00  Practical Duration (hh:mm) 37:00  Corresponding NOS Code LSS/N2501	<ul> <li>Describe the eyelet punching process</li> <li>Describe the eyelet setting process</li> <li>Describe the eyelet setting process</li> <li>Explain the lacing procedure</li> <li>Carry out eyelet punching</li> <li>Carry out eyelet putting</li> <li>Carry out eyelet setting</li> <li>Carry out lacing on the uppers</li> </ul>	Post bed sewing machine, Flat bed sewing machine, Zig zag machine, Sample leather pieces, Scissors, Measuring tape, Stitching awl, Stitch maker, Spring divider, Steel rule, Khurpi, Wooden mallet, Indenting scissors, Hand clicking knife, Shoe, Hammer, Pricking Awl, Welt knife, Nail puller, Manchester nippers, Needles, Thread, Dendrite paste, Pasting brushes, Screwdriver, Leather thickness measuring gauge, PPE		
Week 11	Visual inspection Theory Duration (hh:mm) 03:00 Practical Duration (hh:mm) 37:00 Corresponding NOS Code LSS/N2501	<ul> <li>Describe the visual inspection procedure of stitched components</li> <li>List the equipment's used for visual inspection</li> <li>Carry out visual inspection as per the specifications on the job card</li> <li>Identify the stitched items which do not meet the production specification</li> <li>Report the component which do not meet the product specification to the supervisor</li> </ul>	Post bed sewing machine, Flat bed sewing machine, Zig zag machine, Sample leather pieces, Scissors, Measuring tape, Stitching awl, Stitch maker, Spring divider, Steel rule, Khurpi, Wooden mallet, Indenting scissors, Hand clicking knife, Shoe, Hammer, Pricking Awl, Welt knife, Nail puller, Manchester nippers,		









S. No.	Module Name	Key Learning Outcomes	Equipment Required		
			Needles, Thread, Dendrite paste, Pasting brushes, Screwdriver, Leather thickness measuring gauge, PPE		
Week 12	Cleaning and maintenance  Theory Duration (hh:mm) 00:00  Practical Duration (hh:mm) 40:00  Corresponding NOS Code LSS/N2501	<ul> <li>Identify the tools and materials used for cleaning</li> <li>Carry out cleaning of machines</li> <li>Identify the basic maintenance tools</li> <li>Check whether the tools are free from defects</li> <li>Check whether the tools are clean and safe to use</li> <li>Perform basic maintenance of machineries</li> </ul>	Post bed sewing machine, Flat bed sewing machine, Zig zag machine, Sample leather pieces, Scissors, Measuring tape, Stitching awl, Stitch maker, Spring divider, Steel rule, Khurpi, Wooden mallet, Indenting scissors, Hand clicking knife, Shoe, Hammer, Pricking Awl, Welt knife, Nail puller, Manchester nippers, Needles, Thread, Dendrite paste, Pasting brushes, Screwdriver, Leather thickness measuring gauge, PPE		
Week 13	Reporting and documentation  Theory Duration (hh:mm) 00:00  Practical Duration (hh:mm) 40:00  Corresponding NOS Code LSS/N2501	<ul> <li>Carry out reporting of risks that likely affect services to the relevant person</li> <li>Carry out filling the forms, records and other documentation</li> <li>Follow company reporting procedures about defective tools and machines</li> <li>Report the defective machines, tools and equipment to the supervisor</li> </ul>	Post bed sewing machine, Flat bed sewing machine, Zig zag machine, Sample leather pieces, Scissors, Measuring tape, Stitching awl, Stitch maker, Spring divider, Steel rule, Khurpi, Wooden mallet, Indenting scissors, Hand clicking knife, Shoe, Hammer, Pricking Awl, Welt knife, Nail puller, Manchester nippers, Needles, Thread, Dendrite paste, Pasting brushes, Screwdriver, Leather thickness measuring gauge, PPE		
Week 14	Sorting and placing Theory Duration (hh:mm) 00:00 Practical Duration (hh:mm) 40:00	<ul> <li>Minimize the risk of damage</li> <li>Carry out sorting of workplace</li> <li>Carry out validation of the stitched item</li> <li>Pass the stitched item to the next stage in the manufacturing process</li> </ul>	Post bed sewing machine, Flat bed sewing machine, Zig zag machine, Sample leather pieces, Scissors, Measuring tape, Stitching awl, Stitch maker, Spring divider, Steel rule, Khurpi, Wooden mallet, Indenting scissors,		









-	Madula Nama   Vay Learning Outcomes   Equipment Denvised				
S. No.	Module Name	Key Learning Outcomes	Equipment Required		
	Corresponding NOS Code LSS/N2501		Hand clicking knife, Shoe, Hammer, Pricking Awl, Welt knife, Nail puller, Manchester nippers, Needles, Thread, Dendrite paste, Pasting brushes, Screwdriver, Leather thickness measuring gauge, PPE		
Week 15	Inspection I Theory Duration (hh:mm) 03:00 Practical Duration (hh:mm) 37:00 Corresponding NOS Code LSS/N2502	<ul> <li>Describe types of faults in materials and tools</li> <li>Explain the importance of product quality</li> <li>Describe the inspection procedure</li> <li>Check the materials and component parts to meet specifications</li> <li>Check the quality and appearance of the uppers during material movement</li> <li>Maintain the required productivity and quality levels</li> <li>Carry out quality checks at regular intervals</li> <li>Count the number of uppers at the start and end of every stage in the stitching processes</li> <li>Check whether upper components are paired shade wise as per the specifications</li> </ul>	Post bed sewing machine, Flat bed sewing machine, Zig zag machine, Sample leather pieces, Scissors, Measuring tape, Stitching awl, Stitch maker, Spring divider, Steel rule, Khurpi, Wooden mallet, Indenting scissors, Hand clicking knife, Shoe, Hammer, Pricking Awl, Welt knife, Nail puller, Manchester nippers, Needles, Thread, Dendrite paste, Pasting brushes, Screwdriver, Leather thickness measuring gauge, PPE		
Week 16	Inspection II Theory Duration (hh:mm) 03:00 Practical Duration (hh:mm) 37:00 Corresponding NOS Code LSS/N2502	<ul> <li>Explain the causes of lost production and material wastage</li> <li>Describe the process to maintain the flow of production</li> <li>Check the stitched component as per the design specifications</li> <li>Check the stitch for damages</li> <li>Check that no spillage of adhesives appears on the uppers</li> <li>Check that the folding is done properly</li> <li>Check whether the edge trimming is done correctly</li> <li>Check whether the eyelets are properly placed</li> <li>Check whether the lacing is done correctly</li> <li>Carry out visual inspection on all aspects of the stitching process</li> </ul>	Post bed sewing machine, Flat bed sewing machine, Zig zag machine, Sample leather pieces, Scissors, Measuring tape, Stitching awl, Stitch maker, Spring divider, Steel rule, Khurpi, Wooden mallet, Indenting scissors, Hand clicking knife, Shoe, Hammer, Pricking Awl, Welt knife, Nail puller, Manchester nippers, Needles, Thread, Dendrite paste, Pasting brushes, Screwdriver, Leather thickness measuring gauge, PPE		
Week 17	Reporting and Documentation Theory Duration (hh:mm)	<ul> <li>Identify the causes of faults that affect product quality</li> <li>Carry out rectification of faults to maintain product quality</li> <li>Follow reporting procedures where the cause of faults cannot be identified</li> </ul>	Post bed sewing machine, Flat bed sewing machine, Zig zag machine, Sample leather pieces, Scissors, Measuring		









S. No.	Module Name	Key Learning Outcomes	Equipment Required
Week 18	O0:00  Practical Duration (hh:mm) 40:00  Corresponding NOS Code LSS/N2502  Sorting and placing  Theory Duration (hh:mm) 00:00  Practical Duration (hh:mm) 40:00  Corresponding NOS Code LSS/N2502	<ul> <li>Sorting of tools and materials</li> <li>Pass the stitched uppers to the next stage of production</li> <li>Carry out the closedown procedure after the work is complete</li> </ul>	tape, Stitching awl, Stitch maker, Spring divider, Steel rule, Khurpi, Wooden mallet, Indenting scissors, Hand clicking knife, Shoe, Hammer, Pricking Awl, Welt knife, Nail puller, Manchester nippers, Needles, Thread, Dendrite paste, Pasting brushes, Screwdriver, Leather thickness measuring gauge, PPE Post bed sewing machine, Flat bed sewing machine, Zig zag machine, Sample leather pieces, Scissors, Measuring tape, Stitching awl, Stitch maker, Spring divider, Steel rule, Khurpi, Wooden mallet, Indenting scissors, Hand clicking knife, Shoe, Hammer, Pricking Awl, Welt knife, Nail puller, Manchester nippers, Needles, Thread, Dendrite paste, Pasting brushes, Screwdriver, Leather thickness measuring gauge, PPE
Week 19	Maintenance of work area  Theory Duration (hh:mm) 03:00  Practical Duration (hh:mm) 37:00  Corresponding NOS Code LSS/N8501	<ul> <li>Describe the importance of:         <ul> <li>Good time keeping and attendance</li> <li>Minimizing production cost</li> <li>Taking action when the problem is identified</li> </ul> </li> <li>Prepare the work area as per the requirement</li> <li>Maintain a clean and hazard free working area</li> <li>Deal with work interruption safely</li> <li>Move around the workplace with care</li> <li>Create a comfortable position with the correct posture while working</li> <li>Maintain proper lighting and ventilation to make sure that there is general comfort in the work area</li> </ul>	Post bed sewing machine, Flat bed sewing machine, Zig zag machine, Sample leather pieces, Scissors, Measuring tape, Stitching awl, Stitch maker, Spring divider, Steel rule, Khurpi, Wooden mallet, Indenting scissors, Hand clicking knife, Shoe, Hammer, Pricking Awl, Welt knife, Nail puller, Manchester nippers, Needles, Thread, Dendrite paste, Pasting brushes, Screwdriver, Leather thickness measuring gauge, PPE









S.	Module Name Key Learning Outcomes Equipment Required				
S. No.	Wodule Name	Key Learning Outcomes	Equipment Required		
Week 20	Maintenance of tools and machines  Theory Duration (hh:mm) 00:00  Practical Duration (hh:mm) 40:00  Corresponding NOS Code LSS/N8501	<ul> <li>Handle materials, equipment, tools and machines safely and correctly</li> <li>Report unsafe equipment and other dangerous occurrences</li> <li>Check the condition of tools and equipment used for machine service</li> <li>Carry out maintenance and cleaning outside the machine responsibility</li> <li>Check that the correct machine guards are in place</li> <li>Demonstrate the method of cleaning tools, equipment and machines appropriately</li> <li>Store cleaning equipment safely after their use</li> <li>Carry out disposal of waste safely in the designated location</li> </ul>	Post bed sewing machine, Flat bed sewing machine, Zig zag machine, Sample leather pieces, Scissors, Measuring tape, Stitching awl, Stitch maker, Spring divider, Steel rule, Khurpi, Wooden mallet, Indenting scissors, Hand clicking knife, Shoe, Hammer, Pricking Awl, Welt knife, Nail puller, Manchester nippers, Needles, Thread, Dendrite paste, Pasting brushes, Screwdriver, Leather thickness measuring gauge, PPE		
Week 21	Maintain health, safety and security at the workplace-I Theory Duration (hh:mm) 03:00 Practical Duration (hh:mm) 37:00 Corresponding NOS Code LSS/N8601	<ul> <li>Explain the different types of personal protective equipment</li> <li>Describe the handling and storage of hazardous substances</li> <li>Comply with health and safety related instructions applicable to the workplace</li> <li>Demonstrate the method of wearing the different Personal Protective equipment as per protocol</li> <li>Carry out own activities in line with approved guidelines and procedures</li> <li>Check for any malfunction in machinery and equipment</li> <li>Repair the possible malfunction in machinery and equipment</li> <li>Report any service malfunctions that cannot be rectified with documentation</li> </ul>	Post bed sewing machine, Flat bed sewing machine, Zig zag machine, Sample leather pieces, Scissors, Measuring tape, Stitching awl, Stitch maker, Spring divider, Steel rule, Khurpi, Wooden mallet, Indenting scissors, Hand clicking knife, Shoe, Hammer, Pricking Awl, Welt knife, Nail puller, Manchester nippers, Needles, Thread, Dendrite paste, Pasting brushes, Screwdriver, Leather thickness measuring gauge, PPE		
Week 22	Maintain health, safety and security at the workplace-II  Theory Duration (hh:mm) 00:00  Practical Duration (hh:mm) 40:00  Corresponding NOS Code LSS/N8601	<ul> <li>Prepare a checklist to monitor the workplace and work processes for potential risks and threats</li> <li>Store materials and equipment in line with manufacturer's and organizational requirements</li> <li>Carry out periodic walk-through to keep work area free from hazards and obstructions</li> <li>Report hazards and potential risks/threats to supervisors or other authorized personnel</li> <li>Carry out mock drills/ evacuation procedure at the workplace</li> <li>Demonstrate procedures pertaining to first aid and firefighting in the event of</li> </ul>	Post bed sewing machine, Flat bed sewing machine, Zig zag machine, Sample leather pieces, Scissors, Measuring tape, Stitching awl, Stitch maker, Spring divider, Steel rule, Khurpi, Wooden mallet, Indenting scissors, Hand clicking knife, Shoe, Hammer, Pricking Awl, Welt knife, Nail puller, Manchester nippers,		









S. No.	Module Name	Key Learning Outcomes	Equipment Required		
		<ul> <li>workplace emergencies</li> <li>Follow organization procedures for shutdown and evacuation when required</li> </ul>	Needles, Thread, Dendrite paste, Pasting brushes, Screwdriver, Leather thickness measuring gauge, PPE		
Week 23	Comply with industry, regulatory and organizational requirements  Theory Duration (hh:mm) 00:00  Practical Duration (hh:mm) 40:00  Corresponding NOS Code LSS/N8701	<ul> <li>Carry out work functions in accordance with legislation and regulations, organizational guidelines and procedures</li> <li>Obtain clarifications on policies and procedures from the supervisor</li> <li>Follow the policies and procedures within the work practices</li> <li>Identify any possible deviation to ethical requirements</li> <li>Report any possible deviation to ethical requirements</li> </ul>	Sample Legal Documents		
Week 24	Revision  Theory Duration: (hh:mm) 04:00  Practical Duration: (hh:mm) 36:00  Corresponding NOS Code LSS/N2501 LSS/N2502 LSS/N8501 LSS/N8601 LSS/N8701	<ul> <li>Summarize the skills learned in previous weeks</li> <li>Practice all the previous exercises</li> </ul>	All the equipment as mentioned above for Stitching Operator		
	Total Duration Theory Duration 40:00 Practical Duration 920:00	Unique Equipment Required: Post bed sewing machine, Flatbed sewing machine, Zig zag machine, Sample leather pieces, Scissors, Measuring tape, Stitching awl, Stitch maker, Spring divider, Steel rule, Khurpi, Wooden mallet, Indenting scissors, Hand clicking knife, Shoe Hammer, Pricking Awl, Welt knife, Nail puller, Manchester nippers, Needles, Thread, Dendrite paste, Pasting brushes, Screwdriver, Leather thickness measuring gauge, Sample leather defects materials, Gloves, Helmet, Safety shoe, Ear plug, Apron, Goggles, Cleaning cloth, Water bucket, Cleaning materials, Mop, Dust bin, Broom, First aid kit, Fire extinguisher, Sample legal documents			

Grand Total Course Duration: 960 Hours, 0 Minutes









### **Assessment Criteria**

Job Role	Stitching Operator (Footwear)
Qualification Pack	LSS/Q2501, V1.0
Sector Skill Council	Leather 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 candidate 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

			Total	Out	Marks A	llocation
NO	S	Performance Criteria	Mark	Of	Theory	Practical Skills
1.	LSS/N2501: Carry out	PC1. Follow the instructions on the work ticket/ job card		2	0	2
	stitching operation	PC2. Make sure that the work area is free from hazards		2	0	2
	using different machines	PC3. Ensure the materials used meet the specification matching		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	100	2	0	2
		PC7. Check the equipment prior to making the stitching, including:  Correct controls  Correct attachments  Changing needles  Changing threads  Changing awls  Correct Timing		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		2	0	2









		Total	Out	Marks Allocation	
NOS	Performance Criteria	Mark	Of	Theory	Practical Skills
	necessary				
	PC11. Operate machines safely and in		40	40	0
	accordance with guidelines		12	10	2
	PC12. Estimate the expected length of		_	0	0
	time for the process		2	0	2
	PC13. Optimize the positioning and				
	layout of materials to ensure a smooth		2	0	2
	and rapid throughput				
	PC14. Adjust the tension and stitch		2	0	2
	length			0	2
	PC15. Check the upper components and		2	0	2
	conduct shade wise pairing			0	2
	PC16. Stitch the correct materials in the				
	right sequence as required by the		2	0	2
	production specification				
	PC17. Perform back joining/quarter back				
	joining using zigzag machine/flat bed		2	0	2
	machine				
	PC18. Perform seam rubbing by				
	machine if back joining done by flat bed		2	0	2
	machine				
	PC1. Check the upper components and		2	0	2
	conduct shade wise pairing		2	0	2
	PC19. Attach vamp with tongue using		0	0	0
	flat bed machine		2	0	2
	PC20. Apply adhesives on the		4	0	4
	components		1	0	1
	PC21. Fold the components by		2	0	2
	hand/machine			0	2
	PC22. Join upper and lining using		_	0	2
	flat/post bed machine		2	0	2
	PC23. Join quarter with vamp using post		4	_	4
	bed machine		1	0	1
	PC24. Perform edge trimming operation		7	-	0
	by machine/hand		7	5	2
	PC25. Perform eyeleting by		_	0	0
	machine/hand		2	0	2
	PC26. Perform eyelet punching, eyelet		_	_	0
	putting and eyelet setting by hand		2	0	2
	PC27. Do lacing on the uppers		1	0	1
	PC28. Visual inspection as per			_	4
	specifications in the job card		1	0	1
	PC29. Respond accordingly where	1			
	stitched items do not meet production		1	0	1
	specification				
	PC30. Carry out basic maintenance of				
	machinery and keep them clean after		1	0	1
	use				
	PC31. Report risks/ problems likely to				
	affect services to the relevant person		2	0	2
	promptly and accurately				
	PC32. Complete forms, records and	1	_	_	0
	other documentation		2	0	2
	PC33. Follow company reporting	1			
	procedures about defective tools and		7	5	2
	machines which affect work and report				
I.					









		Total	Out	Marks Allocation	
NOS	Performance Criteria	Mark	Of	Theory	Practical Skills
	risks/ problems likely to affect services to				
	the relevant person promptly and				
	accurately				
	PC34. Report defective machines, tools				
	and/or equipment to the responsible		2	0	2
	person				
	PC35. Sort and place work to the next		_	_	_
	stage of production and minimize the risk		3	0	3
	of damage				
	PC36. Pass the stitched item to the next		2	_	2
	stage in the manufacturing process after validation		3	0	3
	Total		100	30	70
2. LSS/N2502:	PC1. Ensure materials and component				
Contribute to	parts meet specifications		1	0	1
achieving	PC2. Ensure that the quality and				
product	appearance of the uppers are not		6	5	1
quality in	affected during materials movement				
stitching	PC3. Ensure the quality of the product		11	10	1
operation	meets specification during production		11	10	ı
	PC4. Maintain the required productivity		1	0	1
	and quality levels		'	U	'
	PC5. Carry out quality checks at agreed		1	0	1
	intervals and in the approved way		-		-
	PC6. Count and verify the number of				
	uppers are as per job card at the start and end of every stage in the stitching		11	10	1
	processes				
	PC7. Check the upper components are				
	paired shade wise as per the		1	0	1
	specifications in the job card				
	PC8. Check that the stitching is done				
	properly as per the design specifications		0.5	0	0.5
	and no damage happens to the		0.5		0.5
	appearance and quality	50			
	PC9. Check that no spillage of adhesives		0.5	0	0.5
	appear on the uppers	-			
	PC10. Check that the folding is done properly		1	0	1
	PC11. Check the edge trimming, putting	1			
	of eyelets and lacing are done correctly		0.5	0	0.5
	PC12. Conduct a visual inspection on all	1	0.5	_	0.5
	aspects of the stitching process	]	0.5	0	0.5
	PC13. Maintain the continuity of	]			
	production with minimum interruptions		1	0	1
	and downtime	1			
	PC14. Ensure minimum of wastage and		7	6	1
	their proper disposal	-			
	PC15. Identify causes of faults and take action to rectify the same to maintain		2.5	2	0.5
	product quality		2.5	_	0.5
	PC16. Follow reporting procedures	1			
	where the cause of faults cannot be		1	0	1
	identified	]			
	PC17. Pass the stitched uppers with		2.5	2	0.5
	support of the assistant operator for next		2.0		0.0









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			Total	Out	Marks A	llocation
NC	s	Performance Criteria	Mark	Of	Theory	Practical Skills
						SKIIIS
		process				
		PC18. Leave work area safe and secure		1	0	1
		when work is complete				4.5
		Total		50	35	15
3.	LSS/N8501:	PC1. Handle materials, machinery,		2	0	2
	Maintain the work area,	equipment and tools safely and correctly		_		<u>-</u>
		PC2. Use correct lifting and handling		2	0	2
	tools and	procedures				
	machines	PC3. Use materials to minimize waste		3	0	3
		PC4. Prepare and organize work		2	0	2
		PC5. Maintain a clean and hazard free		3	0	3
		working area				
		PC6. Deal with work interruptions		2	0	2
		PC7. Move around the workplace with		3	0	3
		care			U	
		PC8. Maintain tools and equipment		3	0	3
1		PC9. Carry out running maintenance		4	2	2
1		within agreed schedules		4		
		PC10. Carry out maintenance and/or		2	1	1
		cleaning outside responsibility			I	ı
		PC11. Report unsafe equipment and		3	2	1
		other dangerous occurrences	_	3		ı
		PC12. Ensure that the correct machine		1	0	1
		guards are in place		ı	U	I
		PC13. Work in a comfortable position		2	1	1
	with	with the correct posture			I	Į
		PC14. Use cleaning equipment and				
		methods appropriate for the work to be		3	2	1
		carried out				
		PC15. Dispose of waste safely in the		3	2	1
		designated location		3		Ī
		PC16. Store cleaning equipment safely		2	1	1
		after use			I	Į
		PC17. Complete and store accurate		2	1	1
		records and documentation			I	ı
		PC18. Maintain proper lighting,				
		ventilation to make sure general comfort		2	1	1
		is there while working				
		PC19. Give inputs and assist in		1	0	1
		completing documentation	]	'	J	I
		PC20. Report the need for maintenance				
		and/or cleaning outside your area of		1	0	1
		responsibility				
		PC21. Ensure safe and correct handling		2	1	1
		of materials, equipment and tools			<u>'</u>	ı
		PC22. Maintain appropriate environment				
		to protect stock from pilfering, theft,		2	1	1
		damage and deterioration				
		Total		50	15	35
4.	LSS/N8601:	PC1. Comply with health and safety				_
	Maintain	related instructions applicable to the		1	0	1
	health, safety	workplace				
	and security at	PC2. Use and maintain personal	25	1	0	1
	workplace	protective equipment as per protocol	1			•
		PC3. Carry out own activities in line with		1	0	1
		approved guidelines and procedures				









NOC	Porformana Critaria			Out	Marks A	llocation
NOS		Performance Criteria	Mark	Of	Theory	Practical Skills
		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		1	0	1
		equipment				•
		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
		organizational requirements				
		PC9. Safely handle and move waste and		4	_	4
		debris		1	0	1
		PC10. Minimize health and safety risks		4	_	4
		to self and others due to own actions		1	0	1
		PC11. Seek clarifications, from				
		supervisors or other authorized		1	0	1
		personnel in case of perceived risks				
		PC12. Monitor the workplace and work		1	0	1
		processes for potential risks and threats		ı	U	ļ
		PC13. Carry out periodic walk-through to				
		keep work area free from hazards and		0.5	0	0.5
		obstructions, if assigned				
		PC14. Report hazards and potential				
		risks/ threats to supervisors or other		5.5	5	0.5
		authorized personnel				
		PC15. Participate in mock drills/			_	
		evacuation procedures organized at the		0.5	0	0.5
		workplace				
		PC16. Undertake first aid, fire-fighting		,		4
		and emergency response training, if		1	0	1
		asked to do so PC17. Take action based on instructions				
		in the event of fire, emergencies or		0.5	0	0.5
		accidents		0.5		0.5
		PC18. Follow organization procedures				
		for shutdown and evacuation when		1	0	1
		required		'		ı
		Total		25	10	15
5. LSS/	/N8701:	PC1. Carry out work functions in				
	ply with	accordance with legislation and		4.0	_	_
indu		regulations, organizational guidelines		10	5	5
	latory and	and procedures				
	nizational	PC2. Seek and obtain clarifications on				
requ	irements	policies and procedures, from the		3	0	3
		supervisor or other authorized personnel	25			
		PC3. Apply and follow these policies and	23	2	0	2
		procedures within the work practices			U	
		PC4. Provide support to the supervisor		_	_	_
		and team members in enforcing these		7	5	2
		considerations				
		PC5. Identify and report any possible		3	0	3
		deviation to these requirements		25	10	15
		Total		25	וט	15









# **Annexure I: Tools and Equipment for Basic Training (Block I)**

Sector: Leather

Block I QP Code with Version No. or Course Code: LSS/Q2501, V1.0

Block I QP Name or Course Name: Stitching Operator

**Block I NSQF Level**: 4

S. No.	Equipment Name	Minimum number of Equipment required (per batch of 30 trainees)	Unit Type	Is this a mandatory Equipment to be available at the Training Centre (Yes/No)	Dimension/ Specification / Description of the Equipment/ ANY OTHER REMARK
1	Post bed sewing machine	1	Nos	Yes	7" Post bed assembled table unit with 800W 1HP adjustable speed Smart Servo motor
2	Flat bed sewing machine	1	Nos	Yes	Stainless steel bed plate 6 utility stitches including a 4-step buttonhole, top drop-in bobbin system, 3 needle positions
3	Cylinder bed type sewing machine	1	Nos	Yes	2000 rpm high-speed, Sew quiet 3000 DC Servomotor 48 by 20 by 39 inches
4	Sample leather pieces	1	Nos	Yes	As per client specification
5	Scissors	10	Nos	Yes	150mm and 300mm
6	Measuring tape	2	Nos	Yes	Standard
7	Stitching awl	2	Nos	Yes	Wooden and stainless steel, Dig hole, pick thread, marking, Length:12cm
8	Stitch maker	2	Nos	Yes	Wood and steel, Screwdriver included to help change the wheels. Interchangeable wheels for marking 5, 6 and 7 holes per inch
9	Spring divider	2	Nos	Yes	150mm Spring Divider
10	Steel rule	2	Nos	Yes	Stainless Steel 6" - 15 NOS & 12 "
11	Khurpi	2	Nos	Yes	Wooden Handle Height:- 9 Width:- 7.5 Length: 34
12	Wooden mallet	2	Nos	Yes	SOBA 112mm 4-1/2









Inch, 112 mm, 0.500 kg		1	<u> </u>	·	1	
Hand clicking knife   5						Inch, 112 mm, 0.500 kg
15	13	Indenting scissors	2	Nos	Yes	150mm and 300mm
Tempered Sharp Steel   Tempered Sharp Sharp Steel   Tempered Sharp Steel   Tempered Sharp Steel   Tempered Sharp Steel   Tempered Sharp Sharp Steel   Tempered Sharp Steel   Tempered Sharp Sharp Steel   Tempered Sharp S	14	Hand clicking knife	5	Nos	Yes	Stainless Steel
16	15	Shoe Hammer	2	Nos	Yes	
Nail puller   2	16	Pricking Awl	5	Nos	Yes	Tempered sharp steel needle with wooden
19	17	Welt knife	2	Nos	Yes	· ·
19	18	Nail puller	2	Nos	Yes	75x5mm Nail Puller
Type of Needles: 2/0  21 Thread  2 Set  Yes  1x 285 yards 1mm sewing waxed thread 150D  22 Dendrite paste  1 Nos  Yes  FF555 synthetic rubber  1" x7/16" 11/2" x1/2" 2" x 9/16" 3" x 11/16"  24 Sample leather defects material  25 Screwdriver  1 Set  Yes  NA  Measuring Range: 0 to 10 mm Least count of dial gauge: 0.01 Diameter of anvil: 50 mm approximately Diameter of indenter: 10 gm/cm2  Throat depth: 50 mm  28 Dust Pan with Handle & Broom  Press on Nos  Yes  Long handle  Long handle	19		2	Nos	Yes	115mm Nipper
Sewing waxed thread   150D	20	Needles	2	Set	Yes	Type of Needles: 2/0
Pasting brushes  I Nos Yes  I" x 7/16" 11/2" x 1/2" 2" x 9/16" 3" x 11/16"  24 Sample leather defects material  25 Screwdriver  1 Set  Nos  No  (Can be made available at OJT site)  I Diameter of anvil: 50 mm approximately I Diameter of indenter: 100 gm/cm2  Throat depth: 50 mm  27 Garbage Bins  3 Nos  Yes  Long handle  I" x 7/16" 11/2" x 1/2" 2" x 9/16" 3" x 11/16"  NA  Set  Yes  Small size and long size  Measuring Range: 0 to 10 mm  Least count of dial gauge: 0.01 Diameter of anvil: 50 mm approximately Diameter of indenter: 100 gm/cm2  Throat depth: 50 mm  28 Dust Pan with Handle & Broom  Dry and wet mob  Each one  Nos  Yes  Long handle	21	Thread	2	Set	Yes	sewing waxed thread
24 Sample leather defects material  25 Screwdriver  26 Leather thickness measuring gauge  27 Garbage Bins  28 Dust Pan with Handle & Broom  29 Dry and wet mob  29 Dry and wet mob  29 Dry and wet mob  28 Sample leather 1 Set Yes NA  Set Yes Small size and long size  Yes Small size and long size  Yes Small size and long size  (Can be made available at OJT site)  (Can be made available at OJT site)  In Mos No  (Can be made available at OJT site)  In Mos No  Yes Small size and long size  Measuring Range: 0 to 10 mm  Least count of dial gauge: 0.01  Diameter of anvil: 50 mm enderer: 100 gm/cm2  Throat depth: 50 mm  Yes Long handle	22	Dendrite paste	1	Nos	Yes	
defects material   25   Screwdriver   1   Set   Yes   Small size and long size	23	Pasting brushes	1	Nos	Yes	1 1/2" x 1/2" 2" x 9/16"
26 Leather thickness measuring gauge  1 Nos (Can be made available at OJT site)  1 Nos (Can be made available at OJT site)  1 Diameter of anvil: 50 mm approximately Diameter of indenter: 100 gm/cm2  Throat depth: 50 mm  27 Garbage Bins  3 Nos Yes  28 Dust Pan with Handle & Broom  29 Dry and wet mob  Each one  Nos Yes  Measuring Range: 0 to 10 mm Least count of dial gauge: 0.01 Diameter of anvil: 50 mm Throat depth: 50 mm T	24	-	1	Set	Yes	NA
measuring gauge  (Can be made available at OJT site)  (Can be made available at OJT site)  (Can be made available at OJT site)  (Diameter of anvil: 50 mm approximately  Diameter of indenter: 10 mm  Pressure on indenter: 100 gm/cm2  Throat depth: 50 mm  30 lts capacity  28 Dust Pan with Handle & Broom  1 Nos Yes Long handle  29 Dry and wet mob Each one Nos Yes Long handle	25	Screwdriver	1	Set	Yes	Small size and long size
28 Dust Pan with Handle & Broom  29 Dry and wet mob Each one Nos Yes Long handle		measuring gauge			(Can be made available at OJT site)	to 10 mm  Least count of dial gauge: 0.01  Diameter of anvil: 50 mm approximately  Diameter of indenter: 10 mm  Pressure on indenter: 100 gm/cm2  Throat depth: 50 mm
Handle & Broom  29 Dry and wet mob Each one Nos Yes Long handle	27	Garbage Bins	3	Nos	Yes	30 Its capacity
,	28		1	Nos	Yes	Long handle
,	29	Dry and wet mob	Each one	Nos	Yes	Long handle
		_				· · · · · ·
31 PPE set 2 Nos Yes Standard	31	PPE set	2	Nos	Yes	Standard
32 First aid kit 1 Nos Yes Standard						
	33	Fire Extinguisher	1	Nos	Yes	ABC Type









# Annexure II: Tools and Equipment for Hands-On at Employer Location (Block II)

Sector: Leather

Block II QP Code with Version No. or Course Code: LSS/Q2501, V1.0

Block II QP Name or Course Name: Stitching Operator

**Block II NSQF Level**: 4

S. No.	Equipment Name	Minimum number of Equipment required (per batch of 30 trainees)	Unit Type	Is this a mandatory Equipment to be available at the Training Centre (Yes/No)	Dimension/ Specification/ Description of the Equipment/ ANY OTHER REMARK
1	Post bed sewing machine	1	Nos	Yes	7" Post bed assembled table unit with 800W 1HP adjustable speed Smart Servo motor
2	Flat bed sewing machine	1	Nos	Yes	Stainless steel bed plate 6 utility stitches including a 4-step buttonhole, top drop-in bobbin system, 3 needle positions
3	Cylinder bed type sewing machine	1	Nos	Yes	2000 rpm high-speed, Sew quiet 3000 DC Servomotor 48 by 20 by 39 inches
4	Sample leather pieces	1	Nos	Yes	As per client specification
5	Scissors	10	Nos	Yes	150mm and 300mm
6	Measuring tape	2	Nos	Yes	Standard
7	Stitching awl	2	Nos	Yes	Wooden and stainless steel, Dig hole, pick thread, marking, Length:12cm
8	Stitch maker	2	Nos	Yes	Wood and steel, Screwdriver included to help change the wheels. Interchangeable wheels for marking 5, 6 and 7 holes per inch
9	Spring divider	2	Nos	Yes	150mm Spring Divider
10	Steel rule	2	Nos	Yes	Stainless Steel 6" - 15 NOS & 12 "
11	Khurpi	2	Nos	Yes	Wooden Handle Height:- 9 Width:- 7.5 Length: 34
12	Wooden mallet	2	Nos	Yes	SOBA 112mm 4-1/2 Inch, 112 mm, 0.500 kg
13	Indenting scissors	2	Nos	Yes	150mm and 300mm
14	Hand clicking knife	5	Nos	Yes	Stainless Steel









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15	Shoe Hammer	2	Nos	Yes	100 gms, 200 gms, 300 gms and 500 gms
16	Pricking Awl	5	Nos	Yes	Tempered sharp steel
					needle with wooden
		_			handle
17	Welt knife	2	Nos	Yes	knife-edge-square-wwelt-
40	NI II				17-x-17
18	Nail puller	2	Nos	Yes	75x5mm Nail Puller
19	Manchester nippers	2	Nos	Yes	115mm Nipper
20	Needles	2	Set	Yes	Material: Stainless Steel
					Type of Needles: 2/0
21	Thread	2	Set	Yes	1x 285 yards 1mm sewing
					waxed thread 150D
22	Dendrite paste	1	Nos	Yes	FF555 synthetic rubber
23	Pasting brushes	1	Nos	Yes	1" x 7/16"
					1 1/2" x 1/2"
					2" x 9/16"
24	Completed	1	Cot	Yes	3" x 11/16"
24	Sample leather defects material	1	Set	res	NA
25	Screwdriver	1	Set	Yes	Small size and long size
26	Leather thickness	1	Nos	No	Measuring Range: 0 to
	measuring gauge	-			10 mm
				(Can be made	Least count of dial
				available at	gauge: 0.01
				OJT site)	Diameter of anvil:
					50mm approximately
					<ul> <li>Diameter of</li> </ul>
					indenter:10 mm
					<ul> <li>Pressure on indenter:</li> </ul>
					100 gm/cm2
					Throat depth:50mm
27	Garbage Bins	3	Nos	Yes	30 Its capacity
28	Dust Pan with	1	Nos	Yes	Long handle
20	Handle & Broom	'	1403	103	Long nandle
29	Dry and wet mob	Each one	Nos	Yes	Long handle
30	Water Bucket	1	Nos	Yes	20 Its capacity
					' '
31	PPE set	2	Nos	Yes	Standard
32	First aid kit	1	Nos	Yes	Standard
33	Fire Extinguisher	1	Nos	Yes	ABC Type









## **Further Learning**

#### **Learning Pathways**

After completion of the apprenticeship training, the candidates have wide career choices available with them in the Leather industry. A candidate after completing apprenticeship can be skilled horizontally in various segments like Pre Assembly Operator (LSS/Q2601), Skiving Operator (LSS/Q2401), Cutter (Footwear) (LSS/Q2301) etc. and vertically as Moulding Supervisor (LSS/Q7601), Line Supervisor (LSS/Q3102), and Quality Control Inspector (Footwear) (LSS/Q3101) in plant hierarchy.

#### **Employment Opportunities**

Apart from above mentioned avenues, the apprentice can always aspire to be employed in one of the following:

- 1. **Footwear manufacturing units in India**: The apprentice may be employed with the biggest player of the trades and be a part of their manufacturing set and deliver quality work.
- 2. **Footwear manufacturing set up/Retail Unit**: The apprentice may be encouraged to set up their own manufacturing unit, which they may also channelize into owning a retail unit and be able to sell their merchandise directly to the consumers
- 3. **Education and Training**: They may also take up the role of the instructor in this field where they can impart their manufacturing knowledge to the aspiring students.