





Transforming the skill landscape



Participant Handbook

Sector Leather

Sub-Sector **Footwear/Goods and Garments**

Occupation Repairing & Footwear Making

Reference ID: LSS/Q4101, Version 1.0 NSQF Level 4

Cobbler

Published By:

Copyright © 2016

Leather Sector Skill Council LSSC Contact Details: Address: Annex Building, CFTI Campus, No.65/1, GST Road, Guindy, Chennai - 600032, Tamil Nadu, India Email : info1@leatherssc.org Phone : 044 22502350

Disclaimer

The information contained herein has been obtained from sources reliable to LSSC. LSSC disclaims all warranties to the accuracy, completeness or adequacy of such information. LSSC shall have no liability for errors, omissions, or inadequacies, in the information contained herein, or for interpretations thereof. Every effort has been made to trace the owners of the copyright material included in the book. The publishers would be grateful for any omissions brought to their notice for acknowledgements in future editions of the book. No entity in LSSC shall be responsible for any loss whatsoever, sustained by any person who relies on this material. The material in this publication is copyrighted. No parts of this publication may be reproduced, stored or distributed in any form or by any means either on paper or electronic media, unless authorized by the LSSC.



Shri Narendra Modi Prime Minister of India







Certificate

COMPLIANCE TO QUALIFICATION PACK – NATIONAL OCCUPATIONAL STANDARDS

is hereby issued by the Leather Sector Skill Council

for

SKILLING CONTENT : PARTICIPANT HANDBOOK

Complying to National Occupational Standards of Job Role/ Qualification Pack: <u>"Cobbler"</u> QP No. <u>"LSS/Q4101, NSQF Level 4"</u>

 Date of Issuance:
 April 9t^h, 2016

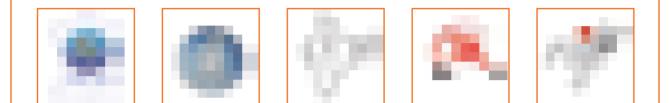
 Valid up to*:
 April 10t^h, 2018

 *Valid up to the next review date of the Qualification Pack or the 'Valid up to' date mentioned above (whichever is earlier)

Authorised Signatory (Leather Sector Skill Council)

Acknowledgements -

We thank the following organizations for endorsing the contents of this Participant Handbook, thus contributing towards skilling based on the Qualification Pack (QP) and National Occupational Standards (NOSs).



About this Book —

This Participant handbook is designed to enable training for the Qualification Pack (QP) for Cobbler (Footwear/Goods and Garments) vide Reference ID: LSS/Q4101 published by LSSC.

This course encompasses 7 compulsory National Occupational Standards (NOS),1 optional NOS of "Cobbler (Footwear/Goods and Garments)" Qualification Pack issued by "SSC: Leather Sector Skill Council". Each NOS is covered across one unit/s.

This book is designed for up-grading the knowledge and skills for working as a 'Cobbler' in the Leather Industry. This book will provide the necessary knowledge and skill inputs for an cobbler to work in an organized and disciplined manner by following safe working practices, good housekeeping, effective communication, documentation and work ethics.

Upon successful completion of this course the participant will be able to:

- 1. Gain Knowledge about leather industry and footwear manufacturing process
- 2. Carry out complex repairs on footwear and other goods
- 3. Carry out footwear making operations using hand tools, equipment and basic machines
- 4. Contribute to achieving product quality in leather repair works and footwear making
- 5. Coordinate with vendors and footwear manufacturing unit for work orders
- 6. Start and manage enterprise for footwear repair and assembling
- 7. Maintain the work area tools and machines
- 8. Maintain health, safety and security at workplace
- 9. Comply with industry, regulatory and organizational requirements

Key Learning Objectives for the specific NOS mark the beginning of each module. The symbols used in this book are described below.

Symbols Used



Key Learning Outcomes



Summarv



Steps



Tips



Unit Objectives

Time



Table of Content

S.No	Modules and Units	Page No
1.	Overview on Leather Industry and Generic Skills	1
	Unit 1.1 - Introduction to Leather Industry and Cobbler	3
	Unit 1.2 - Hazards, Safety and Health	22
	Unit 1.3 - Workplace Skills	36
2.	Carry out complex repairs on the footwear and other goods (LSS/N4101)	49
	Unit 2.1 - Introduction to footwear repair	51
	Unit 2.2 - Hand Sewing	86
	Unit 2.3 - Heel Fixing	96
	Unit 2.4 - Re-attachment of accessories	102
	Unit 2.5 - Repair of Leather goods	107
3.	Carry-out footwear making operations using hand tools, equipment and basic machines (LSS/N4102)	119
	Unit 3.1 - Cutting operations	121
	Unit 3.2 - Skiving operations	130
	Unit 3.3 - Stitching operations	140
	Unit 3.4 - Lasting operations	154
	Unit 3.5 - Sole attaching operations	165
	Unit 3.6 - Finishing operations	171
4.	Contribute to achieving Product Quality in leather repair works and footwear making (LSS/N4103)	177
	Unit 4.1 - Quality and Standards	179
5.	Coordinate with vendors and Footwear manufacturing units for work orders (LSS/N4104)	203
	Unit 5.1 - Coordinate with vendors and footwear manufacturing units	205
	Unit 5.2 - Monetary transactions	213
6.	Start and manage enterprise for for footwear repair and assembling (LSS/N4105)	219
	Unit 6.1 - Procurement of materials	221
	Unit 6.2 - Customer service and Cash Transactions	227



S.No	Modules and Units	Page No
7.	Maintain the Work Area, Tools and Machines (LSS/N8801)	235
	Unit 7.1 - Maintain the Work Area, Tools and Machines	237
8.	Maintain Health, Safety and Security Requirements at Workplace (LSS/N8601)	251
	Unit 8.1 - Comply with Health, Safety and Security Requirements at Workplace	253
9.	Comply with Industry, Regulatory and Organizational Requirements (LSS/N8701)	281
	Unit 9.1 - Legal, Regulatory and Organizational Requirements	283
10.	Employability & Entrepreneurship Skills	291
	Unit 10.1 - Personal Strengths & Value Systems	295
	Unit 10.2 - Digital Literacy: A Recap	309
	Unit 10.3 - Money Matters	313
	Unit 10.4 - Preparing for Employment & Self Employment	321
	Unit 10.5 - Understanding Entrepreneurship	329
	Unit 10.6 - Preparing to be an Entrepreneur	349









सत्यमेव जयते GOVERNMENT OF INDIA MINISTRY OF SKILL DEVELOPMENT & ENTREPRENEURSHIP



Transforming the skill landscape

SSC LEATHER SECTOR SKILL COUNCIL

1. Overview on Leather Industry and Generic Skills

Unit 1.1 - Introduction to Leather Industry and Cobbler Unit 1.2 - Hazards, Safety and Health

Unit 1.3 - Workplace Skills



Key Learning Outcomes

At the end of the module, you will be able to:

- 1. Gain in-depth knowledge about Leather industry in India
- 2. Identify the factory/ section you are working and your role in the section
- 3. Describe the leather manufacturing process
- 4. Identify hazards associated with the trade and mitigation
- 5. Comply with SHE guidelines and legal provisions
- 6. Follow workplace skills
- 7. Use PPE
- 8. Wear PPE Properly

UNIT 1.1: Introduction to Leather Industry and Cobbler



At the end of this unit, you will be able to:

- 1. Explain the importance of leather industry
- 2. Describe the leather manufacturing process
- 3. Describe the uses of different types of leather products in India
- 4. List down different types of leather available
- 5. Describe the role of a cobbler in leather industry

1.1.1 Introduction to Leather Industry

Universally leather is one of the most broadly traded goods. Footwear industry is one of the main driving force for the development of leather industry. There is a demand for leather even in furniture, interior design industries and automotive industry. Because of considerable export earnings and growth., leather industries have a place of importance in the India economy. 10% of the world leather production is done in India. Coming to footwear and garments production in the world, India stands second.9% of the world's footwear is produced in India. There is a possibility of increase in the per capita footwear consumption by four pairs. By 2020, its expected that five billion pairs of footwear are sold. There is rapid employment in the leather industry.2.5 million people from the weaker section are employed in leather industries. With about 30% share, the women employment is predominant in leather products sector.

SL.NO	States	City/District
1	Tamil Nadu	Chennai, Ambur, Ranipet, Vaniyambadi, Vellore, Pernambut, Trichy, Dindigul and Erode
2	West Bengal	Kolkata
3	Uttar Pradesh	Kanpur, Agra, Noida, Saharanpur
4	Maharashtra	Mumbai
5	Punjab	Jallandhar
6	Karnataka	Bangalore
7	Telangana	Hyderabad
8	Haryana	Ambala, Gurgaon, Panchkula, Karnal and Faridabad
9	Union Territory	Delhi
10	Madhya Pradesh	Dewas
11	Kerala	Calicut and Ernakulam / Cochin.

The Main production centers of leather and leather goods in India are as below

India falls behind the majority of the developed nations and even comparatively set developing nations according to the report published by NSDC, despite the fact that India has bit by bit liberalized its bulky compliance and documentation policies for worldwide leather trade. Contrasted to the developed markets (beneath 10% of the GDP) India's cost of logistics has an offer of the GDP, is one of the most elevated in the world(12 to 13% of the GDP). This is reflected in the transportation cost/KM, which may hamper the industry's competitiveness a the leather is export based and needs to achieve a wide retail market. There is a particular negative effect on the leather industry in the form of additional cost of power back up and this is because of moderate pace of changes in the India power sector. There is a wealth of raw materials in leather industry, as India is enriched with 21% of world buffalo and cattle and 11% of world sheep and goat populace.

Other strengths of leather industry:

- Skilled manpower,
- Innovative technology,
- Increasing industry
- Compliance to international environmental standards
- Dedicated support of the allied industries

Features of Leather Product Segments

Tanning Sector

Yearly generation of 2 billion square foot records for 10% of world leather necessity. India colors ceaselessly being chosen at the MODEUROPE Congress.

Footwear Sector

Second biggest footwear maker after china. Yearly production 2065 million sets. Enormous retail market 1950 million sets (95%) are sold in domestic market. Footwear exports records for 42.83% share in India's aggregate leather and leather products export. The Footwear product mix Gents 54%, Ladies 37% and Children 9%.

Leather Garments Sector

Second biggest maker with yearly generation limit of 16 million pieces. Third largest global exporter. Records for 10.09% share of India's aggregate leather export.

Leather Goods & Accessories Sector including Saddlery & Harness – Fifth largest global exporter. Annual production capacity – 63 million pieces of leather articles, 52 million pairs of Industrial gloves & 12.50 million pieces of Harness & Saddlery items. Accounts for 25.34% share of India's total export.

Future Outlook

The government of India had recognized the leather sector as focus sector in the Indian Foreign Trade Policy in perspective of its massive potential for export development prospects and employment generation. In like manner, the government is additionally executing different special focus initiatives under the foreign trade policy for the development of leather sector. With the execution of different industrial development programs and also export promotional exercises; and keeping in view the past execution, and industry's inherent strength of talented labor, innovative technology, expanding industry consistence to global environmental standards, and devoted help of the associated industries, the Indian leather industry plans to increase the production, thereby upgrade export, and resultantly make extra employment opportunities.

1.1.2 Leather

Leather is a long-lasting and flexible thing made by the tanning of animal raw hide and skin, frequently cattle hide.







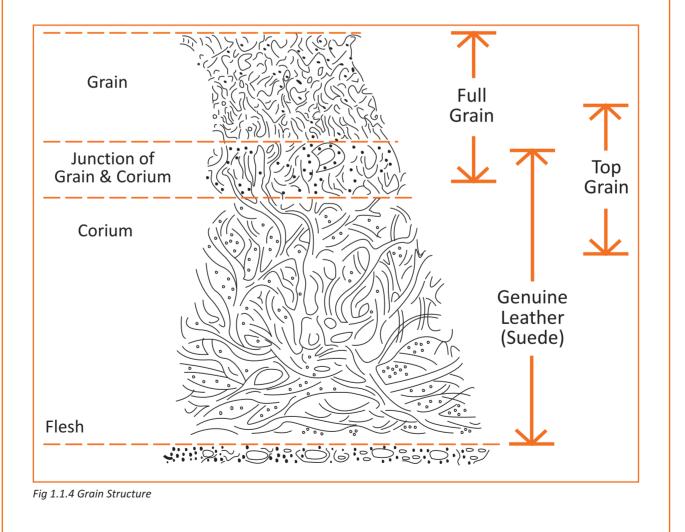
Fig 1.1.1 Raw Leather

Fig 1.1.2 Top Grain Leather

Fig 1.1.3 Leather Swatches

1.1.2.1 Grain Structure -

The structure of leather, also known as Grain structure is depicted below:



Leather is tanned and finished on the grain side to have a smooth rich surface. Leather, which is tanned and finished on the flesh side, is called suede. Different types of finished leathers, which are utilized for making leather goods, are explained below:

Natural Grain Finish

The leathers are carefully finished with grain intact. The leathers ought to have great grain quality without profound scars or looseness.



Fig 1.1.5 Natural Grain Finish

Full Aniline finish

The leathers are colored into a shading close to the required shading. Two to three coats of transparent finish with or without application of dye is applied which fills in as a protection to the surface. Binders can be subjected to high temperature by friction to give a brilliant glossy look to the leather surface. These types of finishes enhance the natural appearance of the surface.



Semi - Aniline Finish

Fig 1.1.6 Full Aniline Finish Leather

Semi-aniline leathers contain little quantity of pigments alongside the dye to give colored finish. The pigments utilized as a part of the finish can cover minor scratches and shallow scars. They exhibit a natural grain surface without a lot of loading of the grain.



Fig 1.1.7 Semi Aniline Finish

Pigment Finish

Pigment finished leathers are those sorts of finished leathers with generally high measure of covering material. The covering of deformities is great in this finish.



Fig 1.1.8 Pigment Finish

Imitation Grain Finish

These sorts of leathers are produced using generally low quality hides. The hide surface has various profound scars and can't be finished to a uniform look without adjustments. Thus, the grain is evacuated by snuffing. Special resin binders are utilized to decrease the looseness of the grain layer and heavy finish coat is applied to get a uniform finished surface, which is embossed.



Fig 1.1.9 Imitation Grain Finish

Corrected Grain Finish

The crust is buffed to expel the top grain design and treated with a filling kind of resin, which influences the grain layer tight. It is them embossed to stimulate an appealing grain surface. Special efforts, for example, brush off effect can be gotten by utilizing reasonable binders and colouring mixes.



Fig 1.1.10 Corrected Grain Finish

Printed Finish

These leathers are finished like amended grain leathers, yet with more profound print on the surface by embossing with suitable pressure and heat. An assortment of print patterns like lizard print, crocodile print, etc. can be affected.



Fig 1.1.11 Printed Finish

Split Surface Finish

Split leathers can't hold the finish covering well because of its coarse and fiber network special techniques can be utilized to apply coatings on the split surface to redesign the performance like finished leathers.



Fig 1.1.12 Split Surface Finish

Nubuck finish

The leathers are finished with velvet like surface on the grain layer. Since the fibers in the grain layer are compact and short, the nap is fine and smooth and the textured surface will demonstrate a distinction in shading when run by the hand over it.

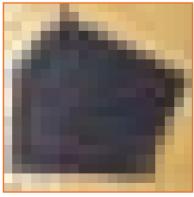


Fig 1.1.13 Nubuck Finish Leather

Oil Pull-up Finish

Special oils are applied on the surface of the leather with or without transparent finish coatings. The oils give protection and a one of a kind look to the surface. Oil pull-ups are produced from full grain leathers with utilization of oil. The oil can relocate when pressure is applied on the surface and return when the pressure is discharged. In this manner, the surface will indicate two-tone impact when pressed or pulled.



Fig 1.1.14 Oil Pull-up Finish

Antique Finish

The leathers are applied with special wax to the buffed grain surface. The wax can dissolve and relocate under frictional heat. Due to this, when the surface is rubbed, the colour of the rubbed area changes which does not invert instantly. This demonstrates an antique effect.



Fig 1.1.15 Antique finish

1.1.2.2 Leather Products

Leather can be used to produce a wide range of products.

Leather Shoes

Leather shoes comprise of leather uppers and PVC soles utilized as walking shoe.



Fig 1.1.16 Leather Shoes

Leather Jackets

A leather jacket resists cold It is usually worn on other clothes. They are manufactured from tanned hides of animals.



Fig 1.1.17 Leather Jackets

Leather Belts

A belt is normally comprised of flexible band or strap. It's ordinarily made out of leather or heavy fabric, and worn around the waist. The belts are utilized to hold the pants or different apparels of garments.



Leather Wallets

A wallet is a flat case which is utilized to have our personal items like money, cards, ID proofs (pan card, voter id card, etc.), photos, visiting cards. Wallets are made out of leather or fabrics, and they are of pocket sized.