**Model Curriculum**

**Basic Closing Operator - Footwear**

**SECTOR: LEATHER**

**SUB - SECTOR: FOOTWEAR**

**OCCUPATION: BASIC CLOSING**

**REF ID: DIPP/FDDI/Q1101**

**NSQF LEVEL: 2**

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**Basic Closing Operator -Footwear**

**CURRICULUM/ SYLLABUS**

This program is aimed at training candidates for the job of a “Basic Closing Operator – Footwear in Leather Sector/ Industry and aims at building the following key competencies among the learner

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| **Program Name** | **Basic Closing Operator - Footwear** | | |
| **Qualification Pack Name & Reference ID** | DIPP/FDDI/Q1101 | | |
| **Version No.** | 1.0 | **Version Update Date** |  |
| **Pre-requisites to Training** | Candidate should be able to read and write. | | |
| **Training Outcomes** | **After completing this program, participants will be able to:**   * Understand the role and responsibility of closing operator * Understand footwear factory, footwear manufacturing processes and different department involved in footwear making * Know about closing department & basic uppers * Understand sizing system and basic designs of shoes * Know about components of upper and how to attach lining & inter lining * Able to define adhesive, eyelets, reinforcement and its types * Understand Needles, threads, Seams and its types * Able to describe about different types of Closing machines, its parts and functions and tools used in Closing Operations * Carry out machine threading & tension adjustment * Define purpose of perforating, stamping, embossing, fusing, zimping * Control the machine and carry out Closing of upper components * Describe about folding and preparation * Make basic uppers like Derby, Oxford and Slip-on * Describe about quality check points of uppers * Identify the defects in machines in Closing Operations and its rectifications * Understand about man, machine & material productivity * Understand about house-keeping, cleaning and maintenance, first-aid, policy and procedures, health & safety, hazards and its precautions * Know about work functions in accordance with legislation and regulations * Learn advantages of effective communication and proper behavior with co-worker and seniors, time management skills, process of communication (including verbal and written skills), communication barriers and attitude toward work * Learn team work and advantages involved in working in a team | | |

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| **Sr. No.** | **Module** | **Key Learning Outcomes** | **Equipments Required** |
| 1. | **Overview of leather industry & Generic skills**  **Theory Duration:**  (hh:mm)  06:30  **Practical Duration:**  (hh:mm)  03:30 | * Gain knowledge about leather and footwear Industry * Identify the factory /section and operator’s role in the section * Gain knowledge of Leather and footwear manufacturing process * Identify hazards associated with the trade and mitigation * Describe the uses of different type of leather products * Demonstrate role of Closing operator in Leather Industry * Will be able to identify various components of footwear | Chairs, Trainers desk,  Student table,  White board, Stationery |
| 2. | **Basic Closing Operations and materials used in upper making**  **Theory Duration:**  (hh:mm)  38:30  **Practical Duration:**  (hh:mm)  100:30 | * Able to identify the basic shoe designs * Have the basic knowledge of sizing system * Check that the materials is as per specification * Check needles, awls and threads * Check if component is correctly marked as required * Identify different eyelets and reinforcement materials used in the upper making * Know various parts & functions of various Closing machines * Able to make the derby, oxford & slip-on * Follow the instructions on the work ticket/ job Card in line * Knowledge of damaged tools & equipments/ machines faults * Leave work area safe and secure when work is complete * Ask questions to obtain more information on tasks when the instructions are unclear and finalize the Closing option with the supervisor, in case of queries * Use of correct machine and equipment * Set machine controls for materials being stitched * Threading and adjust needle as per the requirements * Check the equipment prior to Closing, including:   + Correct controls   + Correct attachments   + Changing needles * Stitch the correct materials in the right sequence * Respond accordingly where stitched items do not meet production specification * Minimise and dispose the waste materials in the approved manner * Carry out basic maintenance of own machines * Pass the stitched item to the next stage in the manufacturing process after validation * Report risks/ problems likely to affect services to the relevant person promptly and accurately | Post bed sewing  machine, Flat bed  sewing machine,  Sample leather  pieces, Scissors,  Hand clicking knife,  Shoe hammer,  Needles, Thread, Neoprene, Pasting  brushes |
| 3. | **Maintaining product quality in closing operations**  **Theory Duration:**  (hh:mm)  10:00  **Practical Duration:**  **(hh:mm)**  10:00 | * Identify and use materials required based on the job card/ work ticket * Take the necessary action when materials do not conform to company quality standards * Report and replace identified faulty materials and component parts which do not meet specification * Identify modifiable defects and rework on them * Carry out work safely and at a rate which maintains work flow * Check the quality of derby upper * Check the quality of oxford upper * Check the quality of slip-on upper * Identify faults and take appropriate action for   rectification   * Make adjustments promptly to return product to specification * Maintain the required   productivity and quality levels | Post bed sewing  machine, Flat bed  sewing machine,  Sample leather  pieces, Scissors,  Hand clicking knife,  Shoe hammer,  Needles, Thread, Neoprene, Pasting  brushes |
| 4. | **Maintain work area, tools and machines**  **Theory Duration:**  (hh:mm)  07:30  **Practical Duration:**  (hh:mm)  02:30 | * Handle materials, machinery, equipment and tools safely and correctly * Understand safety precautions of various machines * Use correct lifting and handling procedures * Use materials to minimize waste * Maintain a clean and hazard free working area * Maintain tools, equipment and machines * Report unsafe equipment and other dangerous occurrences * Ensure that the correct machine guards are in place * Work in a comfortable position with the correct posture * Use cleaning equipment and methods appropriate for the work to be carried out * Good housekeeping practices * Dispose of waste safely in the designated location * Carry out cleaning according to schedules and limits of responsibility | Cleaning cloth, Cleaning materials, Mop, Dust bin, Broom |
| 5. | **Maintain health, safety and security at workplace**  **Theory Duration:**  (hh:mm)  02:30  **Practical Duration:**  (hh:mm)  03:30 | * Comply with health and safety related instructions applicable to workplace * Use and maintain personal protective equipment as per protocol * Identify and correct (if possible) malfunctions in machinery and equipment * Store materials and equipment in line with manufacturer’s and organisational requirements * Minimize health and safety risks to self and others due to own actions * Report hazards and potential risks/ threats to supervisors or other authorized personnel * 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 | First aid kit |
| 6. | **Comply with industry, regulatory and organizational requirements**  **Theory Duration:**  (hh:mm)  01:30  **Practical Duration:**  (hh:mm)  00:30 | * Carry out work functions in accordance with legislation and regulations, organizational guidelines and procedures * Seek and obtain clarifications on policies and procedures, from supervisor or authorized personnel * apply and follow these policies and procedures within work practices * Provide support to supervisor and team members in enforcing these considerations * Identify and report any possible deviation to these requirements | Sample Legal Documents |
| 7. | **Soft Skill**  **Theory Duration**  (hh:mm)  08:30  **Practical Duration**  (hh:mm)  04:30 | * Perform Team & Group   activities   * Understand importance of   health and hygiene   * Comply with effective   communication & behavior with co-workers & seniors   * Comply with Time management Skill * Understand Communication   barriers   * Learn attitude towards work | Chairs, Trainers desk,  Student table,  White board, Stationery |
| 8. | **On Job Training (OJT)**  **Practical Duration:**  (hh:mm)  100:00 | * Understand the practical aspect of what is learnt in the classroom * Aware about factory   environment and working condition   * Learn working culture of factory * Basic ethics of factory * Perform work under deadlines * Quality parameters of a factory * Factory team work * Punctuality * Work Perfection | N/A |
|  | **Total Duration:**  **Theory Duration:**  (hh:mm)  75:00  **Practical Duration:**  (hh:mm)  225:00 | **Unique Equipments Required:**  Chairs, Trainers desk and computer, Student table, White board, Stationery, Post bed sewing machine, Flat bed sewing machine, Sample leather pieces, Scissors, Hand clicking knife, Shoe hammer, Needles, Thread, Neoprene, Pasting brushes. | |

Grand Total Course Duration: 300 **Hours**

**Trainer Prerequisites for Job role: “Basic Closing Operator - Footwear” mapped to Qualification Pack: “DIPP/FDDI/Q1101, Version 1.0”**

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| **Sr. No.** | **Area** | **Details** |
| **1** | **Description** | To deliver accredited training service, mapping to the curriculum detailed above, in accordance to the Qualification Pack “DIPP/FDDI/Q1101” |
| **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 organized and focused, eager to learn and keep oneself updated with the latest in the mentioned field. |
| **3** | **Minimum Educational Qualifications** | Candidate should have a minimum qualification level of Xth pass from any board and discipline. The candidate should have adequate understanding of leather industry. ITI/ Diploma/ Certificate holders, or any other polytechnic/ institute who have been working in the industry for some time and have basic knowledge of the above mentioned. |
| **4a** | **Domain Certification** | Certified for Job Role: “Basic Closing Operator - Footwear”, mapped to QP: “DIPP/FDDI/Q1101, Version 1.0 |
| **4b** | **Platform Certification** | Certified for Job Role: “Trainer”, mapped to QP: “SSC/Q1402”. |
| **5** | **Experience** | Minimum 3-5 years of academic and/or industry experience and should posses good knowledge of sewing machines, needles etc. |

**Annexure: Assessment Criteria**

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| **Assessment Criteria** |  |
| **Job Role** | Basic Closing Operator – Footwear |
| **Qualification Pack** | DIPP/FDDI/Q1101, Version 1.0 |
| **Sector** | Leather |

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| **Sr. No.** | **Guidelines for Assessment** |
| **1** | Criteria for assessment based on each learning outcomes, will be assigned marks proportional to its importance. |
| **2** | For each Individual batch, Examination Cell will create question papers for theory part as well as practical for each candidate at each examination. |
| **3** | To pass the Qualification, every trainee should score minimum 60% cumulatively (Theory and Practical) |

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| **Assessable Outcome** | **Assessment Criteria** | **Total Marks** | **Marks Allocation** | | |
| **Out of** | **Theory** | **Practical Skills** |
| **FDDI/N1101 - Basic Closing Operations & materials used in upper making** | 1. Follow the instructions on the work ticket/job card |  | 2 | 0 | 2 |
| 2. Make sure that the work area is free from hazards | 2 | 0 | 2 |
| 3. Ensure the materials used meet the specification matching | 2 | 0 | 2 |
| * within a product |
| * between a pair of products where applicable |
| 4. Agree and review upon work targets with the supervisor | 2 | 0 | 2 |
| 5. Sort out the material and threads as per the specifications in the job card | 7 | 4 | 3 |
| 6. Select the right sewing machine, threads and bobbins for the materials as per the specifications in the job card | 2 | 0 | 2 |
| 7. Check the equipment prior to making the stitching, including: | 2 | 0 | 2 |
| * Correct controls |
| * Correct attachments |
| * Changing needles |
| * Changing threads |
| * Changing awls |
| * Correct Timing |
| 8. Set machine controls for the materials being stitched | 2 | 0 | 2 |
| 9. Perform a test run to ensure machine is operating correctly | 7 | 4 | 3 |
| 10. Adjust machine controls where necessary | 2 | 0 | 2 |
| 11. Operate machines safely and in accordance with guidelines | 12 | 3 | 9 |
| 12. Estimate the expected length of time for the process | 2 | 0 | 2 |
| 13. Optimize the positioning and layout of materials to ensure a smooth and rapid throughput | 12 | 4 | 8 |
| 14. Adjust the tension and stitch length | 2 | 0 | 2 |
| 15. Check the upper components and conduct shade wise pairing | 2 | 0 | 2 |
| 16. Stitch the correct materials in the right sequence as required by the production specification | 2 | 0 | 2 |
| 17. Perform back joining/quarter back joining using zigzag machine/flatbed machine | 2 | 0 | 2 |
| 18. Perform seam rubbing by machine if back joining done by flatbed machine | 2 | 0 | 2 |
| 19. Attach vamp with tongue using flatbed machine | 2 | 0 | 2 |
| 20. Apply adhesives on the components | 1 | 0 | 1 |
| 21. Fold the components by hand/machine | 2 | 0 | 2 |
| 22. Join upper and lining using flat/post bed machine | 2 | 0 | 2 |
| 23. Join quarter with vamp using post bed machine | 1 | 0 | 1 |
| 24. Perform edge trimming operation by machine/hand | 7 | 3 | 4 |
| 25. Perform eyeleting by machine/hand | 2 | 0 | 2 |
| 26. Perform eyelet punching, eyelet putting and eyelet setting by hand | 2 | 0 | 2 |
| 27. Do lacing on the uppers | 1 | 0 | 1 |
| 28. Visual inspection as per specifications in the job card | 1 | 0 | 1 |
| 29.Respond accordingly where stitched items do not meet production specification | 1 | 0 | 1 |
| 30. Carry out basic maintenance of machinery and keep them clean after use | 1 | 0 | 1 |
| 31. Report risks/ problems likely to affect services to the relevant person promptly and accurately | 2 | 0 | 2 |
| 32. Complete forms, records and other documentation | 2 | 0 | 2 |
| 33. Follow company reporting procedures about defective tools and machines which affect work and report risks/ problems likely to affect services to the relevant person promptly and accurately | 7 | 4 | 3 |
| 34. Report defective machines, tools and/or equipment to the responsible person | 2 | 0 | 2 |
| 35. Sort and place work to the next stage of production and minimise the risk of damage | 3 | 0 | 3 |
| 36. Pass the stitched item to the next stage in the manufacturing process after validation | 3 | 0 | 3 |
| **NOS Total Marks** | **Total** | **110** | **22** | **88** |
| **FDDI/N1102 - Maintaining product quality in basic closing operations** | 1. Ensure materials and component parts meet specifications |  | 1 | 0 | 1 |
| 2. Ensure that the quality and appearance of the uppers are not affected during materials movement | 6 | 4 | 2 |
| 3. Ensure the quality of the product meets specification during production | 11 | 0 | 11 |
| 4. Maintain the required productivity and quality levels | 1 | 0 | 1 |
| 5. Carry out quality checks at agreed intervals and in the approved way | 1 | 0 | 1 |
| 6. Count and verify that the number of uppers is as per job card at the start and end of every stage in the stitching processes | 1 | 0 | 1 |
| 7. Check that the upper components are paired shade wise as per the specifications in the job card | 1 | 0 | 1 |
| 8. Check that the stitching is done properly as per the design specifications and no damage happens to the appearance and quality | 0.5 | 0 | 0.5 |
| 9. Check that no spillage of adhesives appear on the uppers | 0.5 | 0 | 0.5 |
| 10. Check that the folding is done properly | 1 | 0 | 1 |
| 11. Check the edge trimming, putting of eyelets and lacing are done correctly | 0.5 | 0 | 0.5 |
| 12. Conduct a visual inspection on all aspects of the stitching process | 0.5 | 0 | 0.5 |
| 13. Maintain the continuity of production with minimum interruptions and downtime | 1 | 0 | 1 |
| 14. Ensure minimum of wastage and their proper disposal | 7 | 1 | 6 |
| 15. Identify causes of faults and take action to rectify the same to maintain product quality | 2.5 | 2 | 0.5 |
| 16. Follow reporting procedures where the cause of faults cannot be identified | 1 | 0 | 1 |
| 17. Pass the stitched uppers with support of the assistant operator for next process | 2.5 | 2 | 0.5 |
| 18. Leave work area safe and secure when work is complete | 1 | 0 | 1 |
|  | **NOS Total Marks** | **Total** | **40** | **9** | **31** |
| **FDDI/N1103 - Maintain work area, tools and machines** | 1. Handle materials, machinery, equipment and tools safely and correctly |  | 2 | 0 | 2 |
| 2. Use correct lifting and handling procedures | 2 | 0 | 2 |
| 3. Use materials to minimize waste | 3 | 0 | 3 |
| 4. Prepare and organize work | 2 | 0 | 2 |
| 5. Maintain a clean and hazard free working area | 3 | 0 | 3 |
| 6. Deal with work interruptions | 2 | 0 | 2 |
| 7. Move around the workplace with care | 3 | 0 | 3 |
| 8. Maintain tools and equipment | 3 | 0 | 3 |
| 9. Carry out running maintenance within agreed schedules | 4 | 2 | 2 |
| 10. Carry out maintenance and/or cleaning outside responsibility | 2 | 1 | 1 |
| 11. Report unsafe equipment and other dangerous occurrences | 3 | 2 | 1 |
| 12. Ensure that the correct machine guards are in place | 1 | 0 | 1 |
| 13. Work in a comfortable position with the correct posture | 2 | 1 | 1 |
| 14. Use cleaning equipment and methods appropriate for the work to be carried out | 3 | 0 | 3 |
| 15. Dispose of waste safely in the designated location | 3 | 0 | 3 |
| 16. Store cleaning equipment safely after use | 2 | 0 | 2 |
| 17. Complete and store accurate records and documentation | 2 | 1 | 1 |
| 18. Maintain proper lighting, ventilation to make sure general comfort is there while working | 2 | 1 | 1 |
| 19. Give inputs and assist in completing documentation | 1 | 0 | 1 |
| 20. Report the need for maintenance and/or cleaning outside your area of responsibility | 1 | 0 | 1 |
| 21. Ensure safe and correct handling of materials, equipment and tools | 2 | 1 | 1 |
| 22. Maintain appropriate environment to protect stock from pilfering, theft, damage and deterioration | 2 | 1 | 1 |
|  | **NOS Total Marks** | **Total** | **50** | **10** | **40** |
| **FDDI/N1104 - Maintain the health, safety & security requirements at workplace** | 1. Comply with health and safety related instructions applicable to the workplace |  | 1 | 0 | 1 |
| 2. Use and maintain personal protective equipment as per protocol | 1 | 0 | 1 |
| 3. Carry out own activities in line with approved guidelines and procedures | 1 | 0 | 1 |
| 4. Maintain a healthy lifestyle and guard against dependency on intoxicants | 0.5 | 0 | 0.5 |
| 5. Follow environment management system related procedures | 6 | 4 | 2 |
| 6. Identify and correct (if possible) malfunctions in machinery and equipment | 1 | 0 | 1 |
| 7. Report any service malfunctions that cannot be rectified | 1 | 0 | 1 |
| 8. Store materials and equipment in line with manufacturer’s and organizational requirements | 0.5 | 0 | 0.5 |
| 9. Safely handle and move waste and debris | 1 | 0 | 1 |
| 10. Minimize health and safety risks to self and others due to own actions | 1 | 0 | 1 |
| 11. Seek clarifications, from supervisors or other authorized personnel in case of perceived risks | 1 | 0 | 1 |
| 12. Monitor the workplace and work processes for potential risks and threats | 1 | 0 | 1 |
| 13. Carry out periodic walk-through to keep work area free from hazards and obstructions, if assigned | 0.5 | 0 | 0.5 |
| 14. Report hazards and potential risks/ threats to supervisors or other authorized personnel | 5.5 | 3 | 2.5 |
| 15. Participate in mock drills/ evacuation procedures organized at the workplace | 0.5 | 0 | 0.5 |
| 16. Undertake first aid, fire-fighting and emergency response training, if asked to do so | 1 | 0 | 1 |
| 17. Take action based on instructions in the event of fire, emergencies or accidents | 0.5 | 0 | 0.5 |
| 18. Follow organizational procedures for shutdown and evacuation when required | 1 | 0 | 1 |
|  | **NOS Total Marks** | **Total** | **25** | **7** | **18** |
| **FDDI/N1105 - Comply with industry, regulatory and organizational requirements** | 1. Carry out work functions in accordance with legislation and regulations, organizational guidelines and procedures |  | 10 | 4 | 6 |
| 2. Seek and obtain clarifications on policies and procedures, from the supervisor or other authorized personnel | 3 | 0 | 3 |
| 3. Apply and follow these policies and procedures within the work practices | 2 | 0 | 2 |
| 4. Provide support to the supervisor and team members in enforcing these considerations | 7 | 3 | 4 |
| 5. Identify and report any possible deviation to these requirements | 3 | 0 | 3 |
|  | **NOS Total Marks** | **Total** | **25** | **7** | **18** |
| **FDDI/N1106 - Soft Skill** | 1.Team exercises with co-workers |  | 2.5 | 1 | 1.5 |
| 2. Co-ordinations with team | 2.5 | 1 | 1.5 |
| 3.Health practices during working time | 2 | 1 | 1 |
| 4. Implementation on hygiene factors | 2 | 1 | 1 |
| 5.Work operation with time management | 2.5 | 2 | 0.5 |
| 6. Follow written & oral instructions of supervisor | 3 | 3 | 0 |
| 7. Conveying oral & written instructions with co-workers | 3 | 2 | 1 |
| 8. Barrier in communication | 3.5 | 3 | 0.5 |
| 9. Showing positive attitude | 2 | 1 | 1 |
| 10. Deals with co-workers in efficient work | 3.5 | 3 | 0.5 |
| 11. Carry out effective written communication with co-workers | 3.5 | 2 | 1.5 |
| 12. Carry out effective oral communication with co-workers | 3.5 | 0 | 3.5 |
| 13. Following work ethics culture | 3 | 0 | 3 |
| 14. Reading skills | 3.5 | 0 | 3.5 |
| 15. Writing skills | 3.5 | 0 | 3.5 |
| 16. Response in quality & product meetings with supervisors | 3 | 0 | 3 |
| 17. Various hygiene factor | 3.5 | 0 | 3.5 |
| **NOS Total Marks** | **Total** | **50** | **20** | **30** |
| **Grand Total** | | | **300** | **75** | **225** |