









# Sports Ball Craftsperson (Junior)

QP Code: SPF/Q8103

Version: 1.0

NSQF Level: 3

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## SPF/Q8103: Sports Ball Craftsperson (Junior)

## **Brief Job Description**

Sports ball fabricators are involved in production, assembling, and finishing sports ball such as basketballs, footballs, cricket balls, etc. Their tasks range from operating machines to fine handcrafting the finished goods.

#### **Personal Attributes**

Individuals in this role should be creative, details-oriented, self-motivated and energetic. Individuals in this role must demonstrate a very good concentration, listening and comprehension skills.

## **Applicable National Occupational Standards (NOS)**

## **Compulsory NOS:**

- 1. SPF/N8106: Prepare Equipment and Materials for Production of Sports ball
- 2. SPF/N8107: Select appropriate manufacturing process to produce sports ball
- 3. SPF/N8108: Perform final assembly to produce finished sports goods
- 4. SPF/N1169: Improve workplace resource usage
- 5. DGT/VSQ/N0101: Employability Skills (30 Hours)

## **Qualification Pack (QP) Parameters**

Sector	Sports
Sub-Sector	Sports Manufacturing
Occupation	Sports Manufacturing
Country	India
NSQF Level	3
Credits	10
Aligned to NCO/ISCO/ISIC Code	NCO-2015/9329.8103









Minimum Educational Qualification & Experience	10th grade pass OR 9th grade pass with 1 Year of experience OR 8th grade pass with 2 Years of experience OR 5th grade pass with 5 Years of experience OR Certificate-NSQF (Level 2- Sports Goods Manufacturing Helper) with 3 Years of experience
Minimum Level of Education for Training in School	
Pre-Requisite License or Training	NA
Minimum Job Entry Age	18 Years
Last Reviewed On	NA
Next Review Date	23/06/2026
NSQC Approval Date	23/06/2023
Version	1.0
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NQR Version	1









# SPF/N8106: Prepare Equipment and Materials for Production of Sports ball

## **Description**

This unit is about preparing equipment and materials for production of sports ball

## Scope

The scope covers the following:

- Select equipment for the production
- Prepare materials for the production
- Maintain hygiene and sanitation at workplace

#### **Elements and Performance Criteria**

## Select equipment for the production

To be competent, the user/individual on the job must be able to:

- **PC1.** esure the availability of all required equipment and tools for the production
- PC2. use the correct tools and equipment
- **PC3.** check that equipment is safe and set up in readiness for use
- **PC4.** select the correct component parts for the style being worked on
- **PC5.** conform to production quality standards
- **PC6.** report any damaged equipment to the supervisor
- **PC7.** follow company reporting procedures about defective tools and machines which affect work and are risks/ problems
- **PC8.** sort and place work to assist the next stage of production and minimise the risk of damage

#### Prepare materials for the production

To be competent, the user/individual on the job must be able to:

- **PC9.** identify the materials used to produce sports ball
- **PC10.** identify the properties of leather and synthetic leather: Animal skin, PU (polyurethane ) TPU (thermoplastic polyurethane) PVC (Polyvinyl Chloride)
- PC11. select type of leather or synthetic material based on the product to be manufactured
- **PC12.** select the leather that can be used in making of leather-based cricket ball, football, basketball, etc.
- **PC13.** ensure coloring of the leather material before it is put in use
- **PC14.** identify the process in coloring

#### Maintain hygiene and sanitation

To be competent, the user/individual on the job must be able to:

- **PC15.** ensure personal hygiene
- **PC16.** ensure equipment, workshop, etc. are sanitized before and after the usage
- **PC17.** guide others about hygiene and sanitation workplace requirements









**PC18.** report advanced hygiene and sanitation issues to appropriate authority

## **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

- **KU1.** different hand tools used for different leather goods & their cares
- **KU2.** different types of cutting Tools, stitching awls, stitch components
- **KU3.** leather quality and properties
- **KU4.** plating and evaluations of leather quality and appropriate uses
- **KU5.** types of needles & scissors, knifes etc. & their utility
- **KU6.** measuring and layout for different shape & sizes of different leather goods
- **KU7.** different machines used in manufacturing of leather goods
- **KU8.** basic concept of leather goods, kinds, uses, names, functions of hand tools and other holding devices
- **KU9.** use and function of different measuring instruments and gauges
- **KU10.** process of leather treatment
- **KU11.** administration of basic first aid

## **Generic Skills (GS)**

User/individual on the job needs to know how to:

- **GS1.** read and understand all usage and safety manuals
- **GS2.** communicate in a clear and polite manner
- **GS3.** comprehend instructions
- **GS4.** instruct users with clear and easy to understand instructions
- **GS5.** communicate effectively with senior citizens and young children to maintain safety
- **GS6.** assess tools and equipment conditions
- **GS7.** convert metrics of measurements (feet, meter, millimeter, etc.)









## **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Select equipment for the production	8	32	-	-
<b>PC1.</b> esure the availability of all required equipment and tools for the production	1	4	-	-
PC2. use the correct tools and equipment	1	4	-	-
<b>PC3.</b> check that equipment is safe and set up in readiness for use	1	4	-	-
<b>PC4.</b> select the correct component parts for the style being worked on	1	4	-	-
PC5. conform to production quality standards	1	4	-	-
<b>PC6.</b> report any damaged equipment to the supervisor	1	4	-	-
<b>PC7.</b> follow company reporting procedures about defective tools and machines which affect work and are risks/ problems	1	4	-	-
<b>PC8.</b> sort and place work to assist the next stage of production and minimise the risk of damage	1	4	-	-
Prepare materials for the production	12	24	-	-
<b>PC9.</b> identify the materials used to produce sports ball	2	4	-	-
<b>PC10.</b> identify the properties of leather and synthetic leather: Animal skin, PU (polyurethane ) TPU (thermoplastic polyurethane) PVC (Polyvinyl Chloride)	2	4	-	-
<b>PC11.</b> select type of leather or synthetic material based on the product to be manufactured	2	4	-	-
<b>PC12.</b> select the leather that can be used in making of leather-based cricket ball, football, basketball, etc.	2	4	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC13.</b> ensure coloring of the leather material before it is put in use	2	4	-	-
PC14. identify the process in coloring	2	4	-	-
Maintain hygiene and sanitation	8	16	-	-
PC15. ensure personal hygiene	2	4	-	-
<b>PC16.</b> ensure equipment, workshop, etc. are sanitized before and after the usage	2	4	-	-
<b>PC17.</b> guide others about hygiene and sanitation workplace requirements	2	4	-	-
<b>PC18.</b> report advanced hygiene and sanitation issues to appropriate authority	2	4	-	-
NOS Total	28	72	-	-









# **National Occupational Standards (NOS) Parameters**

NOS Code	SPF/N8106
NOS Name	Prepare Equipment and Materials for Production of Sports ball
Sector	Sports
Sub-Sector	Sports Manufacturing
Occupation	Sports Manufacturing
NSQF Level	3
Credits	2
Version	1.0
Last Reviewed Date	NA
Next Review Date	23/06/2026
NSQC Clearance Date	23/06/2023









# SPF/N8107: Select appropriate manufacturing process to produce sports ball

## **Description**

This unit is about performing selecting and performing appropriate manufacturing process to produce sports ball.

## Scope

The scope covers the following:

- Create components of leather and synthetic ball
- Create components of rubber ball
- Create inner components of sports ball
- Sort, report substandard goods before assembling

#### **Elements and Performance Criteria**

## Create outer components of leather and synthetic ball

To be competent, the user/individual on the job must be able to:

- **PC1.** select the tools and materials for the work
- **PC2.** check the quality and characteristics of the material
- **PC3.** match the required standards before starting to cut
- **PC4.** identify defects on the material, if any
- **PC5.** calculate the number of components needed for production
- **PC6.** use scissors or cutting knife to cut the leather piece as per the markings given on the components
- **PC7.** use clicking machine or dyes to cut the batch of materials
- **PC8.** ensure safety during cutting of materials
- **PC9.** organize the cut materials into bundles, batches or groups
- **PC10.** utilize materials efficiently to get maximum cut pieces with minimum wastage
- **PC11.** ensure the number of cut pieces are as per the requirement
- **PC12.** identify any imperfections in the material when cutting
- **PC13.** agree and review the agreed upon work targets with the supervisor
- PC14. produce the required batch of components to match the production targets
- PC15. dispose of waste materials safely and return re-useable materials
- PC16. work in conformance to legal requirements, organizational policies and procedures

## Create components of rubber ball

To be competent, the user/individual on the job must be able to:

- **PC17.** select the quantity of rubber to be used for the batch of balls
- **PC18.** identify any imperfections in the material, if any, before using
- **PC19.** use rollers to kneed and thin the rubber









- **PC20.** identify the process, duration, techniques required to flatten
- **PC21.** cut the flattened rubber using hand or clipping machine into slugs
- PC22. use heat molds to create half-shells
- PC23. check the temperature and pressure of the moulds to ensure perfection
- **PC24.** cut, trim the extra rubber from the half-shells to get perfect semi-circle balls
- PC25. buff the half-shell seams using sanding paper
- PC26. glue the two half-shells together using an adhesive
- **PC27.** load the glued half-shells into the hydraulic molds to create a solid core
- PC28. rough the surface of the balls using a sanding drum
- PC29. apply uniform amount of rubber adhesive to the rough balls through tumbling operation
- PC30. cut the nylon/woolen felts into 'dogbones' shape and stack them
- **PC31.** dip the stacked felt to the vat of adhesive to adhere it to the core
- **PC32.** use hand or ball-covering machine to apply two felts to the rubber core (2in wide, 6in long)
- PC33. use roll-down conveyor to remove any lumps or wrinkles along the sim

## Sort, reports substandard goods before assembling

To be competent, the user/individual on the job must be able to:

- PC34. identify and respond to imperfections, defects and damage due to mishandling
- PC35. report defects in the tools and equipment one does not have the authority to repair
- **PC36.** report risks/ problems likely to affect services to the relevant person promptly and accurately
- **PC37.** complete forms, records and other documentation
- **PC38.** make sure that the cut material is correctly sorted to assist the next stage of production
- **PC39.** make sure that the cut material carefully placed to minimise the risk of damage
- **PC40.** carry out closedown procedures on completion of work

## **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

- **KU1.** types of leather goods requiring stitching by hand or machine stitching
- **KU2.** range of techniques most suited to the different types of leather goods construction
- **KU3.** sources of updates on leather goods and garments and other related areas
- **KU4.** common factors affect stitching
- **KU5.** broken needle procedure
- **KU6.** thread thickness, shade and needle sizes
- **KU7.** different seams and used in leather goods /garments- Edge binding, reverse stitch, French seam top stitch
- **KU8.** variations in stitch types darts, tucks, pleats, piping, gathering, etc.
- **KU9.** setting up and adjusting machine controls
- **KU10.** the typical faults of stitching machines and methods to rectify them
- **KU11.** the actions to take in the event of a machine ceasing to function correctly
- **KU12.** common hazards in the work area and workplace procedures for dealing with them









- **KU13.** the main pieces of equipment needed to stitch the item and their capabilities
- **KU14.** the characteristics of the materials and how they differ
- **KU15.** the problems encountered when stitching different constructions
- **KU16.** usage, application and storage of adhesives
- **KU17.** maintenance, adjustment and replacement of worn parts on the machines required for different types of attachment
- KU18. the manufacturers' instructions for setting up, adjusting and operating the equipment
- **KU19.** the proper sequence of shutting down the machine

## **Generic Skills (GS)**

User/individual on the job needs to know how to:

- **GS1.** monitor client behaviour and activities
- **GS2.** fill up appropriate technical forms, process charts, activity logs in the prescribed format of the company
- **GS3.** read English/ local language as applicable
- **GS4.** read and understand manuals, health and safety instructions, memos, reports, job cards etc.
- **GS5.** listen actively
- **GS6.** communicate effectively with supervisors, managers, etc.









## **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Create outer components of leather and synthetic ball	16	47	-	-
PC1. select the tools and materials for the work	1	3	-	-
<b>PC2.</b> check the quality and characteristics of the material	1	3	-	-
<b>PC3.</b> match the required standards before starting to cut	1	3	-	-
PC4. identify defects on the material, if any	1	3	-	-
<b>PC5.</b> calculate the number of components needed for production	1	3	-	-
<b>PC6.</b> use scissors or cutting knife to cut the leather piece as per the markings given on the components	1	3	-	-
<b>PC7.</b> use clicking machine or dyes to cut the batch of materials	1	3	-	-
PC8. ensure safety during cutting of materials	1	3	-	_
<b>PC9.</b> organize the cut materials into bundles, batches or groups	1	2	-	-
<b>PC10.</b> utilize materials efficiently to get maximum cut pieces with minimum wastage	1	3	-	-
<b>PC11.</b> ensure the number of cut pieces are as per the requirement	1	3	-	-
<b>PC12.</b> identify any imperfections in the material when cutting	1	3	-	-
PC13. agree and review the agreed upon work targets with the supervisor	1	3	-	-
<b>PC14.</b> produce the required batch of components to match the production targets	1	3	-	-
<b>PC15.</b> dispose of waste materials safely and return re-useable materials	1	3	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC16.</b> work in conformance to legal requirements, organizational policies and procedures	1	3	-	-
Create components of rubber ball	17	49	-	-
<b>PC17.</b> select the quantity of rubber to be used for the batch of balls	1	3	-	-
<b>PC18.</b> identify any imperfections in the material, if any, before using	1	3	-	-
PC19. use rollers to kneed and thin the rubber	1	3	-	-
<b>PC20.</b> identify the process, duration, techniques required to flatten	1	3	-	-
<b>PC21.</b> cut the flattened rubber using hand or clipping machine into slugs	1	3	-	-
PC22. use heat molds to create half-shells	1	3	-	-
<b>PC23.</b> check the temperature and pressure of the moulds to ensure perfection	1	3	-	-
<b>PC24.</b> cut, trim the extra rubber from the half-shells to get perfect semi-circle balls	1	3	-	-
<b>PC25.</b> buff the half-shell seams using sanding paper	1	3	-	-
<b>PC26.</b> glue the two half-shells together using an adhesive	1	3	-	-
<b>PC27.</b> load the glued half-shells into the hydraulic molds to create a solid core	1	3	-	-
PC28. rough the surface of the balls using a sanding drum	1	3	-	-
<b>PC29.</b> apply uniform amount of rubber adhesive to the rough balls through tumbling operation	1	3	-	-
<b>PC30.</b> cut the nylon/woolen felts into 'dogbones' shape and stack them	1	3	-	-
<b>PC31.</b> dip the stacked felt to the vat of adhesive to adhere it to the core	1	3	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC32.</b> use hand or ball-covering machine to apply two felts to the rubber core (2in wide, 6in long)	1	2	-	-
PC33. use roll-down conveyor to remove any lumps or wrinkles along the sim	1	2	-	-
Sort, reports substandard goods before assembling	7	14	-	-
<b>PC34.</b> identify and respond to imperfections, defects and damage due to mishandling	1	2	-	-
<b>PC35.</b> report defects in the tools and equipment one does not have the authority to repair	1	2	-	-
<b>PC36.</b> report risks/ problems likely to affect services to the relevant person promptly and accurately	1	2	-	-
<b>PC37.</b> complete forms, records and other documentation	1	2	-	-
<b>PC38.</b> make sure that the cut material is correctly sorted to assist the next stage of production	1	2	-	-
<b>PC39.</b> make sure that the cut material carefully placed to minimise the risk of damage	1	2	-	-
<b>PC40.</b> carry out closedown procedures on completion of work	1	2	-	-
NOS Total	40	110	-	-









# **National Occupational Standards (NOS) Parameters**

NOS Code	SPF/N8107
NOS Name	Select appropriate manufacturing process to produce sports ball
Sector	Sports
Sub-Sector	Sports Manufacturing
Occupation	Sports Manufacturing
NSQF Level	3
Credits	3
Version	1.0
Last Reviewed Date	NA
Next Review Date	23/06/2026
NSQC Clearance Date	23/06/2023









## SPF/N8108: Perform final assembly to produce finished sports goods

## **Description**

This unit is about performing final assembly to produce sports goods.

## Scope

The scope covers the following:

- Combine different components of ball
- Carry out final assembling of balls with bladder, stuffed or hollow core
- · Carry out final quality and standards check
- Work effectively with others

#### **Elements and Performance Criteria**

## Combine different components of ball

To be competent, the user/individual on the job must be able to:

- **PC1.** identify the points of inspection of the assembling goods
- **PC2.** ensure the quantity of cut items meet specifications
- **PC3.** organise and prepare components for sewing
- **PC4.** execute the process for Inner and outer joint sewing
- **PC5.** carry out test sews
- **PC6.** sew cut items to specifications and in the correct sequence
- **PC7.** assemble the balls by stitching the panels together
- **PC8.** identify if sewn product conforms to shape and size requirements
- **PC9.** inspect sewn products against specification
- **PC10.** identify, mark and place rejects in the designated location
- **PC11.** use tools and equipment correctly, efficiently and safely
- **PC12.** prepare sewn work for transfer on to the next stage of the process
- **PC13.** complete and store accurate records and documentation

## Carry out final assembling for balls with bladder, stuffed or hollow core

To be competent, the user/individual on the job must be able to:

- **PC14.** identify the type of balls and their final assembly process ball with bladder, hollow rubber ball, cricket ball
- **PC15.** inspect bladders after removing from the molds
- PC16. perform visual inspection to identify the faulty printed panels if any
- **PC17.** identify missed stiches if any
- **PC18.** ensure bladder of the ball is glued to the air valve panel before final stitching
- **PC19.** inflate the ball to ensure that the bladder has not been punctured by a needle during stitching
- PC20. use vulcanizing machine to heat the bladder to make it more flexible, durable and stronger









- **PC21.** use twining or winding machines to wrap polyester or nylon threads around the inner bladder, to prevent the ball from being deformed
- PC22. ensure the shape, size and weight of the ball is as per the manufacturing standards
- PC23. identify the use of core in leather-based cricket ball
- **PC24.** identify the characteristics of core used in leather-based cricket ball
- PC25. differentiate cork and the wool
- PC26. check quality of the cork and wool
- **PC27.** identify ratio of the cork to the wool
- **PC28.** measure weight to be maintained for preparation of core
- PC29. perform final stitching of the outer layer of the ball

### Carry out final quality and standards check

To be competent, the user/individual on the job must be able to:

- PC30. trim excess threads from the article
- **PC31.** check for any incorrect/ damaged stitch/design embroidery
- **PC32.** handover to alteration section to mend minor defects
- PC33. minimise waste and dispose of all waste materials in the approved manner
- **PC34.** sort and place work to assist the next stage of production and to minimise the risk of damage
- **PC35.** check if the final product meets the standards and international specification
- **PC36.** attach brand labels, barcodes/price tags on the article
- **PC37.** clean the final article to remove all residue, dirt, adhesive or any other contamination by hand/ machine
- **PC38.** wrap the article in paper and prepare for packing in boxes

## Work effectively with others

To be competent, the user/individual on the job must be able to:

- **PC39.** interact (verbal, non-verbal and written) in a gender, disability, and culturally sensitive manner
- **PC40.** promote a safe and interactive environment
- PC41. identify and report inappropriate behaviour (e.g. sexual harassment) to appropriate authority

## **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

- **KU1.** the process for finishing
- **KU2.** the types of raw material to be used for finishing
- **KU3.** the BIS and International standards
- **KU4.** the standard applicable for manufacturing a cricket ball of International label
- **KU5.** the process for packaging
- **KU6.** the types of tools and equipment and other materials used for packaging
- **KU7.** potential faults in the various processes and methods to avoid them
- **KU8.** process for obtaining replacements for worn, faulty or defective tools









- KU9. different characteristics of the various materials used for supporting the finishing operations
- **KU10.** equipment operating procedures to carry out colouring, cleaning, lamping, thread trimming, and packaging operations
- KU11. styles/ design of the products currently being produced
- **KU12.** appearance of the final product
- KU13. common faults in tools and equipment and implications of working with faulty equipment
- **KU14.** the tools, equipment and settings are needed for the operation
- KU15. manufacturers' instructions
- **KU16.** polishing, painting, shining different materials
- **KU17.** plan an appropriate response after assessing an emergency situation
- KU18. emergency response skills appropriate to the location and personal health care
- **KU19.** importance of gender and its related concepts such as gender roles, gender equality, gender power relations etc
- KU20. POSH (Prevention of Sexual Harassment) Act

## **Generic Skills (GS)**

User/individual on the job needs to know how to:

- **GS1.** resolve conflicts
- **GS2.** report and record incidents and emergency situations
- **GS3.** read and understand all usage and safety manuals
- **GS4.** write in English/ local language as applicable
- GS5. fill up activity logs/work sheet in the prescribed format of the company as applicable
- **GS6.** listen actively
- **GS7.** communicate effectively with operators, supervisors, managers, etc.









## **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Combine different components of ball	13	26	-	-
<b>PC1.</b> identify the points of inspection of the assembling goods	1	2	-	-
<b>PC2.</b> ensure the quantity of cut items meet specifications	1	2	-	-
<b>PC3.</b> organise and prepare components for sewing	1	2	-	-
<b>PC4.</b> execute the process for Inner and outer joint sewing	1	2	-	-
PC5. carry out test sews	1	2	-	-
<b>PC6.</b> sew cut items to specifications and in the correct sequence	1	2	-	-
<b>PC7.</b> assemble the balls by stitching the panels together	1	2	-	-
<b>PC8.</b> identify if sewn product conforms to shape and size requirements	1	2	-	-
PC9. inspect sewn products against specification	1	2	-	-
PC10. identify, mark and place rejects in the designated location	1	2	-	-
<b>PC11.</b> use tools and equipment correctly, efficiently and safely	1	2	-	-
<b>PC12.</b> prepare sewn work for transfer on to the next stage of the process	1	2	-	-
<b>PC13.</b> complete and store accurate records and documentation	1	2	-	-
Carry out final assembling for balls with bladder, stuffed or hollow core	16	32	-	-
<b>PC14.</b> identify the type of balls and their final assembly process – ball with bladder, hollow rubber ball, cricket ball	1	2	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC15.</b> inspect bladders after removing from the molds	1	2	-	-
<b>PC16.</b> perform visual inspection to identify the faulty printed panels if any	1	2	-	-
PC17. identify missed stiches if any	1	2	-	-
<b>PC18.</b> ensure bladder of the ball is glued to the air valve panel before final stitching	1	2	-	-
<b>PC19.</b> inflate the ball to ensure that the bladder has not been punctured by a needle during stitching	1	2	-	-
<b>PC20.</b> use vulcanizing machine to heat the bladder to make it more flexible, durable and stronger	1	2	-	-
<b>PC21.</b> use twining or winding machines to wrap polyester or nylon threads around the inner bladder, to prevent the ball from being deformed	1	2	-	-
<b>PC22.</b> ensure the shape, size and weight of the ball is as per the manufacturing standards	1	2	-	-
PC23. identify the use of core in leather-based cricket ball	1	2	-	-
<b>PC24.</b> identify the characteristics of core used in leather-based cricket ball	1	2	-	-
PC25. differentiate cork and the wool	1	2	-	-
PC26. check quality of the cork and wool	1	2	-	-
PC27. identify ratio of the cork to the wool	1	2	-	-
<b>PC28.</b> measure weight to be maintained for preparation of core	1	2	-	-
<b>PC29.</b> perform final stitching of the outer layer of the ball	1	2	-	-
Carry out final quality and standards check	9	36	-	-
PC30. trim excess threads from the article	1	4	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC31.</b> check for any incorrect/ damaged stitch/design embroidery	1	4	-	-
<b>PC32.</b> handover to alteration section to mend minor defects	1	4	-	-
<b>PC33.</b> minimise waste and dispose of all waste materials in the approved manner	1	4	-	-
<b>PC34.</b> sort and place work to assist the next stage of production and to minimise the risk of damage	1	4	-	-
<b>PC35.</b> check if the final product meets the standards and international specification	1	4	-	-
<b>PC36.</b> attach brand labels, barcodes/price tags on the article	1	4	-	-
PC37. clean the final article to remove all residue, dirt, adhesive or any other contamination by hand/ machine	1	4	-	-
<b>PC38.</b> wrap the article in paper and prepare for packing in boxes	1	4	-	-
Work effectively with others	6	12	-	-
<b>PC39.</b> interact (verbal, non-verbal and written) in a gender, disability, and culturally sensitive manner	2	4	-	-
<b>PC40.</b> promote a safe and interactive environment	2	4	-	-
<b>PC41.</b> identify and report inappropriate behaviour (e.g. sexual harassment) to appropriate authority	2	4	-	-
NOS Total	44	106	-	-









# **National Occupational Standards (NOS) Parameters**

NOS Code	SPF/N8108
NOS Name	Perform final assembly to produce finished sports goods
Sector	Sports
Sub-Sector	Sports Manufacturing
Occupation	Sports Manufacturing
NSQF Level	3
Credits	3
Version	1.0
Last Reviewed Date	NA
Next Review Date	23/06/2026
NSQC Clearance Date	23/06/2023









## SPF/N1169: Improve workplace resource usage

## **Description**

This unit is about increasing efficiencies and maximizing the use of materials, particularly resources, energy, and trash, in workplace operations.

## Scope

The scope covers the following:

- conservation procedures for materials
- power conservation methods
- waste management/recycling procedures

## **Elements and Performance Criteria**

#### conservation procedures for materials

To be competent, the user/individual on the job must be able to:

- **PC1.** determine ways to optimize usage of material including water in various tasks/activities/processes
- PC2. examine various tasks/activities/processes for spills/leaks
- PC3. eliminate spills/leaks and escalate to appropriate authorities if they cannot be corrected
- **PC4.** conduct routine cleaning of tools, machines, and equipment

## power conservation practices

To be competent, the user/individual on the job must be able to:

- **PC5.** determine ways to optimize usage of electricity/energy in various tasks/activities/processes
- **PC6.** ensure if the equipment/machine is functioning normally before commencing work and rectify wherever required
- **PC7.** report equipment malfunctions (fumes/sparks/emission/vibration/noise) and lapses in maintenance
- **PC8.** ensure that all electrical equipment and appliances are correctly connected and turned off when not in use

#### waste management/recycling procedures

To be competent, the user/individual on the job must be able to:

- **PC9.** determine recyclable and non-recyclable, and hazardous waste generated
- **PC10.** seperate waste into different categories
- **PC11.** discard non-recyclable waste appropriately
- **PC12.** store recyclable and reusable materials in a designated spot

## **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:









- **KU1.** potential hazards, risks and threats based on the nature of work
- **KU2.** layout of the workstation and electrical and thermal equipment used
- **KU3.** organizations' procedures for minimizing waste
- KU4. efficient and inefficient utilization of material and water
- **KU5.** ways of efficiently managing material and water in the process
- **KU6.** basics of electricity and prevalent energy efficient devices
- KU7. ways to recognize common electrical problems
- **KU8.** common practices of conserving electricity
- **KU9.** usage of different colours of dustbins
- **KU10.** categorization of waste into dry, wet, recyclable, non-recyclable and items of single-use plastics
- **KU11.** waste management and methods of waste disposal
- **KU12.** common sources of pollution and ways to minimize it

## **Generic Skills (GS)**

User/individual on the job needs to know how to:

- **GS1.** record data on waste disposal at workplace
- **GS2.** complete statutory documents relevant to safety and hygiene
- GS3. read Standard Operating Practices (SOP) documents
- **GS4.** communicate with colleagues on the significance of greening of jobs
- GS5. make timely decisions for efficient utilization of resources
- **GS6.** complete tasks efficiently and accurately within stipulated time
- **GS7.** work with supervisors/team members to carry out work related tasks
- GS8. identify cause and effect of greening of jobs









## **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
conservation procedures for materials	4	12	-	-
<b>PC1.</b> determine ways to optimize usage of material including water in various tasks/activities/processes	1	3	-	-
<b>PC2.</b> examine various tasks/activities/processes for spills/leaks	1	3	-	-
<b>PC3.</b> eliminate spills/leaks and escalate to appropriate authorities if they cannot be corrected	1	3	-	-
<b>PC4.</b> conduct routine cleaning of tools, machines, and equipment	1	3	-	-
power conservation practices	8	10	-	-
<b>PC5.</b> determine ways to optimize usage of electricity/energy in various tasks/activities/processes	2	3	-	-
<b>PC6.</b> ensure if the equipment/machine is functioning normally before commencing work and rectify wherever required	2	3	-	-
<b>PC7.</b> report equipment malfunctions (fumes/sparks/emission/vibration/noise) and lapses in maintenance	2	2	-	-
<b>PC8.</b> ensure that all electrical equipment and appliances are correctly connected and turned off when not in use	2	2	-	-
waste management/recycling procedures	8	8	-	-
<b>PC9.</b> determine recyclable and non-recyclable, and hazardous waste generated	2	2	-	-
PC10. seperate waste into different categories	2	2	-	-
PC11. discard non-recyclable waste appropriately	2	2	-	-
<b>PC12.</b> store recyclable and reusable materials in a designated spot	2	2	-	-
NOS Total	20	30	-	-









# **National Occupational Standards (NOS) Parameters**

NOS Code	SPF/N1169
NOS Name	Improve workplace resource usage
Sector	Sports
Sub-Sector	Sports
Occupation	Sports Coaching
NSQF Level	3
Credits	1
Version	1.0
Last Reviewed Date	NA
Next Review Date	23/06/2026
NSQC Clearance Date	23/06/2023









## **DGT/VSQ/N0101: Employability Skills (30 Hours)**

## **Description**

This unit is about employability skills, Constitutional values, becoming a professional in the 21st Century, digital, financial, and legal literacy, diversity and Inclusion, English and communication skills, customer service, entrepreneurship, and apprenticeship, getting ready for jobs and career development.

## Scope

The scope covers the following:

- Introduction to Employability Skills
- Constitutional values Citizenship
- Becoming a Professional in the 21st Century
- Basic English Skills
- Communication Skills
- Diversity & Inclusion
- Financial and Legal Literacy
- Essential Digital Skills
- Entrepreneurship
- Customer Service
- Getting ready for Apprenticeship & Jobs

## **Elements and Performance Criteria**

#### Introduction to Employability Skills

To be competent, the user/individual on the job must be able to:

PC1. understand the significance of employability skills in meeting the job requirements

#### Constitutional values - Citizenship

To be competent, the user/individual on the job must be able to:

**PC2.** identify constitutional values, civic rights, duties, personal values and ethics and environmentally sustainable practices

## Becoming a Professional in the 21st Century

To be competent, the user/individual on the job must be able to:

**PC3.** explain 21st Century Skills such as Self-Awareness, Behavior Skills, Positive attitude, self-motivation, problem-solving, creative thinking, time management, social and cultural awareness, emotional awareness, continuous learning mindset etc.

#### Basic English Skills

To be competent, the user/individual on the job must be able to:

**PC4.** speak with others using some basic English phrases or sentences

#### Communication Skills

To be competent, the user/individual on the job must be able to:

**PC5.** follow good manners while communicating with others

**PC6.** work with others in a team









## **Diversity & Inclusion**

To be competent, the user/individual on the job must be able to:

**PC7.** communicate and behave appropriately with all genders and PwD

**PC8.** report any issues related to sexual harassment

## Financial and Legal Literacy

To be competent, the user/individual on the job must be able to:

**PC9.** use various financial products and services safely and securely

**PC10.** calculate income, expenses, savings etc.

PC11. approach the concerned authorities for any exploitation as per legal rights and laws

## Essential Digital Skills

To be competent, the user/individual on the job must be able to:

PC12. operate digital devices and use its features and applications securely and safely

**PC13.** use internet and social media platforms securely and safely

#### Entrepreneurship

To be competent, the user/individual on the job must be able to:

PC14. identify and assess opportunities for potential business

PC15. identify sources for arranging money and associated financial and legal challenges

#### **Customer Service**

To be competent, the user/individual on the job must be able to:

**PC16.** identify different types of customers

**PC17.** identify customer needs and address them appropriately

**PC18.** follow appropriate hygiene and grooming standards

## Getting ready for apprenticeship & Jobs

To be competent, the user/individual on the job must be able to:

PC19. create a basic biodata

**PC20.** search for suitable jobs and apply

PC21. identify and register apprenticeship opportunities as per requirement

## **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

**KU1.** need for employability skills

**KU2.** various constitutional and personal values

**KU3.** different environmentally sustainable practices and their importance

**KU4.** Twenty first (21st) century skills and their importance

**KU5.** how to use basic spoken English language

**KU6.** Do and dont of effective communication

**KU7.** inclusivity and its importance

KU8. different types of disabilities and appropriate communication and behaviour towards PwD

**KU9.** different types of financial products and services









- **KU10.** how to compute income and expenses
- **KU11.** importance of maintaining safety and security in financial transactions
- **KU12.** different legal rights and laws
- **KU13.** how to operate digital devices and applications safely and securely
- KU14. ways to identify business opportunities
- KU15. types of customers and their needs
- **KU16.** how to apply for a job and prepare for an interview
- **KU17.** apprenticeship scheme and the process of registering on apprenticeship portal

## **Generic Skills (GS)**

User/individual on the job needs to know how to:

- **GS1.** communicate effectively using appropriate language
- GS2. behave politely and appropriately with all
- **GS3.** perform basic calculations
- **GS4.** solve problems effectively
- GS5. be careful and attentive at work
- **GS6.** use time effectively
- **GS7.** maintain hygiene and sanitisation to avoid infection









## **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Introduction to Employability Skills	1	1	-	-
<b>PC1.</b> understand the significance of employability skills in meeting the job requirements	-	-	-	-
Constitutional values - Citizenship	1	1	-	-
<b>PC2.</b> identify constitutional values, civic rights, duties, personal values and ethics and environmentally sustainable practices	-	-	-	-
Becoming a Professional in the 21st Century	1	3	-	-
<b>PC3.</b> explain 21st Century Skills such as Self-Awareness, Behavior Skills, Positive attitude, self-motivation, problem-solving, creative thinking, time management, social and cultural awareness, emotional awareness, continuous learning mindset etc.	-	-	-	-
Basic English Skills	2	3	-	-
<b>PC4.</b> speak with others using some basic English phrases or sentences	-	-	-	-
Communication Skills	1	1	-	-
<b>PC5.</b> follow good manners while communicating with others	-	-	-	-
PC6. work with others in a team	-	-	-	-
Diversity & Inclusion	1	1	-	-
<b>PC7.</b> communicate and behave appropriately with all genders and PwD	-	-	-	-
PC8. report any issues related to sexual harassment	-	-	-	-
Financial and Legal Literacy	3	4	-	-
<b>PC9.</b> use various financial products and services safely and securely	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC10. calculate income, expenses, savings etc.	-	-	-	-
<b>PC11.</b> approach the concerned authorities for any exploitation as per legal rights and laws	-	-	-	-
Essential Digital Skills	4	6	-	-
<b>PC12.</b> operate digital devices and use its features and applications securely and safely	-	-	-	-
<b>PC13.</b> use internet and social media platforms securely and safely	-	-	-	-
Entrepreneurship	3	5	-	-
<b>PC14.</b> identify and assess opportunities for potential business	-	-	-	-
<b>PC15.</b> identify sources for arranging money and associated financial and legal challenges	-	-	-	-
Customer Service	2	2	-	-
PC16. identify different types of customers	-	-	-	-
<b>PC17.</b> identify customer needs and address them appropriately	-	-	-	-
<b>PC18.</b> follow appropriate hygiene and grooming standards	-	-	-	-
Getting ready for apprenticeship & Jobs	1	3	-	-
PC19. create a basic biodata	-	-	-	-
PC20. search for suitable jobs and apply	-	-	-	-
<b>PC21.</b> identify and register apprenticeship opportunities as per requirement	-	-	-	-
NOS Total	20	30	-	-









## **National Occupational Standards (NOS) Parameters**

NOS Code	DGT/VSQ/N0101
NOS Name	Employability Skills (30 Hours)
Sector	Cross Sectoral
Sub-Sector	Professional Skills
Occupation	Employability
NSQF Level	2
Credits	1
Version	1.0
Last Reviewed Date	NA
Next Review Date	23/06/2026
NSQC Clearance Date	23/06/2023

## Assessment Guidelines and Assessment Weightage

### **Assessment Guidelines**

- 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 the proportion of marks for Theory and Skills Practical for each PC.
- 2. The assessment for the theory part will be based on the knowledge bank of questions created by the SSC.
- 3. Assessment will be conducted for all compulsory NOS, and where applicable, on the selected elective/option NOS/set of NOS.
- 4. Individual assessment agencies will create unique question papers for the theory part for each candidate at each examination/training center (as per assessment criteria below).
- 5. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/ training center based on these criteria.
- 6. To pass the Qualification Pack assessment, every trainee should score a minimum of 50% of % aggregate marks to successfully clear the assessment.









7. In case of unsuccessful completion, the trainee may seek reassessment on the Qualification Pack.

Minimum Aggregate Passing % at QP Level: 50

(**Please note**: Every Trainee should score a minimum aggregate passing percentage as specified above, to successfully clear the Qualification Pack assessment.)

## **Assessment Weightage**

## Compulsory NOS

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
SPF/N8106.Prepare Equipment and Materials for Production of Sports ball	28	72	0	0	100	20
SPF/N8107.Select appropriate manufacturing process to produce sports ball	40	110	0	0	150	30
SPF/N8108.Perform final assembly to produce finished sports goods	44	106	0	0	150	30
SPF/N1169.Improve workplace resource usage	20	30	0	0	50	10
DGT/VSQ/N0101.Employability Skills (30 Hours)	20	30	-	-	50	10
Total	152	348	-	-	500	100









# Acronyms

NOS	National Occupational Standard(s)
NSQF	National Skills Qualifications Framework
QP	Qualifications Pack
TVET	Technical and Vocational Education and Training









## Glossary

Sector	Sector is a conglomeration of different business operations having similar business and interests. It may also be defined as a distinct subset of the economy whose components share similar characteristics and interests.
Sub-sector	Sub-sector is derived from a further breakdown based on the characteristics and interests of its components.
Occupation	Occupation is a set of job roles, which perform similar/ related set of functions in an industry.
Job role	Job role defines a unique set of functions that together form a unique employment opportunity in an organisation.
Occupational Standards (OS)	OS specify the standards of performance an individual must achieve when carrying out a function in the workplace, together with the Knowledge and Understanding (KU) they need to meet that standard consistently. Occupational Standards are applicable both in the Indian and global contexts.
Performance Criteria (PC)	Performance Criteria (PC) are statements that together specify the standard of performance required when carrying out a task.
National Occupational Standards (NOS)	NOS are occupational standards which apply uniquely in the Indian context.
Qualifications Pack (QP)	QP comprises the set of OS, together with the educational, training and other criteria required to perform a job role. A QP is assigned a unique qualifications pack code.
Unit Code	Unit code is a unique identifier for an Occupational Standard, which is denoted by an 'N'
Unit Title	Unit title gives a clear overall statement about what the incumbent should be able to do.
Description	Description gives a short summary of the unit content. This would be helpful to anyone searching on a database to verify that this is the appropriate OS they are looking for.
Scope	Scope is a set of statements specifying the range of variables that an individual may have to deal with in carrying out the function which have a critical impact on quality of performance required.









Knowledge and Understanding (KU)	Knowledge and Understanding (KU) are statements which together specify the technical, generic, professional and organisational specific knowledge that an individual needs in order to perform to the required standard.
Organisational Context	Organisational context includes the way the organisation is structured and how it operates, including the extent of operative knowledge managers have of their relevant areas of responsibility.
Technical Knowledge	Technical knowledge is the specific knowledge needed to accomplish specific designated responsibilities.
Core Skills/ Generic Skills (GS)	Core skills or Generic Skills (GS) are a group of skills that are the key to learning and working in today's world. These skills are typically needed in any work environment in today's world. These skills are typically needed in any work environment. In the context of the OS, these include communication related skills that are applicable to most job roles.
Electives	Electives are NOS/set of NOS that are identified by the sector as contributive to specialization in a job role. There may be multiple electives within a QP for each specialized job role. Trainees must select at least one elective for the successful completion of a QP with Electives.
Options	Options are NOS/set of NOS that are identified by the sector as additional skills. There may be multiple options within a QP. It is not mandatory to select any of the options to complete a QP with Options.