

### CONTACT DETAILS OF THE AWARDING BODY FOR THE QUALIFICATION

**Name and address of awarding body:** Central Institute of Plastics Engineering and Technology (CIPET), Ministry of Chemicals and Fertilizers, Department of Chemicals and Petrochemicals, Govt. of India, Head Office, Guindy, Chennai

### Name and contact details of individual dealing with the submission

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### List of documents submitted in support of the Qualifications File:

1. Qualification Document - FRP - Operator
2. Curriculum/ Syllabus
3. Training delivery Plan
4. Criteria for Assessment of Trainees
5. Occupational Map
6. Composition of core committee for QP Development order, DCPC, MoCF, GOI
7. Presentation of 2nd core group committee meeting along with Minutes of meeting approved by members
8. Assessment Process flow
9. Documents supporting need of the Qualification:
  - a. Report of the Coordination Committee address the issue related with Human Resources/ Skilled manpower requirement of Industry- Department of Chemicals and Petrochemicals, Ministry of Chemicals and Fertilizers, Govt. Of India
  - b. A Report on Human Resource and Skill requirement for the Chemicals and Pharmaceutical sector (2022) by NSDC.
  - c. Brief report of Chemicals and petrochemicals Industry in India, April 2015, Corporate Catalyst India Pvt Ltd, Page 4
  - d. Report on Indian Plastics Industry 2013-17, edition 2, Nov 2014, PlastIndia Foundation.
  - e. Indian Plastics Industry – Vision 2012, Leverage Plastic, A report by CRISIL
  - f. Potential of Downstream Plastics Industry in North India, 26 June 2012, Knowledge and Strategy paper by Tata Strategic management Group & FICCI
  - g. Potential of plastics industry in Northern India with special focus on Plasticulture and Food Processing- 2014. A report on Plastic Industry by Tata Strategic management Group & FICCI.

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- h. Plastic Industry in India a BPF Overview for PlastIndia International Exhibition 2012, New Delhi
- i. Porters Five force Analysis of the Plastics Industry by Santanu Mandal, International Journal of Multidisciplinary Research, Vol 1, Issue 7, November 2011, ISSN 2231 5780
- j. Industry Engagement certificate in preparation of learning outcomes and Job Role Identification in Petrochemicals sector

## QUALIFICATION FILE

### SUMMARY

**Qualification Title:** FRP - Operator

**Nature and Purpose of the qualification:**

A CIPET trade certificate for FRP – Operator and main purpose of the Qualification is to get acquainted with the Fibre Reinforced Plastics process and get opportunity to work in this field.

**Body/bodies which will award the qualification:**

The Academic Cell – HO, Central Institute of Plastics Engineering and Technology (CIPET), Ministry of Chemicals and Fertilizers, Department of Chemicals and Petrochemicals, Govt. of India, Head Office, Guindy, Chennai.

**Body which will accredit providers to offer courses leading to the qualification:**

The Academic Cell – HO, Central Institute of Plastics Engineering and Technology (CIPET), Ministry of Chemicals and Fertilizers, Department of Chemicals and Petrochemicals, Govt. of India, Head Office, Guindy, Chennai.

**Body/bodies which will be responsible for assessment:**

The assessment is being carried out at individual Centre level. Training Assessment Wing is created in Head Office (HO) of Central Institute of Plastics Engineering and Technology (CIPET), Ministry of Chemicals and Fertilizers, Department of Chemicals and Petrochemicals, Govt. of India, Guindy, Chennai is responsible for overall assessment.

**Occupation(s) to which the qualification gives access:**

FRP - Operator occupation in Plastics product manufacturing process

**Proposed level of the qualification in the NSQF:** Level 4

**Anticipated volume of training/learning required to complete the qualification:**

960 Notional hours.

**Entry requirements / recommendations:**

Minimum qualification – Preferably 8<sup>th</sup> Standard, Minimum age - 18 years completed.

**Progression from the qualification:**

FRP - Operator (Level 4) has a clear pathway to FRP next level.

## QUALIFICATION FILE

### Planned arrangements for the Recognition of Prior learning (RPL):

RPL arrangements are being developed and will be informed in due course of time.

**International comparability where known:** It will be carried out in next phase as comparability is being verified.

**Date of planned review of Qualification:** 04.08.2017

### Format Structure of the Qualification:

Title and Identification code of component	Mandatory/ Optional	Estimated Size (Notional Hours)	Level
CPC/N1019: Use and applications of FRP products, Merits and Demerits	M	70	4
CPC/N1020: Basics of thermoplastics and thermoset materials. Introduction to Resins/fibres used for FRP Molding	M	100	4
CPC/N1021: Selection of suitable process for FRP products manufacturing and Mould development	M	140	4
CPC/N1022: Efficient operation of the machinery	M	140	4
CPC/N1023: Finishing/Decoration operations for FRP products	M	70	4
CPC/N1024: Understand and apply the quality control techniques for defect free manufacturing	M	100	4
CPC/N1025: Understand and apply Health, safety & Environment measures	M	70	4
CPC/N1026: Develop and maintain suitable housekeeping practices in the shop floor	M	70	4
CPC/N1027: Work effectively with other fellow workers to achieve the goals of the organization. Demonstrate proper communication and supervision skills.	M	100	4
CPC/N1028: Perform the reporting and documentation work required in the shop floor.	M	100	4
<b>Total</b>		<b>960</b>	

Qualifications Document - FRP – Operator attached as Annexure.

## QUALIFICATION FILE

### SECTION 1

#### ASSESSMENT

##### **Body/Bodies which will carry out assessment:**

A Separate department/ body -Training Assessment Wing of Central Institute of Plastics Engineering and Technology (CIPET), Ministry of Chemicals and Fertilizers, Department of Chemicals and Petrochemicals, Govt. Of India, Head Office, Guindy, Chennai.

##### **Will the assessment body be responsible for RPL assessment?**

RPL arrangements are being developed and will be informed in due course of time.

##### **Describe the overall assessment strategy and specific arrangements which have been put in place to ensure that assessment is always valid, consistent and fair and show that these are in line with the requirements of the NSQF:**

With uniformity and setting of learning outcomes for different Jobs Roles the assessment of candidates will be at learning outcome level. Assessment criterion has been defined for each learning outcome and it includes both theoretical and practical skills on which the candidate will be assessed. The question suite which will be used to check the skills of the trainee would include

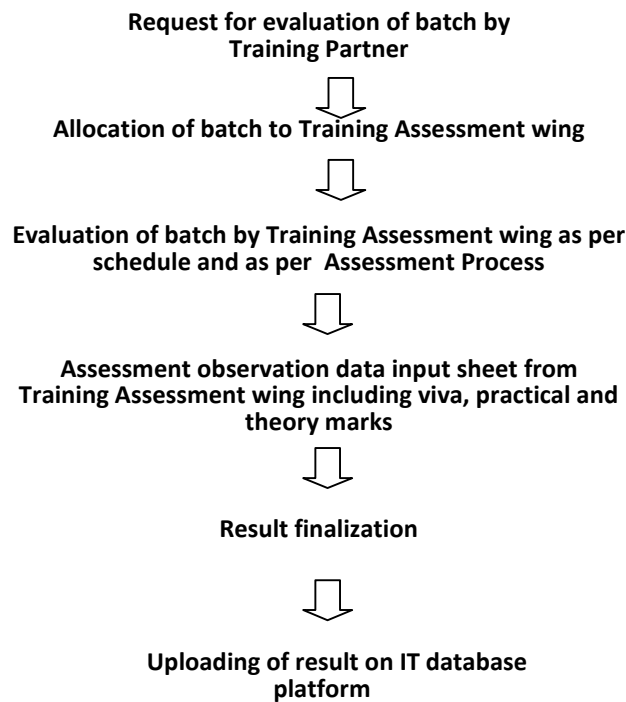
- **Theoretical test suite** – Will include multiple choice questions, audio-video question etc. which will test the trainee on his knowledge of the subject
- **Practical Knowledge suite** – Practical knowledge can be tested through Assessor driven evaluation/test, Situational Judgment Tests etc to test practical core competence. A mix of these would be able to evaluate the trainee on his practical knowledge of the Qualification Document.

##### **Assessment strategy:**

- Assessment criteria for Qualification Document have been developed. Each Learning Outcome have separate marks for Theory and Practical Skills.
- The Training Assessment Wing will have assessors who will not be associated with training activities and will be provided training on the said work. Thus it will ensure that the assessment carried out is fair and consistent.
- Set of question bank developed to assess the theoretical and practical knowledge. To ensure the quality, each trainees get the unique set of question
- Student has to score minimum marks separately for theoretical and practical skill and overall percentage should also be 50% for theory and 70% for practical.
- Empanelment of subject matter expert as assessor to assess trainee specifically on practical skills
- Assessments are preferably conducted by written examination papers in English/regional languages according to the requirement.
- It has been ensure that TP/trainer should not be present during assessment

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### Assessment Process Flow:



### Summative Assessment:

Based on the Total Marks allotted for the specific subject, formal evaluation shall be conducted. Based on secured marks, candidates shall be declared pass or fail.

Steps undertaken for summative assessment:

1. Based on Completion of Batch, Evaluation Schedule shall be prepared
2. Identified Assessor is nominated for Evaluation
3. Setting up of separate Question Paper for Theory & Practical Examination
4. Conduct of examination as per the schedule
5. Evaluation & Certification

**Evidence Collected during Assessment:** Theoretical Answer Sheets, Practical Exam Sheets, Evaluation Sheets, Jobs produced during practical Exams.

### Protocol for Selection of Assessors:

- The Assessors should have the minimum qualification: Degree in Engineering.
- The Assessors should have minimum 5 years of Experience in the relevant field.

## QUALIFICATION FILE

### ASSESSMENT EVIDENCE

#### Assessment Guidelines:

1. Criteria for assessment for each Qualification Document will be created by CIPET.
2. Each Assessable outcome (AO) will be assigned marks proportional to its importance in Learning Outcome and few performance criteria may be allotted marks in combine.
3. Each Learning Outcome will be assessed both for theoretical knowledge and practical which is being proportionately demonstrated in the table below.
4. The assessment for the theory part will be based on knowledge bank of questions created by CIPET which will contain multiple choice theory questions and Practical question database with mark allotment criteria.
5. To pass the Qualification Document, every trainee should score a minimum of 50 % in Functional and all Generic Learning Outcome's.
6. In case of successfully passing only certain number of Learning Outcome's, the trainee is eligible to take Subsequent assessment on the balance Learning Outcome's to pass the Qualification Document.

**Title of the Component:** FRP – Operator

Assessable outcomes		Assessment criteria for the outcome		
LO	Assessable outcome Description	Theory	Practical	Total
CPC/N1019 Use and applications of FRP products. Merits and Demerits	AO1. To identify the need of material and mould for required product	2	10	12
	AO2. Know the merits and demerits of FRP products.	2	10	12
	AO3. Select the type of material, machinery, Mould and process for manufacturing the product.	3	10	13
	AO4. Understand the designing criteria for the FRP products.	3	10	13
	Sub Total	<b>10</b>	<b>40</b>	<b>50</b>
CPC/N1020 Basics of thermoplastics and thermoset materials. Introduction to Resins/fibres used for FRP Molding	AO1. Understanding the use and application of various additives like catalyst, accelerators, hardeners, colorants, etc.	3	12	15
	AO2. Understand the use and application of various resins and fibers.	3	12	15
	AO3. Preparation of fibres for laying. Percentage loading of fibres.	3	12	15
	AO4. Understand the properties of thermo plastics and thermoset material and their behavior.	3	12	15
	Sub Total	<b>12</b>	<b>48</b>	<b>60</b>

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CPC/N1021 Selection of suitable process for FRP products manufacturing and Mould development.	AO1. Understanding the requirements of the product like aesthetic, size & shape, use condition, performance parameters. Finishing after molding, assembly and disassembly requirements.	3	12	15
	AO2. Hand layup process & Spray layup process	3	12	15
	AO3. Injection molding of thermosets	3	12	15
	AO4. Pultrusion, centrifugal casting Filament winding.	3	12	15
	AO5. Resin transfer molding, reinforced reaction injection molding. Compression molding.	3	12	15
	AO6. Pattern making with ply wood, plaster of paris, etc. Mould development with various materials like aluminium, steel, FRP composite, etc	3	12	15
	Sub Total	<b>18</b>	<b>72</b>	<b>90</b>
CPC/N1022 Efficient operation of the machinery.	AO1. Understanding the capacity and range of operation of the machine. Process capability.	2	6	8
	AO2. Understanding various parts and their functions of the machine.	2	6	8
	AO3. Selection of suitable process parameters for the material and product.	2	7	9
	AO4. Start up and shut down procedures	2	6	8
	AO5. Trial production with new materials and molds	2	6	8
	AO6. Process/parameters optimization for quality product manufacturing.	2	7	9
	AO7. Safely loading and unloading of moulds	2	6	8
	AO8. Products ejection and handling.	2	6	8
	AO9. Preventive and Break down Maintenance	2	6	8
	AO10. Understanding the Electrical and hydraulic circuits and their operation.	2	6	8
	AO11. Trouble shooting of defects in manufacturing with regard to mould, material, moulding parameter and machine operation.	2	6	8
Sub Total	<b>22</b>	<b>68</b>	<b>90</b>	
CPC/N1023: Finishing/Deco ration operations for FRP products.	AO1. Trimming and cutting operations on FRP open molded products.	2	6	8
	AO2. Cleaning, washing and removal of release agents from molded products.	2	6	8
	AO3. Post molding operations like joining, drilling, painting and printing on molded products.	2	6	8
	AO4. Finishing operations aimed at improving aesthetic looks	2	6	8
	AO5. Assembly and disassembly of components for building the final product.	2	6	8
Sub Total	<b>10</b>	<b>30</b>	<b>40</b>	
CPC/N1024 Understand	AO1. Mechanical properties & Thermal properties tests.	2	4	6



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and apply the quality control techniques for defect free manufacturing	AO2. Physical & chemical properties	2	4	6
	AO3. Electrical , Fire & smoke properties	2	4	6
	AO4. Review effectiveness of corrective action.	2	4	6
	AO5. Interpret the results of the quality check correctly.	2	4	6
	AO6. Take up results of the findings with QC in charge/appropriate authority.	2	4	6
	AO7. Identify potential causes of non-conformities to quality assurance standards.	2	4	6
	AO8. Identify impact on final product due to non-conformance to prescribed Standards.	2	4	6
	AO9. Evaluating the need for action to ensure that problems do not reoccur.	2	4	6
	AO10. Suggest corrective action to address problem.	2	4	6
	Sub Total	<b>20</b>	<b>40</b>	<b>60</b>
CPC/N1025 Understand and apply Health, safety & Environment measures.	AO1. Identify areas in the work places which are potentially hazardous/ unhygienic in nature.	1	3	4
	AO2. Conduct regular checks with support of the maintenance team on machine health to identify potential hazards due to wear and tear of machine.	2	3	5
	AO3. Support the Safety team and the supervisor in creating the risk mitigation plan.	1	3	4
	AO4. Follow the instructions given on the equipment manual describing the operating process of the equipment.	2	3	5
	AO5. Follow the Safety, Health and Environment related practices developed by the organization.	1	3	4
	AO6. Ensure relevant safety boards/ signs are placed on the shop floor	2	3	5
	AO7. Operate the machine using the recommended Personal Protective Equipment (PPE) and ensure team members also use the related PPEs at the workplace.	1	3	4
	AO8. Maintaining clean and safe working environment near the work place and ensure there is no spillage of chemicals, production waste, oil, solvents etc.	2	3	5
	AO9. Safety and fire drills for self-aware of safety hazards and preventive techniques	1	3	4
	AO10. Maintain high standards of personal hygiene at the work place	2	3	5
Sub Total	<b>15</b>	<b>30</b>	<b>45</b>	
CPC/N1026 Develop and maintain suitable	AO1. Take an overlook of the Area under House Keeping.	1	3	4
	AO2. Put appropriate Signage immediately if oily substance / Water spills on the floor to avoid	1	3	4

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housekeeping practices in the shop floor.	accident			
	AO3. If certain housekeeping activities require to be performed by housekeeping staffs, then Inform them.	1	3	4
	AO4.If it has to be carried out by self then, Identify the material / equipment required for cleaning the areas.	1	3	4
	AO5. Plan the sequence for cleaning the area to avoid re-soiling the cleaned areas and surfaces.	1	3	4
	AO6. Display the appropriate signage for the work being conducted.	1	3	4
	AO7. Ensure that there is adequate ventilation for the work being carried out.	1	3	4
	AO8. Ensure segregation of waste in hazardous/ non Hazardous waste as per the sorting work instructions.	1	3	4
	AO9. Follow the technique of waste disposal and waste storage in the proper bins as per SOP.	1	3	4
	AO10. Segregate the items which are labeled as red tag items for the process area and keep them in the correct places.	1	3	4
	AO11. Sort the tools/ equipment/ fasteners/ spare parts as per specifications/ utility into proper trays, cabinets, lockers as mentioned in the 5S guidelines/ work instructions.	1	4	5
	Sub Total	<b>11</b>	<b>34</b>	<b>45</b>
CPC/N1027 Work effectively with other fellow workers to achieve the goals of the organisation. Demonstrate proper communication and supervision skills.	AO1. Sincere & hard working practice.	2	4	6
	AO2. Punctuality and time management.	2	4	6
	AO3. Demonstrate good customer service practice.	2	4	6
	AO4. Display helpful behaviour at work place by assisting others in performing the task	2	5	7
	AO5. Active listening skills while interacting others	2	5	7
	AO6. Inform grievances and problems to the supervisor in time.	2	5	7
	AO7. Respect the fellow worker from different social religious and cultural background.	2	5	7
	AO8. Demonstrate Supervision skills.	2	5	7
	AO9. Aim at timely completion of job.	2	5	7
Sub Total	<b>18</b>	<b>42</b>	<b>60</b>	
CPC/N1028: Perform the reporting and documentation work required in the	AO1. Understanding various level charts, signage, manuals, operating procedures etc.	2	4	6
	AO2. Writing of small report on incidents and accidents in English or local language.	2	4	6
	AO3. Filling of production data, machine log sheet, personal application etc.	2	4	6

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shop floor	AO4. Basic Computer Operation on MS Office like MS Word, Excel and Power Point	2	4	6
	AO5. Page set up and Printing	1	5	6
	AO6. Making of Posters and Banners	1	5	6
	AO7. Writing Applications and Notes	1	5	6
	AO8. Study about the forms and formats.	1	5	6
	AO9. Filling forms and formats	1	5	6
	AO10. National & International Standards and specifications as per BIS, ISO, ASTM, etc. for raw materials and finished products	1	5	6
	Sub Total	<b>14</b>	<b>46</b>	<b>60</b>
	Total	<b>150</b>	<b>450</b>	<b>600</b>
<b>Means of assessment 1:</b>				
The assessment comprise of -				
<ul style="list-style-type: none"> <li>• Theory Assessment</li> <li>• Viva voce</li> <li>• Practical assessment</li> </ul>				
<b>Means of assessment 2:</b>				
<b>Pass/Fail-</b>				
<p><b>The Pass mark of theory written assessment is 50% and for viva and practical assessment is 70%. The candidate has to pass separately in Theory and Practical.</b></p>				

## QUALIFICATION FILE

### SECTION 2

#### EVIDENCE OF LEVEL

Level of qualification: 4

Title /Name of Qualification/Component: FRP Operator		Level: 4	
NSQF Domain	Outcomes of the Qualification/Component	How the job role relates to the NSQF Level descriptors	NSQF Level
Process	<p>The FRP operator is expected to perform the following activities.</p> <ul style="list-style-type: none"> <li>✓ Applications of FRP for various applications.</li> <li>✓ Understanding the need of raw materials, molds and machinery for the product in hand..</li> <li>✓ Maintain the time limits for allotted work.</li> <li>✓ Organizing and planning the production schedule for effective utilization of the plant and machine and manpower.</li> <li>✓ Preparation of moulds from suitable material.</li> <li>✓ Identifies the types of resin material .</li> <li>✓ Safely handles the resin during working.</li> <li>✓ Selection of fibres and their proportion.</li> <li>✓ Understanding the properties and applications of all types of materials/fibres/additives..</li> <li>✓ Understanding the process capabilities and applying suitable troubleshooting to machine/mold/product defects.</li> <li>✓ Understanding the different manufacturing processes, like hand layup, spray up , pultrusion etc..</li> <li>✓ Understanding the maintenance of machinery and equipment used and applying suitable preventive and break</li> </ul>	<p>All activities of the process for a Operator are familiar to the trade and predictable. These are routine situations of clear choice.</p>	4

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	<p>down maintenance practices.</p> <ul style="list-style-type: none"> <li>✓ Process optimization and parameter setting.</li> <li>✓ Start up &amp; shut down procedures.</li> <li>✓ Post molding operations, finishing and / decoration operations.</li> <li>✓ Understanding the need of testing and quality control required for the FRP products.</li> <li>✓ Understand the activities which can cause potential injury.</li> <li>✓ Performing all checks to ensure conformance of the product to acceptable norms.</li> <li>✓ Identifies the potential causes of non conformance and takes necessary corrective/preventive action.</li> </ul>		
<b>Professional knowledge</b>	<ul style="list-style-type: none"> <li>✓ Understands the Different types of FRP products, requirement of the product, design criteria and material and machine selection.</li> <li>✓ Understand the different plastics materials, additives, various FRP Manufacturing Process, moulds, machines and product costing.</li> <li>✓ Familiar with Possible causes of common moulding problems &amp; their remedies.</li> <li>✓ Basic knowledge of Safety procedures for different FRP Manufacturing Techniques.</li> </ul>	These knowledge are related to the basic factual knowledge of FRP field as required in the industry.	04
<b>Professional skill</b>	<ul style="list-style-type: none"> <li>✓ Prioritize and execute tasks within time limit.</li> <li>✓ Understanding the operational requirement.</li> <li>✓ Time management.</li> <li>✓ Cost management.</li> <li>✓ Man management.</li> <li>✓ Display helpful behavior and ready to help attitude.</li> <li>✓ DiagLOe common faults and suggest remedies.</li> <li>✓ Develop new products on his</li> </ul>	The FRP operator utilizes his personal practical skill to demonstrate in routine and repetitive work requirement. Uses his skill to develop quality products and new applications .	04

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	own skill and knowledge.		
<b>Core skill</b>	<ul style="list-style-type: none"> <li>✓ Ensures that all safety practices as per SOP are implemented.</li> <li>✓ Communicates nicely with co team workers.</li> <li>✓ Able to verify the reports/formats are written properly.</li> <li>✓ Ability to work sincerely and hard work.</li> <li>✓ Maintains self-discipline and ensures a vibrant work culture.</li> <li>✓ Understands the expectations of people working in the team.</li> <li>✓ Follows safety information, maintains cleanliness and uses Personal protection equipment.</li> <li>✓ Able to calculate dimensions of mold drawings, and raw material requirements.</li> <li>✓ Maintain housekeeping in the shop floor.</li> </ul>	The job roles listed in these category are Proper communication either written or oral, with required clarity. Skills to basic arithmetic and algebraic principles, basic understanding of religious and socio political and natural environment.	04
<b>Responsibility</b>	<ul style="list-style-type: none"> <li>✓ The FRP operator is responsible to all of his own work.</li> <li>✓ He is also responsible for learning new things and all operations in the shop floor.</li> <li>✓ He is responsible for the quality of the products.</li> </ul>	The FRP Operator is assisted by assistants and helpers so he is responsible for his own work and learning as well as the quality.	04

## QUALIFICATION FILE

### SECTION 3

#### EVIDENCE OF NEED

##### **What evidence is there that the qualification is needed?**

Qualification document has been developed by suggestion and approval of Chemicals and Petrochemicals Core committee constituted by Department of Chemicals and Petrochemicals, Ministry of Chemicals and Fertilizers, Govt. Of India vide order no. 45012/86/2015-PC-IV Dt. 10.03.2016 which consist of senior leaders and experts from Plastics and Allied Industry, Associations etc and has been further substantiated by various study reports, Annual reports etc. A report on the Coordination Committee addresses the issue related with Human Resources/ Skilled manpower requirement of Industry-Department of Chemicals and Petrochemicals, Ministry of Chemicals and Fertilizers, Govt. Of India (page no. 4, Attached as Annexure 9(a)).

##### **What is the estimated uptake of this qualification and what is the basis of this estimate?**

The Skill gap report states that, there will be 11.6 Lakhs additional manpower is required by 2023-24 is based on the Machinery & Sector growth and Technical Manpower. Refer: Name of the Report **“A report of the coordination committee to address the issues related with human resources/skilled manpower required of the industry”** (page no. 6, Attached as Annexure 9 (a)) (Copy of the Skill Gap Report is enclosed).

##### **What steps were taken to ensure that the qualification(s) does/do not duplicate already existing or planned qualifications in the NSQF?**

Mapping of FRP Operator has been done with National Classification of Occupation 2004 to ensure the qualification does not duplicate, the qualification have being checked with qualification pack of other sectors like Rubber, Electronics etc and there is no duplicity observed in terms of contents, module/syllabus covered etc.

The NSDC list of approved and under developed Qualification Packs was checked prior to stating the work to ensure no duplicity.

##### **What arrangements are in place to monitor and review the qualification(s)? What data will be used and at what point will the qualification(s) be revised or updated?**

Qualification documents shall be revised every two years and the feedback from Industries/ Associations, Alumni will be collected and necessary revisions/updating in Qualification document will be carried out. The feedback received from the industry in term of employability, course coverage, placement factors etc will be checked and growth indicators will be identified and reviewed.

##### ANNEXURE:

7. Presentation of 2nd core group committee meeting along with Minutes of meeting

## QUALIFICATION FILE

approved by members

9. Documents supporting need of the qualification:
  - a. Report of the Coordination Committee address the issue related with Human Resources/ Skilled manpower requirement of Industry- Department of Chemicals and Petrochemicals, Ministry of Chemicals and Fertilizers, Govt. Of India
  - b. A Report on Human Resource and Skill requirement for the Chemicals and Pharmaceutical sector (2022) by NSDC.
  - c. Brief report of Chemicals and petrochemicals Industry in India, April 2015, Corporate Catalyst India Pvt Ltd, Page 4
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  - i. Porters Five force Analysis of the Plastics Industry by Santanu Mandal, International Journal of Multidisciplinary Research, Vol 1, Issue 7, November 2011, ISSN 2231 5780



## QUALIFICATION FILE

### SECTION 4

#### EVIDENCE OF RECOGNITION AND PROGRESSION

**What steps have been taken in the design of this or other qualifications to ensure that there is a clear path to other qualifications in this sector?**

Relevant information was collected from Industries and allied sector working in this area. The Plastics industries are recruiting people based on the qualification acquired. Maximum of the industries accept this as qualification for selection/short listing of the individual ***(Minutes of Meeting of Core committee is attached)***.

The skills acquired at level 3 for a particular duration makes it easy for the Individual to progress to the next level.

ANNEXURE:

7. Presentation of 2nd core group committee meeting along with Minutes of meeting approved by members.

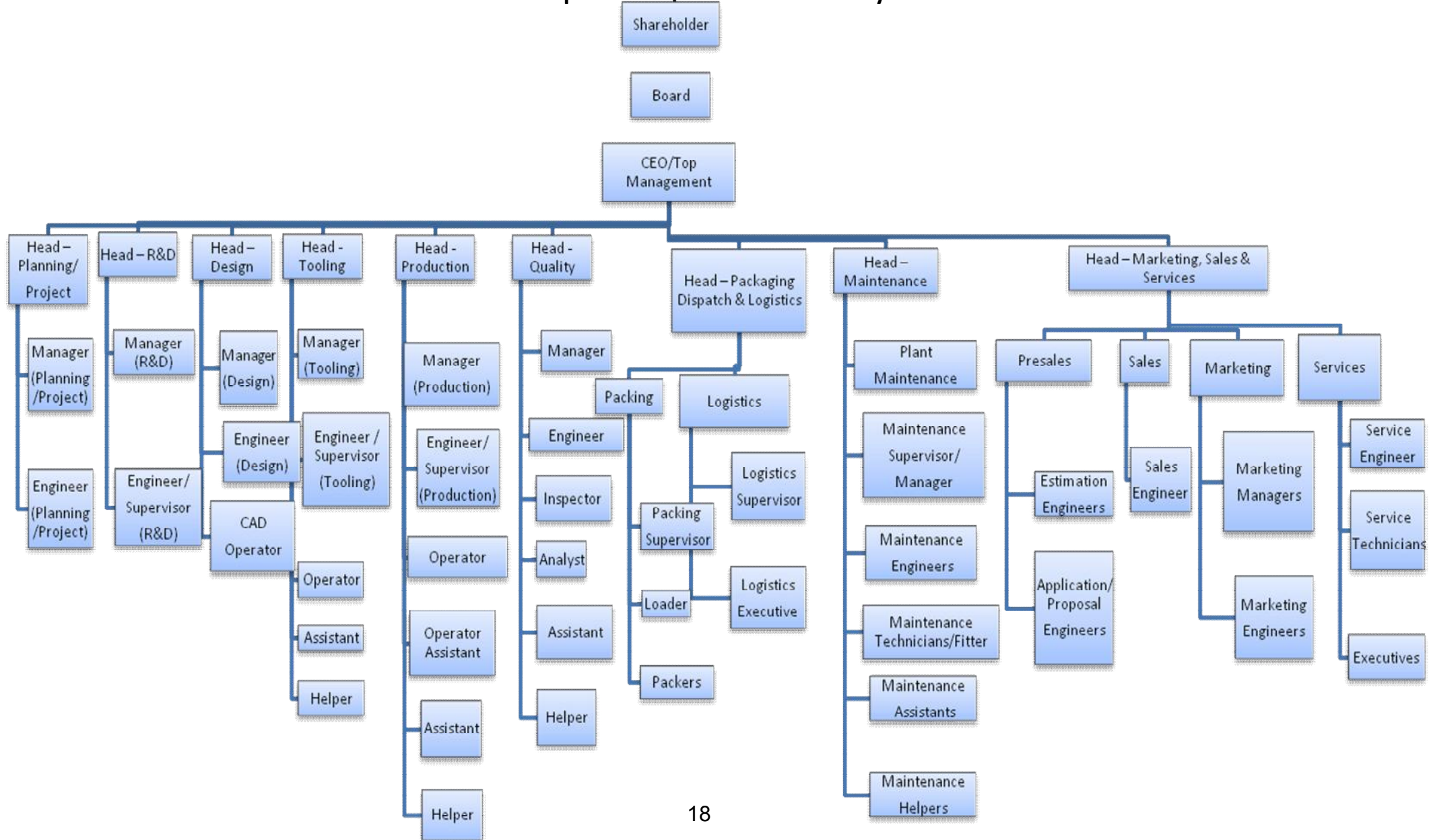
#### **Vertical Pathway:**

The Occupational Map has been created & attached.  
FRP - Operator (Level 4) has a clear pathway to FRP next level.

#### **Horizontal Pathway:**

The individual can migrate within the Plastics Processing related industries.

Occupation Map – Vertical Pathway



Job Role: FRP- Operator