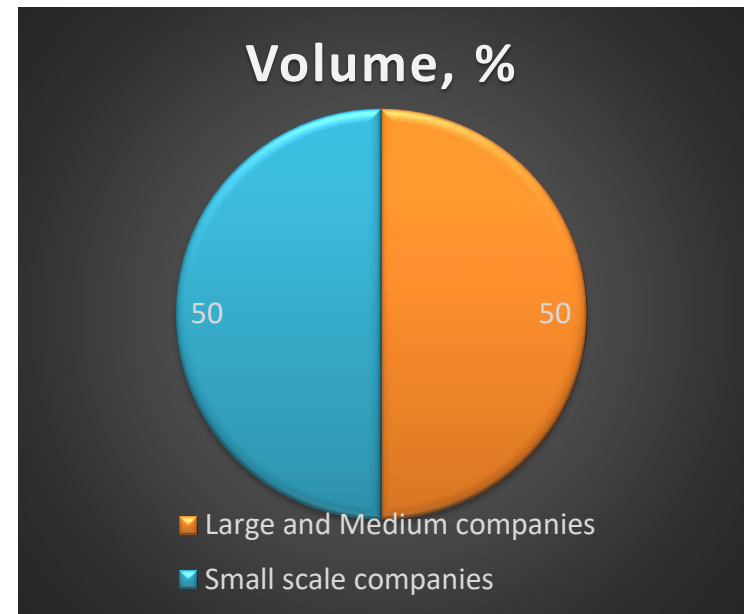
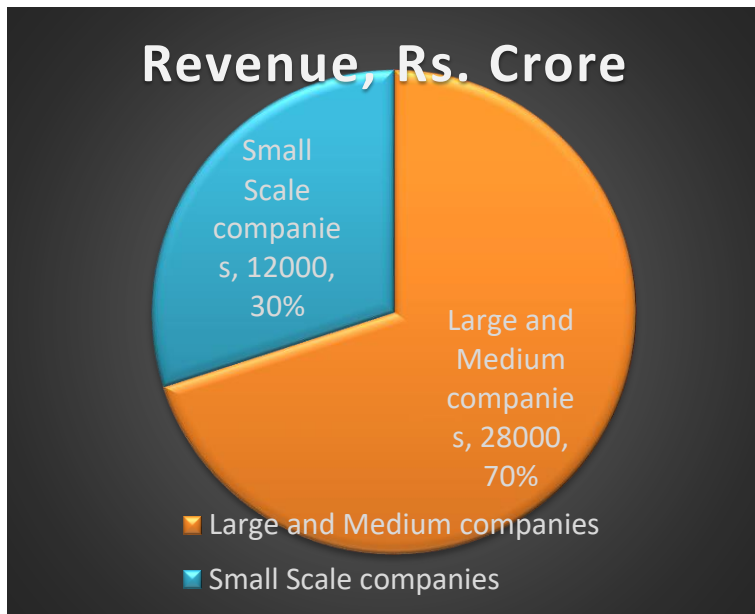


Name of awarding
body

- Paints and
Coatings SSC

Profile : Paints and Coatings

- Average growth rate of 13 – 14% over the next 5 – 6 years. (Source : *AC Nielsen Report*)
- Major players by revenue – Akzo Nobel, Asian Paints, Berger Paints and Kansai Nerolac Paints.
- More than 2500 manufacturing units in small and medium scale category. (*Assocham Report*)



Subsectors : Paints and Coatings

Paints and Coatings

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graph TD; A[Paints and Coatings] --- B[Manufacturing]; A --- C[Application]; D[Qualifications being presented] --> B;
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Manufacturing

Application

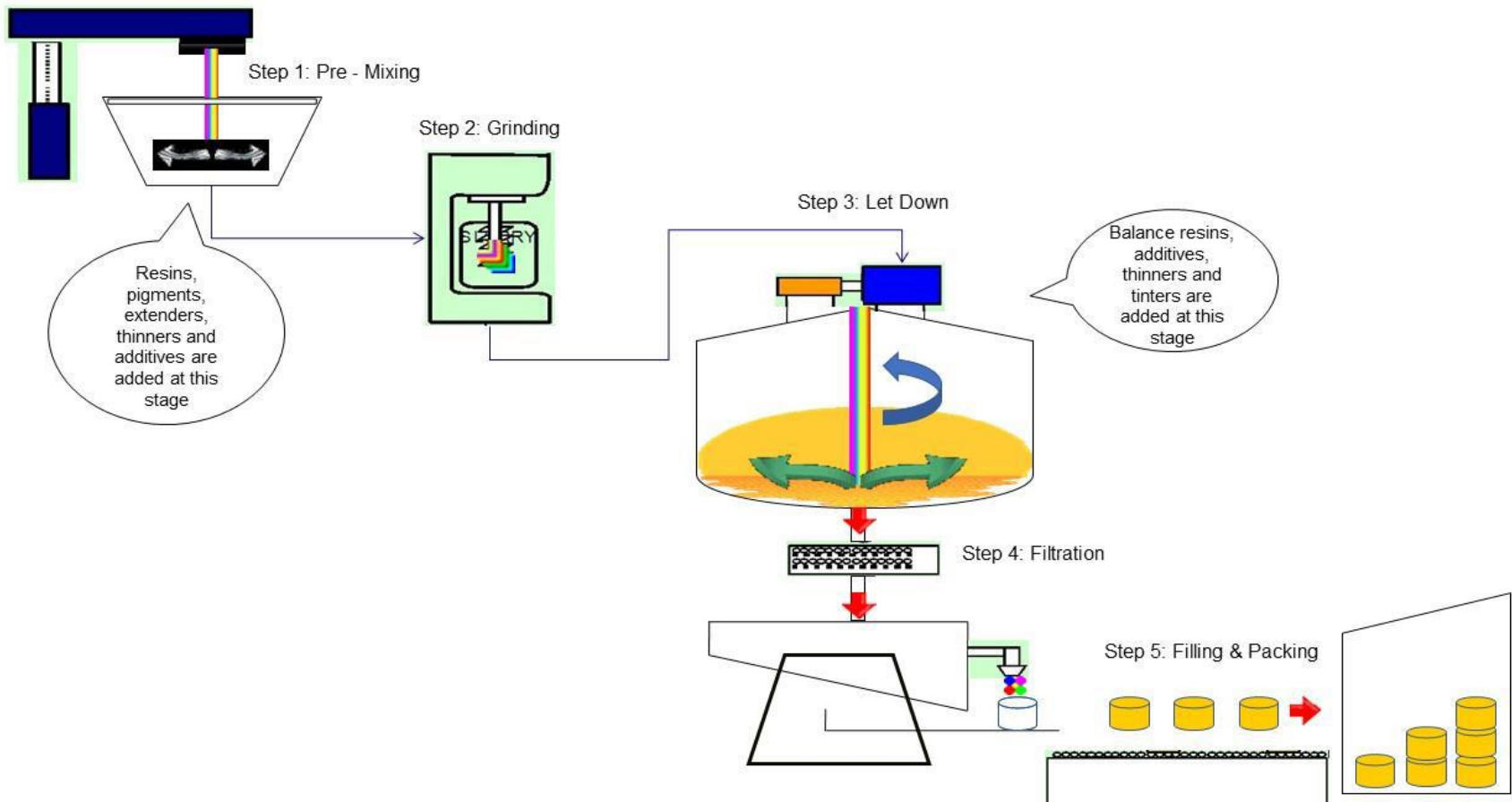
Qualifications being presented

1. Liquid Paint Processing Operator
2. Tinting Operator
3. Filling and Packing Operator
4. QC Chemist (RM and FG)

GLIMPSE OF THE QUALIFICATIONS BEING PRESENTED TODAY

Manufacturing : Paints and Coatings

Pictorial representation of liquid paint manufacturing



Stakeholder Consultations

CONSULTATION

Ministry:

- CIEPET within Ministry of Chemical and Fertilizers

Other Sector Skills councils:

- Automotives
- Life Sciences
- Chemical and Fertilizers (*No response despite repeated reminders*)

Industries:

- Asian Paints
- Berger
- Indian Paints Association
- Tuyan industries (medium scale)

Institutions:

- Senior Principal Scientist & Head, Seminar and Training, CSIR-Central Electro Chemical Research Institute, KARAIKUDI, Tamil Nadu

FACTORY VISIT

- A visit was made to the Asian Paints Factory, Kasana, Greater Noida, UP established in 1990 with nearly 432 technical staff working in the factory across range of occupations. The plant manufactures decorative paints, emulsion paints, stiff paint (distemper), solvent paint (enamel, primer), wood furnishing, and industrial finishes.

Stakeholder Consultations – Continued...

Qualifications have been shared with industry partners –large (4 companies), medium (16 companies) and small scale (about 30 companies) for their comments and approval. The industry partners have approved the QPs.

QC Chemist (RM and FG) job role was shared with Life Sciences SSC to check overlap. Life Sciences SSC confirmed that is no overlap.

Filling and Packing Operator matches in wording with packer, auto, terminologically there is a overlap with the packer qualification in Auto sector, but when goes into the NOSs the difference is evident in terms of material and handling.

There is no overlap with any other SSC

Occupational Map-Manufacturing

	Manufacturing								
	Sales and Marketing	R&D	Production Planning & Logistics	Stores	Production - Liquid Paint	Production - Powder Paint	Production - In-house Resin	Quality Control	Filling and Packing
Level 8		Head - R&D							
Level 7	General Manager - Sales & Marketing	R&D Manager	General Manager - Purchase	Head - Stores and Warehouse	AGM - Production		Head - Resin	General Manager - QC	
					General Manager - Production				
Level 6			Manager - Production Planning		Production Manager			QC Chemist - RM & FG	
			Logistics Manager						
Level 5	Technical Sales Representative	R&D Associate	Assistant Manager - Purchase	Manager - Stores	Supervisor - Production		Kettle Associate		Filling & Packing Supervisor
	Sales & Marketing Executive								
Level 4			Warehouse & Logistics Executive	Stores Representative - Manufacturing & Application	Tinting Operator		Sampling Associate	Junior Chemist	
					* Dispersion Operator				
			Purchase Executive - Manufacturing & Application	Assistant Manager - Stores	Decanting Foreman	Air Classification Mill Operator			
Level 3			Driver	Store Executive	*Mixing Operator	Stirrer	RM Handling Associate		*Packing Operator - Powder
			Planning Executive		*Premix Operator	Tumbling Operator			Filter Operator
Level 2					Helper - Colour Matching	Helper - Premix			
					Helper - Liquid Paint Production	Extrusion Helper			
						Helper - AC Mill Operations			
Level 1									
		QP Combined	QP Approved	QP Presented		* combined packing operator QP		* Combined into Liquid Paint Processing Operator	

Liquid Paint Processing Operator (QP Code -PCS/Q0510)

NCO code	NCO 2015/8131.9900
Occupation	Production Liquid Paint
Description	The Liquid Paint Processing Operator charges the recommended extender, pigment, resin, additives and solvent in the premix unit, then disperses the premixed material in grinding units such as ball mill, bead mill, attritor and sand mill, to achieve the required fineness/smoothness, before letting down the mill base in the mixer. The remaining raw materials are added in the mixer and the final properties of the paint is adjusted, as per specification.
Description of proposed qualification	Premixing the ingredients, grinding the premix in a grinding unit, letting down the mill base into a mixer, mixing the remaining raw materials as per company's standard operating procedure.

Liquid Paint Processing Operator (QP Code -PCS/Q0510)

Need of the qualification	Industry validation received from : 49 companies (4 large, , 16 medium, 29 small) Info regarding skill gap, estimated uptake		
Min Educational Qualifications	10 th standard Explain		
Minimum Job Entry Age-	18 years Explain		
Notional hours	240 Explain		
	NOSs	Estimated size (learning hours)	PCs
	1. PCS/N0502 Charge the material into the dispersion machine	115	17
	2. PCS/N0503 Grind the material in the dispersion unit	122	18
	3. PCS/N0504 Mix the paint raw materials	115	18
	4. PCS/N9901 Coordinate with colleagues and/ or customers	12	37
	5. PCS/N9902 Maintain standards of product/ service quality	22	20
	6. PCS/N9903 Maintain OH & S standards and follow environmental norms	22	40
	7. PCS/N9904 Maintain IPR of organization and customers	8	7

Liquid Paint Processing Operator (QP Code -PCS/Q0510)

		NSQF level	4
Level 9		Process required	Job role holder is expected to work in a familiar, predictable, routine situation of clear choice , for ex., charges the recommended extender, pigment, resin, additives and solvent in the premix unit, then disperses the premixed material in grinding units such as ball mill, bead mill, attritor and sand mill, to achieve the required fineness/smoothness, before letting down the mill base in the mixer. The remaining raw materials are added in the mixer and the final properties of the paint adjusted, as per specification.
Level 8			
Level 7			
Level 6		Professional Knowledge	Job holder is expected to have factual knowledge of the types of premix units and dispersion/ grinding unit
Level 5	Production QC In-Charge/ Supervisor Production	Professional Skills	As the job requires to recall and demonstrate practical skill, routine and repetitive in narrow range application using appropriate rule and tool , using various media to communicate
Level 4	Liquid Paint Processing Operator	Core Skills	needs to know and understand how to: Read and understand process/ formulation sheet, complete accurately, in English/ local language , the batch card, read instructions /guidelines/procedures/rules, listen to and orally communicate information with all concerned
Level 3			
Level 2	Helper Liquid Paint Production	Responsibility	S/he is a skilled worker who carries out own work activities of premixing, grinding and mixing by operating the machines as per SOP.

Tinting Operator (QP Code -PCS/Q0509)

NCO code	NCO 2015/8131.9900
Occupation	Production Liquid Paint
Description	The Tinting Operator perform colour matching for achieving the accurate and desired final colour, by mixing the right proportion of colourants, pigment pastes, tinters or base colours, either into a production vessel or the mixing machine.
Description of proposed qualification	Mixing tinters, colourants, pigment pastes etc. to a paint batch or a sample, to achieve a colour that matches a standard specified by the customer or to the company's colour standard.

Tinting Operator (QP Code -PCS/Q0509)

Need of the qualification	Industry validation received from : 47 companies (4 large, 15 medium, 28 small) Info regarding skill gap, estimated uptake
Min Educational Qualifications	10 th standard. 5 th standard if candidate has 2 years experience as Helper Colour Matcher. Explain
Minimum Job Entry Age-	18 years Explain
Notional hours	240 + On the Job Training of 6 months under an experienced Tinting Operator Explain

NOSS	Estimated size (learning hours)	PCs
1. PCS/N0505 Prepare and perform colour matching	106	31
2. PCS/N0506 Operate the computer coupled spectro photometer	30	21
3. PCS/N0507 Prepare the sample panel for colour matching	40	15
4. PCS/N9901 Coordinate with colleagues and/ or customers	12	37
5. PCS/N9902 Maintain standards of product/ service quality	22	20
6. PCS/N9903 Maintain OH & S standards and follow environmental norms	22	40
7. PCS/N9904 Maintain IPR of organization and customers	8	7

Tinting Operator (QP Code -PCS/Q0509)

		NSQF level	4
Level 9		Process required	Job role holder is expected to work in a familiar, predictable, routine situation of clear choice , for ex., mixes tinters, colourants, pigment pastes, etc. to a paint batch or a sample to achieve a desired colour that matches the customer's requirements and/ or company's colour standard.
Level 8			
Level 7			
Level 6		Professional Knowledge	Job holder is expected to have factual knowledge of the pigment pastes, tinters and colourants
Level 5	Production QC In-Charge/ Supervisor Production	Professional Skills	As the job requires to recall and demonstrate practical skill, routine and repetitive in narrow range application using appropriate rule and tool , using various media to communicate
Level 4	Tinting Operator	Core Skills	needs to know and understand how to: Read and understand process/ formulation sheet, complete accurately, in English/ local language, the batch card, read instructions /guidelines/procedures/rules, listen to and orally communicate information with all concerned
Level 3			
Level 2	Helper Colour Matcher	Responsibility	S/he is a skilled worker who carries out own work activities of colour matching .

Filling and Packing Operator (QP Code -PCS/Q0902)

NCO code	NCO 2015/8131.9900
Occupation	Production Liquid Paint
Description	The Filling and Packing Operator labels the cans, containers, drums or bags used for filling the manufactured liquid or powder paint, sealing and packing them before despatch to the warehouse.
Description of proposed qualification	Labelling the cans, containers, drums or bags used for filling the manufactured liquid and powder paint. Fills the finished liquid or powder paint as per the quantity indicated by the supervisor, seals the lid or bag and packs them into carton boxes.

Filling and Packing Operator (QP Code -PCS/Q0902)

Need of the qualification	Industry validation received from : 49 companies (4 large, 15 medium, 30 small) Info regarding skill gap, estimated uptake		
Min Educational Qualifications	8 th standard. Explain		
Minimum Job Entry Age-	18 years Explain		
Notional hours	240 Explain		
	NOSs	Estimated size (learning hours)	PCs
	1. PCS/N0901 Label the containers or bags	66	19
	2. PCS/N0902 Fill and pack the paint	110	22
	3. PCS/N9901 Coordinate with colleagues and/ or customers	12	37
	4. PCS/N9902 Maintain standards of product/ service quality	22	20
	5. PCS/N9903 Maintain OH & S standards and follow environmental norms	22	40
	6. PCS/N9904 Maintain IPR of organization and customers	8	7

Filling and Packing Operator (QP Code -PCS/Q0902)

		NSQF level	3
Level 9		Process required	Job role holder is expected to have limited range of activities, predictable, routine for ex., label containers, drums, bags as instructed by the supervisor. Pack the quantity of paint/powder as instructed by the supervisor.
Level 8			
Level 7		Professional Knowledge	Job holder is expected to have basic facts of the content of the labels, the quantity to be packed.
Level 6		Professional Skills	As the job requires to recall and demonstrate practical skill, routine and repetitive in narrow range application , enter label details, apply labels to the containers, fill the specified quantity.
Level 5	<p>Level 5: Filling and Packing Supervisor</p> <p>Level 4: </p> <p>Level 3: Filling & Packing Operator</p> <p>Level 2: Helper Liquid Paint Production</p>	Core Skills	needs to know and understand how to: Read and understand label requirements , complete accurately the process sheet, in English/ local language, read instructions /guidelines/procedures/rules, listen to and orally communicate information with all concerned
Level 4		Responsibility	S/he carries out work under close supervision.
Level 3			
Level 2			

QC Chemist (RM and FG) (QP Code -PCS/Q0802)

NCO code	NCO 2015/2113.0601
Occupation	Quality Control
Description	The QC Chemist (RM and FG) conducts specified tests and measurements on raw materials when they arrive from suppliers and vendors and also certifies that the finished goods are ready for despatch.
Description of proposed qualification	Ensuring that the product quality meets the defined standards by checking the quality of the incoming raw materials and finished goods.

QC Chemist (RM and FG) (QP Code -PCS/Q0802)

Need of the qualification	Industry validation received from : 51 companies (4 large, 16 medium, 31 small) Info regarding skill gap, estimated uptake
Min Educational Qualifications	Bachelor of Science (Chemistry) Explain
Minimum Job Entry Age-	18 years Explain
Notional hours	240 Explain

NOSs	Estimated size (learning hours)	PCs
1. PCS/N0801 Check quality of incoming raw materials and finished goods	176	53
2. PCS/N9901 Coordinate with colleagues and/ or customers	12	37
3. PCS/N9902 Maintain standards of product/ service quality	22	20
4. PCS/N9903 Maintain OH & S standards and follow environmental norms	22	40
5. PCS/N9904 Maintain IPR of organization and customers	8	7

QC Chemist (RM and FG) (QP Code -PCS/Q0802)

		NSQF level	5
Level 9	<p>*QC Chemist after about 20 years experience will become GM QC. Before becoming GM, will go thro' levels of Senior Chemist, Executive, Manager, AGM, DGM</p>	Process required	Job role holder is expected to have well developed skill with clear choice of procedures in familiar context eg. Prepare samples of incoming raw materials, conduct tests on raw materials and finished goods, document test results and prepare conformance reports, maintain test and measuring instruments.
Level 8		Professional Knowledge	Job holder is expected to have a knowledge of facts, principles, processes and general concepts in a field of work or study. Knowledge of manufacturing process, properties of raw materials and FG, tests for quality assurance. Calibrations of instruments.
Level 7	*GM QC	Professional Skills	As the job requires a range of cognitive and practical skills required to accomplish tasks and solve problems by selecting and applying basic methods, tools, materials and information. Skills for preparation of sample lots, use of test equipment, document the test result.
Level 6		Core Skills	Desired mathematical skill, understanding of social, political and some skill of collecting and organising information, communication. Interact with line and department staff. Communicate issues to seniors.
Level 5	QC Chemist (RM and FG)	Responsibility	Responsibility for own work and learning and some responsibility for other's work and learning.
Level 4	Junior Chemist		
Level 3			
Level 2			

Checklist – QF supporting documents

1. Career Map/ Progression- 4 Paint manufacturing Job Roles
2. Relevant QPs
3. Skill Reports within the sector
4. Complete Qualification files
5. Industry endorsements
6. Model Curriculum