सूक्ष्म, लघु एवं मध्यम उद्यम मंत्रालय
DEVELOPMENT COMMISSIONER
MINISTRY OF MICRO, SMALL & MEDIUM ENTERPRISES

MSME TECHNOLOGY CENTRE

Please referGuidelines for STT/LTT/Apprenticeship/OEM Qualification File

QUALIFICATION FILE

Technician- Tool and Die

□ Short Term Training (STT) ☒ Long Term Training (LTT) ☐ Apprenticeship

☐Up skilling☐ Dual/Flexi Qualification ☐For ToT

☐General ☐ Multi-skill (MS) ☒ Cross Sectoral (CS) ☐ Future Skills ☐ OEM

NCrF/NSQF Level: 4.0

Submitted By:

MSME TECHNOLOGY CENTRE
O/o DC MSME, Ministry of Micro, Small and Medium Enterprises
Govt. of India
A-Wing, 7th Floor, NirmanBhawan, Maulana Azad road,
New Delhi-110108
Contact No. +91-674-2654700,
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Section 1: Basic Details

1.	**Qualification Name**	**Technician- Tool and Die**	
2.	**Sector/s**	**CAPITAL GOODS & MANUFACTURING**	
3.	**Type of Qualification: ☐ New ☒ Revised ☐ Has Electives/Options ☐OEM**	**NQR Code & version of existing/previous qualification:** *(change to previous, once approved)* **MSME/DTE/55**	**Qualification Name of existing/previous version:** **Technician- Tool and Die**
4.	**a. OEM Name** **b. Qualification Name** (*Wherever applicable)*	**NA** **Technician- Tool and Die**	
5.	**National Qualification Register (NQR) Code & Version** (*Will be issued after NSQC approval)*	QG-04-CG-02413-2024-V1-MSME	**6. NCrF/NSQF Level: *4.0***
7.	**Award (Certificate/Diploma/Advance Diploma/Any Other***(Wherever applicable specify multiple entry/exits also & provide details in annexure)*	**DIPLOMA**	
8.	**Brief Description of the Qualification**	The qualification containing different modules which is required for the job role Tool & Die Engineering, this qualifications ultimately helps learner in the following :. • To be expertise in process planning, manufacturing and design of special purpose tool like jigs & fixture, press tool, Mould • To get an employment in Engineering/ Manufacturing industries various machine tools industry, automobile industry, and pharmaceutical machinery industry • To become an entrepreneur	
9.	**Eligibility Criteria for Entry for Student/Trainee/Learner/Employee**	a. **Entry Qualification &Relevant Experience:** • After 10th Pass completed 2 years diploma in relevant trade • Passed- Jr. Technician Convectional Machine (Level-3.5) from MSME Technology Center • 10th Pass 2 years ITI in relevant trade* • Passed- Level-3.5 from MSME Technology Center **b. Age:** 15 Years	

<table>
<tr><td>10.</td><td>Credits Assigned to this Qualification, Subject to Assessment(as per National Credit Framework (NCrF))</td><td>40</td><td>11.Common Cost Norm Category (I/II/III)
(wherever applicable):I</td></tr>
<tr><td>12.</td><td>Any Licensing requirements for Undertaking Training on This Qualification(wherever applicable)</td><td colspan="2">NA</td></tr>
<tr><td>13.</td><td>Training Duration by Modes of Training Delivery
(Specify Total Duration as per selected training delivery modes and as per requirement of the qualification)</td><td colspan="2">☐Offline ☐Online ☒Blended
<table>
<tr><th>Training Delivery Modes</th><th>Theory (Hours)</th><th>Practical (Hours)</th><th>OJT Mandatory (Hours)</th><th>OJT Recommended (Hours)</th><th>Total (Hours)</th></tr>
<tr><td>Classroom (offline)</td><td>390</td><td>690</td><td>-</td><td>-</td><td>1080</td></tr>
<tr><td>Online</td><td>120</td><td>-</td><td>-</td><td>-</td><td>120</td></tr>
<tr><td>Total</td><td>510</td><td>690</td><td></td><td></td><td>1200</td></tr>
</table>
(Refer Blended Learning Annexure for details)</td></tr>
<tr><td>14.</td><td>Aligned to NCO/ISCO Code/s(if no code is available mention the same)</td><td colspan="2">3115.13 (Tool Room Supervisor)</td></tr>
<tr><td>15.</td><td>Progression path after attaining the qualification
(Please show Professional and Academic progression)</td><td colspan="2">Professional Progress: Tool Room Supervisor

Academic Progress: Post Diploma In Tool & Die Manufacturing (NSQF Level 5) →Post Diploma in Tool Design & CAD/CAM (NSQF Level 5)</td></tr>
<tr><td>16.</td><td>Other Indian languages in which the Qualification & Model Curriculum are being submitted</td><td colspan="2">Hindi</td></tr>
<tr><td>17.</td><td>Is similar Qualification(s) available on NQR-if yes, justification for this qualification</td><td colspan="2">☒Yes ☐No URLs of similar Qualifications:
The proposed qualification differs in learning outcomes in line with the MSME to meet the requirement of MSME / Manufacturing Industries.</td></tr>
<tr><td>18.</td><td>Is the Job Role Amenable to Persons with Disability</td><td colspan="2">☒ Yes ☐ No
If “Yes”, specify applicable type of Disability: as per government norms</td></tr>
<tr><td>19.</td><td>How Participation of Women will be Encouraged</td><td colspan="2">Seats are reserved as per government Norms.</td></tr>
</table>

20.	**Are Greening/ Environment Sustainability Aspects Covered** *(Specify the NOS/Module which covers it)*	**☒Yes ☐No** The said aspect is covered in the module name Employability Skills.	
21.	**Is Qualification Suitable to be Offered in Schools/Colleges**	**Schools ☐ Yes ☒ No Colleges ☐ Yes ☒No**	
22.	**Name and Contact Details of Submitting / Awarding Body SPOC** *(In case of CS or MS, provide details of both Lead AB & Supporting ABs)*	**Name: Sh. Vijay Mahipatrao Bankar** **Contact No. +0755 3501078** **Email-msmetcab@gmail.com**	
23.	**Final Approval Date by NSQC:**	**24.Validity Duration:**	**25.Next Review Date:**

Section 2: Module Summary

NOS/s of Qualifications,
(In exceptional cases these could be described as components)
Mandatory NOS/s:
Specify the training duration and assessment criteria at NOS/ Module level, for further details refer curriculum document.
Th*.-Theory* ***Pr.****-Practical* ***OJT****-On the Job* ***Man.****-Mandatory Training Rec****.****-Recommended Proj****.****-Project*

SEMESTER-I

S. No	NOS/Module Name	NOS/Module Code & Version *(if applicable)*	Core/ Non-Core	NCrF /NSQF Level	Credits as per NCrF	Training Duration (Hours)					Assessment Marks					
						Th.	Pr.	OJT-Man.	OJT-Rec.	Total	Th.	Pr.	Proj.	Viva	Total	Weightage (%) *(if applicable)*
1.	TOOL DESIGN- PRESS TOOL	**MSME/DTE/ 17**	CORE	4	2	30	30	-	-	60	100	100	-	-	200	
2.	TOOL DESIGN– JIGS, FIXTURE&GAUGES	**MSME/DTE/ 18**	CORE	4	2	30	30	-	-	60	100	100	-	-	200	
3.	WORKSHOP PRACTICE-III	**MSME/DTE/ 19**	CORE	4	6	-	180	-	-	180	-	100	-	-	100	
4.	STRENGTH OF MATERIALS	**MSME/DTE/ 20**	NON-CORE	4	2	60	-	-	-	60	100	-	-	-	100	
5.	MATERIAL SCIENCE AND METALLURGY	**MSME/DTE/ 21**	NON-CORE	4	2	60	-	-	-	60	100	-	-	-	100	
6.	BASICS ELECTRICALS & ELECTRONICS	**MSME/DTE/ 22**	NON-CORE	4	1	30	-	-	-	30	100	-	-	-	100	
7.	ELECTIVE *	**MSME/DTE/ 23**	CORE-ELECTIVE	4	3	-	90	-	-	90	-	100	-	-	100	
8.	EMPLOYBILITY SKILL	**MSME/DTE/ 24**	NON-CORE	4	2	60	-	-	-	60	100	-	-	-	100	
Duration (in Hours) / Total Marks					**20**	**270**	**330**	**-**	**-**	**600**	**600**	**400**	**-**	**-**	**1000**	

Elective NOS/s:

S. No	NOS/Module Name	NOS/Module Code & Version *(if applicable)*	Core/ Non-Core	NCrF/NSQF Level	Credits as per NCrF	Training Duration (Hours)					Assessment Marks					
						Th.	Pr.	OJT-Man.	OJT-Rec.	Total	Th.	Pr.	Proj.	Viva	Total	Weightage (%) *(if applicable)*
1.	* PROJECT WORK-TOOL & DIE MAKING	**MSME/DTE/23**	CORE-ELECTIVE	4	3	-	90	-	-	90	-	100	-	-	100	
Duration (in Hours) / Total Marks					3	**-**	-	-	-	90	-	100	-	-	100	

Optional NOS/s:

S. No	NOS/Module Name	NOS/Module Code & Version *(if applicable)*	Core/ Non-Core	NCrF/NSQF Level	Credits as per NCrF	Training Duration (Hours)					Assessment Marks					
						Th.	Pr.	OJT-Man.	OJT-Rec.	Total	Th.	Pr.	Proj.	Viva	Total	Weightage (%) *(if applicable)*
1.	*COMPUTER AIDED DESIGN	**MSME/DTE/23**	CORE-ELECTIVE	4	3	-	90	-	-	90	-	100	-	-	100	
Duration (in Hours) / Total Marks					3	**-**	-	-	-	90	-	100	-	-	100	

SEMESTER-II

S. No	NOS/Module Name	NOS/Module Code & Version *(if applicable)*	Core/ Non-Core	NCrF /NSQF Level	Credits as per NCrF	Training Duration (Hours)					Assessment Marks					
						Th.	Pr.	OJT - Man.	OJT- Rec.	Total	Th.	Pr.	Proj.	Viva	Total	Weightage (%) *(if applicable)*
9.	TOOL DESIGN- PLASTIC MOULD	**MSME/DTE/25**	CORE	4	2	30	30	-	-	60	100	100	-	-	200	
10.	TOOL DESIGN- PRESS TOOL (ADVANCED)	**MSME/DTE/26**	CORE	4	2	30	30	-	-	60	100	100	-	-	200	
11.	WORKSHOP PRACTICE-IV	**MSME/DTE/27**	CORE	4	7	-	210	-	-	210	-	100	-	-	100	
12.	ENVIRONMENTAL SCIENCE	**MSME/DTE/28**	NON-CORE	4	1	30	-	-	-	30	100	-	-	-	100	
13.	PRODUCTION, PLANNING AND CONTROL, ESTIMATION & COSTING	**MSME/DTE/29**	NON-CORE	4	2	60	-	-	-	60	100	-	-	-	100	
14.	INDUSTRIAL ENGINEERING	**MSME/DTE/30**	NON-CORE	4	1	30	-	-	-	30	100	-	-	-	100	
15.	ELECTIVE *	**MSME/DTE/31**	CORE-ELECTIVE	4	3	-	90	-	-	90	-	100	-	-	100	
16.	EMPLOYBILITY SKILL	**MSME/DTE/32**	NON-CORE	4	2	60	-	-	-	60	100	-	-	-	100	
Duration (in Hours) / Total Marks					**20**	**240**	**360**	**-**	**-**	**600**	**600**	**400**	**-**	**-**	**1000**	

Elective NOS/s:

S. No	NOS/Module Name	NOS/Module Code & Version *(if applicable)*	Core/ Non-Core	NCrF/NSQF Level	Credits as per NCrF	Training Duration (Hours)					Assessment Marks					
						Th.	Pr.	OJT-Man.	OJT-Rec.	Total	Th.	Pr.	Proj.	Viva	Total	Weightage (%) *(if applicable)*
1.	* PROJECT WORK-TOOL & DIE MAKING	**MSME/DTE/31**	CORE-ELECTIVE	4	3	-	90	-	-	90	-	100	-	-	100	
Duration (in Hours) / Total Marks					3	-	-	-	-	90	-	100	-	-	100	

Optional NOS/s:

S. No	NOS/Module Name	NOS/Module Code & Version *(if applicable)*	Core/ Non-Core	NCrF/NSQF Level	Credits as per NCrF	Training Duration (Hours)					Assessment Marks					
						Th.	Pr.	OJT-Man.	OJT-Rec.	Total	Th.	Pr.	Proj.	Viva	Total	Weightage (%) *(if applicable)*
1.	* CNC TECHNOLOGY	**MSME/DTE/31**	CORE-ELECTIVE	4	3	-	90	-	-	90	-	100	-	-	100	
Duration (in Hours) / Total Marks					3	-	-	-	-	90	-	100	-	-	100	

Assessment - Minimum Qualifying Percentage:

Specify any one of the following:

Minimum Pass Percentage –Aggregate at qualification level: *(Every Trainee should score specified minimum aggregate passing percentage at qualification level to successfully clear the assessment.)*

Minimum Marks to pass Theory Exam: 40%
Minimum Marks to pass Practical Exam: 60%

Minimum Pass Percentage –NOS/Module-wise :*(Every Trainee should score specified minimum passing percentage in each mandatory and selected elective NOS/Module to successfully clear the assessment.)*

Minimum Marks to pass Theory Exam: 40%
Minimum Marks to pass Practical Exam: 60%

Section 3: Training Related

1.	**Trainer's Qualification and experience in the relevant sector (in years)***(as per NCVET guidelines)*	Diploma/ Degree in Mechanical Engineering or Equivalent with Practical skills and knowledge required in the relevant job role at least one level higher i.e level 5 and above in related field and minimum 4 years of experience in Tool Room/ Technology Centre of MSME or any reputed industry will become a trainer, Or in accordance with the TOT guideline of NCVET
2.	**Master Trainer's Qualification and experience in the relevant sector (in years)** *(as per NCVET guidelines)*	Degree in Engineering (Mechanical/ Production/Manufacturing Technology) or equivalent with 3 to 5 years of experience in Production/ Training/ Design Department from Tool Room/ Technology Centre of MSME or any reputed industry will become as a Master Trainer, Or in accordance with the TOT guideline of NCVET
3.	**Tools and Equipment Required for Training**	☒Yes ☐No (*If "Yes", details to be provided in Annexure)*
4.	**In Case of Revised Qualification, Details of Any Upskilling Required for Trainer**	Yes

Section 4: Assessment Related

	Assessor's Qualification and experience in relevant sector (in years) *(as per NCVET guidelines)*	Diploma / Degree in Engineering (Mechanical/ Production/ Manufacturing Technology) or equivalent with 4 years of experience in Production/ Training/ Design Department from Tool Room/ Technology Centre of MSME or any reputed industry. Only (TOA) certified assessors will be able to conduct the assessments.
	Proctor's Qualification and experience in relevant sector (in years) *(as per NCVET guidelines)*	Degree in Engineering (Mechanical/ Production/ Manufacturing Technology) or equivalent With 7 years of experience in Production/ Training/ Design Department from Tool Room/ Technology Centre of MSME or any reputed industry.
	Lead Assessor's/Proctor's Qualification and experience in relevant sector (in years) *(as per NCVET guidelines)*	Post Graduate in the relevant discipline with minimum 5 years of experience in Production/ Training/ Design Department from Tool Room/ Technology Centre of MSME or any reputed industry.
	Assessment Mode*(Specify the assessment mode)*	**Blended Type (Online + Offline)**
	Tools and Equipment Required for Assessment	☒ Same as for training ☒ Yes ☐ No *(details to be provided in Annexure-if it is different for Assessment)*

Section 5: Evidence of the need for the Qualification

Provide Annexure/Supporting documents name.

1.	**Latest Skill Gap Study (not older than 2years)(Yes/No): Yes,** India Skills Report 2023, " Roadmap to India's Skills and talent Economy 2030"

2.	**Latest Market Research Reports or any other source (not older than 2years) (Yes/No):** **Yes,** "Engineering and capital goods industry" (Feb-2023) by India Brand Equity Foundation –IBEF (Trust established by the Department of Commerce, Ministry of Commerce and Industry, Government of India
3.	**Government /Industry initiatives/ requirement (Yes/No):**Yes
4.	**Number of Industry validation provided:**30
5.	**Estimated nos. of persons to be trained and employed: Approx. 120 per Year**
6.	**Evidence of Concurrence/Consultation with Line Ministry/State Departments:** *NA* If "No", why:

Section 6: Annexure & Supporting Documents Check List

Specify Annexure Name / Supporting document file name

1.	**Annexure:** NCrF/NSQF level justification based on NCrF level/NSQF descriptors *(Mandatory)*	*Annexure-I*
2.	**Annexure:** List of tools and equipment relevant for qualification *(Mandatory, except in case of online course)*	*Annexure-II*
3.	**Annexure:** Industry Validations Summary	*Annexure-III*
4.	**Annexure:** Training & Employment Details	*Annexure-IV*
5.	**Annexure:** Blended Learning *(Mandatory, in case selected Mode of delivery is "Blended Learning")*	*Annexure-V*

6.	**Annexure:** Detailed Assessment Criteria *(Mandatory)*	*Annexure-VI*
7.	**Annexure:** Assessment Strategy *(Mandatory)*	*Annexure-VII*
8.	**Annexure:** Acronym and Glossary *(Optional)*	*Annexure- VIII*
9.	**Annexure:** Multiple Entry-Exit Details *(Mandatory, in case qualification has multiple Entry-Exit)*	*NA*
10.	**Supporting Document:** Model Curriculum *(Mandatory – Public view)*	*Annexure- IX*
11.	**Supporting Document:** Career Progression *(Mandatory - Public view)*	*This aspect mentioned in point no. 15*
12.	**Supporting Document:** Occupational Map *(Mandatory)*	*Annexure-X*
13.	**Supporting Document:** Assessment SOP *(Mandatory)*	*Annexure- XI*
14.	Any other document you wish to submit:	*NA*

Annexure I: Evidence of Level

NCrF/NSQF Level Descriptors	Key requirements of the job role/ outcome of the qualification	How the job role/ outcomes relate to the NCrF/NSQF level descriptor	NCrF/NSQF Level

Professional Theoretical Knowledge/Process	• Work in familiar, predictable, routine, situation of clear choice.	The job role entails managing the design, planning, and manufacturing process of tool design for jigs and fixtures, molds, and press tools. The individual in this position must possess a deep understanding of the principles of design and be able to apply their knowledge to the development and manufacturing of these tools. Additionally, the job holder should have a solid grasp of calculation methods related to component production. They should also be proficient in using software tools, particularly in the areas of electrical circuit design, problem-solving, and working with PLC and SCADA systems. A comprehensive understanding of circuit design is also crucial. Furthermore, job holders are expected to possess factual knowledge in the field of tool manufacturing. This includes staying up to date with industry advancements and having a deep understanding of the processes and techniques involved.	4.5
Professional and Technical Skills/ Expertise/ Professional Knowledge	Factual knowledge of field of knowledge or study.	Job holder is engaged in tasks such as conventional lathe, milling, grinding, drilling machine operating and use of various measuring equipment for manufacturing process, select raw material, cutting tools jigs and fixtures, cutting parameters and various methods. Using Auto cad and Master cam Software he can produced 3D parts model, drafting, assembly and CNC programming. he is responsible for carrying out his/her job. These activities are routine in nature with narrow range of application. Job holder shall	4.5

		understanding the basics of electrical equipment is essential for both tool engineering and production planning. This knowledge allows engineers to work with electrical components, circuits, and systems that are integral to many manufacturing processes. It enables them to troubleshoot electrical issues, make informed decisions regarding equipment selection, and ensure the safe and effective use of electrical systems in the production environment.	
Employment Readiness & Entrepreneurship Skills & Mind-set/Professional Skill	Understand Personal Strengths \ Value ,Digital Literacy, Money Matters and Preparing for Employment & Self Employment	Learner can Develop communication competence, report writing skills & preparation of Resumes or Curriculum Vitae, Learner can be able to Interact effectively with co-workers and can apply the Engineering Ethics and Human Values at workplace. Leaner can understand the basic process of becoming an entrepreneur &start up and can get benefits from various government schemes applicable.	4.5
Broad Learning Outcomes/Core Skill	• Evaluate component production requirement with respect to the specific requirement sheet. Produce tool design according to the requirement of production volume. • Manage supervise the tool assembly with respect to the requirement.	Learner shall work in a team where he/she shall gather accurate information on machining concept and requirements and communicate clearly about the work requirement to the group members through written /verbal. as per organizational standard. Ensure compliance with quality standards, policies and procedures including health and safety Immediately report problems/failures that may impact on the accuracy of the job to the superior staff	4.5

	• Communicate effectively with sub-ordinate. Able to resolve the project related issues.	Adhere to all organization policies and procedures from time to time Learner shall use protective equipment while working and state the name and location of people responsible for health and safety in the workplace. Identify effective resolution techniques Jobholder needs Document tool production requirements. Understand the project requirements/client requirement which requires clarity in oral and the written skills and while working on the content he needs to be aware of the social, political and natural environment. Involvement in Departmental procedural system for project , Responsibility of task completion, Validate the project outcomes with specified acceptance criteria, interpret Assembly Drawing & detail drawing, Assign Process & Work Planning, identify Individual job operations, prepare process plan, arrange sequence of operations in logical manner, identification of Priorities in the project for timely completion of the project, Monitor tool manufacturing process with the help of manufacturing process plan, bar chart, and appropriate management information system available. Therefore Job holder shall develop entrepreneurship skill like Meaning and importance of entrepreneurship, Motivations and reasons to start business, Entrepreneurial process. He/she should have in-depth knowledge of safety rules and regulation to be followed at workshop.it is pegged at level 6.	

Responsibility	• Check-up procedures to ensure that project objectives are finished within specified time frames are developed. • Checkup procedures to ensure that agreed requirements are met are drawn. • The compliance of products with specified requirements is ensured. • Products can include 3D models, design drawing, measuring data. • Work independently and guide team members with full responsibility of output of group and development	Job holder is required to carry out functions such as tool design, tool assembly, machining parts etc. In these activities job holder is doing the tasks independently without any supervision and he is responsible for his own learning and others at the task. Job holder shall encourage team members for continues learning and development by time to time discussing with them various issues of project like tool / die suitability to specified machine, new development in machines, selection of material, new development in the materials and manufacturing processes. Job holder shall follow work standard, specific norms and procedures laid down by the organization. Therefore it is pegged at level 6	4.5

Annexure: II Tools and Equipment (Lab Set-Up)

List of Tools and Equipment for Batch Size: 50

S. No.	Tool / Equipment Name	Specification	Quantity for specified Batch size
1	Vice Mounted Tables	Industry Standard	60
2	Vernier Caliper		10
3	Tool storage drawer		10
4	Thread plug gauge		5
5	Thread pitch gauge		5
6	Surface Plate		4
7	Soft jaws		3
8	Simulator		50
9	Scrap Box		3
10	Safety shoes		60
11	Safety Glasses		60
12	Ring gauge		3

13	Radius gauge		3
14	Plug gauge		3
15	Number Punch		8
16	Micrometer		10
17	Manual Lifter		1
18	Lever dial for work offset setting		25
19	LCD projector		1
20	Laser printer		1
21	Integrated multimedia skill development software for CNC machining		60
22	Inside caliper		10
23	Industry Helmet		60
24	Industry hand gloves		60
25	Industrial grade CNC Turning Center& cutting tools		4
26	Industrial grade CNC milling& cutting tools		3
27	Height Gauge		10
28	Hammer		30
29	Generator Set		1
30	Gauges		12
31	First aid kit		2
32	Feeler gauge for work offset setting		6
33	Computer systems in LAN		60
34	Combination Plier		25
35	Bore gauge		3
36	Apron		60
37	Centre Punch		25
38	3pin micrometer		5
39	Tool (End mill, Face mill, Drill bits, spring collet, arbor , tool holding device)		20
40	Conventional lathe Machine		24
41	Conventional Milling Machine vertical		14
42	Conventional Milling Machine horizontal		3
43	Conventional surface grinding Machine		3
44	Conventional drilling Machine		3
45	Conventional shaper Machine		1
46	TIG/MIG/Arch welding machine with simulator		1 NOS EACH
47	Injection Molding Machine		1

48	Industrial Press		1
49	Profile Projector		1
50	CNC WIRECUT		1
51	CNC EDM		1
52	Hacksaw		1
53	AUTOCAD SOFTWARE		60
54	SOLIDWORKS SOFTWARE		60
55	MS OFFICE		60

Annexure III: Industry Validations Summary

S. No	Organization Name	Representative Name	Designation	Contact Address	Contact Phone No	E-mail ID	LinkedIn Profile *(if available)*
1	Kirloskar Brothers Limited	Purvez Pasta	HR	No 254/1, Viramgam Highway, Sanand Ho, Sanand - 382110 (Near Chharodi Railway Station, Chharodi)	2717273310	Parvez.Pasta@kbl.co.in	
2	Parle Elizabeth Tools Private Limited	DevendraDawande	HR	Plot No. PE-37, BOL Sanand GIDC-II, Sanand, Chharodi, Gujarat 382110	7211149243	dbdawande@parle-elizabeth.com	
3	Windsor Machines Limited	Steven Christian	HR	5402, 5403, Phase IV, GIDC Estate, Vatva, Ahmedabad, Gujarat 382445	7930262100	steven.christian@windsormachines.com	
4	Shilp Gravures Ltd	AniruddhGharia	HR	778/6, Pramukh Industrial Estate, Sola-Santej Road, Village Rakanpur, Tal, Kalol, Dist. Gandhinagar Gujarat (India.) - 382721	2764 286323	careers@shilpgravures.com	
5	Jyoti Plastic Industries	Vipul Patel	CEO	Plot No. 1211/A, Vadsar-Bhoyan Road, Opp.Arvind Mills (Knit & Garment Unit), Kalol, Village MotiBhoyan, Gandhinagar-382721, Gujarat, India	8047837137	info@jyotiplasticindia.com	
6	Galaxy Chains Pvt. Ltd.	KishanGovani	Proprietor	N.H. 27, Opp. Field Marshal High School, Shapar Ind. Zone, Shapar, Gujarat 360024	090999 32799	galaxy@galaxychains.com	

7	Latteys Industries Ltd	G.Nallathambi	Works manager	Plot No.16, Phase 1&2, GIDC Naroda, Ahmedabad, Gujarat 382330	079 2282 2894	latteysqc@gmail.com	
8	Mascot Pump Limited	Pratik Patel	Proprietor	13, Naroda GIDC Rd, Makarpura, GIDC Naroda, Ahmedabad, Gujarat 380025	9824533161	info@mascotpumps.com	
9	Fine Care Biosystems	Kaushik Patel	HR	Block# 228/1/4, Dantali Industrial Owner Association,, Dantali, Kalol, Gujarat 382721	9924474433	info@accumaximum.com	
10	The Anup Engineering Limited	Ashwin	HR	Behind 66 KV Electric Sub Station, Odhav Rd, Ahmedabad, Gujarat 382415	7922872823	anup@anupengg.com	
11	SHREE AMBA MECHANICAL WORKS	PANCHAL HASMUKH	Proprietor	B/9 DHANJIBHAI ESTATE, NR REVABHAI ESTATE, CTM AMRAIWADI AHMEDABAD	9426325593	shreeambaeng20@gmail.com	
12	P.C. INDUSTRIES	Honey Shah	Proprietor	Block No. 782, Pramukh Industrial Estate, Near Shilp Gravures Village Rakanpur, Takalol, Gandhinagar, Gujarat 382721	9662525222	pci@pcindustries.co.in	
13	A. M. Designs Pvt. Ltd.	JuhiMevada	HR	Kathwada G.I.D.C Plot No. 24 Road, Odhav Rd, Ahmedabad, Gujarat 382430	079 2970 8170	hradmin@amdindia.in	
14	ShayburgValvesPvt Ltd.	ArvindSolanki	HR	PLOT NO. 176,186,187, AJANTA INDL. ESTATE, VILL: VASNA(IYAVA), TAL: SANAND, DIST: AHMEDABAD, Gujarat 382110	02717 619 100	mkt1@shayburgvalves.com	
15	STEELSTRONG VALVES (I) PVT LTD	NareshSuthar	HR	PLOT NO. 186,187, AJANTA INDL. ESTATE, VILL: VASNA(IYAVA), TAL: SANAND, DIST: AHMEDABAD, Gujarat 382110	9099972570	sanandworks@steelstrong.com	
16	Indo-mac Engineers	Mr. Dinesh Panchal	Proprietor	541, GidcKathawada, Road No-15, Kathwada Road, Kathawada, Kathawada, Ahmedabad, Gujarat 382430	9824091598	engineering@indomac.com	
17	Clartech Engineers Pvt Ltd	Mr. Bannur	Proprietor	Plot 413, Phase II GIDC Industrial Estate, Vatva, Ahmedabad, Gujarat 382445	079 29295055	Contact@clartechengineers.com	
18	Dinesh Enterprise	Mr. Dinesh	Proprietor		079 2277 4185		

				Plot No. 51,52 Ganshyam Estate, opp.mamta Nagar Nr.viratnagar Cross Road, Murgha Farm Rd, Ahmedabad, Gujarat 382350		dineshenterprise52@gmail.com	
19	Accumax Lab Devices Pvt.Ltd	Kaushik Patel	HR	Plot-16,Electronic Park "SEZ, GIDC Rd, Sector 26, Gandhinagar, Gujarat 382026	9904406061	info@accumaximum.com	
20	Ashmor Electricals (India) Pvt. Ltd.	Pallav A. Shah	Support	KhatrajKalol Rd, MotiBhoyan, Ta kalol, Gandhinagar, Gujarat	87980 51886	ashmor_electricals@yahoo.com	
21	Ambica optical industries	Abhay Shah	Partner	45, mahalaxmi estate, Bombay Conductor Rd, Vatva, Ahmedabad, Gujarat 382445	7965124588	ambicaoptical15@yahoo.com	
22	Nilkanth Machine Tools	VINUBHAI SOLANKI	CEO	5503/1 G.I.D.C. Vatva, Cross Road, near Trikampura, B/h, Vatva, Ahmedabad, Gujarat 382445	094260 83725	info@milmac.com	
23	Schilltek International	KIRAN CHAVDA	Proprietor	37, Karnavati Estate, Phase IV, GIDC Estate, Vatva, Ahmedabad, Gujarat 382445	099252 53737	skilltech@gmail.com	
24	Shiv Shakti Industries	PANKAJ PANCHAL	Proprietor	Phase I, GIDC, Vatva, Ahmedabad, Gujarat	9825061182	shivshaktiindustries191@gmail.com	
25	Gayatri Engineering Works	Nilesh Patel	Proprietor	55 SUPRABHAT INDUSTRIAL ESTATE O/S DARIYAPUR GATE, AHMEDABAD	9825186087	engineers369@yahoo.com	
26	Shree Chamunda Engineering Works	Mr. N.M. Panchal	Proprietor	5, Ashirwad Industrial Estate, Saraspur, Ahmedabad, Gujarat 380024	098243 02494	chamundaenggworks@gmail.com	
27	Ginza Machinery Mfg. Co	MR. PRATIK	PARTNER	Plot No. 1106, 07, D - Road, Phase 3, GIDC Estate, Vatva, Ahmedabad, Gujarat 382445	96240 90000	pratik@armstitch.com	
28	GABBAR ENGINEERING CO.	MR. UMESH	PARTNER	PLOT NO 1903, GIDC INDUSTRIAL ESTATE, PHASE 3, Rd F, Vatva, Ahmedabad, Gujarat 382445	098240 62000	umesh@gabbar.com	
29	Shree Chamunda Industries	YOGESH DODIYA	PARTNER	8, Puspak Industrial Estate, Phase-1, Nika Tube Compound, Vatva, G I D C, Ahmedabad, Gujarat 382445	098980 70291	Yogesh.dodiya76@gmail.com	

30	Millmac Solutions	Kasyap Panara	Proprietor	47, NR RAMOL TOLLPLAZA SVP RING ROAD RAMOL AHMEDABAD	7600810381	millmacsolutions@gmail.com	

formation of all the industry validations in table. This is not required for OEM qualifications.

Annexure IV: Training & Employment Details

Training and Employment Projections:

Year	Total Candidates		Women		People with Disability	
	Estimated Training	Estimated Employment Opportunities	Estimated Training	Estimated Employment Opportunities	Estimated Training	Estimated Employment Opportunities
24-25	90	90	5	5	-	-
25-26	120	120	8	8	-	-
26-27	150	150	10	10	-	-

Data to be provided year-wise for next 3 years

Training, Assessment, Certification, and Placement Data for previous versions of qualifications:

Qualification Version	Year	Total Candidates				Women				People with Disability			
		Trained	Assessed	Certified	Placed	Trained	Assessed	Certified	Placed	Trained	Assessed	Certified	Placed
1.0	20-21	76	76	71	69	0	0	0	0	0	0	0	0
1.0	21-22	56	56	46	46	0	0	0	0	0	0	0	0
1.0	22-23	36	36	35	35	0	0	0	0	0	0	0	0

Applicable for revised qualifications only, data to be provided year-wise for past 3 years.

List Schemes in which the previous version of Qualification was implemented:

1. Fee based Training Program under the Ministry of MSME.

Content availability for previous versions of qualifications:

☒ Participant Handbook ☒ Facilitator Guide ☒ Digital Content ☒ Qualification Handbook ☐ Any Other:

Languages in which Content are available:

English

Annexure V: Blended Learning

Blended Learning Estimated Ratio &Recommended Tools:

Refer NCVET "Guidelines for Blended Learning for Vocational Education, Training & Skilling" available on:*https://ncvet.gov.in/wp-content/uploads/2023/01/Guidelines-for-Blended-Learning-for-Vocational-Education-Training-Skilling.pdf*

S. No.	Select the Components of the Qualification	List Recommended Tools – for all Selected Components	Offline : Online Ratio
1	☐Theory/ Lectures - Imparting theoretical and conceptual knowledge	Books/ e-books, Presentations, Reference Material , Audio / Video Modules with 2D and 3D animation Self-Learning Videos /Broadcasts /Mobile Learning /Curated Digital content	40:60
2	☐Imparting Soft Skills, Life Skills, and Employability Skills /Mentorship to Learners	Self-Learning Videos , Broadcasts, Mobile Learning , Curated Digital content	40:60
3	☐Showing Practical Demonstrations to the learners	CNC Simulators/ CAD Software, Video Content , E-Resource library	100:0
4	☐Imparting Practical Hands-on Skills/ Lab Work/ workshop/ shop floor training	CNC Simulators, CNC Lathe Machines, Grinding Machines, Measuring, instruments, Cutting Tools, Hand Tools / CAD Software	100:0
5	☐Tutorials/ Assignments/ Practice	Online Question Bank, Mobile Quick test app, MCQ based tests, Practical Test on Machines	40:60
6	☐Proctored Monitoring/ Assessment/ Evaluation/ Examinations	Assessment engine for Essays, Up-loadable file examinations, Mock test sessions	50:50

7	☐On the Job Training (OJT)	Live Project on CNC Machines, Measuring Instruments at concern Industry/ Institution	100:0

Annexure VI: Detailed Assessment Criteria

Detailed assessment criteria for each NOS/Module are as follows:

NOS/Module Name	Assessment Criteria for Performance Criteria/Learning Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
NOS / Module: **MSME/DTE/17** TOOL DESIGN- PRESS TOOL	PC.1 Concept of press tool. PC.2 To know about the sheet metal and strip layout PC.3 Understand design fundamental of presses and advantages and disadvantages of press tool PC.4 Get knowledge about use of press tool. PC.5 Selection of proper tool parts as required. PC.6 Understand different operation done on press tool. PC.7 Understand requirement of press tool operation. PC.8 Understand different operations on press tools. PC.9 Get knowledge about strip layout, principles about operations, different sheet metals, and require parameter to band or cut it. PC.10 Understand the different component of press tools like cutting die, top plate, bottom plate, guide pillar, guide bush, stripper plate etc. PC.11 Understanding about the different component used in design of press tool. PC.12 Get knowledge for manufacturing different process to produce elements.	100	100	-	-

	PC.13 Get knowledge about design of element and its requirement. PC.14 Get knowledge about the design of press tool. PC.15 Get knowledge of different parameters required during design. PC.16 Selection of strip layout PC.17 Conceptual designing the model and other components of press tool. PC.18 Selection of different material for different element. PC.19 Selection of bending parameters and bending operation. PC.20 Conceptual design and its application PC.21 Design of press tool. PC.22 Selection of different material for different element. PC.23 Get knowledge about parameter to use different press for different press tool operation. PC.24 Understand selection of press for operation. PC.25 Get knowledge for selection of press by its height, power etc.				
NOS / Module: **MSME/DTE/18** TOOL DESIGN– JIGS, FIXTURE&GAUGES	PC.1 Understand about different types of tool. PC.2 Get knowledge about concept of jig and fixture. PC.3 Understand design fundamental of jig and fixture. And advantages and disadvantages of jig and fixture PC.4 Understand the fundamental concepts and terminology related to jigs, fixtures, and gauges. PC.5 Demonstrate the ability to design jigs and fixtures for specific machining and assembly operations. PC.6 Tooling elements and accessories PC.7 Develop an understanding of the principles behind gauge design and measurement PC.8 The role of jigs, fixtures, and gauges in quality control PC.9 Gauge use in measurement tasks PC.10 Safety guidelines in jig, fixture, and gauge use PC.11 Maintenance and care practices	100	100	-	-

NOS / Module: **MSME/DTE/19** WORKSHOP PRACTICE-III	PC.1 Understand different machines. PC.2 Making multifunctional tools integrating skills of Bench work, Turning, Milling, Surface grinding, Cylindrical grinding	-	100	-	-
NOS / Module: **MSME/DTE/20** STRENGTH OF MATERIALS	PC.1 Concept of classification of load, stresses, strains, types of stress and strains. PC.2 Hooke's law, young modulus of elasticity, nominal stress, yield point, plastic stage. PC.3 Proof stress, working stress, factor of safety. PC.4 Bars of varying cross-section. PC.5 Related problems on shear stress and strain, modulus of elasticity and rigidity. PC.6 The Shear force and bending moment PC.7 Theory of simple bending PC.8 Moment of inertia and its application. PC.9 Application of moment of inertia, second moment of area of common geometrical sections. PC.10 Deflection PC.11 Understand Euler formula. PC.12 Principle of column and strut, short and long column, effective length, slenderness ratio, buckling load, crushing load. PC.13 Understand principle of torque and torsion, torsion equation, torsional rigidity, angle of twist, hollow and solid shaft. PC.14 Principle of torque, power transmitted, angular displacement, shaft size, shear stress. PC.15 The principle of leaf spring, deflection, stiffness, strain energy stored in leaf spring.	100	-	-	-
NOS / Module: **MSME/DTE/21** MATERIAL SCIENCE AND METALLURGY	PC.1 Describe the basic concepts and principles of material science and metallurgy. PC.2 Analyze the atomic and crystalline structure of materials. PC.3 Understand the relationship between microstructure and mechanical properties. PC.4 Explain the behavior of materials under different loading conditions. PC.5 Describe various phase transformations and their impact on material properties.	100	-	-	-

	PC.6 Comprehend the properties and applications of common engineering materials. PC.7 Analyze the different methods of material characterization. PC.8 Discuss the principles of metallurgical processes and their applications. PC.9 Apply knowledge of material science and metallurgy to solve real-world engineering problems.				
NOS / Module: **MSME/DTE/22** BASICS ELECTRICALS & ELECTRONICS	PC.1 Understand the fundamental principles of electricity, including voltage, current, and resistance, and apply Ohm's law to solve basic electrical problems. PC.2 Analyze and design simple electrical circuits, including series and parallel circuits, using Kirchhoff's laws and voltage/current dividers. PC.3 Identify and work with essential electronic components, such as resistors, capacitors, and transistors. PC.4 Describe the difference between digital and analog electronics and apply basic logic gate concepts to digital circuits. PC.5 Analyze and work with AC circuits, including phasors, impedance, and resonance. PC.6 Understand the basics of three-phase systems and the function of transformers. PC.7 Demonstrate practical skills by building and testing simple electronic circuits and completing a basic electronics project. PC.8 Gain confidence in troubleshooting electrical and electronic circuits. PC.9 Be introduced to microcontrollers and basic programming concepts.	100			
NOS / Module: **MSME/DTE/23** PROJECT WORK-TOOL & DIE MAKING	Project Report Mentioning the process and procedure carried by the trainee for completing the assign task duly endorsed by the authorized personnel and The report must contain: • Details of Department/ Organization • Brief Job description & work activity	-	100	-	-

	• Specific problem faces if any with the solution. • Technical Books referred during the OJT • Conclusion				
NOS / Module: **MSME/DTE/23** COMPUTER AIDED DESIGN (ELECTIVE)	PC.1 understand the functions in CAD section PC.2 Use of computer and CAD software in area of design and drawing PC.3 understand the procedure to be adopted for computer aided drawings PC.4 Describing the co-ordinate system. PC.5 Using the AutoCAD workspace and user interface. PC.6 Understand and reading of engineering drawing, industrial drawing, and technical terms used in drawing. PC.7 advanced editing and construction techniques. PC.8 Can understand the 2D sketcher commands and how to utilize them. PC.9 Creation of2D sketches. PC.10 advanced editing and construction techniques. PC.11 Understand the 2D sketcher commands and how to utilize them. PC.12 Creation of2D sketcher drafting. PC.13	-	100	-	-
NOS / Module: **MSME/DTE/24** EMPLOYBILITY SKILL	PC.1 communicate effectively using verbal and nonverbal communication etiquette. PC.2 Exhibit how to behave, communicate, and conduct oneself appropriately with all genders and PwD	100	-	-	-
NOS / Module: **MSME/DTE/25** TOOL DESIGN- PLASTIC MOULD	PC.1 Understand classification of plastic. PC.2 Get knowledge about concept of mould. PC.3 Application of mould. PC.4 Different types of injection moulding machine. PC.5 Understanding parameter of moulding machine. PC.6 Understanding different types of moulding machine. PC.7 Understanding mould and material use in mould. PC.8 Understand different component use in mould. PC.9 Get knowledge about different material use different component.	100	100		

	PC.10 Understand function and application of different component of mould. PC.11 Understand cooling system in mould and its need in plastic mould. PC.12 Get knowledge about different parts of mould according to different types of mould. PC.13 Get knowledge about parting surface , relief of parting surface PC.14 Drawing different design for different types of mould. PC.15 Get knowledge about selection of material for all parts. PC.16 Understand process of manufacturing of each parts. PC.17 Cost of manufacturing. PC.18 Perfect design of plastic mould. PC.19 Detailed drawings for manufacturing of mould				
NOS / Module: **MSME/DTE/26** TOOL DESIGN- PRESS TOOL (ADVANCED)	PC.1 Understand different parameter for cutting and non-cutting operations. PC.2 Get knowledge about strip layout, principles about operations, different sheet metals, and require parameter to band or cut it. PC.3 Get knowledge about different material their uses for manufacturing of elements of press tool. PC.4 Get knowledge for manufacturing different process to produce elements. PC.5 Get knowledge about design of element and its requirement. PC.6 Get knowledge about the design of press tool. PC.7 Get knowledge of different parameters required during design. PC.8 Selection of strip layout PC.9 Conceptual designing the model and other components of press tool. PC.10 Selection of different material for different element. PC.11 Selection of bending parameters and bending operation. PC.12 Understand conceptual design and its application PC.13 Get knowledge of deferent require parameter during design. PC.14 How to create perfect design of press tool. PC.15 Selection of different material for different element.	100	100	-	-

NOS / Module: **MSME/DTE/27** WORKSHOP PRACTICE-IV	PC.1 Different types of machining process. PC.2 Understand different machines used for different parts	-	100	-	-
NOS / Module: **MSME/DTE/28** ENVIRONMENTAL SCIENCE	PC.1 Understand the scope and importance of Environmental Sciences. PC.2 Describe the structure and function of ecosystems and the importance of biodiversity. PC.3 Identify common sources and types of environmental pollution and their impacts PC.4 Understand the science behind climate change and its global impacts. PC.5 Examine sustainable resource management and conservation practices. PC.6 Explore the role of policies and regulations in environmental protection. PC.7 Analyze the relationship between human population growth and environmental issues. PC.8 Discuss strategies for biodiversity conservation and the importance of protected areas. PC.9 Recognize the significance of environmental education and public awareness.	100	-	-	-
NOS / Module: **MSME/DTE/29** PRODUCTION, PLANNING AND CONTROL, ESTIMATION & COSTING	PC.10 Production and its methods PC.11 Productivity and its influence in industry. PC.12 Material planning PC.13 Process planning PC.14 Routing and scheduling phases of production control PC.15 Loading, dispatching and follow-up PC.16 Cost structure and break even analysis PC.17 Overhead and depreciation PC.18 Estimating procedure and estimation of cost of component PC.19 Profit and loss and its importance	100	-	-	-
NOS / Module: **MSME/DTE/30**	PC.1 Industrial engineering and its application PC.2 The methods and procedure of plant layout PC.3 Productivity and its influence PC.4 Method study and its application.	100	-	-	-

INDUSTRIAL ENGINEERING	PC.5 Work measurement and its application. PC.6 Value analysis process and its application PC.7 Network techniques of cpm& pert PC.8 Inspection and inspection department PC.9 ISO quality system PC.10 Total quality management PC.11 The facilities of planning and its needs PC.12 Inventory control, models and application and its need for inventory PC.13 Need of practice of inventory control PC.14 Engineering economics				
NOS / Module: **MSME/DTE/31** PROJECT WORK-TOOL & DIE MAKING	Project Report Mentioning the process and procedure carried by the trainee for completing the assign task duly endorsed by the authorized personnel and The report must contain: • Details of Department/ Organization • Brief Job description & work activity • Specific problem faces if any with the solution. • Technical Books referred during the OJT • Conclusion	-	100	-	-
NOS / Module: **MSME/DTE/31** CNC TECHNOLOGY	PC.1 understand CNC turning and milling machine. PC.2 Utilization of different G and M codes for different programs. PC.3 understand principle of feedback control PC.4 Classification based on control system feature PC.5 Classification based on co-ordinate system PC.6 Classification based on identification of axis PC.7 manual part programming PC.8 Computer aided part programming PC.9 tooling for CNC machine and application PC.10 specification of CNC machines and purpose PC.11 CNC milling and milling operation PC.12 CNC machining centre	-	100	-	-

NOS / Module: **MSME/DTE/32** EMPLOYBILITY SKILL	PC.1 Calculate income and expenditure for budgeting PC.2 Demonstrate how to conduct offline and online financial transactions, safely and securely and check passbook/statement PC.3 Operate digital devices and use the associated applications and features, safely and securely PC.4 Create an e-mail id and follow e- mail etiquette to exchange e -mails	100	-	-	-
	Total Marks	**2800**	**2000**	**100**	**100**

Annexure VII: Assessment Strategy

This section includes the processes involved in identifying, gathering, and interpreting information to evaluate the Candidate on the required competencies of the program.

Mention the detailed assessment strategy in the provided template.

1. Assessment System Overview:

- Batches are assigned to the Central MSME NSQF Examination Cell via email for the assessment.

- Central MSME NSQF Examination Cell sends the assessment confirmation to respective TC/AB
- Central MSME NSQF Examination Cell deploys the certified Assessor for executing the assessment at respective TC/AB via online / offline mode.
- Central MSME NSQF Examination Cell & respective TC/AB Internal Examination Cell monitors the assessment process & records

2. Testing Environment:

- Central MSME NSQF Examination Cell confirms the Assessment location, date and time
- For number of candidates more than 30 separate assessors are assigned for the assessment.
- Central MSME NSQF Examination Cell & respective assessor confirms that the allotted time to the candidates to complete Theory & Practical Assessment is correct.

3. Assessment Quality Assurance levels/Framework:

- Each TC Submits the Question Bank for the individual subject Theory & Practice separately, submits to Central MSME NSQF Examination Cell and it is verified by the Central MSME NSQF Examination Cell Committee members.
- Questions are mapped to the specified assessment criteria
- All the assessors & Trainers are well qualified &trained to carry out the specified task.

4. Types of evidence or evidence-gathering protocol:

- Online Link is send by Central MSME NSQF Examination Cell to respective TC & Assessor. Reporting of the assessor from assessment location is verified by the Central MSME NSQF Examination Cell through the online Meeting Link. Students are also required to join for the online link for verification by the Central MSME NSQF Examination Cell
- Assessment Photographs are shared with the Central MSME NSQF Examination Cell & are also with the respective TC.

5. Method of verification or validation:

- Online Link is send by Central MSME NSQF Examination Cell to respective TC & Assessor. Reporting of the assessor from assessment location is verified by the Central MSME NSQF Examination Cell through the online Meeting Link. Students are also required to join for the online link for verification by the Central MSME NSQF Examination Cell

6. Method for assessment documentation, archiving, and access:

- The Assessment records are shared with Central MSME NSQF Examination Cell & also stored at respective TC.

- Assessor fills the assessment report and shares with the Central MSME NSQF Examination Cell

On the Job Training:

- The module / NOS (which covers the job profile of CNC Operator- Turning will be assessed.
- The candidate must score 60% marks to successfully complete the OJT.
- Learner will be assessed on the basis of OJT report followed by Viva
- Assessment will ensure that the Learner is able to:
    - ✓ Effective engagement with the customers / Subordinates and team
    - ✓ Understand the working of various tools and equipment
    - ✓ Understand the working environment of the industry

Annexure VIII: Acronym and Glossary

Acronym

Acronym	Description
AA	Assessment Agency
AB	Awarding Body
ISCO	International Standard Classification of Occupations
NCO	National Classification of Occupations
NCrF	National Credit Framework

NOS	National Occupational Standard(s)
NQR	National Qualification Register
NSQF	National Skills Qualifications Framework
OJT	On the Job Training

Glossary

Term	Description
National Occupational Standards (NOS)	NOS define the measurable performance outcomes required from an individual engaged in a particular task. They list down what an individual performing that task should know and also do.
Qualification	A formal outcome of an assessment and validation process which is obtained when a competent body determines that an individual has achieved learning outcomes to given standards
Qualification File	A Qualification File is a template designed to capture necessary information of a Qualification from the perspective of NSQF compliance. The Qualification File will be normally submitted by the awarding body for the qualification.
Sector	A grouping of professional activities on the basis of their main economic function, product, service or technology.
Short Term Training (STT)	STT/ Short -term skilling means any vocational training program undertaken for less than a year (Theory + Practical + OJT). https://ncvet.gov.in/sites/default/files/NCVET.pdf