

Model Curriculum

Rubber Mould Maker

SECTOR: GEMS & JEWELLERY
SUB-SECTOR: CAST AND DIAMONDS-SET JEWELLERY
OCCUPATION: WAX MODEL MAKING
REF ID: G&J/Q2603, V1.0
NSQF LEVEL: 4



Certificate

CURRICULUM COMPLIANCE TO QUALIFICATION PACK – NATIONAL OCCUPATIONAL STANDARDS

is hereby issued by the

GEM & JEWELLERY SECTOR SKILL COUNCIL OF INDIA

for the


MODEL CURRICULUM

Complying to National Occupational Standards of
Job Role/ Qualification Pack: **Rubber Mould Maker** QP No. **G&J/Q2603 NSQF Level 4**

Date of Issuance: **October 15th, 2016**

Valid up to: **October 14th, 2018**

* Valid up to the next review date of the Qualification Pack


Mr. Premkumar Kothari
Chairman
(Gem & Jewellery Skill Council of India)

Rubber Mould Maker

CURRICULUM / SYLLABUS

This program is aimed at training candidates for the job of a “Rubber Mould Maker”, in the “Gems & Jewellery” Sector and aims at building the following key competencies amongst the learner

Program Name	Rubber Mould Maker		
Qualification Pack Name & Reference ID	G&J/Q2603, v1.0		
Version No.	1.0	Version Update Date	N.A
Pre-requisites to Training	10th standard passed, preferably		
Training Outcomes	<p>After completing this programme, participants will be able to:</p> <ul style="list-style-type: none"> • Produce the rubber mould: Produce rubber mould from the master model of the jewellery piece, in order to use it for mass production through casting process. • Respect and maintain IPR: Respecting Intellectual Property Rights of the company’s products and designs. • Coordinate with others: Identify team work and level of communication with colleagues or clients. It determines the ability to work as a team member, share work and multi-task in order to achieve the required deliverables on schedule. • Maintain occupational health and safety: Make commitment towards reporting potential hazards, taking preventive measures to contain accidents in order to make the work environment safe for self and colleagues and maintaining a clean working environment. 		

This course encompasses 4 out of 4 National Occupational Standards (NOS) of “Rubber Mould Maker” Qualification Pack issued by “Gem & Jewellery Skill Council of India”.

Sr. No.	Module	Key Learning Outcomes	Equipment Required
1	<p>Produce the Rubber Mould (hh:mm) 20:00</p> <p>Practical Duration (hh:mm) 120:00</p> <p>Corresponding NOS Code G&J/N2603</p>	<ul style="list-style-type: none"> To select appropriate rubber for creating mould To place the master model and additional sprue (if any) accurately inside rubber layers To set temperature for mould making as per operating standard To accurately prepare rubber moulds To precisely cut rubber mould ensuring flow of molten wax in the next process To ensure damage free output with minimal hazards To maintain allowance for shrinkage To remove master model from hot rubber without damage To produce quality rubber mould and send with zero defects to next process To identify different types of rubber and their properties, particularly, with respect to heat and pressure sensitivity To identify uses of different qualities of wax and its properties in terms of shrinkage To identify potential work hazards, particularly, when using vulcaniser, hot plates and sharp tools 	<p>Mandatory – Vulcanizer; Tweezers; Scissors; Blade Handle; Aluminum Frame; Master Piece; Needle; Bench Vice; Nozzle; Hook; Rubber / Silicon; Surgical Blade; Protective Band Aid; Pen; Pencil; Eraser; Note Pad</p>
2	<p>Respect and maintain IPR</p> <p>Theory Duration (hh:mm) 01:00</p> <p>Practical Duration (hh:mm) 02:00</p> <p>Corresponding NOS Code G&J/N9901</p>	<ul style="list-style-type: none"> To prevent leak of new designs/ plans to competitors by reporting on time To be aware of any of company’s product, process or design patents To report IPR violations observed in the market, to supervisor or company heads To know the basics of IPR and patent laws 	<p>Computer or laptop attached to LCD projector; whiteboard; whiteboard markers; Pen; Pencil; Eraser; Note Pad</p>
3	<p>Coordinate with Others</p> <p>Theory Duration (hh:mm) 02:00</p> <p>Practical Duration</p>	<ul style="list-style-type: none"> Learn how to coordinate with supervisor, colleagues and others Learn the importance of interaction and coordination for personal growth 	<p>Computer or laptop attached to LCD projector; whiteboard; whiteboard markers; Pen; Pencil; Eraser; Note Pad</p>

Sr. No.	Module	Key Learning Outcomes	Equipment Required
	(hh:mm) 02:00 Corresponding NOS Code G&J/N9902		
4	Maintain occupational health and safety Theory Duration (hh:mm) 01:00 Practical Duration (hh:mm) 02:00 Corresponding NOS Code G&J/N9905	<ul style="list-style-type: none"> • Learn about safety procedures • Learn about potential hazards in workplace • Learn what to do in an emergency situation • Learn to use the fire extinguisher by identifying the appropriate fire • Learn how to comply with company safety rules and regulations 	First aid kit; fire extinguisher; emergency plan outline; Pen; Pencil; Eraser; Note Pad
	Total Duration 150:00 Theory Duration 24:00 Practical Duration 126:00	Unique Equipment Required: Vulcanizer; Tweezers; Scissors; Blade Handle; Aluminum Frame; Master Piece; Needle; Bench Vice; Nozzle; Hook; Rubber / Silicon; Surgical Blade; Protective Band Aid, Aid; Pen; Pencil; Eraser; Note Pad, First aid kit; fire extinguisher; emergency plan outline; Pen; Pencil; Eraser; Note Pad	

Grand Total Course Duration: **150 Hours, 0 Minutes**

(This syllabus/ curriculum has been approved by [Gem and Jewellery Skill Council of India](#))

Trainer Prerequisites for Job role: “Rubber Mould Maker” mapped to Qualification Pack: “G&J/Q2603, v1.0.”

Sr. No.	Area	Details
1	Job Description	To deliver accredited training service, mapping to the curriculum detailed above, in accordance with the Qualification Pack “G&J/Q2603”, Version 1.0.
2	Personal Attributes	Aptitude for conducting training, and pre/post work to ensure competent, employable candidates at the end of the training. Strong communication skills, interpersonal skills, ability to work as part of a team; a passion for quality and for developing others; well-organised and focused, eager to learn and keep oneself updated with the latest in the mentioned field.
3	Minimum Educational Qualifications	Graduate, preferably
4a	Domain Certification	Certified for Job Role: <u>Rubber Mould Maker</u> mapped to QP: “G&J/Q2603, v1.0”. Minimum accepted score as per SSC guidelines is 80% on the SSC prescribed online theory assessment test based on an industry validated question bank.
4b	Platform Certification	Recommended that the Trainer is certified for the Job Role: “Trainer”, mapped to the Qualification Pack: “SSC/1402”. Minimum accepted score for the trainer is 80% as per SSC guidelines.
5	Experience	Minimum 3 years of experience in Rubber Mould Making

Annexure: Assessment Criteria

Assessment Criteria	
Job Role	Rubber Mould Maker
Qualification Pack	G&J/Q2603, v1.0
Sector Skill Council	Gem & Jewellery Skill Council of India

Sr. No.	Guidelines for Assessment
1	Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each PC.
2	The assessment for the theory part will be based on knowledge bank of questions created by the SSC
3	Individual assessment agencies will create theory question papers for candidates at every examination/training centre. (as per assessment criteria below)
4	Individual assessment agencies will create practical tests for skill evaluation for candidates at every examination/training centre. (as per assessment criteria below)
5	To pass the Qualification Pack, every candidate should score a minimum 70% of aggregate marks to successfully clear the assessment.
6	In case of successfully passing only certain number of NOSs, the candidate is eligible to take subsequent assessment on the balance NOSs to pass the Qualification Pack.

		Marks Allocation			
Assessment outcomes	Assessment Criteria for outcomes	Total Mark (80+20)	Out of	Theory	Skills Practical
1. G&J/N2603 Produce the rubber mould	PC1. Select appropriate rubber for creating mould	75	8	0	8
	PC2. Place the master model and additional sprue (if any) accurately inside rubber layers		12	2	10
	PC3. Set temperature for mould making as per operating standard		12	2	10
	PC4. Accurately prepare rubber moulds		10	2	8
	PC5. Precisely cut rubber mould ensuring flow of molten wax in the next process		12	2	10
	PC6. Timely deliver rubber mould to next process		2	0	2
	PC7. Produce number of moulds per day as per target given		2	0	2
	PC8. Ensure damage free output with minimal hazards		5	0	5
	PC9. Maintain allowance for shrinkage is made		4	1	3
	PC10. Remove master model from hot rubber without damage		3	1	2
	PC11. Produce quality okayed rubber mould and send with zero defects to next process		5	0	5
	Sub Total		75	10	65
2. G&J/N9901 Respect and maintain IPR	PC1. Be able to spot plagiarism and report	9	3	2	1
	PC2. Be aware of patents and IPR		4	1	3
	PC3. Not be involved in IPR violations		2	1	1
	Sub Total		9	4	5
3. G&J/N9902 Coordinate with others	PC1. Understand the work output requirements	8	2	1	1
	PC2. Comply with company policy and rule		1	0	1
	PC3. Deliver quality work on time as required by reporting any anticipated reasons for delays		1	0	1
	PC4. Put team over individual goals		1	1	0
	PC5. Be able to resolve conflicts		1	0	1
	PC6. Learn how to multi-task relevant activities		2	1	1
	Sub Total		8	3	5

4. G&J/N9905 Maintain occupational health and safety	PC1. Spot and report potential hazards on time	8	2	1	1
	PC2. Follow company policy and rules regarding use of hazardous materials		2	0	2
	PC3. Attend and actively participate in the health and safety campaigns organised by the company		2	1	1
	PC4. Use or wear safety gear as per the rules of the company		2	1	1
	Sub Total		8	3	5
	Grand Total	100	100	20	80
	Percentage Weightage:			20%	80%
	Minimum Pass % to quality (aggregate):			70%	