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## **National Competency Standards**

**For**

**Fashion Jewelry Maker**

## **Introduction**

The National Competency Standards are written specifications of skill and knowledge competencies required in a particular trade. The competency standards are developed in collaboration with United Nations Industrial Development Organization (UNIDO), GIZ and National Vocational & Technical Training Commission (NAVTTTC).

Industry experts from the relevant industries from different geographical locations across Pakistan were consulted during the development process of these competency standards to ensure input and ownership of all the stakeholders. NAVTTTC approves these competency standards on the recommendation of Industry Advisory Group (IAG) for the Information Technology sector.

The National Competency Standards could be used as a referral document for the development of curricula to be used by training institutions.

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## **STRUCTURE OF COMPETENCY STANDARDS**

Competency Standards are performance specifications that identify the knowledge and competencies an individual needs to succeed in the workplace. A competency standard has the following elements:

### **Competency Unit**

A competency unit is a statement which points to an outcome that employers will value and is observable and assessable. The competency unit is derived during the process of Occupational Analysis and is called 'Task Statement' in a DACUM Chart.

### **Overview**

An overview is a description of the competency standard. It briefly describes the purpose and linkage of the competency unit with a job role.

### **Performance Criteria**

Performance criteria statements set the standard of performance of a task in a job role. It describes 'how well' a task or competency unit is to be performed. It should be observable and written in a measurable term. It is one of the basic criteria for conducting assessment of the performance of a tradesman.

### **Knowledge and Understanding**

Supporting knowledge and understanding statements include the essential knowledge and understanding, covering facts, principles, procedures, processes and methods. These statements cover the basic knowledge and understanding that is required to master a competency unit in an occupation.

### **Tools & Equipment**

All the related tools, equipment and machinery that are required to perform a particular competency unit or task are listed under this heading.

## Competency Map

### A. Perform Sketching

A1 Draw geometrical shapes	A2 Perform free hand sketching	A3 Draw jewelry shapes	
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### B. Perform Ingot Making

B1 Perform torch handling	B2 Perform melting	B3 Perform fluxer	B4 Adjust size of die		
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### C. Prepare Wire & Sheet

C1 Operate rolling machine	C2 Perform sheet size grading	C3 Perform gauge measurements of wire	C4 Execute annealing	C5 Apply pickling	
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### D. Carry Out Making & Transfer Design

D1 Perform drilling	D2 Perform sawing	D3 Remove unwanted design marks		
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### E. Perform Shaping & Doming

E1 Execute annealing	E2 Perform dapping	E3 Remove marks			
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### F. Perform Assembling

F1 Perform jump ring making	F2 Prepare solder for precious metal	F3 Perform soldering	F4 Perform pickling	F5 Remove extra solder	
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### G. Perform Finishing

G1. Perform filing	G2. Perform sanding	G3. Perform polishing	G4. Perform matt finishing	G5. Perform satin finishing	G6. Perform texturing
G7. Perform enameling	G8.Perform faceting				

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### H. Perform Stone Setting

H1. Make seat for stone	H2. Secure stone	H3 Perform finishing of mounting	H4 Perform bright cutting for pave setting		
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### I. Perform Wax Carving

I1 prepare surface of wax	I2 Perform marking & transfer design	I3 Perform sawing	I4 Perform scraping & carving	I5 Perform hollowing	I6 Perform sanding & finishing
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### J. Communicate with others

J1 Communicate with people in relevant market	J2 Communicate with the supervisor	J3 Communicate with coworkers
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### K. Develop Professionalism

K1. Consult with expert workers	K2. Interaction in market	K3. Update relevant techniques
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### L. Adopt Safety Precautions

L1 Apply Safety of Tools and equipment	L2 Apply personal safety	L3 Apply workplace safety
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## Competency Standards for “Fashion Jewelry Maker”

### 1. Unit Title: Perform Sketching

Competency Unit	Overview	Performance Criteria	Knowledge & understanding	Tools & Equipment
<b>A1.</b> Draw geometrical shapes	Everything around us compose of geometrical shapes and to understand them properly students are required to draw them with help of geometrical tools	You must be able to: <b>P1.</b> Hold pencil properly <b>P2.</b> Hand placement on the paper <b>P3.</b> Firm hand pressure on pencil <b>P4.</b> Handle scale properly & read measurements <b>P5.</b> Handle geometrical tools properly <b>P6.</b> Use grid paper for 2D shapes	You must know and understand: Geometrical prospective will be attain by the student	<b>C1.</b> Proper light source <b>C2.</b> Pencil, shapner & eraser <b>C3.</b> Drawing board <b>C4.</b> Geomatrical tools
<b>A2.</b> Perform free hand sketching	Free hand drawing is a basic exercise to attain perfection in sketching and drawing	You must be able to: <b>P1.</b> Hold pencil properly <b>P2.</b> Hand placement on the paper <b>P3.</b> Firm hand pressure on pencil <b>P4.</b> Adgest movement of pencil <b>P5.</b> Keep the pencil properly sharpened <b>P6.</b> Perform warm up exercise <b>P7.</b> Draw a loosely object	You must know and understand: <b>K1.</b> Types of pencil <b>K2.</b> Types of papers	<b>C1.</b> Proper light source <b>C2.</b> Pencil, shapner & eraser <b>C3.</b> Drawing board

<b>A3. Draw jewelry shapes</b>	To draw jewelry shapes with toning by using the combination of free hand sketching and geometrical drawings	You must be able to: <b>P1.</b> Hold pencil properly <b>P2.</b> Hand placement on the paper <b>P3.</b> Firm hand pressure on pencil <b>P4.</b> Adgest movement of pencil <b>P5.</b> Draw isometric drawings <b>P6.</b> Sketch to jewelry component	You must know and understand: <b>K1.</b> Material used for drawing purpose <b>K2.</b> Unerstanding of basic jewelry shapes <b>K3.</b> Understanding of isometric drawings <b>K4.</b> Understan toning properly	<b>C1.</b> Proper light source <b>C2.</b> Pencil,shapner & eraser <b>C3.</b> Drawing board <b>C4.</b> Isomatric grid <b>C5.</b> Stencils
<b>A4.</b> Perform isometric view	The basic purpose of this exercise is to draw visually 3D object in 2D drawing	You must be able to: <b>P1.</b> Draw axonometric projection in coordination of three axes <b>P2.</b> Draw equal for shortened and angle between any two other are 120 degree <b>P3.</b> Use grid paper (60 degree )	You must know and understand: <b>K1.</b> Understand to draw jewelry component in isometric view	<b>C1.</b> HB pencil <b>C2.</b> Eraser <b>C3.</b> Geometry box <b>C4.</b> Isomatric grid paper <b>C5.</b> Multi media

## 2. Unit Title: Perform Ingot Making

Competency Unit	Overview	Performance Criteria	Knowledge & understanding	Tools & Equipment
<b>B1.</b> Perform torch handling	The basic propose of torch handling is to	You must be able to: P1.Perform melting of alloys	You must know and understand:	C1.Touch with assorted tips

	melt alloys but it is also used to anneal metals and soldering of jewelry part	<p>P2. Anneal of alloys</p> <p>P3. Perform soldering of jewelry parts</p> <p>P4. Perform mixing of different alloys</p> <p>P5. Perform age hardening</p> <p>P6. Select torch with tips</p>	<p>K1. Metal melting point</p> <p>K2. Torch angles for different results</p> <p>K3. Different flame size</p> <p>K4. Understand flame color for different result</p>	<p>C2. Gas fittings</p> <p>C3. Gas cylinders</p> <p>C4. Crucible</p> <p>C5. Crucible tong</p> <p>C6. Crucible stand</p> <p>C7. Flux</p>
<b>B2. Perform melting</b>	The basic purpose of melting is to mix alloys to make the bar for wire or sheets	<p>You must be able to:</p> <p>P1. Perform torch handling</p> <p>P2. Maintain temperature of torch</p> <p>P3. Pour metals in to ingot mold</p> <p>P4. Handle crucible properly</p> <p>P5. Heat ingot mold</p> <p>P6. Lubricate ingot mold</p> <p>P7. Stir molten metal during melting process</p>	<p>You must know and understand:</p> <p>K1. Melting points</p> <p>K2. Flame color for different result</p> <p>K3. Controlling of flames for karat percentage</p>	<p>C1. Torch with assorted tips</p> <p>C2. Gas fittings</p> <p>C3. Gas cylinders</p> <p>C4. Crucible</p> <p>C5. Crucible tong</p> <p>C6. Crucible stand</p> <p>C7. Flux</p> <p>C8. Heat prove gloves</p> <p>C9. Waight balance</p>
<b>B3. Perform fluxer</b>	The purpose of adding flux in to molten metal is to maintain temperature off alloys	<p>You must be able to:</p> <p>P1. Clean the metal</p> <p>P2. Controll pop up metals during melting process</p> <p>P3. perform movement of metals in melted forms</p>	<p>You must know and understand:</p> <p>K1. Visual melting condition</p> <p>K2. Knowlige of flux application</p> <p>K3. Understanding of pouring time</p>	<p>C1. Metl and alloys</p> <p>C2. Gas fittings</p> <p>C3. Gas cylinders</p> <p>C4. Crucible</p> <p>C5. Crucible tong</p> <p>C6. Crucible stand</p> <p>C7. Flux</p> <p>C8. Heat prove gloves</p>

<b>B4.</b> Adjust size of die	The purpose of die adjustment is to gain required/specific size of sheet or wire	You must be able to: P1.Adjust the die to maintain specific with and length of wire or sheet P2.Hold die in “U” clamp P3.Lubricate die or ingot before poring metal P4.Preheat die or ingot mold before poring metal to make it bubble free	K1.Use and read Varner caliper K2.Importence of current size of ingot	C1.Varner caliper C2.Adjestable mold C3.Ingot mold stand

### 3. Unit Title: Prepare Wire & Sheet

Competency Unit	Overview	Performance Criteria	Knowledge & understanding	Tools & Equipment
<b>C1.</b> Operate rolling machine	The purpose of a rolling machine is to roll out metal sheets and wire	You must be able to: P1.Adjest the roller P2.Roll out metals P3.Check the gauges P4.Anneal metals P5.Roll smooth wire and sheet	You must know and understand: K1.Insert metal in to machine K2.Pull out mettle from rolling machine	C1.Rolling mill C2.Micro meter C3.Heat resistant gloves C4.Varner caliper C5.Oil for lubrication C6.Drawing tong

			<p>K3. Understanding of gauge measurement</p> <p>K4. Understanding of annealing time after every half thickness of bar</p>	<p>C7. Tournch</p> <p>C8. Annealing stand</p>
<b>C2.</b> Perform sheet size grading	To maintain gauges to control wait of jewelry	<p>You must be able to:</p> <p>P1. Handle micro meter</p> <p>P2. Handle sheet gauges</p> <p>P3. Handle Vanier caliper</p>	<p>You must know and understand:</p> <p>K1. Measure thickness of sheet from different places using different gauges</p> <p>K2. Importance of accurate gauge to control the weight of jewelry</p>	<p>C1. Micrometer</p> <p>C2. Vanier caliper</p> <p>C3. Weighing balance</p>
<b>C3.</b> Perform gauge measurements of wire	To maintain the gauges of wire to control wait of jewelry	<p>You must be able to:</p> <p>P1. Handle micro meter</p> <p>P2. Handle wire gauges</p> <p>P3. Handle Vanier caliper</p> <p>P4. Measure thickness to make it perfect</p>	<p>Measure the thickness of wire from different places to control the wait of jewelry</p>	<p>C1. Micrometer</p> <p>C2. Vanier caliper</p> <p>C3. Weighing balance</p>
<b>C4.</b> Execute annealing	The purpose of Annealing is to make metal softer	<p>P1. Roll to become easy</p> <p>P2. Avoid cracks in the metal</p> <p>P3. Become Easy to form and shape the metal</p>	<p>You must know and understand:</p> <p>K1. Handling water quenching</p>	<p>C1. Tournch</p> <p>C2. Annealing furnace</p> <p>C3. Tong</p> <p>C4. Asbestos sheet</p>

		P4.Reduce the stress of metal	K2.Controll flow or temperature of flame	C5.Metals to anneal
<b>C5.</b> Apply pickling	The purpose of pickling solution is to clean metals to remove fire scales and color restoring	You must be able to: P1.Prepare pickling solution 5% Sulfuric acid and 95% water P2.Mentain strength of annealing solution P3.Mentain temperature of solution at 60% P4.Clean metal with using water P5.Restore color by using wire brush	You must know and understand: K1. Make pickling solution and mentions of solution K2.Apply pickling solution after soldering process	C1.Beaker C2.Hotplate C3.Pickling pot C4.Selfuric acid C5.Measuring beaker C6.Copper tong C7.Bras brush

#### 4. Unit Title: Carry Out Making & Transfer Design

Competency Unit	Overview	Performance Criteria	Knowledge & understanding	Tools & Equipment
<b>D1.</b> Perform drilling	The purpose of drilling is to insert saw blade in to metal and to make holes for pave setting	You must be able to: P1.Determan the size of drill according to the marking P2.Mark the metal where drilling required P3.Controll speed of drill machine and stress on metal P4.Put lumber under the metal sheets	You must know and understand: K1.Keep drill bit straight during drilling K2.Punch marks with pointed punch K3.Hold the sheet while drilling	C1.Drill machine C2.Drill bits C3.Lumber C4.Pliers C5.Punch C6.Hamour C7.Metal holding device C8.Wax or Lubricant

		P5.Use wax or lubricant on the tip of drill bit		
<b>D2.</b> Perform sawing	To perform sawing is to cut metal in to jewelry piece	You must be able to: P1.Mark on metal P2.Mark to perform drilling process P3.Punch and drilling marks P4.Perform drilling process P5.Perform sawing P6.Select accurate blades P7.Mentain tension of saw blade	You must know and understand: K1.Metal required Annealing K2.How to hold metal during sawing	C1.Marking tools C2.Marking punches C3.Drill machine C4.Drill bits C5.Wax C6.Saw frames & Saw blades C7.Hamour C8.Jewlers bench
<b>D3.</b> Remove unwanted design marks	To remove unwanted marks on the design	You must be able to: P1.Select file if need to remove deep marks P2.Select sanding paper to remove files marks P3.Reinspect the object and conditions P4.Remove remaining marks with scotch briteif found	You must know and understand: K1.Excersise to clean surface of sawed piece of jewelry K2.Insure a well smooth surface of sawed piece of jewelry	C1.Sawed piece of jewelry C2.File set C3.Assorted sanding paper of different grit C4.Scotch brite C5.Light source C6.Jewlers bench

### 5. Unit Title: Perform Shaping & Doming

Competency Unit	Overview	Performance Criteria	Knowledge & understanding	Tools & Equipment
E1.Execute annealing	This unit of competency is to make metal softer	You must be able to: P1.Insure the temperature required by hand or by control of furnace P2.Perform quench in to water P3.Mentain pressure of ammonia gas if use furnace P4.Dry metal after annealing process	You must know and understand: K1.Temperature required for annealing for different metals K2.Duration of annealing process K3.Change of visual color of metal during annealing process	C1.Annealing furnace C2.Ammonia gas C3.Touch with gas calendar C4.Water and water container C5.Annealing stand
E2.Perform dapping	This unit of competency is to shape or form a metal sheet in to a domed jewelry piece	You must be able to: P1.Anneal metal P2.Cut the sheet at per size required to make dome P3.Dap a piece of sheet by dapping tools and dapping block P4.Anneal pieces of sheet each quarterly during dapping process	You must know and understand: K1.Observe condition to sheet pieces when start working K2.Observe condition of sheet pieces again and again using dapping process and	C1.Stainless steel dapping tools C2.Dapping block C3.Stainless steel dapping block C4.Wooden dapping tools C4.Wooden dapping block

		P5. Manipulate metal surface	notice marks on it K3. Notice hardness of sheet pieces to anneal it again	C5. Hammer C6. Mallets
<b>E3. Remove marks</b>	This unit of competency is to make smooth surface of dapped jewelry pieces	You must be able to: P1. Connection of dapped piece P2. Select files to remove dapping marks P3. Select sanding paper to remove file marks P4. Select tools accordingly after inspecting the dapping piece again and again P5. Select scotch brite if needed to smooth surface more	You must know and understand: K1. Direction of file to move back and forth K2. Basic knowledge of tools to remove dapping marks K3. Wash and clean after removing dapping marks	C1. File set C2. Sanding paper C3. Scotch brite

## 6. Unit Title: Perform Assembling

Competency Unit	Overview	Performance Criteria	Knowledge & understanding	Tools & Equipment
<b>F1. Perform jump ring making</b>	This unit of competency is to mark marking lines to assemble jewelry components	You must be able to: P1. Draw wires according to requirement of size to use in jewelry piece P2. Make spirals of wire P3. Cut spirals to make jump rings P4. Close face of jump ring	You must know and understand: K1. Anneal wire before making spiral of wire K2. Stretch wire straight before wire spiral	C1. Wire C2. Mandrels C3. Handral C4. Hooks C5. Sheer C6. Nose plier

		<p>P5.Solder the face of jump ring</p> <p>P6.Select mandrel</p>	<p>K3.Select mandrels to make spiral.</p> <p>K4.Grab spiral between fingers during cutting process</p>	<p>C7.Tweezer</p> <p>C8.Beanch wires</p> <p>C9.Annealing tools</p>
<b>F2.Prepare solder for precious metal</b>	This unit of competency is to make solders perform different soldering of hard, medium and soft jobs of precious metals	<p>You must be able to:</p> <p>P1.Select alloys to make different kind of solders (hard, medium &amp; soft )</p> <p>P2.Select alloys to make solders for different karats</p> <p>P3.Select torch nozzle and pressure gauge of gas cylinder</p> <p>P4.Select crucible according to the metal weight</p> <p>P5.Stir metal during melting process</p> <p>P6.Mark karate or hardness on each bar</p>	To hold constant temperature on crucible when melting alloys	<p>C1.Base metal</p> <p>C2.Alloyes</p> <p>C3.Torch</p> <p>C4.Crucible</p>
<b>F3.Perform soldering</b>	This unit of competency is to assemble and join parts of jewelry and components	<p>You must be able to:</p> <p>P1.Clean metals before soldering process</p> <p>P2.Apply flux on joints before soldering</p> <p>P3.Arange parts before soldering the joints</p> <p>P4.Hold torch in right direction and use blue flame for soldering joints</p> <p>P5.Quinch in water then pickling solution</p>	<p>You must know and understand:</p> <p>K1.To maintain temperature for soldering</p> <p>K2.To bind and hold the jewelry pieces to joint</p> <p>K3.Understand not to move parts during soldering</p>	<p>C1.Torch</p> <p>C2.Parts to join</p> <p>C3.Flux</p> <p>C4.Soldering block or joint paper</p> <p>C5.Soldring tweezers</p> <p>C6.Soalder pick</p> <p>C7.Binding wire</p>

		to clean object P6.Target object with constant flame	process	C8.Water pot C9.pickling solution C10.sanding papers C11.Assoted files
<b>F4.Perform pickling</b>	This unit of competency is to de grease and clean the metal and to restore the color of metal	You must be able to: P1.Heat the pickling solution and maintain temperature P2.Dip the article in to pickling solution P3.Pick the object back when clean and de greased P4.Pick the object back when metal restored its color P5.Rimes and clean with wire brush then dry the object	You must know and understand: K1.TO maintain temperature to solution K2.Understand the percentage of acid in to water	C1.Pickling solution C2.Pickling pot C3.Copper tong C4.Water & soap C5.Wire brush
<b>F5. Remove extra solder</b>	This unit of competency is to make neat jewelry components after soldering process	You must be able to: P1.File the extra solder P2.Sanding to remove file marks P3.Pickel to remove fire scales	You must know and understand: K1.Avoid cutting original metals K2.Avoid unnecessary file and sanding	C1.Files C2.Sanding papers

## 7. Unit Title: Perform Finishing

Competency Unit	Overview	Performance Criteria	Knowledge & understanding	Tools & Equipment
<b>G1.</b> Perform filing	This unit of competency is to make smooth surface of casted pieces, remove remaining sprue and to remove dapping marks	You must be able to: P1.Hold jewelry pieces properly while filing P2.File out unnecessary metal, bubbles and remaining sprue P3.File out objects in forward strokes P4.Mentain the pressure of file and direction P5.Mentain the speed on curves and angles	You must know and understand: K1.How to grab file and movement K2.Cuts of file and number of cuts per square inch K3.kinds of files	C1.File set C2.Object to need filing
<b>G2.</b> Perform sanding	This unit of competency is to remove file marks from metal objects	You must be able to: P1.Select grid of sanding paper P2.Hold the object properly P3.Perfoem sanding & keep on observing P4.Mentain speed and direction of sanding P5.Change sand paper to smooth the surface of metal	You must know and understand: K1.Observe condition of object & use fine grit of sand paper K2.To use course sand paper	C1.Sanding paper of different grit C2.Metal pieces or jewelry pieces for practice C3.Jewelrls bench
<b>G3.</b> Perform polishing	This unit of competency is to polish and smooth the	You must be able to: P1.Apply pre polish procedure P2.Polidh the jewelry piece with silicon	You must know and understand: K1.To hold the jewelry	C1.Polishing wheel C2.Flexible shaft machine C3.Jewelers bench

	object surface	wheel P3.Polish the jewelry piece with rouge ( cutting compound ) P4.polish the jewelry with tripoly (polishing compound) P5.Select buffing wheel P6.Clean jewelry pieces after polishing in ultrasonic machine	piece properly K2.To mentain speed of machine K3.Determan the direction to buff the jewelry piece	C4.Holding device C5.Buffing table C6.Rouge C7.Tripoly C8.ultra sonic machine C9.ultra sonic machine powder C10.Steam cleaner
<b>G4.</b> Perform matt finishing	This unit of competency is to perform dull finish at jewelry pieces	You must be able to: P1.Select grit of sand papers P2.Mentain speed to move jewelry pieces during operation P3.Mentain the pressure of sand dropped at jewelry pieces P4.Wash the jewelry pieces at the end	You must know and understand: To follow safety aspect	C1.Sand blaster C2.Sand with different grid C3.Air compressor C4.Jewlry article to use in matt finish
<b>G5.</b> Perform satin finishing	This unit of competency is to obtain satin finish at jewelry pieces	You must be able to: P1.Perform mirror finish P2.Select the satin finish wheels P3.Perform satin finish P4.Select the machine use for stain finish	You must know and understand: K1.To control the speed of buffing machine or flex shaft machine K2.Understand the use of weir wheel or spongy wheel	C1.Buffing table/shaft machine C2.wire brush C3.Spongee wheel C4.Object to practice satin finish

			for satin finish	
<b>G6.</b> Perform texturing	This unit of competency is to decorate jewelry pieces with different texturing techniques	You must be able to: P1.Hold the object for texturing P2.Select tools according to the types of texturing P3.Maintain speed of texturing tools	You must know and understand: K1.To control speed of medium use for texturing K2.To vitiate the texturing techniques	C1.Hammer for hammer texturing C2.Gravers to be use texturing process C3.Holding device
<b>G7.</b> Perform enameling	This unit of competency is to decorate jewelry pieces with different enamel	You must be able to: P1.Creat cavities on object for enameling P2.Select the color according to the design P3.Dry enamel paints with dryer P4.Dry glass enamel with fire P5.Fill compartments or carved areas of metal with enamel	You must know and understand: K1.To wash the glass enamels before filling K2.Dilute enamel paint with thinner	C1.Jewelry component for enameling C2.Glass powder of different color C3.Enamel paints for different color C4.Fire stand for glass enameling C5.Dryer for enamels paints C6.tools to fill enamels
<b>G8.</b> Perform faceting	This unit of competency is to perform bright	You must be able to: P1.Hold the object properly P2.Select the graver and sharp it properly	You must know and understand: K1.To grab graver and	C1.Metas or jewelry components for practice faceting

cutting on jewelry pieces	<p>if perform faceting with hand</p> <p>P3.Perform bright cutting with hand</p> <p>P4.Select diamond tools if perform faceting with machine</p> <p>P5.Control speed of machine</p>	<p>direction to use it</p> <p>K2.Maintain hand pressure and movement of tools</p> <p>K3.Fix jewelry component on wax or holding clay</p>	<p>C2.Holding device</p> <p>C3.Wax/modeling clay</p> <p>C4.Graver</p> <p>C5.sharpening stones</p> <p>C6.Faceting machine</p> <p>C7.Faceting tools</p>
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## 8. Unit Title: Perform Stone Setting

Competency Unit	Overview	Performance Criteria	Knowledge & understanding	Tools & Equipment
<b>H1.</b> Make seat for stone	This unit of competency is to prepare seat to place stone before fixing	<p>You must be able to:</p> <p>P1.Select tools / bur according to the size of stone</p> <p>P2.Hold object properly in holding device or shellac</p> <p>P3.Perform seat making using bur with flex shaft machine</p>	<p>You must know and understand:</p> <p>K1.To use lubricant when cutting with bur or graver</p> <p>K2.Control speed of flex shaft</p>	<p>C1.Component holding device</p> <p>C2.Shellac</p> <p>C3.Bur</p> <p>C4.Flexshaft</p>
<b>H2.</b> Make seat for stone	This unit of competency is to fix and grab stones in mounting securely	<p>You must be able to:</p> <p>P1.Select tools to secure stone in mounting</p> <p>P2.Select the holding device to stop mounting movement</p>	<p>You must know and understand:</p> <p>K1.To match seats and stone size properly</p> <p>K2.Cheque stone</p>	<p>C1.Holding device</p> <p>C2.Pliers</p> <p>C3.Pushers</p> <p>C4.Beading tools</p>

		P3.Perform fixing stone using pliers P4.Beading tools or pushers	security/movement with tweezers after fixing stones	
<b>H3.</b> Perform finishing of mounting	This unit of competency is to remove marks of tools and beautify the mounting after fixing stone	You must be able to: P1.Hold jewelry pieces and device properly P2.Finish/polish mounting with silicon wheels P3.Perform buffing	You must know and understand: K1.Polish carefully, stones should not be touched during polishing process K2.Remove compound by using ultra sonic	C1.Silicon wheel C2.Flex shaft C3.Holding device C4.Buffing table C5.Buffing wheel C6.Buffing compound
<b>H4.</b> Perform bright cutting for pave setting	This unit of competency is to beautify pave setting by bright cutting around the stone	You must be able to: P1.Select the graver and sharp it properly P2.Hold the component properly so that it don't move during bright cutting. P3.Preform bright cutting around the stone with bright cutter graver	You must know and understand: K1. Not to cut beads during bright cutting	C1. Gravers C2. Holding device C3.Gravers sharpening tools

## 9. Unit Title: Perform Wax Carving

Competency Unit	Overview	Performance Criteria	Knowledge & understanding	Tools & Equipment
I1.prepare surface of wax	This unit of competency is to smooth wax surface before marking design on it.	You must be able to: P1. Remove marks and maintain level of wax sheet using files P2.Preform surface smoothness using sand papers.	You must know and understand: K1. Remove all kind of marks from surface of wax	C1.Wax sheet C2. C3. C4.
I2.Perform marking & transfer design	This unit of competency is to transfer design on wax before cutting of wax model	You must be able to: P1. Mark design directly on wax using scriber P2.Paste designee paper on wax if already dray design on paper P3.Perform marking with scriber P4.Put talcum powder to prominent the design on wax sheets	No double marking on wax when marking or transferring design on wax	C1.Wax sheets C2.Scriber C3.Designe to transfer
I3.Perform sawing	This unit of competency is to cut contour of design in wax sheet	You must be able to: P1.Hold wax sheet properly at bench pin P2.Incert saw blade in to wax sheet if need cutting inside the contour P3.Perform cutting carefully to save the bottom of wax sheet consider not to cut	You must know and understand: K1. Carefully save the design to cut during sawing process	C1. Jeweler bench C2.nWax sheet with design C3.Saw Frame C4. Saw blade C5. Files

		too much during sawing P4.Remove unnecessary wax using files		
<b>I4.</b> Perform scraping & carving	This unit of competency is to create patterns and carve out the design already marked on wax	You must be able to: P1.Create shape of Pattern P2.Prominent the design by carving of wax	You must know and understand: K1. Carve carefully not to mark design on wax during scraping	C1.Spatulas C2.Surgical blades C3. Burs C4. Wax files
<b>I5.</b> Perform hollowing	This unit of competency is to maintain gauge of wax patterns to reduce the jewelry weight	You must be able to: P1.Hold pattern properly P2. Select Bur to hollow the pattern P3. To Hold bur into flex shaft	You must know and understand: K1. Hollow carefully voiding to make pattern to weak or too thin	C1. Wax pattern C2. Flex shaft C3. Assorted Burs C4.Surgical blades
<b>I6.</b> Perform sanding & finishing	This unit of competency is to make smooth surface of entire wax mold	You must be able to: P1.Preform file work to remove unwanted mark P2.Preform sanding to remove file marks P3. Preform final finish with silk cloth	You must know and understand: K1.Properly remove all marks saving whole design on wax pattern	C1. Wax model C2. Files C3. Sanding paper C4. Silk cloth

**10. Unit Title: Communicate with other**

Competency Unit	Overview	Performance Criteria	Knowledge & understanding	Tools & Equipment
J1. Build relations with customers	This unit of competency is designed to build good relationship with customers.	You must be able to: P1. Offer after sales services. P2. Update customers with new products. P3. Kind and honest with customers. P4. Be polite with customers in dealing. P5. Keep record of customers. P6. Share details of new products with customers.	You must know and understand: K1. Maintaining data of related customers. K3. 4Ps and 4Cs of customers.	1. Data of customers 2. Mobile 3. Computer 4. Reference 5. Chambers
J2. Supervise workers	This unit of competency is designed to manage the workers and other personnel that can help in improving work quality and quantity.	You must be able to: P1. Perform the duty with other team members. P2. Supervise the work and achieve targets in minimum time. P3. Give clear direction to workers. P4. Check efficiency of workers/ team members. P5. Motivate the workers in order to enhance the efficiency of workers. P6. Make work environment comfortable	You must know and understand: K1. Assigned task K2. Management skills K3. Leadership qualities K4. Being team leader	1. Notice board 2. Schedule 3. Web portal

		for workers. P7. Evaluate workers on the basis of performance.		
J3. Follow instructions from seniors	This unit of competency deals with following instructions of the seniors to perform proper job.	You must be able to: P1. Seek guidance from seniors. P2. Follow the instructions from seniors. P3. . consult seniors in case of emergency.	You must know and understand: K1. Knowledge of seniors to enhance the efficiency of products. K2. Senior suggestions and instructions.	<ol style="list-style-type: none"> <li>1. Family members</li> <li>2. Friends of family members.</li> <li>3. Senior businessmen from different chambers</li> <li>4. Senior government officials.</li> </ol>
J4. Establish linkage with suppliers.	This unit of competency is to develop good relationships and linkage with raw material suppliers.	You must be able to: P1. Keep good relationships in order to supply material in time. P2. Maintain record of the suppliers. P3. Identify relevant suppliers.	You must know and understand: K1. Supply chain management. K2. Maintaining record of suppliers.	<ol style="list-style-type: none"> <li>1. Record register</li> <li>2. pen</li> </ol>