

ՈՍԿԵՐՉՈՒԹՅԱՆ ՄՐՑՈՒՅԹԻ ՊԱՀԱՆՋՆԵՐԸ

1

Work organization and management

- Procedures for checking and maintaining specialist individual tools and shared workshop tools and machines
- Safe operation and maintenance of shared workshop machines and individual tools
- Procedures for the secure storage of jewellery and materials
- Risks attached to the use of natural and propane gas, oxygen, electricity, acid, and chemical products
- Legislation and best practice relating to health and safety
- Legislation and regulations relating to the purchase, production and sale of precious metals, gemstones and finished pieces
- History and tradition of specialist jewellery making techniques used in past periods and in different countries
- Specialist terminology relating to precious metals and jewellery making
- Provide advice and guidance on jewellery manufacturing techniques for a specific design proposal
- Assess and plan for the separate tasks and operations necessary for the manufacture or repair of jewellery components and assembly of completed jewellery pieces
 - Accurately interpret proposals for manufacture of jewellery components or complete jewellery pieces including: Technical drawings, Sample pieces, Sketches or rendered images from 3D digital models , Interpret technical terminology and symbols, Determine time, materials and equipment necessary to complete projects
- Work with a high degree of accuracy and precision on fine and delicate pieces
- Comply with the health and safety regulations and procedures of the country or region where working
- Use personal protective equipment (PPE) and clothing sturdy enough to protect the user from small pieces of flying or incandescent metal
- Operate machinery and tools in a manner that avoids risk to him/herself or others within the workshop
- Proactively maintain continuous professional development in order to be aware of fashion trends in jewellery design, specialist manufacturing techniques and developments in technology

2

Manufacture of precious metal alloys

- Content of precious metal alloys and the impact that additives have on the precious metal in terms of colour, pliability and durability
- How alloys react to various processes used by the jewellery maker
- Properties of precious metal alloys and their solders
- Laws and regulations relating to precious metal content for sale and export

- Assaying processes and procedures for the country of operation, purchase and sale of jewellery products
- Assaying marks delineating precious metal quality
- Formats in which precious metals are sold
- Recognize authenticity and quality signs for precious metals
- Source precious metals of the correct price and quality for jewellery manufacture
- Calculate the proportions and quantities of fine precious metals and base metals required for any predetermined quantity of any recognized precious metal alloy
- Cast precious metal alloy ingots and bars of any predetermined weight, with a minimum of residual impurities, ready to be milled or rolled in preparation for the manufacture of jewellery components

3

Preparation of precious metal alloys for the manufacture of jewellery components

- Properties and applications of various recognized precious metal alloys
- Procedures for transformation of precious metal alloy ingots in preparation for the manufacture of jewellery components
- Applications and uses for various recognized precious metals
- Manufacture precious metal sheet or square wire, and reduce to any pre-determined thickness using manual or electrically powered rolling mills
- Manufacture and reduce thickness of square or round wire in precious metal alloys to any pre-determined dimensions using drawing banks
- Manufacture round wire from square wire, and reduce to any pre-determined diameter using a drawing bank

4

Preparation of precious metal alloys for the manufacture of jewellery components

- Various jewellery components and their uses
- Techniques and methods for forming and constructing components
- Manufacture Chenier/tube and reduce to any predetermined diameter using a drawing bank
- Transform precious metal alloy sheet, wire or Chenier/tube into basic jewellery components by means of bending, shaping and forming so as to conform to any shape pre-determined by technical drawing or sample component
- Accurately drill precious metals so as to conform to any shape pre-determined by technical drawing or sample component
- Transform basic jewellery components by means of abrasive techniques such as milling, grinding, filing a jour-sawing etc. so as to conform to any shape pre-determined by a technical drawing or sample component
- Hammer, emboss, shape or dome precious metal sheet of an appropriate thickness into low relief, so as to conform to any shape pre-determined by a technical drawing or sample component using an doming tool appropriate

5	Manufacture of complex components and complete jewellery pieces using solder joins
	<ul style="list-style-type: none"> • Various jewellery components and their uses
	<ul style="list-style-type: none"> • Range and use of techniques and methods for forming, constructing, and finishing components
	<ul style="list-style-type: none"> • Gemstone setting
	<ul style="list-style-type: none"> • Correct and safe use of solders and soldering torches
	<ul style="list-style-type: none"> • Assemble basic jewellery components into complex jewellery components by means of precious metal solder joins so as to conform to any design pre-determined by a technical drawing or sample component
	<ul style="list-style-type: none"> • Manufacture settings for precious gemstones so as to conform to any design pre-determined by a technical drawing or sample component, and in such a manner that stones of the pre-determined size and shape can be properly set by a professional gem setter
	<ul style="list-style-type: none"> • Manufacture functioning mechanisms for jewellery such as hinges, clasps, articulations, pressure snaps riveting and screw threads so as to conform to any design pre-determined by a technical drawing or sample component, or of their own conception and in such a manner that they will function as required and continue to function in the same manner for an indefinite period of time with normal use
	<ul style="list-style-type: none"> • Assemble basic jewellery components and complex jewellery components into completed jewellery pieces by means of precious metal solder joins so as to conform to any design pre-determined by a technical drawing or sample component
	<ul style="list-style-type: none"> • Repair damaged or worn pieces of jewellery in such a manner that the restored piece will be indistinguishable from its original aspect at the time of manufacture
6	Surface finish
	<ul style="list-style-type: none"> • Skill specific finishing and polishing methods and techniques
	<ul style="list-style-type: none"> • Effect of different types and grades of polishing media on the surface finish
	<ul style="list-style-type: none"> • Procedures, tools and techniques to gain the optimum surface finish
	<ul style="list-style-type: none"> • Common surface imperfections and defects and appropriate techniques for their repair
	<ul style="list-style-type: none"> • International grades of sandpaper used in surface finishing
	<ul style="list-style-type: none"> • Avoid creating marks, scratches and surface imperfections throughout all stages of manufacture of simple and complex jewellery components and completed jewellery pieces prior to the application of final surface finish
	<ul style="list-style-type: none"> • Finish surfaces at stages throughout the manufacturing process

- Apply non-reflective 800ASA sandpaper (or equivalent) appropriate for critical evaluation and/or passing on to any subsequent phase of production requiring other goldsmith's industry skills, such as casting, gem-setting, engraving, and polishing