



Technical Description

Jewellery

Skill 27



WorldSkills International, by a resolution of the Competitions Committee and in accordance with the Constitution, the Standing Orders, and the Competition Rules, has adopted the following minimum requirements for this skill for the WorldSkills Competition.

The Technical Description consists of the following:

1 Introduction.....	3
2 The WorldSkills Occupational Standards (WSOS).....	5
3 The Assessment Strategy and Specification.....	12
4 Assessment Design and Practice.....	13
5 The Test Project.....	18
6 Skill management and communication.....	22
7 Skill-specific safety requirements.....	25
8 Materials and equipment.....	27
9 Skill-specific rules.....	38
10 Expert knowledge and experience.....	41
11 Visitor and media engagement.....	42
12 Sustainability.....	43
13 References for industry consultation.....	44
14 Appendix.....	46

1 Introduction

1.1 Name and description of the skill competition

1.1.1 The name of the skill competition is

Jewellery

1.1.2 Description of the associated work role(s) or occupation(s)

Jewellery manufacture involves creating jewellery pieces using precious metals and jewellery gemstones. A jeweller can create exclusive, individual pieces for clients, ready to be set with gemstones, or prototypes for serial reproduction through the lost-wax casting process. Jewellers may be tasked with replicating existing pieces, refashioning items, or repairing damaged jewellery. They typically work from detailed designs generated through consultation with clients or designers and may use traditional hand sketching or Computer Aided Design (CAD) drawings from designers. Increasingly, AI-assisted visualisation tools are used to explore and develop design concepts. Jewellers must accurately interpret these drawings to create final pieces that meet designers' or clients' visions.

A jeweller can do all the work on the product, but collaboration with other industry specialists is possible. Collaboration enables the sharing of manufacturing operations to enhance time management and efficiency. A jeweller must have an understanding of production processes, even if they do not perform these themselves. An example of this would be outsourcing to a third party to complete a specific task or sharing a workspace with other jewellery makers or technicians with different specialist skills. Today, jewellers broadly fall into two categories: those specialising in handmade bespoke pieces, often working independently or in small ateliers; and those engaged in mass or serialised production, who may assemble components cast by others or produced through mechanised means. Both approaches require an understanding of precision, workflow, and efficient task delegation.

Once the jeweller has completed their work on a piece, it may progress to further phases of the manufacturing process, requiring jewellery industry skills other than jewellery making, for example, gem setting and casting. For this reason, a jeweller must have some knowledge and understanding of other jewellery industry skills. They must have an appreciation of gemstones, their characteristics, cuts, uses and impact on the finished piece. Similarly, they must be aware of the different phases of reproduction, such as casting, just mentioned, and be familiar with CAD. Technology continues to transform the industry, with CAD and 3D printing enabling the creation of complex designs and more efficient production workflows. AI is also beginning to shape the field, offering generative tools that help visualise and iterate design ideas.

Jewellers work with highly valuable materials; therefore, they must act with complete honesty and integrity. They must understand the security and regulations related to the purchase, production, and sale of precious metals, gemstones, and finished pieces. Whether working as part of a production team or as a sole manufacturer, a jeweller must have a thorough understanding of production costs to determine an acceptable selling price while maintaining profitability. Furthermore, ethical sourcing and sustainability have become central pillars in both consumer expectations and industry standards. Today's jeweller must possess not only technical expertise but also a sound understanding of the broader social and environmental implications of their choices of material. An example is awareness of issues such as conflict diamonds, the use of recycled or fair-trade metals, and adherence to responsible mining and supply chain practices.

Clients are increasingly informed and discerning, often seeking reassurance that the pieces they commission or purchase are sourced and created with respect for human rights, environmental stewardship, and cultural integrity. As such, transparency regarding provenance is no longer

optional but essential. A jeweller must be prepared to demonstrate that gemstones and precious metals have been sourced through ethical and sustainable means, aligning their practice with global efforts to promote equity, environmental responsibility, and traceability within the trade.

This shift also brings opportunity. Those jewellers who embrace these values not only help uphold the dignity of the craft but also position themselves as leaders in a conscientious and evolving marketplace.

1.1.3 Number of Competitors per team

Jewellery is a single Competitor skill competition.

1.1.4 Age limit of Competitors

The Competitors must not be older than 22 years in the year of the Competition.

1.2 The relevance and significance of this document

This document contains information about the standards required to compete in this skill competition, and the assessment principles, methods, and procedures that govern the competition.

Every Expert and Competitor must know and understand this Technical Description.

In the event of any conflict within the different languages of the Technical Descriptions, the English version takes precedence.

1.3 Associated documents

Since this Technical Description contains only skill-specific information it must be used in association with the following:

- WSI – Code of Ethics and Conduct
- WSI – Competition Rules
- WSI – WorldSkills Occupational Standards framework
- WSI – WorldSkills Assessment Strategy
- WSI online resources as indicated in this document
- WorldSkills Health, Safety, and Environment Policy and Regulations
- WorldSkills Standards and Assessment Guide (skill-specific)

2 The WorldSkills Occupational Standards (WSOS)

2.1 General notes on the WSOS

The WSOS specifies the knowledge, understanding, skills, and capabilities that underpin international best practice in technical and vocational performance. These are both specific to an occupational role and also transversal. Together they should reflect a shared global understanding of what the associated work role(s) or occupation(s) represent for industry and business (www.worldskills.org/WSOS).

The skill competition is intended to reflect international best practice as described by the WSOS, to the extent that it can. The Standard is therefore a guide to the required training and preparation for the skill competition.

In the skill competition the assessment of knowledge and understanding will take place through the assessment of performance. There will only be separate tests of knowledge and understanding where there is an overwhelming reason for these.

The Standard is divided into distinct sections with headings and reference numbers added.

Each section is assigned a percentage of the total marks to indicate its relative importance within the Standards. This is often referred to as the “weighting”. The sum of all the percentage marks is 100. The weightings determine the distribution of marks within the Marking Scheme.

Through the Test Project, the Marking Scheme will assess only those skills and capabilities that are set out in the WorldSkills Occupational Standards. They will reflect the Standards as comprehensively as possible within the constraints of the skill competition.

The Marking Scheme will follow the allocation of marks within the Standards to the extent practically possible. A variation of up to five percent is allowed, if this does not distort the weightings assigned by the Standards.

2.2 WorldSkills Occupational Standards

Section		Relative importance (%)
1	Work organization and management	20
	The individual needs to know and understand: <ul style="list-style-type: none"> • The requirements and implications of jewellery production on the environment and related sustainability issues • Sources of advice relating to the objectives, requirements, and specifications • Quality requirements of the product or service • Methods for restructuring, reprioritising, and adapting project plans in response to timeframes and unforeseen challenges to ensure progress toward deadlines • Modifications that can be made to the plan to respond to unforeseen developments 	

Section		Relative importance (%)
	<ul style="list-style-type: none"> • Reporting requirements for accidents, incidents, and other non-conformances with WHS procedures • Information analysis techniques appropriate to tasks and position • Methods of categorizing and organizing information including correct sequencing of information • Methods of recording and communicating information • Types of information relevant to the workplace and required tasks • Processes or tools for effective decision making • How to deliver and receive constructive criticism to better work in a collaborative manner • Safe operation, maintenance, and regular inspection of both individual and shared workshop tools and machinery. • Procedures for the secure storage of jewellery and materials • Methods for identifying and managing risks associated with workplace tasks and hazardous materials, and the application of appropriate control measures. • Out-sourcing practices to external contractors for the purposes of electro-plating and the electro-plating process, gemstone mounting and the gemstone mounting process • Processes for manufacturing both single and mass unit production, e.g. 1 piece, 10 pieces, 100 pieces. 	
	<p>The individual shall be able to:</p> <ul style="list-style-type: none"> • Follow environmental policies and systems, manage risks and resource inefficiencies in the workplace, and suggest improvements where appropriate • Plan work activities using appropriate planning tools such as technical drawings, sample pieces and sketches or rendered images from 3D digital models, whilst following established procedures, including work health and safety (WHS) requirements • Check plans to ensure accuracy and conformance and modify the plan components, as a contingency for overcoming any unforeseen difficulties or developments • Identify hazards, implement and evaluate risk controls, use and maintain PPE, and follow SOPs and WHS procedures to ensure workplace safety • Create efficient work practices to minimize waste • Access, interpret, organize, and clarify workplace information, using appropriate terminology and symbols • Work with a high degree of accuracy and precision on fine and delicate pieces • Operate machinery and tools in a manner that avoids risk tothemselves or others within the workshop • Gather relevant information, seek input from team members, and engage in effective dialogue to make informed decisions • Communicate effectively in various workplace situations, including giving and receiving feedback. 	

Section		Relative importance (%)
2	Design jewellery components	20
	<p>The individual needs to know and understand:</p> <ul style="list-style-type: none"> • Specialist techniques both historical and regional • Features, availability, and delivery processes of products and services offered • The management of customer requirements, including the provision of alternatives and communication of service limitations • Strategies for managing customer issues • Record keeping requirements of customer service interactions and transactions • Iterative processes to enable effective development of client designs • Potential problems or limitations that may affect or limit a client's design • Effective communication techniques to better understand client needs • Trends, innovations, and breakthroughs in relevant design fields • Methods to establish rapport with customers aimed at providing a positive customer experience • Research techniques and design resources, including how and where to locate them • Existing designs, ethical and competitive considerations • Applicable industry standards or regulations • Drawing media and their purposes/applications including paper, and ink/pencil/stencils/erasers • Principles and techniques for visually communicating design ideas, including basic sketching, 2D and 3D drawing methods, the relationship between technical and artistic drawings, and the use of CAD software with appropriate terminology and symbols • Fundamental and advanced design principles relevant to jewellery, including form, function, harmony, line (interpretive and actual), and the elements that define both basic and complex components • Jewellery construction techniques and suitable manufacturing technologies • The use of techniques associated with applying texturing to precious metal surfaces for creative effect • How to extract mass and area properties using 3D design software • Information on specifications, design documentation, illustrations, design drawings and other applicable source documents • Industry requirements and availability of industry expertise • Safe work practices • Processes for material recycling and waste disposal. • How to implement sustainable practices in jewellery design, including ethical sourcing of materials such as gemstones and precious metals. This includes knowledge of standards and certification or fair trade and responsible mining. 	

Section		Relative importance (%)
	<p>The individual shall be able to:</p> <ul style="list-style-type: none"> • Identify and interpret specifications • Identify purposes and needs, including design restraints, budget considerations, item end-use, proportions, desired features, and available materials • Develop research/ideas to a sufficient level to determine customer expectations and/or design outcomes • Clearly communicate design intent and feasibility to customers and relevant stakeholders (engineer, master pattern maker) using appropriate terminology • Record and communicate design development and intent through annotations (call outs), visual cues, and process documentation • Create, refine, and approve drawings and renderings using appropriate tools and techniques to accurately communicate jewellery design concepts • Engage with experts, mentors, or peers to gather input and diverse perspectives on design challenges • Identify and solve problems that may affect design, form or functionality • Interpret and address diverse customer requirements using product knowledge, propose suitable alternatives, identify potential design limitations, and manage issues that may arise during the design process. 	
3	Manufacture of precious metal alloys	5
	<p>The individual needs to know and understand:</p> <ul style="list-style-type: none"> • Methods for coordinating with others to ensure correct preparation and documentation of alloy blends • The composition and properties of precious metal alloys and solders, including how additives affect colour, pliability, durability, and how alloys respond to common jewellery-making processes • Legislation, industry standards, and ethical frameworks relating to the purchase, production, and sale of precious metals, and finished pieces, including requirements for responsible sourcing from suppliers and manufacturers, adherence to fair trade practices, and sustainability obligations across the jewellery supply chain • Assaying processes and procedures for the country of operation, purchase, and sale of jewellery products • Assaying marks delineating precious metal quality • Forms in which precious metals are sold, such as sheet/wire/ granules. 	
	<p>The individual shall be able to:</p> <ul style="list-style-type: none"> • Recognize authenticity and quality signs for precious metals • Source precious metals of the correct price and quality for jewellery manufacture 	

Section		Relative importance (%)
	<ul style="list-style-type: none"> • Calculate the proportions and quantities of fine precious metals and base metals required for any predetermined amount 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. 	
4	Handling of metal alloys for the manufacture of jewellery components	5
	<p>The individual needs to know and understand:</p> <ul style="list-style-type: none"> • Properties and applications of various recognised precious metal alloys • The process for the transformation of precious metal alloy ingots in preparation for the manufacture of jewellery components • Applications and uses for different recognized precious metals • Methods for collaborating with team members and suppliers to ensure proper use and handling of tools and materials. 	
	<p>The individual shall be able to:</p> <ul style="list-style-type: none"> • Reduce precious metal sheets and square wires made from precious metal alloys to a predetermined thickness using manual or electrically powered rolling mills • Reduce square or round wires made from precious metal alloys to predetermined dimensions using drawing banks • Manufacture round wire from square wire and reduce it to a predetermined diameter using a drawing bank • Apply basic mathematical formulas to calculate metal weights and achieve the desired dimensions. 	
5	Manufacture of both simple and complex jewellery components	35
	<p>The individual needs to know and understand:</p> <ul style="list-style-type: none"> • Decision making processes applied when selecting fabrication techniques, working out tolerances, or addressing challenges in mechanical components or gemstone settings. • The use of CAD for layout or cross-referencing digital models to translate designs into physical components. • Methods for articulating the rationale behind fabrication choices when collaborating with designers, gem setters, or clients. • Methods and techniques for evaluating the functionality of mechanisms and wearability of finished components before final assembly. • Methods of anticipating how individual components integrate into larger assemblies and workflows • Legislation and regulations regarding the purchase, production, and sale of precious metals, gemstones, and finished pieces 	

Section		Relative importance (%)
	<ul style="list-style-type: none"> • Various jewellery components and their intended applications • Techniques and methods for forming and constructing components and methods for finishing components • The requirements for gemstone seating to ensure professional gem setting outcomes • The correct and safe use of solders and soldering torches, and hard soldering techniques • Other techniques used in the joining of one or more components to create a completed piece without the use of heat or solder. 	
	<p>The individual shall be able to:</p> <ul style="list-style-type: none"> • Manufacture Chenier/tubes and reduce to any predetermined diameters using a drawing bank • Transform precious metal alloy sheet, wire or Chenier/tube into simple jewellery components employing bending, shaping, and forming to conform to any shape pre-determined by technical drawing or sample component • Drill precious metals accurately to conform to any shape pre-determined by technical drawings or sample component • Transform simple jewellery components employing abrasive techniques such as milling, grinding, filing, ajour-sawing etc. to conform to any shape pre-determined by technical drawings or sample components • Hammer, emboss, shape or dome precious metal sheets of appropriate thickness into low relief, to conform to any shapes pre-determined by technical drawings or sample components using appropriate doming tools • Manufacture settings for precious gemstones to conform to shapes or designs pre-determined by technical drawings or sample components • Manufacture functioning mechanisms for jewellery such as hinges, clasps, articulations, pressure snaps riveting and screw threads as determined by technical drawings or sample components, or of their own design • Refine and revisit complex constructions like hinges, clasps, and articulated pieces to ensure mechanical integrity and durability • Assemble basic jewellery components and complex jewellery components into completed jewellery pieces by means of precious metal solder joins to conform to any designs pre-determined by technical drawings or sample components • Repair damaged or worn pieces of jewellery so that the restored pieces will be indistinguishable from their original aspect at the time of manufacture. 	
6	Surface finish	15

Section	Relative importance (%)
<p>The individual needs to know and understand:</p> <ul style="list-style-type: none"> • Skill specific finishing and polishing methods and techniques that reduce waste, reuse abrasives, and minimise environmental impact • Procedures, tools, and techniques to gain the optimum surface finish, • Common surface imperfections and defects and appropriate methods for their repair • International grades of sandpaper used in surface finishing • Precious metal lemel control and collection processes to reduce waste and encourage reuse • Best practice for refining to ensure maximum returns of scrap precious metals to ensure sustainable practices are upheld in the workplace. 	
<p>The individual shall be able to:</p> <ul style="list-style-type: none"> • Remove marks, scratches, and surface imperfections throughout all stages of manufacture of simple and complex jewellery components and completed jewellery pieces before the application of final surface finishes • 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 phases of production requiring other jewellery' industry skills, such as casting, gem-setting, engraving, and polishing • Work in an organized and efficient manner to minimize loss of precious metals • Return all surplus metal and lemel/scrap to assess loss prior to recycling. 	
<p>Total</p>	<p>100</p>

3 The Assessment Strategy and Specification

3.1 General guidance

Assessment is governed by the WorldSkills Assessment Strategy. The Strategy establishes the principles and techniques to which WorldSkills assessment and marking must conform.

Expert assessment practice lies at the heart of the WorldSkills Competition. For this reason, it is the subject of continuing professional development and scrutiny. The growth of expertise in assessment will inform the future use and direction of the main assessment instruments used by the WorldSkills Competition: the Marking Scheme, Test Project, and Competition Information System (CIS).

Assessment at the WorldSkills Competition falls into two broad types: Measurement and Judgement. For both types of assessment, the use of explicit benchmarks against which to assess each Aspect is essential to guarantee quality.

The Marking Scheme must follow the weightings within the Standards. The Test Project is the assessment vehicle for the skill competition, and therefore also follows the Standards. The CIS enables the timely and accurate recording of marks; its capacity for scrutiny, support, and feedback is continuously expanding.

The Marking Scheme, in outline, will lead the process of Test Project design. After this, the Marking Scheme and Test Project will be designed, developed, and verified through an iterative process, to ensure that both together optimize their relationship with the Standards and the Assessment Strategy. They will be agreed by the Experts and submitted to WSI for approval together, to demonstrate their quality and conformity with the Standards.

Prior to submission for approval to WSI, the Marking Scheme and Test Project will liaise with the WSI Skill Advisors for quality assurance and to benefit from the capabilities of the CIS.

4 Assessment Design and Practice

4.1 General guidance

This section describes the role and place of the Marking Scheme, how the Experts will assess Competitors' work as demonstrated through the Test Project, and the procedures and requirements for marking.

The Marking Scheme is the pivotal instrument of the WorldSkills Competition, in that it ties assessment to the standard that represents each skill competition, which itself represents a global occupation. It is designed to allocate marks for each assessed aspect of performance in accordance with the weightings in the Standards.

By reflecting the weightings in the Standards, the Marking Scheme establishes the parameters for the design of the Test Project. Depending on the nature of the skill competition and its assessment needs, it may initially be appropriate to develop the Marking Scheme in more detail as a guide for Test Project design. Alternatively, initial Test Project design can be based on the outline Marking Scheme. From this point onwards the Marking Scheme and Test Project should be developed together.

Section 2.1 above indicates the extent to which the Marking Scheme and Test Project may diverge from the weightings given in the Standards, if there is no practicable alternative.

For integrity and fairness, the Marking Scheme and Test Project are increasingly designed and developed by one or more Independent Test Project Designer(s) with relevant expertise. In these instances, the Marking Scheme and Test Project are unseen by Experts until immediately before the start of the skill competition, or competition module. Where the detailed and final Marking Scheme and Test Project are designed by Experts, they must be approved by the whole Expert group prior to submission for independent validation and quality assurance. Please see the Competition Rules for further details.

Experts and Independent Test Project Designers are required to submit their Marking Schemes and Test Projects for review, verification, and validation well in advance of completion. They are also expected to work with their Skill Advisor, reviewers, and verifiers, throughout the design and development process, for quality assurance and in order to take full advantage of the CIS's features.

In all cases a draft Marking Scheme must be entered into the CIS at least eight weeks prior to the Competition. Skill Advisors actively facilitate this process.

4.2 Assessment Criteria

The main headings of the Marking Scheme are the Assessment Criteria. These headings are derived before, or in conjunction with, the Test Project. In some skill competitions the Assessment Criteria may be similar to the section headings in the Standards; in others they may be different. There will normally be between five and nine Assessment Criteria. Whether or not the headings match, the Marking Scheme as a whole must reflect the weightings in the Standards.

Assessment Criteria are created by the person or people developing the Marking Scheme, who are free to define the Criteria that they consider most suited to the assessment and marking of the Test Project. Each Assessment Criterion is defined by a letter (A-I). **The Assessment Criteria, the allocation of marks, and the assessment methods, should not be set out within this Technical Description. This is because the Criteria, allocation of marks, and assessment**

methods all depend on the nature of the Marking Scheme and Test Project, which is decided after this Technical Description is published.

The Mark Summary Form generated by the CIS will comprise a list of the Assessment Criteria and Sub Criteria.

The marks allocated to each Criterion will be calculated by the CIS. These will be the cumulative sum of marks given to each Aspect within that Assessment Criterion.

4.3 Sub Criteria

Each Assessment Criterion is divided into one or more Sub Criteria. Each Sub Criterion becomes the heading for a WorldSkills marking form. Each marking form (Sub Criterion) contains Aspects to be assessed and marked by Measurement or Judgement, or both Measurement and Judgement.

Each marking form (Sub Criterion) specifies both the day on which it will be marked, and the identity of the marking team.

4.4 Aspects

Each Aspect defines, in detail, a single item to be assessed and marked, together with the marks, and detailed descriptors or instructions as a guide to marking. Each Aspect is assessed either by Measurement or by Judgement.

The marking form lists, in detail, every Aspect to be marked together with the mark allocated to it. The sum of the marks allocated to each Aspect must fall within the range of marks specified for that section of the Standards. This will be displayed in the Mark Allocation Table of the CIS, in the following format, when the Marking Scheme is reviewed from C-8 weeks. (Section 4.1 refers.)

	CRITERIA								TOTAL MARKS PER SECTION	WSSS MARKS PER SECTION	VARIANCE	
	A	B	C	D	E	F	G	H				
STANDARDS SPECIFICATION SECTION	1	5.00								5.00	5.00	0.00
	2		2.00					7.50		9.50	10.00	0.50
	3								11.00	11.00	10.00	1.00
	4			5.00						5.00	5.00	0.00
	5				10.00	10.00	10.00			30.00	30.00	0.00
	6		8.00	5.00				2.50	9.00	24.50	25.00	0.50
	7			10.00				5.00		15.00	15.00	0.00
TOTAL MARKS	5.00	10.00	20.00	10.00	10.00	10.00	15.00	20.00	100.00	100.00	2.00	

4.5 Assessment and marking

There is to be one marking team for each Sub Criterion, whether it is assessed and marked by Judgement, Measurement, or both. The same marking team must assess and mark all Competitors. Where this is impracticable (for example where an action must be done by every Competitor simultaneously, and must be observed doing so), a second tier of assessment and marking will be put in place, with the approval of the Competitions Committee Management Team. The marking teams must be organized to ensure that there is no compatriot marking in any circumstances. (Section 4.6 refers.)

4.6 Assessment and marking using Judgement

Judgement uses a scale of 0-3. To apply the scale with rigour and consistency, Judgement must be conducted using:

- benchmarks (criteria) for detailed guidance for each Aspect (in words, images, artefacts, or separate guidance notes). This is documented in the Standards and Assessment Guide.
- the 0-3 scale to indicate:
 - 0: performance below industry standard
 - 1: performance meets industry standard
 - 2: performance meets and, in specific respects, exceeds industry standard
 - 3: performance wholly exceeds industry standard and is judged as excellent

Three Experts will judge each Aspect, normally simultaneously, and record their scores. A fourth Expert coordinates and supervises the scoring, and checks their validity. They also act as a judge when required to prevent compatriot marking.

4.7 Assessment and marking using Measurement

Normally three Experts will be used to assess each Aspect, with a fourth Expert supervising. In some circumstances the team may organize itself as two pairs, for dual marking. Unless otherwise stated, only the maximum mark or zero will be awarded. Where they are used, the benchmarks for awarding partial marks will be clearly defined within the Aspect. To avoid errors in calculation or transmission, the CIS provides a large number of automated calculation options, the use of which is mandated.

4.8 The use of Measurement and Judgement

Decisions regarding the choice of criteria and assessment methods will be made during the design of the competition through the Marking Scheme and Test Project.

4.9 Skill assessment strategy and procedures

WorldSkills is committed to continuous improvement including reviewing past limitations and building on good practice. The following skill assessment strategy and procedures for this skill competition take this into account and explain how the marking process will be managed.

Assessment and marking will cover the following areas:

Criterion A: Similarity to drawing

Experts will assess how closely the Competitor's work reflects the overall shapes and proportions shown in the Test Project drawings, including any functional elements like mechanisms or clasps.

Criterion B: Saw piercing and milling

Experts will assess the accuracy of shapes, angles, intersections, and internal surface finishes of technical elements created by the removal of metal.

Criterion C: Soldering and laser welding

Experts will assess how Competitors join components using soldering or laser welding. For soldering: joints must be secure, the amount of solder correct, and no pinholes visible. For laser welding: filler must be correctly applied, with no excess and no pinholes.

Criterion D: surface finish

Experts will assess how well each Competitor has produced a uniform, unpolished surface equivalent to an 800-grit abrasive finish.

Criterion E: Measurements

Experts will assess whether the measurements and mass of the Competitor's work reflect the clearly marked dimensions and weights on the test project drawing within defined tolerances.

Criterion F: Piece finished on time

Experts will assess whether the correct number of components and technical elements specified in the Test Project drawing are present and connected using a soldered or mechanical joint. This criterion also includes competitors economical use of material.

Criterion G: Design and jewellery components

Experts will assess how effectively the Competitor has brought the design brief to life. They will look at how clearly the Competitor shows their design development from the initial idea to the final piece, how well the piece meets all the required features and technical skills, and how harmoniously the creative elements come together in the final design.

Procedural Specifications

- Experts attending the Competition are divided into marking groups to deal with each section of the marking criteria.
- Experts will maintain supervision of Competitors during the Competition, but must not look at Competitors' work or have knowledge of progress, except from the compatriot Competitor during the times permitted by Competition Rules.
- At the end of each Competition day, incomplete test pieces will be collected by the Workshop Manager, placed in opaque boxes, sealed and signed, marked with the Competitor's workstation number and country code, and locked in a safe or strong cabinet. The key or combination to the cabinet will be held by the Workshop Manager, Workshop Manager Assistant, or the Skill Competition Manager.
- At the end of each day, photographs of all Competitors' metal may be taken by the Workshop Manager or the Skill Competition Manager to ensure that no parts are replaced or added. These photographs are to be kept in a safe or strong cabinet.
- At the end of each Competition module, test pieces for marking must be sealed in opaque envelopes inscribed with the Competitor's name, workstation number, and country code, until assessment or until returned to the Competitor for use in a subsequent module.

General Marking rules

- Shapes and proportions assessed in Criterion B must not be reassessed in Criterion A.
- By default, all joints shown as touching in the Test Project drawings must be soldered, unless the Test Project specifies that laser welding is required. For criterion F, each joint must show an attempt at soldering in order for the piece to be considered finished on time.
- Surfaces assessed in Criterion B must not be reassessed in Criterion D.
- A sample of the desired surface finish will be selected by Experts and displayed within the competition area for Competitor reference.
- All measurement marking will be inputted using calculations and incremental percentage tolerances, as agreed by the Experts at the previous competition.
- On the final day, Experts will also assess Competitors' economic use of material by weighing all 18ct yellow gold metal, lemel, and filings returned against the metal provided.

For **dimensions**, the following percentage increments apply: For dimensions up to approximately 5 mm, a **1.0%** increment is used. For dimensions from 5 mm up to 20 mm, increments of **0.5%** are applied. For dimensions from 20 mm up to 35 mm, increments of **0.3%** are used, and for any dimensions above 35 mm, increments of **0.2%** apply.

For **mass**, increments are as follows: For weights up to 7 grams, a **2.0%** increment is used. For weights between 7 grams and 10 grams, increments of **1.5%** are applied, and for weights above 10 grams, increments of **1.0%** are used.

For **economic use of material**, marking deductions are determined by the percentage of material returned. Competitors returning **97.5% to 100%** of the material receive full marks, those returning between **96.5% and 97.4%** receive half marks, and those returning between **95.5% and 96.4%** receive zero marks.

5 The Test Project

5.1 General notes

Sections 3 and 4 govern the development of the Test Project. These notes are supplementary.

Whether it is a single entity, or a series of stand-alone or connected modules, the Test Project will enable the assessment of the applied knowledge, skills, and behaviours set out in each section of the WSOS.

The purpose of the Test Project is to provide full, balanced, and authentic opportunities for assessment and marking across the Standards, in conjunction with the Marking Scheme. The relationship between the Test Project, Marking Scheme, and Standards will be a key indicator of quality, as will be its relationship with actual work performance.

The Test Project will not cover areas outside the Standards or affect the balance of marks within the Standards other than in the circumstances indicated by Section 2. This Technical Description will note any issues that affect the Test Project's capacity to support the full range of assessment relative to the Standards. Section 2.1 refers.

The Test Project will enable knowledge and understanding to be assessed solely through their applications within practical work. The Test Project will not assess knowledge of WorldSkills rules and regulations.

Most Test Projects and Marking Schemes are now designed and developed independently of the Experts. They are designed and developed either by the Skill Competition Manager, or an Independent Test Project Designer, normally from C-12 months. They are subject to independent review, verification, and validation. (Section 4.1 refers.)

The information provided below will be subject to what is known at the time of completing this Technical Description, and the requirement for confidentiality.

Please refer to the current version of the Competition Rules for further details.

5.2 Format/structure of the Test Project

The Test Project is a single Test Project assessed in stages.

5.3 Test Project design requirements

Test Projects should reflect the purposes, structures, processes, and outcomes of the occupational role they are based on. They should aim to be a small-scale version of that role. Before focusing on practicalities, SMTs should show how the Test Project design will provide full, balanced, and authentic opportunities for assessment and marking across the Standards, as set out in Section 5.1.

The Test Project should be a single piece of jewellery that contains a wide variety of technical elements including:

- [Ajour/back holes](#);
- [Gallery and/or back/edge wire](#);
- [Settings made by hot joining jewellery components](#);
- [Assembly of complex jewellery components](#);
- [Doming/forming or relief work](#);

- A creative element that forms part of one day's module, that is outlined by a design brief supplied to the Competitor during familiarization.

The Test Project should be designed to sit flat on at least one plane to allow for measurement (height) and similarity (does the piece sit flat?).

The drawing must be available in at least JPG or PDF. For drawing projections refer to ISO 128, either first or third angle projection. Projections shall be on one sheet of A4 paper, scale 1:1, or one per module. Cross-sections and three-dimensional representations may also be included.

Once the Test Project has been designed, it can be requested that the materials from this list can be milled to suit the requirements of the project, time, and logistical requirements permitting.

In each module a minimum of two and a maximum of three proposed marking dimensions, must be clearly identified on the drawing for marking purposes. Each marking dimension must allow for a minimum of three contact points.

A full scale, hand-made prototype of the Test Project and accompanying images must be brought to the competition for Experts to view after the Test Project has been presented.

Project/Modules will be developed to accommodate timetables designed for a Test Project of 22 working hours including time for Iterative Design elements.

Iterative Design elements for modules 1 through 3:

- Module 1: 4 x initial drawings. 30 Minutes (Recommended)
- Module 2 : 2 x drawings. 30 Minutes (Recommended)
- Module 3: 1 x drawing. 40 Minutes (Recommended)

5.4 Test Project coordination and development

The Test Project MUST be submitted using the templates provided by WorldSkills International (www.worldskills.org/expertcentre). Use the Word template for text documents and DWG template for drawings.

5.4.1 Test Project coordination (preparation for Competition)

Coordination of the Test Project/modules will be undertaken by the Skill Competition Manager.

5.4.2 Who develops the Test Project/modules

The Test Project/modules are developed by an Independent Test Project Designer(s) (ITPD) in collaboration with the Skill Competition Manager.

5.4.3 When is the Test Project developed

The Test Project/modules are developed according to the following timeline:

Time	Action
Fifteen (15) months prior to the Competition	The ITPD is identified and a Confidentiality Agreement between WSI and the ITPD is organized.
Two (2) months prior to the Competition	The Test Project documents are sent to the WorldSkills International Skills Competitions Administration Manager.
At the Competition on C-2	The translated Design Brief is made available to the Competitors on the WorldSkills website.

Time	Action
At the Competition on C1	Test Project/modules and translated Test Project Statement of Work are presented to the Competitors and Experts.

5.5 Test Project initial review and verification

The purpose of a Test Project is to create a challenge for Competitors which authentically represents working life for an outstanding practitioner in an identified occupation. By doing this, the Test Project will apply the Marking Scheme and fully represent the WSOS. In this way it is unique in its context, purpose, activities, and expectations.

To support Test Project design and development, a rigorous quality assurance and design process is in place (Competition Rules sections 10.6-10.7 refer.) Once approved by WorldSkills, the Independent Test Project Designer (ITPD) is expected to identify one or more independent expert(s), and trusted individuals initially to review the Independent Test Project Designer's ideas and plans, and subsequently to verify the Test Project, prior to validation.

A Skill Advisor will ensure and coordinate this arrangement, to guarantee the timeliness and thoroughness of both initial review, and verification, based on the risk analysis that underpins Section 10.7 of the Competition Rules.

5.6 Test Project validation

The Skill Competition Manager coordinates the validation of the Test Project/modules and will ensure that it can be completed within the material, equipment, knowledge, and time constraints of Competitors.

5.7 Test Project circulation

The Test Project/modules are not circulated prior to the Competition. The Test Project/modules are presented to Experts and to Competitors on C1.

A general Statement of Work is circulated two (2) months prior to the Competition via the WorldSkills website. No technical or detailed information on the Test Project/modules is shared.

The translated Design Brief is given to Competitors towards the end of familiarization for questions and answers, and in the evening of C-2 it is accessible for all Competitors via the WorldSkills website.

5.8 Test Project change

Due to the Test Project being developed by an Independent Test Project Designer(s) (ITPD), there is no change required to be made to the Test Project/modules at the Competition. Exceptions are amendments to technical errors in the Test Project documents and according to infrastructure limitations.

5.9 Material or manufacturer specifications

Specific material and/or manufacturer specifications required to allow the Competitor to complete the Test Project will be supplied by the Competition Organizer and are available from www.worldskills.org/infrastructure located in the Expert Centre. However, note that in some cases

details of specific materials and/or manufacturer specifications may remain secret and will not be released prior to the Competition. These items may include those for fault finding modules or modules not circulated.

6 Skill management and communication

6.1 Discussion Forum

Prior to the Competition, all discussion, communication, collaboration, and decision making regarding the skill competition must take place on the WorldSkills skill-specific Discussion Forum. (<http://forums.worldskills.org>). Skill related decisions and communication are only valid if they take place on the WorldSkills Discussion Forum. The Chief Expert (or an Expert Lead appointed by the Skill Management Team) will be the moderator for this Discussion Forum. Refer to the Competition Rules for the timeline of communication and competition development requirements.

6.2 Competitor information

All information for registered Competitors is available from the Competitor Centre (www.worldskills.org/competitorcentre).

This information includes:

- Competition Rules
- Technical Descriptions
- Mark Summary Form (where applicable)
- Test Projects (where applicable)
- Infrastructure List
- WorldSkills Health, Safety, and Environment Policy and Regulations
- Other Competition-related information

6.3 Test Projects and Marking Schemes

Circulated Test Projects will be available from www.worldskills.org/testprojects and the Competitor Centre (www.worldskills.org/competitorcentre).

6.4 Day-to-day management

The day-to-day management of the skill competition during the Competition is defined in the Skill Management Plan that is created by the Skill Management Team. The Skill Management Team comprises the Skill Competition Manager, Chief Expert, and the Expert Leads. The Skill Management Plan is progressively developed in the six (6) months prior to the Competition and finalized at the Competition. The Skill Management Plan can be viewed in the Expert Centre (www.worldskills.org/expertcentre).

6.5 General best practice procedures

General best practice procedures clearly delineate the difference between what is a best practice procedure and skill-specific rules (section 9). General best practice procedures are those where Experts and Competitors CANNOT be held accountable as a breach to the Competition Rules or skill-specific rules which would have a penalty applied as part of the Issue and Dispute Resolution procedure including the Code of Ethics and Conduct Penalty System. In some cases, general best practice procedures for Competitors may be reflected in the Marking Scheme.

Topic/task	Best practice procedure
Assessment	<ul style="list-style-type: none"> • Marking Teams will be determined by the Skill Competition Manager and Chief Expert. • Marking Teams will be assigned Marking Criterion on the morning of C1. Marking Teams will mark the same Criterion on each day of assessment. • Not all Experts will be required to assess during the Competition. Those Experts that are not assessing may be assigned other responsibilities as seen fit by the Skill Competition Manager and Chief Expert. • Experts that are not required to assess must remain within the skill competition area while assessment is taking place. Non assessing Experts are encouraged to observe the process but must not interfere with the Assessment in any way.
Sustainability	<ul style="list-style-type: none"> • All precious metal filings must be gathered in the bench drawer or lap-skin and collected at the end of each Competition Day. • All lighting and power must be turned off at the power point outside of competition time. • All gas and oxygen cylinders must be turned to the off position outside of competition time.
Equipment failure	<ul style="list-style-type: none"> • In the event of failure of equipment supplied by the Competition Organizer, time lost during repair or substitution will be added on to the official competition time. • In the event of failure of equipment brought by the Competitor, time lost during repair or substitution will not be added on to the official competition time. <p>Refer to section 8 Materials and equipment of this document.</p>
Translation of documents	<ul style="list-style-type: none"> • Following the decision made at the General Assembly in Dubrovnik, Skill 27 (Jewellery) will now use AI translation for all technical and design documents. As a result, there is no requirement to translate any Test Project documentation before the competition begins on C-1.)
Test Project release	<ul style="list-style-type: none"> • The Test Project will be released to both Competitors and Experts in the morning of C1. Competitors will have one hour of Test Project familiarization prior to Competition Commencement. • The process for Design Brief distribution on C-2 will be as follows: <ul style="list-style-type: none"> ◦ 45 minutes prior to the completion of familiarization, the design brief and mood boards will be handed out to Competitors. ◦ At the end of the designated familiarization, all paperwork pertaining to the Design Brief and mood boards will remain in the skill competition area as stated within section 9 skill-specific rules. ◦ 15 minutes prior to the end of the designated familiarization time, there will be a short question and answer period. This question-and-answer period will be for the clarification of instructions within the Design Brief only. No creative direction will be offered other than contained within the Design Brief.

Topic/task	Best practice procedure
	<ul style="list-style-type: none"> ◦ Immediately after the familiarization period has ended, a copy of the Design Brief and the corresponding mood boards will be made available through the WorldSkills International website.
Documentation	<ul style="list-style-type: none"> • All paperwork presented to Experts and Competitors must remain in the workshop until Competition Completion on C4.

7 Skill-specific safety requirements

7.1 Personal Protective Equipment

Refer to WorldSkills Safety Policy and Regulations for Host country or region regulations.

Task	Safety glasses with side protection	Welding mask	Dust mask	Welding gloves	Welding Apron	Sturdy shoes with closed toe and no heel	Fire resistant protective clothes
General PPE for safe areas						√	
General PPE for workshop areas	√					√	√
Drilling with hand-drilling	√						
Forge use		√	√	√	√		√
Milling with hand-milling	√						
Removing products with hand-drill such as abrasive paper/ abrasive disc/ abrasive wheels	√		√				
	√						

Task	Safety glasses with side protection	Welding mask	Dust mask	Welding gloves	Welding Apron	Sturdy shoes with closed toe and no heel	Fire resistant protective clothes	
Hammering and Forming								

8 Materials and equipment

8.1 Infrastructure List

The Infrastructure List details all equipment, materials, and facilities provided by the Competition Organizer.

The Infrastructure List is available at www.worldskills.org/infrastructure.

The Infrastructure List specifies the items and quantities requested by the Skill Management Team for the next Competition. The Competition Organizer will progressively update the Infrastructure List specifying the actual quantity, type, brand, and model of the items. Note that in some cases details of specific materials and/or manufacturer specifications may remain secret and will not be released prior to the Competition. These items may include those for fault finding modules or modules not circulated.

At each Competition, the Skill Management Team must review and update the Infrastructure List in preparation for the next Competition. The Skill Competition Manager must advise the Director of Skills Competitions of any increases in space and/or equipment.

At each Competition, the Technical Observer must audit the Infrastructure List that was used at that Competition for the upcoming WorldSkills Competition.

The Infrastructure List does not include items that Competitors and/or Experts are required to bring and items that Competitors are not allowed to bring – they are specified below.

8.2 Competitors toolbox



Competitors may bring one toolbox with the total external volume not exceeding 0.057 m³.

(Volume = Length x Height x Width, or $V = L \times H \times W$)

Volume measurement does not include a packing crate, other protective packing material, palette for transportation, wheels, etc.

8.3 Materials, equipment, and tools supplied by Competitors

The following items are allowed to be carried in the toolbox:

Item	quantity	Picture
<p>Saw Frames</p> <p>Various Styles other than that supplied in the IL</p>	<p>2 pce</p>	
<p>Needle File Various cuts/ Shapes. Other than that supplied in the IL.</p>	<p>20 pce</p>	

Item	quantity	Picture
Escapement Needle File Various cuts/shapes. Other than that supplied in the IL.	20 pce	
Scissor for metal	1 pce	
Tweezers Stainless Steel Anti-magnetic Various Styles	4 pce	
Tweezers - X-Lock	3 pce	
Titanium Rod for Soldering	2 pce	

Item	quantity	Picture
		
Parallel plier	2 pce	
Cutter - End cut flush or Side cut	1 pce	
Jewellers Plier Various Jaw Shapes	8 pce	
Pin Vice Various Styles	3 pce	
Modified punches Beaders/ Shanks	8 pce	
	6 pce	

Item	quantity	Picture
Gravers with handle Various Styles		
Burnisher Various Styles	3 pce	
Clamp – Double end, Broad wedge, etc Various Styles	2 pce	
Bench Hammers Various Styles	4 pce	
Ear Protection - Over Ear	1pce	
Ear Protection - In Ear	1pce	
Magnification	1	

Item	quantity	Picture
		
Glue	2	
Titanium strips/Clamps	5 pce	
Emery Stick Sticks or boards must not already contain abrasive paper or abrasive cloth/ plastics	10 pce	
Specialty Burr 2.38 mm shank	25 pce	
Scraper Various Styles	4 pce	

Item	quantity	Picture
Soft Jaw Pliers Various shapes	4 pce	
Benders Various Styles	2 pce	
Needle File Holder Various	5 pce	
Customised Pliers Pliers that have been modified	4 pce	
Engineer Jig	2 pce	
3rd Hand	2	
Drawg Templates	8 pce	

Item	quantity	Picture
Pumice Brush	2	
Centre Finder	1 pce	
Parallel Clamps	2 pce	
Hand Vise Various Styles	4 pce	
Bezel punch	5 pce	
Bezel Mandrel - Oval	1 pce	
Bezel Mandrel - Round	1 pce	
Rotary Solder Stand Without solder board	1 pce	

Item	quantity	Picture
		
Gapping-Files, various sizes other than those supplied in the IL	15 pce	

The pictures and descriptions in the list above are only examples. They show the kind of tool you can bring, not the exact brand or model you must have. For example, if the list shows a round bezel mandrel, you may bring any brand of round bezel mandrel, but you may only bring one.

Some tools will be provided by the Competition Organizer (listed in the Infrastructure List). All Competitors must use these supplied tools. You are not allowed to bring your own tool if it does the same job as one supplied by the Competition Organizer. These will not be permitted in the workshop. Refer to Competition Rules.

All tools brought to the Competition must fit within the pre-defined toolbox size as listed in section 8.2 Competitors toolbox.

8.4 Materials, equipment, and tools supplied by Experts

Experts are required to supply their own Personal Protective Equipment as specified in section 7 skill-specific safety requirements.

Experts are responsible that Interpreters bring their own PPE.

8.5 Materials and equipment prohibited in the skill area

Competitors and Experts are prohibited to bring any materials or equipment not listed in section 8.3 and section 8.4.

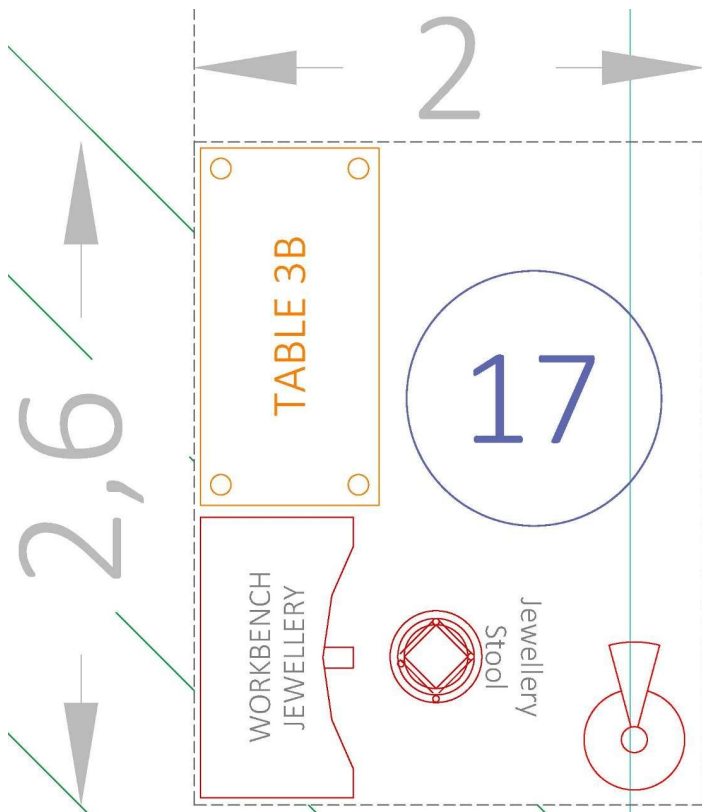
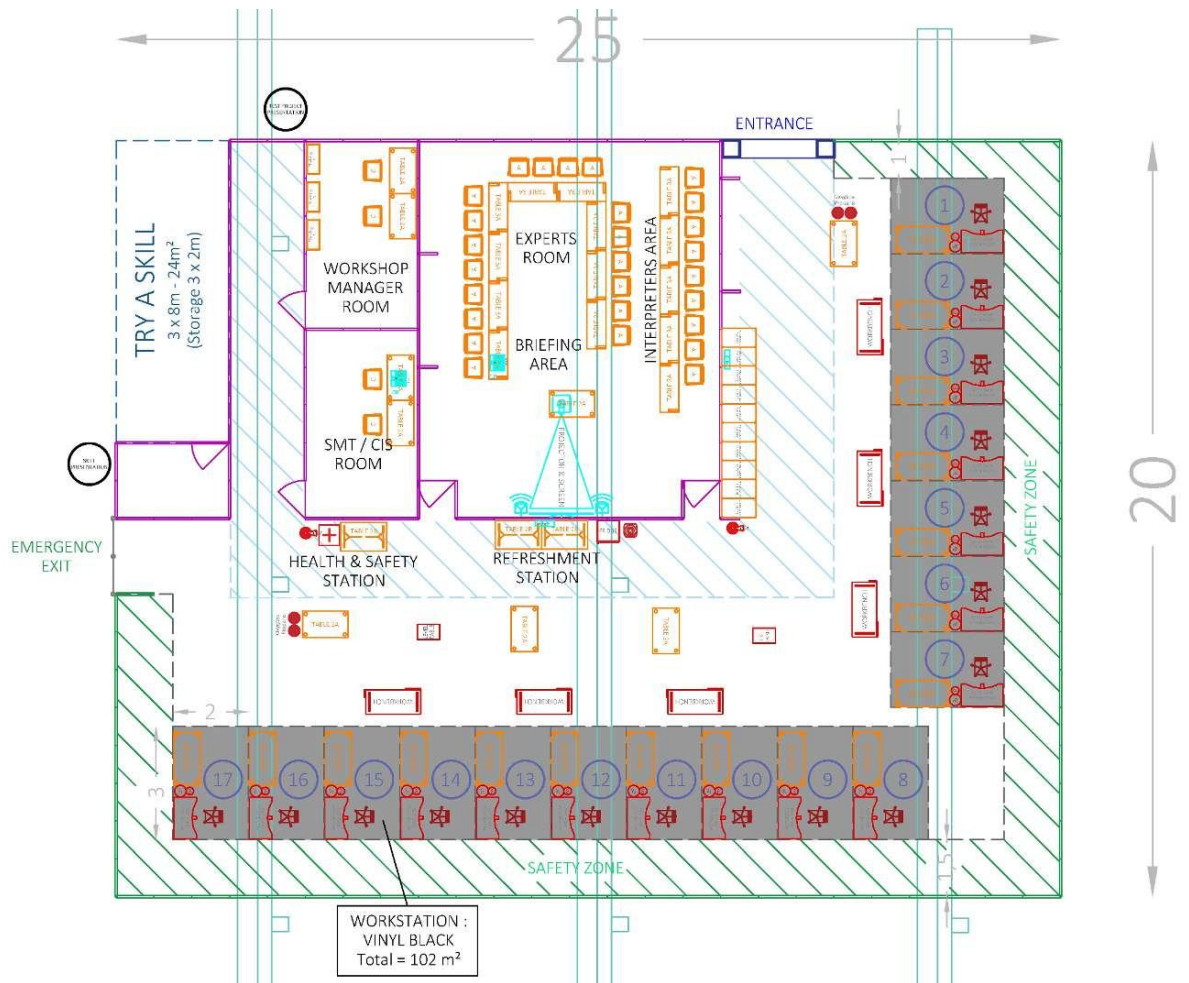
- Tools that perform the same function, or perform the same task, as equipment supplied by the Competition Organizer are prohibited;
- Tools and templates that have been pre-formed for the Test Project;
- Metal used in the Test Project other than that supplied by the Host Country for the competition.

Any yellow or white gold or silver that can be used to augment the metal supplied for the competition. This includes any precious metal jewellery worn by the Competitors. They must remove this jewellery and place in their locker prior to entering the workshop area.

8.6 Proposed workshop and workstation layouts

Workshop layouts from previous competitions are available at www.worldskills.org/sitelayout.

Example workshop layout



Jewellery Benches must be a minimum size of :

Length: 1200 mm

Width: 600 mm

Height: 1000 mm

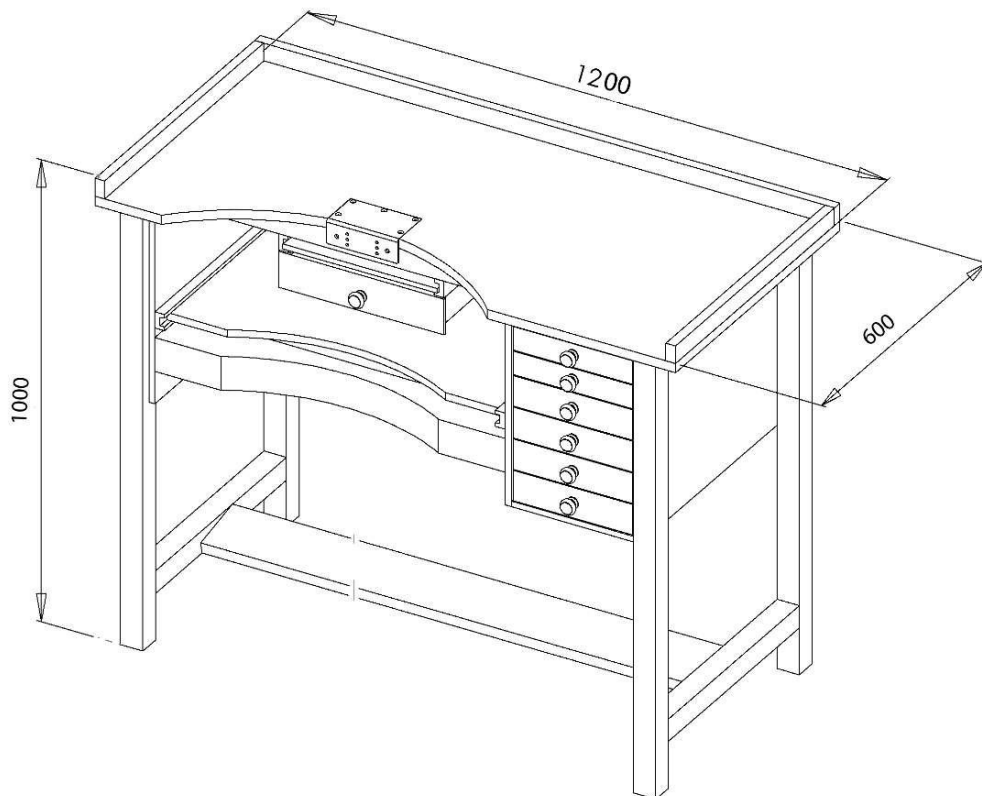


Image is for dimensional reference purposes only.

9 Skill-specific rules

9.1 General notes

Skill-specific rules cannot contradict or take priority over the Competition Rules. They do provide specific details and clarity in areas that may vary from skill competition to skill competition. This includes but is not limited to personal IT equipment, data storage devices, Internet access, procedures and workflow, and documentation management and distribution. Breaches of these rules will be solved according to the Issue and Dispute Resolution procedure including the Code of Ethics and Conduct Penalty System.

9.2 Skill-specific rules

Topic/task	Skill-specific rules
Use of technology – USB, memory sticks	<ul style="list-style-type: none"> It is prohibited to use digital information storage devices on any computer on which the final Test Project is stored.
Use of technology – personal laptops, tablets, and mobile phones	<p>No digital information processing devices of any kind may be taken to the workstations from C-2 until the end of C4 including:</p> <ul style="list-style-type: none"> Computers; Tablets; Mobile phones; Personal stereo equipment.
Use of technology – personal photo and video taking devices	<p>The following uses of photographic devices are forbidden:</p> <ul style="list-style-type: none"> Taking photographs of any Test Project documentation, until after the Test Project has been released; Taking photographic devices into the workstations between setting-up and packing-up; Taking detailed photographs of Competitor's work from outside the workshop; Viewing detailed photographs of Competitor's work from outside the workshop taken by others.
Tools/infrastructure	<ul style="list-style-type: none"> Unused tools/infrastructure found/handed in at/before the initial toolbox check will be confiscated until after the competition. This also applies for any additional tools added to a Competitor workstation after the initial toolbox check.

Topic/task	Skill-specific rules
Templates, aids, etc.	<p>Competitors must not bring the following into the workshop (Refer to section 8.5 Material and equipment prohibited in the skill area:</p> <ul style="list-style-type: none"> • Tools/templates pre-formed for the Test Project – manufacturing of any such tools/templates must be manufactured during competition time and is strictly prohibited before Competition Commencement on C1.
Drawings, recording information	<ul style="list-style-type: none"> • Except for the competition timetable, all documentation that is taken to (or produced at) the workshop, must remain in the workshop. • As soon as any portion of the Design Brief is released it is prohibited for Competitors and all Experts including the Chief Expert, to bring any paperwork or documentation into the workshop area. • All Competitor documents, including notes and sketches must remain at the Competitors workstation, and within the competition area. • All Experts documents, including notes and sketches, must remain within the Experts area. This also applies to the Chief Expert. • Experts and Interpreters may not directly exchange documents with Competitors within the workshop (translations of documents for Competitors must be copied by the SMT before being passed on)
Assessment	<ul style="list-style-type: none"> • Experts will maintain supervision of the Competitors during the competition, but must not look at Competitors' work, or have any knowledge of progress, except from those times permitted by Competition Rules, until the module is marked. • The following rules must therefore be observed during competition time: <ul style="list-style-type: none"> ◦ Experts and Interpreters must not enter the safety area between setting-up and packing-up, except during daily toolbox checks; ◦ Must not have direct contact with their compatriot Competitor during competition time except during those times permitted by Competition Rules; ◦ Must not leave the workshop for breaks if their compatriot Competitor is also outside except during those times permitted by the Competition Rules. • During competition time, Competitors: <ul style="list-style-type: none"> ◦ Who require assistance should speak to the Chief Expert (with or without Interpreter) at a predetermined "neutral" location on the edge of the safety area. ◦ Must not have direct contact with their compatriot Expert/Interpreter (including breaks) except during those times permitted by Competition Rules.

Topic/task	Skill-specific rules
	<ul style="list-style-type: none"> ◦ Must not leave the workshop for breaks if their compatriot Expert/Interpreter is also outside except during those times permitted by the Competition Rules. ◦ Any exceptions to above, or alternative solutions must be approved by the Chief Expert.
Test Project	<ul style="list-style-type: none"> • No digital or paper copy (see above) of the Test Project is to be given to Competitors, other than the official Test Project documents provided at the beginning of C1.

10 Expert knowledge and experience

10.1 Requirements

Experts appointed for this skill competition must have the following knowledge and experience for the appropriate occupation or work role as documented in **section 1.1.2**.

- A formal qualification in jewellery manufacturing, either a diploma, advanced diploma, or degree in jewellery design, goldsmithing, or object design; or completion of a traditional trade apprenticeship, resulting in a trade certificate in jewellery or goldsmithing.
- At least five years of active experience in the jewellery industry. This may include hands-on manufacturing experience or significant experience in training and educating future jewellers.
- Practical experience in core jewellery-making processes, such as soldering, saw piercing, metal forming, accurate measuring, and file work.
- The ability to accurately read and interpret technical drawings and translate these into high-quality finished objects.
- Comprehensive understanding of precious metals and gemstones, including their characteristics and correct handling during manufacture.
- Experience in evaluating finished work against defined technical and creative benchmarks, with the ability to provide fair, consistent, and constructive feedback.
- Familiarity with the WorldSkills Occupational Standards for Jewellery and the associated competition marking schemes.
- Strong interpersonal skills for collaborating with other Experts, delivering clear technical explanations, and engaging in productive dialogue during Expert deliberations.
- An ability to critically evaluate and assess original design elements created by Competitors, ensuring that each piece is judged for creativity, aesthetic merit, functionality, and compliance with the project brief.
- Awareness and basic proficiency in modern industry practices, such as: CAD design specific to jewellery; 3D printing and its integration into model and mould-making workflows; Laser welding for precision joining and repair.
- A demonstrated commitment to ongoing professional learning and upskilling, ensuring that their knowledge remains current with both traditional techniques and innovations in the field.
- Familiarity with principles of sustainability, including responsible sourcing, traceability, and environmental impact; reflecting the values of the modern jewellery sector.

11 Visitor and media engagement

11.1 Engagement methods

Following is a list of possible ways to maximize visitor and media engagement:

- Try-a-Skill (benches with tools for visitors to try basic Jewellery techniques);
- “Competitor Cam” – a fixed camera on each Competitor’s workstation with a central viewing monitor;
- Test Project descriptions;
- Enhanced understanding of Competitor activity;
- Competitor profiles – interests, training, and education, e.g. duration of training;
- Career opportunities – may differ from Host Country to Home Country;
- Precious metal art history – an educational brochure detailing the history of jewellery manufacture and how this aligns with current industry practice, specifically, techniques that the Competitors are currently using;
- Audio visual display explaining the project and category information for the general public.

12 Sustainability

12.1 Sustainable practices

This skill competition will focus on the sustainable practices below:

- Recycling;
- Use of “green” materials;
- Use of completed Test Projects after Competition;
- Energy efficient lighting;
- Pre-determined material list;
- Pre-determined toolbox sizes.

13 References for industry consultation

13.1 General notes

WorldSkills is committed to ensuring that the WorldSkills Occupational Standards fully reflect the dynamism of internationally recognized best practice in industry and business. To do this WorldSkills approaches a number of organizations across the world that can offer feedback on the draft Description of the Associated Role and WorldSkills Occupational Standards on a two-yearly cycle.

In parallel to this, WSI consults three international occupational classifications and databases:

- ISCO-08: (<http://www.ilo.org/public/english/bureau/stat/isco/isco08/>)
- ESCO: (<https://ec.europa.eu/esco/portal/home>)
- O*NET OnLine (www.onetonline.org/)

13.2 References

This WSOS (Section 2) appears most closely to relate to the occupation of Jeweller (which is rather higher):

<https://www.onetonline.org/link/summary/51-9071.01>

and the occupation of Jeweller here, which may be a closer fit:

<http://data.europa.eu/esco/occupation/618a854a-4ecd-4535-84e6-350e1fe0aa0f> .

Adjacent occupations may also be explored through these links.

ILO 7313

The following table indicates which organizations were approached and provided valuable feedback for the Description of the Associated Role and WorldSkills Occupational Standards in place for WorldSkills Shanghai 2026.

Organization	Contact name
C Rempel Joias	Claudinei Rempel, Director
DARI	Ryo Yasuda, President
Hiko Mizuno College of Jewelry	Yoshikazu Yamada, Instructor
Japan Jewelry Association	Akio Sakamaki, Vice Chairman
Mikimoto Jewelry MFG. Co. Ltd	Takuya Konno
Newkoge Co., Ltd.	Yohihiro Nishida, President
ODA Professional field of jewelry and object design	Andrea von Allmen, Co-President
Sarah and Sebastian	Robert Sebastian Grynkofki, Co-Founder, Product Director
The Goldsmith Centre	Robin Kyte, Education and Training Consultant

Organization	Contact name
UID, Karnavati University	Dhiraj Kumar, Director Academics

14 Appendix

14.1 Appendix information

Not applicable.