



Australian Government

Department of Education, Employment and Workplace Relations

CUVOPA203A Complete pre-cutting processes for solid opals

Release: 1

CUVOPA203A Complete pre-cutting processes for solid opals

Modification History

Version	Comments
CUVOPA203A	This version first released with <i>CUV11 Visual Arts, Craft and Design Training Package version 1.0</i>

Unit Descriptor

This unit describes the performance outcomes, skills and knowledge required to determine market needs for solid opals as a basis for decision making, to plan the stones to be cut and complete the pre-cutting processes. It includes documenting and recording all aspects of the procurement and cutting process.

This unit requires the application of research skills to determine market preferences for buying cut and polished opal so that decisions can be made on how to cut the opal to gain the best yield and show of colour. It also covers the ability to carry out all the pre-cutting planning, cleaning and pre-forming of the gemstone while working safely with materials and equipment

Application of the Unit

Advanced processes needed for pre-cutting black and boulder opals are covered in CUVOPA407A Apply advanced pre-cutting processes to complex opals.

Where appropriate the outcomes of this unit could be contextualised to apply to other gemstones

Licensing/Regulatory Information

No licensing, legislative, regulatory or certification requirements apply to this unit at the time of endorsement.

Pre-Requisites

Not applicable.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Element	Performance Criteria
<i>Elements describe the essential outcomes of a unit of competency.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.</i>

Elements and Performance Criteria

<p>1. Survey market requirements as a basis for making a decision on opal cutting strategy</p>	<p>1.1 Establish current client cut and polished <i>opal-buying preferences</i> in the retail and wholesale markets</p> <p>1.2 Determine the internet buying preferences for cut and polished opal</p> <p>1.3 Document client buying preferences for cut and polished opal</p>
<p>2. Weigh opal and record information</p>	<p>2.1 Weigh opal before cleaning as a basis for determining yield</p> <p>2.2 Record <i>relevant information</i></p>
<p>3. Clean and orient opal to determine yields and shape</p>	<p>3.1 Make an assessment of the stone and consult with supervisor, colleagues, client or other appropriate persons</p> <p>3.2 Rub down to expose the colour face using <i>appropriate equipment</i></p> <p>3.3 Determine best orientation for gemstone</p> <p>3.4 Establish the top and bottom of the stone</p> <p>3.5 Remove <i>unwanted material</i></p> <p>3.6 Check for internal flaws with powerful light source</p> <p>3.7 Cut stone to maximise value, taking yield and colour play into consideration</p>
<p>4. Process opal to pre-form state</p>	<p>4.1 Remove unwanted material from the planned gemstone using appropriate equipment</p> <p>4.2 Grind to the desired shape</p> <p>4.3 Check for internal flaws and correct if necessary</p> <p>4.4 Follow <i>general OHS principles and safe operating procedures</i> when using tools, equipment and materials</p>

Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

Required skills

- communication skills to:
 - document buying preferences and technical data
 - consult with others about opal assessments
- critical thinking and analytical skills to assess stones
- literacy skills to interpret information about buying preferences
- problem-solving skills to identify flaws and maximise yields
- numeracy skills to make basic calculations and use numerical features of machinery
- technology skills to source information from the internet and use cutting machinery.

Required knowledge

- characteristics of opal gemstone structure
- importance of achieving yield when cutting a gemstone
- market trends and industry requirements for opal products
- safety issues associated with opal-cutting machinery.

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment	
Critical aspects for assessment and evidence required to demonstrate competency in this unit	<p>Evidence of the ability to:</p> <ul style="list-style-type: none"> • apply knowledge of current retail, wholesale and internet buying trends • make decisions on what the final product should be and how to cut the stone to achieve the desired outcome, maximising the yield and colour play from each stone • safely complete cleaning, shaping and pre-forming.
Context of and specific resources for assessment	<p>Assessment must ensure access to:</p> <ul style="list-style-type: none"> • a computer • an opal-cutting workshop with stones and equipment.
Method of assessment	<p>A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:</p> <ul style="list-style-type: none"> • observation of processes and procedures • oral and/or written questioning on underpinning knowledge and skills • evaluation of the final product • review of portfolios of evidence • review of third-party workplace reports of on-the-job performance by candidate. <p>Assessment methods should closely reflect workplace demands (e.g. literacy) and the needs of particular groups (e.g. people with disabilities, and people who may have literacy or numeracy difficulties, such as speakers of languages other than English, remote communities and those with interrupted schooling).</p>
Guidance information for assessment	<p>Holistic assessment with other units relevant to the industry sector workplace and job role is recommended.</p>

Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

<p>Determining <i>opal-buying preferences</i> may involve:</p>	<ul style="list-style-type: none"> • accessing internet auction sites • accessing internet opal-specific sites • making contact with opal dealers • making contact with opal cutters • phoning jewellery wholesalers and other jewellers • talking with local jewellery store owners • targeting specialist opal stores.
<p><i>Relevant information</i> to be recorded may include:</p>	<ul style="list-style-type: none"> • date of purchase • description of stone • description of area where mined • mining lease number • number of classes • purchase price • vendor • weight.
<p><i>Appropriate equipment</i> may include:</p>	<ul style="list-style-type: none"> • cleaning equipment • diamond grinder • diamond saw • free-hand saw • silicon carbide grinder • slab saw • trim saw.
<p><i>Unwanted material</i> may include:</p>	<ul style="list-style-type: none"> • cracked material • iron stone • materials with inclusions or stains • matrix • poor colour • potch • sandstone.
<p><i>General OHS principles and safe operating procedures</i> may include:</p>	<ul style="list-style-type: none"> • complying with safe operating procedures for each machine • good housekeeping, in particular avoiding contaminants • using personal protective equipment (PPE) where required.

Unit Sector(s)

Opal cutting and polishing