



GEMKHANA 2026

COMPETITION SCHEDULE AND CONDITIONS

GEMKHANA 2026 – COMPETITION SCHEDULE AND CONDITIONS

GENERAL CONDITIONS

1. This is a Level 3 Competition and will be judged in accordance with the rules and definitions of the ***Competitor & Judging Manual for Lapidary and Allied Competitions Issue no. 9, April 2026.*** (referred to in this Schedule as the Manual), unless otherwise stated in this Schedule.
2. All competitors are advised to familiarise themselves with all the “Conditions for Competitors” in the Manual (particularly pages 5 to 13)
3. Competitors should be aware of, or check their eligibility to enter a Novice or Intermediate Division either by: -
 - Reading Section B4 of the manual (pages 6 & 7) relating to Competition Divisions, or by
 - checking the updated results list on the AFLACA website (<http://aflaca.org.au>)
4. Enquiries, correspondence and ALL POSTAL ENTRIES relating to this Competition should be directed to:

Kathy Selwood

P.O. Box 188, Orange NSW 2800

Phone enquiries to Kathy Selwood: 0437 917 074 or Barbara Try 0417 676 435

Emails kathrynselwood@bigpond.com or twotrys@bigpond.net.au

5. Maximum number of entries allowed is two (2) per person per section except for Showcase Sections where only one entry per person is allowed.
6. It is the Competitor’s responsibility to ensure that their entries are entered in the correct section and that the sections are correctly marked on the Entry Form. If in doubt ring the Competition Committee.

However, the Competition Committee may transfer an entry into another section if they are of the opinion that it has obviously been entered into the incorrect section.

7. Entry Fees: - \$1.00 per entry for the first 10 entries, thereafter free.
(Payable by cheque or money order to Gem & Lapidary Council of NSW Inc)
8. All entries not being collected in person at the GEMKHANA must be accompanied by the **cost of return** post or **pre-paid post bag** included with the entry form (see Page 13). Please ensure sufficient funds to cover additional paperwork and possible medallions.
9. While every care will be taken, the GEMKHANA 2026 Committee will not accept any responsibility for the loss or damage of any entries or exhibits that may occur in transit or whilst in the possession of the GEMKHANA 2026 committee.
10. Competitors and exhibitors are responsible for the insurance of their entries or exhibits while in transit, and whilst in the possession of the GEMKHANA 2026 Committee.

11. How to enter the Competition – Sections 1 to 4, 8 to 13 and 18 to 26

- a. Package up your entries to cushion them from damage whilst in transit – also see SC3.
- b. Fill out an official entry form – see page 13 of this Schedule.
- c. If you want acknowledgement of receipt of your entries, please provide a valid email address. If there is no email, please include a stamped, self- addressed envelope.
- d. Organise a cheque or money order payable to the Gem & Lapidary Council of NSW Inc for the entry fees (and return express postage if you are not collecting the entries in person at the GEMKHANA.
- e. Submit your Entries + Entry Form + All fees to the Competition Committee. This can either be:
 - By Express post to
Kathy Selwood
P.O. Box 188 Orange
NSW 2800

If you are sending your entries by mail, please send an email to Kathy or Barbara so that we are aware that a parcel is coming.

They must be received by Friday 21st August 2026 or by hand at the Gem and Lapidary Council meeting 26th August 2026 at Parramatta/Holroyd Lapidary Club by 2pm.

NOTE that late entries will not be eligible for competition and will be returned.

12. How to Enter the Competition – Sections 16, 17, 29, 32, 34 and showcases

- a. Send your Entry Form and All Entry Fees to **arrive by Friday 21st August 2026** to:-
Kathy Selwood
P.O. Box 188,
Orange NSW 2800
- b. Hand deliver the entries to the Competition committee in the Competition Hall at the GEMKHANA 2026 VENUE between **1pm and 5pm on Friday 25th September 2026**
- c. Note that entries in Sections 29, 32 & 34 must be set up and ready in the Exhibition Hall by **5.00pm Friday 25th September 2026**

13. Judging, Judging Sheets and Entry Pickup

- a. Entries in Sections 1 to 5, 8 to 13, 18 to 26 will be judged prior to the GEMKHANA.
- b. Entries in Sections 16, 17, 29, 32, and 34 will be judged at the GEMKHANA.
- c. Judging Sheets may be collected from the Competition Office between 10am and 12 noon on **Sunday 27th September 2026**
- d. Entries may be collected between 6pm and 7pm on **Sunday 27th September 2026**
- e. Entries not collected will be returned to the competitor in the manner specified on the entry form together with the applicable judging sheets.

14 SPECIAL CONDITIONS (SC)

SCI – Sizes and Tolerances

Where an entry does not conform to the size conditions in this Schedule or the Manual it will be ruled ineligible and not judged. Refer to section definitions in the Schedule and the Manual for allowable tolerances.

SC2 – Carving (Section 5)

Each entry must have a label which best describes the exhibit for the viewer's interest including the material used. These labels will not be judged.

SC3 - Facet Entries (Section 8 to 11)

- a. All chosen designs have either been previously used in competitions or have been successfully test cut using instructions given
- b. **ALL** Facets are **FLAT**, any entry with Concave or Curved facets (except Section 8A continuous girdle) will be disqualified and will NOT be judged.
- c. **Minimum size** is 6mm measured across shortest axis of outline shape at the girdle, or as indicated on design sheet.
- d. Each faceted stone must be entered in a display box and this box must contain a label which contains only the following details:
 - Section Number
 - Material used
 - Colour of material
 - Size

SC4 – Tumbled Stones (Section 12A)

Please read page 19 (D2.2) and page 55 (D12.1) of the Manual for definition of this section.

SC5 – Jewellery (Sections 18 – 26)

Competitors should carefully read Part E of the Manual in relation to all Jewellery Sections.

15 TROPHIES AND MEDALLIONS

1. Medallions and prize cards will be awarded for 1st, 2nd, and 3rd placed entries. Highly Commended will receive a prize card only.
2. At the Committee's discretion, where there are insufficient entries in a Novice or Intermediate Sections, a Special Award May be nominated, and such an award will not exclude a competitor from entering the same section in future competitions.
3. To be eligible in winning a 'Dick Moppett Trophy: in faceting, entries must achieve a minimum of 70 points for Novice and 90 points for Open.
4. Annual Trophies may be awarded in the following categories: -

SPECIAL ONE-OFF TROPHIES

Donated by Gem & Lapidary Council of NSW

Section N-1A.3 Novice Standard Cabochon -C/S-Highest Score

Section O-13.1 Open Polished Face-Flat Surface-Highest Score

Section N-19A.2 Novice Cast Jewellery not intended to include
Lapidary, Fossil or Mineral Item/s-Highest Score

THE JOAN BALL TROPHIES

Section O-26B.1 Open Enamelled Jewellery without Mount
-Highest Score

Section O-17.1 Open Novelty Gemcraft-Highest Score

THE ALAN COULTON TROPHY

Section O-20A.1 Open Cast Jewellery using Natural Objects as Patterns
-Highest Score

5. Perpetual Trophies may be awarded for the following :-

THE BORIS NOVIC TROPHY

Section O-2A.1 The competitor with the highest score in Section O-2A.1 Double Standard Cabochon – C/S

THE DICK MOPPETT TROPHY – NOVICE

Sections N-8B.3 & N-9B.3 For the Novice competitor with the highest aggregate point for two (2) faceted stones - one shall be **STANDARD BRILLIANT** and the other a **STANDARD STEP CUT**. Note that each entry must achieve a minimum standard of **70 points**.

THE DICK MOPPETT TROPHY – OPEN

Sections O-8B.1 & O-9B.1 For the Open Competitor with the highest aggregate points for two (2) faceted stones – one shall be **STANDARD BRILLIANT** and the other a **STANDARD STEP CUT**. Note that each entry must achieve a minimum standard of **90 points**.

THE ARTHUR ROFFEY TROPHY for “BEST MINERAL IN SHOW”

(As selected by the donor)

THE FRANK LANDER TROPHY for MOST SUCCESSFUL COMPETITOR

Points are awarded as:- 1st place – 6 points 2nd place – 4 points 3rd place – 2 points .
Highly Commended = 1 point. Special Award – 6 points

THE FRANK HALL TROPHY for MOST SUCCESSFUL CLUB

Points awarded as:- 1st place – 6 points, 2nd place – 4 points, 3rd place – 2 points.
Highly commended – 1-point, Special award – 6 points. Entries within 75% of the winning entry's score – 1 point.

GEMKHANA 2025 – COMPEITION SCHEDULE AND CONDITIONS

Judging will be in accordance with the AFLACA Competition and Judging Manual Issue No. 9

O= Open I = Intermediate N = Novice J = Junior TR = Trophy

C/S = Craftsmanship A/A = Aesthetic Appeal SC = Special Condition Applies

Standard Cabochon – Must not pass through a 15mm hole (SCI)

O-1A.1	Standard Cabochon	C/S – Any Material	
I-1A.2	Standard Cabochon	C/S – Any Material	
N-1A.3	Standard Cabochon	C/S – Any Material	TR
J-1A.4	Standard Cabochon	C/S - Any Material	
O-1A.5	Standard Cabochon	A/A Jasper	
I-1A.6	Standard Cabochon	A/A Jasper	
N-1A.7	Standard Cabochon	A/A Jasper	
J-1A.8	Standard Cabochon	A/A Jasper	

Fancy Cabochon – Minimum Dimension to be not less than 30mm on the longest Dimension across the outline shape (SCI)

O-1B.1	Fancy Cabochon	C/S – Any Material
I-1B.2	Fancy Cabochon	C/S – Any Material
N-1B.3	Fancy Cabochon	C/S – Any Material
J-1B.4	Fancy Cabochon	C/S – Any Material
O-1B.5	Fancy Cabochon	A/A – Ribbonstone
I-1B.6	Fancy Cabochon	A/A – Ribbonstone
N-1B.7	Fancy Cabochon	A/A – Ribbonstone
J-1B.8	Fancy Cabochon	A/A – Any Material

Double Standard Cabochon - must not pass through a 15mm hole (SCI)

O-2A.1	Double Standard Cabochon	C/S – Agate	TR
I-2A.2	Double Standard Cabochon	C/S – Agate	
N-2A.3	Double Standard Cabochon	C/S – Agate	

Double Fancy Cabochon – Must not pass through a 15 mm hole (SCI)

O-2B.1	Double Fancy Cabochon	C/S – Tiger’s Eye
I-2B.2	Double Fancy Cabochon	C/S – Any Material
N-2B.3	Double Fancy Cabochon	C/S – Any Material

Freeform – Must not pass through 15mm hole (SCI)

O-3.1	Freeform	C/S – Any Material
I-3.2	Freeform	C/S – Any Material
N-3.3	Freeform	C/S – Any Material
J-3.4	Freeform	C/S – Any Material

Freeform – Must not pass through 10mm hole (SCI)

O-3.5	Freeform	C/S – Opal Solid
N-3.6	Freeform	C/S – Opal Solid

Opal Doublets- Must not pass through 10mm hole (SCI)

O-4A	Opal Doublet – Flat Top
O-4B	Opal Doublet – Domed Top

Carving – Hardness under 4 – Minimum size 50mm on the longest dimension (excluding base or mount) – Maximum size 100mm (including base of mount) (SCI and SC2)

O-5A.1	Carving – 3 dimensional
N-5A.2	Carving – 3 dimensional

Carving – Any Hardness – Minimum size 50 mm on the longest dimension (excluding base or mount) Maximum size 100 mm (including base or mount) (SC1 and SC2)

O-5B.1	Carving – in relief
N-5B.2	Carving – in relief

Carving – any hardness – minimum size 50 mm on the longest dimension (excluding base or mount) – maximum size 100 mm (including base or mount) (SCI and SC2)

O-5E.1	Carving not otherwise specified in Groups 5A to 5D
N-5E.2	Carving not otherwise specified in Groups 5A to 5D

Facet Cuts – Minimum size 6mm on shortest axis of outline shape – Groups 8, 9, 10 and 11 – (SC1 and SC3)

O-8B.1	I-8B.2	N-8B.3	Standard Round Brilliant with Faceted Girdle	Labradorite	TR
O-9B.1	I-9B.2	N-9B.3	Standard Square Step Cut with Cut corners	Colourless Topaz	TR
O-10.1	Modified Standard Cut – Ultrabrilliant Cushion (Aust)			Coloured Cubic Zirconia	
I-10.2	Modified Standard Cut – Smithsonian Bar Pixel var.			Pale Blue Cubic Zirconia	
N-10.3	Modified Standard Cut – Emergent Phenomenon			Coloured Cubic Zirconia	
O-11.1	Fancy Cut – Yin - Yang			Colourless Cubic Zirconia	
I-11.2	Fancy Cut – Exotic Cross Rose Hybrid			Pink MM Corundum	
N-11.3	Fancy Cut – Commercial Rose Hybrid			Coloured MM Corundum	

Tumbled Stones – must not be able to pass through a 15mm diameter hole (SC4)

O-12A.1	Tumbled Stones – Preformed Shape	Group of 3- different materials
N-12A.2	Tumbled Stones – Preformed Shape	Group of 3 – Any material
O-12B.1	Tumbled Stones- Natural Shape	Group of 3- Any material
N-12B.2	Tumbled Stones- Natural Shape	Group of 3- Any Material

Polished Face – Minimum size 50mm across shortest axis – Maximum size 300mm on any dimension

O-13.1	Polished Flat Surface	C/S	TR
N-13.2	Polished Flat Surface	C/S	
J-13.3	Polished Flat Surface	C/S	
O-14.1	Polished Curved Surface	A/A	
N-14.2	Polished Curved Surface	A/A	
J-14.3	Polished Curved Surface	A/A	

Gem Trees - must fit in 300mm cube but must not fit in a 150mm cube (SC1)

O-16.1	Gem Tree
N-16.2	Gem Tree

Novelty Gemcraft – Minimum size 50mm on the longest dimension excluding base (SC1)

O-17.1	Novelty Gem craft	TR
N-17.2	Novelty Gem craft	

Hand Fabricated and Wire Wrapped Jewellery (SC5)

- O-18A.1 Hand Fabricated Jewellery **NOT** intended to include Lapidary, Fossil or Mineral Specimen (s)
- I-18A.2 Hand Fabricated Jewellery – **NOT** intended to include Lapidary, Fossil or Mineral Specimen (s)
- N-18A.3 Hand Fabricated Jewellery – **NOT** intended to include Lapidary, Fossil or Mineral Specimen (s)
- O-18B.1 Hand Fabricated Jewellery-- **WITH** lapidary Item (s) cut and set by entrant I-
18B.2 Hand Fabricated Jewellery – **WITH** lapidary item(s) cut and set by entrant N-
18B.3 Hand Fabricated Jewellery – **WITH** lapidary item(s) cut and set by entrant
- O-18D.1 Hand Fabricated Jewellery **WITH** Commercial Lapidary Item (s) set by entrant
- N-18D.2 Hand Fabricated Jewellery – **WITH** Commercial Lapidary item (s) set by entrant.
- O-18E.1 Wire Wrapped Jewellery- **WITH** Lapidary, Fossil or Mineral Items(s) prepared/
set by entrant
- N-18E.2 Wire Wrapped Jewellery **WITH** Lapidary. Fossil or Mineral Item (s) prepared/
set by entrant

Cast Jewellery – using Patterns, mould or Dies MADE BY ENTRANT (SC5)

- O-19A.1 Cast Jewellery **NOT** intended to include Lapidary Fossil or Mineral Item(s)
- N-19A.2 Cast Jewellery **NOT** intended to include Lapidary Fossil or Mineral Item(s) **TR**

Metal Clay Jewellery – using Patterns, Moulds or Dies MADE BY ENTRANT(SC5)

- O-19E.1 Metal Clay Jewellery **NOT** intended to include Lapidary, Fossil or Mineral Item(s)
- N-19E.2 Metal Clay Jewellery **NOT** intended to include Lapidary Fossil or Mineral Item(s)

Cast Jewellery – using Natural Objects as Patterns (SC5)

- O-20A.1 Cast Jewellery **NOT** intended to include Lapidary Fossil or Mineral Item(s) **TR**
- N-20A.2 Cast Jewellery **NOT** intended to include Lapidary Fossil or Mineral Item(s)

Metal Clay Jewellery – using natural Object as Patterns (SC5)

- O-20E.1 Metal Clay Jewellery **NOT** intended to include lapidary, fossils or minerals
- N-20E.2 Metal Clay Jewellery **NOT** intended to include lapidary, fossils or minerals

Cast Jewellery – using Commercial Wax Models or Patterns (SC5)

- O-21A.1 Cast Jewellery **NOT** intended to include Lapidary Fossil or Mineral Item(s)
N-21A.2 Cast Jewellery **NOT** intended to include Lapidary Fossil or Mineral Item(s)

Metal Clay Jewellery – using Commercial Wax Models or Patterns (SC5)

- O-21G.1 Metal Clay Jewellery **WITH** Commercial Lapidary Item(s) set by Entrant
N-21G.2 Metal Clay Jewellery **WITH** Commercial Lapidary Item(s) set by Entrant

Combined Jewellery – with Lapidary Items cut and set by Entrant (SC5)

- O-23A.1 Combined Jewellery **NOT** intended to include lapidary fossils or minerals
O-23B.1 Combined Jewellery **WITH** lapidary items cut & set by Entrant

Enamelled Jewellery in Hand Fabricated Setting (SC5)

- O-24A.1 Enamelled Jewellery in hand fabricated setting
N-24A.2 Enamelled Jewellery in hand fabricated setting

Commercial Mount Jewellery (SC5)

- O-25.1 Commercial Mount Jewellery **WITH** Lapidary item(s) cut and set by entrant
I-25.2 Commercial Mount Jewellery **WITH** Lapidary item(s) cut and set by entrant
N-25.3 Commercial Mount Jewellery **WITH** Lapidary item(s) cut and set by entrant

Enamelling Sections (SC5)

- O-26A.1 Enamelled Jewellery in Commercial Mount
N-26A.2 Enamelled Jewellery in Commercial Mount
O-26B.1 Enamelled Jewellery without Mount **TR**
N-26B.2 Enamelled Jewellery without Mount
O-26C.1 Enamelling – non-Jewellery
N-26C.2 Enamelling – non-Jewellery

Showcases

O-29B.1 Showcase General – LIT

Fossils

O-32A.1 Fossils Non-Display – Any Locality

N-32A.2 Fossils Non-Display - Any locality

O-32B.1 Fossils Non-Display Group of 3

N-32B.2 Fossils Non-Display Group of 3

Minerals

O-34A.1 Mineral Non-Display Single Specimen Any Locality Cabinet Size

N-34A.2 Mineral Non-Display Single Specimen Any Locality Cabinet Size

O-34A-3 Mineral Non-Display Single Specimen Any Locality Miniature

N.34A.4 Mineral Non-Display Single Specimen Any Locality Miniature

O-34B.1 Mineral Non -Display Group of Three Any Locality Thumbnail

N-34B.2 Mineral Non -Display Group of Three Any Locality Thumbnail

GEMKHANA 2026 OFFICIAL COMPETITION FORM

Mail to: Kathy Selwood

PO Box 188, Orange NSW 2800

Postal Entries: All Entry Forms and fees- must be **RECEIVED BY THE COMMITTEE** by Friday 21st August 2026

COMPETITOR DETAILS Name:

Email:

Address

State: Postcode..... Personal Contact No

Full Club Details:

For Juniors Only, Date of Birth:/...../.....(NB: Must be under 16 at 21st August 20265)

ENTRY SUMMARY AND FEES (Cheques made payable to Gem and Lapidary Council of NSW Inc)

No of Entries: Are entries to be returned by mail? (Circle) Yes/No

Entry Fees-\$1.00 per entry for first ten entries, thereafter free Amount \$.....

Return Postage- Registered \$.....

Total Amount Enclosed \$.....

Signature of Competitor:

ENTRIES BY SECTION- Postal (by Friday 21/08/26)									
Section No	Entries (1or2)	Section No	Entries (1or2)	Section No	Entries (1or2)	Section No	Entries (1or2)	Section No	Entries (1or2)
O-1A.1		I-1A.2		N-1A.3		J-1A.4		O-1A.5	
I-1A.6		N-1A.7		J-1A.8		O-1B.1		I-1B.2	
N-1B.3		J-1B.4		O-1B.5		I-1B.6		N-1B.7	
J-1B.8		O-2A.1		I-2A.2		N-2A.3		O-2B.1	
I-2B.2		N-2B.3		O-3.1		I-3.2		N-3.3	
J-3.4		O-3.5		N-3.6		O-4A		O-4B	
O-5A.1		N-5A.2		O-5B.1		N-5B.2		O-5E.1	
N-5E.2		O-8B.1		I-8B.2		N-8B.3		O-9B.1	
I-9B.2		N-9B.3		O-10.1		I-10.2		N-10.3	
O-11.1		I-11.2		N-11.3					
O-12A.1		N-12A.2		O-12B.1		N-12B.2			
O.13.1		N-13.2		J-13.3		O-14.1		N-14.2	
J-14.3		O-18A.1		I-18A.2		N-18A.3		O-18B.1	
I-18B.2		N-18B.3		O-18D.1		N-18D.2		O-18E.1	
N-18E.2		O-19A.1		N-19A.2		O-19E.1		N-19E.2	
O-20A.1		N-20A.2		O-20E.1		N-20E.2		O-21A.1	
N-21A.2		O-21G.1		N-21G.2		O-23A.1		O-23B.1	
O-24A.1		N-24A.2		O-25.1		I-25.2		N-25.3	
O-26A.1		N-26A.2		O-26B.1		N-26B.2		O-26C.1	
N-26C.2									

ENTRIES BY SECTIONS- Delivered and Setup by Entrant at GEMKHANA (Friday 25/09/26)									
Section No	Entries 1or2	Section No	Entries 1or2	Section No	Entries 1or2	Section No	Entries 1or2	Section No	Entries 1or2
O-16.1		N-16.2		O-17.1		N-17.2		O-29B.1	
O-34A.1		O-32A.1		N-32A.2		O-32B.1		N-32B.2	
N-34B.2		N-34A.2		O-34A.3		N-34A.4		O-34B.1	

If you are sending your entries by mail, please send an email to Kathy or Barbara so that we are aware that a parcel is coming.

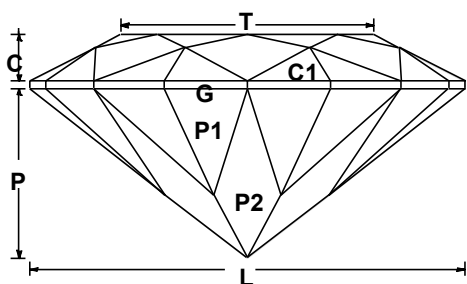
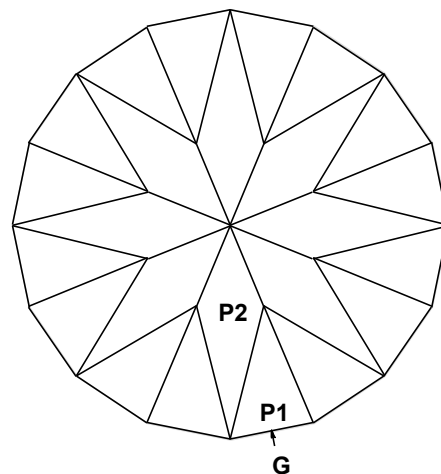
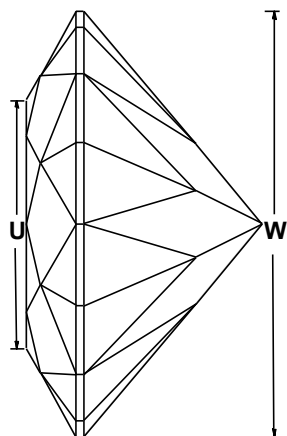
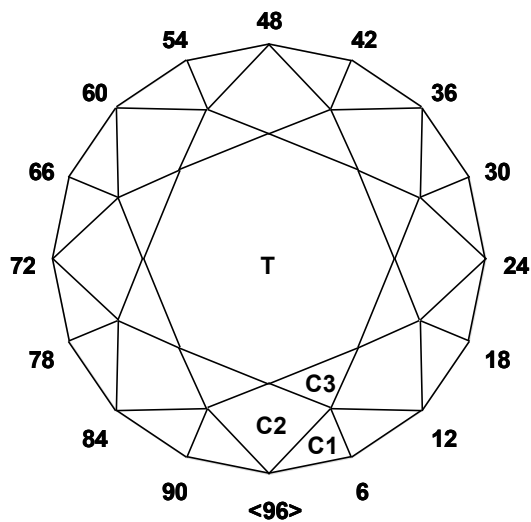
2026 NSW Gemkhana

Section: O-8B.1, I-8B.2, N-8B.3 Standard Round Brilliant with Faceted Girdle

Material: Australian Labradorite

Minimum Size: 6.0mm across shortest dimension of outside shape

Facets: 73 (57 + 16); Meets: 57 (25 Pavilion + 32 Crown)



Standard Brilliant Faceted Girdle

Angles for R.I. = 1.540

57 + 16 girdles = 73 facets

8-fold, mirror-image symmetry

96 index

$L/W = 1.000$ $T/W = 0.583$ $U/W = 0.583$

$P/W = 0.396$ $C/W = 0.111$

$Vol. /W^3 = 0.178$

PAVILION

P1	43.00°	03-09-15-21-27-33-39-45- 51-57-63-69-75-81-87-93	Cut to TCP
G	90.00°	03-09-15-21-27-33-39-45- 51-57-63-69-75-81-87-93	Set size
P2	41.00°	96-12-24-36-48-60-72-84	Form PCP, meet P1, G

CROWN

C1	42.00°	03-09-15-21-27-33-39-45- 51-57-63-69-75-81-87-93	Set girdle thickness
C2	35.00°	96-12-24-36-48-60-72-84	Meet C1, G
C3	20.00°	06-18-30-42-54-66-78-90	Meet C1, C2
T	0.00°	Table	Meet C2, C3

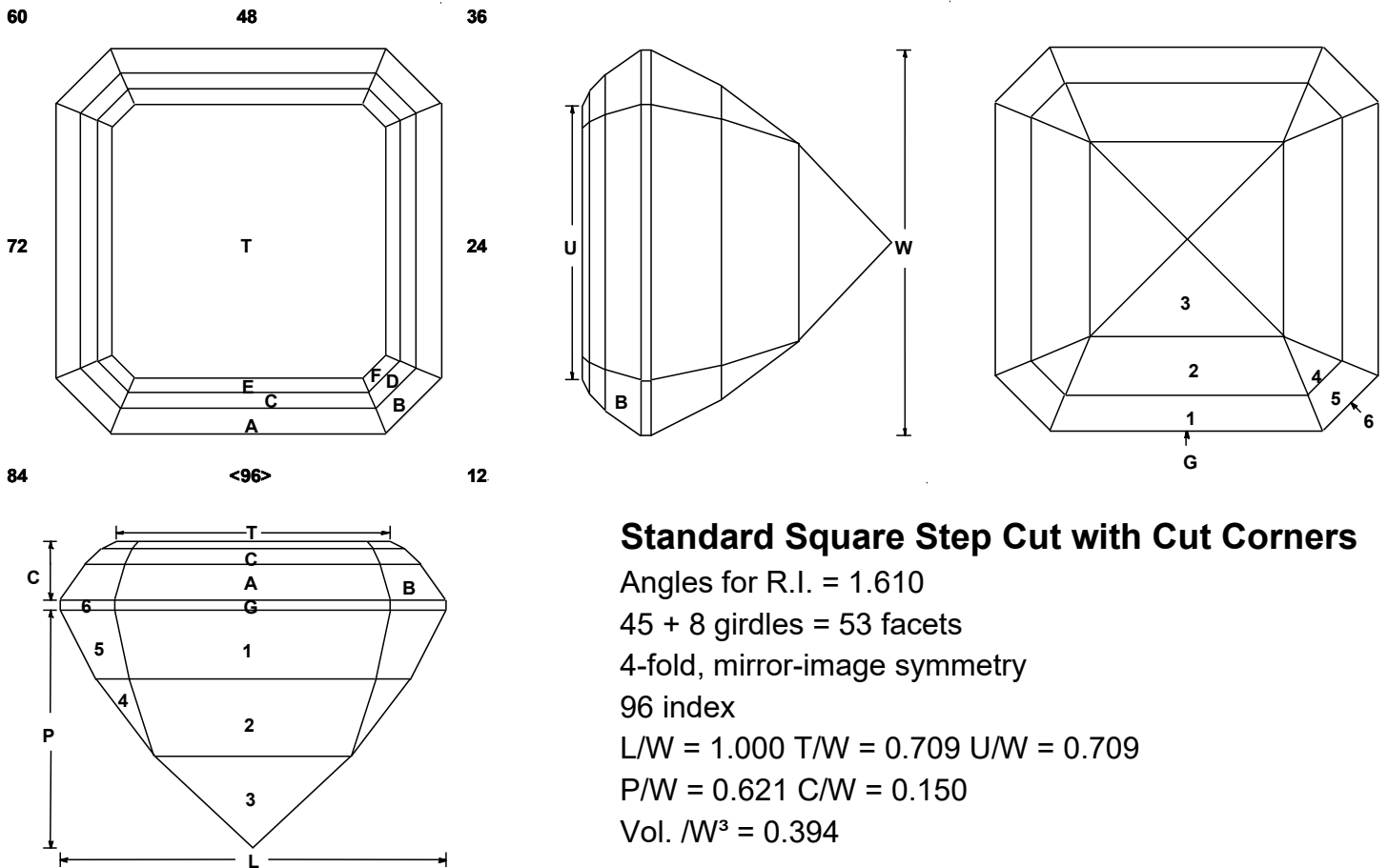
2026 NSW Gemkhana

Section: O-9B.1, I-9B.2, N-9B.3 Standard Square Step Cut with Cut Corners

Material: Colourless Topaz

Minimum Size: 6.0mm across shortest dimension of outside shape

Facets: 53 (45 + 8); Meets: 45 (Pavilion 21 + Crown 24)



Standard Square Step Cut with Cut Corners

Angles for R.I. = 1.610

45 + 8 girdles = 53 facets

4-fold, mirror-image symmetry

96 index

$L/W = 1.000$ $T/W = 0.709$ $U/W = 0.709$

$P/W = 0.621$ $C/W = 0.150$

$Vol. /W^3 = 0.394$

PAVILION

G	90.00°	96-24-48-72	Set size
1	63.00°	96-24-48-72	Set girdle
2	53.00°	96-24-48-72	Estimate
3	43.00°	96-24-48-72	Estimate, form PCP
4	53.00°	12-36-60-84	Meet 2, 3
5	63.00°	12-36-60-84	Meet 1, 4
6	90.00°	12-36-60-84	Meet 1, 5, level girdle

CROWN

A	55.00°	96-24-48-72	Set girdle thickness
B	55.00°	12-36-60-84	Level
C	42.00°	96-24-48-72	Estimate
D	42.00°	12-36-60-84	Level
E	27.00°	96-24-48-72	Estimate
F	27.00°	12-36-60-84	Level
T	0.00°	Table	Estimate

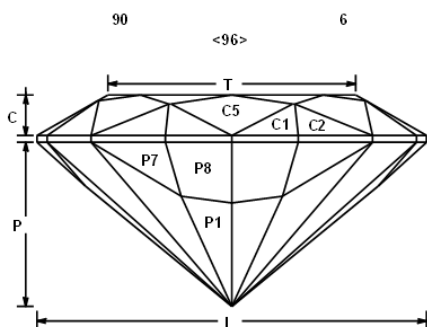
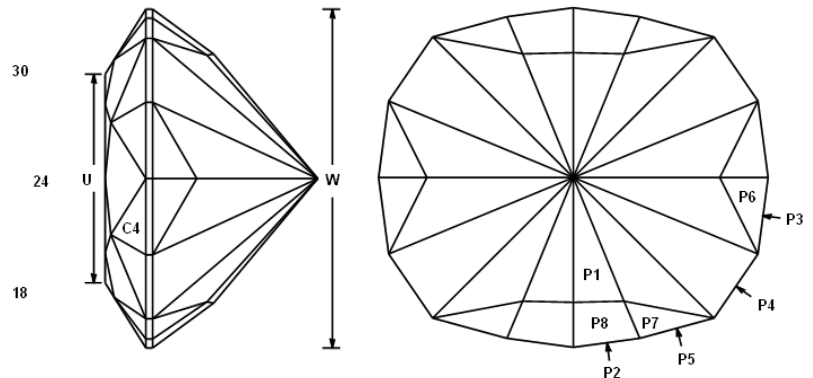
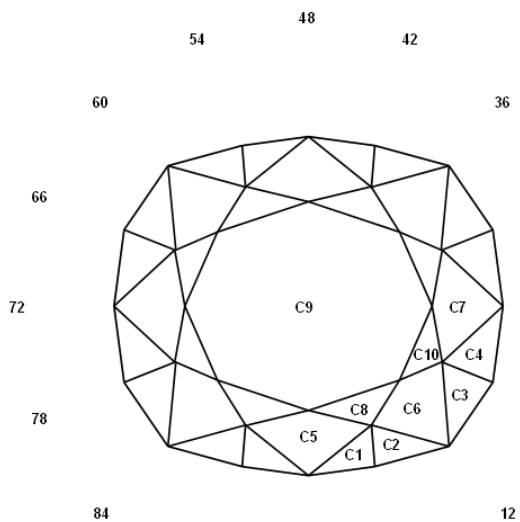
2026 NSW Gemkhana

Section: O-10.1 Ultrabright Cushion

Material: Any Coloured MM Cubic Zirconia

Minimum Size: 6.0mm across shortest dimension of outside shape

Facets: 77 (61 + 16); Meets: 57 (25 Pavilion + 32 Crown)



Ultrabright Cushion

John Broadfoot 2011

Angles for R.I. = 2.160

61 + 16 girdles = 77 facets

2-fold, mirror-image symmetry

96 index

$L/W = 1.145$ $T/W = 0.729$ $U/W = 0.619$

$P/W = 0.484$ $C/W = 0.119$

$Vol./W^3 = 0.261$

PAVILION

P1	40.00°	03-09-15-21-27-3339-45-51-57-63-69-75-81-87-93
P2	90.00°	02-46-50-94
P3	90.00°	22-26-70-74
P4	90.00°	15-33-63-81
P5	90.00°	04-44-52-92
P6	42.60°	22-26-70-74
P7	53.40°	04-44-52-92
P8	54.10°	02-46-50-94

CROWN

C1	36.80°	02-46-50-94
C2	37.20°	04-44-52-92
C3	33.00°	15-33-63-81
C4	33.30°	22-26-70-74
C5	32.00°	96-48
C6	25.80°	10-38-58-86
C7	29.80°	24-72
C8	15.10°	05-43-53-91
C9	0.00°	Table
C10	9.96°	17.6-30.4-65.6-78.4

Form PCP

Establish width for required L/W ratio

Establish Length required for given ratio

Cut to form continuous girdle line with P1 facet edges

Cut to form continuous girdle line with P1 facet edges

Cut these Barion facets by hand (no Motor) form level girdle

Cut Barions to form level girdle

Cut barions to meet P7, adjust angle.

Set girdle thickness

Cut Breaksto meet girdle with C1

Cut Breaksto meet girdle with C2

Cut Breaksto meet girdle with C3

Cut Main to form meetpoint with Girdle and C1

Cut Main to form meetpoint with Girdle and C2

Cut Main to form meetpoint with Girdle and C3

Cut Stars ti form meetpoint with C1 and C2

Cut table at this point if possible, machine dependant

These stars need some tweaking, use index cheater to float in at low speed.

2026 NSW Gemkhana

Section: I-10.2 Smithsonian Bar Pixel Variation

Material: Pale Blue MM Cubic Zirconia

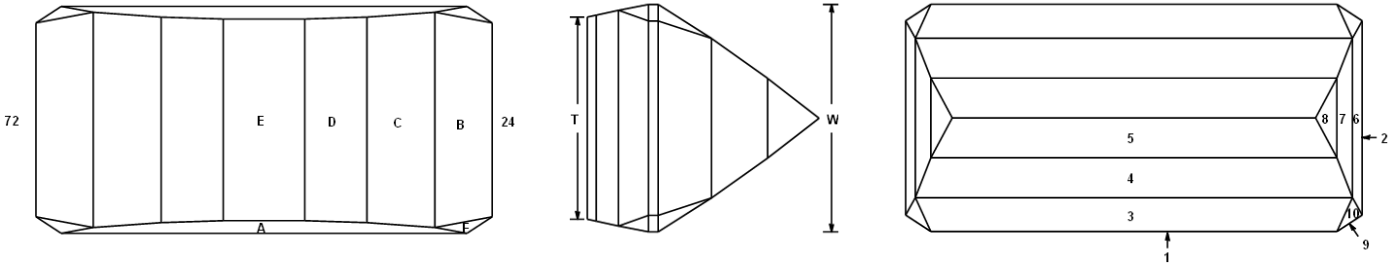
Minimum Size: 6.0mm across shortest dimension of outside shape

Facets: 37 (29 + 8); Meets: 28 (16 Pavilion + 12 Crown)

60

48

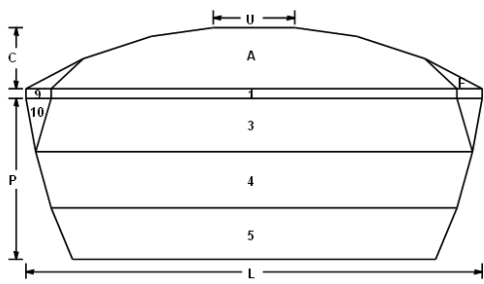
36



84

<96>

12



Smithsonian Bar Pixel Variation

Original by Jeff Graham,
 Modified with Facets 6,7, 8 & cut corners JS 2022
 Angles for R.I. = 2.160
 29 + 8 girdles = 37 facets
 2-fold, mirror-image symmetry
 96 index
 L/W = 1.999 T/W = 0.884 U/W = 0.356
 P/W = 0.706 C/W = 0.269
 Vol./W³ = 1.137

PAVILION

1	90.00°	96-48
2	90.00°	24-72
3	57.22°	96-48
4	54.44°	96-48
5	52.51°	96-48
6	80.01°	24-72
7	74.00°	24-72
8	68.00°	24-72
9	90.00°	09-39-57-87
10	69.83°	09-39-57-87

CROWN

A	77.77°	96-48
B	28.01°	24-72
C	18.00°	24-72
D	8.00°	24-72
E	0.00°	Table
F	52.82°	09-39-57-87

Set Width
 Set Length
 Estimate ratio 2 : 2 : 2
 Estimate ratio 2 : 2 : 2
 Estimate ratio 2 : 2 : 2
 Level Girdle
 Level Tier
 Level Tier
 Cut Girdle Corner
 Cut Corner to meet 3,4,6,7, level girdle

Set Girdle thickness
 Level Girdle
 Estimate Ratio 2 : 2 : 2 : 2
 Estimate Ratio 2 : 2 : 2 : 2
 Estimate Ratio 2 : 2 : 2 : 2
 Cut corner to meet A,B,C

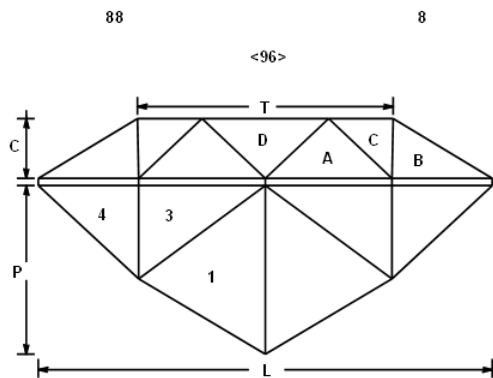
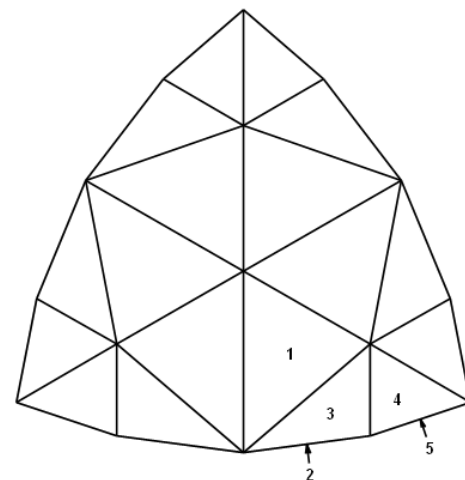
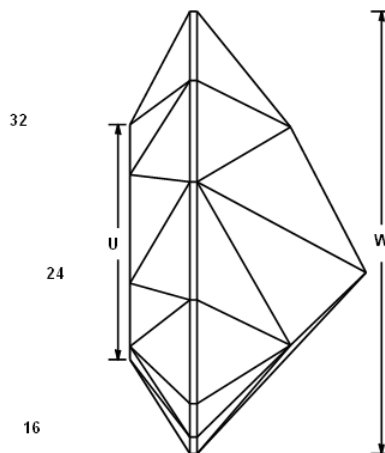
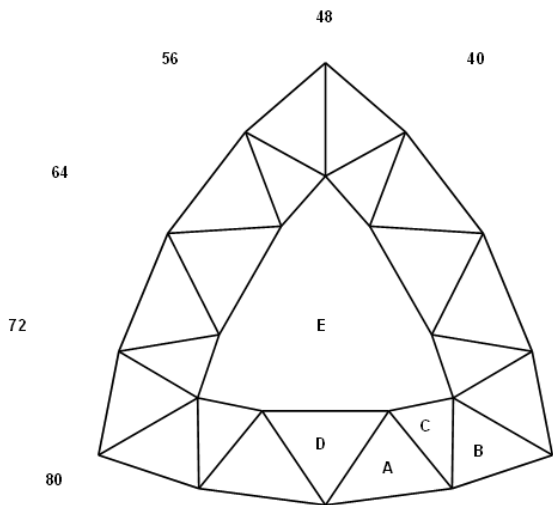
2026 NSW Gemkhana

Section: N-10.3 Emergent Phenomenon

Material: Any Coloured MM Cubic Zirconia

Minimum Size: 6.0mm across shortest dimension of outside shape

Facets: 52 (40 + 12); Meets: 37 (16 Pavilion + 21 Crown)



Emergent Phenomenon

Arya Akhavan 2013

Angles for R.I. = 2.160

40 + 12 girdles = 52 facets

3-fold, mirror-image symmetry

96 index

$L/W = 1.023$ $T/W = 0.578$ $U/W = 0.529$

$P/W = 0.381$ $C/W = 0.135$

$Vol./W^3 = 0.157$

PAVILION

1	43.00°	01-31-33-63-65-95	Cut to PCP
2	90.00°	02-30-34-62-66-94	Set size
3	45.68°	02-30-34-62-66-94	Meet 1, 2
4	46.99°	05-27-37-59-69-91	Meet 2, 3
5	90.00°	05-27-37-59-69-91	Meet 2, 3, 4, level girdle

CROWN

A	35.00°	02-30-34-62-66-94	Set girdle thickness
B	35.00°	05-27-37-59-69-91	Meet A, 2, 5
C	34.00°	03-29-35-61-67-93	Meet A, B, 2, 5
D	32.34°	96-32-64	Meet A, B, C, D
E	0.00°		Table, meet A, B, C, D

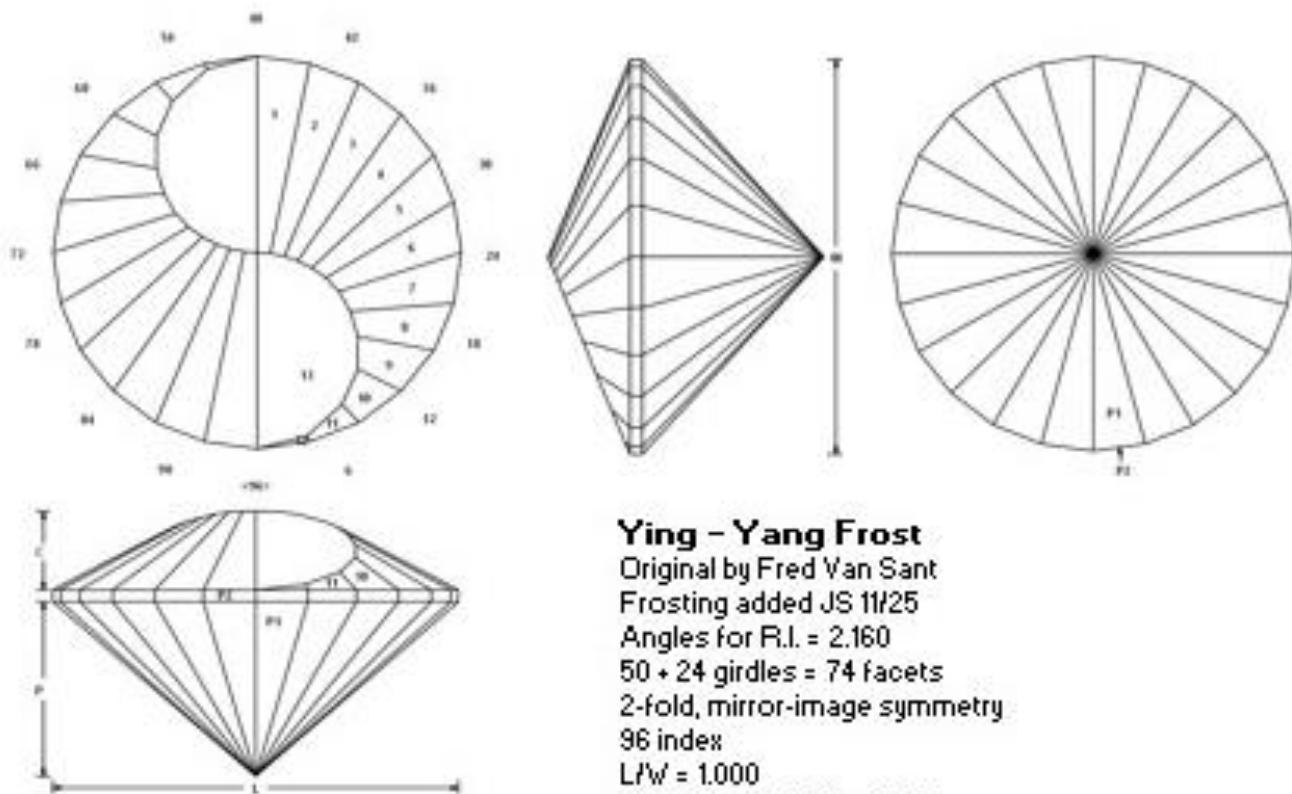
2026 NSW Gemkhana

Section: O-11.1 Ying - Yang Frost

Material: Colourless MM Cubic Zirconia

Minimum Size: 6.0mm across shortest dimension of outside shape

Facets: 74 (50 + 24); Meets: 50 (25 Pavilion + 25 Crown)



Ying - Yang Frost

Original by Fred Van Sant

Frosting added JS 11/25

Angles for P.I. = 2.160

50 + 24 girdles = 74 facets

2-fold, mirror-image symmetry

96 index

L/W = 1.000

P/W = 0.446 C/W = 0.200

Vol./W³ = 0.199

PAVILION

P1 42.00° 02-06-10-14-18-22-26-30
34-38-42-46-50-54-58-62
66-70-74-78-82-86-90-94

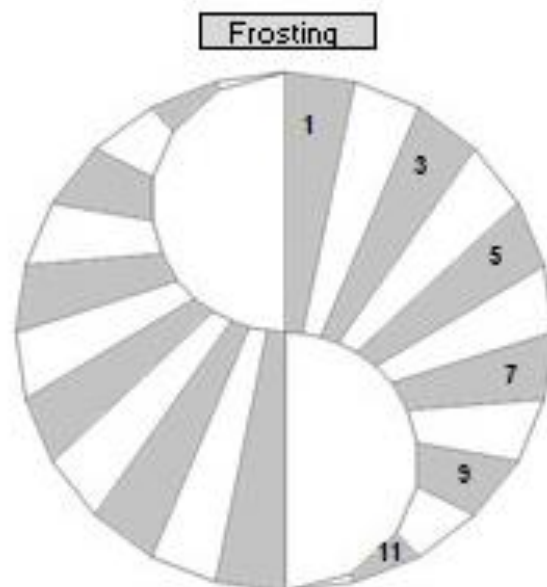
Cut to PCP

P2 90.00° 02-06-10-14-18-22-26-30
34-38-42-46-50-54-58-62
66-70-74-78-82-86-90-94

Set size

CROWN

1	22.00°	46-94	Set girdle thickness
2	22.34°	42-90	
3	23.04°	38-86	Create level girdle
4	24.09°	34-82	all round
5	25.51°	30-78	
6	27.30°	26-74	Frost facets in grey
7	29.40°	22-70	
8	31.73°	18-66	
9	34.11°	14-62	
10	36.30°	10-58	
11	38.00°	06-54	
12	38.94°	02-50	
13	21.83°	96-48	



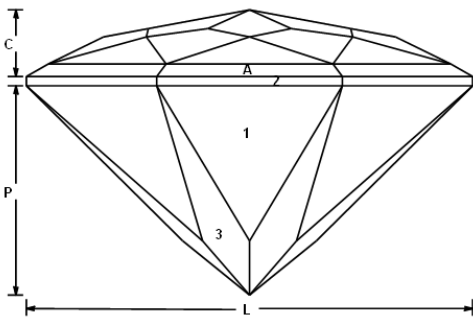
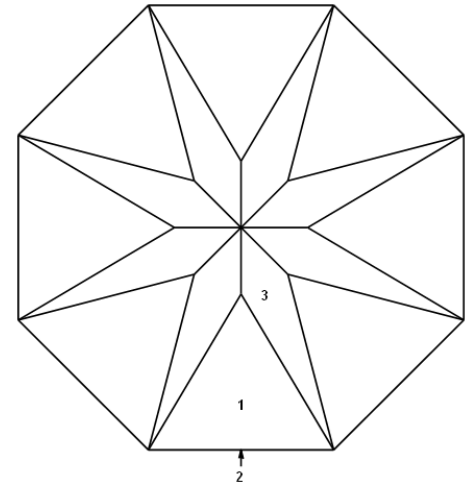
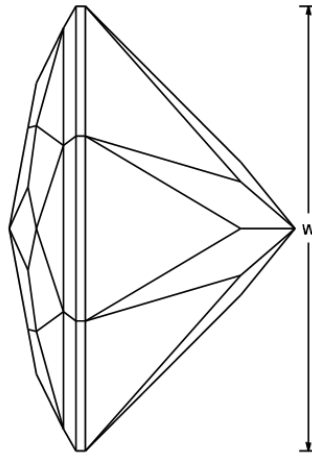
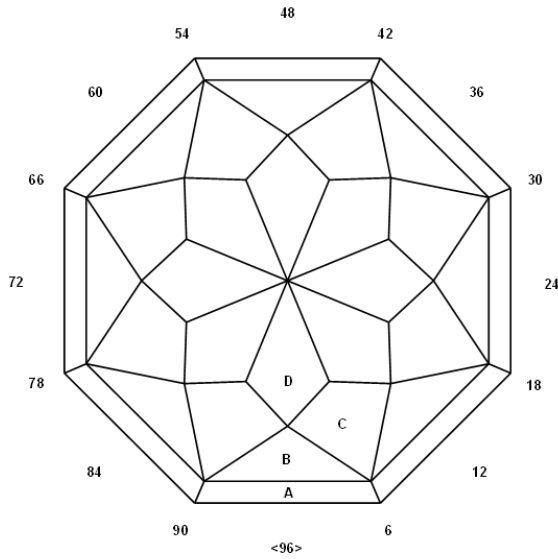
2026 NSW Gemkhana

Section: I-11.2 Exotic Rose Cross Hybrid

Material: Pink MM Corundum

Minimum Size: 6.0mm across shortest dimension of outside shape

Facets: 56 (48 + 8); Meets: 34 (9 Pavilion + 25 Crown)



Exotic Cross Rose Hybrid

Pav by Vargas, Cr. by Vargas, Hybrid by JS 2025

Angles for R.I. = 1.760

48 + 8 girdles = 56 facets

8-fold radial symmetry

96 index

L/W = 1.000

P/W = 0.470 C/W = 0.150

Vol./W³ = 0.210

PAVILION

- 1 45.00° 96-12-24-36-48-60-72-84 Create TCP
- 2 90.00° 96-12-24-36-48-60-72-84 Set size
- 3 41.00° 06-18-30-42-54-66-78-90 Meet 1, 2, create PCP

CROWN

- A 30.31° 96-12-24-36-48-60-72-84 Set girdle thickness
- B 26.01° 96-12-24-36-48-60-72-84 Cut by eye
- C 18.00° 06-18-30-42-54-66-78-90 Meet A, B
- D 10.58° 96-12-24-36-48-60-72-84 Meet B, C, create Apex

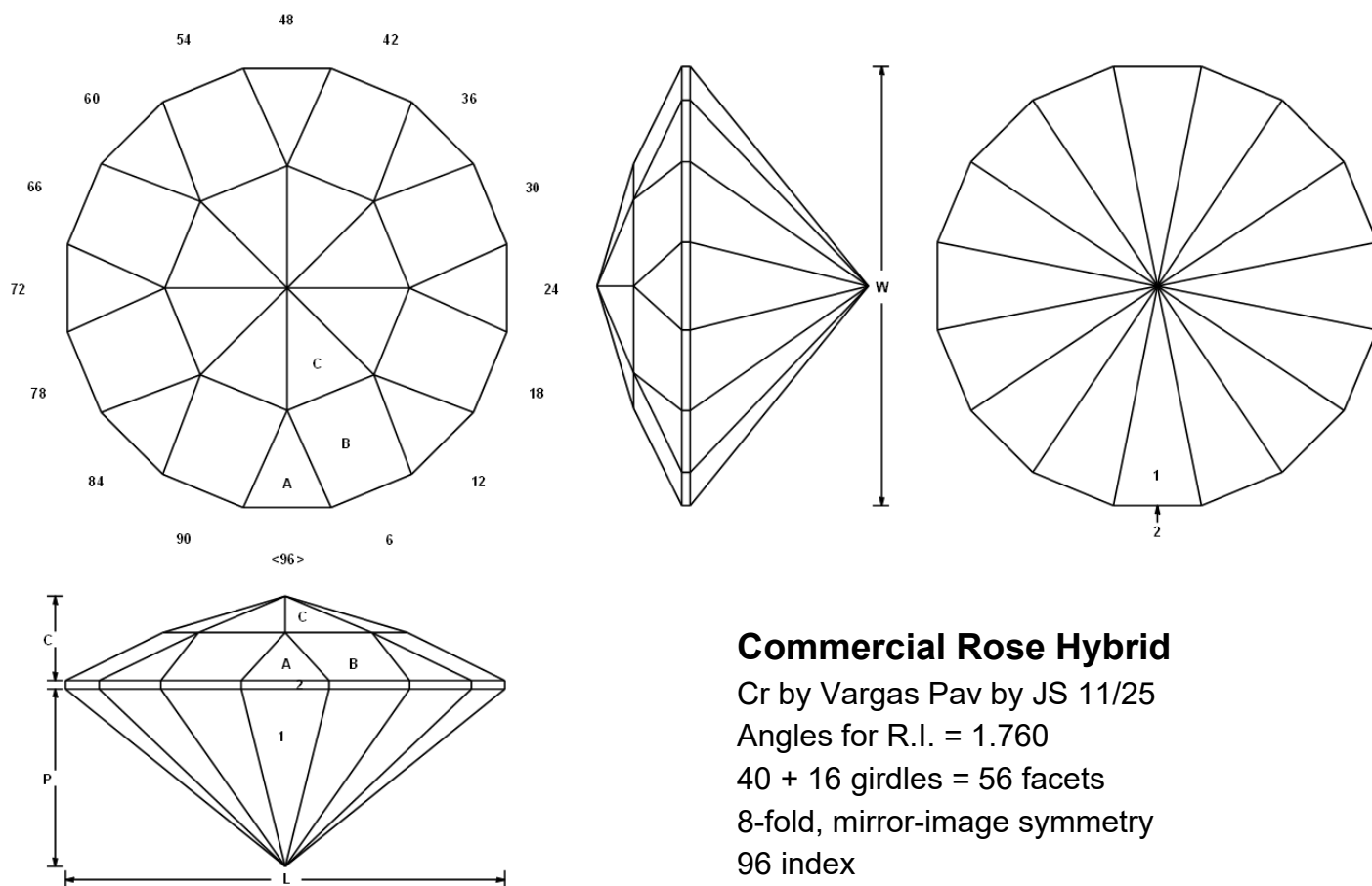
2026 NSW Gemkhana

Section: N-11.3 Commercial Rose Hybrid

Material: Coloured MM Corundum

Minimum Size: 6.0mm across shortest dimension of outside shape

Facets: 56 (40 + 16); Meets: 42 (17 Pavilion + 25 Crown)



Commercial Rose Hybrid

Cr by Vargas Pav by JS 11/25

Angles for R.I. = 1.760

40 + 16 girdles = 56 facets

8-fold, mirror-image symmetry

96 index

L/W = 1.000

P/W = 0.405 C/W = 0.192

Vol./W³ = 0.181

PAVILION

1 39.00° 96-06-12-18-24-30-36-42-48-54-60-66-72-78-84-90 Cut to PCP

2 90.00° 96-06-12-18-24-30-36-42-48-54-60-66-72-78-84-90 Set size

CROWN

A 26.00° 96-12-24-36-48-60-72-84 Set girdle thickness

B 24.00° 06-18-30-42-54-66-78-90 Level girdle

C 18.00° 06-18-30-42-54-66-78-90 Meet A, B, form Apex