



BUYER GUIDE

Custom Acrylic Puzzle Production and Quality Guide

Compare puzzle and frame formats, define seven RFQ fields, review the manufacturing flow, control quality risks, select packaging, and prepare a clearer quote request.

PRODUCT

SPECIFICATION

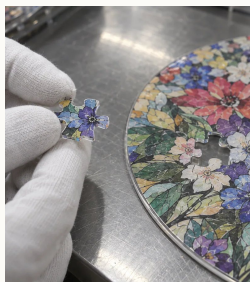
QUALITY

RFQ

PRODUCT & SPECIFICATION

Separate the Puzzle and Frame Specifications

Decide whether the product is mainly assembled or displayed, then work backward from the sales method to size, piece count, print side, white ink, and packaging.



Acrylic Puzzle

Loose pieces are assembled into one image. Check piece count, fit, chips, scratches, the completed form, and retention inside the pack.



Acrylic Puzzle Frame

A display format with an outer frame, clear plates, base plate, or fixing parts. Check frame position, assembly, components, movement, and packaging.

Seven RFQ Fields

Field	Typical Options	Quote Impact	How to State It
Finished size	W x H, diameter, pack limit	Material, weight, pack, freight	Dimensions or proposal requested
Piece count	Target count, difficulty, open	Cutting, control, fit	Target count and intended user
Frame	None, outer, display frame	Parts, fixing, pack, QC	Construction or proposal requested
Print side	Front, reverse, double-sided	View, clarity, protection	Front view and preferred side
White ink	None, spot, full underbase	Clear areas, color, opacity	White layer or clear-area map
Packaging	OPP, carton, PET, tray, box	Scratches, retention, display	Sales method and visibility
Sales method	Event, retail, ecommerce, gift	SKU, labels, freight, instructions	Channel and SKU count

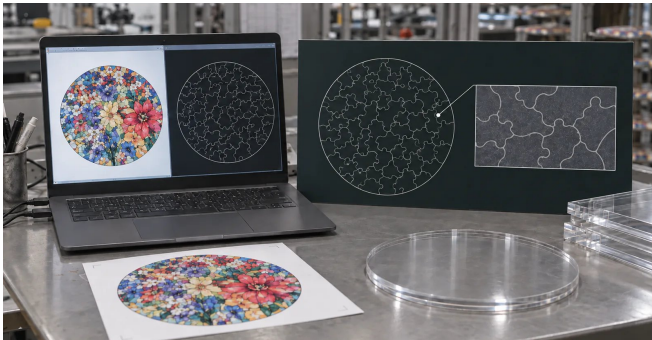
Mark open items as proposal requested.

Keep undecided points separate from approved conditions so quotes can be compared on the same basis.

PROCESS OVERVIEW

How Are Custom Acrylic Puzzles Made?

Separate color artwork, white ink, and cut lines, then approve color, clarity, edges, fit, piece count, and packaging on a finished sample.



01 Prepare artwork

Separate color, white ink, cut lines, size, and piece count.

02 Confirm material

Define sheet, thickness, clarity, surface, film, and use.

03 UV print

Confirm print side, white ink, clear areas, color, and adhesion.

04 Laser cut

Cut the outer shape and pieces; review edges and full assembly.

05 Clean and finish

Remove debris and prepare surfaces, edges, and film for QC.

06 Inspect

Compare color, position, damage, count, and fit with the sample.

07 Pack and ship

Verify retention, individual pack, SKU, carton marks, and count.

RISK & COUNTERMEASURE

Six Common Risks and Practical Controls

Do not rely on drawings or one numerical value alone. Align the acceptance basis on a finished sample made with the intended material, print, and cutting conditions.

1 Cut lines

Thin necks and sharp internal corners can chip or handle poorly.
Control: Simplify fragile geometry and test it at actual size.

2 White ink and clear areas

Incorrect coverage can cause weak color or a white halo.
Control: Separate color and white layers and approve clear areas.

3 Piece fit

Cut width and material conditions can create tight or loose fit.
Control: Assemble a complete set made under intended conditions.

4 UV-ink adhesion

Surface condition, cleaning, ink, and curing can affect adhesion.
Control: Agree on pretreatment and a relevant adhesion check.

5 Surface and edges

Stacking and handling can cause rubbing, chips, marks, or haze.
Control: Compare surfaces and edges with the approved sample.

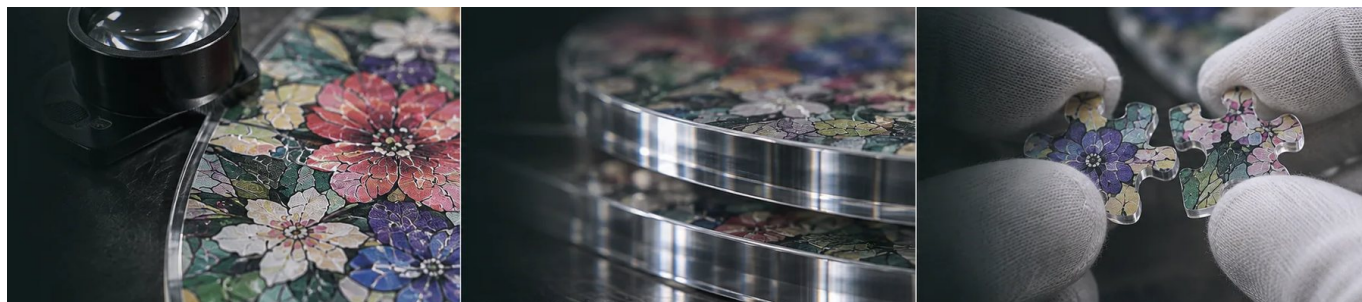
6 Count, SKU, and pack

Missing pieces, mixed SKUs, or movement can create claims.
Control: Verify count, SKU, retention, and carton marks.

QUALITY CONTROL

Four Quality Gates

Use the approved finished sample to align decisions at the data, sample, bulk-production, and pre-shipment stages. Agree on the inspection scope for the project.



GATE 01

Data Review

Confirm color data, white ink, cut lines, finished size, piece count, and viewing direction.

GATE 02

Pre-Production Sample

Approve color, clarity, adhesion, edges, fit, piece count, and the packed condition.

GATE 03

Bulk Production

Compare first-off and in-process samples for position, scratches, chips, and edges.

GATE 04

Pre-Shipment Check

Verify piece count, SKU, individual pack, retention, carton marks, and quantity.

Choose the inspection method project by project.

Agree on full inspection, critical-point checks, or sampling based on quantity, sales method, product value, destination, and risk. This guide does not promise a fixed inspection rate or AQL.

SAMPLE APPROVAL

What to Approve on the Finished Sample

Align the viewing angle, lighting, assembly method, and packed condition before bulk production, then record the acceptance basis.



Item	How to Check	Approval Basis
Color, white, clear areas	Compare approved data and product under consistent lighting	Approve color and clarity on the finished sample
Print position, adhesion	Review contours, fine lines, white boundaries, and agreed test	Approve a condition suited to the material and use
Edges and surfaces	Change angle to check scratches, chips, haze, marks, and feel	Share the accepted appearance standard
Piece fit	Assemble the complete set, not only representative pieces	Approve tightness, looseness, and completed form
Count and packaging	Verify pieces, SKU, retention, bags, cards, and boxes	Approve the complete delivery condition

Keep an approval record

- Approved sample or traceable photos
- Final data revision number
- Notes on color, clear areas, and fit
- Packaging sample and SKU table
- Changes and whether reapproval is required



RFQ READY SUMMARY

What Is Needed for a Custom Acrylic Puzzle Quote?

Share use, size, piece count, frame, print construction, quantity, packaging, and delivery conditions. Mark undecided fields as proposal requested.

01

Use and sales method

Event, retail, ecommerce, or gift

02

Finished size

W x H mm, diameter, or proposal requested

03

Piece count

Target count, intended user, difficulty

04

Frame construction

None, outer frame, or display frame

05

Print data

Print side, white ink, clear areas, references

06

Quantity and SKUs

Total, SKU count, and quantity by SKU

07

Packaging and labels

Bag, box, tray, barcode, warnings

08

Delivery conditions

Destination, timing, split shipments

Copy these fields into your RFQ

Product use and sales method:
Finished size or proposal requested:
Target piece count:
Frame requirement:
Print side, white ink, and clear areas:

Total quantity and SKU breakdown:
Packaging, barcode, and labels:
Destination and requested timing:
Artwork and reference images:
Other project requirements:

NEXT STEP

You Can Start Before Every Specification Is Final

Share the intended use, known size, quantity, SKU count, packaging direction, and destination. Open questions can then be organized for review.



Discuss Your Acrylic Puzzle Project

Send the available artwork, finished size, piece count, quantity, SKUs, packaging, destination, and requested timing.

[CONTACT](#)

Technical References

- [Trotec Laser](https://www.troteclaser.com) - Acrylic processing tips
- [Mimaki](https://www.mimaki.com) - UV ink adhesion troubleshooting
- [Roland DGA](https://www.rolanddga.com) - How to test UV ink adhesion
- [ISO 2859-1](https://www.iso.org) - Sampling inspection overview

Important

This guide summarizes general buyer checkpoints. Confirm thickness, size, piece count, tolerance, inspection scope, packaging, intended age, and market-specific regulations or testing for each project.