

SOP Kitchen Manufacture Process

1. Purpose

To establish a standardised, repeatable process for manufacturing kitchen cabinetry, including cabinet carcasses, door fronts, drawer boxes, and face frames, using a panel saw and manual machining methods, ensuring consistent quality, accuracy, and finish.

2. Scope

This SOP applies to all workshop personnel involved in cutting, sanding, finishing, drilling, spraying, and assembly of kitchen components.

3. Responsibility

- Workshop Manager - Overall quality control and workflow management
- Panel Saw Operator - Accurate cutting and labelling
- Machining Staff - Sanding, edge preparation, and drilling
- Spray Technician - Undercoating and topcoat spraying
- Assembly Staff - Cabinet, door, drawer, and face frame assembly

4. Component Groups Covered

This SOP applies equally to the following components unless otherwise specified:

- Cabinet carcass panels
- Door fronts
- Drawer box components
- Face frame components

5. Process Flow (All Components)

5.1 Cut Panels to Size (Panel Saw)

- Review drawings and cutting lists before cutting.
- Set panel saw fences and stops accurately.
- Cut all parts to size including:
 - Cabinet panels and shelves
 - Door blanks
 - Drawer box parts
 - Face frame rails and stiles
- Label each component clearly.
- Stack parts safely to prevent damage.

Quality Check:

Dimensions correct

Clean, square cuts

Components clearly labelled

5.2 Edge Sand 180 Grit

- Sand all cut edges to remove saw marks and sharpness.
- Maintain straight edges and correct dimensions.
- Do not round edges at this stage.

Quality Check:

Smooth edges

No chipping or burn marks

5.3 Drum Sand - 240 Grit

- Drum sand all faces of:
- Cabinet panels
- Door fronts
- Drawer box parts
- Face frame components
- Use appropriate grit progression to achieve uniform surface finish.

Quality Check:

Flat, even surfaces

No sanding lines or burns

5.4 Arris Edges

- Lightly break all sharp edges by hand sanding.
- Apply consistent arris to improve finish quality and durability.
- Ensure edges are not over-rounded.

Quality Check:

Consistent soft arris

Clean edge definition

5.5 Undercoat (All Components)- 2 parts Undercoat 1 Part Hardener 30%

Thinners

- Apply undercoat/sealer to all components, including:
- Cabinet panels
- Door fronts
- Drawer box components (as specified)
- Face frames
- • Ensure full coverage to faces and edges.
- Follow manufacturer's spray settings and drying times.

Quality Check:

Even coverage

No runs, dry spray, or missed areas

5.6 Sand Between Coats - 320/400 Grit

- Lightly sand all undercoated surfaces once fully dry.
- Remove dust nibs, raised grain, and surface defects.
- Clean thoroughly prior to further processing.

Quality Check:

Smooth, uniform surface

No sand-through

5.7 Drilling (Manual/Jig-Based)

- Drill all required holes using jigs and templates:
- Shelf pin holes
- Hinge cup holes (doors)
- Fixing and assembly holes
- Use depth stops and guides for accuracy and consistency.

Quality Check:

Accurate hole placement

Correct depth and spacing

5.8 Spraying - Top Coat (All Components) 2 parts Undercoat 1 Part Hardener 10% Thinners

- Apply final paint or lacquer coats to all components:
- Cabinets
- Doors
- Drawer boxes (if specified)
- Face frames
- Maintain consistent spray technique and environment.
- Allow adequate flash-off and curing times.

Quality Check:

Consistent colour and sheen

No runs, sags, or contamination

6. Assembly

6.1 Cabinet Assembly

- Assemble cabinet carcasses using approved fixings and adhesives.
- Check for square and correct dimensions.
- Install backs, shelves, and internal components.

Quality Check:

Cabinets square and solid

6.2 Drawer Boxes

- Assemble drawer boxes ensuring square and correct sizing.
- Fit runners and test smooth operation.

- Touch up finish where required.

Quality Check:

Smooth operation

Consistent alignment

6.3 Doors and Face Frames

- Fit hinges to door fronts.
- Install face frames to cabinets as specified.
- Hang doors and adjust for even gaps and alignment.
- Inspect finish after handling.

Quality Check:

Even reveals

No finish damage

7. Final Inspection & Sign-Off

- Inspect all cabinets, doors, drawer boxes, and face frames.
- Confirm compliance with drawings and specifications.
- Approve for packing, delivery, or installation.