

## **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%****Thinner**

- 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.