

Skills Test Criteria – Woodmachining (STWM1)
SQA Unit Code HN49 04

This should be the final Unit delivered within the SVQ.

We do not expect this test to run more than 8 hours in one day and work should be planned accordingly.

The following criteria describe the standard/tolerances the candidate must meet in relation to each of the different skill elements.

The pass mark for the overall test should be 70%, if a candidate doesn't achieve this the whole test should be considered as a fail.

Grind and sharpen a pair of cutters for a circular moulding cutter block

Grinding to be marked before cutter is honed	Profile accurate when laid on development Grinding angle $35^{\circ} \pm 1^{\circ}$ Relief angle on top edge of cutter $10^{\circ} \pm 1^{\circ}$ To balance
Cutter	Grinding uniform, no secondary bevels Free from burn marks Edge honed to remove burr

Grind Straight Knives

Knives	Ground to recommended grinding angle $\pm 1^{\circ}$ Ground to parallel width $\pm 0.5\text{mm}$ and in balance.
Knives	Free from burn marks No reduced ends Ground to a sharp edge Honed to remove burr

Circular Hand Feed Rip Saw

Riving knife	correctly fitted to current Woodworking Machine Regulations
Sawblade, mouthpiece and packings	correctly fitted to current Woodworking Machine Regulations
Guards positioned correctly to current Woodworking Machine Regulations	Flattening Deeping Bevel Ripping Wedges
Fences positioned	in line with gullets
Flattening and deeping dimensions	Flatting widths $40\text{mm} \pm 1\text{mm}$; $65\text{mm} \pm 1\text{mm}$; $80\text{mm} \pm 1\text{mm}$ Deeping thickness $15\text{mm} \pm 3\text{mm}$

Bevel and wedge taper dimensions	Size of bevel 25mm and 24mm ± 5 mm on each dimension Wedge taper 30mm to 7mm ± 1 mm on each dimension
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High Speed Router

Panel cutter correctly	fitted into router
Profile cutter	correctly fitted into router
Former pins and Perspex guard correctly positioned for	Panel cutter Profile cutter
Internal component profile	Internal recess 70mm dia. $\pm 0.5\text{mm}$ Internal rebate width 5mm $\pm 0.5\text{mm}$ Internal rebate depth 5mm $\pm 0.5\text{mm}$
External component profile	External profile to master pattern $\pm 0.5\text{mm}$ Chamfer width 7mm $\pm 0.5\text{mm}$ Chamfer depth 7mm $\pm 0.5\text{mm}$
Free from excessive burn marks and breakout	Internal recess External profile Chamfer

Vertical Spindle Moulder

Sunk chamfer cutter	correctly fitted into circular moulding cutter block
Block correctly fitted on spindle, correct spindle speed selected	Circular moulding cutter block Pre-set block for bevelled rebate Pre-set block for rebate Adjustable groover
All Guards and false fences correctly fitted and	Rebating Grooving Sunk Chamfer Bevelled rebate
Component profile	Groove (to correct hand) width 12mm $\pm 0.5\text{mm}$; depth 5mm $\pm 0.5\text{mm}$ position 32mm from top edge $\pm 0.5\text{mm}$ Square rebate (to correct hand) width 11mm $\pm 0.5\text{mm}$; depth 8mm $\pm 0.5\text{mm}$. Bevelled rebate (to correct hand) width 21mm $\pm 0.5\text{mm}$; depth 8mm $\pm 0.5\text{mm}$ Sunk chamfer (to correct hand) width 12mm $\pm 0.5\text{mm}$; depth 8mm
Overall Width	60mm $\pm 0.5\text{mm}$
Evenly machined	no sunk ends or chipping

Single End Tenoner

Scribing cutters	correctly fitted
Guards	correctly positioned
Fit of component into trial mortice	Tenon easy push fit into trial mortice Shoulders flush with 'face side' of trial mortice ± 0.5 mm Shoulders and scribe to fit trial mortice; no gaps exceeding 0.5mm
Angle and length of shoulders	Angled shoulder $60^\circ \pm 1^\circ$ Square shoulder 90° Length and hand of shoulders as rod ± 0.5 mm
Tenon shoulders	free from breakout and excessive burning