

Correlation of
Modern Cabinetmaking, Molzahn, Umstatt, Davis
(Goodheart-Willcox Publisher ©2023)
to
Woodwork Career Alliance: 8. Clamping & Laminating

The content of the text and Lab Workbook correlates to Woodwork Career Alliance (WCA) skill standards. The WCA establishes a benchmark to measure and recognize an individual's skills and knowledge. The WCA skill standards help ensure that students are prepared for rigorous industry standards, and provide a pathway for advancement for professional woodworkers.

The WCA skill standards define the minimum requirements for specific woodworking machine operations. Using the WCA skill standards in a wood training program can help you, your students, and your program obtain industry recognition. The Modern Cabinetmaking textbook and Lab Workbook are correlated to the performance standards, helping prepare your students for certification.



Clamping & Laminating Considerations

- Pre-Operation Checklist is a prerequisite for ANY operation.
- Materials are machined and prepared properly, with dowels and hardware installed.
- Clears machine and cleans work area after operation.
- Required OSHA-approved personal protective equipment is worn.
- Lock-out/tag-out procedure is in place and followed.
- Process is completed in a timely manner.
- If required, select proper program from controller or programmable logic controller (PLC).
- Inspect for evidence of chatter marks or part hesitation.
- Operator clears machine and cleans work area after use.
- Proper stance and hand position are demonstrated.
- Spot check results following the operation.
- Tool/machine manufacturer's safety rules and guidelines are followed.
- Verifies tool is properly guarded.

Case Clamp

Level	Objective	Performance Standards	Textbook Chapter(s)	Lab Workbook Material
Pre-Operation Checklist				
1	—	Performance Standard 1. Verifies work area is free of clutter.	Chapters 32, 40	—
1	—	Performance Standard 2. Ensures fastening supplies and hand tools are positioned for use.	Chapters 32, 40	—
1	—	Performance Standard 3. Verifies press faces are clean, flat, and free of blemishes.	Chapters 32, 40	—
2	—	Performance Standard 1. Verifies clamps are adjusted square and true.	Chapters 32, 40	—
2	—	Performance Standard 2. Verifies pressure points are adjusted appropriately to produce even pressure during clamping.	Chapters 32, 40	—
2	—	Meets Level 1 performance standard.	—	—
Operation—Assemble Cabinet Box				
1	Given materials and machine ready to operate, assemble and clamp a four-sided box with a back.	Performance Standard 1. Joints remain tight and sound when pressure is released from clamps.	Chapters 32, 40	Section Project 5-2
1	Given materials and machine ready to operate, assemble and clamp a four-sided box with a back.	Performance Standard 2. Box is assembled square within ± 0.8 mm ($1/32$ " [0.0312"]) when measured corner to corner in any direction.	Chapters 32, 40	Section Project 5-2
1	Given materials and machine ready to operate, assemble and clamp a four-sided box with a back.	Performance Standard 3. Surfaces of any two opposing parts intended to be flush are flush within ± 0.4 mm ($1/64$ " [0.0156"]).	Chapters 32, 40	Section Project 5-2
1	Given materials and machine ready to operate, assemble and clamp a four-sided box with a back.	Performance Standard 4. Surfaces of any two opposing parts are within ± 0.4 mm ($1/64$ " [0.0156"]) of intended position.	Chapters 32, 40	Section Project 5-2
2	Given materials, set up machine to assemble and clamp a four-sided box with a back.	Performance Standard 1. Inspects materials to confirm dowels/glue are accurately applied.	Chapters 32, 40	—

Level	Objective	Performance Standards	Textbook Chapter(s)	Lab Workbook Material
2	Given materials, set up machine to assemble and clamp a four-sided box with a back.	Performance Standard 2. Adjusts pressure points to produce even pressure during clamping.	Chapters 32, 40	—
2	Given materials, set up machine to assemble and clamp a four-sided box with a back.	Meets Level 1 performance standard.	—	—

Edgebander

Level	Objective	Performance Standards	Textbook Chapter(s)	Lab Workbook Material
Pre-Operation Checklist				
1	—	Performance Standard 1. Demonstrates knowledge of and proper use of all machine specific controls.	Chapter 34	—
1	—	Performance Standard 2. Verifies core material thickness.	Chapter 34	—
1	—	Performance Standard 3. Ensures dust collection is functioning.	Chapter 34	—
1	—	Performance Standard 4. Ensures proper air pressure is supplied.	Chapter 34	—
1	—	Performance Standard 5. Monitors all supply levels.	Chapter 34	—
1	—	Performance Standard 6. Ensures paths of in-feed and out-feed have no obstructions to material and operator.	Chapter 34	—
2	—	Performance Standard 1. Powers up machine and verifies proper operating temperature has been reached.	Chapter 34	—
2	—	Performance Standard 2. Selects and installs proper adhesive for given task and material.	Chapter 34	—
2	—	Performance Standard 3. Loads magazine for coiled or straight banding material.	Chapter 34	—
2	—	Performance Standard 4. Sets beam height to within 0.1 mm [0.0039"] based on panel thickness.	Chapter 34	—

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Level	Objective	Performance Standards	Textbook Chapter(s)	Lab Workbook Material
2		Performance Standard 5. Enables correct stations for given material/process.	Chapter 34	—
2	—	Meets Level 1 performance standard.	—	—
Operation—Edgebanding				
1	Given machine set up, adjusted, with edgebanding and material ready to band, apply the coiled or strip edgebanding to the given material or parts.	Performance Standard 1. Feeds panels properly into machine.	Chapter 34	Section Projects 4-12, 4-13
1	Given machine set up, adjusted, with edgebanding and material ready to band, apply the coiled or strip edgebanding to the given material or parts.	Performance Standard 2. Applies edgeband to correct edges in proper sequence (opposing edges first).	Chapter 34	Section Projects 4-12, 4-13
1	Given machine set up, adjusted, with edgebanding and material ready to band, apply the coiled or strip edgebanding to the given material or parts.	Performance Standard 3. Identifies basic material and processing defects.	Chapter 34	Section Projects 4-12, 4-13
2	Given material, set up machine and apply edgebanding to specifications.	Performance Standard 1. Loads program and/or adjusts machine for given material.	Chapter 34	—
2	Given material, set up machine and apply edgebanding to specifications.	Performance Standard 2. Sets up and adjusts all processing stations.	Chapter 34	—
2	Given material, set up machine and apply edgebanding to specifications.	Performance Standard 3. Corrects basic processing defects.	Chapter 34	
2	Given material, set up machine and apply edgebanding to specifications.	Performance Standard 4. Produces parts which exhibit acceptable glue line with minimal glue residue.	Chapter 34	

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Level	Objective	Performance Standards	Textbook Chapter(s)	Lab Workbook Material
2	Given material, set up machine and apply edgebanding to specifications.	Performance Standard 5. Powers down machine in accordance with machine manual.	Chapter 34	
2	Given material, set up machine and apply edgebanding to specifications.	Meets Level 1 performance standard.	—	—