

# Finishing Techniques

Al Miotke

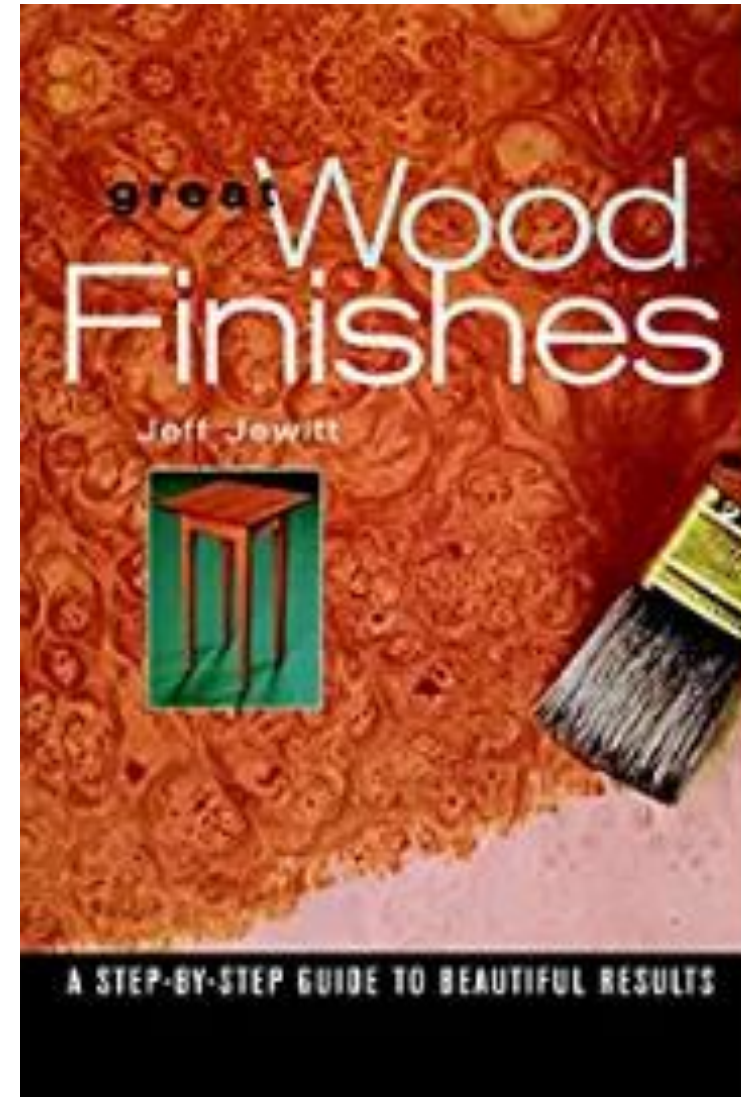
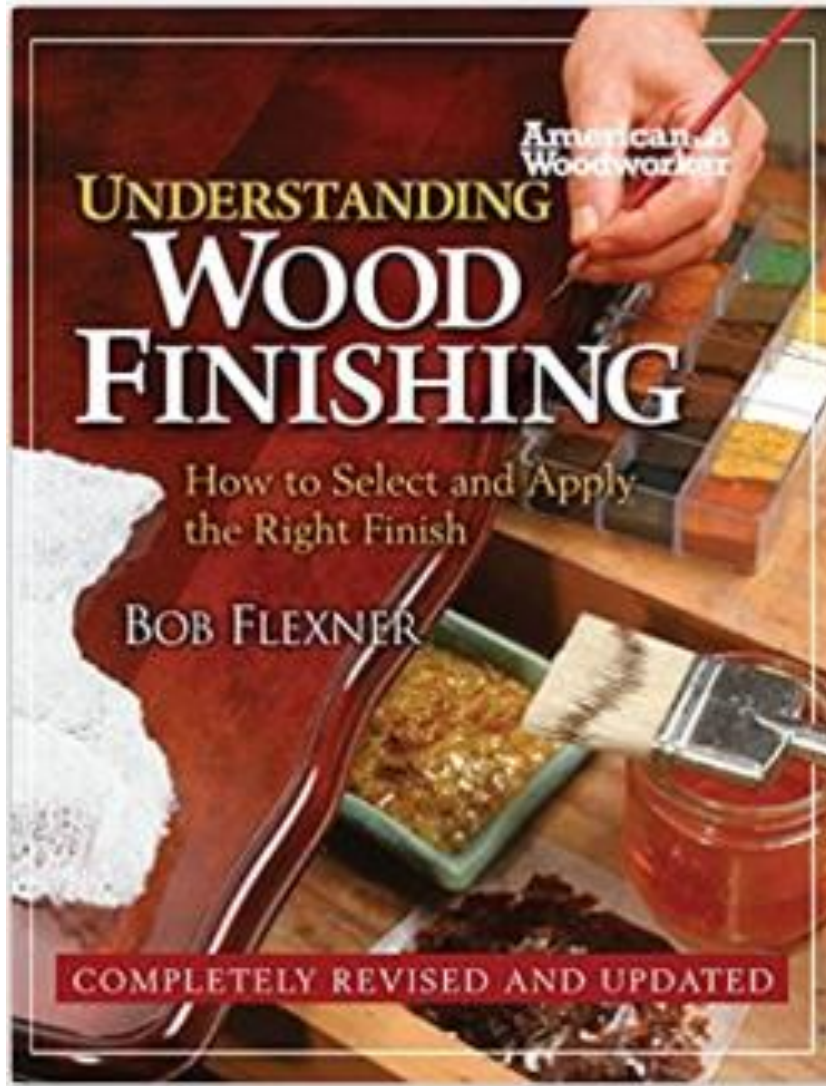
# Topics

1. Determining the desired look of the finished piece
2. Surface Preparation
3. Types of Finishes with Pro's/Con's
4. Filling the grain – if desired.
5. Finishing the finish
6. Examples

Let's share ideas



# Good Reference materials





# Select the best finish for the piece



Warmth

Durability



Sheen

Ease of application

## Surface Preparation suggestions before adding finish

1. Cut as clean as possible.
2. Go thru the grits to at least 320 or 400.
  - You may want to go higher with some woods.
3. Keep sanding speed low. Don't overheat the wood.
4. Hand sand with the grain with last grit.
5. Don't over sand especially on soft or open grain woods.
6. Clean the surface with mineral spirits and inspect.

# Finishing Types

## Penetrating Oils

Non Drying

Drying

Mineral Oil

Boiled Linseed

Tung

Walnut

Soybean

## Film Finishes

Evaporative

Reactive

Shellac

Lacquer

Varnish

Spar/Marine Varnish

Polyurethane

Wax

Beeswax

Carnauba

Micro-Crystalline

Blended

Oil/Varnish

Oil/Wax

Many Options

Homemade  
Tung oil finish  
Antique oil  
Danish Oil  
Teak Oil  
Waterlox  
Maloof finish  
Velvit Oil  
Salad Bowl  
Finish  
Nordic Oil

Many Options

-Friction polish  
Paste wax  
-Mahoneys wax  
-Yorkshire Grit--  
EEE  
-Dr. Kirks scratch  
free  
-Tried & True  
-Rubio  
Monocoat  
-Osmo Polyx  
-Odies Oil

Other

CA

# Characteristics

Characteristic	Finish type
Fast drying	1) Lacquer 2) Shellac 3) Water Based Poly
Easy to Repair	1) Lacquer 2) Shellac
Easy to Apply	1) Oil's 2 ) Wiping finishes
Toxicity	1) Lacquer 2) Polyurethane 3) Varnish
Durability	1) Polyurethane 2) Varnish 3) Lacquer
Highlight grain and figure Preserve natural look of the wood	1) Drying Oils 2) Oil/varnish blends
Finish with minimal color change	1) Water based Polyurethane
Build a High Gloss Finish	1) Lacquer 2) Varnish's 3) Shellac

Finish	Pro's	Con's
<b>Oil</b> Walnut, Tung, Linseed	<ul style="list-style-type: none"> <li>• Simple to apply</li> <li>• Maintains natural look of wood</li> </ul>	<ul style="list-style-type: none"> <li>• Minimal protection</li> <li>• Difficult to build a sheen other than Satin. Tung Oil is dull</li> </ul>
<b>Varnish</b>	<ul style="list-style-type: none"> <li>• Excellent resistance to heat, water, wear, solvents.</li> <li>• Easy to brush or wipe-on if diluted.</li> </ul>	<ul style="list-style-type: none"> <li>• Slow curing causing dust contamination</li> <li>• Adds yellow tint over time</li> </ul>
<b>Shellac</b>	<ul style="list-style-type: none"> <li>• Fast curing</li> <li>• Easy to rub to a high sheen</li> <li>• Good clarity and depth</li> <li>• Excellent barrier to other stains, finishes</li> <li>• Natural product, solvent is not as dangerous to breath</li> </ul>	<ul style="list-style-type: none"> <li>• Low resistance to heat, water, solvents.</li> <li>• Moderate resistance to wear</li> <li>• Shorter shelf life</li> </ul>
<b>Lacquer</b>	<ul style="list-style-type: none"> <li>• Very fast curing</li> <li>• Good Clarity</li> <li>• Excellent rubbing properties</li> </ul>	<ul style="list-style-type: none"> <li>• Toxic solvent and air polluting.</li> <li>• Moderate protection from heat, wear, solvents, water</li> </ul>



# Approaches to Fill the grain

- **Create a slurry wet sanding with oil.**
- **Grain filler**
  - Oil Based – Bartley
  - Water Based – Behlens, Clear Aqua Coat
- **Sanding Sealer**
- **Use the finish**
  - Varnish /Lacquer/Polyurethane
  - Will require many coats
- **Alternative fillers**
  - Liming wax



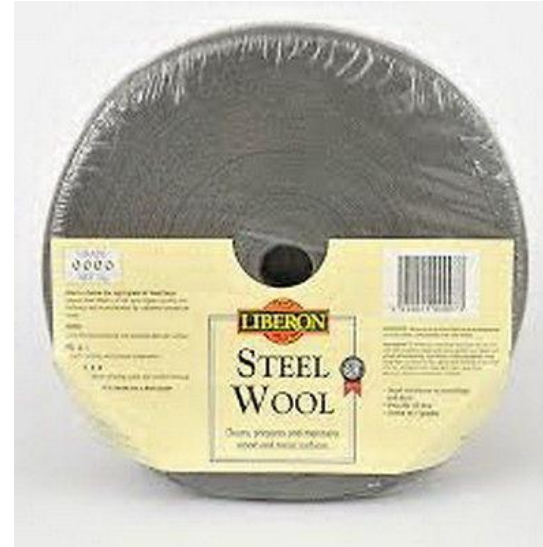
# Finish the Finish

## Goals

1. Rubout minor flaws in the finish
2. Creates the sheen you desire.
3. Creates a smooth silky feel.

## Techniques

1. Let the finish properly cure.
  - Min 1 wk. for Lacquer/shellac
  - Min 2 wks. for Varnishes
2. #0000 Steel Wool.
3. Sandpaper up to 10,000 Grit.
4. Rubbing/Polishing compounds.
  - Meguiars
5. Buffing wheels.
  - Beall system - Tripoli, White Diamond, Carnuba Wax



# Finish compatibility

Varnish over Oil	Yes
Lacquer over Oil	Yes(make sure oil is cured)
Varnish/Lacquer over Shellac	Yes
Shellac over Varnish/Lacquer	Yes
Oil over Shellac	No
Oil over Varnish/Lacquer	No
Lacquer over Varnish or visa-versa	OK, apply a barrier coat of shellac to be safe

# Examples



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