

Finishing techniques

Finishes:

Paints:

<i>Advantages</i>	<i>Disadvantages</i>
<ul style="list-style-type: none">• Stops rusting• Aesthetically pleasing• Range of colours• Saves time/money	<ul style="list-style-type: none">• Chips away• Environmentally unfriendly

Uses: Bridges, metal work, brick work

Varnishes:

<i>Advantages</i>	<i>Disadvantages</i>
<ul style="list-style-type: none">• Protects from dirt/sunlight/water• Enhances look of wood• Easy to apply• Can't see brush strokes	<ul style="list-style-type: none">• Can be a dull colour• Bubbles can ruin finish look• Some varnishes are bad for the environment (brushes cleaned result in varnish into water system)

Uses: Hardwoods, softwoods

Sealant:

<i>Advantages</i>	<i>Disadvantages</i>
<ul style="list-style-type: none">• Waterproof finish• Thermal/acoustical insulation• Electrical properties• Used for simple smoothing/filling	<ul style="list-style-type: none">• Do not have great strength

Uses: Pipe threads, aquariums, roofs, hydraulic systems

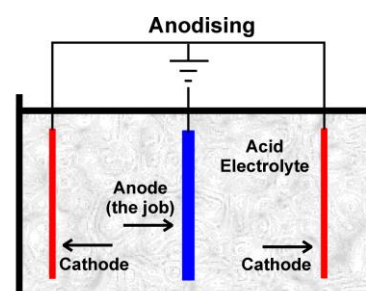
Preservatives:

Advantages	Disadvantages
<ul style="list-style-type: none"> • Improve lifespan of timber • Reduce biological corrosion • Improve aesthetics of wood 	<ul style="list-style-type: none"> • Toxic • More effective if used to pressure treat wood

Uses: Wood products exposed to water and corrosion

Anodising:

1. Used to add a coating to aluminium using the metal as an anode in an acid solution, resulting in oxidation forming the coating

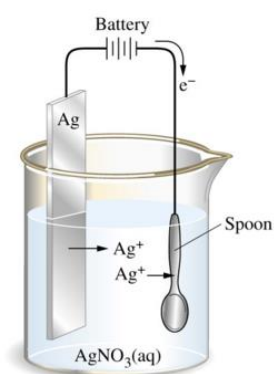


Advantages	Disadvantages
<ul style="list-style-type: none"> • More durable • Range of colours 	<ul style="list-style-type: none"> • Joining/machining can't be done after anodising • Expensive

Uses: Window frames, bike frames, screws

Electro-plating:

1. Hi
2. Hi
3. Hi
4. Hi
5. Hi
6. Hi



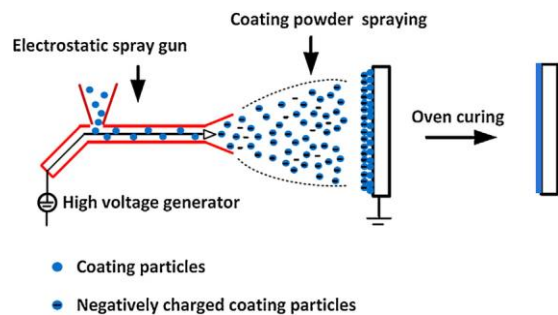
Advantages	Disadvantages
<ul style="list-style-type: none"> • Corrosion resistant • Easy to do • Improves mechanical properties 	<ul style="list-style-type: none"> • Non-uniform • Time consuming • Toxic fumes released

- Stops rusting

Uses: Spoons, taps, shower heads

Powder coating:

1. Hi
2. Hi
3. Hi
4. Hi
5. Hi
6. Hi



<i>Advantages</i>	<i>Disadvantages</i>
<ul style="list-style-type: none"> • More protection than paint • Nontoxic • Range of colours • Better for environment than paint 	<ul style="list-style-type: none"> • Harder to do than paint • Uses energy for heating powder (paint doesn't)

Uses: Cars, wheel arches, sports equipment

Oil coating:

<i>Advantages</i>	<i>Disadvantages</i>
<ul style="list-style-type: none"> • Replaces oils in wood lost as the timber dries out • Hard wearing • Protective finish 	<ul style="list-style-type: none"> • Multiple layers needed to be applied • Time consuming • Labour intensive

Uses: Teak oil used on woods to give better protection

Galvanisation:

Item dipped into molten zinc and allowed to cool

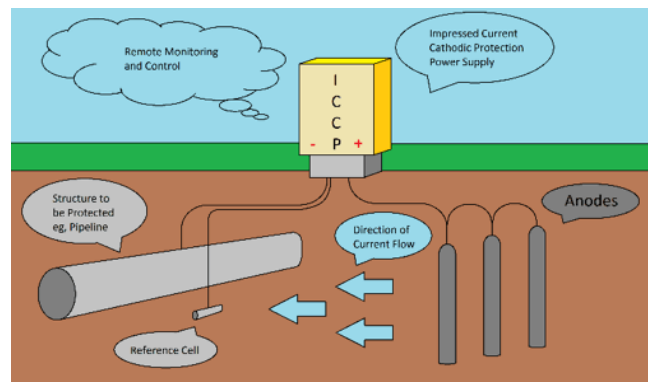
<i>Advantages</i>	<i>Disadvantages</i>
<ul style="list-style-type: none"> • Prevents rusting • Easy to do 	<ul style="list-style-type: none"> • Layer is chipped away over time

- Fast process

Uses: Bridges, pipes, metal brackets

Cathodic protection:

1. Hi
2. Hi
3. Hi
4. Hi
5. Hi
6. Hi



Advantages	Disadvantages
<ul style="list-style-type: none"> • Prevents metals corroding • Greatly increases lifespan of metal • Cost efficient to run 	<ul style="list-style-type: none"> • Hard to install • Complex to upkeep • Uses energy constantly • Expensive to install

Uses: Pipelines, ships, cars

Paper and board finishing process:

Laminating:

Coating the paper with liquid/film to protect it

Advantages	Disadvantages
<ul style="list-style-type: none"> • Gives glass/aesthetics • Rigid/strength • Low cost • Hard to rip 	<ul style="list-style-type: none"> • Paper hard to access/write on

Uses: Posters, pictures, song music

Varnishing:

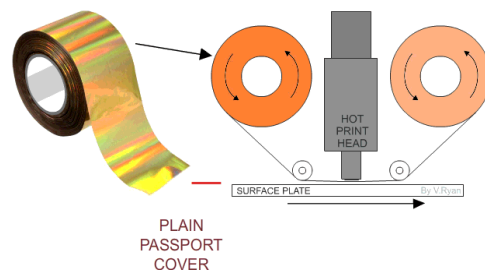
Clear, non-pigmented ink used on pre-coated papers

<i>Advantages</i>	<i>Disadvantages</i>
<ul style="list-style-type: none">• Enhances the colour• Protects against dirt/fingerprints	<ul style="list-style-type: none">• Long dry time (2 hours)• Slows down overall completion time• Sticks to other surfaces/pages if not fully dried

Uses: Brochures, magazines,

Hot foil blocking:

1. Hi
2. Hi
3. Hi
4. Hi
5. Hi
6. Hi

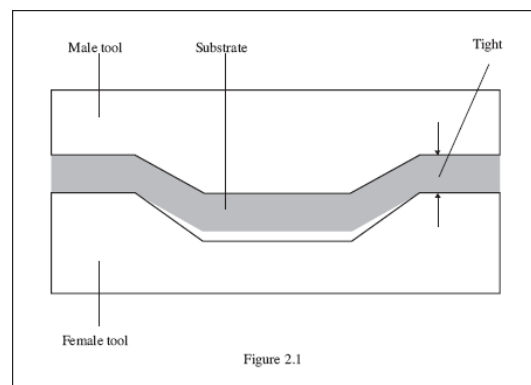


<i>Advantages</i>	<i>Disadvantages</i>
<ul style="list-style-type: none">• Enhance/add value to paper• Aesthetics• Range of colours	<ul style="list-style-type: none">• Difficulties in reproducing tints and halftones

Uses: Passport, gold foil decorations, wedding invite cards

Embossing:

1. Raised design on the surface of the paper/card
2. Hi
3. Hi
4. Hi
5. Hi
6. Hi



<i>Advantages</i>	<i>Disadvantages</i>
<ul style="list-style-type: none"> • High quality finish • Sophisticated appearance 	<ul style="list-style-type: none"> • Very expensive

Uses: Toblerone card packaging, birthday cards