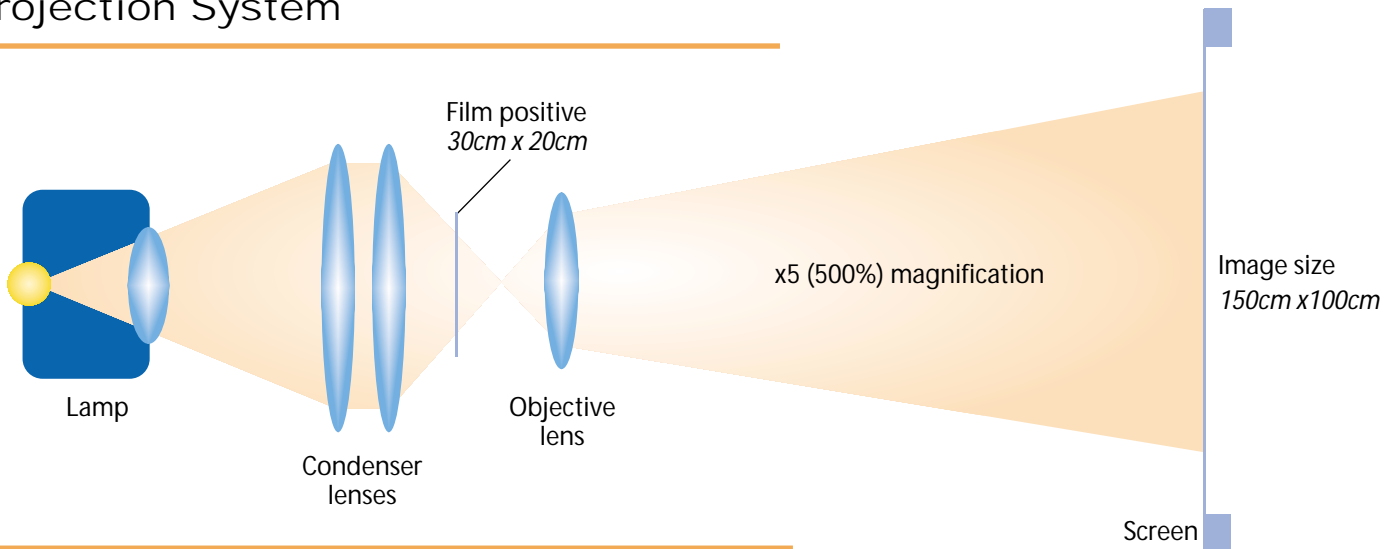


What is Direct Projection?

Direct projection is a system designed to expose screens using a projection camera to project a small original positive onto an emulsion coated screen using ultra violet light.

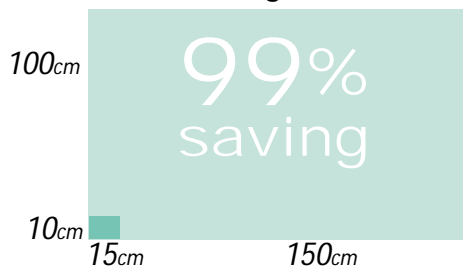
Basic Components of a Direct Projection System



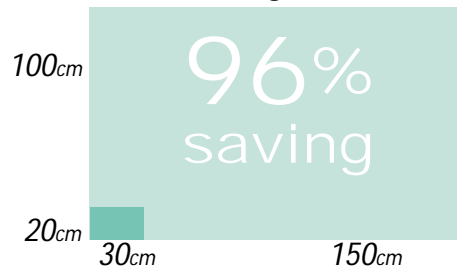
Why use Direct Projection?

Silver Film Savings

at x10 magnification



at x5 magnification



Production Time Savings

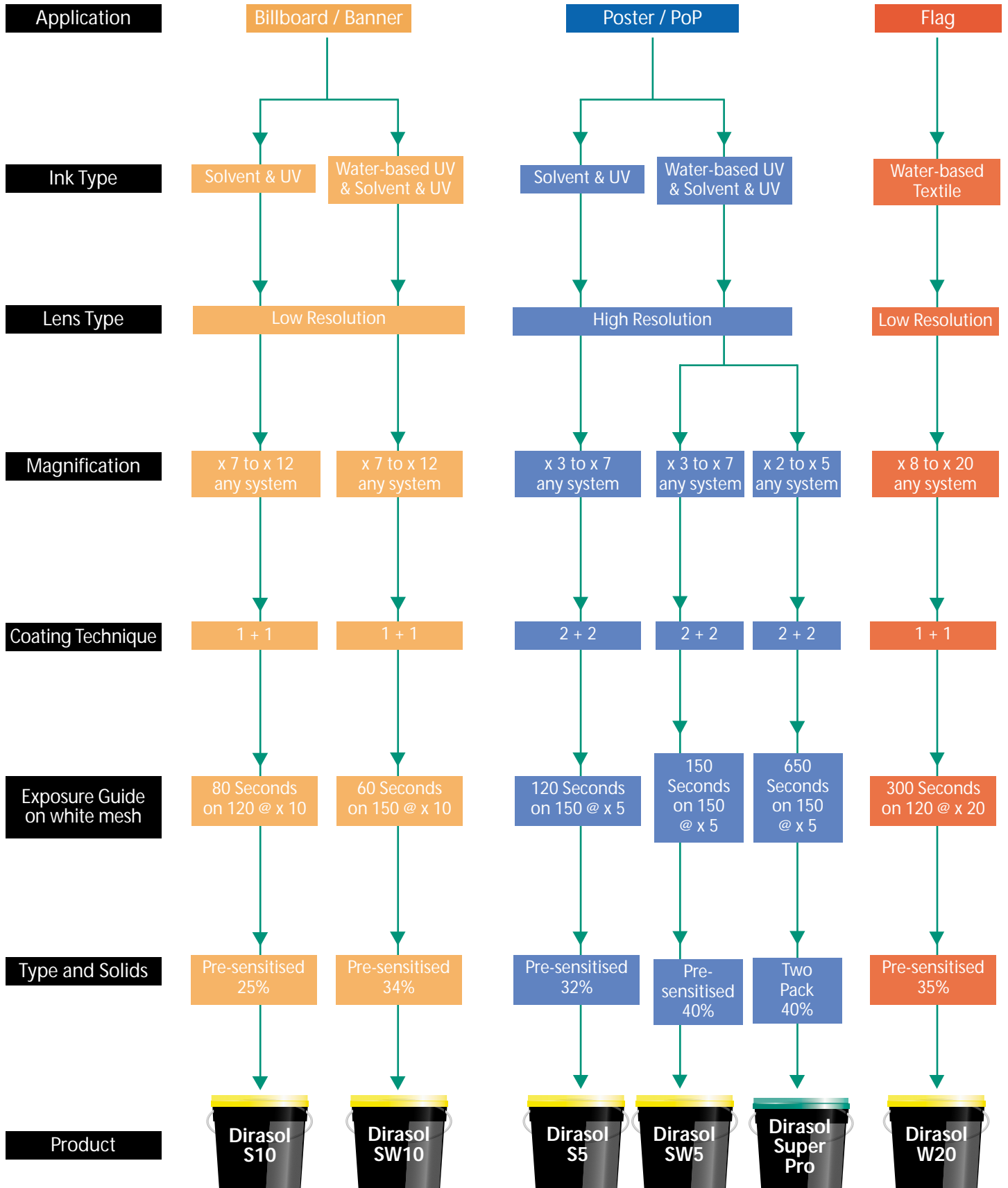
	Contact Exposure	Direct Projection
Position Positive on Screen	1min	—
Apply Vacuum	2min	—
Exposure Time	5min	1 - 2 min
Total	8min	1 - 2 min

In Line Processing



Emulsion Selector for Direct Projection

Note: Exposure times are an average based on exposure for different manufacturer's equipment.



Hints and tips for best results

- **Frames** Large format frames must be constructed from the correct section to maintain tension without deforming.
- **Mesh** White mesh gives better and faster emulsion throughcure especially at higher magnifications.
With solvent-based inks use 120.34 white plain weave.
Water-based UV and UV inks use 150.34 white plain weave.
Tension = minimum 18 N/cm.
- **Mesh Preparation** New mesh requires a diazo wash to optimise emulsion adhesion.
(see Dirasol Direct Projection Product Information Sheet for further information).
Degrease all mesh with Seriprep 102 or 300 to improve coating properties and stencil durability.
- **Coating** For consistant results use an automatic coating machine at up to 250 cm/min.
1+0 or 1+1 for high magnifications and a build of approximately 1 micron.
1+2 or 2+2 for lower magnification and a build of 2 - 4 microns.
- **Emulsion Drying** To maintain emulsion build, dry horizontally with the squeegee side up.
Maximum temperature of 35°C.
Ventillate drying area to avoid high humidity.
- **Positives** Should be high clarity and good density.
Screen ruling of 230 - 300 lpi.
Right reading emulsion side up.
- **Projection optics** Low resolution/fast exposure lens. High resolution/slower exposure lens.
For approximately 10 times magnification. For approximately 5 times magnification.
- **Correct exposure** Calculate with step-and-repeat exposures using appropriate tonal range or 50% square dot value.
Exposure times will vary according to the type of projector.
- **Post exposure** Improves durability to water-based UV inks.