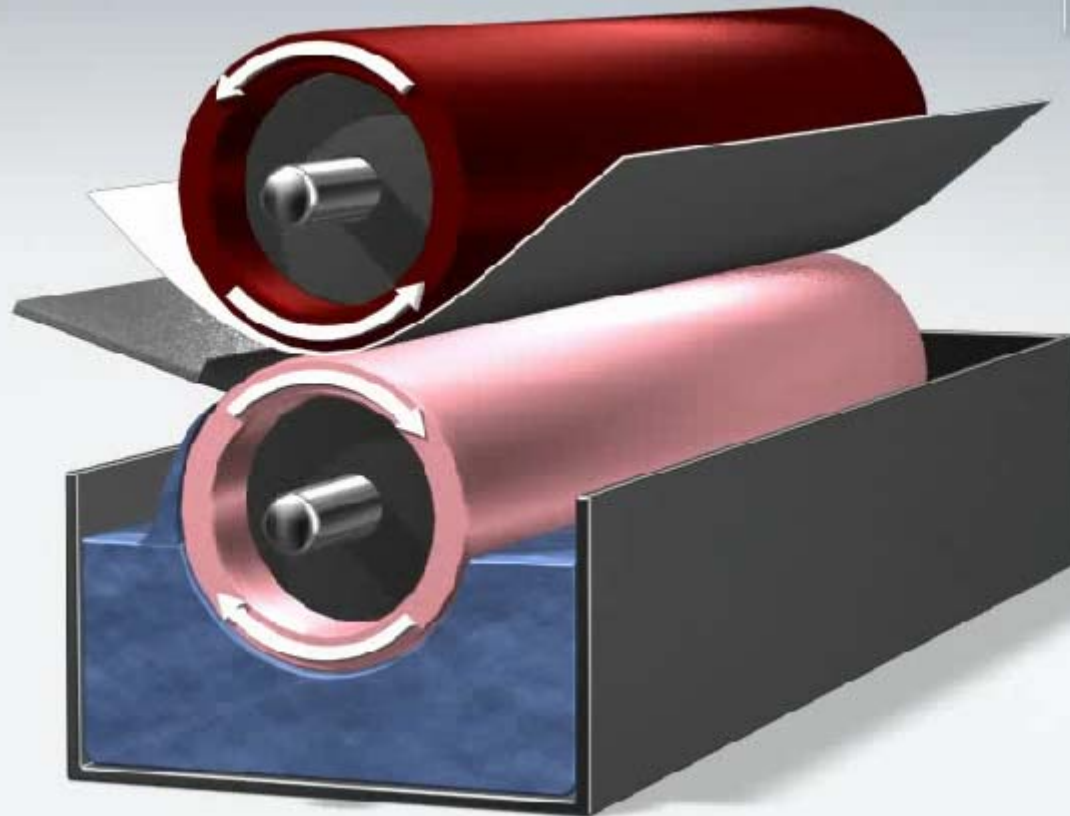


Gravure Printing

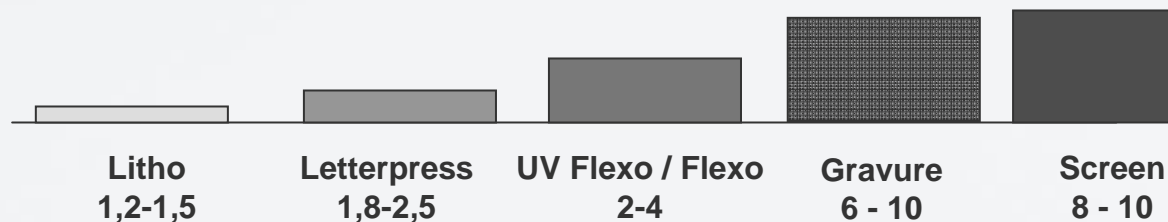


Gravure principle



Gravure printing

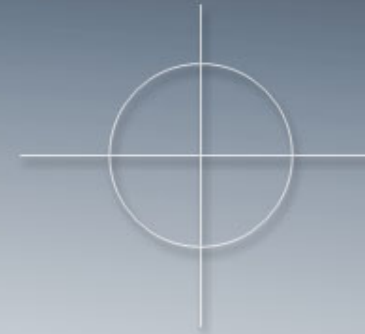
- Print methods to choose from
 - Flexo
 - UV flexo
 - UV Letterpress
 - UV Offset
 - Rotary (& flatbed) screen
 - Gravure
- Film weight / ink deposit depend on print method



Gravure

Advantages for Narrow Web

- Cost effective for longer runs, with long repeats.
- Possibility to replace UV screen backing whites
- Increased production speeds, particularly where UV screen is currently used (Often limiting factor for speed of run)
- Possibility to print special effect products (metallics)

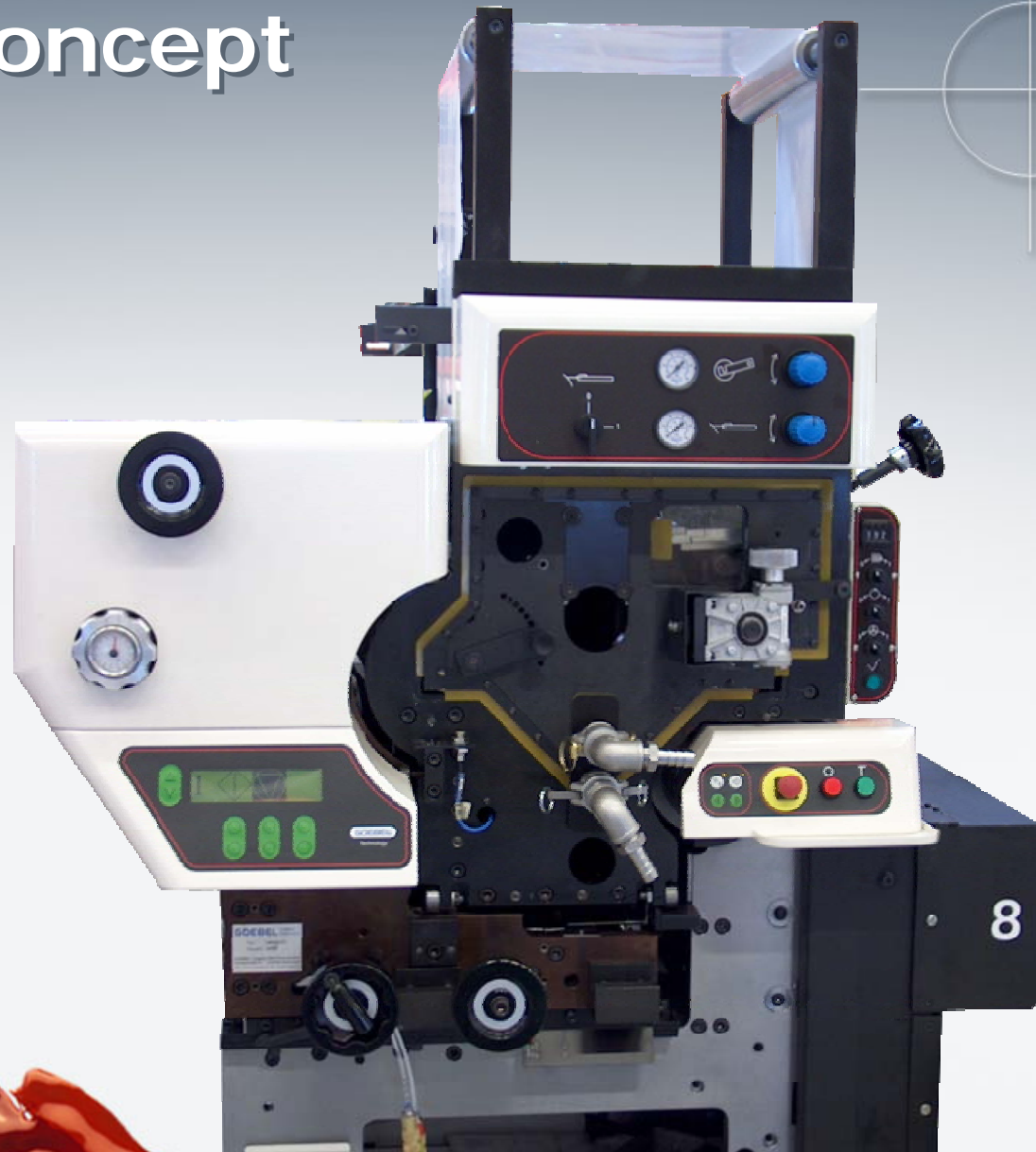


Gravure is needed

- For high brilliance metallics
 - Only way to utilise "foil look a like" pigments for reverse print to rival Hot & Cold Foiling
- Standard metallic pigments better in gravure
 - Gravure film weight and solvent based technology gives metallic inks the best chance
- Heavy coat weight can be applied with good text resolution
 - For Opaque White inks Gravure still offers the best opportunity to have full density & opacity with decent text sharpness.
 - Film weights possible to apply varnish, laminating adhesives



Nilpeter concept



Comparison in Combination Printing

vs UV rotary Screen 13% mesh 40m/min



Properties	WB Flexo	UV Flexo std	UV Flexo special	SB Gravure (theoretical)
Printability (pinholes)	Slightly worse	Slightly worse	Equal	Better
Text / lines	Worse	Equal > 6p	Equal > 6p	Equal
Opacity	75%	80%	Equal	Worse
Whiteness	Equal	Equal	Equal	Equal
Curing	Equal	Equal	Better	Better
Adhesion	Worse	Equal	Equal	Better
Easy to overprint with UV Flexo	Worse	Equal	Better	Worse



Gravure

Product range

- Rotokett S
 - Solvent based Gravure ink for Narrow web
- Metalglow G
 - Solvent based metallic inks.
- Metalglow ML G
 - ultrametallic gravure ink (SB)
("replacement" for hot foil)

