

Gravure: The Process of Choice

Inks

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Impact of Gravure on Inks... and vice versa

- The gravure process allows ink options
-These ink options enable certain gravure capabilities



Volatiles

- Organic solvents
- Water
- Radiation cured – not common



Ink Capability

- Higher wet ink volume than flexo or offset
- Allows solvents incompatible with flexography
- Allows faster drying solvents at lower temperatures



Ink Capability

- Higher wet ink volume than flexo or offset
 - Higher densities especially vs. flexo
 - Specialty inks
 - Glow in the dark
 - Longer, stronger fluorescents
 - Certain metallics
 - Other large particle materials



Ink Capability

- Allows solvents incompatible with flexography
 - Can run non-alcohol solvents
 - Resins systems not possible with flexo
 - High performance polymers
 - Retort
 - Special primers
 - Alcohol resistant inks
 - Clean up options



Ink Capability

- Allows faster drying solvents at lower temperatures
 - Larger amounts of faster evaporating solvents
 - Temperature sensitive substrates
 - High shrink applications



Cost Efficiency

- Lower pigment content ink, higher volatiles
- Lower price per pound, less mileage
- Net impact – “it depends”



Sustainability

- Higher volatile content
 - Some volatiles are not water miscible, can be recovered
 - Other are incinerated with energy recycled to dryers
 - Can run water or solvent
- Common solvent binder is nitrocellulose
 - Based on wood pulp or cotton
- Similar to flexography

