

Direct Laser Engraving

New Horizons For Dry Offset Printing

International Metal Decorator's Association Annual Conference

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19-20 May 2005



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New Horizons For Dry Offset Printing

- Review the Dry Offset Process
- Consumer Products Companies
- Direct Laser Engraving
- Renaissance Technology
- Looking Forward

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New Horizons For Dry Offset Printing

Dry Offset Printing

- Process / Advantages & Disadvantages
- Equipment / Configurations / Limitations
- End Uses
- Metal Deco / Plastic Containers

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Dry Offset Printing

- Typical Quality Expectations
- Beverage Containers
- Plastic Containers

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Typical Quality Expectations

- Nature of Prepress
- Screen Rulings
- Process Limitations
- Opportunities

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Consumer Products Companies

- Brand Equity
- Shelf Presence
- Graphic Consistency
- Future Direction

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Conventional Prepress Workflow

- Digital Prepress Systems
- Proofing
- Analog Platemaking

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Laser Engraving – What Is It?

- It is the removal of pre-polymerised material by means of one or more lasers controlled by a graphic image in order to produce a Dry Offset Plate.

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ALE Meridian System



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The Direct Laser Engraving Process

- Digital Prepress Workflow
- Conventional Photopolymer Plates
- Pre-polymerized Plate / Magnetic Cylinder

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The Direct Laser Engraving Process

- Digital Image Transfer - CTP
- Control of Image Geometry
- No Post Processing

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The Direct Laser Engraving Process

Fundamental Benefits

- No films or black masks needed.
- No plate processing
- Fast CTP (Computer To Press).
- Extensive choice of material available.

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Renaissance Engraving

- Variable height dots
- Variable rheology, surface energy and impression Dry Offset printing forms
- Variable surface area
- Variable surface energy

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Looking Forward

- CO₂ YAG hybrid technology
- Advanced material development
- Continued enhancement of Renaissance
- Brand equity for the CPC's

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Looking Forward

Development Partners Wanted!

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