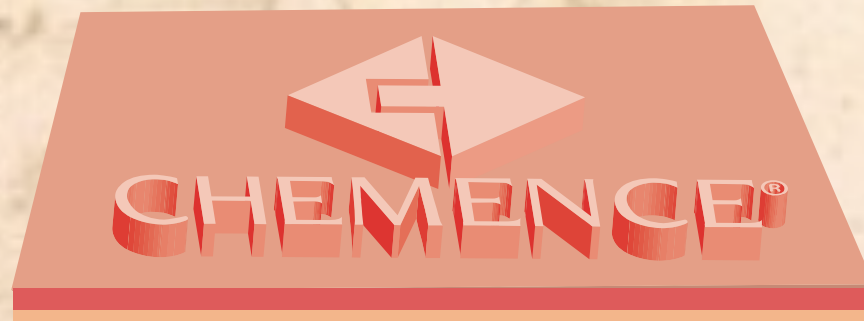


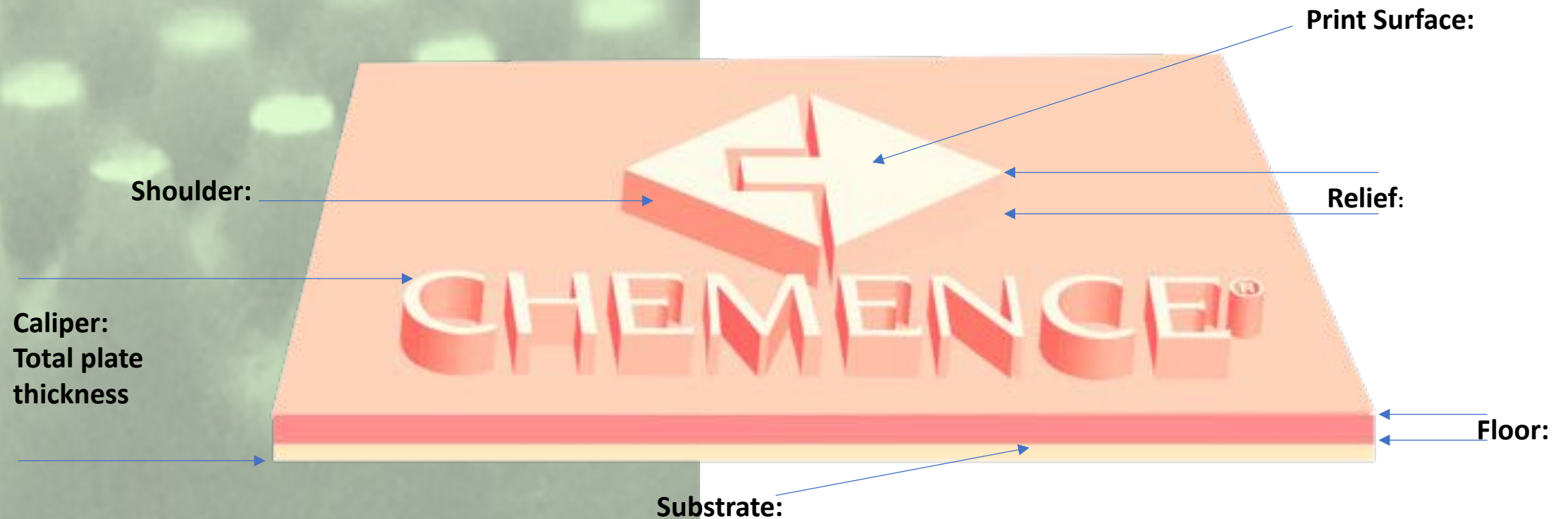
The Anatomy of Liquid Plate Technology...



Warning:

**This presentation is rated AP by the FPPA,
and requires audience participation.**

Flexographic Plate



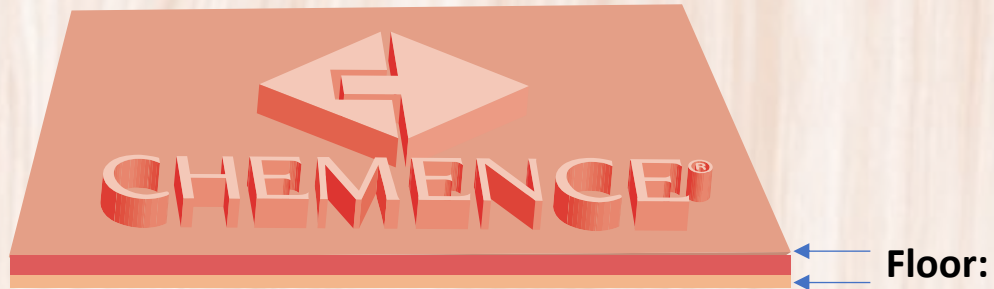
Caliper



- Controlled by shims.
- Multiple plate calipers can be achieved with one exposure system (.067, .070, .125, .250).
- Thicker caliper is better for corrugated printing applications. (.155, .250, .280).
- Thicker caliper is an optimum choice for multi-wall bag printing applications
- Thicker & Softer Durometer plates form to contours of textured surfaces (e.g. Craft, Corrugated substrates).



Floor



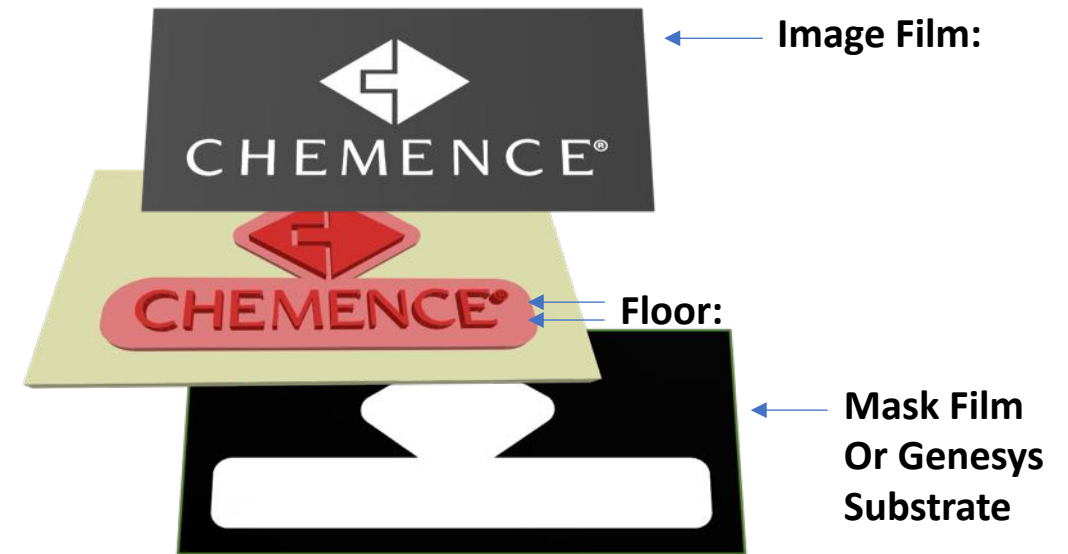
How important is it?

- Controlled by top exposure lamps
- Floor height is determined by target press and printing substrate conditions.
- Industry practice recommends floor specifications to be $1/2$ times the caliper height.
- Better image detail can be achieved by a thicker floor and less relief for certain applications.
- Wood graining is a special effect desired by most trade shops?
- What causes it?
- Does it affect performance?

Island Plates

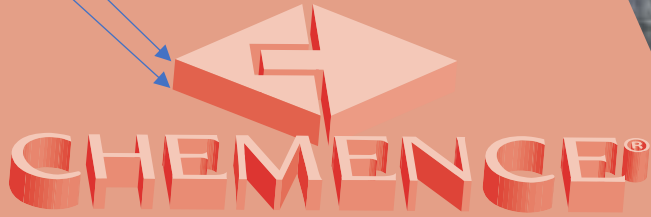


- Recovers 60%+ more resin than solid plate processing.
- Average island plate weighs 50% less than solid plates.
- More manageable for mounting & cutting tables.
- Cost more than solid sheet plate solutions



Relief

Relief:



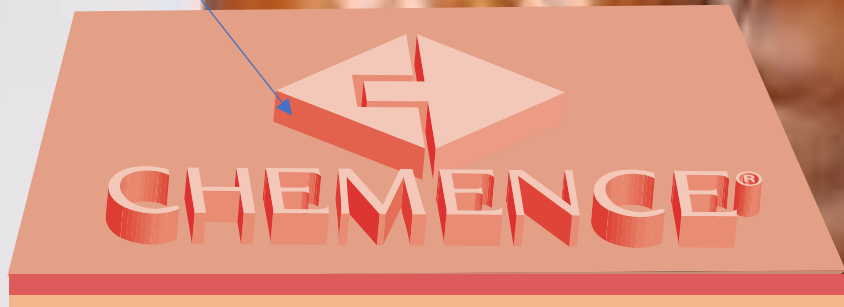
What's Important?

- Proper balance with target printing conditions in mind.
- Controlled by post exposure times
- Too much relief results in a weak structure and promotes unstable printing conditions.
- Too little relief can cause the floor to come in contact with the anilox or printing substrate.

Shoulder



Shoulder:



- Proper shoulder structure is important to provide support for optimized printing conditions.
- Too much shoulder can cause image growth and reverse depth loss.
- Undercutting is a desired plate condition
- Too little shoulder can cause undercut, and result in uneven printing surface conditions.

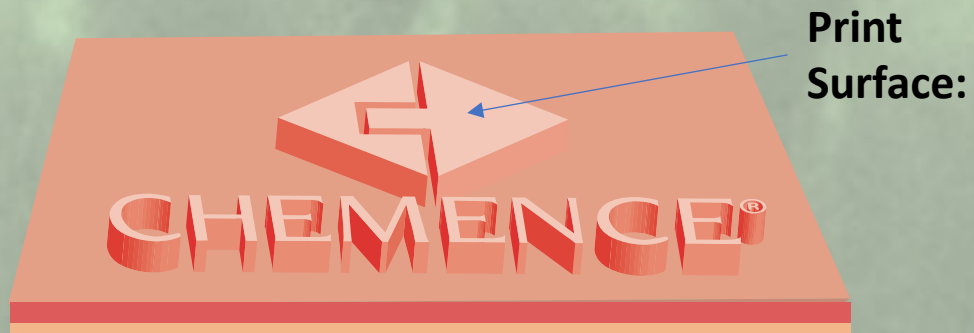


T-2 Proper Exposure



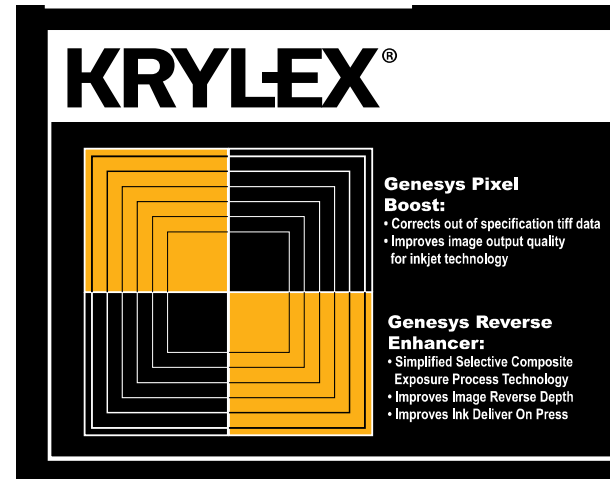
T-2 Over Exposure

Print Surface



What's Important?

- Proper Surface Tension.
- Material Absorption & Ink Saturation Limits (Accentuated by ink, and photopolymer choice).
- Plate tack is a desired print surface condition
- What technologies can help?

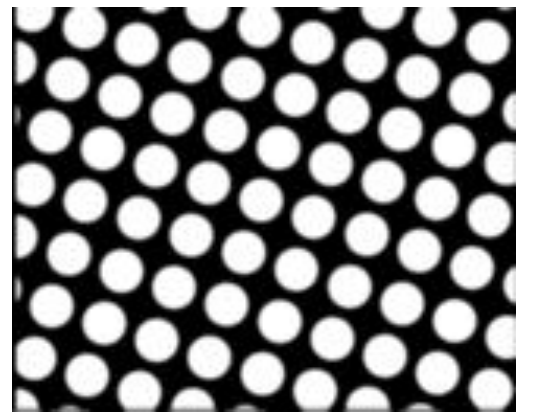
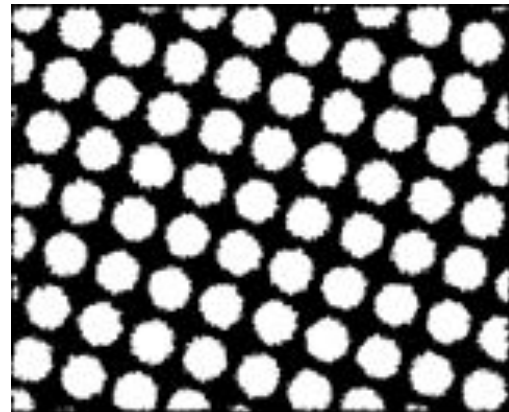


Cover Film



What does it do?

- Protects Image Film.
- Provides Vacuum Support.
- Contributes to print surface conditions (Matte/Non-Matte).
- Blocks 100% UV light transmission
- Corrects minor imperfections.



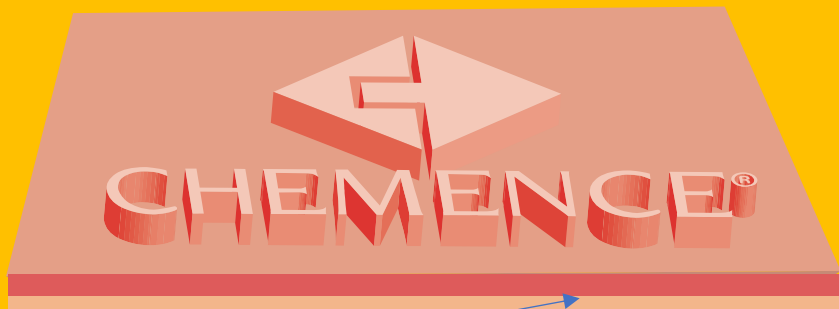
Substrate

What's Important?

- Tie Coat
- Dimensional Stability
- Flexibility/Carriage Performance
- Upper Vacuum Compatibility

Are There Options?

- Standard Substrates
- Self-Adhesive Substrates
- Genesys Auto-Mask/Composite Layer Technology (KwikMount)

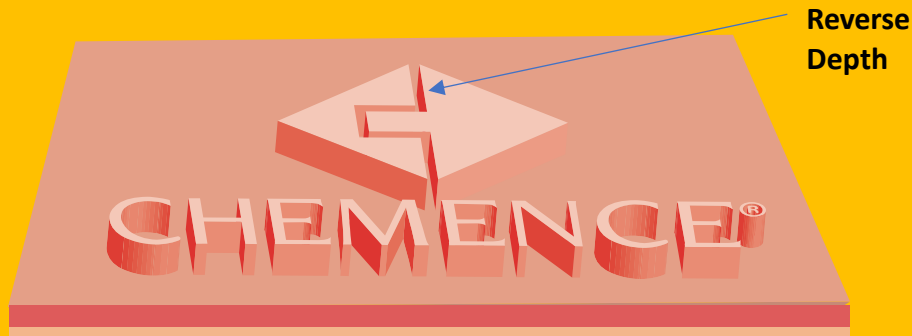
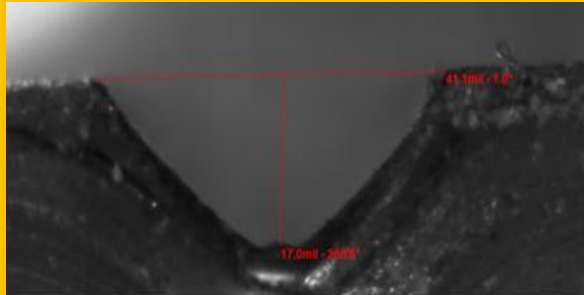


Substrate:



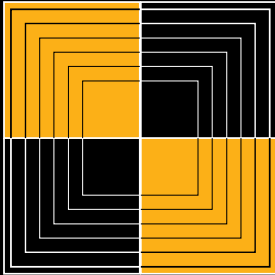
KwikMount®

Reverse Depth



- T-2 Exposure times control reverse depth.
- Affected by light scatter & refraction.
- Germicidal lamps reduce light refraction
- Reverse depth can be managed by the introduction of filter technologies.

KRYLEX®




Genesys Pixel Boost:

- Corrects out of specification tiff data
- Improves image output quality for inkjet technology

Genesys Reverse Enhancer:

- Simplified Selective Composite Exposure Process Technology
- Improves Image Reverse Depth
- Improves Ink Deliver On Press

After:
Krylex
Genesys
Pixel Boost
& Reverse
Enhancer
Technology



CHEMENCE
The Chemistry of Excellence

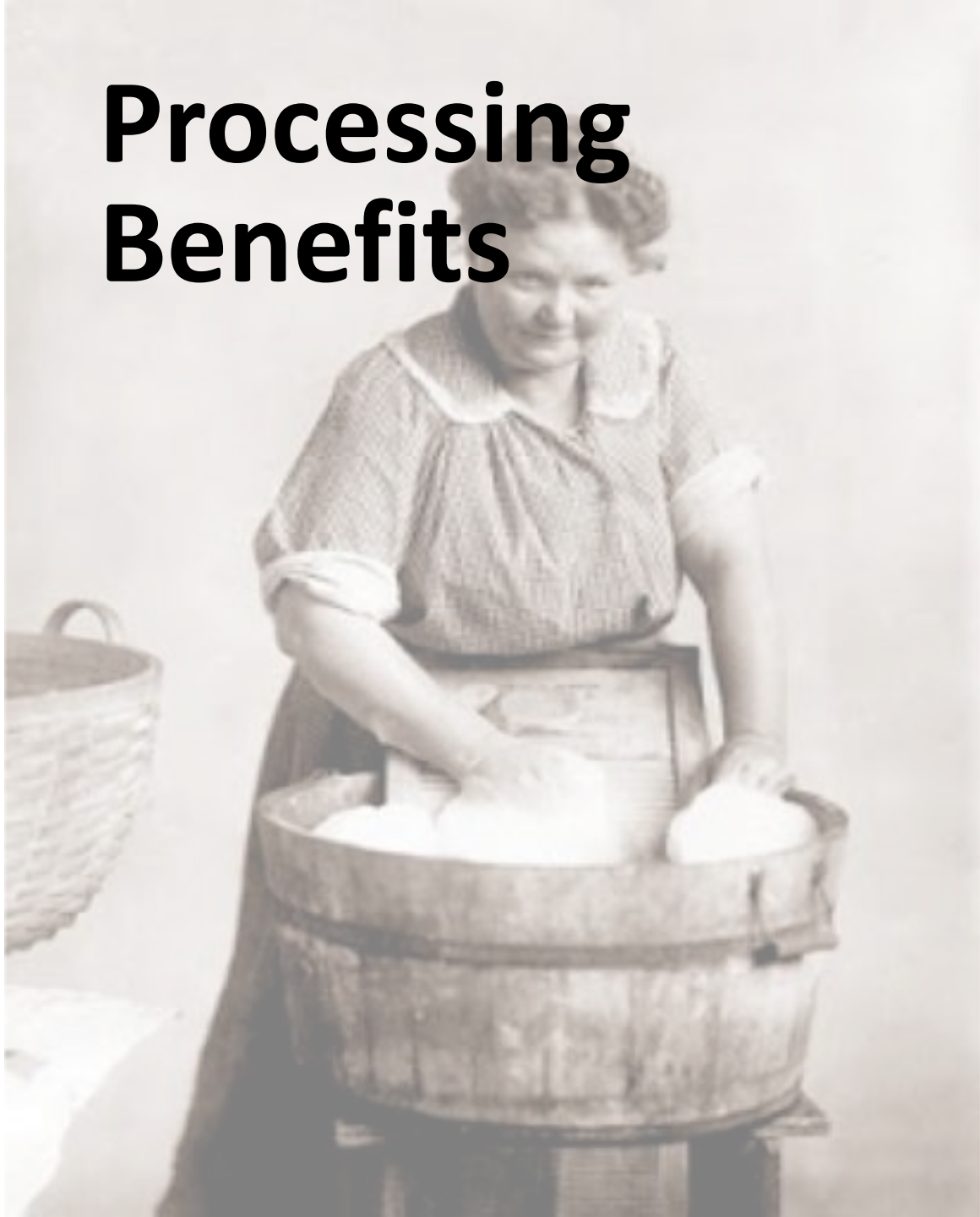
Dot Structure



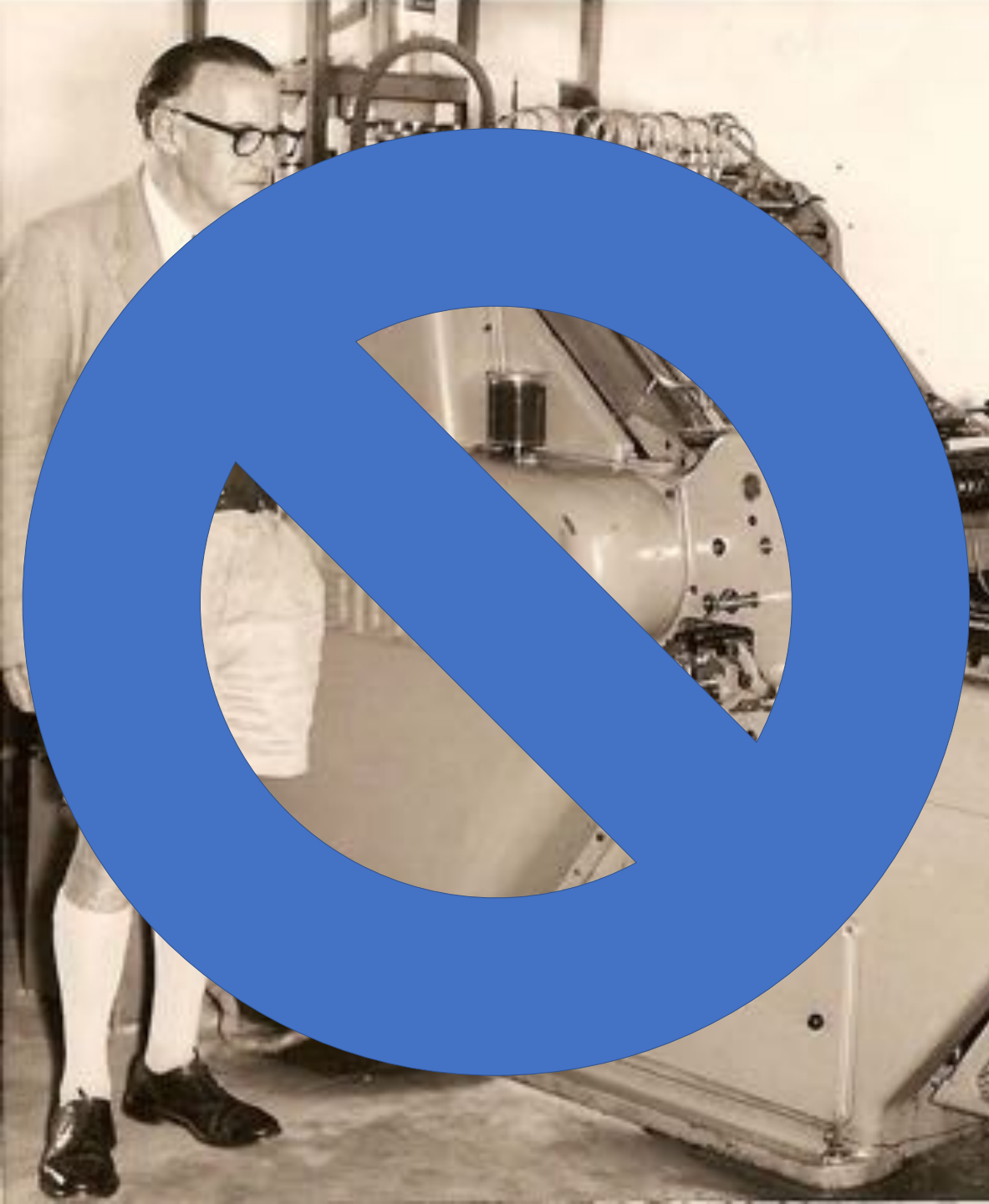
“The Original Flat Top Dot”

- Requires No Special Lamination Processing.
- Delivers Flat Top Press Performance and Ink Distribution.
- Dot structure is controlled by T1 floor exposure times
- Ideal for Genesys Ink Metering Technology.

Processing Benefits



- 40 min processing (non-germicidal).
- Renders more plates per shift.
- Reclaim Uncured Resin.
- Aqueous Processing Environment.
- Little to No VOC's.
- Compatible with most laundry detergents
- Lighter Weight (Island Plates).
- Easier Mounting and Handling.
- No Expensive Brushes (Reduced Maintenance Cost).



Printing Benefits

- Lighter Weight “I” Plate Technology (Improves performance on press).
- Capping Technology (Combines better image quality, and softer plate durometer benefits).
- Improves Ink Delivery.
- Flat Top Dot for optimum imaging results.

Financial Benefits



- Reclaim \$\$\$
- Shorter Processing Times \$\$\$
- Less Manufacturing Cost \$\$\$
- Little to No VOC Concerns Reduces Insurance Liability \$\$\$
- Reduced Inventory Requirements (Achieve multiple caliber plates on a single device)\$\$\$
- Island Plates Reduce Shipping Costs \$\$\$
- Reduces The National Debt \$\$\$

Customization Benefits



- Plate Caliper Control (Single Device)
- Plate Capping
- True Island / Plate Branding
- Ink Metering Support
- Multiple Substrate Support
- Streamlined Automation (Genesys)
- Custom Product Development
(Quick To Market)

Sustainability...



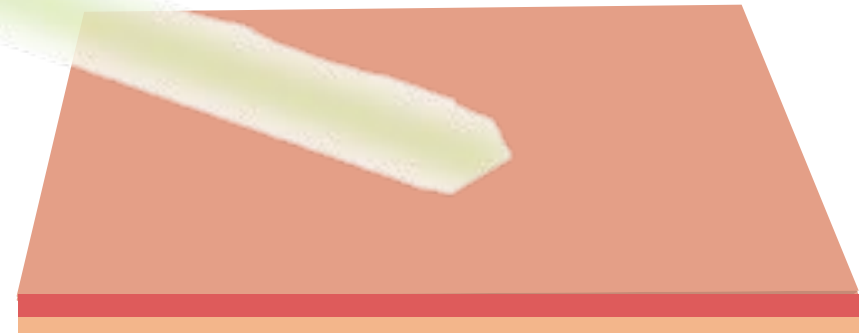
- Safer Than Solvent Based Processing
- Less Environmental Impact
- Little to No VOC's
- Reuse Uncured Resin (Reclaim)
- Water Washout (Eco Friendly)
- Can be used as fertilizer for farming applications

What's The Future Of Liquid?



Filmless Resin Curing

- 3D?
- LED Micro-Cell Projection?
- Artificial Intelligence?
- Thermal Resin?



We're leading the technology charge...



CHEMENCE®

The Chemistry of Excellence



Thank You! 😊

KRYLEX®
PRINTING SOLUTIONS