

PRIME UV-IR SYSTEMS, Inc.
NPES ICC Color Management
Conference

Why add UV Printing
to your production
process?

SPEAKER: ERICH MIDLIK

THE CASE FOR UV

- Increase production speeds.
 - Faster turn-around. Print & ship same day.
 - Improve print quality.
 - Eliminate tracking, offsetting
 - Better color reproduction. Sharper dot structure.
 - Color consistency throughout print run.
 - Environmentally safe – ZERO VOC's.
 - Increased ink mileage vs. coldset & heatset.
 - Expand product range – attract new customers.
 - All substrate types: newsprint, coated, foil, film...limited by press not the ink.
 - Maximize your ROI.
- 

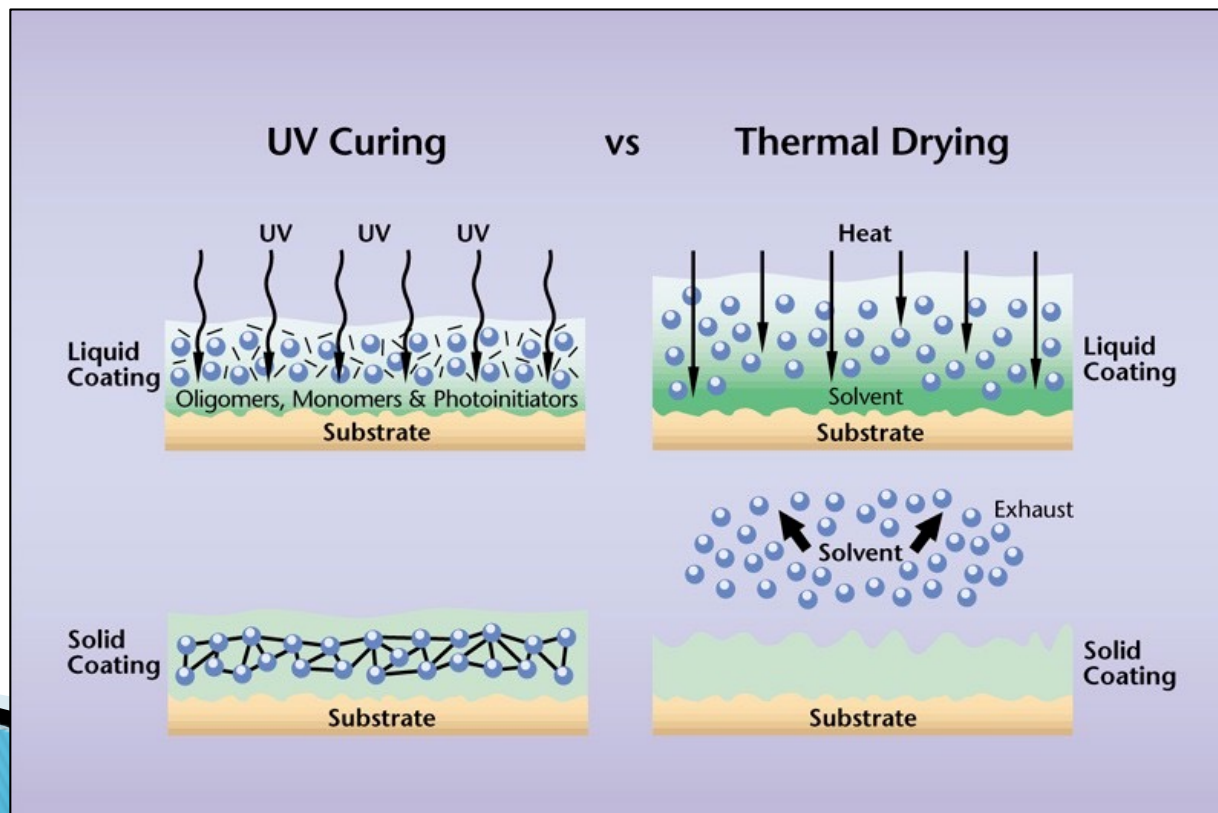
UV ENERGY

UV Curing: Highly focused ultra violet energy is used to cure UV inks / UV coatings / UV adhesives.

Conventional inks and coatings:

Release solvent or water vapor during drying process.

UV inks & UV coatings are 100% solids – release nothing.

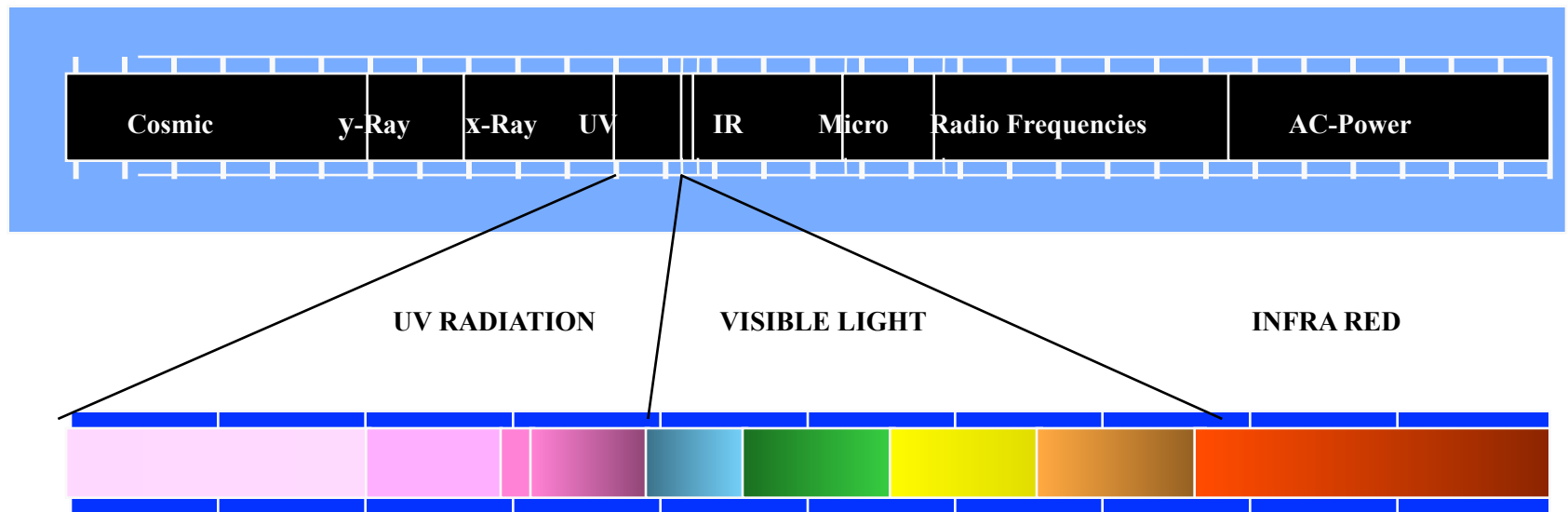


MAIN COMPONENT– UV LAMP

UV Lamp Energy:

$\frac{1}{3}$ UV + $\frac{1}{3}$ IR + $\frac{1}{3}$ Light

Electromagnetic Spectrum



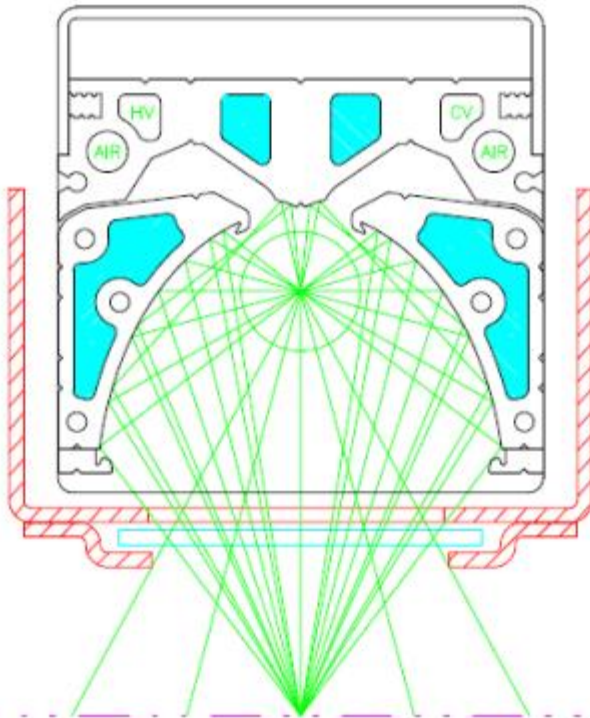
UV PROCESSORS – Cooling Methods – Remove IR Heat

Two common cooling methods to manage and remove heat:

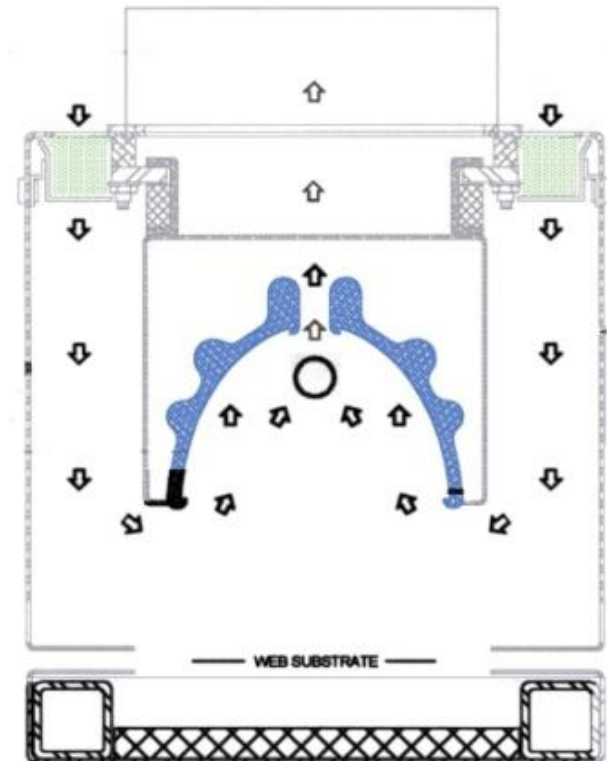
Air-cooled – Primarily for High Speed Web Presses.

Water-cooled – Primarily for High Speed Sheetfed Presses.

Prime FLEXMAX UV



Prime OPTIMUM UV



TODAY'S WORLD

COMMUNICATION FORMATS & STRUCTURES RAPIDLY EVOLVING

**READERS, ADVERTISERS & PRODUCT MANAGERS
EXPECTATIONS RISING**

- **MORE COLOR**
- **IMPROVED QUALITY**
- **FASTER DELIVERY**
- **GREATER SUBSTRATE OPTIONS**

**ADVERTISERS & READERS PROVIDED MANY MEDIA
FORMAT OPTIONS**

- **CREATIVE WAYS TO EARN THEIR BUSINESS**
 - **OFFER UNIQUE OPPORTUNITIES/SOLUTIONS**
- 

ROGER HOLMES CHOOSE A FAR LESS TRAVELED ROAD 8 YEARS AGO!



VISION – ROGER UNLOCKED THE TRUE POTENTIAL OF HIS PRESSES – A BELIEVER

ADDING UV ENABLED ROGER TO PROVIDE

- **NO OFFSETTING**
- **NO TRACKING**
- **HIGHER LINE SCREEN – LESS DOT GAIN**
- **MORE VIBRANT COLORS**

A BETTER QUALITY PRODUCT OVER HIS COMPETITION

AN EXPANDED PRODUCT LINE

- **NEWSPRINT**
 - **SUPERCALENDERED & MATT STOCKS**
 - **COATED STOCKS**
- 

مكتبة الرضا الثقافية لدراسة الأطفال بدمشق

بيتي الجميلة

رأسها - راسها - رأسها - رأسها

الطبعة الأولى
2007/2008
الطبعة الثانية

المعاصر
Aimara

١٠٥٨ : ١٠٥٩

www.ck12.com

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عكاظ

NAKO

صوت الحاضر والمستقبل

طبعة المشرقية

دهانات الخليج
GULF PAINTS

لترين من المعلومات عن خدماتنا يرجى الاتصال على

٩٢٠٠٠٠١١٢
٩٢٠٠٠٠١١٢





المصدر: ربيعة العامر، 1395هـ الموافق 21 أبريل 2014م، مجلة الجامعة والابتكار، العدد 13347.

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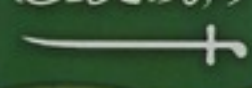
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Saudi Gazette

• An Okaz publication saudigazette.com.sa SR 2



الإمام محمد رسول الله



مع الأخضر الى بكين

2
دوال

اليوم

48
صفحة

Ziebart



الوهابيون في المملكة تظلّل بالكمبيوتر

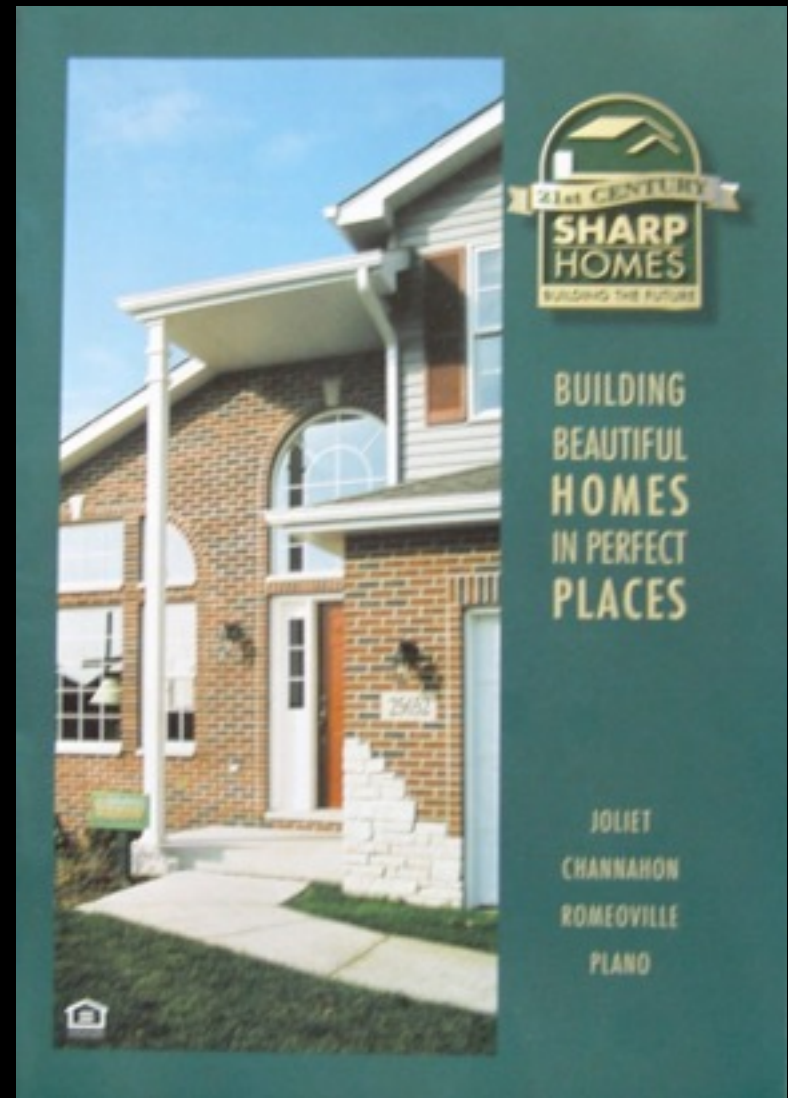
يتم القص بدقة متناهية ويكون الشعر كتيب يهبط 3 فانسة
مضطبا مظهرها وانها اسوار تلك فتبدو وكأنها مقلدة من المصنع



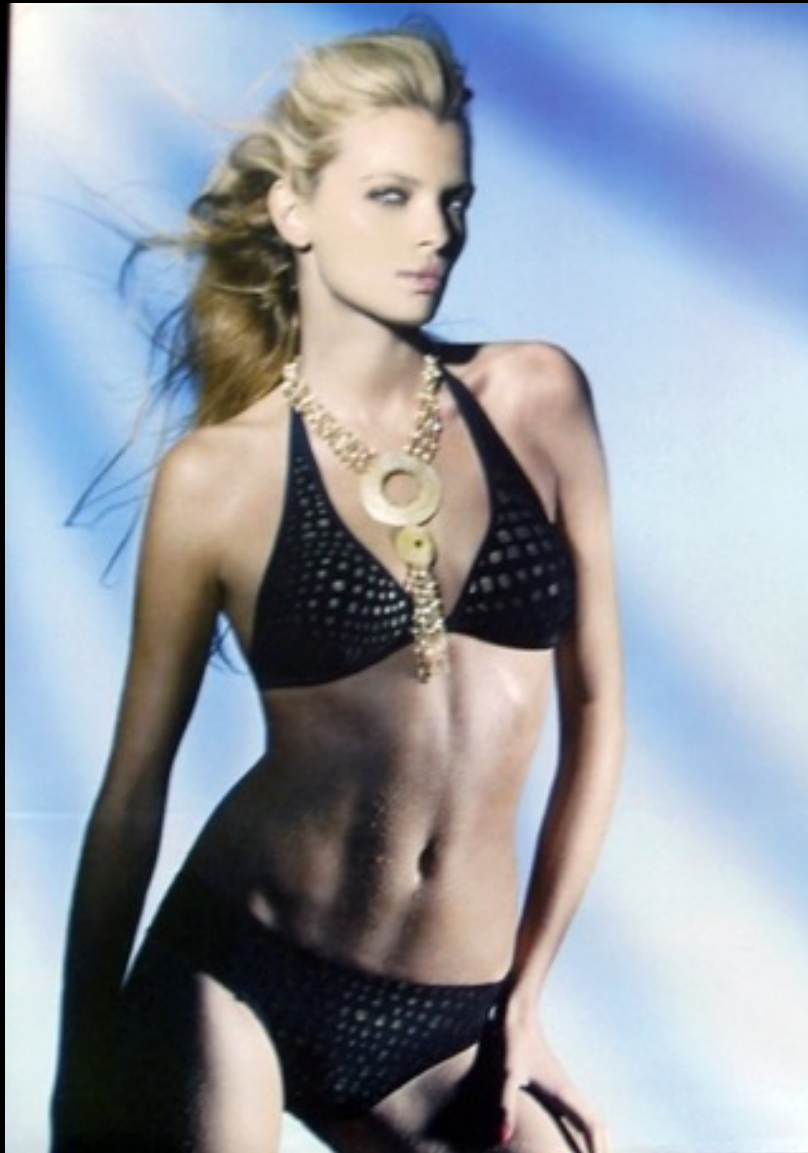
WEEKLY SUPPLEMENT MATT STOCK



SPECIAL ADDITION LIGHT WEIGHT COATED



HIGH END ADVERTISEMENT HEAVY WEIGHT COATED



BI-MONTHLY CATALOGUE LIGHT WEIGHT COATED

September/October 2006 West Edition

The VALUE[®]
CATALOGUE
Great Savings for You and Your Home

For advertising information please call 1-866-717-0655

STORE MANAGER'S **FINAL WEEK!**
BLOWOUT SALE
ALL DISCONTINUED AND FLOOR MODELS REDUCED
**TO SLIGHTLY ABOVE, AT OR
EVEN BELOW OUR COST**



Rowing Machine
Now \$799



Elliptical
Now \$699



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Now \$999

PLUS TAKE UP TO 1 YEAR TO PAY*

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FOR ALL THINGS FITNESS

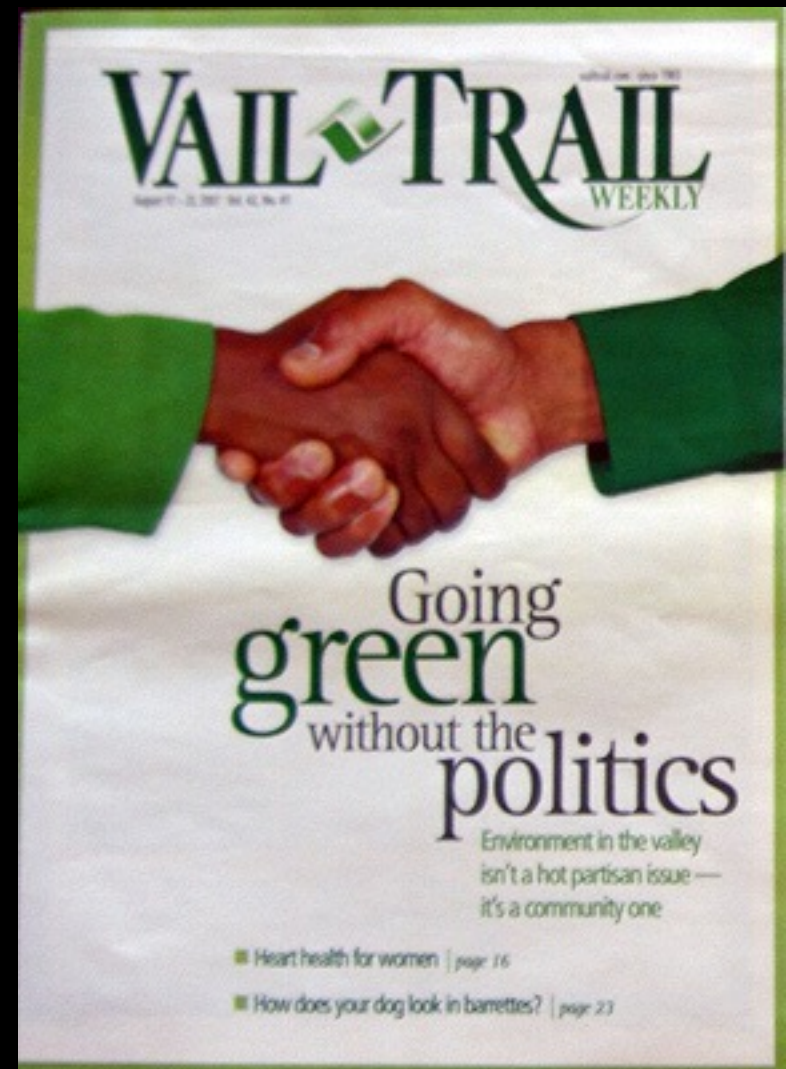
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**SPECIAL ADDITION
LIGHT WEIGHT COATED**



**WEEKLY SUPPLEMENT
LIGHT WEIGHT COATED**



HIGH END MARKETING PIECE LIGHT WEIGHT COATED



STAR PRESS with PRIME UV ACCOMPLISHMENTS:

MAXIMIZED HIS RETURN ON HIS PRESS INVESTMENTS

INCREASED PRESS UTILIZATION.

CREATED HIGHER VALUE – HIGHER MARGIN BUSINESS.

REDUCED DEPENDENCE ON KEY ACCOUNTS.

IMPROVED PRINT QUALITY – 150 LINE SCREEN & HIGHER.

BECAME A MARKET LEADER – INNOVATIVE.

PROVIDING HIGHER QUALITY THAN HIS COMPETITION!

- **CONTRACT PRINTING - DOUBLED.**
 - **CIRCULATION & AD REVENUE: INCREASED.**
- 

Book Printers /Semi-Commercial / Commercial Markets

WHY PRINTERS REPLACING HEATSET DRYERS WITH UV

HEATSET PRINTING REQUIRES

- LARGE DRYING TUNNEL
- CHILL STANDS
- WEB CLAMPS
- SILICONE APPLICATORS
- ADDITIONAL TENSION & REGISTRATION CONTROLS
- AFTERBURNERS & VOC PERMITTING IN MANY COUNTRIES
- REGULATORY ENVIRONMENTAL COMPLIANCE SUBMISSION REQUIREMENTS
- HIGHER SKILLED THUS HIGHER PAID PRINTERS
- MUCH GREATER MAINTENANCE TIME & MONEY

Floor space s

HEATSET Oven



***In-Line Heatset Oven
With Incineration Equipment
on a Heidelberg / Harris
Commercial Offset Web Press***

HEATSET Oven

*Heatset Oven and Incinerator
Gear Side Press View*

11 3:37AM

HEATSET Requires Massive Support Structure



UV Requires Little Space – Easy to Retrofit



Book Printing / Semi-Commercial / Commercial Markets



**PRIME UV Curing System- Wet Trapping UV Inks
after the last print unit of a Harris M110 Commercial Web Press**

Book Printing / Semi-Commercial / Commercial Markets

**PRIME RADMAX UV
ON KBA COLORA
TRIPLE WIDE
85000 IPH**



COLORADO MOUNTAIN PRINTER REPLACED 2 HEATSET OVENS WITH 2 NEW PRIME UV CURING SYSTEMS.

WHY CONVERT TO UV:

- **TREMENDOUS SPACE SAVINGS – EASY TO RETROFIT.**
- **NO PERMITS & NO VOC'S.**
- **FAR FASTER LEARNING CURVE.**
- **LOWER PAPER WASTE & NO PAPER DISTORTION.**
- **REDUCED ENERGY COSTS.**
- **FAR LOWER MAINTENANCE COSTS.**
- **EASIER FOR THE PRESS OPERATORS.**

**GREEN TECHNOLOGY WHICH THE STATE & CUSTOMERS
PREFERRED!**





**Colorado Mountain News Media
MDGM 4-High Towers**

BOOK PRINTER BRADFORD & BIGELOW CHOOSES TO EXPAND WITH UV OVER HEATSET

JOHN GALLIGAN – PRESIDENT, BRADFORD & BIGELOW

**QUOTES FROM PRINTING IMPRESSIONS MAGAZINE AFTER THE ADDITION OF
2 PRIME UV SYSTEMS ON HIS TWO TIMSONS BOOK PRESSES.**

“For one, we’d be saving \$18,000 a month on natural gas expenses”

“Secondly, there’s no permitting issues and reporting required”

“UV also produces a better product”

**“You don’t need cumbersome chillers and heaters that torture the paper,
taking all the moisture out”**

**“The cost of the UV equipment is less than the cost of heatset packages
and chillers”**

“UV ink is more expensive, but the price is coming down”

“But UV produces a better product and the price of natural gas is going up”

**“Without chillers and dryers, we also save about 20 feet (of footprint) in the
pressroom”**





UV Curing Inline on An Offset Web Book Press

TIMSONS T48A ZMR BOOK PRESS

PRIME UV S21-550434-PP/AF

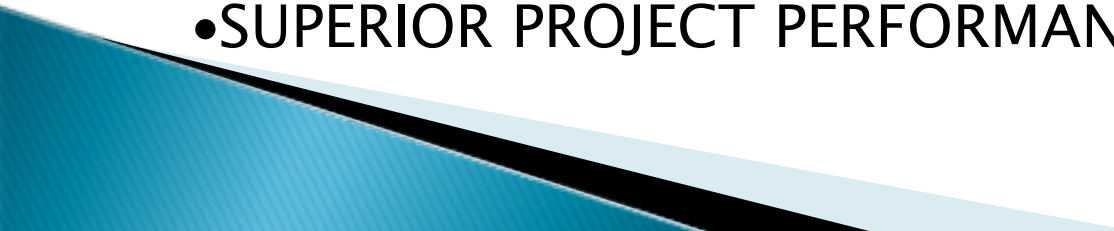
Curing UV inks at 1500 fpm

TIMSONS T48A ZMR BOOK PRESS



LABELS – YEARS AGO UV FLEXO BECAME THE PREFERRED METHOD OF HIGH QUALITY PRINTING FOR NARROW WEB PRESSES

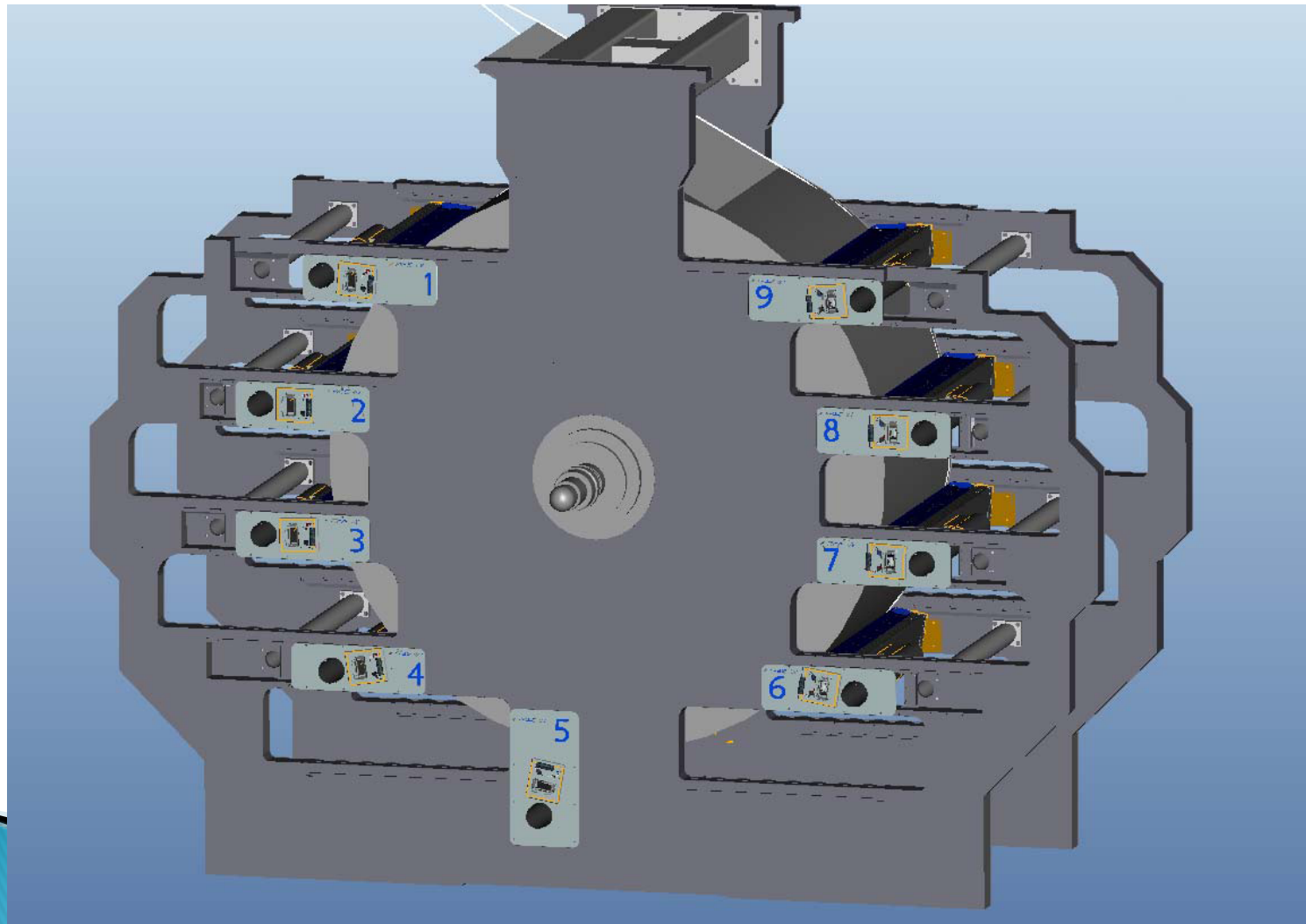
UV FLEXO PROVIDE SUCH BENEFITS AS

- PRINT ON A WIDE RANGE OF SUBSTRATES
 - FILMS–FOILS– LAMINATED STOCKS–THERMAL STOCKS
 - LESS DOT GAIN
 - DOT STRUCTURE REMAINS THE SAME
 - CONSISTENT COLOR FROM START TO FINISH
 - REDUCED ENERGY COST
 - SMALLER FOOTPRINT
 - FASTER MAKEREADY – REDUCED WASTE
 - SUPERIOR PROJECT PERFORMANCE
- 

UV FLEXO: Delivers Best Quality & High Production



Prime's FLEXMAX UV – Full CI UV Flexo Press & Inline UV coating–Flexible Films



UV for Sheetfed Printing

UV provides:

- **Broader product offering & higher product quality.**
- **Print on foil boards, acetates, plastics.**
- **Improved Product Durability & Chemical Resistance.**
- **No More Waiting for Stacks to Dry.**
- **Instant finishing, bindery, padding, scoring, folding, etc.**
- **Greatest visual dimension to printed images.**
 - **Images “Pop” off sheet.**
- **Variety of Product Enhancing UV Coatings.**
- **Wet-trap vs Dry-trap UV drying.**

Opens up:

- **New markets.**
- **New customers.**
- **Higher margin business.**

End result for you.

- **Higher ROI.**
 - **Happier & Larger Customer Base.**
- 

Ryobi 756 XL Sheetfed Offset Press Extended Delivery with Prime DIAMOND UV System with Inline UV COATER



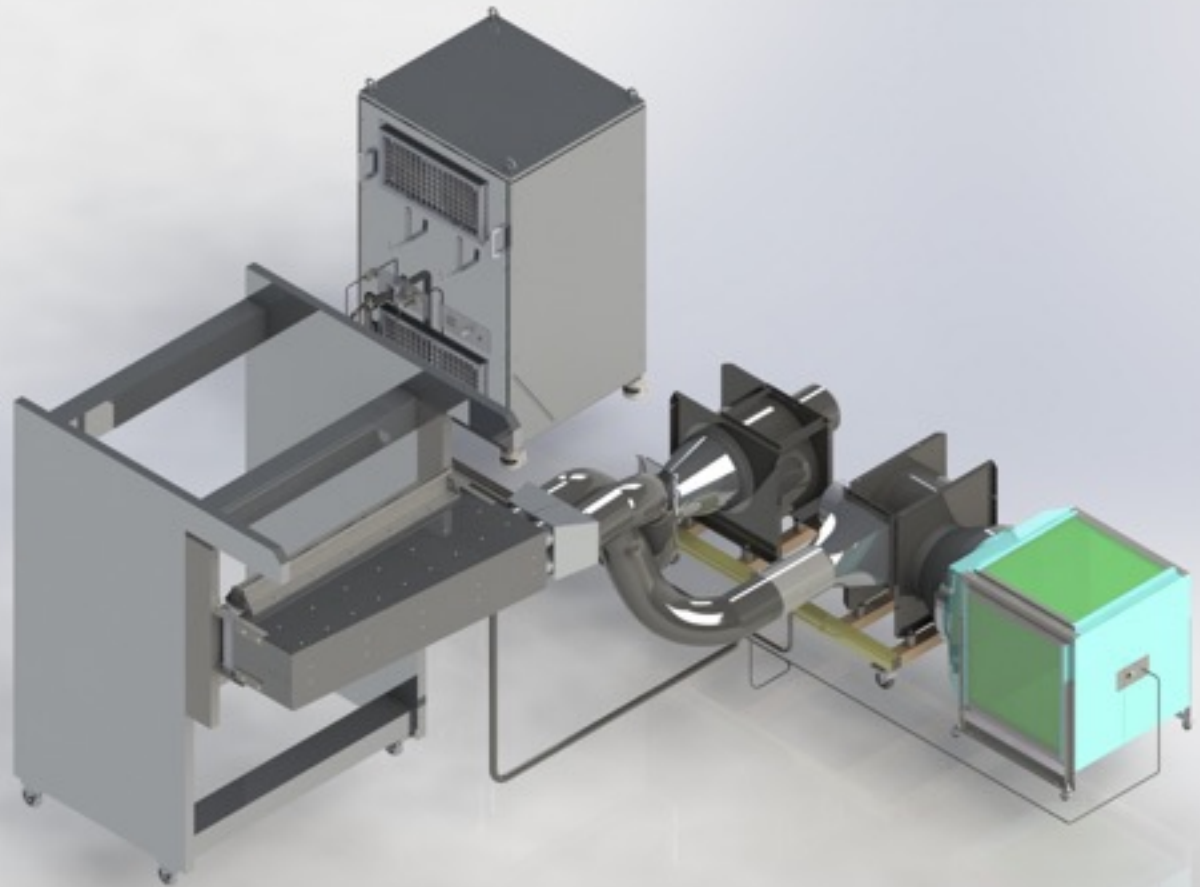
UV Specialty Coatings – Creating Unique Visual Effects & Customer Interaction

- **HIGH GLOSS (15–20 points higher than aqueous)**
- **MATT**
- **TEXTURED**
- **PROTECTIVE**
- **PEARLESCENT**
- **SOFT-TOUCH**
- **3-D VISUALS**

**ADDED VALUE & HIGHER MARGIN BUSINESS:
OFFSET, FLEXOGRAPHIC, GRAVURE & DIGITAL
PRESSES**



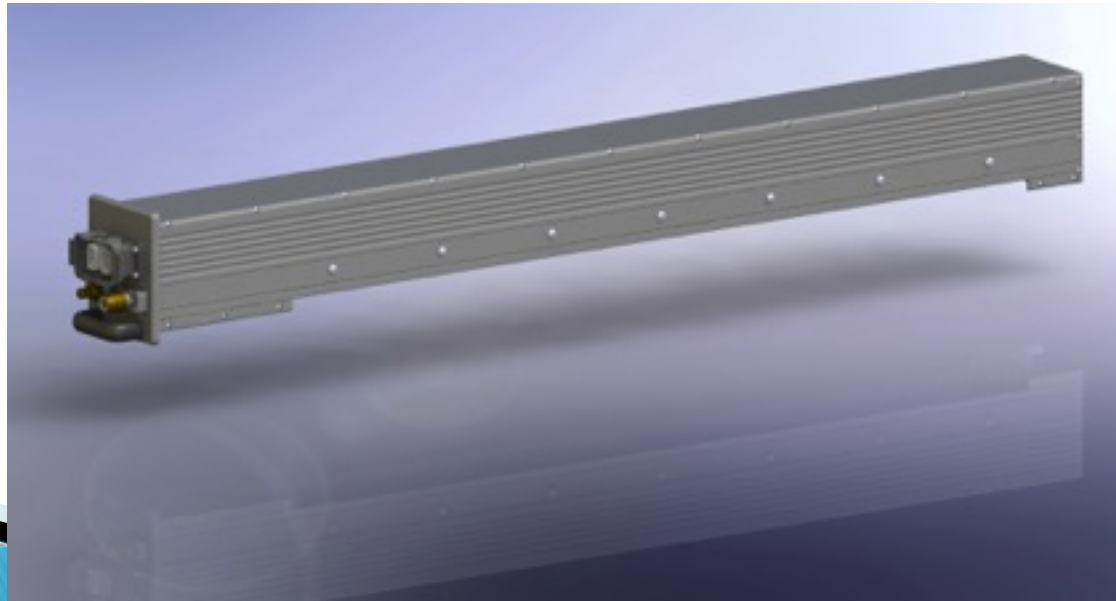
PRIME's Portable Inline UV Coater



UP & COMING UV TECHNOLOGY

UV LED – Light Emitting Diodes:

- **Energy Output: 20–45% UV & remainder IR.**
- **Mostly UV Front Side (Substrate) & IR Back Side.**
- **Lower Energy consumption.**
- **Greater Capital Investment.**
- **Higher Ink Cost.**
- **Longer life expectancy of LED's vs UV lamp.**
- **Lower Power LED requires air-cooling.**
- **Higher Power LED Requires water-cooling.**



Prime UV-IR Systems thanks you for this
opportunity!

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www.primeuv.com

