

# UV Coatings Deliver Best Economic Value Statement

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## ABSTRACT

### The "Problem:"

Manufacturers worldwide need:

Return on Investment – True ROI...

Current liquids coatings technology are nearing  
 OBSOLESCENCE: Solvent, Water, 2K, etc....

Current coatings technology such as Water-based,  
 Solvent-based, 2K....Waste and Pollute

These technologies CONSUME:

- Energy – Waste a great deal of Energy
- Floor Space – Cause in lost Productivity
- WIP – Wasted capital / Locked in capital costs

These technologies EMIT:

- Solvents – Pollute the environment

### The "Solution:"

UV Technology is "Faster, Smaller, **Cleaner**"

Faster Line Speed – *Increase productivity by 100 – 200%*

Faster Coating Cure – *Less than 2 Seconds / Won't damage substrates*

Faster Coating Optimization – *Ability to re-claim & re-use / NO Waste*

Smaller Floor Space – *Reduction in floor space by 80-90%*

Smaller Work in Process – *Reduction in WIP by 80-90%*

Smaller Energy Costs – *Reduction in energy cost by 50-60%*




Smaller Quality Costs – *Reduction in quality cost by 50%*

Cleaner – No Volatile Organic Compounds – *Good for workers & environment*

Cleaner – No Hazardous Air Pollutants – *Ditto*

Cleaner – No N-vinyl pyrrolidone's – *Ditto*

Cleaner – Reduced Reporting – *Reduction in costs*

- FASTER  Line Speed
-  Coating Cure
-  Coating Optimization

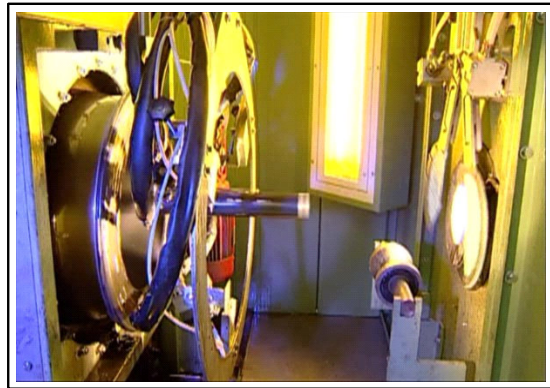


Figure: Continuous Pipe Application

### Faster Line Speed delivers:

- ✓ Higher System thru-put
- ✓ Increased production
- ✓ Result: Improved Roie



Figure: Heat sensitive Substrates

### Faster Coating Cure:

- ✓ Protect SENSITIVE substrates
- ✓ Increased production
- ✓ Result: Improved Roie

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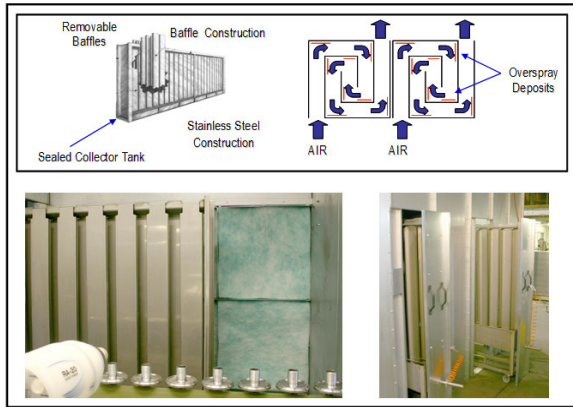


Figure: Reclaim diagram and modules

## **Faster Coating Optimization:**

- ✓ Ability to reclaim/100% solids
- ✓ Increased efficiency up to 98%
- ✓ No set-up of UV coating
- ✓ Result: Improved Roie

- **SMALLER** → Floor Space
- Work in Process
- Energy Consumption
- Maintenance Costs
- Capital Equipment
- Quality Costs

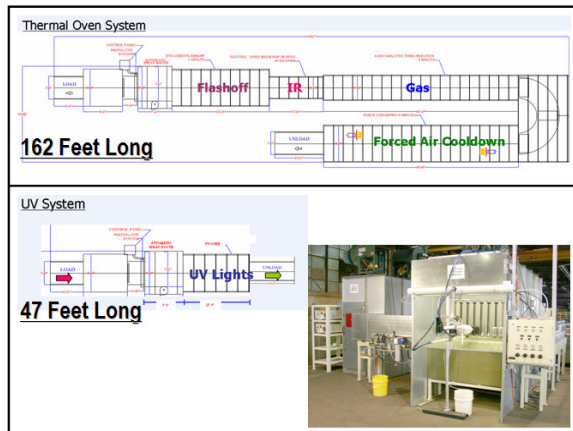


Figure: Thermal Oven V's UV System

## **Smaller Floor Space:**

- ✓ Eliminate any oven
- ✓ No preheating of substrate
- ✓ Example: 162 Ft. V's 47 Ft.
- ✓ Result: Improved Roie



Figure: WIP – Work in Progress

## **Smaller Work-in-Process:**

- ✓ No excess inventory
- ✓ Reduction in inventory costs
- ✓ Eliminates
- ✓ Result: Improved Roie

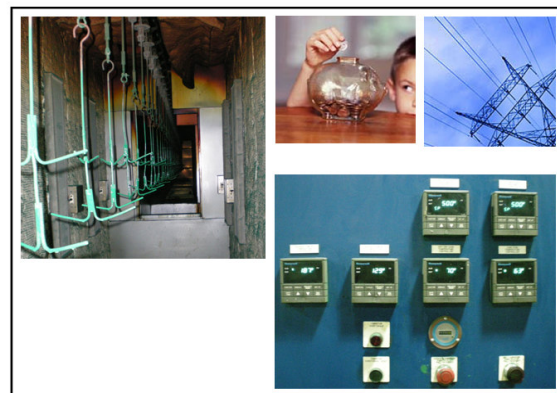


Figure: Oven and Oven Control Systems

## **Smaller Energy Consumption**

- ✓ No ovens
- ✓ No part pre-heat process
- ✓ No cool down towers
- ✓ Lights: Fast on & off
- ✓ Result: Improved Roie

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Figure: Conveyor Systems

## **Smaller Maintenance Costs**

- ✓ Reduction in conveyors
- ✓ Less Oven maintenance
- ✓ Result: Improved Roie

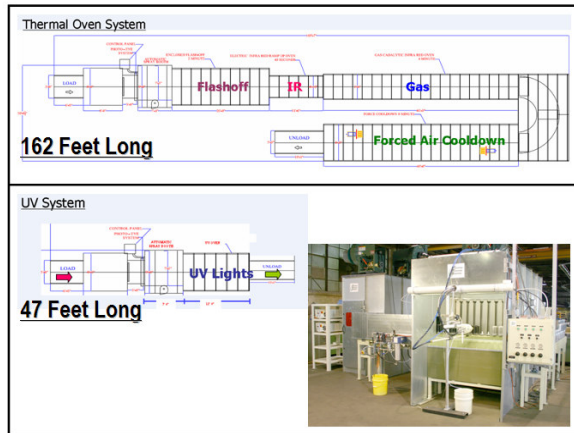


Figure: Thermal Oven V's UV System

## **Smaller Capital Costs**

- ✓ Oven V's UV Light Bank
- ✓ 165 Feet V's 47 Feet long
- ✓ Result: Improved Roie



Figure: Material / Quality Issues

## **Smaller Quality Costs**

- ✓ No long conveyor runs
- ✓ Instant cure/Instant inspection
- ✓ No "conveyor line" of bad parts
- ✓ Result: Improved Roie

- **CLEANER** → Zero VOCs / No HAPs/NVPs
- Reduced Reporting
- Improved Health and Safety



**Environmentally BAD...**

**Typically contain VOC's**

Figure: Examples of 2 part system

## **Cleaner / Zero VOC/No HAP, etc.**

- ✓ No VOC scrubbers
- ✓ Result: Improved Roie



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Figure: Waste and Hydracat pump system

## Cleaner / Reduced Reporting

- ✓ No VOC scrubbers
- ✓ Overall reduced reporting
- ✓ Result: Improved Roie



Figure: HMIS / Pictures

## Cleaner / Improved Health & Safety

- ✓ Follow UV Safety Guidelines
- ✓ Improvement over Solvents
- ✓ Result: Improved Roie

## UV Technology Delivers:

### Faster:

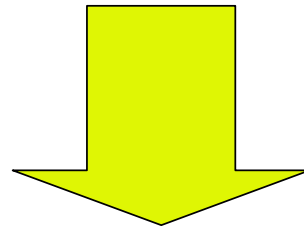
- Line Speed
- Coating Cure
- Coating optimization

### Smaller:

- Floor Space
- Work In Process
- Energy Consumption
- Maintenance Costs
- Capital Equipment Cost
- Quality Costs

### Cleaner:

- ❖ Zero VOCs, No HAPs/NVPs
- ❖ Reduced Reporting
- ❖ Improved Health and Safety



**TRUE....**

**Return On Investment**  
and the **environment**