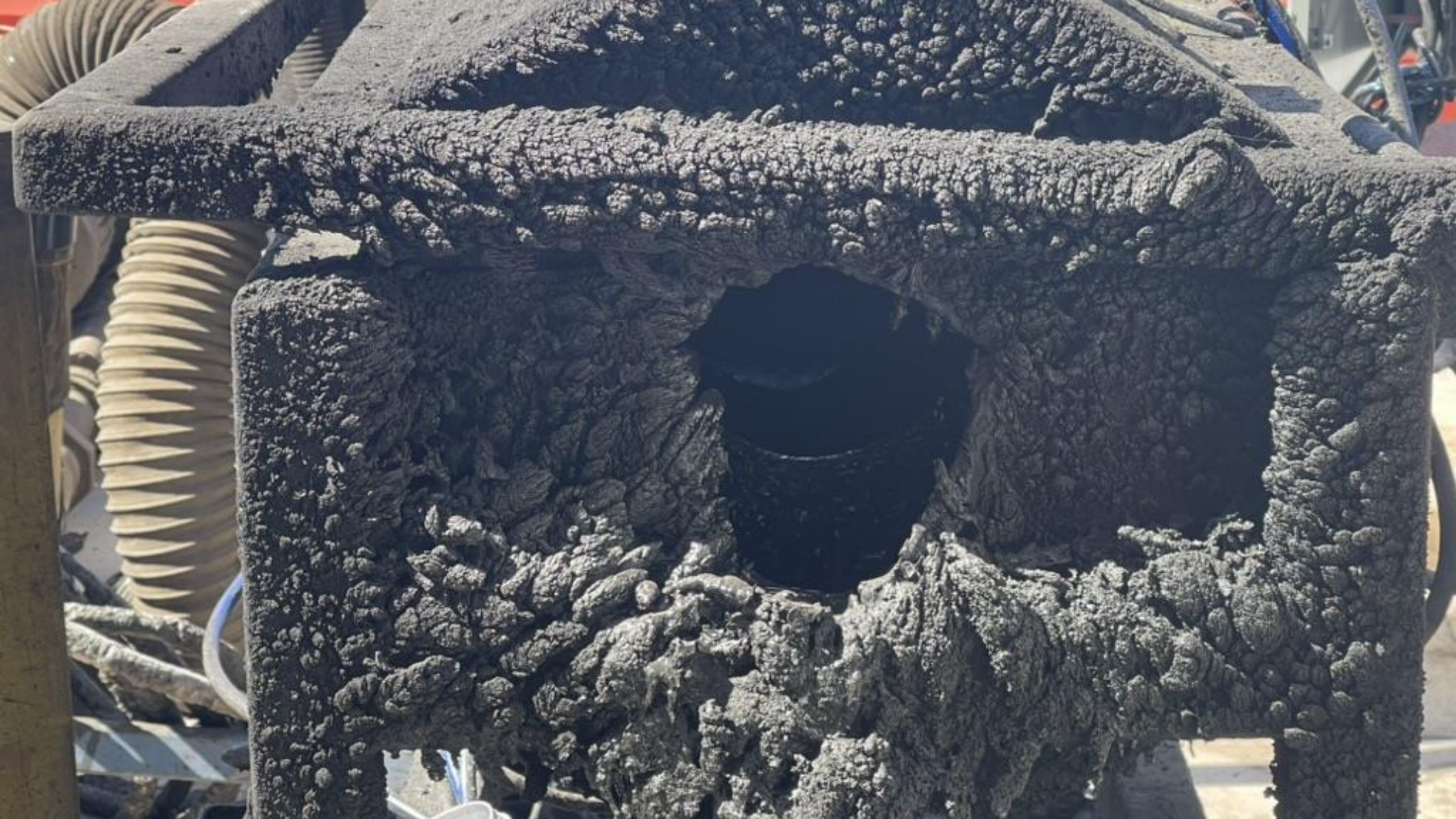
Eliminating VOC emissions in your manufacturing process and much more, with UV coatings technology

Michael Kelly - AlliedUV



THE TRANSITION

MARKETPLACE

TODAY'S MARKETPLACE REALITIES:

- Very competitive marketplace
- Customer requirements / needs are increasing – "***Sustainability…..***"
- Re-shore manufacturing back to NA
- Single-type coating operation can cause bottlenecks / inefficiencies
  - Example: Existing powder operation – Can be complimented with UV
- US Manufacturing needs a competitive edge

MARKETPLACE

MANUFACTURER'S GOALS:

- Driving process efficiencies
- Manufacturing an improved product – Exceeding Customer's Needs
- Focus on Workplace Safety – EH&S
- Improving your Sustainability Footprint – ***"BEING GREEN"***
- Delivering improved ROI – Return on Investment

CURRENT CURRENT SCENARIO

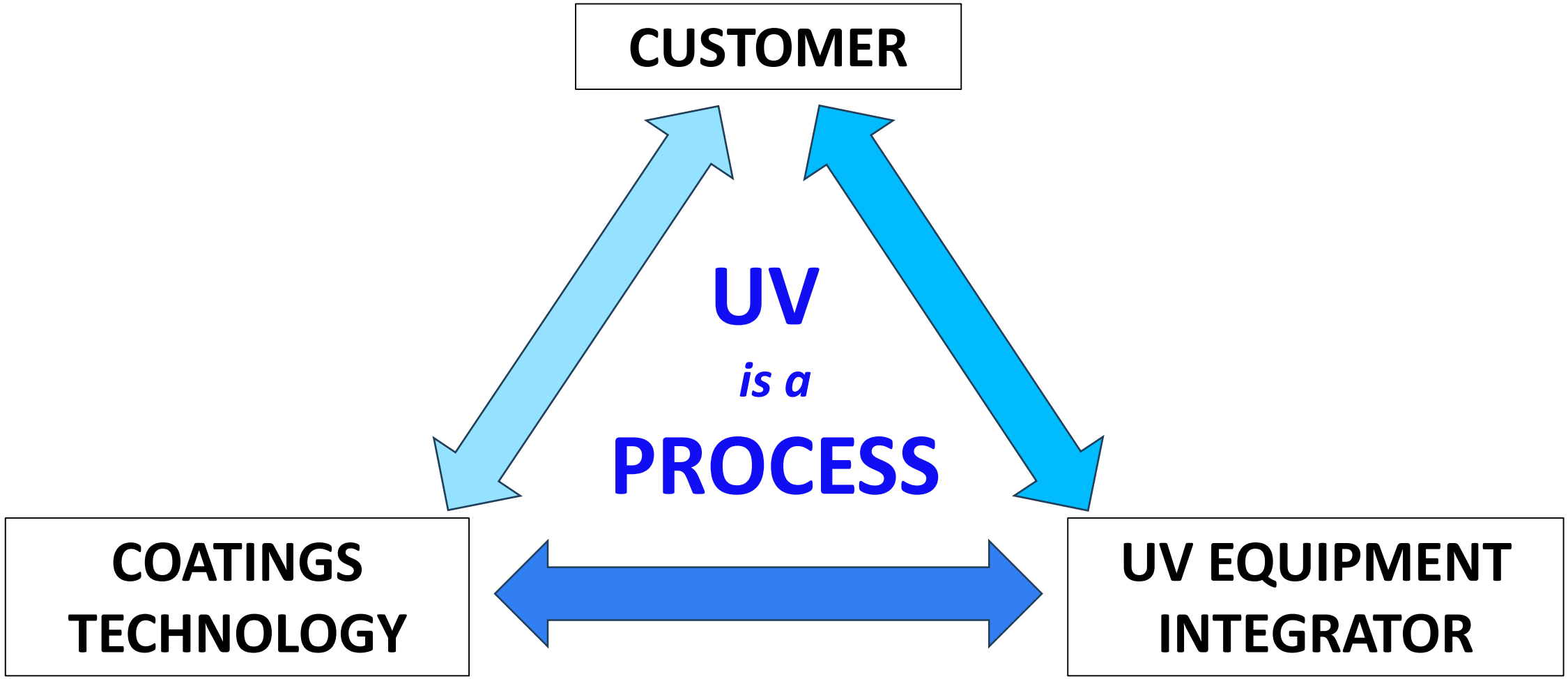
CUSTOMERS CURRENT COATING OPERATION:

- Current Supplier: *"Are they looking out for my best interest?"*

- In reality, legacy coating suppliers are complacent
  - Making money & profit off your back – because "they have your business!"
- Minimal incentive to be proactive
- Time and time again, we witness this….

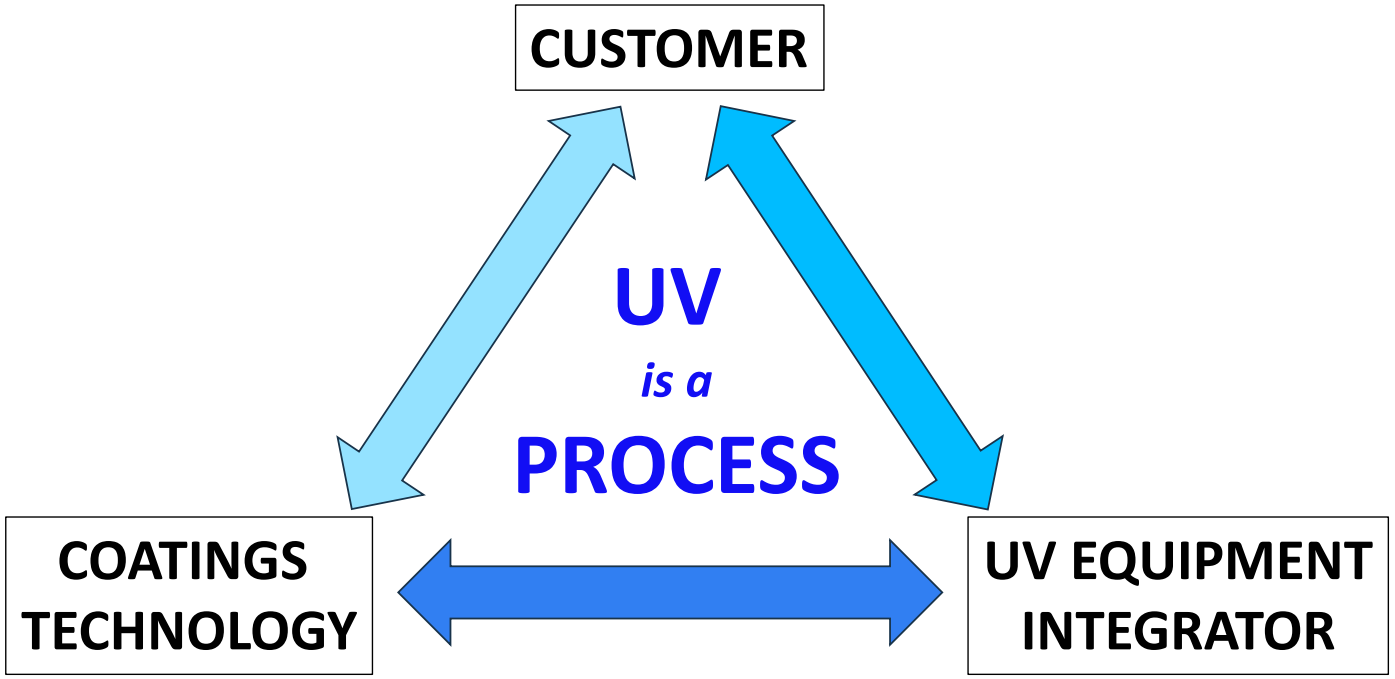
- UV - Ultraviolet Coatings Technologies offer unique advantages – LET ME EXPLAIN

UV IS A PROCESS



UV IS A PROCESS

GOAL: START EARLY / DIALOG / ALLIED IS THE CATALYST:



STAGES FOR SUCCESS…

UV IS A PROCESS - EXECUTION IS KEY

INITIAL PROJECT ENGAGEMENT:

PRE-PRODUCTION STAGES: 1-7

POST-PRODUCTION STAGES: 8-14

UV IS A PROCESS - EXECUTION IS KEY

STAGES 1 – 7: PRE-PRODUCTION STAGES:

1. EDUCATION is KEY – **UV**University - Web-Site / YouTube / Linkedin / Etc.
2. UV is a PROCESS – END CUSTOMER, UV Systems Int. and UV Tech Company
3. Understanding your Process Specifications / Needs
4. Product Specifications / Requirements – Corrosion / Adhesion / Thickness / Etc.
5. ROI & **VOC reduction Discussion** – Must make economic / environmental sense
6. QUALIFIED UV SYSTEMS INTEGRATORS - Partners
7. BEST PRACTICES – DEFINED - Customer & UV Integrator

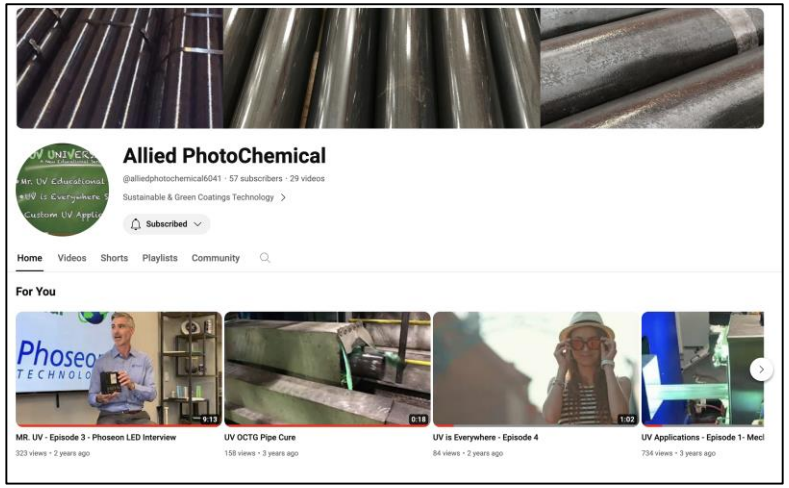
UV IS A PROCESS - EXECUTION IS KEY

STAGES 8 – 14: POST-PRODUCTION STAGES:

8. Quality Certification Procedures – DEFINED / Customer Specific
9. PPE – Personal Protection Equipment recommendations
10. EHS Safety Training / On-site / Multi-Shift
11. On-site Start-Up Assistance – UV Systems Integrator / UV Lights / Allied UV
12. Maintaining your UV System
13. Monitoring the ROI / Cost Savings / Overall benefits of UV
14. **On-Going Service & Support - Continue EHS / Customer AUDITS & REPORTS**

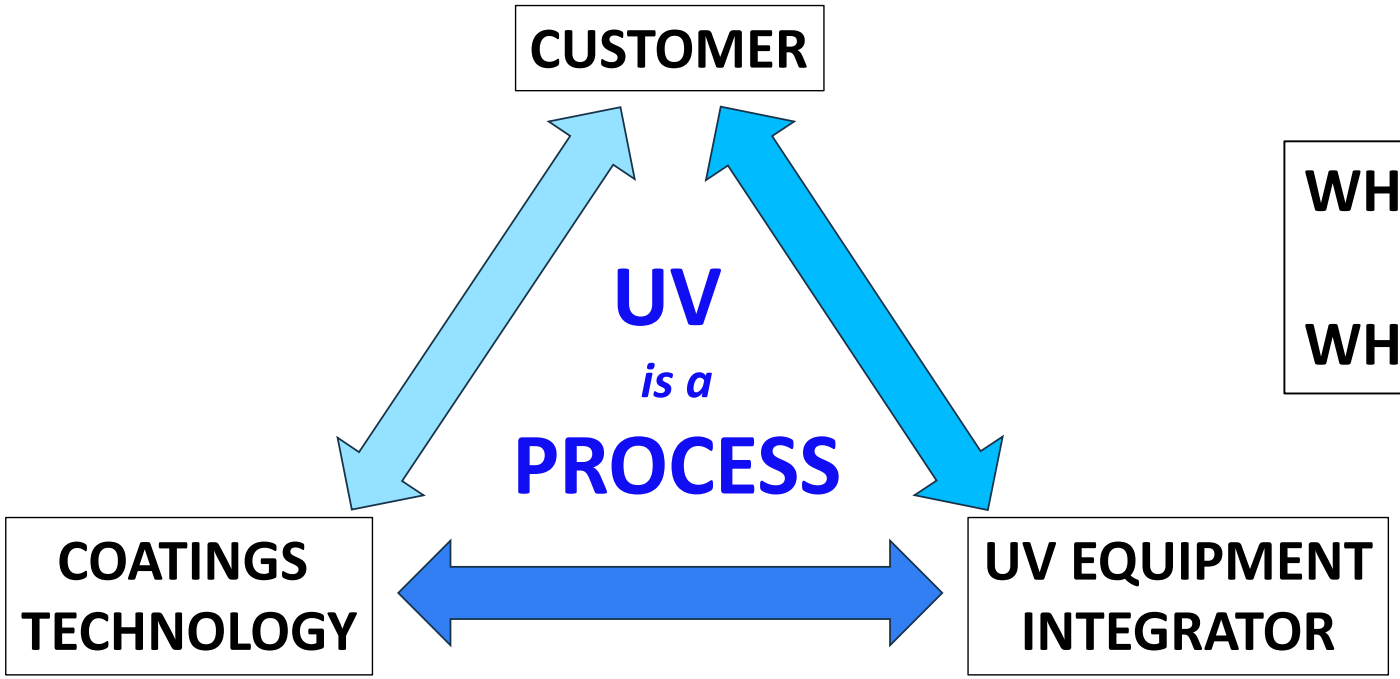
CUSTOMER ENGAGEMENT

STAGE 1 – UV UNIVERSITY – EDUCATION:



CUSTOMER ENGAGEMENT

STAGE 2 – UV IS A PROCESS:



WHAT YOU HAVE NOW….

WHAT YOU WANT IN THE FUTURE….

CUSTOMER ENGAGEMENT

STAGE 3 – UNDERSTANDING PROCESS / DISCUSSION:

KEY PROCESS CRITERIA:

- ✓ LINE SPEED
- ✓ SUBSTRATE DIMENSIONS
- ✓ SUBSTRATE CONDITION BEFORE COATING
- ✓ PRE-HEAT REQUIREMENTS
- ✓ VOC EMISSIONS
- ✓ ETC…

CUSTOMER ENGAGEMENT

STAGE 4 – PRODUCT SPECIFICATION:

KEY PRODUCT SPECIFICATIONS:

- ✓ COATING THICKNESS
- ✓ CORROSION TESTING
- ✓ ADHESION
- ✓ GLOSS
- ✓ ETC….

CLEARLY DEFINED – COMPARATIVE TESTING AGAINST CURRENT COATING SOLUTION

ALLIED PHOTOCHEMICAL APPLICATIONS REQUIREMENTS			
Customer Name:	TBD	**WORK ORDER:**	**TBD**
Method:	Roll Coat	**Coating Technology:**	UV
Line Speed:	TBD	**UV Light Type:**	Hereaus Bulbs
IR:	TBD	**Thermal:**	TBD

CUSTOMER SPECIFICATION REQUIREMENTS					
Specification	**ASTM Standard**	**Y/N**	**Requirement**	**Source**	**Result**
Coating Thickness	ASTM D4138		TBD	TBD	
Adhesion	ASTM 3359-17		5B	TBD	
Solvent Resistance	ASTM D1308		Acetone >TBD Double Rubs MEK >TBD Double Rubs	TBD	
Impact Resistance	ASTM D2794		80 lbs	TBD	
Aqueous Immersion	ASTM D870		TBD	TBD	
Flexibility Test	ASTM F 1683-02		TBD	TBD	
Hardness - Pencil Scratch Hardness	ASTM 3363-05		TBD	TBD	
Chip Resistance	ASTM D3170		TBD	TBD	
Abrasion Wear Resistance	ASTM D4060		TBD	TBD	
Accelerated Aging	Two week - 120F		TBD	TBD	
Salt Fog	ASTM B-117		TBD	TBD	
Humidity	ASTM D2247		TBD	TBD	
UV Resistance	ASTM G155-05 Cycle 1		TBD	TBD	
Outdoor Exposure	Actual Test		TBD	TBD	
Gloss	ASTM D523/D2457		TBD	TBD	
Cold Impact Resistance	ASTM D2444-99		TBD	TBD	
Flammabilty	ASTM D5025 / 5027		TBD	TBD	
Weldabilty	NO ASTM		TBD	TBD	

CUSTOMER ENGAGEMENT

STAGE 4 – PRODUCT SPECIFICATIONS CONTINUED:

DEFINING YOUR NEEDS

Description	ASTM Std.	Specifics	Customer Comments
Salt Fog	ASTM B117	Greater than 500 hours / Less than 5% red rust	Needs significant improvement
Humidity	ASTM D2247	Greater than 1000 hours / Less than 5% red rust	This is the main cause with Rust
Impact Resistance	ASTM D2794	Greater than 160 in-lbs	Improved handling / load & unload protection
Adhesion	ASTM B3359 - 17	5B	Improved adhesion
UV Resistance	ASTM G155-05	Greater than 1000 Hours / No blistering	Improved outdoor storage for End Customer

TESTING

Description	ASTM Std.	Water-based	UV	Specifics
Salt Fog	ASTM B117	24 Hours	>505 Hours	Greater than 500 hours / Less than 5% red rust
Humidity	ASTM D2247	240 Hours	>1073 Hours	Greater than 1000 hours / Less than 5% red rust
Impact Resistance	ASTM D2794	Pass	Pass	Greater than 160 in-lbs
Adhesion	ASTM B3359 - 17	4B	5B	5B
UV Resistance	ASTM G155-05	650 Hours	>1000 Hours	Greater than 1000 Hours / No blistering

CUSTOMER ENGAGEMENT

STAGE 5 – ROI DISCUSSION:

Directions for Use:		
	Entered Data	Measurement
Enter in Outside Diameter of Tube:	9.625	Inches Diameter
Target Coating Thickness:	1.0	Mils Thick
Cost of Water-Based / Gallon:	$ 26.60	Dollars
Percent Solids of Water-Based	28%	Percentage
Water-based coating percent efficiency	70%	Percentage
Cost of UV Coating / Gallon:	$ 67.90	Dollars
UV coating percent efficiency	96%	Percentage

FUNCTIONAL PIPE COATING MODEL		
Linear Foot Comparison:	9.625	Inches Diameter
Target Coating Thickness	1.0	Mils Thick

Description	Water-based	UV
Coating cost per gallon	$ 26.60	$ 67.90
Percent Solids	28%	100%
Percent Water	72%	0%
Percent Efficiency	70%	96%
Coverage at 1 mil - Square Feet	314	1,540
Coverage at 1 mil - Square Inches	45,271	221,737
Diameter of Pipe (inches)	30.24	30.24
Linear inches per gallon	1,497	7,333
Linear feet per gallon @ 1 mils thick	125	611
Linear feet per gallon @ specified coating thickness	125	611
Cost per linear foot coated specificed inch diameter pipe	$ 0.2132	$ 0.1111

COMPLETE ROI ANALYSIS

- ✓ COATING COST / FOOT
- ✓ VOC'S
- ✓ ENERGY COSTS
- ✓ FLOOR SPACE
- ✓ INCREASED SPEED
- ✓ CLEAN UP COSTS
- ✓ QUALITY COSTS
- ✓ AND MORE……

CUSTOMER ENGAGEMENT

STAGE 5 – ROI DISCUSSION – EXAMPLE:

CURRENT OFFERING:

- Current Water-based offering: $26.60 per gallon
- 28% solids (or in reality, coating AND 72% water and solvent)

UV COATING:

- UV Coating: $67.90 per gallon
- 100% solids (or in reality, **all coating** – No water, solvent or fillers)

COST ANALYSIS:

- Analyze 9.625 inch diameter pipe at 1.0 mils thick

CUSTOMER ENGAGEMENT

STAGE 5 – ROI DISCUSSION: WATER-BASED V'S UV

WATER-BASED COATING	UV COATING
WATER-BASED COATING ~28% SOLIDS	UV COATING – 100% SOLIDS 100% SOLIDS
WFT 4.0 to 5.0 MILS	NO EVAPORATION
~ 4.0 MILS EVAPORATES INTO THE AIR – SOLVENT / & WATER	
DFT 1.0 MILS	WFT 1.0 MILS DFT 1.0 MILS

CUSTOMER ENGAGEMENT

Coatings Trends & Technologies SUMMIT

Directions for Use:

	Entered Data	Measurement
Enter in Outside Diameter of Tube:	9.625	Inches Diameter
Target Coating Thickness:	1.0	Mils Thick
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Linear feet per gallon @ specified coating thickness	125	611
Cost per linear foot coated specificed inch diameter pipe	$ 0.2132	$ 0.1111

WB = $0.2132 / Pipe

UV = $0.1111 / Pipe

Water-Based
91% more costly

Spray Efficiency
UV – 96%
WB – 70%

CUSTOMER ENGAGEMENT

STAGE 5 – ROI DISCUSSION: OTHER COST SAVINGS

OTHER COST SAVINGS TO CONSIDER		
Additional Benefits	**Dollars Savings**	**Comments**
No VOC's - Minimal Reporting		
No HAP's - Minimal Reporting		
No Solvent adders		
Much better ASTM-B117 Salt Performance		
Significant floor space savings - Square Foot		
Minimal clean up activities		
Oven Cost Savings - Utilities Savings		
On-Site Inventory 80% less		
Less internal handling costs		
Less transportation costs		
Humidity issues		

DETAILED COST ANALYSIS SHOULD BE CONDUCTED

CUSTOMER ENGAGEMENT

STAGE 5 – VOC REDUCTION DISCUSSION:

VOC CALCULATOR - SOLVENT, WATER & UV COATINGS

Allied PhotoChemical®

Michael Kelly
Allied PhotoChemical, Inc.
mkelly@alliedphotochemical.com
Mobile: 248-515-9240

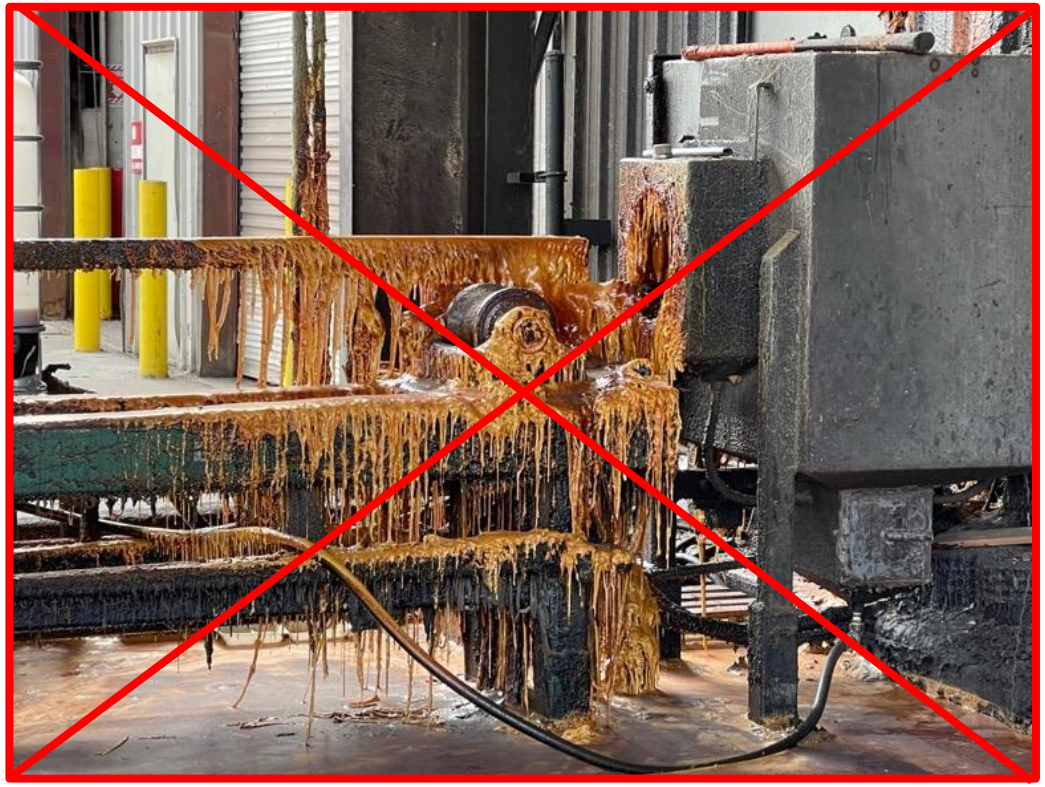
FUNCTIONAL PIPE - VOC SAVINGS

Description	Entered Data	Measurement
Solvent-Based Coating VOC's / Gallon:	0.00	Lbs / Gallon
Solvent-Based Percent Solids / Gallon:	0.0%	Percentage
Water-Based Coating VOC's / Gallon:	2.06	Lbs / Gallon
Water-Based Percent Solids / Gallon:	28.0%	Percentage
UV Coating VOC's / Gallon:	0.00	Lbs / Gallon
UV Coating Percent Solids / Gallon:	100.0%	Percentage

Amount of Coating Consumed:	Entered Data	Measurement
Solvent-Based Coating per YEAR	-	Gallons
Water-Based Coating per YEAR	38,000	Gallons

VOC COMPARISON - SOLVENT / WATER / UV

Description	Solvent-Based	Water-based	UV
Percent Solids	0.0%	28.0%	100.0%
VOC's per coating	0.00	2.06	0.00
Amount of VOC's based on consumption	-	78,280	-
Total VOC's emissions SAVED per YEAR: LBS	-	**78,280**	



VOC / LBS SAVINGS PER YEAR: >78,000 LBS

CUSTOMER ENGAGEMENT

STAGE 6 – VISIT TO ALLIED & UV INTEGRATORS / TRIALS:

CUSTOMER ENGAGEMENT

STAGE 7 – BEST PRACTICES:

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BEST PRACTICES

UV SYSTEMS INTEGRATOR:

Section	Category	Description
Section 1	Paint Heating Systems	- Water Jackets for Spray Systems / etc.
Section 2	UV Spray Containment System – Air Rings	- Entry & Exit of UV Spray Systems
Section 3	Preventative Maintenance / PPE Gear Schedule	- Provides shift / day / weekly maintenance schedule
Section 4	One Page "Cheat" Sheets	- Examples
Section 5	System Flush before shipment to Customer	- Use Flushing Monomer to clean / flush before shipment

CUSTOMER RESPONSIBILITY:

Section 6	Tote Warmers / Heat Controllers	- Heating Blankets / Power Blanket Adjustable Controllers
Section 7	Tote Agitators	- Electric Gear Drive / Variable Speed Drive / Pneumatic Air
Section 8	Tote Scales	- Heavy Duty Pallet Scale w/ LED Indicator 2'x2' / 4'x4'
Section 9	UV Spill Kit	- Spill Kit

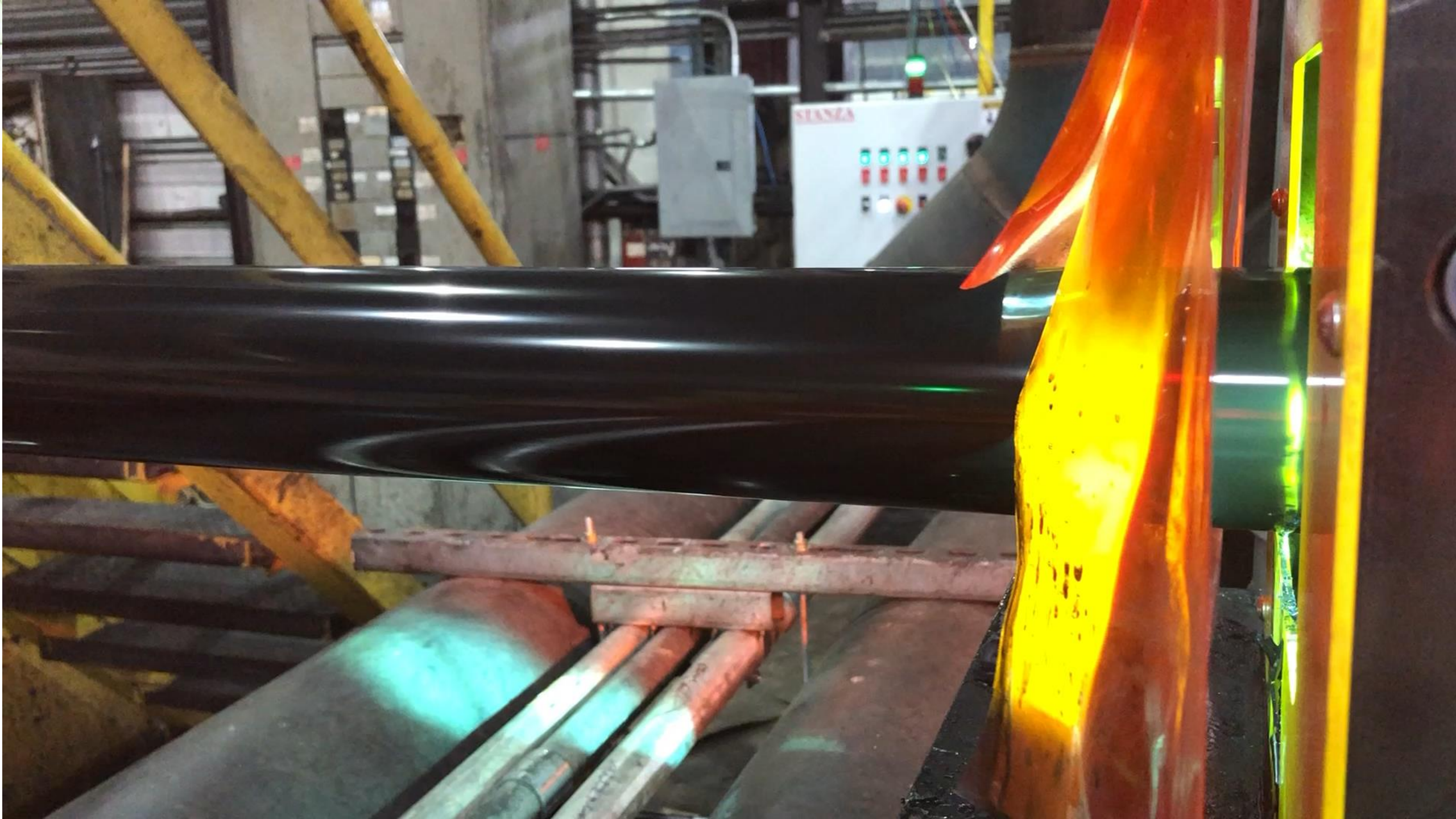
NOTE: FAILURE TO FOLLOW THESE BASIC UV BEST PRACTICES WILL IMPACT YOUR OVERALL PRODUCTION

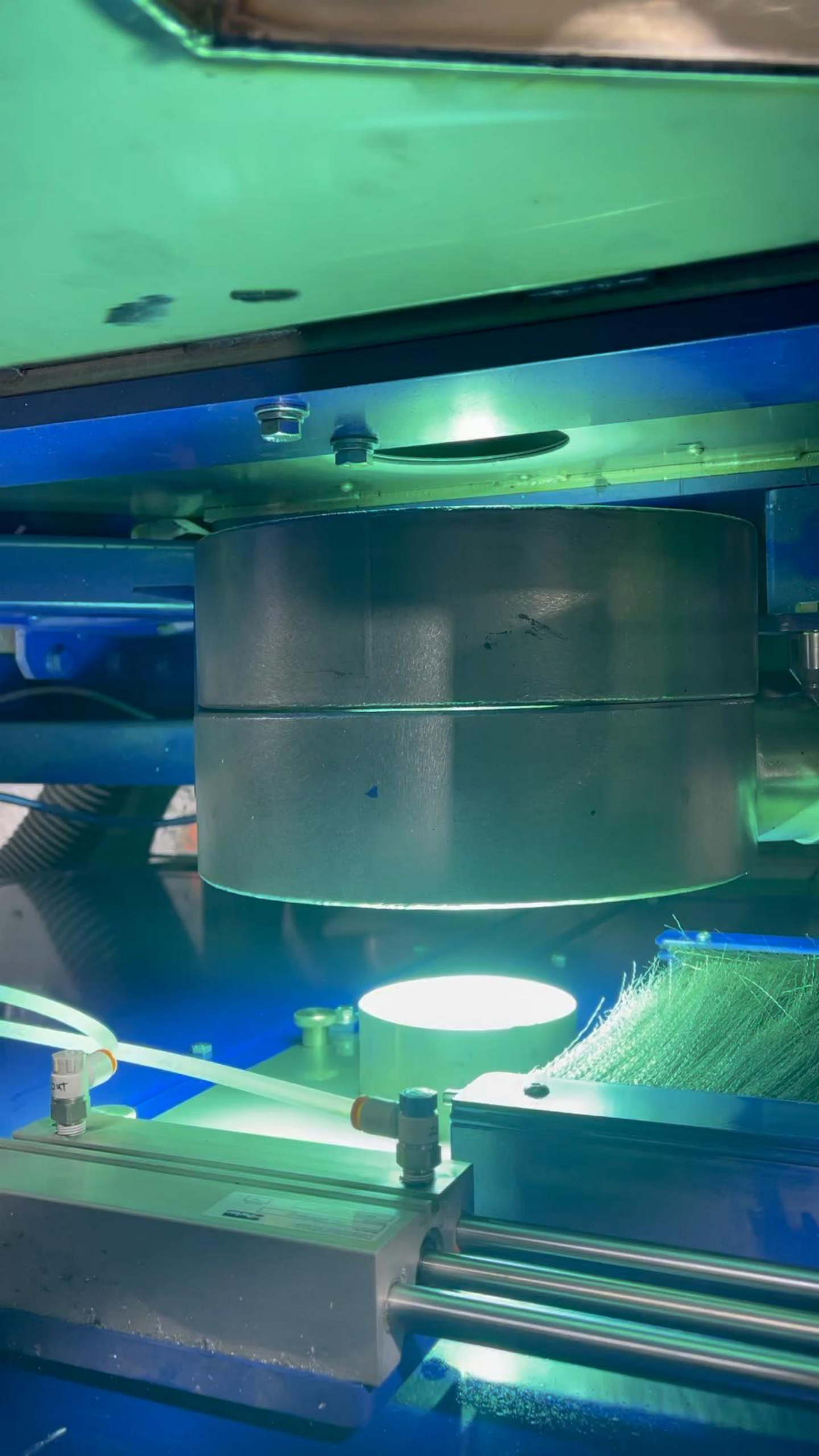
5/6/24 CONFIDENTIAL TO ALLIED PHOTOCHEMICAL 2

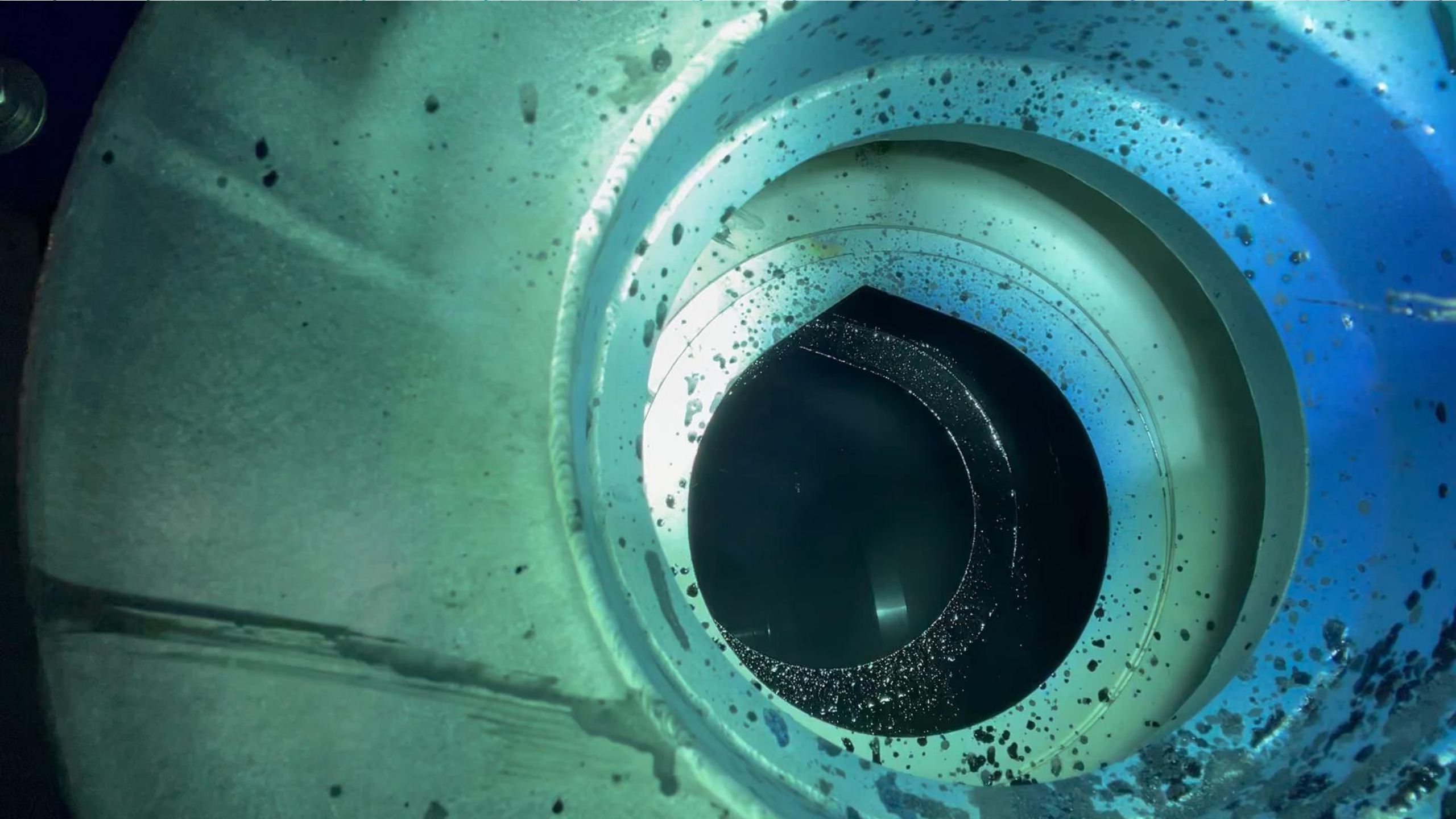
CUSTOMER ENGAGEMENT

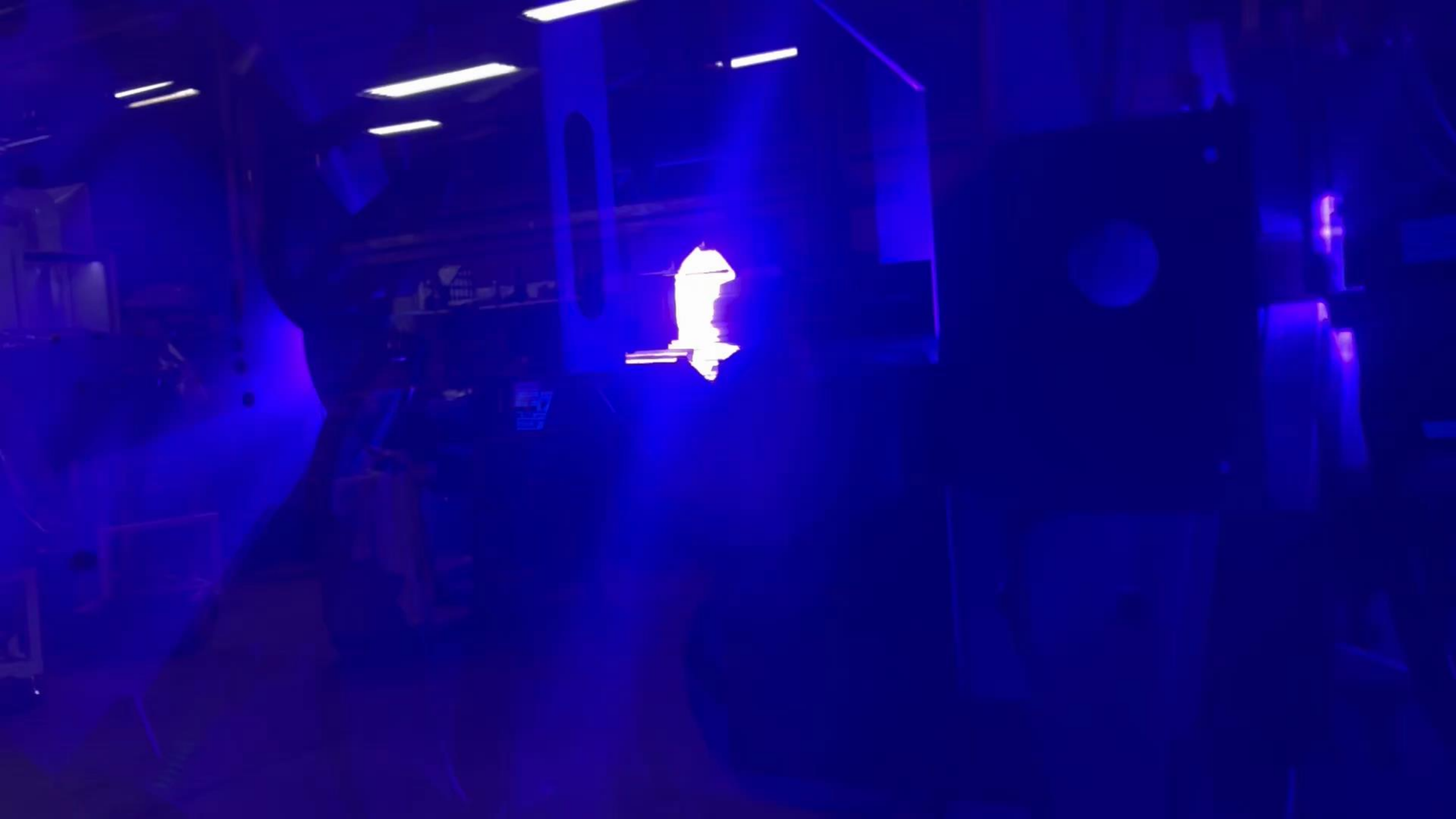
COMPLETED STAGES 1-7:

RUNNING PRODUCTION









CUSTOMER ENGAGEMENT

STAGES 8 - 14: POST-PRODUCTION STAGES:

8. Quality Certification Procedures – DEFINED / Customer Specific
9. PPE – Personal Protection Equipment recommendations
10. EHS Safety Training / On-site / Multi-Shift
11. On-site Start-Up Assistance – UV Systems Integrator / UV Lights / Allied UV
12. Maintaining your UV System
13. Monitoring the ROI / Cost Savings / Overall benefits of UV
14. **On-Going Service & Support - Continue EHS / Customer AUDITS & REPORTS**

CUSTOMER ENGAGEMENT

STAGE 8 – QUALITY CERTIFICATION PROCEDURES

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QUALITY CERTIFICATION PROCEDURES

Section	Category	Description
Section 1	Measuring Substrate cleanliness	- 898 Tape on substrate before wash / after wash / before coating
Section 2	Measuring Coating Thickness	- Digital OR Analog Magnetic Thickness Gauge – FISCHER
Section 3	X-Cross Adhesion Test	- X-Cross Hatch with Scotch 898 Tape – ASTM 3359-D
Section 4	Adhesion Test	- Scotch 610 or 898 Tape Adhesion Test
Section 5	Quality Measurement Log Worksheet	- Document various Process and Coating Parameters
Section 6	Solvent Resistance Rub	- Specific number of Acetone or MEK rubs - ASTM D4752
Section 7	Copper Sulfate Stain Test	- Detects no-coat portions of Galvanized Tube **(GALVANIZED ONLY)**
Section 8	Stain Test – KZ-9000-Stain	- Detects possible under-cure condition **(GALVANIZED ONLY)**
Section 9	Heraeus Light Reflector Maintenance	- Best means to identify and clean DIRTY reflectors **(MICROWAVE)**
Section 10	LED Light Maintenance	- Best means to clean / repair LED Light **(LED)**
Section 11	EIT Power Puck Measurements	- Confirming your UV Energy Output of UV Lights
Section 12	Intellego Smart Measurement Strips	- Easy means to measure UV Energy Output of UV Lights

NOTE: FAILURE TO FOLLOW THESE QUALITY CERTIFICATION PROCEDURES WILL IMPACT YOUR OVERALL PRODUCTION

CUSTOMER ENGAGEMENT

STAGE 8 – QUALITY CERTIFICATION PROCEDURES

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DOCUMENT NAME: MEASURING COATING THICKNESS w/ DIGITAL MAGNETIC THICKNESS GAUGE
DATE: 04/24
REVISION: 3.5

PROCEDURE: This document provides details on the best means to measure the coating thickness. With 100% solids UV coatings, WTF – Wet Film Thickness is the same as DFT – Dry Film Thickness.

SPECIFICATION: Recommend: Fischer PERMASCOPE ® MP0R Coating Thickness Gauge

Item No.	Description
PERMASCOPE® MP0R	Handheld

Fischer Document No: Document number 902-517
https://shop.fischer-technology.com/product/dualscope-mp0r/?v=893f26889d1e

PICTORIAL REVIEW: Below are examples of specific thickness measurement devices

CAUTION: Be aware that Pipe Scale / Galvanized Layer can impact your Coating Thickness Measurements. Please implement off-set when calibrating Gauge.

Example: Scale is 0.3 to 0.4 Mils – Then offset Measurement Gauge 0.35

SAMPLING: Please read 5 samples per actual reading / Take average

Digital Magnetic Thickness Gauge

Allied PhotoChemical
16024 Angelo Drive
Macomb, MI 48042 USA
Telephone: 586-232-3637
Fax: 586-232-3889
info@alliedphotochemical.com

COATING THICKNESS WORK INSTRUCTIONS

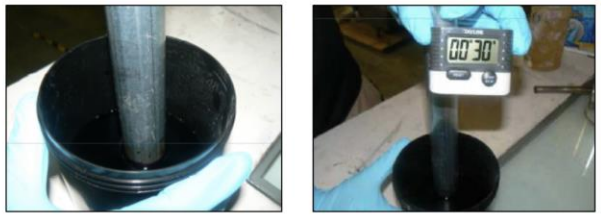
Allied PhotoChemical®

DOCUMENT NAME: Dye Stain Test
DATE: 09/15/2021
REVISION: 1.0

PROCEDURE: The dye stain test is used to analyze coating cure. A piece of coated substrate is submerged into stain for 30 seconds. After the 30 seconds remove the substrate and wipe away any remaining stain from the surface. Analyze the part for dark stained surface, as these areas show under cured coating. Note: Even cured coating will stain, however you are looking for extreme areas of stain.

PICTORIAL REVIEW: Below are picture examples of conducting copper sulfate stain test.

1. Place solution in a container large enough to submerse a pipe end. Solution should be 2-3 inches deep. Wipe the coated pipe with a clean, dry cloth before submersing.



2. Leave pipe submersed for 30 seconds, then remove and wipe clean

Allied PhotoChemical
16024 Angelo Drive
Macomb, MI 48042 USA
Telephone: 586-232-3637
Fax: 586-232-3889
info@alliedphotochemical.com

COATING DYE STAIN TEST

CUSTOMER ENGAGEMENT

STAGE 9 – PPE RECOMMENDATIONS

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EHS SAFETY EQUIPMENT

OUTLINED ARE RECOMMENDATIONS FOR INFORMATION SAKE.

CRITICAL TO PROVIDE PROPER EHS TRAINING – CONTINUE REFRESHER TRAINING OPERATORS, SUPERVISORS & MANAGEMENT

CUSTOMER ENGAGEMENT

STAGE 10 – EHS / SAFETY TRAINING & WORK INSTRUCTIONS

ULTRA VIOLET (UV) CURABLE COATING PROCESS AND SAFETY

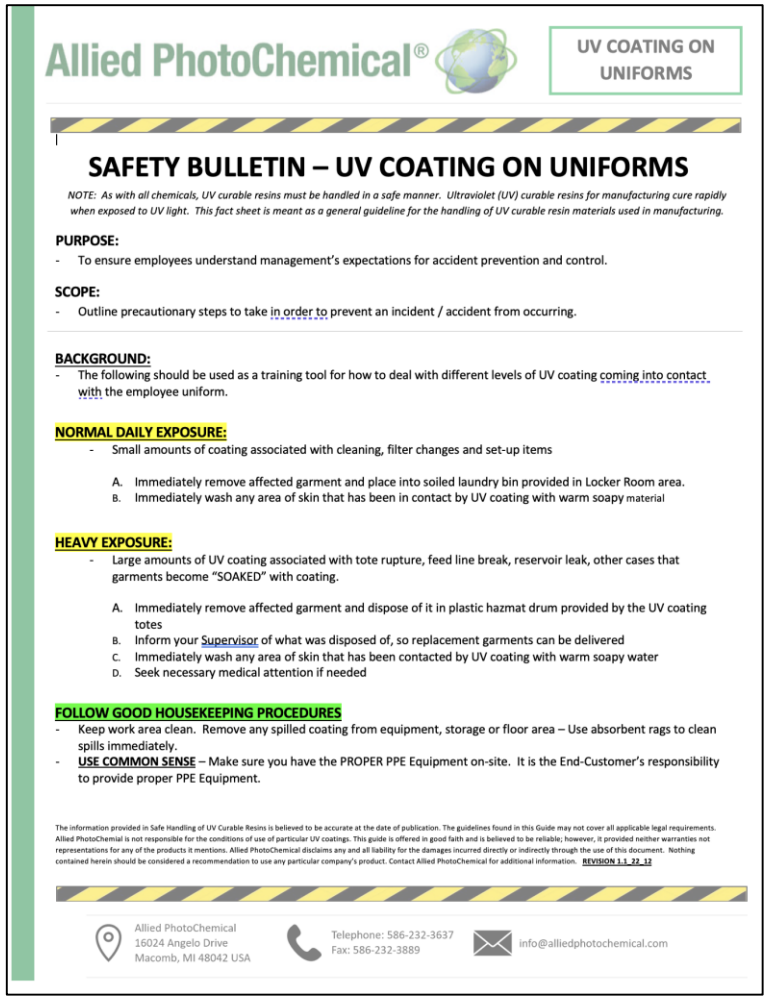
CUSTOMER TRAINING

45 MINUTES COURSE / SHORT QUIZ

CRITICAL TO PROVIDE PROPER EHS TRAINING – CONTINUED REFRESHER TRAINING FOR OPERATORS, SUPERVISORS & MANAGEMENT

CUSTOMER ENGAGEMENT

STAGE 10 – EHS / SAFETY TRAINING & WORK INSTRUCTIONS



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UV COATING ON UNIFORMS

SAFETY BULLETIN – UV COATING ON UNIFORMS

NOTE: As with all chemicals, UV curable resins must be handled in a safe manner. Ultraviolet (UV) curable resins for manufacturing cure rapidly when exposed to UV light. This fact sheet is meant as a general guideline for the handling of UV curable resin materials used in manufacturing.

PURPOSE:

- To ensure employees understand management's expectations for accident prevention and control.

SCOPE:

- Outline precautionary steps to take in order to prevent an incident / accident from occurring.

BACKGROUND:

- The following should be used as a training tool for how to deal with different levels of UV coating coming into contact with the employee uniform.

NORMAL DAILY EXPOSURE:

- Small amounts of coating associated with cleaning, filter changes and set-up items

A. Immediately remove affected garment and place into soiled laundry bin provided in Locker Room area.
B. Immediately wash any area of skin that has been in contact by UV coating with warm soapy material

HEAVY EXPOSURE:

- Large amounts of UV coating associated with tote rupture, feed line break, reservoir leak, other cases that garments become "SOAKED" with coating.

A. Immediately remove affected garment and dispose of it in plastic hazmat drum provided by the UV coating totes
B. Inform your Supervisor of what was disposed of, so replacement garments can be delivered
C. Immediately wash any area of skin that has been contacted by UV coating with warm soapy water
D. Seek necessary medical attention if needed

FOLLOW GOOD HOUSEKEEPING PROCEDURES

- Keep work area clean. Remove any spilled coating from equipment, storage or floor area – Use absorbent rags to clean spills immediately.
- **USE COMMON SENSE** – Make sure you have the PROPER PPE Equipment on-site. It is the End-Customer's responsibility to provide proper PPE Equipment.

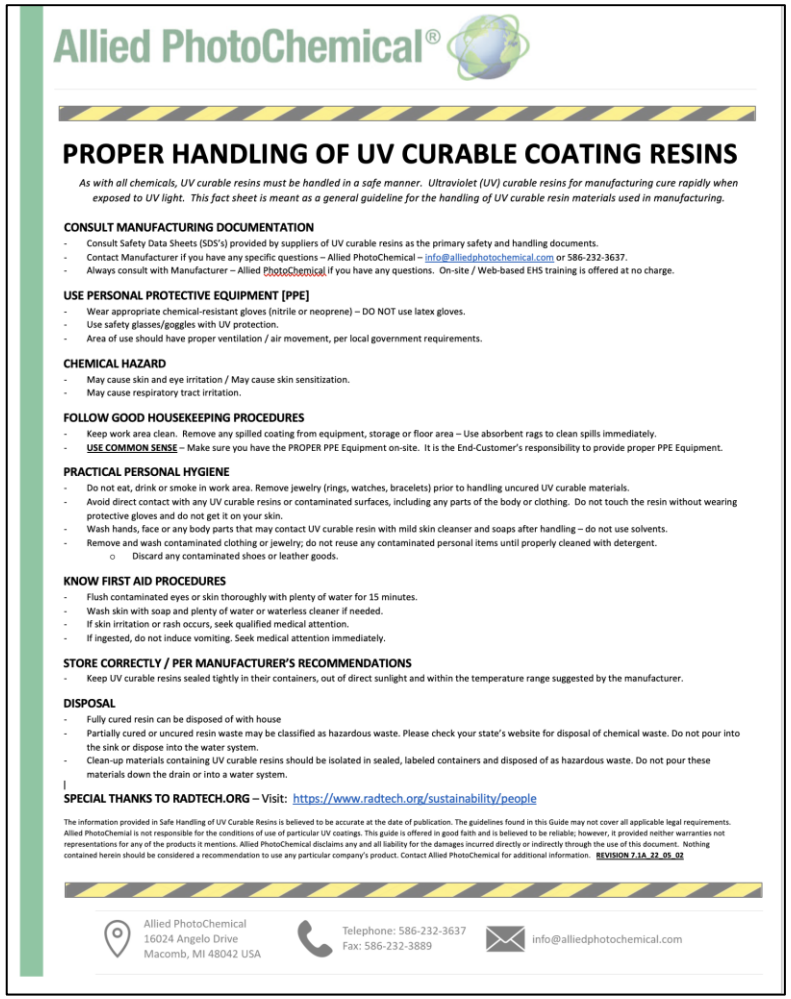
Allied PhotoChemical
16024 Angelo Drive
Macomb, MI 48042 USA

Telephone: 586-232-3637
Fax: 586-232-3889

info@alliedphotochemical.com

SAFETY BULLETIN

UV COATING ON UNIFORMS



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PROPER HANDLING OF UV CURABLE COATING RESINS

As with all chemicals, UV curable resins must be handled in a safe manner. Ultraviolet (UV) curable resins for manufacturing cure rapidly when exposed to UV light. This fact sheet is meant as a general guideline for the handling of UV curable resin materials used in manufacturing.

CONSULT MANUFACTURING DOCUMENTATION

- Consult Safety Data Sheets (SDS's) provided by suppliers of UV curable resins as the primary safety and handling documents.
- Contact Manufacturer if you have any specific questions – Allied PhotoChemical – info@alliedphotochemical.com or 586-232-3637.
- Always consult with Manufacturer – Allied PhotoChemical if you have any questions. On-site / Web-based EHS training is offered at no charge.

USE PERSONAL PROTECTIVE EQUIPMENT [PPE]

- Wear appropriate chemical-resistant gloves (nitrile or neoprene) – DO NOT use latex gloves.
- Use safety glasses/goggles with UV protection.
- Area of use should have proper ventilation / air movement, per local government requirements.

CHEMICAL HAZARD

- May cause skin and eye irritation / May cause skin sensitization.
- May cause respiratory tract irritation.

FOLLOW GOOD HOUSEKEEPING PROCEDURES

- Keep work area clean. Remove any spilled coating from equipment, storage or floor area – Use absorbent rags to clean spills immediately.
- **USE COMMON SENSE** – Make sure you have the PROPER PPE Equipment on-site. It is the End-Customer's responsibility to provide proper PPE Equipment.

PRACTICAL PERSONAL HYGIENE

- Do not eat, drink or smoke in work area. Remove jewelry (rings, watches, bracelets) prior to handling uncured UV curable materials.
- Avoid direct contact with any UV curable resins or contaminated surfaces, including any parts of the body or clothing. Do not touch the resin without wearing protective gloves and do not get it on your skin.
- Wash hands, face or any body parts that may contact UV curable resin with mild skin cleanser and soaps after handling – do not use solvents.
- Remove and wash contaminated clothing or jewelry; do not reuse any contaminated personal items until properly cleaned with detergent.
  - Discard any contaminated shoes or leather goods.

KNOW FIRST AID PROCEDURES

- Flush contaminated eyes or skin thoroughly with plenty of water for 15 minutes.
- Wash skin with soap and plenty of water or waterless cleaner if needed.
- If skin irritation or rash occurs, seek qualified medical attention.
- If ingested, do not induce vomiting. Seek medical attention immediately.

STORE CORRECTLY / PER MANUFACTURER'S RECOMMENDATIONS

- Keep UV curable resins sealed tightly in their containers, out of direct sunlight and within the temperature range suggested by the manufacturer.

DISPOSAL

- Fully cured resin can be disposed of with house
- Partially cured or uncured resin waste may be classified as hazardous waste. Please check your state's website for disposal of chemical waste. Do not pour into the sink or dispose into the water system.
- Clean-up materials containing UV curable resins should be isolated in sealed, labeled containers and disposed of as hazardous waste. Do not pour these materials down the drain or into a water system.

SPECIAL THANKS TO RADTECH.ORG – Visit: https://www.radtech.org/sustainability/people

Allied PhotoChemical
16024 Angelo Drive
Macomb, MI 48042 USA

Telephone: 586-232-3637
Fax: 586-232-3889

info@alliedphotochemical.com

PROPER HANDLING OF UV CURABLE COATING RESINS

CUSTOMER ENGAGEMENT

POST PRODUCTION STAGES:

8. Quality Certification Procedures – DEFINED / Customer Specific
9. PPE – Personal Protection Equipment recommendations
10. EHS Safety Training / On-site / Multi-Shift
11. On-site Start-Up Assistance – UV Systems Integrator / UV Lights / Allied UV
12. Maintaining your UV System
13. Monitoring the ROI / Cost Savings / Overall benefits of UV
14. **On-Going Service & Support - Continue EHS / Customer AUDITS & REPORTS**

CUSTOMER ENGAGEMENT

STAGE 14 – ONGOING SUPPORT / CUSTOMER ASSESSMENT REPORT - CAR

QUARTERLY VISITS / AS NEEDED VISITS: PROACTIVE AUDIT OF UV PROCESS

Customer:		Coating:		Date:	
Location:		Size (in.):			
Line/Mill#:		Speed ft/min:			

ALLIED UV

Process Components	Good	Caution	Needs Attention	Notes/Findings:
COATING STORAGE				
COATING PREP				
WASHER				
DRYER				

MUTUAL ACCOUNTABILITY

Customer:		Coating:		Date:	
Location:		Size (in.):			
Line/Mill#:		Speed ft/min:			

ALLIED UV

Process Components	Good	Caution	Needs Attention	Notes/Findings:
COATING STORAGE				
COATING PREP				
WASHER				
DRYER				
PRODUCT SURFACE				
DAY TANK/RECLAIM				
SPRAY BOX				
LIGHT BOX				
MAINTENANCE (PM's)				
PPE/SPILL KIT				
Quality Assurance	**Good**	**Caution**	**Needs Attention**	**Notes/Findings:**
THICKNESS				
ADHESION				
CURE				
VISUAL DEFECTS				

Please Contact Allied UV for Detailed Information About This Report

OUTCOME

SIGNIFICANT BENEFITS:

- ✓ **Sustainability / Environmental Advantages – No VOC's or HAP's**
- ✓ Great Overall Process Improvements – Faster Production Speeds
- ✓ Improved Product Performance
- ✓ Lower per linear foot coating costs
- ✓ Energy Savings
- ✓ And many others…..

CONVERSATION SESSION

ASK YOUR QUESTIONS

Michael Kelly
mkelly@AlliedUV.com
248-515-9240