



COATINGS+

+ ON SITE GUIDE

SSPC Annual Conference | December 13–16, 2021
Phoenix Convention Center | Phoenix, AZ

QUALITY MATTERS

BLAST WITH SUPEROXALLOY



Coating without embedment

Substrate blasted with 10X

Coating with embedment

Substrate blasted by other abrasives

ACHIEVE SSPC SP-5 FINISH × MAXIMIZE ADHESION × PREVENT RUST BLOOM

Coatings+ Booth 400

10X ENGINEERED
MATERIALS

COATINGS+ *Sponsors*

Thank you to our 2021 sponsors for their part in our final event!

PLATINUM SPONSORS



We protect and beautify the world™

GOLD SPONSORS



SILVER SPONSORS



BRONZE SPONSORS



OFFICIAL PUBLICATION OF THE PROGRAM





TEXAN STONE LLC

14090 Southwest Freeway, Suite 310, Sugarland TX 77478
Phone: (713) 294-4180 Email: Mani@texanstone.com
www.texanstone.com



**WE ARE LOADING BREAKBULK NOW!
PLEASE VISIT OUR STAND 704 AT COATINGS+ CONFERENCE**

CARB CERTIFIED PROCESSOR

Wholesale Supply of India Beach Garnet

**100% Verified and Screened Clean Coarse Garnet 30/60 Mesh
Very Clean Staurolite from Europe**

**All Products Are Mined and Sourced Legally
Long-Term Stable Government Supply**

Texan Stone LLC is a major abrasive supplier based in Houston, selling abrasives Nationwide. We stock **CARB Certified** India beach garnet and Staurolite. Garnet sizes are 30-60, 50-80, 80 and 120 mesh. 55 lbs. Poly Bag packaging is available upon request.

STAR-O-RIGHT is a high-quality Staurolite concentrate from Europe. STAR-O-RIGHT has good area coverage, high mil impression (2 mil finish), no radiation issues, low chloride and conductivity levels, less dust generation, faster blasting with lower abrasive consumption.

Staurolite is suitable for blending with Slags and delivers high performance economically. Packed in 1 or 2 MT jumbo bags. We guarantee consistent quality at a great Wholesale price.

Currently all India Beach Garnet and Staurolite are sold via major distributors nationwide. Please call for distributorship details. Our team of dedicated Technical and Sales Experts works with all customers to understand their priorities and challenges to obtain solutions.

Samples Provided Upon Request. 100% RADIATION CHECKED

STAUROLITE



**Texan Minerals Garnet
30-60 mesh is **AB-1**
and **CARB** certified.
Many End-Users tested
and found our Garnet
has low impurities
gives consistent White
Finish and 3 mil**

INDIA BEACH GARNET



FOR SALES, PLEASE CONTACT

Alex | (713) 823-9816 | Alex@texanstone.com
Haiyan | (832) 790-2484 | Haiyan@texanstone.com
David | (832) 795-8422 | David@texanstone.com (Español)

Shipped Directly to North American Ports

Processing Warehouses Located in Houston TX, Savannah GA & Newark NJ

WELCOME TO COATINGS+ 2021

Welcome to Coatings+ 2021. On behalf of the Board of Directors for the Association for Materials Protection and Performance (AMPP) Global Center, it is my pleasure to welcome you to the beautiful city of Phoenix, Arizona. Phoenix and the surrounding area is known for beautiful golf courses and hiking trails, and it is home to one of the largest municipal parks in North America. While here, we hope you can enjoy the rich history of the city at The Heard Museum that features art and culture of Native Americans in the Southwest, or visit the Phoenix Art Museum, the largest art museum in the Southwest.

It is my hope that you all enjoy our last Coatings+ Conference and attend one of our many technical sessions to learn about the latest on coatings technologies, inspection equipment, and professional services from around the industry. This is our last Coatings+ Conference and we want to make it a memorable one. I hope you have invited someone from your organizations that have not been before so they can be part of the last one and be here in 2022 when we welcome the new AMPP Annual Conference.



Some conference highlights include:

- + The Awards Luncheon where this year's SSPC Individual and Structure Awards will be presented
- + The ribbon cutting and exhibit hall opening ceremony on Tuesday evening
- + This year's technical program with 75+ speakers
- + NEW! — The Coatings Experience, which offers activities on coatings application, surface preparation, inspection plans, and coatings selection in a fun and interactive way
- + Wednesday's exhibit hall, where you can check out the professional development panelists, such as this year's woman in coatings award winner, young and seasoned professionals, etc.

Be sure to download the Coatings+ mobile app to stay up to date on sessions, events, and booth numbers. Take full advantage of the networking opportunities during the conference, and please join us during our round robin with Bob Chalker, AMPP CEO, to learn more about what the future holds for AMPP.

Enjoy Coatings+ 2020. I look forward to seeing you next year at our new AMPP Annual Conference and Expo March 6–10, 2022 in San Antonio, TX.

Sincerely,

A handwritten signature in black ink that reads "Joyce Wright". The signature is fluid and cursive.

Joyce Wright
Chair, AMPP Global Center

TABLE OF CONTENTS

AMPP Board of Directors	8
Conference Schedule	12
Conference Information	14
Conference Activities	20
Other Meetings	22
Annual Awards	24
Technical Paper Presentations	29
Workshops	51
Exhibitor Listings	59
Convention Center Map	74
Exhibit Hall Floorplan	78

Join Us at the Coatings+ 2021 Professional Development Panel

Wednesday, December 15 | 3:30 PM–5:00PM

Located in the Exhibit Hall

How Have Change and Evolution Influenced Your Career?

Change is inevitable, though sometimes more surprising or impactful than we might expect. To the entire world, 2020 was both, sending our lives spinning and careers careening into uncertainty and chaos. Thankfully, the evolution of technology has been a steadfast contributor to advancement in our industry, allowing us to regain some traction. We at AMPP invite you to join us for a panel discussion with chosen industry members in various stages of their careers, to see how change and disruption has influenced them over the last year and throughout their careers. You won't want to miss it!



AMPP BOARD OF DIRECTORS

OFFICERS



Tim Bieri
Chair
BP America Inc.



Sam Scaturro
Vice Chair
*Alpine Painting &
Sandblasting Contractors*



Joe Walker
Past Chair
Elcometer, Inc.



Cris Conner
AMPP Global Center Vice
Chair—Ex Officio
Utility Service



Bob Chalker
Chief Executive Officer *AMPP:*
*Association for Materials
Protection and Performance*
Secretary—Ex Officio



Helena Seelinger
Executive Director
*AMPP: Association for
Materials Protection and
Performance*

DIRECTORS



Abdullah Al-dossary
Saudi Aramco



Ross Boyd
TruQC, LLC



Amir Eliezer
CTO-TRYMER LTD.



Kevin Garrity
Mears Group, Inc.



George Galis
*Finishing Trades
Institute (FTI)*



Bob Kogler
Rampart, LLC



Michelle Lau
*Mach 3 Engineering
Sdn. Bhd.*



Garry Manous
Atsalis Bros. Painting



Russell Norris
*The Sherwin-Williams
Co.*



Doni Riddle
*The Sherwin-Williams
Company*



Skip Vernon
CLT, Inc.



Paul Vince
WSP

AMPP GLOBAL CENTER BOARD OF DIRECTORS

OFFICERS



Joyce Wright
Chair
*Huntington Ingalls Industries—
Newport News Shipbuilding*



Cris Conner
AMPP Vice Chair
Utility Service



Terry Greenfield
Past Chair
CONSULEX



Sam Scaturro
AMPP Vice Chair—Ex Officio
*Alpine Painting &
Sandblasting Contractors*



Bob Chalker
Chief Executive Officer AMPP:
*Association for Materials
Protection and Performance*
Secretary—Ex Officio



Cindy O'Malley
Executive Director AMPP
Global Center
Chief Operating Officer
AMPP: *Association for
Materials Protection and
Performance*

DIRECTORS



Mana Al-Mansour
Saudi Aramco



Juan Caballero
Naval & Industrial Solutions S.A.



Cal Chapman
Chapman Engineering



Steve Cogswell
FINCANTIERI Marine System



Emer Flounders
Aegion/Corrpro



Roy Fultineer
Roberts Corrosion Services, LLC



Rolf Gubner
Consultant



Francisco Gudiel
LA DoT & Development, Materials and Testing Section



Kimberly-Joy Harris
Enbridge



Alison Kaelin
ABKaelin, LLC



Doug Kellow
Brenntag Canada Inc.



Kristin Leonard
ExxonMobil



Michael McLampy
PPG Industries



Michael O'Brien
MARK 10 Resource Group, Inc.



Ahren Olson
Covestro, LLC



Arcino Quiero
Newport News Shipbuilding



Greg Redick
Potomac Redan Associates, LLC



Brian Saldanha
Chemours Company



Leonardo Uller
SURPLUS



Paul Vinik
GPI

CONFERENCE SCHEDULE

SUNDAY, DECEMBER 12, 2021

11:00 AM–4:00 PM Phil Calvo Memorial Golf Tournament

MONDAY, DECEMBER 13, 2021

8:00 AM–5:00 PM Exhibitor Move-In
9:00 AM–11:00 AM Concurrent Technical Sessions
11:30 AM–1:00 PM Awards Lunch
3:00 PM–4:00 PM Round-Robin with Bob Chalker, *AMPP CEO*
1:30 PM–5:00 PM Concurrent Technical Sessions
5:30 PM–7:30 PM Welcome Reception

TUESDAY, DECEMBER 14, 2021

8:00 AM–3:00 PM Exhibitor Move-In
8:30 AM–10:00 AM Keynote Breakfast
10:30 AM–12:00 PM Concurrent Technical Sessions
1:00 PM–5:00 PM Concurrent Technical Sessions
5:00 PM–8:00 PM Exhibit Hall Opening Reception

WEDNESDAY, DECEMBER 15, 2021

8:00 AM–11:00 AM Concurrent Technical Sessions
8:30 AM–9:30 AM Round-Robin with Bob Chalker, *AMPP CEO*
11:00 AM–5:00 PM Exhibit Hall Open
11:30 AM–1:00 PM Complimentary Lunch in Exhibit Hall
1:00 PM–3:30 PM Concurrent Technical Sessions
3:30 PM–5:00 PM Professional Development Panel

THURSDAY, DECEMBER 16, 2021

8:30 AM–11:30 AM Concurrent Technical Sessions
10:00 AM–3:00 PM Exhibit Hall Open
11:30 AM–1:00 PM Complimentary Lunch in Exhibit Hall
1:00 PM–3:00 PM Concurrent Technical Sessions
3:00 PM–8:00 PM Exhibitor Move-Out

EXHIBIT HALL HOURS

Tuesday, Dec 14 5:00 PM–8:00 PM
Wednesday, Dec 15 11:00 AM–5:00 PM
Thursday, Dec 16 10:00 AM–3:00 PM

REGISTRATION HOURS

Monday, Dec 13 7:00 AM–6:00 PM
Tuesday, Dec 14 7:00 AM–7:00 PM
Wednesday, Dec 15 7:00 AM–5:00 PM
Thursday, Dec 16 7:00 AM–2:00 PM

BOOKSTORE HOURS

Monday, Dec 13 7:00 AM–5:00 PM
Tuesday, Dec 14 7:00 AM–6:00 PM
Wednesday, Dec 15 7:00 AM–5:00 PM
Thursday, Dec 16 7:00 AM–3:00 PM



A new year.
A new
membership
model.
New
possibilities...

The process of merging NACE International and SSPC into AMPP, the Association for Materials Protection and Performance, continues with finishing touches being put on a newly designed membership model.

Just as NACE and SSPC's combined 140+ year history serves as the foundation for the future of materials protection and performance, your member history will remain and form the basis of your AMPP membership.

Leading up to the official launch, we want to answer your most frequently asked questions and help you realize the many possibilities offered by AMPP membership, built on the rich legacies of these two respected organizations and their many members.

Change brings questions. Find answers here.

New AMPP Membership Model FAQs
ampp.org/membership/FAQs



Check back regularly and look for the official new AMPP model launch in early 2022! Bookmark ampp.org/membership/FAQs or scan the QR code.



CONFERENCE INFORMATION

Right to Deny or Remove

We reserve the right to deny registration or admission to or remove any party from the conferences and expo, at our sole discretion.

Wi-Fi – Wireless Internet

Complimentary Wi-Fi is available to all attendees in the exhibit hall and most common areas of the convention center. Please use the following to log in:

- + Wi-Fi Name: Coatings+
- Password (case sensitive): iupat-fti



Social Media

Follow AMPP on Twitter, Facebook, LinkedIn, and Instagram for updates and important reminders. Use #CoatingsPlus2021 to join the conversation.

Professional Development Hours

To obtain a certificate of Professional Development Hours, log on to the website at www.ampp.org/pdh-coatings. Search for or browse to select the sessions you attended.

Email or print your certificate! This system will be available online for one year after the conclusion of the conference, accessible from your AMPP profile. Certificates are based solely on the information provided to AMPP at the time of printing.

Official Conference Language

The official conference language is English.

Dress Code

The dress code for all official conference activities is business casual.

Coatings+ App

Stay up to date with all of the activities at Coatings+ 2021. Download the app today by following the instructions below:

1. Download "Coatings+" in either the App Store or Google Play.
2. Open the app and search for the event "Coatings+ 2021".
3. Tap the name of the event, then tap Download to open it.
4. Enter your info. If you aren't automatically prompted to log in, tap the Profile tab at the bottom of the screen, then Log in.
5. Verify your account. You'll receive an email containing a verification code. Enter the code and tap the arrow.
6. You'll then be logged in and directed to the Coatings+ Home page.

Information Kiosk

Need directions to your next meeting or have a question about Coatings+? Knowledgeable AMPP staff will be available to help you navigate the Phoenix Convention Center or answer general conference questions. The Information Kiosk will be located at the entrance to the Convention Center from 3rd St.

While there, update your AMPP profile for a chance to win SSPC-branded items.

COVID-19

All Coatings+ participants must sign a COVID-19 Liability Wavier when registering. If you are feeling unwell or experiencing any symptoms of COVID-19, we recommend that you do not attend the conference and that you seek medical attention if necessary.

CONFERENCE INFORMATION

AMPP Store

Looking for books on coatings? Visit the AMPP Bookstore and browse through coatings-related books. Get exclusive discounts on titles displayed on site at Coatings+. While at the AMPP Bookstore, be sure to check out the AMPP online store kiosk to see additional coatings-protection and corrosion-related products. The AMPP Bookstore is located at the entrance of the exhibit hall.

Sales Office

Exhibit Hall, Booth 522

Looking to reach the decision makers in the global corrosion and protective coatings industries? One stop to the AMPP Sales Office will provide you with marketing solutions. Get information on all of AMPP's upcoming events as well as media options, including *Materials Performance*, *CORROSION*, *CoatingsPro*, digital issues, and digital offerings.

First Aid

Phoenix Convention Center, North Hall C

The first aid room contains essential first aid supplies, is staffed by first aid representatives, and will be available to all conference attendees during regular conference hours.

Mother's Room

Mamava pods are located on the 2nd level of the North building and on the first level of the West building in the Phoenix Convention Center.

Prayer Room

Phoenix Convention Center, North 221 C

A prayer room is a place for people to pray, whether individually or in groups. It is the place where individuals may break away from routine and the busy conference schedule for divine time to themselves. It is not intended for one faith or religion; any person with the will to pray may use the prayer room during Coatings+.

Conference Proceedings

You can access, search, and download all conference proceedings both online and via USB flash drive if you purchased access as part of your Advance Registration. If you purchased a Full-Conference Advance Registration or Advance Student Registration, a ticket for your complimentary USB flash drive will be provided to you at the registration desk, upon check-in. Please take your ticket to the AMPP Store to collect your USB.



For those who did not purchase a Full-Conference Advance Registration pass, USBs will be available for purchase at the rate of \$99 USD at the AMPP Store. Access to the papers online will be available starting early 2022. At www.nace.org, click 'My Account' at the top of the webpage and select 'Downloadable Products' from the left menu.

Publication Bins

Come by and pick up complimentary issues from the following publications:

- + *CoatingsPro Magazine*
- + *Materials Performance Magazine*
- + *CoatingsPro's SourceBOOK*
- + *BIC Magazine*
- + *CoatingsTech*
- + *Materials Evaluation*
- + *PaintSquare*

CONFERENCE INFORMATION

Convention Center Accessibility

The Phoenix Convention Center is an ADA-compliant facility and welcomes all guests with disabilities. Please contact Phoenix Convention Center at +1 602.256.4394 with any questions.

Code of Ethics

The Fundamental Principles

Members uphold and advance the integrity, honor, and dignity of the members' profession by:

- Using their knowledge and skill for the enhancement of human welfare,
- Being honest and impartial, and serving with fidelity the public, their employers, and clients; and
- Striving to increase the competence and prestige of the materials protection and performance profession.

The Fundamental Canons

1. Uphold the safety, health, and welfare of the public in the performance of their professional duties.
2. Represent areas of competence and build reputation based on merit of services.
3. Strive for continuous professional development and foster development of others in field.
4. Serve in professional matters for AMPP, employer, and/or client as faithful agents or trustees and shall avoid conflicts of interest.
5. Members shall associate only with reputable persons or organizations.
6. Members shall issue public statements only in an objective and truthful manner.
7. Act with integrity and honesty in all professional endeavors and be forthcoming with concerns of unethical behaviors.
8. Foster behaviors of respect, value diversity of our members, staff, partners, customers, and suppliers, and strive to promote recognition and participation by individuals regardless of differences.
9. Harassment, including but not limited to cultural, religious, or sexual, by or against any employee, member, officer, director, or other volunteer, vendor, or customer; and such conduct will not be permitted or condoned.

Anti-Harassment Policy

AMPP is committed to providing an environment free of sexual harassment (which includes harassment based on gender, pregnancy, childbirth, or related medical conditions), as well as harassment based on such factors as race, color, religion, national origin, ancestry, age, physical disability, mental disability, medical condition, marital status, sexual orientation, gender identity, gender expression, workers' compensation leave, veteran status, or any other condition or characteristic protected by law. We expect all participants at Coatings+ to abide by this Anti-Harassment Policy in all venues at Coatings+, including ancillary events and official and unofficial social gatherings.

- + Exercise consideration and respect in your speech and actions.
- + Refrain from demeaning, discriminatory, or harassing behavior and speech.
- + Be mindful of your surroundings and of your fellow participants.
- + Alert AMPP staff if you notice harassment. If you are being harassed, notice that someone else is being harassed, or have any other concerns, please contact Meghan Leyva at +1 361.779.1387 on-site immediately.

Alcohol and Drug Policy

AMPP and the AMPP Global Center are committed to the health and well-being of its staff, members, customers, event participants, and vendors. This Policy addresses the availability and consumption of alcoholic beverages at AMPP affiliated events. Those who choose to drink alcoholic beverages at AMPP affiliated events are expected to do so legally and in moderation and are expected to act responsibly and behave professionally.

The sale or distribution of alcoholic beverages at any AMPP affiliated event must be conducted through a licensed provider. Non-alcoholic beverages are required at all affiliated events at which alcohol is served. Alcohol should cease being served to allow for safe consumption before the designated time for close of the function. Non-

CONFERENCE INFORMATION

alcoholic beverages may remain available at this time. Advertisements shall not highlight the availability of alcohol at any affiliated event. Advertising shall not promote consumption of alcohol.

International Communities are not covered under AMPP insurance programs and should conform to all applicable regulations. Appropriate insurance coverage is recommended. Those international communities not explicitly covered under AMPP insurance programs must indemnify and hold harmless AMPP for any and all sponsored events where alcohol is distributed and consumed. For all affiliated events where alcohol is available, the sponsoring group will endeavor to establish agreements establishing reciprocal indemnification and hold harmless responsibilities and insurance requirements with the venue. Any member, sponsor, vendor, or exhibitor at an affiliated event wishing to sell or distribute alcohol must conform to this Policy and any other directives made by AMPP staff.

The use of alcoholic beverages or other controlled substances by any member, sponsor, vendor, or exhibitor at an AMPP affiliated event shall comply with federal, state, and local laws. Members, staff, vendors, and customers at AMPP affiliated events shall conform to this Policy and all other applicable policies, including, but not limited to, the Code of Ethics and Health, Safety, and Risk Management, current versions of which are incorporated herein by reference. Individuals who violate this Policy may be subject to the disciplinary procedures, including, but not limited to, suspension or loss of membership, disbarment from future AMPP affiliated events and/or other sanctions as deemed appropriate. Communities or other AMPP affiliates who violate this Policy may be subject to the disciplinary procedures, including, but not limited to, suspension or loss of affiliation, disbarment from future affiliated events and/or other sanctions as deemed appropriate by the Association or Center Board of Directors.

Violations of this Policy may be addressed by the Association or Center Board of Directors or the Ethics and Professional Practice Committee, at its sole discretion.

Minor Policy for AMPP Conferences

Children under the age of 15 are not permitted in the Expo, meetings, and technical presentations. Children over the age of 15 must be registered as guests and wear badges at all times while in the convention center. To accommodate nursing mothers, the following will apply:

1. Expo attendance: Nursing infants will be allowed in the Exhibit Hall during show hours only and must always be carried by a registered AMPP attendee either in his or her arms or in a front baby carrier (NO STROLLERS PERMITTED). Everyone who attends the exhibition must be registered and have a badge. Badges for minors 15 and older are free and available on site at the registration desk. Minors between 15 and 18 years of age must be accompanied by an adult at all times. Guardians are asked to help maintain a professional, disturbance-free exhibition environment.
2. Meetings and technical presentations: To provide all AMPP attendees an optimal learning environment, minors and guests are not permitted in technical presentations. Those attending these sessions must be registered for the conference and show the appropriate badge.
3. Exhibitors: Exhibitor booth staff must be registered as such and be 15 years of age or older. The nursing infant rule does not apply to exhibitors. No child under the age of 15 may be in an exhibit booth during setup, tear-down, or show hours. Anyone in violation of these rules will have their booth closed and will not be provided a refund.
4. Strollers and rolling carts are not allowed in the Exhibit Hall at any time.
5. Childcare is not available at the convention center; however, your hotel concierge may be able to assist you. Please note that AMPP has no affiliation with these services.

KEYNOTE SPEAKER



KEYNOTE SPEAKER—LISA BODELL

FutureThink CEO; Global Innovation and Change Expert; Best-Selling Author, *Kill the Company* and *Why Simple Wins*

Tuesday, December 14, 2021 | 8:30 AM–10:00 AM | West 301A

Lisa Bodell is a global leader on behavior change, whose skill-building firm has transformed hundreds of thousands of employees from Fortune 500 companies by showing them how to eliminate the complexity that holds them back and get to the work that matters.

Her talks offer a roadmap to eradicate the workplace complexity that is killing organizations' ability to be agile, fast, and innovative. In order to experience this trifecta of competitive advantage, organizations must embrace simplicity as a basic operating principle, and Lisa's content and energy move them to action.

A dynamic keynote speaker, Lisa empowers audiences with thought-provoking examples and practical techniques that ignite simplification and innovation immediately. Praise for her talks include: "the best speaker yet — engaging and energetic" (Google); "revolutionary and compelling" (Accenture); "incredibly unique and thought provoking" (Mastercard Worldwide); "immediately actionable" (Citigroup).

With a deep understanding of best practices across industries, Lisa has contributed her expertise to a wide variety of media, including: *Fast Company*, *WIRED*, *The New York Times*, *Bloomberg Businessweek*, *Forbes*, *Harvard Business Review*, *The Huffington Post*, and *CNN*. Lisa has served on the advisory boards of the NSA, the Association of Professional Futurists, and Novartis' Diversity and Inclusion Board, and she is an acting member of the Global Agenda Council for the World Economic Forum.

Trenton offers three Wax-Tape® brand anticorrosion wrap systems.

High-quality, easy-to-apply wraps that protect irregularly shaped fittings and require minimal surface preparation.



Belowground applications

Wax-Tape® #1 **Anticorrosion Wrap:**

A very durable wrap that uses a thick, non-stitch bonded synthetic fabric and has no clay fillers, so it stays conformed to irregular profiles. The wrap requires no abrasion blasting, can be backfilled immediately and is compatible with cathodic protection.



Aboveground and belowground applications

Wax-Tape® #2 **Self-Firming Anticorrosion Wrap:**

A unique, microcrystalline-wax-saturated wrap that slowly firms up to provide excellent aboveground and belowground protection. Comes in a variety of colors and usually requires no outerwrap.



High-temperature applications

Wax-Tape® HT-3000

High-Temperature Anticorrosion Wrap:

Designed for operating temperatures up to 230°F (110°C), Wax-Tape® HT-3000 wrap can be used on high-temperature oil and gas piping, on compressor station discharge piping, beneath thermal insulation and in high ambient temperature conditions.

Only Trenton offers Wax-Tape® brand anticorrosion wrap systems, with primers, wraps and outerwraps.

TRENTON
ANTICORROSION MATERIALS

www.trentoncorp.com

CONFERENCE ACTIVITIES

PHIL CALVO MEMORIAL GOLF TOURNAMENT

Sunday, December 12
11:00 AM–4:00 PM

TPC Scottsdale, Champions Course | Scottsdale, AZ

Proceeds from this memorial golf tournament benefit the AMPP Scholarship Fund. Thank you to all our sponsors and players.

AWARDS LUNCH

Monday, December 13
11:30 AM–1:00 PM

Phoenix Convention Center | West 301A

Join your peers and our AMPP leaders as we gather together to honor the 2021 award recipients. Visit page 24 to see the full list of award recipients.

NEW—ROUND ROBIN WITH BOB CHALKER, AMPP CEO

Monday, December 13
3:00 PM–4:30 PM

Phoenix Convention Center | North 228 A-B

Wednesday, December 15

8:30 AM–9:30 AM

Phoenix Convention Center | North 224 B

Have questions about the NACE International and SSPC Merger? Want to know how AMPP developed the new organization name? Come by and chat with AMPP CEO Bob Chalker to get your questions answered about AMPP. There are two opportunities to participate in this discussion.

WELCOME RECEPTION

Monday, December 13
5:30 PM–7:30 PM

Sheraton Phoenix Downtown | Valley of the Sun Ballroom

Always a favorite social event, the 2021 Welcome Reception kicks off Coatings+ in Phoenix, as attendees and exhibitors connect over drinks and hors d'oeuvres. Drink tickets will be provided at registration.



KEYNOTE BREAKFAST

Tuesday, December 14

8:30 AM–10:00 AM

Phoenix Convention Center | West 301A

Don't miss this year's keynote speaker, Lisa Bodell, a global leader on behavior change who will help teach you some practical techniques to get back to the basics, ignite simplification and innovation within, and get back to the work that really matters.

FACILITY OWNERS LUNCH AND PEER TECHNICAL DISCUSSION SESSION

Tuesday, December 14

11:30 AM–1:00 PM | Phoenix Convention Center

Facility owners are invited for a complimentary lunch to thank them for their commitment to SSPC standards and quality programs for their industrial coating projects. An open forum peer technical discussion session on best practices and solutions will follow lunch.



EXHIBIT HALL OPENING RECEPTION

Tuesday, December 14

5:00 PM–8:00 PM

Phoenix Convention Center | North Halls A–C

Help celebrate the official opening of the 2021 Coatings+ Exhibit Hall; attendees are invited to a reception on Tuesday evening. Hors d'oeuvres and beverages will be served. Enjoy this excellent opportunity to network with people from all aspects of the coatings industry and to peruse the very latest offerings from our vendors.



COATING EXPERIENCE

Exhibit Hall Hours

Phoenix Convention Center | North Halls A–C

This interactive area will introduce those interested in coatings to the ins and outs of application, surface preparation, inspection plans, and coatings selection in a fun and interactive way.

LUNCH WITH EXHIBITORS

Wednesday, December 15

11:30 AM–1:00 PM

Thursday, December 16

11:30 AM–1:00 PM

Phoenix Convention Center | North Halls A–C

We invite you to meet and mingle in the exhibit hall and enjoy a complimentary lunch.


PROFESSIONAL DEVELOPMENT PANEL

Wednesday, December 15

3:30 PM–5:00 PM

Phoenix Convention Center | North Halls A–C

The Professional Development Panel brings an opportunity for Young Professionals, students, and anyone else new to the industry to attend an educational leadership discussion. This is a great opportunity to meet and network with PCS-certified industry mentors and subject matter experts in a relaxed setting. Our team will also be sharing some plans for opportunities and resources we have in store whether you are new to the industry or looking to mentor those who are!




2 DECADES OF COVERAGE

YEARS

20

CoatingsPro
MAGAZINE

As *CoatingsPro Magazine* commemorates its 20th year, we celebrate by acknowledging the many successful projects of our industry's coatings contractors.



Learn more about this special milestone at www.coatingspromag.com/Celebrate20

OTHER MEETINGS

MONDAY, DECEMBER 13

AMPP Technical Program Committee (TPC) Introduction Meeting | 1:00 PM–2:00 PM | Phoenix Convention Center, North 222 C

AMPP Technical Program Committee (TPC) will announce the current status of technical committees and answer any questions regarding the role, responsibilities, and leadership of TPC, the TPC structure, how technical symposia can be recommended for future conferences, and how you can participate in TPC in the key roles of leaders and contributors. Thank you, in advance, for your support of the AMPP Technical Program Committee — we look forward to seeing you at Coatings+.

TUESDAY, DECEMBER 14

MPI — Standards Committee | 8:00 AM–12:00 PM | Phoenix Convention Center, North 224 B

The MPI Standards Community will be meeting to shape the current standards and develop new standards for the architectural and commercial painting industry. Paint manufacturers, specifiers/owners, contractors, and any other individual interested in working in this effort is invited to attend.

Standards Informational Meeting | 10:00 AM–12:00 PM | Phoenix Convention Center, North 226 A–B

The Standards Informational Meeting will include a brief overview of AMPP and a summary of recent activities over the past few years that resulted in a more robust AMPP Standards Program. We also will describe the current standards program including leadership and participation on Standards Committees. This presentation is intended to provide you with a better understanding of AMPP Technical Activities – standards program, technical program, and the research program. Attendees will have the opportunity to ask questions.

AMPP NBPI Instructor Meeting | 10:30 AM–11:30 AM | Phoenix Convention Center, North 222 C

Accreditation Program Committee | 2:30 PM–4:00 PM | Phoenix Convention Center, North 222 C

WEDNESDAY, DECEMBER 15

MPI — Advisory Board | 8:00 AM–11:00 AM | Phoenix Convention Center, North 222 C

AMPP Instructor Meeting | 12:00 PM–1:30 PM | Phoenix Convention Center, North 224 B

AMPP Instructors will meet to recap training in 2021 and to discuss initiatives for 2022.

Accreditation Program QP Core Subcommittee | 12:30 PM–2:00 PM | Phoenix Convention Center, North 222 C

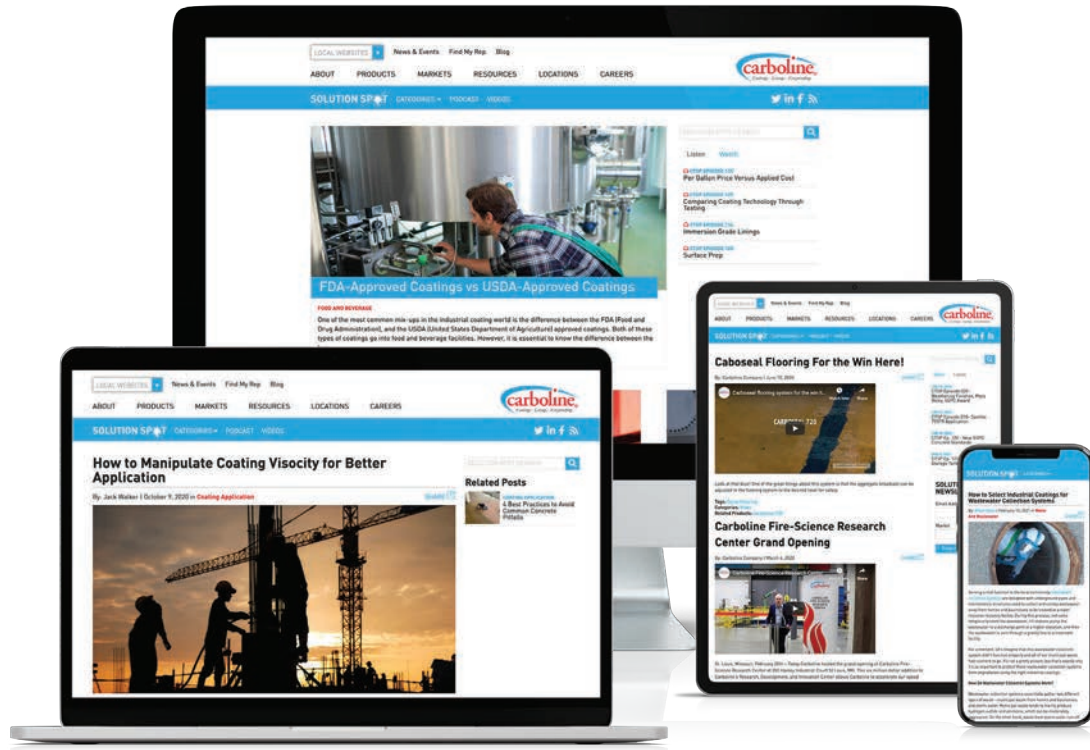
Accreditation Program QP-3 Subcommittee | 2:00 PM–3:00 PM | Phoenix Convention Center, North 222 C

Accreditation Program QP-5 Subcommittee | 3:00 PM–4:00 PM | Phoenix Convention Center, North 222 C

Accreditation Program QP General Subcommittee | 4:00 PM–5:00 PM | Phoenix Convention Center, North 222 C

SOLUTION SPOT

The Solution Spot has the answers to your tough coating, lining, and fireproofing questions.



READ BLOG ARTICLES

Browse through articles written by knowledgeable industry experts, that answer your tough coatings questions.



LISTEN TO PODCASTS

Over 150 podcast episodes featuring experts discussing common industrial coatings and linings products, problems, solutions, and painting and testing techniques.



WATCH VIDEOS

Browse our video library of product applications, product demonstrations, and more.

carboline.com/solution-spot



www.carboline.com



AWARDS LUNCH

Monday, December 13 | 11:30 AM–1:00 PM | Phoenix Convention Center, West 301A

Help us honor the 2021 SSPC Award recipients at the Awards Luncheon. Below is a list of winners for each award category.

THE CHARLES G. MUNGER AWARD

For the outstanding industrial or commercial coatings project demonstrating longevity of the original coating. The structure may have had spot repairs or overcoating with the original coating still in-tact.



Structure Name: *Enbridge Tank 79 Mural Restoration*
Location: *Regina, Saskatchewan, Canada*
Owner: *Enbridge Pipelines Inc.*
Contractor: *Commercial Sand Blasting and Painting*
Coating Material Supplier: *Benjamin Moore*
Project Sponsor: *Enbridge*
Coating Inspector: *Mike Jones, Jones Coatings and Chad Foulston*
Lead Artist: *Grant McLaughlin*

THE E. CRONE KNOY AWARD

For outstanding achievement in industrial or commercial coatings work that demonstrates innovation, durability, or utility.



Structure Name: *SoFi Stadium*
Location: *Inglewood, CA*
Owner: *Hollywood Park Land Company, LLC*
Contractor: *Commerce Industrial Coatings*
Coating Material Supplier: *Carboline Company*
Architect/Engineer/Consultant: *Enbridge HKS, Inc.*

THE ERIC S. KLINE AWARD

For outstanding achievement in industrial coatings work performed in a fixed shop facility. The project can be repair work or new construction.



Structure Name: *Globe Life Field*
Location: *Arlington, TX*
Owner: *Texas Rangers*
Contractor: *W&W Afco Steel*
Coating Material Supplier: *Sherwin-Williams Protective & Marine Coatings*

THE GEORGE CAMPBELL AWARD

For outstanding achievement in the completion of a difficult or complex industrial or commercial coatings project.



Structure Name: *Liberty Bridge*
Location: *Pittsburgh, PA*
Owner: *Pennsylvania Department of Transportation*
Contractor: *Avalotis Corp.*
Coating Material Supplier: *Sherwin-Williams Protective & Marine Coatings*
Architect/Engineer/Consultant: *HDR Assoc.*

THE SSPC COATINGS INDUSTRY SPIRIT AWARD

For recognition of a coatings project that demonstrates extraordinary service benefiting a community or the industry.



Structure Name: *SPCA - Lake Jackson, TX Animal Shelter*
Location: *Lake Jackson, TX*
Owner: *SPCA - Lake Jackson*
Contractor: *Lonestar Resin Systems*
Coating Material Supplier: *Carboline Company*

THE MILITARY COATINGS AWARD OF EXCELLENCE

This award is in recognition of the exceptional coatings work performed on U.S. military ships, structures, or facilities.



Structure Name: *USS Spruance*
Location: *BAE Systems Ship Repair San Diego, CA*
Owner: *United States Navy (SWRMC)*
Contractor: *BAE Systems & International Marine & Industrial Applicators LLC (IMIA)*
Coating Material Supplier: *PPG Protective & Marine Coatings*
Architect/Engineer/Consultant: *Gordon Kuljian, PPG Field Service Technical Representative*

THE WILLIAM JOHNSON AWARD

For outstanding achievement demonstrating aesthetic merit in industrial or commercial coatings work.



Structure Name: *Lachlan's Line Pedestrian & Cycle Bridge*
Location: *Ryde Area, Sydney, New South Wales, Australia*
Owner: *Transport for New South Wales*
Contractor: *S & L Steel Fabrications P/L*
Coating Material Supplier: *DuluxGroup, Protective Coatings Division*
Engineer: *Arup/KI Studio*
Project Manager: *Arenco*
Surveillance Officer: *Transport for NSW*

ANNUAL AWARDS



THE SSPC HONORARY LIFE MEMBER AWARD

Recognizing extraordinary contribution and long-term activity on behalf of SSPC.

Award Recipient Bob McMurdy



JOHN D. KEANE AWARD OF MERIT

Named for SSPC's executive director from 1957 to 1984, acknowledges outstanding leadership and significant contribution to the development of the protective coatings industry and to SSPC.

Award Recipient Mark Ingle, P.E., NAVSEA



WOMEN IN COATINGS IMPACT AWARD

Recognizes women in the coatings industry who contribute to creating a positive impact on the culture of the industry. These women are leaders in their profession and demonstrate commitment to the advancement of the coatings industry.

Award Recipient Joyce Wright, Huntington Ingalls Industries – Newport News Shipbuilding



THE RICHARD W. DRISKO COATINGS EDUCATION AWARDS

For significant development and dissemination of education material and technical information relating to protective coatings and their application.

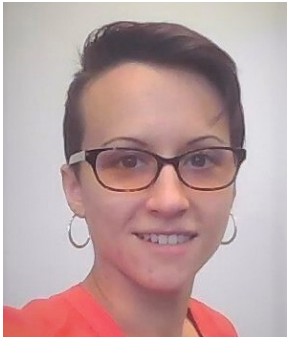
Award Recipients William Corbett, PCS, KTA-Tator, Inc. & Terry New, PCS, TL New Consulting LLC



THE SSPC TECHNICAL ACHIEVEMENT AWARD

Recognizing outstanding service, leadership, and contribution to the SSPC technical committees.

Award Recipient Kurt Wood, Arkema LLC



PRESIDENT'S LECTURE SERIES AWARD

Presented to papers handpicked by the SSPC President and chosen for their reflection of the coatings industry and profession.

Award Recipient "Efficiency of Zinc Content in Sacrificial Protection of Coatings"
Authors (from right to left): Nicole Rakers, PPG; Mary Lyn Lim, PhD, Arconic Technology Center; Michael McCarthy, PPG; James Begley, PPG; Arif Mubarok, PhD, PPG



SSPC OUTSTANDING CHAPTER AWARDS

Presented to the Outstanding North America Chapter and the Outstanding International Chapter. Chapters are evaluated on the overall operation of the chapter and the creativity and quality of the events that they hold each year.

Award Recipients: North American – Southern California Chapter, International – China Chapter



THE BEST OF CORROSION & COATINGS+

Register now and receive the early registration discount!

Corrosion and coatings professionals – get the best of the industry in one place. The inaugural AMPP Annual Conference & Expo brings two flagship conferences together in San Antonio. Meet with industry experts and be part of the most current technical symposia, industry forums, workshops, and standards meetings.

Network with colleagues from around the world. Participate in shaping the future of the industry. Explore the latest technologies and products on the exhibit hall floor.

Register today at the ace.ampp.org

Interested in securing a booth, sponsorships, or advertising?
For package rates and details, contact Tiffany Krevics at Tiffany.Krevics@ampp.org.

 **AMPP**[™]
ANNUAL CONFERENCE + EXPO
MARCH 6–10, 2022 | SAN ANTONIO, TEXAS

TECHNICAL PAPER PRESENTATIONS

TESTING

Phoenix Convention Center | North 222 A–B

Chair: William Corbett, *KTA-Tator, Inc.*

In-Line 3D Characterization of Substrates Through Final Coat

Presentation Time:
9:00 AM–9:30 AM

This paper will present a hand-held shop floor 3D measurement system capable of characterizing raw substrates through final coated surfaces. The system is fast, covers a statistically significant area of the part, and has been shown to allow correlation of initial substrate quality to final painted surface appearance. Such a system allows for end-to-end process control for coatings, improving quality and reducing costs. The talk will provide a variety of case studies and performance data on the instrument across different materials and environments.

Presented By:
Erik Novak, *Onto Innovation*

Importance and Correlation of Accelerated Weathering Versus 10 Years of South Florida Exposure

Presentation Time:
9:30 AM–10:00 AM

The coating industries use accelerated testing to extrapolate and ensure the coating formulation will withstand the force of nature and provide long-term Durability. This paper will compare the performance data of the three common accelerated method, QUV (ASTM 4587), Xenon (ASTM D6695) and EMMAQUA (ASTM D 4141). We will also correlate and compare those data to the same system exposed 10 years in South Florida and also Kansas City, MO. We will compare high performance polyurethane, polysiloxane and fluoropolymer technology. We will demonstrate the combination of accelerated testing can predict long-term performance for different longitude and degree of sun exposure depending of the location of the structure. We will also demonstrate how formulation matter and the critical impact on ingredient and long-term performance of the coating.

Presented By: Remi Briand, Alaina Rickard, & Laura Burton, *Tnemec Company, Inc.*

Application of Electrochemical Noise to Identify Zinc Activity in Zinc-Rich Primer Coatings

Presentation Time:
10:00 AM–10:30 AM

The three-coat system consisting of a zinc-rich primer, epoxy midcoat, and polyurethane topcoat has been widely adopted for corrosion protection of structural steel bridges. In aggressive environments and adverse conditions, the coatings may require early maintenance before its service life. Corrosion mitigation is afforded by the barrier characteristics of the various layers as well as beneficial galvanic coupling of the zinc pigment in the primer to the steel substrate when subjected to corrosive environments such as with moisture ingress and coating damage such as holidays and scratches. The dispersed zinc pigments in the binder require adequate electronic coupling in order to provide the beneficial electrochemical coupling of the zinc to the steel. The application of the electrochemical noise (EN) technique to identify coating corrosion performance was reviewed in controlled laboratory tests. Zinc pigment activation and transition to passive-like conditions in defect and defect-free coating specimens could be identified by EN. The noise resistance correlated well with the polarization resistance to identify zinc activity when coating defects exposed the metal surface and could differentiate coating resistance upon wetting with time of exposure.

Presented By: Samanbar Perme, *Florida International University*, & Kingsley Lau, *Florida International University*

CORROSION

Phoenix Convention Center | North 226 A–B

Chair: Samanbar Perme, *Florida International University*

Ultrathin Permanently Installed Ultrasonic Thickness Sensors, and Applications for Hard to Reach Thickness Measurement Locations

Presentation Time:
9:00 AM–9:30 AM

Ultrathin, Permanently Installed Ultrasonic Thickness (UT) Sensors, that wirelessly provide wall-thickness measurements with great resolution (0.05mm/40 mils), whilst being embeddable underneath coatings and insulation. Thereby, access to hard-to-reach Thickness Measuring Locations (TMLs) is facilitated, and the integrity of a variety of coatings and insulation methods is preserved.

Presented By: Pedro Bordieri & Thomas Fink, *Technofink*

A Novel Surface Preparation Technology to Enhance Corrosion Protection

Presentation Time:
9:30 AM–10:00 AM

This paper introduces a novel pretreatment method that can be used for large structures such as those used in protective and marine coatings industries where traditional pretreatment application is prohibitive. We will demonstrate corrosion performance of various coating systems used in marine environments and compare the novel pretreatment method with traditional surface pretreatment methods.

Presented By: Sarah Specht & Julia Heigl, *PPG*

COATING APPLICATION, TYPES, AND CHARACTERISTICS

Phoenix Convention Center | North 222 A–B

Chair: Jack Walker, *Carboline Company*

New SSPC Paint 47 Fluoropolymer Topcoat Standard for Protective and Restoration Coatings

Presentation Time:
1:30 PM–2:00 PM

Since the 1980s, fluoropolymer resin technologies have offered the possibility of a quantum improvement in topcoat decorative properties — gloss and color retention — compared to conventional acrylic and polyester resins. Specifiers of both protective and architectural restoration coatings systems have expressed a need for a new SSPC standard for field-applied fluoropolymer topcoats, particularly for bright and saturated colors. In the past few years, the SSPC C.1.8 committee worked to develop such a standard, which issued in December 2020 as SSPC Paint 47. A key challenge has been to identify a set of accelerated weathering test conditions that would allow for the reliable qualification of fluoropolymer topcoat formulations, much faster than the 10–50 year outdoor service life of the fluoropolymer paint. Using a round-robin weathering study of 13 resin systems (fluorinated and non-fluorinated) from 10 different manufacturers, in four reference colors, we have identified accelerated test conditions that accurately differentiate between high weatherability fluoropolymer formulations, and conventional SSPC Paint 36 and MPI 311 formulations (Spearman rank correlation > 0.90).

Presented By: Kurt Wood, *Arkema, Inc.*

Use of Duplex Coating Systems for Protection of Structural Steel

Presentation Time:
2:00 PM–2:30 PM

Presented By: William Corbett, *KTA-Tator, Inc.*

The use of duplex coating systems (hot dip galvanizing or thermal spray coating with one or more liquid-applied coatings) for long term protection of structural steel is becoming more mainstream in many industries. This paper describes the advantages of employing duplex coating systems as well as some important considerations for designers prior to specifying their use.

Fluoropolymer Polyurethane Topcoats on Elevated Steel Water Storage Tanks: Roller Applications Weather the Test of Time

Presentation Time:
2:30 PM–3:00 PM

Presented By: Vaughn O'Dea & Scott Keiby, *Tnemec Company, Inc.*

Elevated steel water storage tanks arguably face some of the most aggressive exterior exposures in North America. The fluoropolymer topcoat is typically roller applied to the exterior water tanks surfaces of both new and existing re-paints. A roller application leaves a slight roller stipple and air entrainment in the dried film, typical of this application method. As an industrial-grade fluoropolymer coating, this roller application provides a functional film and are designed specifically for performance as well as industry painting practices for water tanks.

INSULATION & CORROSION

Phoenix Convention Center | North 226 A–B

Chair: Cory Brown, *Tnemec Company, Inc.*

Insulative Coatings — Fit for Purpose

Presentation Time:
1:30 PM–2:00 PM

Presented By: Arin Shahmoradian, *SPI Coatings*

Correctly specify and install the right insulative coating for CUI protection, insulation and personal protection.

Field Application of Third Generation Polysiloxane Coating Systems

Presentation Time:
2:00 PM–2:30 PM

Presented By: Peter Bock, *Performance Polymers Americas, LLC*; & James Reynolds, *Performance Polymers EMEA, BV*

Third Generation Polysiloxane (TGPS) ambient curing CUI mitigation coatings have been used in the petrochemical industry for over five years since the “third generation” concept was introduced at NACE Corrosion 2017. These coating technologies have demonstrated positive results in both shop and field application for asset management in elevated temperature, cryogenic and cyclic applications across -196 to 650 °C/ -321 to 1200 °F operational temperatures. TGPS coatings have also demonstrated effective use of a two-step (primer-insulation) CUI mitigation coating approach operating up to 400 °C/750 °F, when compared to the traditional (CUI coating-fibrous insulation-cladding) systems.

Surface Decontamination Significantly Reduces Vulnerability to CUI

Presentation Time:
2:30 PM–3:00 PM

Presented By: Loren Hatle, *Corrosion Exchange, LLC*

A method to ensure maximum bonding of protective coating to metal, surface preparation must include metal decontamination processes to fully eradicate the full array of micro-contaminants that impede coating adhesion to ensure maximum asset resilience against problems such as stress corrosion cracking (SCC) and other CUI vulnerabilities. Case studies prove that early adoption of novel surface decontamination technologies confer complete permanent micro-contaminant removal for improved protective coating bond strength to reduce economic investment in maintenance and increase long-term coating reliability, thus reducing vulnerability to CUI.

Development of Novel Epoxy Closed-Cell Foam for Personnel and Corrosion Protection

Presentation Time:
3:00 PM–3:30 PM

Presented By: Osmay Oharriz, *Belzona*

Industrial assets operating at 140 °F or above may be thermally insulated to prevent plant operators and personnel from experiencing skin burns after accidental touches. Insulation, however, increases the risk of the underlying substrate of suffering from corrosion. Typical insulating systems should consist of three components for a comprehensive and effective insulation strategy: high quality corrosion resistance coatings, absorbent insulation materials, and both effective and durable weather barrier or jacketing. Another alternative is the use of insulating organic coating systems, which can provide personnel protection and corrosion resistance. This paper introduces a novel, two-component, solvent-free modified epoxy phenol Novolac resin-based polymeric closed-cell foam for corrosion protection combined with thermal and cool-to-touch insulating properties. Design considerations of such a material, fitness-for-service testing and results are presented. Potential application areas and benefits including ease of use, worksite personnel and corrosion under insulation protection are also discussed.

Quality Comes First

Our team offers demonstrated expertise in critical asset protection solutions.



Coatings Consulting



Full Service Materials Testing, Inspection and Analytical Lab



Coatings Inspection

www.gpinet.com

GPI



QP INDUSTRIAL PAINTING ACCREDITATION IMPROVES YOUR BUSINESS

Don't take our word for it.
See what this facility owner and contractor have to say.

New Jersey American Water:

"We had a lot of failures because the contractors that we were using in the past weren't accredited and they were cutting corners and it ended up costing us close to \$17M."

– Kenny Jaros,
Tank Maintenance Coordinator,
New Jersey American Water

Alpine Painting:

"We now offer longer warranties on jobs, and worry less about callbacks, things run smoother and we can get to more work with the same amount of labor and ultimately the more work I get to turns into more dollars."

– Sam Scaturro, President, Alpine Painting

Want to learn more? Contact us to get started.
<https://www.ampp.org/accreditation>

 **AMPP**[™]
Learn more about AMPP. www.ampp.org

PIPELINE, OIL & GAS

Phoenix Convention Center | North 228 A–B

Chair: Gus Badalamenti, *Carboline Company*

A Hot Spread Epoxy Phenolic Coating for CUI Mitigation: From Confusion to Fusion for Facility Owners

Presentation Time:
1:00 PM–1:30 PM

Presented By:
Vijay Datta & Mike
O'Donoghue,
AkzoNobel

It is fair to say that maintenance in the worldwide oil and gas industry has changed dramatically over the past ten years. Facility owners are more than ever looking to reduce shutdown times, to improve plant efficiency and to extend plant lifetimes. With this comes the increased industry understanding about corrosion under insulation (CUI) with its deleterious impact and the ongoing desire for pragmatic high performance and cost-effective coating solutions. CUI maintenance work can take up to 50% or more of a typical oil and gas facility's maintenance budget. With such a heavy impact on resources when CUI maintenance needs to be carried out, it is imperative the rehabilitation must be done right, first time. Factoring in operational losses the cost to shutdown equipment can be up to US\$100,000 per hour, so the ability to carry out planned or even emergency maintenance whilst the facility is operating can be very attractive. However, coating piping and equipment that is still in operation causes logistical, technical, and practical challenges for traditional coating technologies. Although most traditional coating solutions are capable of application at elevated temperature, few have been deliberately formulated to be applied in this way. This paper reviews the current protective coating technologies on the market that are used direct to hot process piping for CUI protection applications. Exemplified by a novel hot spread epoxy phenolic coating that represents a fusion in molecular engineering, and fusion to the applied substrate, it is shown how properly formulated protective coatings for hot steel application on low grade surface pre-treatments (a) derive from an understanding of iron (oxyhydr)oxide types, (b) assure facility owners cost reductions in CUI mitigation, (c) help eliminate confusion for owners, engineers, and specification authorities with coating selection, and (d) provide valuable coating additions for the maintenance contractor's armoury. Applications of the hot spread epoxy phenolic technology to hot rusted steel pipes and vessels in the oil and gas industry are highlighted.

Creating and Applying a Single Coat Nano Non-Skid Deck Epoxy

Presentation Time:
1:30 PM–2:00 PM

Presented By:
Joe Davis, *Tesla*
NanoCoatings Inc.

The Offshore Oil and Gas environment is among the most corrosive in the world. It is also one of the most dangerous. Providing safe working surfaces is a requirement of BSEE and is desired by asset owners and contractors alike. Balancing safety with production and turn-around times is always a battle, but one coating manufacturer seems to have solved these issues through its development of a single coat zinc-CNT nano non-skid epoxy deck coat that provides galvanic protection via the sacrificial metal's electron transfer along the CNT quantum network. The coating is a single coat solution and is ready for service in under 24 hours.

This paper (and presentation) will highlight some of the formulation challenges encountered when developing this first of its kind deck coating, address how this single coat application improves efficiency over other multi coat applied products and the ease of installation with some traditional and new application approaches.

Advantages of a True 100% Epoxy, Pipeline Coating in Cold Weather vs. Commonly Used Vinyl Ester Coatings for Corrosion Prevention of Piping and Girth Weld

Presentation Time:
2:00 PM–2:30 PM

Presented By: John
Glass, Pipeline
Coatings Systems

A Recent product development has introduced a cold-weather coating system formulated on true epoxy chemistry that has been engineered on multiple disciplines to outperform the standard epoxy and vinyl ester coatings currently being implemented for girth weld protection and other corrosion mitigation applications. In-depth engineering allows this epoxy coating to cure 15 degrees lower than the current lowest cold-weather epoxy coating at 20 °F. Presentation will cover the advantages of using a true Epoxy coating over a Vinyl Ester coating for cold weather applications. Coating systems are critical in the mitigation of corrosion on pipelines and their integrated parts. Epoxies offer a multitude of positive characteristics including: high adhesion at a chemical level, excellent abrasion resistance, and reduced water permeation rates when compared to vinyl esters.

CONCRETE

Phoenix Convention Center | North 225 A–B
Chair: Bob Murphy, PCS, MCI, *SJK Consulting*

Caveat Emptor! Preparing Cementitious Mortars to Support High-Performance Lining Systems: Broom Finish or Blasted Surface?

Presentation Time:
1:00 PM–1:30 PM

Presented By: Vaughn
O’Dea & Remi Briand,
Tnemec Company, Inc.

Cementitious repair mortars are commonly used to rehabilitate deteriorated wastewater concrete infrastructure prior to the application of high-performance lining systems. Commonly, such repair mortars receive a broom finish creating a “profiled” surface prior to the application of a spray-applied protective lining system. Other recommendations require that the cementitious mortars receive a blasted (mechanically profiled) surface to impart a mechanical profile prior to topcoating with a similar lining system. This paper will summarize the results of an investigation to quantitatively assess adhesion of a protective lining when applied to a broom finish surface verses a blasted surface.

My “Poly” Has Bubbles: The Continued Challenge of Pinholes & Bugholes With Thick-Film Concrete Coating Work

Presentation Time:
1:30 PM–2:00 PM

Presented By: Dudley
Primeaux, *Primeaux
Associates LLC*

Present the challenges with coating concrete, and the presence of pinholing issues, and bughole concerns. Will address what causes the pinholing and well as what proper techniques can be used to alleviate the issue in thick-film, fast set plural component thermoset coatings, like polyurea and polyurea/polyurethane hybrid systems. From a bughole perspective, what can be done to properly line a concrete structure for successful application performance?



Course 8-20:
Heavy coatings
Epoxy
Linings

Medium 16-40
Heavy mill scale
Heavy rust
Medium coatings

Medium Fine 20-40
Mill scale
Rust
Coatings

Fine 30-60
Mill scale
Light coatings

Extra Fine 40-60
Light rust
Light coatings

Want the best coating results? Slag size matters.

Black Magic® Coal Slag.

Different size grits give a different end result. For coatings to adhere correctly, tell us about what mill you need to get and we will recommend the best size for your project. We want the job done right, just like you.

**We deliver. On time.
Where you need it. When you need it.
Since 1990.**

Abrasives
INCORPORATED
Blast Media, Coatings & Equipment • An Employee-Owned Company

**CALL OUR TEAM!
800-584-7524**

**www.AbrasivesInc.com
sales@AbrasiveInc.com**

Choosing the Correct Technology for Lining Concrete

Presentation Time: 2:00 PM–2:30 PM

Presented By: Brian Huffman, *The Sherwin-Williams Company*

The author will present on the various generic coatings technologies available for lining concrete and discuss the advantages and disadvantages of each one. Discussion will include epoxy, polyurethane and polyurea technologies. The goal of the presentation will be to provide some guidance to the attendees on when is the right application to select each technology as part of a specification. The summary will include a brief case study of each of the three generic technologies.

What Testing Is Relevant When Coating Concrete Tanks

Presentation Time: 2:30 PM–3:00 PM

Presented By: John Sierzega, *The Sherwin-Williams Company*

How many times have you seen a specification that calls out a certain test that has no relevance to the project? These tests do not help and often hinder your progress on a job. Whether it be a testing prior to and during surface prep, or testing after application, this paper will dive into what testing is relevant when coating concrete tanks. Whether its checking for soundness of the substrate, or PH of the substrate.

ENVIRONMENTAL HEALTH & SAFETY

Phoenix Convention Center | North 226 A–B

Chair: Gregory Stein, P.E., *Tank Industry Consultants Inc.*

Regulatory Update: New and Revised Regulations and Actions Affecting the Coatings Industry

Presentation Time: 1:00 PM–1:30 PM

Presented By: Alison Kaelin, *ABKaelin, LLC*

This annual paper summarizes environmental, health and safety issues that may impact SSPC members. This paper discusses current and expected EPA, OSHA, and state and local regulatory rulemaking, emphasis programs, enforcement initiatives, related SSPC standards and guides, or other similar topics. The paper will include updates on proposed OSHA regulatory changes and EPA hazardous waste regulations. Most of the information is taken directly from the respective agency's published regulatory agenda, supplemented by anecdotal information gathered from various professional journals, seminars, and conferences.

Building an OSHA Respirator Program

Presentation Time: 1:30 PM–2:00 PM

Presented By: Charles Brown, *Greenman-Pedersen, Inc.*

The primary means to control occupational diseases caused by breathing contaminated air is through the use of feasible engineering controls, such as enclosures, confinement of operations, ventilation, or substitution of less toxic materials. When effective engineering controls are not feasible, or while they are being instituted, appropriate respirators shall be used. Employer shall provide respirators, when necessary, which are applicable and suitable for the purpose intended. Employer shall be responsible for establishment and maintenance of a respirator program that includes the requirements of paragraph (c), Respiratory protection program.

Asbestos on Concrete Bridges: Awareness, Compliance, Abatement

Presentation Time:
2:00 PM–2:30 PM

Presented By: Gary Caldwell, 1 Priority Environmental Services, LLC.

Asbestos-containing textured surfacing materials, as well as other types of asbestos containing materials, were historically applied in significant quantities to concrete bridges and other structures built as late as the early 1990's. During renovation (surface preparation for overcoating or total coating removal and replacement) or demolition of bridges, just like buildings, there are specific regulatory requirements such as licensure, inspections, procedures and notifications that must be followed to avoid compliance violations, litigation and to avoid unwanted asbestos exposure to employees and the environment.



Polyaspartic Topcoats for Bridge Infrastructure

Corrosion protection coatings make an indispensable contribution to the long-term preservation of valuable bridge infrastructure. At Covestro, we enable coating system manufacturers by supplying a wide range of raw materials and technology that make effective corrosion protection possible.

- **Fast return to service** – aids in fast tracking projects
- **High build** – reduces traditional 3 coats down to 2 or DTM
- **Cost Savings** – 20% reduction of overall cost with 31% labor savings
- **Great weathering** – maintains gloss and color long term
- **Low temperature cure** – extends the construction season

Contact us to learn more:
solutions.covestro.com/en/industries/construction
@CovestroUS | Covestro

COATING FORMULATION

Phoenix Convention Center | North 222 A–B

Chair: Dudley Primeaux, PCS, *Primeaux Associates*

Efficiency of Zinc Content in Sacrificial Protection of Coatings

Presentation Time:
8:00 AM–8:30 AM

Presented By: Nicole Rakers, PPG



Zinc rich coatings have long been used in the protective coatings industry as one of the primary means of steel substrate protection against corrosion. The primary mechanism of protection has historically been galvanic sacrificial loss of zinc metal and the simultaneous formation of protective zinc oxides and salts. Various standards and customer specifications exist to ensure that the coating will provide the necessary corrosion protection needed for the life of asset. As dictated by standards and specifications, a minimum of 65 wt.% and upwards of 80 wt.% zinc is often found in the industry. As development in zinc rich coatings continue to evolve, it is imperative to consider additional methods in evaluating and understanding corrosion protection. In this paper electrochemical tools will be utilized to investigate, evaluate, and understand the corrosion protection performance.

Study of Corrosion Resistance for Blends of FEVE Fluoropolymer and Acrylic Resins

Presentation Time:
8:30 AM–9:00 AM

Presented By: Donald Lawson, AGC Chemicals Americas, Inc.

We studied the corrosion resistance for topcoat systems made using a solvent-borne 2K fluoroethylene vinyl ether (FEVE) polyol blended with different acrylic resins. The topcoats were applied over primed steel substrates. The primers consisted of zinc-rich (for 2-coat) and zinc-rich/epoxy mid-coat (for 3-coat) systems. Standard, salt fog (ASTM B 117), cyclic Prohesion (ASTM ASTM G85 Annex A5) and EIS (electrochemical impedance spectroscopy) test methods were used to determine corrosion resistance. The blended system performance was compared against FEVE, acrylic, polyurethane, and polysiloxanes controls.

Corrosion Resistance Comparison of Zinc-Rich Epoxy With Reduced Zinc Levels

Presentation Time:
9:00 AM–9:30 AM

Presented By: Mary Roley & John Gentry, Carboline

Zinc-rich coatings have long been known to provide excellent corrosion resistance in highly corrosive environments, in general, inorganic zincs for new construction and organic zincs for maintenance. A recent trend has been toward zinc-rich coatings with reduced levels of zinc dust. An SSPC committee formed to revise SSPC Paint 29, Zinc Dust Sacrificial Primer, Performance Based, to reference performance only, removing reference to minimum zinc dust level. Based on the long field history and longevity of zinc-rich coatings with high zinc content, it is important to compare relative test data for systems with lower zinc content. Testing should proceed carefully and in conjunction to real world performance to ensure that accelerated laboratory testing adequately replicates field exposures. A study has been undertaken to compare the accelerated corrosion resistance of a zinc-rich epoxy with reduced levels of zinc dust, with and without specialized additives.

Can Low Zinc Epoxy Primers Work as Well as Traditional Zinc Rich Epoxy Primers?

Presentation Time:
9:30 AM–10:00 AM

Presented By: David Hunter, *Hempel (USA) Inc.*

This paper will examine the formulation of new activated low zinc epoxy primers and compare their mechanical and anticorrosion properties to conventional zinc rich epoxy primers. Comparable corrosion resistance at reduced zinc levels in the dried film will be demonstrated and show that zinc metal levels can be reduced to as low as 40% by weight without compromising galvanic protection while improving adhesion and mechanical properties of the dry film. Finally, the performance in cyclic ageing test of the primer in a two-coat system will also be presented.

Coatings on the Edge of Forever

Presentation Time:
10:00 AM–10:30 AM

Presented By: Carl Reed, *Retired*, & Kat Coronado, *AkzoNobel*

This is a look at how edge retention or edge coverage of coatings has historically been used in the coatings industry and how it should be used.

SURFACE PREP

Phoenix Convention Center | North 226 A–B
Chair: Mark Hudson, *Sherwin-Williams Company*

National Shipbuilding Research Program Surface Preparation and Coatings Panel SSPC 2021 Update

Presentation Time:
8:00 AM–8:30AM

Presented By: Arcino Quiero Jr., *HII-Newport News Shipbuilding*

NSRP SP&C Panel's mission is to reduce coatings cost of Navy ships. The Panel's Spec to Deck application approach; research, evaluate, develop, and sustain current and emerging technologies, enabling this effort to reduce cost and maintain quality of coatings and corrosion control of Naval and commercial ships.

This summary is a look at implementable work and a gauge of the value of future work.

Latest Research Into Blast Nozzle Design and Efficiency

Presentation Time:
8:30 AM–9:00 AM

Presented By: Jim Gooden & Graeme Thomas, *BlastOne International*

Abrasive Blast nozzles have changed very little since the 1980's. Using cameras and imaging equipment that has only recently been available, new research into the design of Abrasive Blast nozzles has revealed some great opportunities for efficiency and increasing productivity. Newly patented designs have been tested with startling results.

INSPECTION

Phoenix Convention Center | North 228 A–B

Chair: Charlie Brown, PCS, *Greenman-Pedersen, Inc.*

Adhesion Testing: How to Make It Stick in Assuring Coating Performance

Presentation Time: 8:00 AM–8:30 AM
Adhesion testing is often the “go-to” test to ensure a successful application, but isn’t always thought out and results in conflicts. This paper provides a Check-List to help avoid those common mistakes.

Presented By: Kirk Shields & Randy Nixon, *Corrosion Probe, Inc.*

Coating Inspection — Is a Manufacturer’s Rep a Good Choice for Project Coating Inspection?

Presentation Time: 8:30 AM–9:00 AM
I see many specifications come out requiring the coating/lining manufacturers representative to perform extensive coating inspection tasks on projects. Is this a good idea? Or a conflict of interest leaving the owner exposed to undue risk?

Presented By: Murray Heywood, *Corrosion Probe Inc.*

Coating Condition Assessments: First Step in Fighting Corrosion on Aboveground Storage Tanks

Presentation Time: 9:00 AM–9:30 AM
This presentation features a case study to walk through the process of performing a detailed coating condition assessment of an aboveground storage tank; the first step in performing a comprehensive corrosion assessment and planned rehabilitation.

Presented By: Lake Barrett & Adam Beers, *KTA-Tator Inc*

Owner, Contractor, and Third-Party Inspector Perspectives: Understanding Quality Control and Quality Assurance in a Quality Management System

Presentation Time: 9:30 AM–10:00 AM
This presentation will provide the coatings professional with an understanding of the nuances between Quality Assurance (QA) and Quality Control (QC) and the roles of QA and QC personnel as part of a Quality Management System on an industrial coatings project. The roles, responsibilities, and expectations of all stakeholders from the perspective of an Owner, Contractor and a 3rd party inspection company will be addressed.

Presented By: Lake Barrett, *KTA-Tator Inc*; Kenny Jaros, *American Water*; & Sam Scaturro, *Alpine Painting & Sandblasters*

GREEN COATINGS

Phoenix Convention Center | North 222 A–B

Chair: Doug Sinitiere, *Carboline Co.*

Green Coatings from a Global Perspective — 5 Years Later

Presentation Time: 1:00 PM–1:30 PM This presentation will examine, compare, and contrast global standards, rules, perspectives, and ideas of what makes coatings “green.”

Presented By: Don Futch, *Teknos*

Novel Hydrolytically Stable Silane Additives for Improving the Performance of Waterborne Acrylic Roof Coatings

Presentation Time: 1:30 PM–2:00 PM

Presented By: Jacob Shevrin, *Evonik Corporation*

As global environmental regulations continue to tighten restrictions on VOC-containing coatings, the need for hydrolytically stable additives in waterborne coatings has never been greater. Organofunctional alkoxysilanes are a class of widely used additives in the coatings industry, as they act as a bridge between an organic coating and an inorganic substrate; thus providing adhesion promotion. Given the high moisture sensitivity of organofunctional alkoxysilanes, most silane additives rapidly undergo condensation in waterborne coatings, leading to unworkable viscosities and gelling of the waterborne coatings within the first few weeks or months on the shelf. This has posed a significant barrier to using silane additives in waterborne coatings for all types of applications. As the liquid-applied cool roof coating market continues to experience significant demand increase, specifically liquid-applied waterborne acrylic cool roof coatings, this work will focus on the liquid-applied waterborne acrylic roof coating market. In this new work, we demonstrate the improved adhesion and mechanical properties of waterborne acrylic roof coatings with a novel epoxy-functional oligomeric silane additive that is stable over time. Several crucial coating properties will be investigated in accordance to ASTM D6083, including shelf stability, dry and wet adhesion properties to various roofing membranes, ponding water resistance, dirt pick-up resistance, tensile strength, flexibility, and UV weathering resistance. These new findings demonstrate significant progress in overcoming the biggest obstacle for the use of silane additives in waterborne roof coatings. Coating manufacturers that previously could not use silane adhesion promoters in waterborne systems due to stability issues can now explore this technology with a significantly increased probability of success. As roof coating regulations and specifications continue to become more stringent across the United States, these novel silane additives will play an important role in achieving better performance of these waterborne coatings without impacting shelf life.

Maximum Sustainability

Presentation Time: 2:00 PM–2:30 PM Provide Environmentally sustainable reuse options to generators for their non-salable, non-useable and waste, recycling it back in circular economy, creating products of use and value for developing communities.

Presented By: Huzaifa Matawala, *Regent Paints Inc.*

U.S. Army Combat Capabilities Development Command (DEVCOM) Safer Alternatives for Readiness (SAFR) Program: Modernizing Army Coatings Technologies

Presentation Time:
2:30 PM–3:00 PM

Presented By:
Jacquelynn Fenyak,
Jensen Hughes

A unique approach is required to develop, validate, and implement coatings technologies for the U.S. Army ahead of regulatory changes in all operating environments to maintain readiness. The U.S. Army Combat Capabilities Development Command (DEVCOM) Safer Alternatives for Readiness (SAFR) program has navigated this ever-changing environment for over 20 years, successfully fielding technologies that meet or exceed performance requirements while removing components that risk environmental and occupational health.

INSPECTION

Phoenix Convention Center | North 228 A–B

Chair: Andy Shingledecker, *WSB & Associates, Inc.*

What Do You Really Need to Know to Be a Good Coatings Inspector?

Presentation Time:
1:00 PM–1:30 PM

Presented By:
William Corbett,
KTA-Tator Inc

The role of a “Coating Inspector” has evolved considerably over the past few decades, and the responsibilities have increased over what used to be a rather straightforward job: to verify that surface preparation and coating application meet the project specification requirements. Today, certified coatings inspectors of various levels of subject matter expertise are often required, and continuing education is not only encouraged but necessary to stay abreast of new standards and changes to existing ones, instrumentation, and coatings technology. Do we need a PhD in Coatings Inspection? Probably not, but this presentation will describe what coatings inspectors really need to know before they perform in-process coatings inspection on an industrial painting project.

Using DFT Scanning Probe Technology on Smaller or Narrower Coated Substrates

Presentation Time:
1:30 PM–2:00 PM

Presented By: David
Barnes, *Elcometer
Limited*

Scanning technology is perhaps the largest recent development in DFT measurement. SSPC PA2 and ASTM D 7091 now both embrace this new technology in their most recent versions. However, neither document discusses the use of scanning technology on smaller or narrower areas such as I- beam toe or flange areas.

This paper looks at the scanning technology overall with particular emphasis on these smaller areas and the benefits the use of this technology brings.

How to Inspect Thermal Spray Zinc Metalizing

Presentation Time:
2:00 PM–2:30 PM

Presented By:
Bernardo Duran,
*International Zinc
Association*

Thermal spray zinc metalizing and its alloys are used in a variety of industries to provide corrosion protection. Some of these many applications include bridges and other infrastructure, marine vessels, offshore wind towers and oil platforms, and application over concrete to protect the reinforcing bar. To ensure the continued performance of the coating in these harsh environments, it is necessary to properly inspect the thermal spray metalizing.

This presentation begins with a foundation examining how the surface preparation and thermal spray processes (arc spray and flame spray) are similar to and different from other corrosion protection systems and will include video of the arc spray method. After the groundwork, standards and specifications in the thermal spray zinc industry will be

discussed, including SSPC CS 23.00 (NACE No. 12) and SSPC-PA 18. The audience will learn inspection criteria and become familiar with inspection tools, techniques, and methods, including pre-job and daily operator qualifications. The presentation will include pictures and explanations of coating variations. Additionally, safety requirements and PPE will also be covered.

SURFACE PREP

Phoenix Convention Center | North 226 A–B

Chair: Mark Schultz, PCS, *Sherwin-Williams Company*

Power Tool Surface Preparation in Shipyards

Presentation Time:
1:00 PM–1:30 PM

Presented By:
Eric Shoyer,
*Elzly Technology
Corporation*

Power tool cleaning has been a common method of surface preparation prior to coating application since the dawn of steel shipbuilding. Power tools are usually handheld pneumatic, or sometimes electric, devices that through impacting or abrasive action can remove coating and corrosion. Most commonly power tool cleaning has been used for re-work or coating repair associated with outfitting. Typically, power tools are limited to the touch up or repair of small areas or areas that cannot be accessed by bulkier equipment such as abrasive blasters.

Despite having lower production rates and lower coating performance compared to abrasive blasting, power tools are still a valuable option and are effective in the right circumstances. However, tools and techniques are constantly evolving and there is a need to generate the necessary data to allow shipyards to optimize procedure for power tool cleaning prior to coating application. With proper guidance and optimization of newer tools and processes there is a significant opportunity to reduce costs and improve the coating quality for both shipyards and the Navy.

This paper presents data generated through literature research over multiple studies performed on various power tools.

Don't Let Your Eyes Deceive You

Presentation Time:
1:30 PM–2:00 PM

Presented By: Ken
Rossy, *HoldTight
Solutions Inc.*

Coatings fail for many reasons. In this presentation, we discuss the risks inherent in the surface preparation process, which accounts for most premature coating failures. We present several leading current industry methods for testing for and removing soluble salts. There is debate about allowable salt levels in various service environments and for various coating types. But most surface salt contamination issues have proven solutions, which are cost effective in comparison to the risk of coating failure. We discuss the strengths and weaknesses for different methods of testing and removing salts, with special attention to how to prepare steel for most if not all coatings.



GAIN VALUABLE CRAFTWORKERS SKILLS AND BECOME EMPLOYABLE

The coatings industry is a highly technical field that requires skilled personnel to perform quality surface preparation and protective coatings application. Gain those skills by learning from the experts. Our craftworker education programs contain resources to use on the job and prepare you for certification exams.

Industrial Coatings Application (ICA)

This program is a series of online modules based on the NACE No. 13/SSPC-ACS-1 standard that sets the criteria for a qualified workforce, meeting contractors' and facility owners' need for consistent, quality work completed accurately, safely, and at a reasonable cost. More information at nace.org/ICA

Abrasive Blaster Certification Program

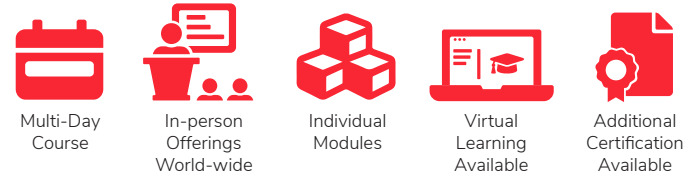
While working towards certification, you will learn how to recognize the basic principles of surface preparation, proper blast cleaning equipment set-up, blasting techniques, and various abrasives and their uses. More information at sspc.org/C7

Spray Application Certification Program

This program assesses the skills of sprayers who have a minimum of 800 hours applying protective coatings with airless/conventional spray in an industrial or marine environment. More information at sspc.org/C12

Coating Application Specialist Certification Program

Designed to certify those individual craftworkers who have experience and training in all aspects of hands-on surface preparation and coating application of complex industrial and marine structures. More information at sspc.org/CAS



Why take a course with AMPP?

Both NACE and SSPC training and certification programs have come together under AMPP, The Association for Materials Protection and Performance. Several NACE and SSPC courses are specified by name for employment requirements within the coatings industry.

CASE STUDIES

Phoenix Convention Center | North 224 B

Chair: Bhuvaneshwaran Elayaperumal

Determining Coating Removal Surface Impact Using SEM and EDS Analytical Techniques: A Comparative Study

Presentation Time:
9:00 AM–9:30 AM

Presented By: Peter Yancey, *Atmospheric Plasma Solutions, Inc.*

The microscopic surface condition of DH36 steel substrates stripped using 4 different coating removal technologies was examined using scanning electron microscopy (SEM) and energy dispersive spectroscopy (EDS). Grit blasting, rotary wire wheel, needle gun, and atmospheric plasma coating removal were investigated. The stripped panels were sent to an analytical testing lab to perform the SEM and EDS analysis and reviewed to determine the surface condition using SEM and characterize the amount of remaining coating left on the surface using EDS.

Automated Surface Preparation and Lining Installation in Penstocks and Large Diameter Water Pipes

Presentation Time:
9:30 AM–10:00 AM

Presented By: Davinder Khangura, *BC Hydro*; & Tyler Colby, *Jewel Welding Pipe Fab and Coatings*

Since the catastrophic accident at the Cabin Creek penstock in Georgetown, CO on October 2, 2007 where five coating applicator's lives were lost, the hydroelectric and water transmission industry has been looking for safer practices to line the interior of penstocks and other large diameter water pipes. One hydroelectric utility essentially eliminated the need for personnel to enter the pipe during the surface preparation and lining installation processes by requiring contractors to develop surface preparation and lining installation methods that were automated, controlled, and monitored from outside the pipe. This paper addresses the conceptual design process, describes the robotic equipment that was developed for the project, and the overall performance of the equipment.

Crisis Management for Construction Projects

Presentation Time:
8:30 AM–9:00 AM

Presented By: Akram Saad, *Hill International*

A crisis is the sudden occurrence of any unplanned or unexpected event that causes harm to the project/company, employees, or the public. The crisis could be a medical/safety emergency, a natural disaster, or a personnel crisis dealing with unethical or illegal activities.

The construction industry must always operate with a "better safe than sorry" mindset.

A proactive way to do so is to ensure that there is a crisis management plan in place.

The Critical Steps to Crisis Management

A crisis can strike at any time; advanced planning is the key to survival. Before a crisis strikes, construction business owners should think about how it would impact their clients, employees, suppliers, and the public. Review these critical steps to improve an existing crisis management plan or to create a new one.

Assemble your crisis team: The crisis team consists of a combination of people which would vary based on the type of company (e.g., construction manager, safety officer, a public relations officer "PRO").

Identify potential crisis scenarios: Think about the different crisis scenarios that could happen and plan out your response (from beginning to end) to the situation.

Anticipating a crisis is not meant to be a scare tactic. It is simply a way of preparing you for a potential event that could have a detrimental effect on the operation of your company if not planned for and managed appropriately.

Additional critical steps must be taken to manage a crisis, what the crisis plan itself should entail, and crisis management during and after the crisis

The construction team has to be quite familiar with the crises that construction projects deal with on a regular basis. Before a crisis strikes, the project team should think about how it could affect employees and the public. No matter the size of the project, advanced planning is central to your company's ability to survive an emergency.

Critical steps construction team should follow to ensure their communication plan is up to balance, the critical steps and what the crisis plan itself should entail, and crisis management during and after the emergency.

TANKS

Phoenix Convention Center | North 222 A–B

Chair: Anwer Khan, *MOL Group*

Automation in Storage Tank Coating

Presentation Time: 9:00 AM–9:30 AM
New options and possibilities for the automated coating of storage tanks.

Presented By: Stefan van Diessen, *VertiDrive*

Advantages of Using 100% Solids Epoxy as Potable Water Linings

Presentation Time: 9:30 AM–10:00 AM
The coatings landscape is changing dramatically with more stringent VOC laws and extractables standards for drinking water, the products owners can rely on for lining their storage vessels is shifting. The author will discuss the advantages of using high film build, edge retentive 100% solids epoxy technology for steel potable water storage tanks. The discussion will center around rapid curing and return to service, increased life cycle expectations, reduction in potential taste & odor issues as well as the overall reduction in cost of ownership.

Presented By: Eric Zimmerman, *Sherwin-Williams Protective Coatings*

COATING APPLICATION, TYPES, AND CHARACTERISTICS

Phoenix Convention Center | North 222 A–B

Chair: Ramon Pelaez, PCS, MCI, *Greenman-Pedersen, Inc.*

Spray Painting Drones — A Look at What's Coming in 2022

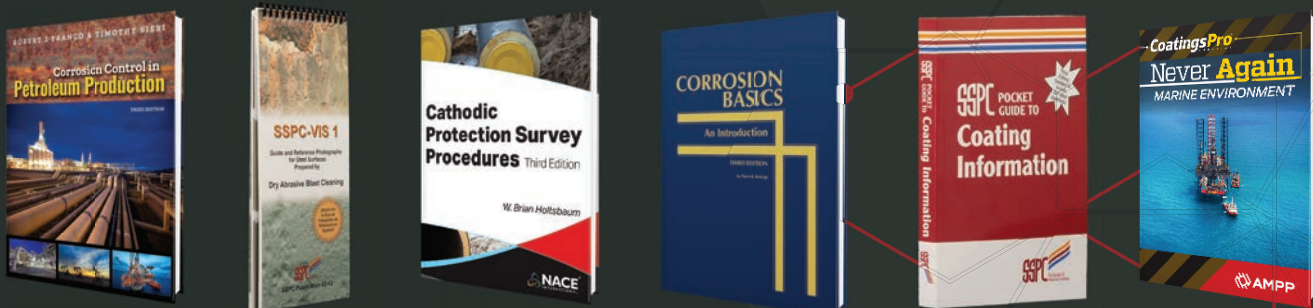
Presentation Time:
1:00 PM–1:30 PM

Presented By: Robert Dahlstrom, *Apellix*; & Chuck Rosales, *AkzoNobel*

Cleaning, coating, and nondestructive testing of corrosion-susceptible and other surfaces requires extensive manual labor, often at vertical heights that create a dangerous occupational environment. Drones, also known as unmanned aerial systems (UAS) can be leveraged to perform some of these tasks, including cleaning and coating while keeping workers safely on the ground. Drone capabilities have significantly evolved over the past decade, and it is expected that the ubiquity of such systems will continue to increase in the years to come. This paper details the development of a spray-painting drone by an aerial robotics company as part of a joint development agreement with one of the large paint manufacturing companies. This system is a custom manufactured drone with a tether to the aircraft from the ground that delivers power and coating material. An on-board computer manages flight navigation along with intelligent spraying. While the utilization of this new technology faces many challenges, it is important to recognize the potential and projected growth of such systems. An introduction to the current state of coating and cleaning drones will be discussed, along with limitations and benefits the system can provide to the coatings industry.

Stock up on your corrosion and coatings resources **TODAY!**

The AMPP Technical Library has over 300 titles dedicated to corrosion control and coatings.



Explore the AMPP Store at ampp.org/resources/store





INTRODUCING PPG FLOORING



General Purpose



Wear Resistant



Chemical Resistant



Urethane Cement

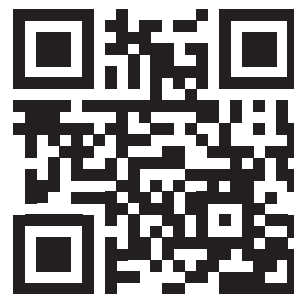
Be a step ahead with our new PPG FLOORING systems

From high traffic areas and non-skid requirements to compliance with industry standards, PPG has you covered. Our comprehensive selection of systems and products provides durability, aesthetics, versatility, ease of use, and low VOC*. PPG FLOORING is made for contractors, architects, engineers, facility managers, and project managers for a wide-range of application environments.

Visit www.ppgpmc.com/flooring to find out more.
www.ppgpmc.com | 1-888-9PPGPMC | PMCMarketing@ppg.com

*Ultra-Low VOCs range from Zero to less than 50g/L.
The PPG Logo is a registered trademark of PPG Industries Ohio, Inc.

Scan now to learn more
about PPG FLOORING.



Download our brochure
for our full line of
systems and products.



WORKSHOPS

WORKSHOPS

Coatings+ Workshops are non-paper presentations that provide attendees with useful training and skills on popular coatings topics, offer professional and employment development, and address changes and programs resulting from the recent merger of SSPC and NACE International to create AMPP: Association of Materials Protection and Performance.

MONDAY

+ Achieving Sustainable Development Goals With the Use of Foul Release Systems in Underwater Hulls: An Inspector's Experiences on Drydocking Challenges and How to Overcome Them | 9:00–11:00 AM | Phoenix Convention Center, North 225 A–B

Presented By: Juan Caballero, *Naval & Industrial Solutions*

The use of Foul Release Systems in marine vessels contributes to accomplish Global Sustainability Development Goals. Adequate dry-docking inspection during the application of this type of coating systems is essential for a successful project execution. Therefore, it is important that the inspector understand how the foul release systems helps to meet the Sustainable Development Goals, have knowledge on adequate procedures, and possess experience to overcome main inspection challenges in the field.

Foul Release Systems provide fouling protection, minimize the impact on marine ecosystems, reduce fuel consumption, and lower carbon emissions generation. Coating manufacturers have designed special surface preparation and paint application procedures for achieving system expected performance. These special procedures requirements can be challenging to achieve for the applicators, and the inspector's expertise to manage this type of situations is highly important in order to successfully perform in these demanding projects.

+ Coatings 101 | 2:00–5:00 PM | Phoenix Convention Center, North 225 A–B

Presented By: Charles Brown, Mike Baase, and Chris Farschon, *Greenman-Pedersen, Inc.*

The workshop will provide an overview of an industrial protective coatings project, including design considerations, material selection, surface preparation guides, ambient conditions, and basic quality control techniques. What participants will attain out of this course is a basic understanding of how protective coatings are specified and applied to meet the goals of a project. We will review and present typical inspection instruments used on a paint project, surface preparation guides, how to read a product data sheet, and how to measure ambient conditions.

+ Available Training for DoD or DoTs | 2:00–3:00 PM | Phoenix Convention Center, North 227 A–B

Presented By: Paul Vinik, *Greenman-Pedersen, Inc.*

Do you work with or for the Department of Defense or Department of Transportation? This session features speakers presenting from both the government and public/civilian perspective, particularly the skills and training needed to be successful. Hear their unique insights as they share their career trajectories and what credentialing and experience they would recommend for others in the industry.

Speakers will also discuss available training options from AMPP that is most beneficial for DoD and DoT employees. Fully funded training is available. Ask questions, chat with industry peers, and learn more about resources available so you can plan next steps for the future of your career.

TUESDAY

+ Inspector Level Training and Certifications — What's New and What's Changed | 10:30 AM–12:00 PM |

Phoenix Convention Center, North 225 A–B

Presented By: Dave Evans and Alicia Yust, *AMPP*

Get a preview of the new Coating Inspection Program (CIP), which incorporates changes from Protective Coatings Inspector (PCI), learn how to renew your AMPP certification, and understand upcoming changes.

+ Oil and Gas Pipelines — Coating Failure or End of Coating Life | 10:30–11:00 AM | Phoenix Convention Center, North 227 A–B

Presented By: Jeffrey Didas, *Kinder Morgan*

This presentation will discuss coating failures and give several examples of oil and gas pipeline coating failures. It will also compare the failures to coatings that have reached their end of life. What is a coating failure will be discussed? The question “What is the Life of a Coating” will be discussed and possibly answered. Finally, today's pipeline coatings will be discussed as well as today's repair/rehabilitation coatings.

+ What's New With the QP Program? | 1:00–2:00 PM | Phoenix Convention Center, North 222 A–B

Presented By: Dave Evans, *Director, QP & Coatings Credentialing, AMPP*


Hear the latest updates for the Qualification Procedures (QP) program including status of the new QP committees, developments of a parallel path for Coating Application Specialist (CAS) certification, and general program updates and developments.

+ Cathodic Protection 101 for the Coating Professional | 1:00–4:00 PM | Phoenix Convention Center, North 227 A–B

Presented By: Pete Ault and James Ellor, *Elzy Technology Corp.*

This presentation will cover the basics of cathodic protection (CP) on marine and underground structures that a professional working in the coatings industry needs to know. There is an obvious overlap in corrosion control between the use of CP and coatings, as the two methods are typically used concurrently to protect assets. It is essential that coating professionals have a basic understanding of how CP works and how it affects their work. During the two-hour paper session, a discussion of the basics of CP will be held, focusing on the interaction of coatings and CP, and why asset owners, spec writers, coating applicators, inspectors, and paint manufacturers all need to have an understanding of CP mechanisms to adequately do their jobs. Other talks during the paper session will focus on case studies of coating failures and RDT&E in the area of CP and coatings.

This session will be followed by a two-hour workshop with hands-on experiments and training for all types of coating professionals, including engineers, inspectors, coating formulators, etc. The workshop will demonstrate basic CP principles with small table level experiments, demonstrate the use of CP and coating test instruments, and provide for a face-to-face informal Q&A session for coating professionals to have their CP-related questions answered.



**Thanks to
IUPAT,
I'll live an extra
100 years.**

For a higher level of protection, durability and safety — not to mention a higher ROI — specify an International Union of Painters and Allied Trades (IUPAT) workforce. CAS certified, each IUPAT worker has thousands of hours of training. From blasting and then applying the right protective coatings, they're the ultimate experts in every detail.

Talk about increasing a lifespan!

Visit us at Booth #516 and IUPATindustrial.com to Learn More



**International Union of
Painters and Allied Trades**

IUPAT.org

WEDNESDAY

+ How to Preserve Steel Infrastructure and Assets With Zinc Coatings | 8:00–11:00 AM | Phoenix Convention Center, North 225 A–B

Presented By: Kevin Irving, and Bernardo Duran, *International Zinc Association*

Steel corrosion is an expensive and dangerous problem worldwide that has devastating effects on infrastructure and other steel assets. It also consumes large portions of budgets for replacement, maintenance, and indirect costs to the public. A solution is necessary to address these concerns and maintain the material properties of the structures, safeguard the public, reduce expenditures, and increase the lifespan of metal structures.

This workshop will discuss multiple zinc coating options aimed at protecting steel from corrosion and minimizing maintenance over the structure's life. The processes to be addressed include hot-dip galvanizing, thermal spray metalizing, zinc-rich paint, and duplex systems. Attendees will have a chance to handle and inspect samples coated with the different processes. In addition, the presenters will cover case studies for the different types of zinc coatings.

Specifiers, asset owners, and transportation agencies will learn how they can use zinc coatings individually or together to protect and extend the life of their steel structures while reducing their maintenance budgets.

+ Recruiting, Retaining, and Training the New Generation of Craftworkers | 8:00–9:00 AM | Phoenix Convention Center, North 227 A–B

Presented By: Melissa Craig, *AMPP*, Ken Seal, *Tanner Carroll*, Jesús Martínez, *IUPAT*, and Chris Kucherawy, *Conomos*

This one-of-a-kind session connects craftworkers, contractors, and asset owners to discuss the benefits of pursuing a career in coatings application and blasting. A 15-minute keynote lecture on the craftworker's career path transitions into a panel discussion featuring different perspectives that highlight industry partners from tenured craftworkers, those new to the industry, and asset owners and contractors. Their discussion will shed light on the current state of the workforce and how to find, attract, and retain qualified personnel.

Hear from those looking for credentialed workers, those who opted for a craftworker certification versus a 4-year degree, and contribute to the dialogue on how we can plan for the future of the industry.

+ SSPC's Surface Preparation Methods Standards for Concrete: The Right Direction or Pursuit of Folly? | 1:00–3:00 PM | Phoenix Convention Center, North 225 A–B

Presented By: Vaughn O'Dea, *Tnemec Company, Inc.*, Randy Nixon, *Corrosion Probe, Inc.*, Bill Jenkins, *AkzoNobel*, and Murray Heywood, *Corrosion Probe Inc.*

In 2015, SSPC created a Concrete Surface Preparation Task Group to develop individual surface preparation method standards and levels for the various forms of surface preparation common in our industry. SSPC argued the industry was lacking a standard(s) to specify for surface preparation of concrete and that the SSPC-SP13/NACE No. 6 was written as a guideline and not a standard. After developing individual concrete surface preparation method standards, the objective was then to classify SSPC-SP13 as a guideline to provide concrete surface preparation commentary.

To date, SSPC has published the Concrete Abrasive Blasting (CAB) standards 1–3, and is nearing completion of the Pressurized Water Cleaning of Concrete and Cementitious Materials (CWJ) standards 1–2. The development of other individual surface preparation methods for the surface preparation of concrete are planned to follow.

Are these individual surface prep method standards providing the industry with clear and concise requirements for the preparation of concrete or only confusing the matter? A panel of industry experts will review SSPC's surface

WORKSHOPS

prep method standards of concrete and contrast with the SSPC-SP13/NACE No. 6 Surface Preparation of Concrete standard.

+ In Focus: CoatingsPro Contractor Award Winners | 1:00–3:00 PM | Phoenix Convention Center, North 227 A–B
Presented By: Stephanie Chizik, *AMPP*

CoatingsPro Magazine will be celebrating this year's Contractor Awards Program with case histories from various winners, highlighting successful problem solving, safety considerations, savings, innovations, and efficiencies.

+ Basics of Passive Fire Protection | 3:00–4:30 PM | Phoenix Convention Center, North 226 A–B
Presented By: David Hunter, *Hempel*

This workshop will cover the basic passive fire protection considerations including:

- + Why fire protected
- + Design and durability of materials
- + Quality control
- + Material selection considerations

THURSDAY

+ Coating Failure Investigation Workshop: Make the Fix Better Than the Problem | 9:30–11:30 AM | Phoenix Convention Center, North 225 A–B
Presented By: Valerie Sherbondy and Rick Huntley, *KTA-Tator, Inc.*

When premature coating failures occur, there are often arguments, allegations, and finger-pointing as attempts are made to determine fault and who will be on the hook financially. Sometimes, assumptions are made with incomplete information and the rework results in a second coating failure. This workshop will follow the steps of collecting background information, conducting a site visit, forensic analysis, and development of a failure mechanism. Participants will guide the investigation by choosing what data they feel is significant to the investigation and failure resolution. Using the information collected, the participants will determine what went wrong, who is at fault, and how to remedy the situation so that the fix is better than the initial application and a repeat failure does not occur.

+ Repair and Lining of Concrete | 8:30–10:30 AM | Phoenix Convention Center, North 227 A–B
Presented By: Frank Rea, *Consulex*

This workshop will provide the basics of repairing and lining concrete and the lessons learned for a successful lining installation. The uniqueness of concrete as a substrate, the importance of lining concrete, an outline of a repairing and lining concrete procedure, and examples of common errors from lessons learned will be discussed.

+ Corrosion Under Insulation (CUI) Workshop | 1:00–3:00 PM | Phoenix Convention Center, North Hall A–C
Presented By: Don Vickers, *Vickers LLC*, Kat Coronado, *International Paint*, Art MacKinnon, *Hempel*, Mike Pardo, *Aspen Aerogels*, and Kristin Michelle Leonard, *ExxonMobil Research & Engineering*

This panel discussion will cover the following topics:

- + Mechanism of CUI
- + Coatings used under insulation as described In SP0198
- + Issues of CUI as faced by owners
- + How this process occurs
- + What its economic impact might be locally and globally
- + Failure mechanisms
- + How to detect and identify
- + How to classify
- + Possible preventative actions.

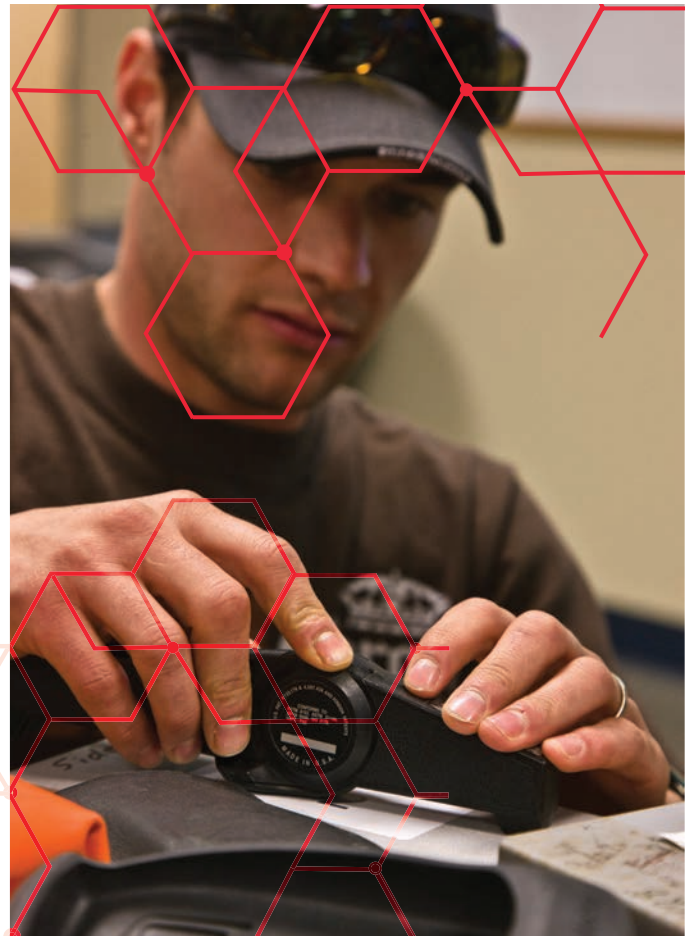
There will also be time for the audience to ask questions of our panel.

DEVELOP YOUR COATINGS INSPECTION EXPERTISE WITH GLOBALLY RECOGNIZED TRAINING

See why 100,000+ have chosen the NACE Coatings Inspection Program as their foundation in a growing field of qualified workers.

This in-depth, interactive training program is built upon decades of knowledge and experience.

Advance your career at: www.nace.org/cip



*Coatings hate it.
Our environment loves it.*

SURE/CUT

Cutting through the competition

SURE/CUT **SURE/CUT**

VELOCITY

Calcium-Iron Silicate Abrasive

EDGE

Nickel Abrasive

SURE/CUT is a next generation, environmentally friendly abrasive providing best in class productivity to the blaster. Coatings don't stand a chance! Contact your local Distributor TODAY to get your first order of SURE/CUT!

HARSCO
ENVIRONMENTAL

Harsco Environmental

888-733-3646 | reedcs@harsco.com

SURE/CUT is a brand brought to you by Black Beauty



BLACK BEAUTY®

EXHIBITOR LISTINGS & INFORMATION



Your project deserves it.



German
technology –
American
ingenuity

State-of-the-art fire proofing technology

Fire and its heat present a great risk to life and property. An intumescent coating will delay this process by creating a layer of char between the steel and fire.

In close cooperation with leading manufacturers, WIWA has developed the single-feed **HERKULES GX PFP**:

- Mounted on cart with lift for safe and easy operation
- Wide variety of accessoires available

With an output of 9 l/min per 40 cycles and a pressure ratio of 75:1, it is ideally suited for the use for smaller areas and repairs.



www.wiwausa.com



WIWA Wilhelm Wagner GmbH & Co. KG



@wiwa_airless_global_hq

Toll-Free: +1-855-757-0141



COATINGS+ Exhibitors

Current exhibitors as of November 19, 2021.

#

1 Priority Bridge Coating & Painting 415
Fort Worth, TX
www.go1priority.com

Since 2003, 1 Priority Environmental Services has specialized in asbestos and lead paint abatement and other environmental remediation services for bridges, commercial buildings and industrial site. For the past 15 years, 1 Priority has abated over 1,000 bridges prior to their repair, overcoat or demolition. Bridge abatements have included asbestos textured concrete coatings, caulks, mastics and utility piping, as well as lead-based paint from steel bridge substructures. 1 Priority and its sister companies operate in over 36 states out of 25 offices.

10X Engineered Materials 400
Wabash, IN
www.10xem.com

10X Engineered Materials is a technology-driven manufacturer producing a new class of sustainable, high-performance abrasives that address OSHA's free silica ruling in blasting. We have developed products that meet the critical industry need for fast, cost-effective abrasives free of silica and beryllium. They contain virtually zero leachable heavy metals and ultra low chlorides. Our abrasives are fast acting on tough coatings and leave an excellent profile with a white metal finish and virtually no embedment. Our products are sustainably sourced and manufactured entirely in the USA.

A

Abrasives Inc. 917
Glen Ullin, ND
www.abrasivesinc.com

Abrasives Incorporated, home of Black Magic® Coal Slag, is the leader in coal slag, blast media and equipment sales. We serve surface prep and coating professionals from start to finish. Based in North Dakota, we deliver to customers throughout the world. One call and we take care of it all.

Accurate Corrosion Control, Inc. 811
Glendale, AZ
www.accuratecorrosion.com

Accurate Corrosion Control, Inc. (ACCI) is an employee owned corporation specializing in corrosion control and cathodic protection. Established in 1984 in Phoenix, Arizona, the Company maintains the same high standards it was founded on 35+ years ago, providing quality corrosion control engineering, monitoring, installation and materials, on time and within budget. ACCI currently has 90 employees that work from our Glendale, AZ and Pleasanton, CA offices. ACCI is licensed in Arizona, California, Utah, New Mexico, Nevada, Washington, and Texas, and has performed Engineering projects in various parts of the United States. ACCI employs a trained and NACE certified workforce that can provide turnkey corrosion control projects to all industries.

AMPP 522
Houston, TX and Pittsburgh, PA
www.ampp.org

Located in the middle of the Exhibit Hall, in Booth 522, the AMPP booth offers information on all things AMPP, including membership, education and certification programs, the QP Accreditation program, publications, conferences & events, industry information, standards and more.

AMPP Media 722
Houston, TX and Pittsburgh, PA
www.ampp.org/ampp/resources

AMPP Media provides valuable insights from global experts on the latest research, best practices, and case studies on protective coatings and corrosion control. Editorial helps keep industry professionals abreast of the corrosion prevention technologies.

EXHIBITOR LISTINGS

ARS Recycling Systems, LLC 222 & 123
Lowellville, OH
www.arsrecycling.com

World leading solutions for all steel surface preparation, painting and coating applications; commercial or industrial services. ARS manufactures Abrasive Blasting Recycling Systems, Dust Collectors, Vacuum Recovery Units and Rapid Deployment equipment to meet the requirements of our customers. Along with offering a robust lineup of standard abrasive blasting-vacuum equipment, ARS collaborates with our customers to build specialty equipment ideally suited for even the most challenging projects.

Atlantic Design Inc. 216
Abingdon, MD
www.calladi.com

Atlantic Design, Inc. is a full service engineering and manufacturing business located in Baltimore, Maryland. With over 30 years of experience, we pride ourselves on providing innovative and efficient solutions to meet each individual customer's needs. We sell or rent new and used equipment. We can also retrofit, upgrade, and troubleshoot any equipment you may already own.

Axxiom Manufacturing 422
Fresno, TX
www.schmidtabrasiveblasting.com

Axxiom Manufacturing, Inc. manufactures the Schmidt® brand of innovative engineered abrasive blast equipment and related components now including the AmphiBlast™ wet/dry blast system. Globally recognized for high quality workmanship, genuine Schmidt equipment, available only from authorized distributors, incorporates state-of-the-art metering and control systems with proprietary equipment design to consistently deliver the safest and most productive blasting performance in the surface preparation industry.

B

B&W Distributors 913
Mesa, AZ
www.bwdist.com

BlastOne International 900
Columbus, OH
www.blastone.com

BlastOne International has been a leading specialist consultant and supplier to the protective coating and corrosion control industry for over 40 years. We specialize in providing our clients with strategically catered solutions that will help them become more competitive, efficient, and profitable on any blasting or painting jobs.

Borchers CHLOR*RID 915
Westlake, OH
www.chlor-rid.com

CHLOR*RID International is the world leader in soluble salt & decontamination products, field test kits, and education for surface preparation. For 20 years, CHLOR*RID products have provided a biodegradable, non-hazardous, and economical way to ensure the longevity of applied surface coatings. Signature products include: • CHLOR*RID liquid soluble salt remover • CHLOR*WASH surface cleaner • HOLD*BLAST for surface passivation • CHLOR*TEST kits for immediate, accurate readings for chlorides on surfaces in abrasives and liquid. Visit www.chlor-rid.com for in-depth product and salt education, as well as a list of our worldwide distributors.

C

Carboline 800
St. Louis, MO
www.carboline.com

Carboline Company is a St. Louis-based coatings manufacturer with global reach. The company, founded in 1947, produces high quality performance coatings, linings and fireproofing products in more than 20 manufacturing facilities around the world. Carboline's cutting-edge Research, Development & Innovation Center is a reflection of its commitment to remaining at the forefront of the protective coatings industry. For more information, visit www.carboline.com.

CDI – Climate by Design International 641
Owatonna, MN
www.cdihvac.com

CDI manufactures ARID-DRY mobile desiccant dehumidifiers for temporary humidity control and constructive drying. Features include special filtration, cooling, and heating; units are available in 600-25,000 CFM supply volumes.

CoatingsPro 823
San Diego, CA
www.coatingspromag.com

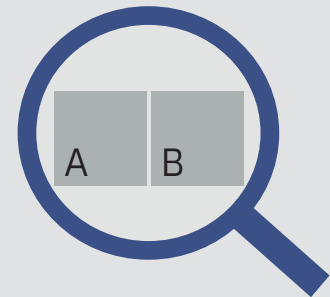
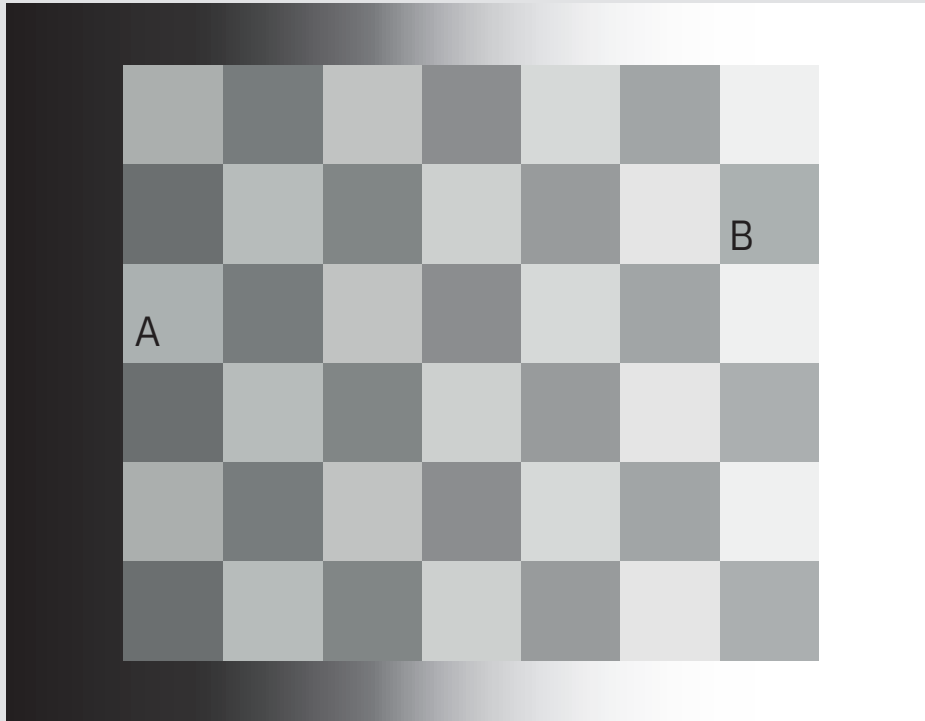
CoatingsPro Magazine takes a real-world look at coatings projects from the contractors' viewpoint. The magazine covers coatings on concrete, steel, rooftops, and flooring, in both industrial and commercial applications.

Cortec Corporation 638
Saint Paul, MN
www.cortecvci.com

Cortec® Corporation is the global leader in environmentally friendly Vapor phase Corrosion Inhibitor (VpCI®) and Migrating Corrosion Inhibitor (MCI®) Technology. Cortec has been awarded more than 50 patents and continues to develop new products for a wide variety of corrosion inhibiting applications.

Which has the highest degree of cleanliness ?

A unique instrument to measure cleanliness of steel blasted surfaces.



Both are the same!

WA CLEAN for iOS will help you to determine it objectively!

- **Prevent re-blasting** due to non-quality events
- **Improve quality** consistency thanks to live inspections
- **Reduce cleaning costs** by **avoiding overblasting**
- **Prevent subjectivity**

Scan this QR code for more details
Or get in touch with your local contact
on wabrasives.com
800-207-4691



wabrasives.com

EXHIBITOR LISTINGS

COVAL 508
Stafford, TX
www.coval-group.com

COVAL manufactures a range of single component easy to apply thin film coatings. Our coatings interact on the molecular level to covalently bond and crosslink to the substrate regardless of the surface profile. They can be applied directly to metal, concrete, tile, painted surfaces, epoxy, fiberglass and even glass! The high-tension crosslinking creates an entirely new surface that is extremely hard, totally waterproof, graffiti proof and highly resistant to abrasion, acids, stains, mold, and corrosion.

CSI Services 540
Santa Clarita, CA
www.csiservices.biz

CSI Services, Inc. (CSI) is a third-party consulting engineering firm specializing in protective coatings and linings. CSI is an SSPC Certified QP5 Inspection Firm that routinely provides inspection services worldwide. CSI also provides comprehensive coating consulting services including field and laboratory testing, maintenance and corrosion surveys, coating system evaluations, technical specifications, failure analysis, expert witness, and more.

CS Unitec 331
Norwalk, CT
www.csunitec.com

D
Dale Fastener Supply 406
Houston, TX
www.dalecompany.com

Dale Fastener Supply has been manufacturing and fabricating U-bolts, Coated U-bolts, Anchor bolts, J-bolts, Stud Bolts, and supplying fasteners since 1959. Our success has been possible through excellent service and a commitment to quality, unmatched in the industry. Over time the contact area between the un-coated U-bolts and pipe erodes and starts deteriorating the material in the presence of moisture. This excessive corrosion at the pipe support point is the leading cause of process pipe failure and will eventually develop into the pinhole leaks. PRO-COAT U-BOLT™ are designed to solve this problem. PRO-COAT U-BOLT™ are available and stocked in all the standard pipe sizes. Special sizes are made to order.

DeFelsko Corporation 616
Ogdensburg, NY
www.defelsko.com

DeFelsko, a leading U.S. manufacturer of inspection instruments, proudly manufactures the PosiTector, PosiTest and PosiPen brand of instruments including the PosiTector series of interchangeable probes for measuring coating thickness,

profile, environmental conditions, salt contamination, hardness, porosity and ultrasonic wall thickness. Products include the PosiTector 6000 series of coating thickness gages.

DeHumidification Technologies, LP 702
Houston, TX
www.rentdh.com

DeHumidification Technologies, LP (DH Tech) provides temporary humidity and temperature control solutions to multiple industries in the US, Canada, Australia and Thailand. DH Tech boasts the highest quality equipment and the most experienced and highly trained technical staff in the industry. Owners, Ken Armstrong and Brian Battle, work closely with employees to deliver unparalleled customer service.

Denso North America 612
Houston, TX
www.densona.com

Denso North America is a leading manufacturer of tapes, coatings and linings. Denso provides long-life corrosion protection for pipelines, bridges, piles, tanks and many more industries. Products include self-healing visco-elastic coatings, petrolatum wax tapes, pipeline liquid epoxies, coal tar epoxies, outerwraps and more. Brand names include Protal, SeaShield Pile Protection Systems, Archco Linings and the newest Viscotaq line of self-healing sealants & coatings and more. In business for over 138 years, Denso is recognized as the global leader in corrosion prevention.

Doosan Portable Power 202 & 105
Statesville, NC
www.doosanportablepower.com

Doosan Portable Power specializes in air compressors, generators, light towers and light compaction equipment. Backed by a century of expertise, Doosan Portable Power provides innovative products and industry-leading support for customers.

Dustnet by EMI 911
Pensacola, FL
www.dustnet.com

E-F
Eagle Industries 506
Harahan, LA
www.eagleind.com

Eagle Industries is your leading construction supplier of Jobsite Enclosures & Containment products. We supply a wide range of containment tarps, reinforced poly sheeting, safety netting, shrink wrap, equipment, scaffold containment & weather enclosure products. Eagle branded products are used for purposes of jobsite containment and abatement protection, weather protection, and jobsite safety.

Easy Kleen Pressure Systems, Ltd. 707
Sussex Corner, NB (Canada)

www.easykleen.com

Easy-Kleen Pressure Systems Ltd. has been a family owned and operated pressure washer manufacturer since 1982. We take great pride in manufacturing North America's most Hardworking, Reliable, and Efficient high pressure cleaning systems. Our customers are important to us, our goal is to match our customers with the Easy Kleen System that will meet their needs now and in the future.

ecoFINISH, LLC 507
Warminster, PA

www.ecofinishcoatings.com

ecoFINISH® High Performance coatings offer a unique alternative to traditional surface coatings. Portable polymeric powder coatings are thermally applied to metals, concrete, or fiberglass to provide durable environmental and chemical corrosion protection. EcoFINISH Corrosion Protection PLUS coatings provide additional optional benefits, such as ecoDUSTRIAL® Skid-Resistant/Slip-Resistant coatings, which incorporate various grit types and sizes to provide corrosion, wear resistance, and high COF ratings, and ecoDUSTRIAL® Antimicrobial coating with BioCote® to actively kill surface bacteria for the life of the coating.

Elcometer 600
Warren, MI

www.elcometer.com

Elcometer is a leader in coating and concrete inspection equipment, rebar, and metal detection. With a range of products specifically developed to meet the needs of the coatings industry, Elcometer is well positioned to provide you with the solution to your inspection requirements — whatever and wherever they might be.

Elé Corporation 505
McCook, IL

www.elecorporation.com

Elé Corporation is a global manufacturer of specialty intermediates used in variety of industries such as personal care, polyurethanes and CASE. Elé is creating greener, more natural solutions, higher carbon renewable content and Prop 65 compliant products without compromising functionality or efficacy. Backed by our highly experienced R&D team, we collaborate with our customers to provide tailored solutions.

Element Materials Technology 512
Houston, TX

www.element.com

Element is one of the world's leading global providers of testing, inspection and certification services for a diverse range of products, materials and technologies in advanced industrial supply chains where failure in use is not an option. Our global

network of laboratories support customers from R&D, through regulatory approvals and into production, ensuring products are safe, sustainable and achieve market access. We offer leading coatings testing, inspection and advisory services, supplying critical materials evaluation for the most challenging environments.

EnTech Industries, LLC 210
East Grand Forks, MN

www.entechindustries.com

EnTech Industries has been manufacturing high quality, field-tested mobile and skid dust collectors for 25 years. The collectors are offered in diesel, electric and diesel/electric combination, and in capacities from 2,000 cfm through 60,000 cfm.

Ervin Industries 809
Ann Arbor, MI

www.ervinindustries.com

Manufacturer of highly engineered abrasives.

Fischer Technology, Inc. 818
Windsor, CT

www.fischer-technology.com

Visit the Fischer Technology booth to see the latest instruments for nondestructive and precise measurement of corrosion protection coatings on ships, bridges and other structures. From coating thickness measurement according to international standards IMO PSPC and SSPC-PA2 to ultrasonic wall thickness. Fischer instruments also measure thermal spray aluminum over stainless steel, intumescent coatings, holiday testing, the surface profile of blasted surfaces and more.

G-I

Gannett Fleming 728
Camp Hill, PA

www.gannettfleming.com

For over 100 years, Gannett Fleming has provided progressive design and construction services for worldwide transportation, earth sciences, facilities, geospatial, power, and water projects. Consistently ranking among the industry's top firms, Gannett Fleming is ISO 9001:2015 Certified, assuring we meet the most rigorous quality standards. Our 2,500+ employees embrace sustainability, innovation, and advanced solutions to solve our clients' complex challenges and improve the communities they serve. Learn more at www.gannettfleming.com.

EXHIBITOR LISTINGS

GMA Garnet USA
The Woodlands, TX
www.gmagarnet.com

GMA Garnet (USA) Corp. is a leading supplier of garnets for the surface preparation industry. Material is available through its global distribution network and warehouses.

Green Diamond Performance Materials 200
Riddle, OR
www.greendiamondpm.com

Green Diamond Sand Products offers environmentally safe, moisture free abrasives with no free silica. Durability and sharp edges provide faster cutting. Custom blends can be used in numerous applications.

Greenman-Pedersen, Inc. 710
Babylon, NY
www.gpinet.com

Founded in 1966, GPI is a leading engineering consulting firm that specializes in the innovative design and construction of transportation infrastructure and building projects. Our experts provide comprehensive engineering, design, planning and construction management services to a wide variety of government agencies, municipalities, institutions, industries, corporations, private organizations and developers. Services: Bridge Engineering, Building Systems Engineering/MEP, Civil and Site Engineering, Construction Management, Environmental/Sustainability, GIS/Asset Management, Highway Engineering, Planning & Urban Design, Protective Coatings, Surveying/Mapping, Traffic Engineering, Water/Wastewater
Specialties: Geospatial Services, Laboratory, Training/ Continuing Education

922 Harsco Minerals
Camp Hill, PA
www.harsco-environmental.com

Harsco Corporation is a diversified industrial services company serving global industries that are fundamental to worldwide economic growth. The Company operates in three segments: Harsco Metals, Minerals; Harsco Industrial and Harsco Rail. The Harsco Metals, Minerals Segment is a provider of on-site services for material logistics and resource recovery from iron, steel and metals manufacturing. Harsco Minerals is an industry pioneer in the processing of mineral products for environmentally beneficial uses and is known throughout the industry for its high quality, high performance BLACK BEAUTY® abrasives, roofing granules and aggregates products.

Henkel - LOCTITE 816
Rocky Hill, CT
www.henkel-adhesives.com/us/en/industries/industrial-maintenance-repair.html

Protective and wear resistant coatings have long been a high-quality and cost-effective solution for machinery and equipment repair and maintenance across many industries. LOCTITE® industrial protective and wear resistant coatings are easily applied on surfaces of all sizes and offer the extra benefit of corrosion protection.

Key Benefits of LOCTITE® Protective and Wear Resistant Coatings: Restore worn surfaces and extend the life of parts, Increase part efficiency, Save costs by avoiding part replacement and reducing spare-part inventories, and Protect parts against abrasion, erosion, chemical attack, and corrosion.



EXHIBITOR LISTINGS

HippWrap Containment 737
San Diego, CA
www.hippwrap.com

HippWrap Containment specializes in shrink-wrap containment enclosures for protective coatings, asbestos, and weather protection projects. The company offers creative solutions to containment problems.

HoldTight Solutions, Inc. 812
Houston, TX
www.holdtight.com

HoldTight Solutions Inc. is a manufacturer and distributor of additives for the coatings surface preparation industry to assist with cleaning blasted surfaces of soluble salts and contaminants and to prevent flash rusting prior to coating. The additive, HoldTight® 102 is used with dry abrasive, wet abrasive and UHP blasting. Additionally, HoldTight distributes a preservation coating, HT 365, to prevent corrosion and flash rusting of bare steel for up to one year. This is used for storage, shipping, and fabrication of steel products. Finally, HoldTight distributes a suite of testing equipment and test kits for measurement of surface conductivity, chloride ions and water quality that also benefit the surface preparation market.

Industrial Vacuum Equipment Corp. 230
Ixonia, WI
www.industrialvacuum.com

Industrial Vacuum Equipment Corp. manufactures the Hurricane line of industrial vacuum loaders and FiltAire dust collectors. We sell and rent vacuums and dust collectors from locations throughout North America. Setting the Quality Standard for 25 Years!

International Union of Painters and Allied Trades 516
Hanover, MD
www.IUPAT.org

The IUPAT Finishing Trades Institute — The Experts in Coating Application Training with SSPC Programs.

J-L

Jetstream of Houston/Guzzler 246 & 143
Manufacturing/FS Solutions
Houston, TX
www.waterblast.com
www.guzzler.com
www.fssolutionsgroup.com

J.H. Fletcher & Co. 905
Huntington, WV
www.jhfletcher.com

J.H. Fletcher & Co. has been engineering and manufacturing equipment since 1937, with a focus on providing solutions that improve safety and efficiency. Included in Fletcher's standard product line is the Model BK-80 Grit Blaster, a robotic ultra-high pressure water and abrasive grit blaster. The model features 80' of reach and radio remote operation. Fletcher also offers specialty equipment, custom designed to help solve customer's operational obstacles.

KleenBlast 416
Danville, CA
www.kleenblast.com

KleenBlast is the largest distributor of abrasives, sandblasting equipment and safety products on the West Coast. With locations in Tacoma, Portland, Hayward, Rancho Cucamonga and Chula Vista, products are just a day away. KleenBlast also operates Kleen Industrial Services, an industrial waste and recycling service, out of all locations.

KTA-Tator, Inc. 799
Pittsburgh, PA
www.kta.com

KTA-Tator, Inc. established in 1949 was the first Coating Inspection Firm qualified under SSPC QP 5 and employs over 130 NACE Certified Inspectors and 70+ CWI's across the globe. In addition to our coating inspection services, KTA offers Non-Destructive Testing, Coating Assessments, Laboratory Testing, Failure Analysis, Environmental, Health, & Safety Services, Instrument Sales, and Training. We thank you for your business over the last 70 years and look forward to many more.

Langtry Blast Technologies Inc. 434
Burlington, ON (Canada)
www.langtry.org

Langtry Blast Technologies Inc. is an established original blast equipment manufacturer from Burlington, Ontario, Canada. Our traditional business model is based on the accomplishment of properties in the shot blast manufacturing market across the globe. Integrating leading edge technology with our own product development, we have provided equipment to the key players in the automotive and aerospace market. Our internal engineering team provides solutions to the intricacies of blasting, cleaning and surface profile finishing.

L.M.I. Rentals and Repairs 299
operated by Liberty Maintenance
Youngstown, OH
www.lmirentalsrepairs.com

L.M.I. Rentals and Repairs is a leader in the abrasive blasting and painting industry. We have over 35 years of experience in



Measure Coatings: Paint, Powder, Anodize, Plating & Corrosion Protection

- Measure O.D., I.D. & thick coatings up to 4 in.
- Ferrous and non-ferrous substrates
- From basic "readings only" to stats and detailed inspection plans
- Simple and fast measurements



Contact us today!
Fischer Technology Inc.
860.683.0781
www.fischer-technology.com
info@fischer-technology.com

servicing and maintaining industry equipment. L.M.I services and rents blasting and recycling units, dust collectors, vacuum trucks, platform trucks/trailers, snooper units and more.

M-P

Machinery & Solutions LLC 730
Phoenix, AZ
www.machineryandsolutions.com

Where problems end and solutions begin. Machinery and Solutions is a Phoenix, Arizona based distributor for Binks, Graco, Wagner, CATechnologys, Iwata, and other brands. We offer repair services for painting equipment as well as stocking OEM Parts and equipment replacement parts to help you keep your product line up and running. We also offer a routine maintenance program to keep your equipment running at peak performance. We stock rebuild kits, parts, and a variety of styles of new pumps, guns and basically anything you need for paints and other coatings. At Machinery and Solutions, we offer more than customer supplies and equipment, but also show you how to use them in an economical, safe, and efficient way. We will help you find the right process for your product.

Marine Equipment Supply (MES), LLC 605
Spanish Fort, AL
www.mes.us

Marine Equipment Supply (MES) is a nationwide equipment rental house geared towards servicing the Blast and Paint (Preservation) market. Our fleet contains Dust Collectors, Vacuums, Blast Pots, Steel Grit Equipment and more.

Master Builders Solutions 700
Shakopee, MN
www.master-builders-solutions.com

A world leader in commercial & industrial flooring, BASF helps facilities increase the service life of their floors. We work with our customers to select the flooring option that suits the unique needs of their facility. BASF offers fast-curing and esthetically pleasing solutions that meet the most stringent flooring specifications.

Maxepoxy Protection & Repair Technology - Technofink, LLC 510
Spring, TX
www.technofink.com

MAXEPOXY Protection & Repair Technology, High-Performance Polymers against Abrasion, Corrosion, Chemical attack, Cavitation, and fillers for Composite repairs. TECHNOFINK, an innovative technology company with the know-how for coating protection and corrosion control, providing high quality and high-performance products to protect and extend the equipment life. We aim to provide solutions through products and know-how for our clients' problems with the highest level of quality, reliability, and security while offering the best cost-benefit ratio.

Mericka Group LLC 645
Anchorage, AK
www.merickagroup.com

Proven Industry Leaders. Mericka Group is comprised of individuals that have been in the Multi Services Industry for many years. The ownership and management team have brought the vast knowledge and experience they have accumulated over the years to Mericka Group and it is evident in every project they do.

Minerals Research, Inc 807
Tuscon, AZ
www.mineralsresearch.com

Manufacturer of SHARPSHOT slag abrasives. Also represents and distributes technical abrasives and equipment products. Primarily serving California and other Western states.

Montipower Americas Inc. 509
Manassas, VA
www.montipower.com

Montipower is showcasing the MBX Bristle Blaster, an innovative power tool surface preparation solution. The Bristle Blaster removes corrosion, scale, and coatings while imparting a 3 mil surface profile and near-white metal clean. The Bristle Blaster is ideally suited for spot repairs and for jobs where abrasive blasting is prohibited.

National Equipment Corp. (NECO) 538
College Station, TX
www.hosecoupling.com

National Equipment Corp. will display its Neco Blast Couplings and complete product line.

NCP Coatings Inc 300
Niles, MI
www.ncpcoatings.com

A third-generation family-owned business, NCP develops and manufactures technologically advanced primers, enamels, textured coatings, topcoats, reducers and marking paints. The company recently celebrated 70 years of supplying the global paint coatings arena. Headquartered in southwest Michigan, NCP employs more than 100 people at its primary manufacturing facility.

Nextec, Inc./PreTox 404
Dubuque, IA
www.pretox.com

PreTox Systems/NexTec, Inc. markets PreTox products, which render lead content waste not RCRA hazardous for disposal. Unique products include those for abrasive blasting, Paint Strippers, and substrate demolition. Compatible with all

EXHIBITOR LISTINGS

abrasives and removal methods. PreTox paint strippers contain no MC.

NuWay Industrial Waste Management, LLC 640
North Lima, OH

www.nuwayindustrialwm.com

Nu Way Industrial Waste Management, LLC is a WBE and WOSB certified company specializing in hazardous and non-hazardous waste transportation and disposal.

Olimag Sands Inc. 417
Thetford Mines, QC (Canada)

www.olimag.com

Olimag Sand is the largest producer of non-toxic abrasive for sand blasting in Eastern Canada. Its synthetic olivine JETMAG is produced in a rotary kiln at 2,300 F.

Onset - HOBO Data Loggers 399
Bourne, MA

www.onsetcomp.com

Onset, the trusted manufacturer of HOBO data loggers, offers field-proven, reliable, web-enabled monitoring systems that measure and record temperature, RH, and dew point throughout blasting and coating processes to ensure high-quality coatings. HOBO systems provide immediate notification if conditions deviate outside the optimal range, and record the data required for documenting conditions during the coating process. Stop by booth #399 to learn more and enter our raffle for a free data logger! And visit us on the web at www.onsetcomp.com.

Opti-Blast Inc 831
Jacksonville, TX

www.optiblast.com

For over 25 years, Opti-Blast has manufactured and delivered quality, high-performance plastic blast media to commercial and military customers around the world. We are proudly MIL-SPEC approved.

To ensure consistent quality, we manufacture all of our plastic blast media, which is 100% made in the USA. In addition to our MIL-SPEC approved plastic media, we have proprietary blends of blast media that work well with all types of substrates! Our products are highly useful for a range of different project applications. This includes anti-corrosion coating removal, aircraft paint stripping, and mold cleaning.

Please visit our Booth #831. We are specialists in plastic blast and other media and have extensive in-depth industry experience. We are always committed to ensuring you get the best product for your blasting needs!

Pacific Dust Collectors & Equipment 238
Damascus, OR

www.pacificdustequipment.com

PPG Protective & Marine 500
Pittsburgh, PA

www.ppgpmc.com

With decades of experience and a commitment to innovation, our protective and marine coatings business has developed a complete range of proven coating solutions to protect assets in the world's most challenging conditions.

P & L Metalcrafts, LLC 637
Youngstown, OH

www.metalcraftsyng.com

We specialize in metal fabrication & hardware rigging supplies for your containment design & metal component requirements in the bridge painting & water tank industries. We are your outrigger specialists! We also offer all rigging hardware - wire rope cable - ropes - gloves. We ship across the USA. Give us a call at 330-793-2178 or check out our website at www.metalcraftsyng.com.

R

Rainguard Brands, LLC 546
Phoenix, AZ

www.rainguardpro.com

For 51 years Rainguard Pro has been innovating new products that protect our customer's investments. Our company is committed to our customers, employees and the environment. Our new IsoFree™ No VOC products exceed most State's environmental standards and are the best in the industry.

Raphoon, LLC 930
Spring, TX

www.raphoon.com

Pipeline Coatings, with services including consulting, inspection, training, and product design, which will help any pipeline company in improving the integrity of their network. Primarily focused on PIPELINE COATINGS and protection methods. Raphoon, LLC is committed to the continual improvement of our pipeline protection mechanisms and the long-term reliability of the world's energy infrastructure.

Rapid Prep 232
North Kingstown, RI

www.rapidprep.com

Rapid Prep is a full-service provider of surface preparation equipment. Our highly trained staff has a combined experience within the industrial painting industry of more than 100 years. Our skilled team can configure most equipment to your specifications. Rapid Prep is fully committed to providing the highest quality equipment backed by 24-hour service from start up to demobilization. With four locations nationwide-service is never that far away. Call us today to experience the Rapid Prep advantage.

RockRidge Abrasives 739
Amherst, NY
www.gnpgraystar.com

RockRidge was created by a collective of abrasive specialists who wanted to supply our customers with high-quality abrasives that we have hand-selected and thoroughly tested.

Our product line includes coated and non-woven abrasives, garnet for blasting and water-jet cutting applications, glass beads, aluminum oxide, steel grit, steel shot, silicon carbide, and other specialty materials.

We are involved face-to-face in the industry and constantly evolve our knowledge and products to best serve our customers' needs and to improve their processes.

We have dozens of distributor locations across the U.S. and Canada, all of which provide reliable product knowledge and loyal service.

Rust-Oleum 503
Vernon Hills, IL
www.rustoleum.com

For more than a century, Rust-Oleum has been a global leader in manufacturing innovative coatings that empower do-it-yourselfers and professionals alike across categories including small project paints, cleaners, primers, automotive, industrial, high performance coatings and wood care. Its wide breadth of brands and products include such trusted names as Rust-Oleum, Stops Rust®, Painter's Touch®, Universal®, EpoxyShield®, Varathane®, Zinsser®, Watco®, MultiSpec®, X-I-M®, Krud Kutter®, RockSolid®, Wipe New®, Testors®, Seal-Krete®, Modern Masters®, Miracle Sealants®, Roto-Rooter®, Mean Green®, Concrobium®, and Gator® Finishing Products.

S
Seal for Life Industries 646
Pflugerville, TX
www.sealforlife.com

Seal For Life Industries offers the most diversified coating solutions in the market for superior infrastructure protection. With products from self-healing coatings to heat-shrink sleeves, anti-corrosion tapes to liquid coatings, cathodic protection to intumescent coatings and anti-corrosion thermoplastics servicing multiple industries across the globe. Working in a variety of industries including civil and infrastructure, renewable energy, water and wastewater, oil and gas, district heating/cooling and general industrial purposes.

Sherwin-Williams 716
Cleveland, OH
www.sherwin-williams.com/protective

A complete line of products. Market expertise. On-time distribution. What else would you expect from a world leader in protective coatings and linings? That's where nearly 150

years of coatings experience comes in. Add to that a dedicated distribution network that delivers on time, every time. Sherwin-Williams. Leave nothing to chance.

Sponge-Jet 827
Newington, NH
www.spongejet.com

Sponge-Jet manufactures composite abrasives by bonding conventional abrasives with polyurethane sponge. This method allows for clean, dry, low dust, reusable abrasive blasting and promotes high-quality surface preparation, the acceleration of blasting and painting operations during shutdowns, while minimizing impact to surrounding equipment, maintenance trades and the environment. Sponge-Jet also manufactures high-production, composite abrasive blasting and recovery systems.

T
Tarps Manufacturing 639
Meredosia, IL
www.tarpsmfg.com

Tarps Manufacturing, Inc. produces custom containment tarps, building wraps, and ground tarps in strong nylon and poly mesh. Many options available in coated fabrics, FR, multi-layered tarps for sound reduction, and special printing. USA construction, prompt delivery, consistent products.

Teknos US Inc. 329
Charlotte, NC
www.teknos.com

Teknos is a global coatings company offering a wide range of paints and coatings for the manufacturing industry, energy sectors, building professionals, and infrastructure. With operations in more than 20 countries in Europe, Asia, and the USA, we are on our mission to make the world last longer by providing smart, sustainable coating solutions to protect and prolong.

Texan Stone LLC 704
Stafford, TX
www.texanstone.com

Texan Stone LLC is a wholesale supplier and processor of India Beach Garnet and Staurolite abrasives. All products are mined and sourced legally and available in the U.S., Canada, Mexico and other global destinations. Houston; texanstone.com. Booth 704.

Tinker & Razor 928
New Braunfels, TX
www.tinker-razor.com

Tinker & Razor is an electronics firm successfully engaged in the design, development and manufacture of Holiday Detectors,



NCP COATINGS PRODUCTS

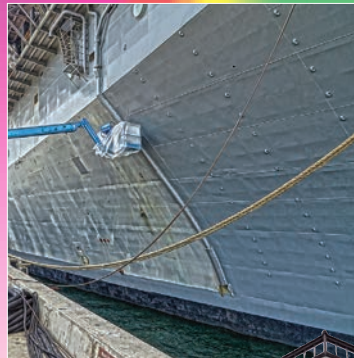
Developer and manufacturer of technologically advanced primers, enamels, textured coatings, topcoats, reducers and marking paints

COATINGS

COMMERCIAL • INDUSTRIAL • MARINE • MILITARY

Industries Served

NCP Coatings' customers include OEM manufacturers in industries such as: heavy truck and trailer; recreational marine and commercial shipbuilding; off-road equipment. Other industries served include aerospace, military weaponry, ground force equipment and naval shipbuilding.



**Paints, Coatings,
Deck Nonskids**

**Your Partner In Coatings Since 1948
ISO 9001:2015 Certified**

Headquarters
225 Fort Street
Niles MI 49120
800.627.1948

Indiana
1413 Clover Road
Mishawaka IN 46544
800.627.1948

N.V.S.C. s.r.l.
Via S. Martino 6
15028 Quattordio ITALY
39 0131 773403

www.ncpcoatings.com

EXHIBITOR LISTINGS

Detectron Pipe & Cable Locators and Fluid Leak Detectors, plus a sizable line of Cathodic Protection Instrumentation. Incorporated in 1948, Tinker & Rasor has been continuously manufacturing Holiday Detectors since the founding of the Company. Our Holiday Detectors are in wide use throughout the world inspecting protective coatings.

Tnemec 323

Kansas City, MO

www.tnemec.com

Protective coatings manufacturer since 1921, Tnemec Company Inc. offers products developed to protect against the most severe environments facing the water industry. Tnemec's expansive product line is supported by extensive performance data and outstanding technical service backed by a highly trained network of knowledgeable coating representatives. Tnemec supplies coating systems for a wide variety of water storage vessels.

Trenton Corporation 732

Ann Arbor, MI

www.trentoncorp.com

Since 1949, Trenton has pioneered the development of wax-based anticorrosion products. Most well-known is the Wax-Tape® brand anticorrosion wrap system, with primers, wraps and outerwraps. Three wraps meet a variety of needs; Wax-Tape #1 anticorrosion wrap remains flexible, excellent for underground applications, Wax-Tape #2 anticorrosion wrap firms up, providing mechanical protection aboveground, Wax-Tape HT-3000 provides protection for operating temperatures up to 230° F (110°C). For additional protection, Trenton offers outerwraps, including MCO™ outerwrap, a fiberglass weave saturated with a moisture-cured resin.

TruQC 833

Kirkwood, MO

www.truqc.com

TruQC is a field-friendly document and workflow framework configured to meet your specific business needs, including compliance with QP, QS and QN certifications. Direct gauge integration, thousands of users across the globe and years of experience in the industry make TruQC the premiere compliance software for coatings contractors.

V-W

Van Air Systems 803

Lake City, PA

www.vanairsystems.com

The ideal solution for mobile blasting and painting is the Blast Pak PRO from Van Air Systems. A completely portable deliquescent drying system features the industry's best warranty, requires no electricity, and has a plug and play design. Conveniently assembled on a forklift skid with lifting lugs to

easily move around a worksite, check it out at the Van Air Systems Booth and remember Dry Air Matters.

Vulkan Blast Shot Technology 542

Brantford, ON (Canada)

www.vulkanshot.com

For over 30 years, Vulkan Blast Shot Technology has been a leading manufacturer/distributor of specialty stainless steel shot and grit abrasives manufactured at their head office in Hattingen, Germany.

We are committed to supplying our customers with the highest quality specialty abrasives; CHRONITAL cast stainless shot and GRITTAL stainless grit, as well as complimentary on-site technical advice and equipment evaluations. We pride ourselves in our exceptional level of customer service from administration to shipping to outside sales and support.

W Abrasives (Winoa USA) 212

Welland, ON (Canada)

www.wabrasives.com

Warren Environmental 711

Middleborough, MA

www.warrenenviro.com

Warren Environmental is a manufacturer of proprietary epoxy blends and patented application technologies. Since 1996, we have protected or rehabilitated municipal and private client's infrastructure throughout the United States. We have quickly become the industry's trusted epoxy manufacturer due to our concentration on quality and safety for the environment, workers, and the communities we serve.

Western Technology 608

Bremerton, WA

www.westerntechnologylights.com

Western Technology manufactures The BRICK, part of their "Kick It Tough" line featuring LED Portable Explosion Proof, Low Voltage, Wet Location, LED Lights. The BRICK and BRICKette has become the go-to light for Hazardous Locations, Wet Locations and Confined Space. Standard accessories are designed for quick, sure mounting in almost any type of work situation.

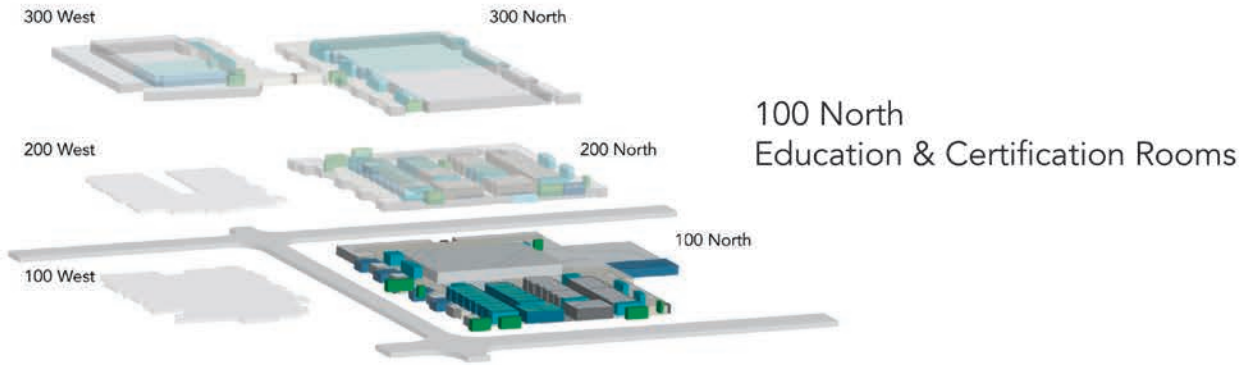
WIWA LLC 1021

Alger, OH

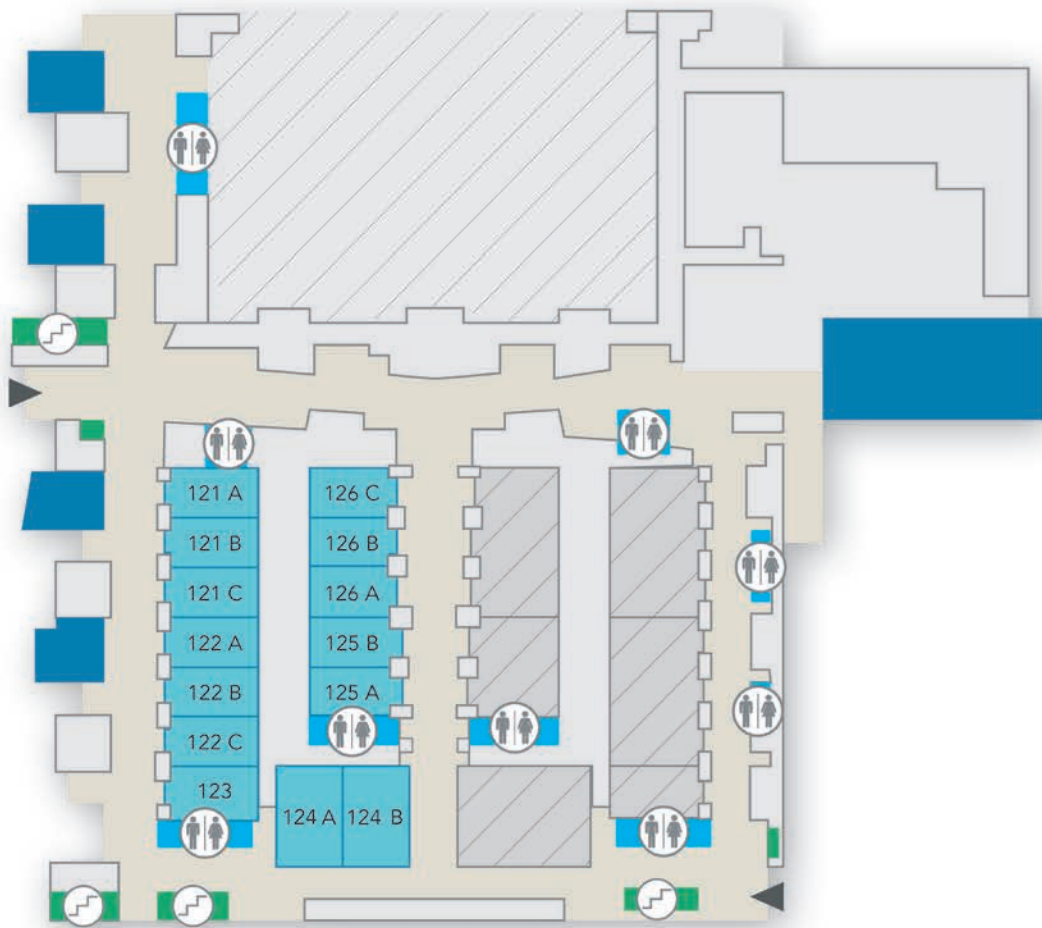
www.wiwausa.com

WIWA is an industrial and commercial spray equipment manufacturer that specializes in customized, as well as standard equipment, used for the application of protective coatings and linings. WIWA spray solutions are designed for the applicator that's looking to elevate their production levels as well as minimize their cost of ownership.

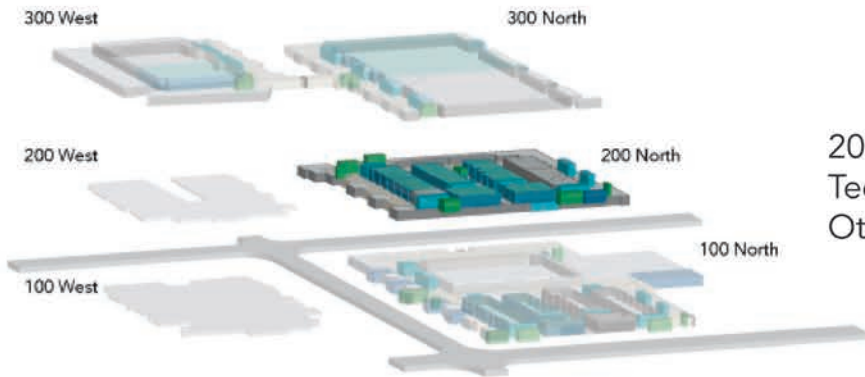
CONVENTION CENTER MAP



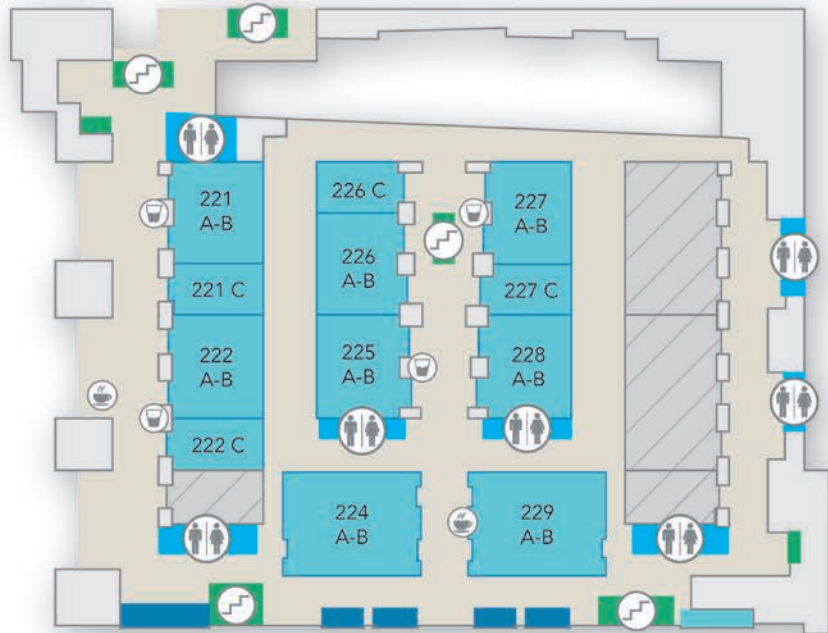
100 North
Education & Certification Rooms



CONVENTION CENTER MAP



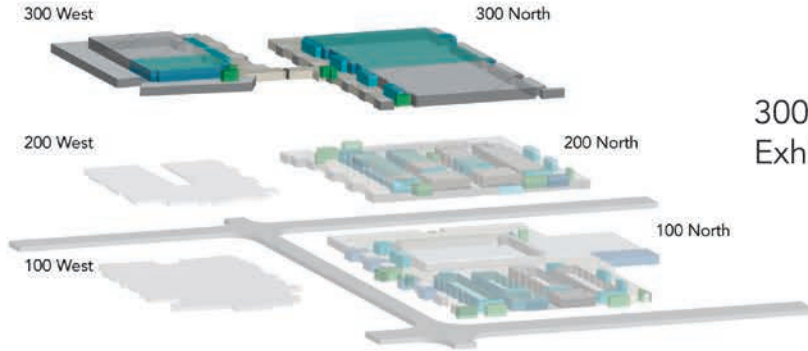
200 North
Tech Sessions, Workshops &
Other Meetings



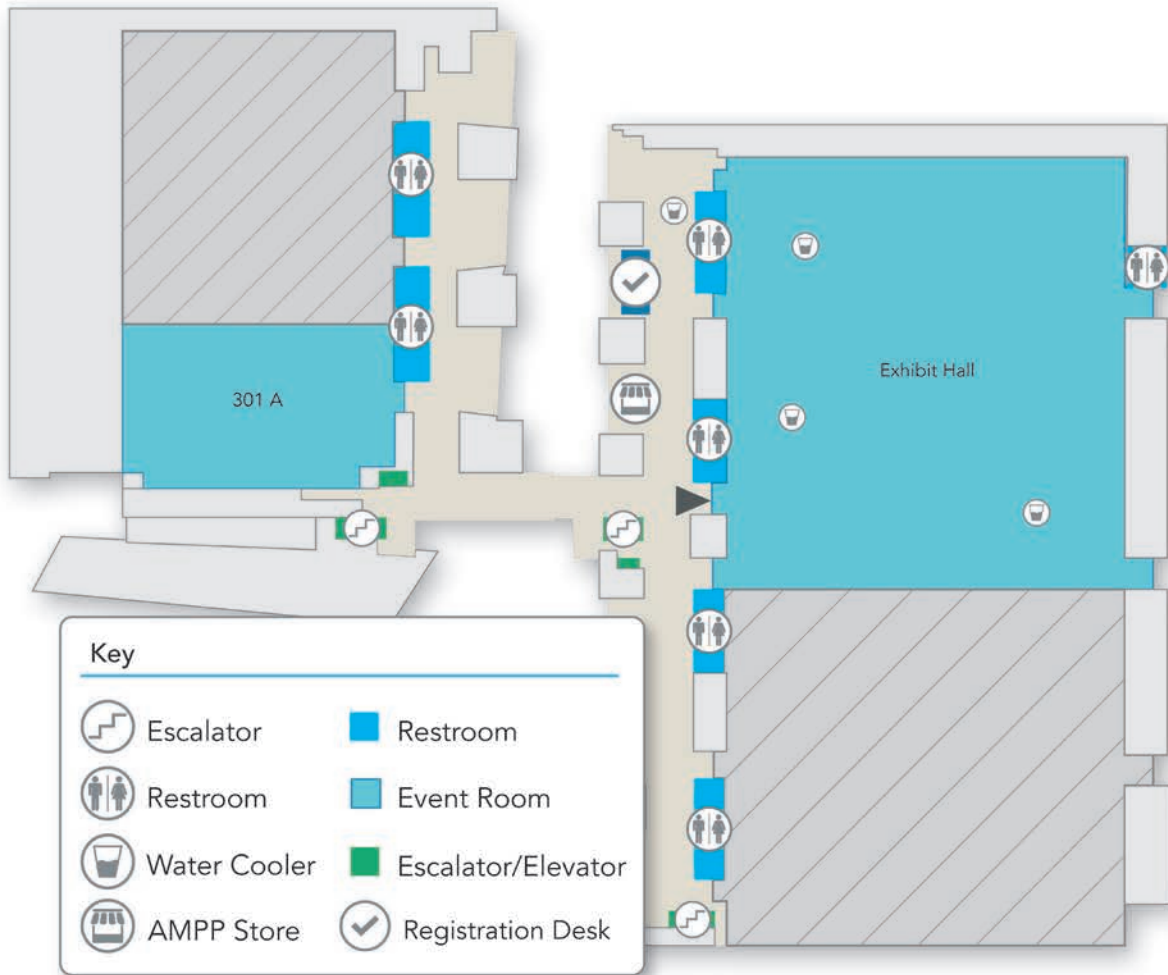
Key

- | | | | |
|---|----------------|---|--------------------|
|  | Escalator |  | Restroom |
|  | Restroom |  | Event Room |
|  | Water Cooler |  | Escalator/Elevator |
|  | Coffee Station |  | Balcony |

CONVENTION CENTER MAP



300 North & West
Exhibit Hall





NO SALT. NO RUST. ONE STEP.

Most Trusted Brand

With over three decades of success in tests and application, **HoldTight 102** is an industry leading salt remover and Flash Rust Preventer that reduces surface prep costs and preserves your high value assets.



NOTHING LEFT BEHIND

For more than 30 years

EXCEPT THE COMPETITION

Watch our video on lab results showing no residue left behind.

<https://holdtight.com/nlb>



EXHIBIT HALL FLOOR

Exhibit Hall Booth Layout

Key

-  Entrance
-  Restroom
-  Water Cooler
-  Booth
-  AMPP Booth/Media Booth
-  CoatingsPro Booth
-  Sponsor Booth
-  Coatings Experience & Professional Dev Panel



FROM SPEC TO PROTECT



ASSET PROTECTION. WE'RE IN IT TOGETHER.

When it comes to fighting corrosion, working with a trusted coatings resource can make all the difference in the world.

We help you get the job done on time and on budget, with the right coatings, application technology and industry expertise. All backed by the industry's largest team of NACE-certified coating professionals – and 4,700 North America distribution locations wherever your projects are.

We're Sherwin-Williams Protective & Marine. Let's talk.

swprotective@sherwin.com
[sherwin-williams.com/protective](https://www.sherwin-williams.com/protective)

SHERWIN-WILLIAMS®

IUPAT has developed the most qualified craftspeople since 1887.

World-class training at over 100 training centers across North America.

Robust training in all aspects of surface preparation & coating application for complex industrial & marine structures.

Certified workers, accredited programs and training centers.

Superior work that's on time and on budget.

IUPAT INDUSTRIAL PAINTERS.

For a higher level of protection, durability and safety.

Niagara Falls International Rainbow Bridge, connecting New York and Ontario



International Union of Painters and Allied Trades

IUPAT.org

Visit us at Booth #516 and IUPATIndustrial.com to Learn More