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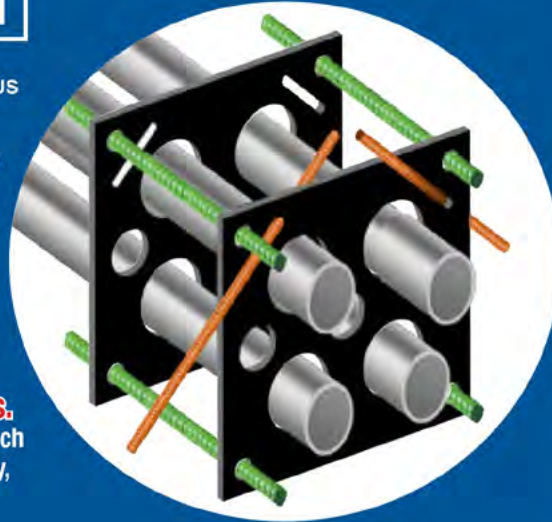
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Prevention is Key
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ON THE COVER

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iTOOLco is a unique research and development company that has led the electrical tool industry with their groundbreaking designs since 2001. iTOOLco's inventors & Co-Founders David & Michael Jordan have developed and patented countless innovative products, pushing the envelope of what can be done to improve the lives of electricians and distribution partners alike. iTOOLco has been awarded prestigious accolades, including numerous NECA Showstopper Awards, for its groundbreaking work in

the electrical field. Based in Clinton, TN, iTOOLco is dedicated to creating the highest quality American made products, backed by an industry leading 6 year warranty.

With real world experience as electrical contractors, brothers David and Michael Jordan have a deep understanding of the kind of quality, time-saving tools electricians depend on for doing the job right. Over the years iTOOLco has revolutionized the wire pulling market with the introduction of the first ever 12,000

lb. puller - the Cannon 12K, with built in reverse. As well as their Cordless Cannon 3K & 6K (the first on the market of each, respectively). Capable of reaching areas where power may not be available, these pullers allow users to achieve the same amount of power, without worrying where it will come from. Also known for their Gear Punch which includes lifetime replacement on draw studs, Tray Rollers, numerous Material Handling solutions, etc. iTOOLco ensures that no matter the job, we have a solution. □

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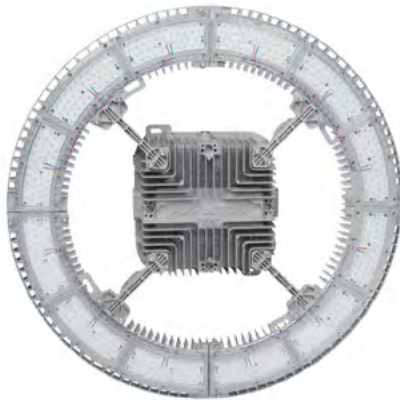
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Corrosion is a Powerful Destructive Force: *Prevention is Key*

BY JOSEPH WILSON, *DIRECTOR OF SALES, CENTRAL REGION AT EMERSON AUTOMATION SOLUTIONS*

THE WORLD CORROSION ORGANIZATION ESTIMATES the global cost of corrosion at \$2.5 trillion (USD) or about 3% of the GDP in most industrialized countries. Therefore, any money saved by preventing corrosion, including the cost of lost productivity because of outages, delays, failures, and litigation; labor; and new equipment to replace failed parts, directly improves profitability.

Consider the petrochemical refining industry where processing equipment, electrical systems, and lighting need protection against pitting, corrosive gases, and water intrusions. In the U.S. alone,

the industry's annual direct cost of corrosion is estimated at \$3.7 billion. Of this total, maintenance-related expenses are estimated at \$1.8 billion, vessel turnaround expenses at (CONTINUED ON PAGE 10)







\$1.4 billion, and fouling costs are approximately \$0.5 billion. In a commodity-driven industry, investment in more effective corrosion control strategies often takes a backseat to across-the-board cost-cutting measures to the detriment of long-term profits, environmental safety and operational productivity.

When specifying electrical products for harsh environments choosing the right materials to ensure adequate corrosion-resistance is crucial. In offshore oil and gas operations, for example, equipment is under constant exposure to seawater and salt spray, both of which are highly corrosive due to the autocatalytic action of sodium chloride and other dissolved chlorides. Corrosive substances such as hydrogen sulfide and carbon dioxide also occur naturally in oil and gas fields. Other corrosives that affect a wide range of industries include chlorine, bromine, hydrochloric acid and ammonia.

IRON & STEEL TYPES

Most industrial electrical products worldwide are still made of coated metal. The most commonly used metals are ferrous, taking advantage of iron's strength, versatility, workability and relative affordability. Unfortunately, with the exception of stainless steel, ferrous products are also the most susceptible to corrosion.

PROTECTIVE COATINGS

Various finishes can be applied to help isolate metallic surfaces from the surrounding corrosive environment. The most familiar example is ordinary paint

applied to steel to prevent rust. However, there are several other methods including baked enamel, epoxy powder coat and PVC coating. For effective protection, coatings must be applied properly and protected against damage during installation and use. The zinc surface on galvanized steel serves both as a protective coating and, if damaged, a sacrificial anode that will corrode in preference to the exposed steel.

Galvanization and Finishes

Galvanization of iron and steel products can greatly improve corrosion-resistance in wet or weather-exposed environments. In particular, galvanized cast iron and non-stainless steel products are often used in wet and weather-exposed locations with the expectation that they can safely remain in service for many years. Yet the same products would likely be unsuitable for direct exposure to corro-

sive chemicals. A wide variety of liquid and powder coat finishes can be applied to iron and steel products – including galvanized products – to help seal out water, air and corrosive chemicals. Their effectiveness depends on thorough coverage, reliable adhesion and suitable resistance to impact and abrasion in the field. Resistance to chemical degradation is also important. Epoxy powder coat is one example of a finish that provides excellent resilience and strength while remaining impervious to heat and most chemicals.

Galvanization: Providing two forms of protection against rust in a single process

The only effective way to fight rust is to prevent the corrosive processes from beginning. This is normally done in one of two ways: by adding a barrier i.e., paint, that prevents oxygen and electrolytes such as rainwater from reaching the surface, or by introducing a sacrificial anode, which corrodes preferentially to the iron or steel part. Galvanization provides both of these protection methods simultaneously.

Protective Properties

The galvanizing process creates a metallurgical bond between the zinc coating and the underlying steel or iron. This bond provides much stronger adhesion than any type of paint, including epoxies. The galvanized surface forms in multiple layers, with zinc and iron alloyed in varying ratios. The outer layer of pure zinc is relatively ductile, while the inner layers are progressively harder – harder than steel, in fact. These qualities combine to provide excellent resistance to both impact and

(CONTINUED ON PAGE 12)





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abrasion, helping protect against surface damage.

In addition, when left unpainted, zinc exposed to the wetting and drying of weather gradually forms a patina of zinc carbonate over a period of a few months to a year. This patina provides an additional barrier against corrosion. Because it “grows” outward from the surface, this patina is especially effective at protecting edges and corners where paint could be easily damaged.

The most important advantage of galvanizing over paint, however, is the anodic property of zinc in a galvanic couple with iron. If the galvanized coating is damaged – whether by accident or through an intentional action such as cutting or drilling – the zinc will act as a sacrificial anode that corrodes first while protecting the more noble iron or steel.

This protective action will continue until the damage is repaired by applying

a zinc-rich paint to the damaged area, for example, or until all the zinc has corroded. Depending on the thickness of the galvanized layer and the corrosiveness of the surrounding atmosphere, the service life, defined as time to first maintenance, can be a couple of decades to a hundred years or more.

Epoxy Powder Coat

Unlike liquid paint, powder coating uses an electrostatic process to apply a finish to metallic parts in a dry state. Once applied, the finish is heat-cured to create a finish that is thicker, tougher, more even on all outer surfaces and edges, and more durable than most paints. This makes epoxy powder coat one of the preferred protection choices for oil and gas, wastewater and other harsh, corrosive industrial applications. To ensure proper adhesion and maximum durability, correct surface preparation and application

quality are essential. The goal should be to apply multiple, well-bonded coats to provide optimum resistance against impact and abrasion. Components should be periodically inspected for finish damage that exposes the metal underneath to salt spray or other corrosive elements. Epoxy powder coat can also be degraded by UV radiation, so service life may be shortened for products installed in areas exposed to intense direct sunlight.

INDEPENDENT PERFORMANCE TESTING

In order to determine the corrosion resistance of various protection methods used on conduit bodies, Emerson turned to Intertek, an independent Total Quality Assurance provider to industries worldwide with more than 1000 laboratories and 44,000 employees. Intertek conducted ASTM-B117 Salt Fog performance testing on iron (CONTINUED ON PAGE 14)

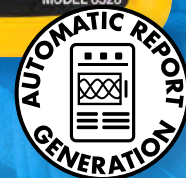
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TEST RESULTS



Appleton Form 35

Brand X

Brand Y



Before and after photographs. Above photo are new conduit bodies and below photo shows same conduit bodies after 42 days in salt fog.

Test Group #1: Malleable Iron

Consisted of three (3) malleable iron conduit bodies protected by:

- Appleton Form 35: Triple coat finish featuring (1) Zinc, (2) Chromate, (3) Electrostatically applied epoxy powder coat
- Brand X: Zinc plate, Acrylic paint
- Brand Y: Zinc plate, Acrylic paint



Appleton FM7

Brand X

Brand Y



Before and after photographs. Above photo are new conduit bodies and below photo shows same conduit bodies after 42 days in salt fog.

Test Group #2: Cast Iron

Consisted of three (3) cast iron conduit bodies protected by:

- Appleton FM7: Triple coat finish featuring (1) Zinc, (2) Chromate, (3) Electrostatically applied epoxy powder coat
- Brand X: Zinc plate, Acrylic paint
- Brand Y: Zinc plate, Acrylic paint

conduit bodies from three major manufacturers. A total of 39 conduit bodies were tested, all in the 3/4-inch trade size.

The salt solution used was 5% plus/minus 1% according to ASTM B117-18 “Standard Practice for Operating Salt Spray (Fog) Apparatus.” To prevent salt-fog from entering the interior of the conduit body, all iron test samples had steel (zinc-plated) plugs installed, with aluminum plugs with Teflon® tape in the aluminum samples. Test samples were subjected to the salt-fog for 1008 hours (42 days), being removed only for inspection and photography at fixed intervals.

All testing was conducted in the Arlington Heights, Illinois (USA) Intertek laboratory in January 2019. Test samples

were sorted into 15 groups according to metal and protection types, i.e., malleable iron (plated/painted), die-cast aluminum (painted), cast iron (plated/painted), cast aluminum (unpainted), et cetera. All samples were purchased at electrical distributors straight from their inventory and not sourced direct from the manufacturer. In this paper, we will look at the results of the malleable iron and cast iron samples. Results from the other samples will be published in an upcoming whitepaper, although those results further bolster the case for triple coat protection.

Final Word: Triple coat is the best defense against corrosion

Not all industries have the same corro-

sion problems, but all industries do need to take the possibility of corrosion seriously and choose the right protection for their particular operations and environment. Start by checking the certifications and ratings required for your application. Next, discuss these requirements and concerns with the manufacturer. Becoming informed is the best way to ensure the product you select will provide the corrosion protection and service you expect over its lifetime.

Both in this study and in real-world applications, the triple coat finish has shown to be far more effective than conventional paint finishes, without question. It's formed when a zinc electroplate, chromate dip (CONTINUED ON PAGE 16)



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and epoxy powder coating is combined to achieve greater corrosion protection in wet or harsh environments, assuring long, trouble-free service in locations such as petrochemical and chemical plants, refineries, and other process industries.

Triple coat finishes consist of:

Coat #1: Zinc Electroplate

Zinc is one of the most important nonferrous metals. When applied onto the surface of ferrous (iron-containing) metals, it creates a formidable corrosion-resistant barrier. It is resistant to atmospheric attack, and fresh and salt waters, and is highly effective at keeping moisture from reaching the surface of the coated object.

Coat #2: Chromate Dip

Chromate coatings act as paint does, protecting the zinc from white corrosion, thus making the part considerably more durable. It also destroys organic growth on the surface. While conven-

tional paint coatings have long been popular, they're simply not as effective in resisting corrosion as Chromate. Paint is hard to apply evenly, so it tends to drip and bubble, miss small crevices, and thin out at the edges, leaving these areas more exposed. Because of its chemical composition and method of application, Chromate is not subject to paint's limitations.

Coat #3: Epoxy Powder Coat

As a final finishing step, Epoxy powder is applied to fittings electrostatically. Drawn to the metal like a magnet, the powder covers evenly, reaching into the smallest crevices. The powder is then slowly oven baked to cure the coating and ensure a strong bond. Because powder coating does not have a liquid carrier, it can produce thicker coatings than conventional liquid coatings without running or sagging. Products are more resistant to mechanical damage since the powder coat finish does not

crack or chip like painted surfaces.

By merging the strengths of Zinc, Chromate and Epoxy Powder, the triple coat process results in a thick, uniform layer of protection that seals out the harshest corrosives, including:

- Sulfur oxides
- Nitrogen oxides
- Chlorine and chlorides
- Ammonia and ammonia salts
- Hydrogen sulfide.

Triple coat is extremely durable. It is flexible so it stays intact when the underlying metal expands and contracts during temperature changes and stress fluctuations — unlike paints. It also adds value through fewer callbacks and lower operation costs, while helping to safeguard the environment by virtually eliminating overspray particulates. On the job, there is no better way to safeguard your operations, profitability and employee safety than triple coat protection. □

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Exciting Restructuring Changes at AEMC® Instruments

As part of a restructuring strategy with our ever-growing company, we are happy to announce the appointment of four people.

Corrado Crippa has been hired as the new Global Sales Director. He has 30 years' experience in the domestic and international energy sector. With his strong communication skills, linguistic capabilities (five languages) and international experience he will be an asset in continuing to grow our company.

Kristy Ford has received the promotion to Marketing Director. With her demonstrated problem solving and marketing creativity, technical aptitude, new ideas and dedication, she along with her team will lead us in our Marketing efforts.

Timothy V. Cowgill has received the promotion to the new National Sales Manager. Tim will be responsible for



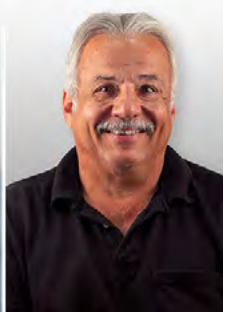
Corrado Crippa



Kristy Ford



Timothy V. Cowgill



George Vlachos

managing the sales activity for both USA and Canada. Over the past 20+ years, Tim has successfully managed and dramatically increased sales growth in the Western region.

George Vlachos is transitioning to the new Technical Trainer position. George has over 20+ years' experience in managing sales activity for the East-

ern region. With his technical product knowledge and excellent communication skills he will develop and teach AEMC's in-person seminars and remote webinars and conduct presentations at trade shows.

Please join us in congratulating these four very capable individuals as we look forward to a successful future. □

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Advanced Test Equipment Corp. (ATEC) Launches New Logo

Advanced Test Equipment Corp. (ATEC) is proud to present its new logo: an origami-inspired refresh of the classic symbol known throughout the test & measurement industry.

A leader in test equipment rentals, sales, service, and calibration since 1981, ATEC was founded by CEO Jim Berg, who first



drew the logo on a restaurant napkin in a flash of inspiration in the 1980s.

Today, ATEC is trusted by test engineers, government agencies, and Fortune 500 companies across the world as a one-stop shop for EMC, Power Electronics, Electrical, NDT, Environmental, General Purpose, Communications, and RF Safety test equipment.

"We're excited to launch the new logo, as it's a symbol of how ATEC is evolving to fulfill customer needs," Jamison Berg, Vice President of Sales and Marketing said.

A new logo and a new year mark the beginning of an era of innovation for

ATEC, as the company:

- Grows its sales, service, and calibration capabilities, including the ISO 17025 scope of accreditation for its A2LA accredited lab
 - Launches online quote payment and account portal
 - Partners with industry leader Narda STS
 - Revolutionizes RF power amplifier design with its own brand, Advanced Amplifiers
- "Now more than ever, customers need a trusted partner in test & measurement who offers an easy-to-use website, simple checkout, rental agents who can guide them to the right equipment and help them navigate test standards, and quick shipping to meet their deadlines. And that's us," Berg expressed. □

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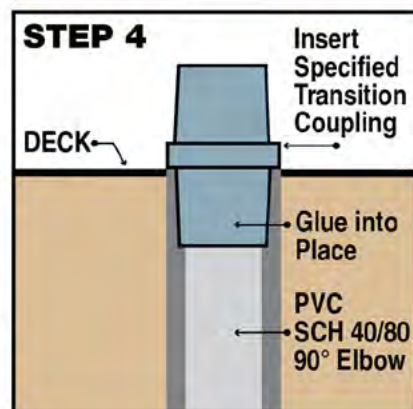
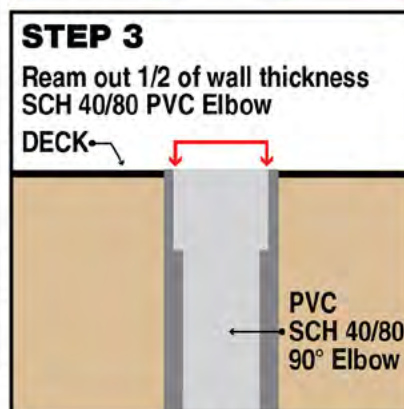
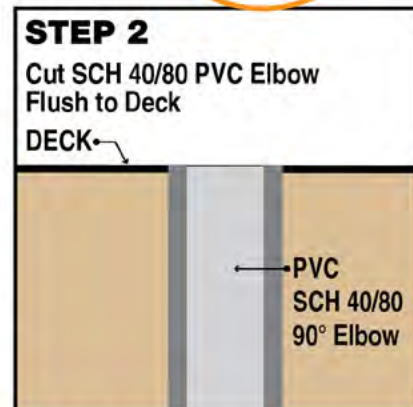
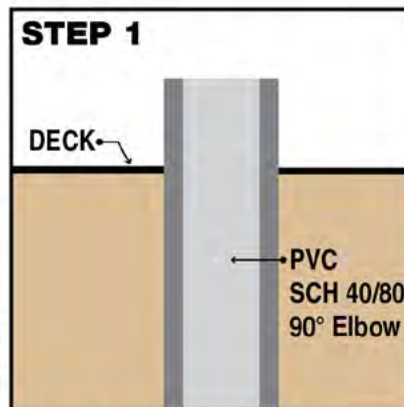
1/2" thru 6"

Transition Couplings

Size	Catalog #
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3/4"	75PVC-IN/PVC-IN
1"	100PVC-IN/PVC-IN
1 1/4"	125PVC-IN/PVC-IN
1 1/2"	150PVC-IN/PVC-IN
2"	200PVC-IN/PVC-IN
2 1/2"	250PVC-IN/PVC-IN
3"	300PVC-IN/PVC-IN
3-1/2"	350PVC-IN/PVC-IN
4"	400PVC-IN/PVC-IN
5"	500PVC-IN/PVC-IN
6"	600PVC-IN/PVC-IN

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CSA C22.2, No.85 and
US Army Corps Engineers
Specifications

All SP Products Inc.
Transition Fittings are
manufactured for
installation to either
meet or exceed
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NEMA TC2, TC3 or
UL 651 specifications



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IP13k

Hilti is Now the Official Tool Partner of the Dallas Cowboys

Hilti North America with headquarters in Plano, Texas, and the Dallas Cowboys organization have announced that Hilti is the “Official Tool Partner of the Dallas Cowboys”.

The agreement includes stadium signage and corporate events at both AT&T Stadium in Arlington and The Star in Frisco. Over the coming months, the Hilti team will be working with Cowboy’s operations to provide solutions for facilities, quick and safe stadium turns

for large scale events, and for future construction.

“We here at the Dallas Cowboys are proud to partner with a trusted, well-known brand in Hilti to help us with our daily needs at AT&T Stadium and The Star in Frisco,” said Dallas Cowboys Chief Operating Officer Stephen Jones. “With so many events that we host at both facilities, having a reliable partner with incredible tools at our disposal to assist with those turns for each

event will be a huge win for us going forward.”

“This multi-year partnership between two great premium brands opens a lot of opportunities for Hilti to be showcased by the five-time world champion team,” said Martina McIsaac, Region Head and CEO of Hilti North America.

Hilti North America is also the Official Tool Provider for American Airlines Center in Dallas and the Texas Rangers stadium in Arlington. □

ABOUT HILTI NORTH AMERICA

Hilti supplies the worldwide construction and energy industries with technologically leading products, systems, software, and services. With almost 4,000 team members in North America, the company stands for direct customer relationships, quality, and innovation. The Hilti headquarters for North America are in Plano, Texas, along with a distribution center in Dallas, a service and research center in Irving, and a major Operations Center in Tulsa, Okla. The global Hilti Group has 30,000 team members in over 120 countries. The company is privately owned by the Martin Hilti Family Trust. The Hilti Group’s strategic orientation is based on a caring and performance-oriented culture and the goals of creating enthusiastic customers and building a better future.



Emerson Overhauls Online Training Portal

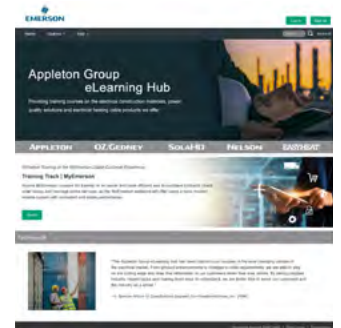
Emerson announced recently the launch of the new Appleton Group eLearning Hub. Previously known as Emerson University, this educational site has been given a face lift with a category reorganization, and an easier to navigate course library for an improved learning environment. Visitors can browse an extensive portfolio of learning modules ranging from certification ratings, to lighting standards, and

plenty of in-depth studies of Emerson branded electrical products including those from Appleton, OZ/Gedney, SolaHD, Nelson and EasyHeat.

“Appleton Group eLearning Hub offers distributors, electricians, and extended sales teams alike a foundation to explore and expand their knowledge at their own pace, wherever they learn best,” said Lauren Egan, Sr. Channel Marketing Specialist, Emerson

Automation Solutions. “With the increase in remote learning, and time being hard to come by these days, it’s important for us, as an industry leader, to provide clear and manageable educational opportunities and support in a user-friendly format.”

Available at no cost, the Appleton Group eLearning Hub makes it simple for professionals to expand their skill set. Once a visitor creates their user



account they are immediately able to log-in and view training options. New courses are added often in a streamlined and digestible format and length. Longer webinar recordings are also available for more comprehensive learning on specific topics. □

ABOUT EMERSON

Emerson (NYSE: EMR), headquartered in St. Louis, Missouri (USA), is a global technology and engineering company providing innovative solutions for customers in industrial, commercial, and residential markets. Our Emerson Automation Solutions business helps process, hybrid, and discrete manufacturers maximize production, protect personnel and the environment while optimizing their energy and operating costs. Our Emerson Commercial & Residential Solutions business helps ensure human comfort and health, protect food quality and safety, advance energy efficiency, and create sustainable infrastructure. For more information visit Emerson.com.



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Barron Lighting Group's Founder, Lou Goldman, Announces Retirement

The founder of Barron Lighting Group, Lou Goldman, retired at the end of 2021

Barron was founded in 1973 with Lou's forward-thinking approach to streamlining manufacturing processes in a cost-saving and dependable way. This innovative thought process led to the creation of the first LED exit sign, a staple in exit and emergency lighting. Over the past 48 years, Barron has gone through many changes including a move from Illinois to Arizona as well as an expanded family of products including Exitronix emergency lighting, Trace-Lite commercial and industrial lighting, specialtyLED commercial and decorative lighting, and Growlite indoor and greenhouse horticultural lighting.

As an industry leader, Lou focused on the creation of a lucrative and thriving business by being reliable and responsive to the customers' needs throughout the complete customer journey -- providing top-notch lighting solutions coupled with best-in-class customer service. This approach and mindset have been the cornerstone of Barron to this day.

Over the years, Lou's business philosophy has been to develop talented individuals to leverage opportunities that keep the organization and business growing. With over 55 years of sales and management experience, more often than not, Lou's days have been spent coaching and mentoring the employees of Barron while continuing to focus on the company's strategic operational plans.

"I've been lucky to have known Lou



Barron Lighting Group founder,
Lou Goldman

most of my life. His kindness, mentorship and above all friendship, have meant the world to me and countless others at Barron. Lou's advice, humor and daily presence at Barron will be missed, but the Barron family is so incredibly happy for Lou as he embarks on his new adventure," said Alan Tracy, CEO, of Barron Lighting Group.

Alan has been with Barron for 34 years. Before being promoted to CEO, Alan was President of Barron for 14 years. Alan will continue to oversee all responsibilities for each of Barron's four product divisions while managing a fully operational manufacturing facility, elevating a best-in-class customer journey as well as working environment for Barron employees. □

ABOUT BARRON LIGHTING GROUP

Barron Lighting Group, based out of Glendale, Arizona, manufactures a comprehensive line of lighting fixtures and solutions for commercial and industrial applications and powers four brands: Exitronix life-safety and emergency lighting, Trace-Lite indoor and outdoor commercial and industrial lighting, specialtyLED commercial and decorative lighting, and Growlite indoor and greenhouse horticultural lighting. For more information, visit barronltg.com.



MaxLite Plans to Open New and Expanded 100,000-Square-Foot Warehouse in Indiana

MaxLite, a leading innovator in the lighting industry for almost 30 years, announces that it plans to open a new approximately 100,000-square-foot state-of-the-art distribution center in March 2022. The new facility in Greenwood, Indiana, just outside of Indianapolis, will be part of MaxLite's growing network with additional distribution centers in northern New Jersey and Anaheim, California.

MaxLite's new distribution center will be located less than two miles from our existing facility in the same city. The new distribution center will maximize 36' of vertical height through the use of pallet racks that allow an additional level of storage. The new facility will help to serve customers in the central region of the United States, enabling delivery to customers in this region in 1-2 business days. The facility will also act as the central hub to store some of the secondary products and solutions in MaxLite's portfolio. It will help MaxLite dramatically improve delivery times and lower shipping costs from coast to coast; it will allow delivery of product to the lower 48 states in three days or less.

Known for its green initiatives as a five-time recipient of the prestigious ENERGY STAR® Partner of the Year Award for its industry leadership, MaxLite will outfit the new facility with energy-efficient BLHE3 High Bays powered by c-Max Network controls. In addition to the energy savings realized from the LED High Bays, the wireless controls will further reduce energy consumption by allowing for individual/group control using motion detection to only light the areas of the facility where activity is happening while still providing safe lighting levels for associates in the warehouse.

To learn more about MaxLite and our innovative lighting and controls products, visit www.maxlite.com □

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IP26 Flat "Big O" Box Support Plate  PATENT PENDING



SAVES OVER 1 HOUR PER INSTALLATION

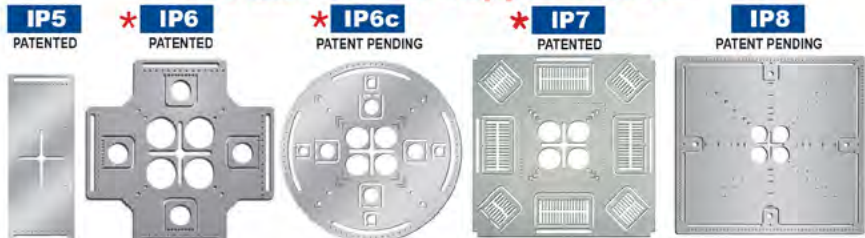
Prefabricated Assemblies

SAVE More Than \$1500 per Wall Outlet

PFA3



Conduit & Box Support Plates



Support From Only ONE Rod Plus Eliminates Conduit Clamps
Save More Than One Hour per Installation! *

IP11 Trapeze Brackets

Original EZUTB - Size 1/2" thru 1 1/4" Conduit or equal size MC Cable.

SAVE OVER 20 MINUTES PER FOOT



TRAPEZE Eliminates ALL Conduit Clamps!

 PATENTED

NECA SHOW STOPPER 7997

Mount Boxes on Both Sides or Between Studs

IP28a  PATENTED

Strong 16 Gauge Galvanized Steel



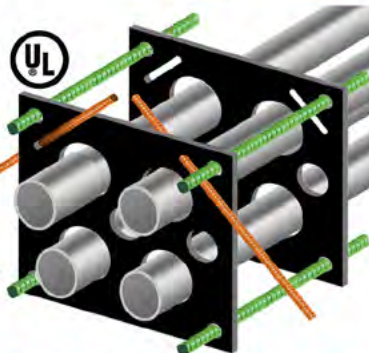
2 Box Flat Fixed Position

PATENT PENDING

NECA SHOW STOPPER 2000

IP1 QwikDuct HDPE CUSTOM TEMPLATES

LOWER CONDUIT FROM ABOVE
NO WORKERS BELOW PREVENTS INJURIES OR DEATHS
4,000 PSI TENSILE STRENGTH AT BREAK
OVER 12X FASTER THAN SPACERS & CHAIRS



IP13a-13h Transition Couplings



Sizes 1/2" thru 6" Schedule 40/80 Conduit

IP15 1 Piece Reaming Bit  PATENT PENDING

1/2" thru 6"

High Speed Steel for Long Life.

Installation in Less Than 5 Minutes

- Use For Entire Job - Not Just for Repair!

IP19 4-Conduit Block  PATENTED

Support up thru 4 conduits From ONLY 1 ROD!

SAVE OVER 30 MINUTES PER INSTALLATION



IP21a QwikBlock Box Support  PATENT PENDING

NEW



Accepts Both 1/4" & 3/8" Threaded Rod

NEW

IP18a Snap-ON Adjustable Back Box Support  PATENT PENDING



IP3a End Bell Adapter  PATENT PENDING



Smooth Edges Allow Trouble Free Wire Pulls.
PVC Schedule 40 & 80
Sizes 1/2" thru 6"

IP3b PVC Offset  PATENT PENDING



1/2" thru 6" Conduit
1/2" thru 2" Offset

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Emerson Introduces Versatile Junction Boxes with New Mounting and Safety Features

With the addition of the new Appleton™ GRTS Series to its line of junction boxes, Emerson is providing electrical contractors with a versatile, easy-to-install solution ideal for stanchion-mounted lighting applications as well as any general raceway needs whether cable or conduit is used.

Several features of the Appleton GRTS Series make this junction box a superior choice. Innovative mounting feet design, developed with contractor input, enables easier installation, when mounting to brackets, trays, walls, columns and more. Electricians will find large box space to freely access, splice and maintain wires. A new cable-attached cover eliminates a drop hazard and increases jobsite safety. Factory-installed options are available such as 10 AWG capable terminal blocks for today's lighting, receptacle and control needs, and a drain option for areas requiring control over condensation and moisture build up.

In addition to enabling easier installation, these versatile junction boxes simplify inventories for the electrical contractor and electrical distributors by eliminating the need to stock a variety of costly junction box/hub combinations.

Appleton GRTS junction boxes can be installed with confidence inside and outside, in classified hazardous Div. 1 and Div. 2 locations. The GRTS Series provides unmatched protection from environmental conditions with our unique triple coat and epoxy coat finishes on iron or aluminum boxes, and NEMA 4/4X and IP66 ratings to withstand rain, windblown dust, snow, and sleet.



**For more information, visit
www.appleton.emerson.com**

Universal Douglas Lighting Americas Releases New EVERLINE CDL Series of LED Commercial Downlights

EVERLINE family of LED luminaires now offers a dimmable downlight with installation-friendly, selectable CCT and Wattage options

Universal Douglas Lighting Americas (UDLA), a leading manufacturer of lighting fixtures, retrofit solutions, and intelligent lighting control systems, has released its EVERLINE CDL series of LED Commercial Downlights. These new luminaires offer flexible recessed lighting options for commercial buildings.



Available in three sizes—6", 8", and 9.5"—the CDL Downlights deliver robust, long-lasting performance with a sleek appearance. The CDL Downlights are an excellent choice for office reception areas, corridors, lobbies, conference rooms, and private offices.

Each size of the CDL Downlights comes with three different selectable light output options and selectable Correlated Color Temperature (CCT) options of 3000k, 3500k, or 4000k. The luminaires are also dimmable, offering 0-10V LED dim control with dimming to 5%. These features make this one of the most flexible commercial downlight series on the market today.

"We are continuing to expand our EVERLINE portfolio of LED products with the release of the Commercial Down-

light. Our goal, as always, is to deliver greater innovation and more choice for customers, as they create modern lighting experiences in commercial environments," said Chris Holstein, Vice President of Product Management and Marketing at UDLA. "The selectable CCT and Wattage make the LED Commercial Downlight easier to install and eliminates the need to have a wide array of lighting inventory on hand."

All EVERLINE luminaires come with a five-year limited warranty, backed by more than 75 years of experience and innovation in reliable analytics, energy efficiency, and sustainability.

**For more information, visit
unvlt.com**

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Create a robust and unrivaled infrastructure for the life of your facility with the **5 Square®** Products!



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- ELIMINATES TROUBLESHOOTING TIME AND COST
- FULLY UPGRADEABLE SYSTEM
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- AVAILABLE IN ZINC OR RED

Telecommunications



- INTEGRAL CABLE MANAGEMENT
- SAVE LABOR...INCREASE PROFITS
- FACILITATES MIN. BEND RADIUS REQUIREMENTS
- SUPPORTS CURRENT AND EVOLVING SYSTEMS
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- SPECIFIED BY ENGINEERING FIRMS, HOSPITALS, UNIVERSITIES & GOVERNMENT AGENCIES

YOU CAN INSTALL AN ENTIRE FIXTURE

(IN THE TIME IT
TAKES TO READ
THIS AD)

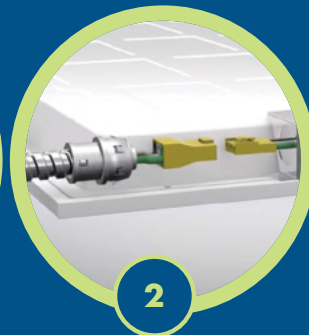
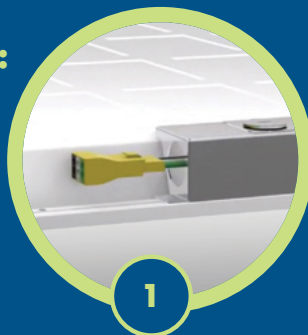
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MORE CAPABILITIES INCLUDE:

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- Rough and robust durability

INNOVATION IS LED BY TCP

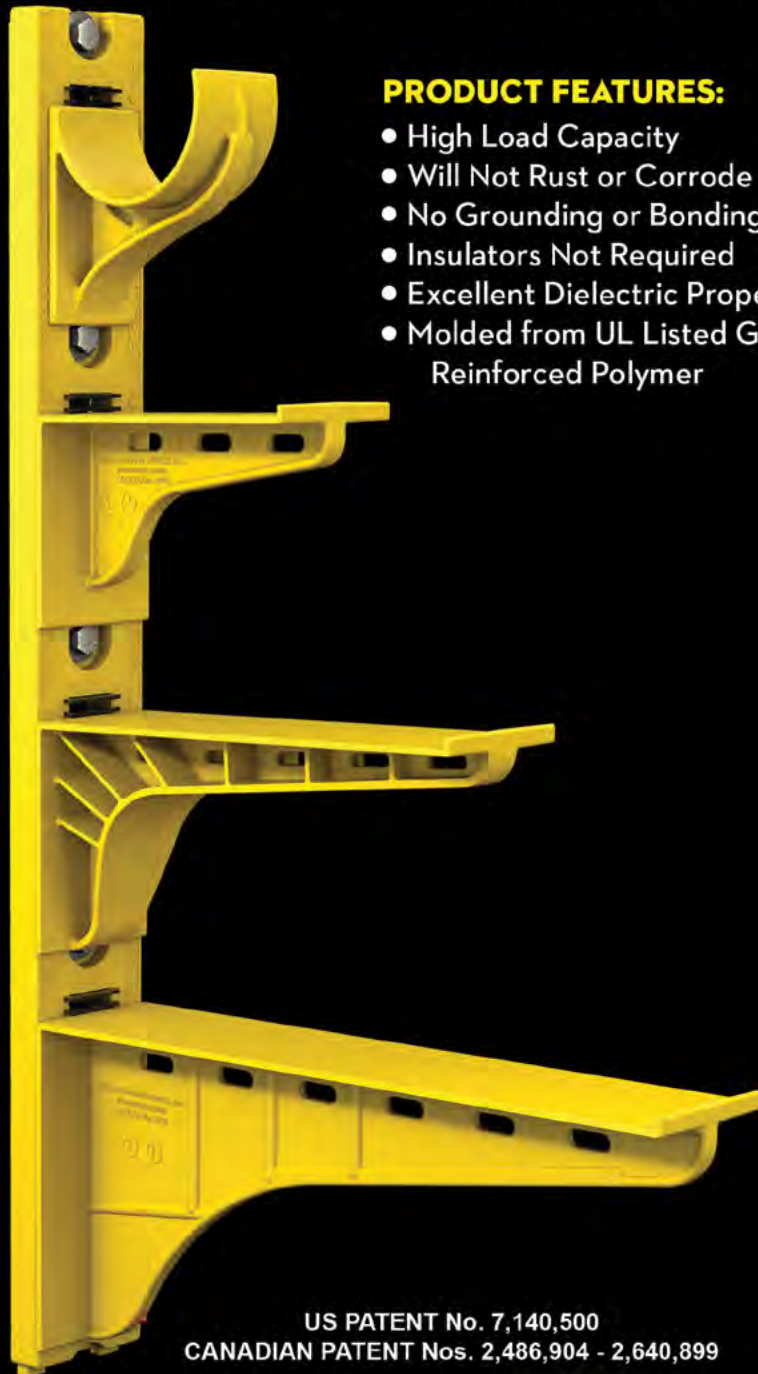
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HDL Arm Lock shown with RA04 Arm and CR36-B Stanchion



3HDS - 3" throat saddle shown with a cable secured by cable ties.



RA08 - 8" arm shown with three cables secured by cable ties.

US PATENT No. 7,140,500
CANADIAN PATENT Nos. 2,486,904 - 2,640,899

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More Settings and More Security Topaz Announces New Security Lights

Topaz Lighting Corporation announced today its newest line of LED Security Lights. Topaz Security Lights are now available in bronze and white housings with and without motion sensors.

Topaz Senior Product Line Manager, Mohammed Ali notes, “No matter the fixture or application, installation convenience is key. These security lights were designed to mount vertically or horizontally on a standard J-box and the light heads can be adjusted without tools, allowing light to be directed exactly where it is needed.”

The motion sensor models offer additional features to customize settings as needed on site. With 180° detection and a 39-foot range, the sensor has a wide field of detection to ensure safety and security. The timeout, motion sensitivity and ambient light operating threshold can all be adjusted as needed, or manually disabled when detection is not necessary.

Additionally, Topaz Security Lights are rebate eligible in major markets across the country including New York City, Phoenix, Dallas, Los Angeles, Chicago, San Antonio, and Las Vegas. The Topaz online Rebate Finder (www.topaz-usa.com/rebate-finder) matches qualifying Topaz products with utility provider rebates and supplies support documentation necessary to take advantage of significant savings.

**For more information, visit
www.topaz-usa.com**



NSI Industries Launches PowerGRP™ Cable Ties

High Quality Ties Designed to Secure Wire Bundles and Harness Components Easily in Almost any Application; Available in a Range of Lengths and Tensile Strengths, Featuring a Self-Locking Design for a Fast and Secure Hold

NSI Industries, LLC, a leading provider of electrical product solutions for more than 45 years, is proud to announce the launch of PowerGRP™ Cable Ties.

“Now available, PowerGRP™ Cable Ties is a new line of high quality ties designed to secure wire bundles and harness components easily in almost any application,” said David DiDonato, Chief Commercial Officer, NSI Industries. “PowerGRP Cable Ties are available in a range of lengths and tensile strengths, featuring a self-locking design for a fast and secure hold, each and every time indoors or out.”

Additional PowerGRP™ Cable Ties features include:

- Strong teeth lock in place
- No slip tail aids grip
- Smooth edges prevent damage to cables and creates a clean, professional look
- Curved tip for faster threading
- Available in 8-inch and 11-inch
- Available in natural and black

**For more information, visit
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Spitfire - Buried Low Voltage Cable Fault Locator

- ◆ Accurate
- ◆ Easy to use
- ◆ High energy output
- ◆ Proven reliability
- ◆ Compact design
- ◆ Lightweight

Wayfind'r - Impulse cable tracer

- ◆ Accurate
- ◆ Easy to use
- ◆ Connects directly to energized cables
- ◆ Distinct signal for easy tracing
- ◆ Traces direct buried and cables in conduit
- ◆ Rugged, compact design

Impulse Phaser - Cable / phase system

- ◆ Accurately identifies cables in trenches, vaults, conduits and enclosures
- ◆ Identifies jacketed, shielded, cables, even in pipe
- ◆ Accurately identifies phases in multi-conductor cables
- ◆ Easy to understand and use



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