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Filtration
is Key to
Protecting
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Generation
Processes**

**Platinum Tools®
Launches New
Colored Hybrid
HPH J-Hooks**

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1
Step 1: Remove
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2
Step 2: Cut Split
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3
Step 3: Snap in
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4
Step 4: Attach
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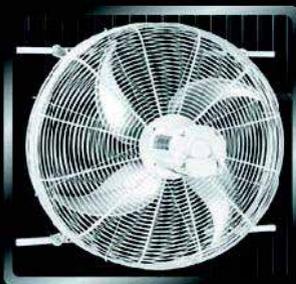
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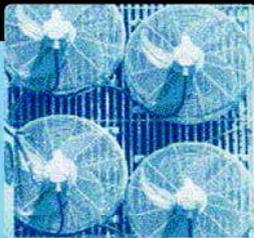
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Superior Water Filtration is Key to Protecting Power Generation Processes

Multi-element, automatic self-cleaning strainers optimize cooling and energy production, while minimizing maintenance and downtime

For the power generation industry, including steam turbine, nuclear, and hydroelectric power plants, water filtration is required in many applications, such as boilers, turbines and cooling towers, and is essential for cooling. Water that contains too high an amount of dirt, debris, and Total Suspended Solids (TSS) can cause fouling, scale buildup, and reduced plant efficiency, requiring increased maintenance and downtime. Therefore, good water filtration is critical to ensure safe, reliable production, extend equipment life, and increase the intervals between equipment cleaning or necessary maintenance.

For example, when fresh water is taken from lakes, rivers and aquifers, filtering the raw water removes organic, aquatic, and other solids, which enables it to be used as process and cooling water. Similarly, in once-through systems, water filtration in plant cooling systems and condensers enables filtered water to circulate through pipes and absorb heat from the system. Then the warmed, filtered water is cycled back to its original, natural source.

In power plant cooling towers, water filtration improves cooling efficiency while reducing fouling and plugging. It does so by filtering out dust/solids and by reducing scale in connected cooling water systems.

In process equipment, water filtration can remove suspended scale and debris from heat exchangers and cooling systems to prevent fouling and clogging of equipment and nozzles. When contaminants are filtered from water before reaching spray nozzles, this prevents fouling, abrasion, nozzle wear, and keeps the nozzles debris free.

To further minimize maintenance and improve plant effi-

ciency, fine water filtration can even remove microscopic and suspended solids as well as trace contaminants when treating water used for cooling and other processes.

A growing number of power industry professionals are ensuring more reliable electricity production with superior quality water by using low maintenance, multi-element, automatic self-cleaning strainers. This approach provides a more effective defense against power plant equipment damage, downtime, and inefficiency.

Optimizing Process Reliability and Production
Historically, the power generation industry has utilized certain types of sand or media filters, centrifugal separators, and basket type strainers for filtration. However, in many cases these have a number of shortcomings, including susceptibility to fouling and damage, and can require frequent cleaning, maintenance, and early replacement.

To overcome these problems, many power industry professionals now rely on multi-element, automatic self-cleaning strainers like those from R. P. Adams. The company introduced and patented the technology in the 1960s, and has over 10,000 installations worldwide today. This design provides an alternative to sand and media filters, centrifugal separators, and basket type strainers. Unlike those designs, the multi-element, automatic self-cleaning strainers can provide continuous removal of suspended solids. When utilized for power industry water filtration, the strainers can reliably filter out sand, silt, and other suspended solids as small as 30-100 microns in size.

A significant feature of the multi-element design is in the engineering of the backwash mechanism, which enhances

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reliability. With many traditional strainers, the backwash mechanism comes into direct contact with the straining media. This can be problematic, as large, oversized solids often encountered with raw water can become lodged between the straining media and the backwash assembly. The result is straining media damage and/or rupture that can compromise filtration and even other equipment, hindering production. Instead, the multi-element design utilizes a tube sheet to separate the straining media from the backwash mechanism. This prevents the backwash mechanism from coming into contact with the media and damaging the elements.

Power industry operators often also need to consider how to best reduce filter fouling and required maintenance. Traditional strainers can become clogged quickly due to limitations in straining area. When that occurs, cleaning, media replacement or backwashing is necessary, which adversely affects productivity as well as maintenance costs. In this regard, the multi-element design provides three to four times the surface area of traditional strainers and pre-filters. This translates directly into less frequent backwashing so less water goes to waste, less power is consumed, and less maintenance is required.

While traditional media found in large basket designs can lead to collapse and failure under differential pressures as low as 35 PSID, the smaller diameter of the media used in the multi-tube strainers enables the strainer to safely handle differential pressures in excess of 150 PSIG. This protects power production even during high differential pressure events, which could otherwise result in significant downtime.

As an additional protective measure, the strainer drive system includes a shear key, which sacrifices itself in the presence of excessively large debris. So, if large debris were to cause mechanical problems within the strainer, the shear key breaks, protecting the unit's rotating assembly, motor, and gearbox by halting the drive shaft rotation. Filtration continues, but operators notice an increase in differential pressure as the backwash cycle is interrupted, and can take action to clear the obstruction and replace the shear key.

For power industry environments exposed to highly corrosive elements, upgrade options to materials such as super duplex and duplex stainless steels, titanium, Monel, Inconel, and Hastelloy provide resistance to corrosion and corrosion-related damage.

When considering technology for power industry filtration systems, automatic multi-element, self-cleaning filters are an increasingly popular choice and a reliable, cost effective solution.

For more information contact R.P. Adams, P.O. Box 963, Buffalo, NY 14240-0963; Phone: (716) 877-2608, toll-free: (800) 896-8869; Fax: (716) 877-9385; E-mail: info@rpadams.com; Visit the web site: www.rpadams.com



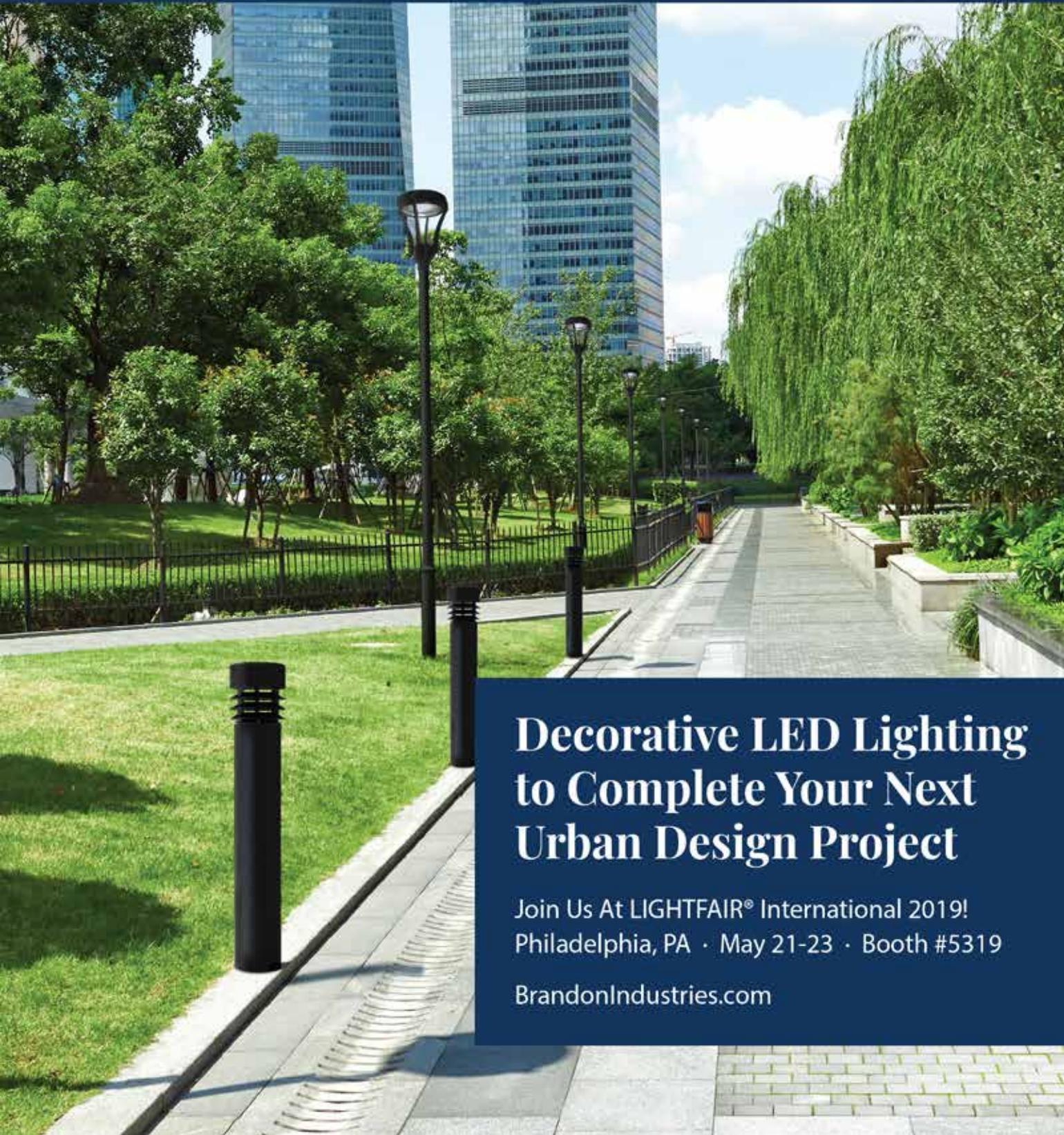
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Platinum Tools® Launches New Colored Hybrid HPH J-Hooks

*Now Available in Four Colors, the High Performance, UL Listed, Plenum-Rated
J-Hooks are Designed with a Reusable Snap-Lock Latch for Securing Cable*

Platinum Tools®, the leader in solutions for the preparation, installation, hand termination and testing of wire and cable, is proud to announce the launch of its new high performance hybrid J-Hook line. Now available in four colors and four sizes in standard and batwing configurations, the new HPH J-Hooks are available in boxes of 25.

"Our new HPH J-Hooks have been designed to support today's modern high performance network cable installations, such as data centers, commercial structures, manufacturing facilities, and residential applications," explained John



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BEAT THE STATISTICS

About 70% of drops happen during the exchange of the lanyard from one tool to another. The Snap-on Tools@Height system features independent tethering, which means each tool is attached to its own lanyard. Minimizing exchanges reduces the likelihood of drops and increases safety.

MINIMIZE RISK

Independent tethering also allows the tool to be removed from and returned to its holster or pouch using just one hand. Safety is improved by allowing the user to maintain the critical "three points of contact" when working at height.

RETAIN CONTROL

Our modular approach means you can configure the tools/holsters based on a user's personal preference, while providing a system that meets your safety standards.

See what the most comprehensive tool drop prevention solution in the industry can do for your team's safety and productivity by contacting:

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Phillips, Platinum Tools, LLC product manager. "Our high performance HPH J-Hooks are built with steel J-Hooks over-molded with Plenum-rated polypropylene for an easy cable slide. The 'Snap-Lock' retainer is easy-to-use and reuse, firmly securing cables every time and eliminating the use of cable and velcro ties."

Now available in red, blue, and black variations (in addition to the original white), the High Performance Hybrid J-Hooks feature a smooth, radiused 2-inch wide base with no pressure points, and are UL listed, Plenum-rated, RoHS and TIA compliant. The colors allow easy identification of cable runs for different purposes, such as separating security, fire, and data systems.

With an industry leading bend radius of more than 3.5 inches, Platinum Tools' HPH J-Hooks meet and exceed TIA's bend radius standards. This prevents deformation to the cables such as indentations, pinches, or creases, making it easy for these J-Hooks to support high-performance cables, such as Cat6A or Cat7, and fiber optics, while maintaining the high standards necessary to prevent cable interference.

"Our high performance HPH J-Hooks come in four different sizes, the HPH16 (1 inch), HPH32 (2 inch), HPH48 (3 inch), and the HPH64 (4 inch) for all your cable management uses," Phillips continued. "The largest size, HPH64, has a cable capacity of up to three hundred and thirty

Cat5e cables. All four sizes can be flush mounted for easy installation, and come pre-assembled to the most common fasteners, with options for special-order custom attachments. Unlike most of its competitors, the Snap-Lock, when open, even expands the HPH J-hook's cable capacity."

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For additional pricing and more information on Platinum Tools and its complete product line, please visit www.platinumtools.com, call (800) 749-5783, or email info@platinumtools.com.

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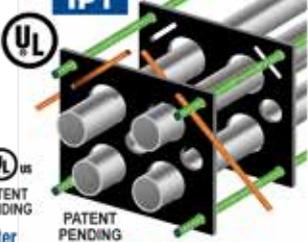
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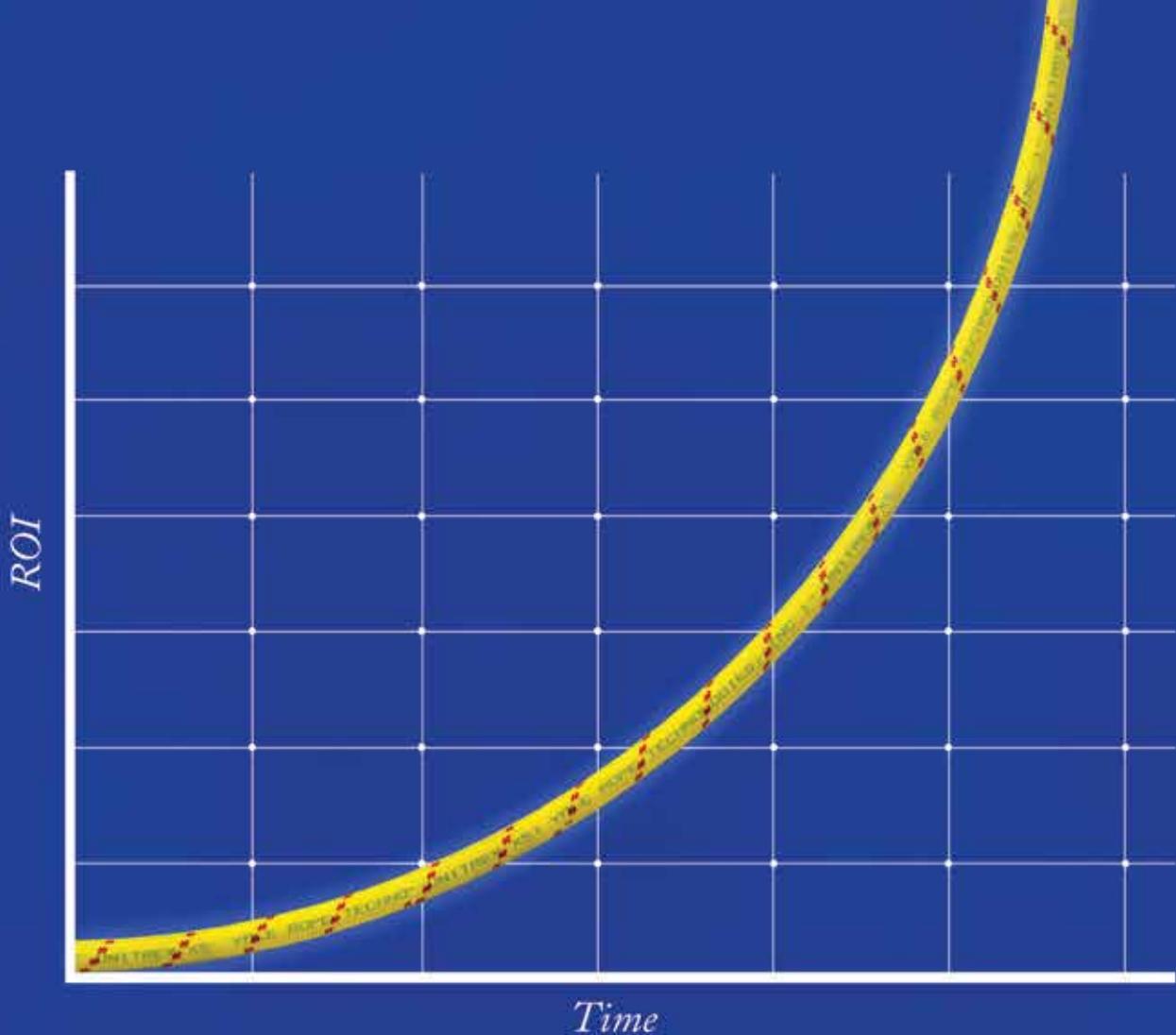
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