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#### THE **TILITYSOURCE** U

#### Products and Services for Today's Electric, Telecom, and CATV Utilities

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Klein Tools'® New Insulation Resistance Tester Gives Electricians a More Efficient Way to Measure

Klein Tools, for professionals since 1857, introduces the ET600 Insulation Resistance Tester, perfect for electricians and maintenance professionals that install, troubleshoot and maintain electrical wiring and equipment. This versatile tester features voltage test ranges from 125V to 1000V, plus a convenient lock feature for hands-free insulation testing.







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- Allows reliable termination of highly stranded flexible copper cable into mechanical lugs
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For Copper

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"A resistance tester is essential for professionals to verify that electrical insulation is intact, or if an electrical system is exhibiting leakage current that needs maintenance," says Sabrina Kalsi, product manager at Klein Tools. "Our Insulation Resistance Tester is built for testing at installation, during troubleshooting, or at annual maintenance."

For more information, visit www.kleintools.com/ new-products or search for #NewKleins on social media.

### About Klein Tools

Since 1857 Klein Tools, a family-owned and operated company, has been designing, developing and manufacturing premium-quality, professional-grade hand tools. The majority of Klein tools are manufactured in plants throughout the United States and are the No. 1 choice among professional electricians and other tradespeople. For more information, visit www.kleintools.com.

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## BURNDY<sup>®</sup> Announces the Release of the PATRIOT<sup>®</sup> PAT750T3 Battery Crimper Series with T3 Technology



BURNDY®, a leading manufacturer and provider of compression connector solutions to the industrial, energy, construction, telecommunications, petrochemical, data center, and transportation industries, is pleased to announce the release of new PATRIOT® PAT750T3 Battery Crimper Series with T3 Technology.

The new PAT750T3 Series has all the exceptional features of its PATRIOT predecessor, plus a new ergonomic design and state of the art technology. The TRACK TRACE TRANSMIT intelligence feature provides critical crimping information for all projects small and large. Data collected by the PAT750T3 provides users a new level of confidence that their BURNDY crimper is performing to specification and enhances the application of the BURNDY® Engineered System; an undeniable advantage over all competitive tools. This tool is the most versatile on the market, making it the choice of all electrical contractors, large and small.

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Headquartered in Manchester, New Hampshire, BURNDY® has over 90 years of dedicated customer support in both service and product. Our customers need to look no further than BURNDY® for all their connector, tool, and accessory needs. BURNDY® is the only manufacturer to have the BURNDY® Engineered System of coordinating dies, connectors and tools. The three elements have been specifically designed to work together and engineered to meet stringent, accepted quality standards allowing the user complete confidence in the integrity of the connection.

For additional information, contact us at 47 East Industrial Park Drive, Manchester, New Hampshire 03109; call Customer Service at 1-800- 346-4175; or visit our website at www.BURNDY.com.

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Klein Tools, for professionals since 1857, introduces the Tradesman ProTM Tool Station Backpack, the perfect combination of storage, accessibility and durability. This innovative design features storage for any trade's essential hand tools, plus a fold-out workstation to keep tools and parts easy to locate on any jobsite. Available with a removable Worklight or without, this backpack gives tradespeople the ability to carry the necessities throughout the day and work comfortably anywhere their skills are needed.



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### Tradesman ProTM Tool Station Backpacks (Cat. No. 55655, 55482)

- 21 pockets and large interior for maximum tool storage
- Available with removable Flashlight with Worklight (Cat. No. 55655) or without (Cat. No. 55482)
- Elastic loop holds worklight for hands-free illumination of backpack interior
- Front of backpack unzips halfway for quick tool access or fully extends for workstation access
- Front zipper pocket for small items
- Exterior organization includes side pouch for water bottle, tape measure clip and tape thong
- Extra padding on the shoulder straps and back for carrying comfort
- Adjustable chest and lower straps for customized fit
- Made of water-resistant 1680d ballistic weave materials for durability
- Flashlight with Worklight (Cat. No 56028) is available to purchase separately

"With the wide range of Klein Tools products that our customers use, we wanted to make sure they had a hands free carrying option with lots of organization and a workstation with light that makes finding your tools quick and easy," said Linda Rolfe, senior project manager at Klein Tools. "The Tool Station Backpack gives users the ability to take their tools on the go, set up a temporary work station anywhere, and to illuminate their work areas with the removable magnetic worklight."

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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

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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 efficiency, 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

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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 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.



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Brimingham, AL 35219 Email: sales@warehouseequipment.com Web: www.warehouseequipment.com 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:

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