



SENSABILITY

PRECISION • EFFICIENCY • RELIABILITY • SAFETY

ISO 9000



ISSN 1549-0106

Volume 1, Number 2

[Subscribe](#) | [Unsubscribe](#)

IN THIS ISSUE

[Want to Get Athletic Performance from Heavy Equipment? Automate.](#)

[Sealed Switch Panels Offer "Here, There, Anywhere" Design Flexibility](#)

[CPI's Complete Thermal Switch Catalog Now Available on CD-ROM](#)

[CPI's E Series Switches Prevent a Boatload of...](#)

[A National Safety Challenge and CPI's E Switches](#)

[For Our European Customers, Life Just Got Easier](#)

[The North American Continent-Smaller and Faster Than Ever](#)

[You Need A Limit Switch, But Which One?](#)

[You're Invited... MINExpo](#)

A Note From CPI

Dear subscriber,

Welcome to SensAbility!

How's business?

As we enjoy the warmth of summer, we're also enjoying the signs of a warming U.S. economy. And just like graduations, weddings, and the 4th of July, the better days ahead are worth celebrating. On behalf of everyone at CPI, I wish you all the best in the coming months.

It's an exciting time at CPI. We're pleased to announce that we've appointed two new distributors to enhance our global presence with high-response technical support and shipping for our Canadian and European customers. Plus, we're eagerly preparing for September's MINExpo International® in Las Vegas, Nevada. We're looking forward to meeting some of our customers there and developing new relationships as well.

There is an array of interesting topics in this second issue of SensAbility; we hope you'll enjoy the read. Our first issue was a big success, and I want to thank all of you who responded. We look forward to hearing your thoughts and suggestions for future issues, and don't hesitate to forward this to your friends who would also enjoy the read. We'd like to hear from them too.

Until next time, enjoy the rest of your summer!

Mac Stuhler
Vice President
Control Products, Inc.

Feature Articles

Want to Get Athletic Performance from Heavy Equipment? Automate.



Today's heavy equipment is getting leaner and meaner, without drugs! Advances in electrohydraulics are enabling equipment designers to take advantage of microprocessor and software technologies to offer significant productivity gains as well as improved safety and greater machine longevity. Critical

to the success of automating heavy equipment are position sensors capable of performing precisely and reliably in extremely harsh environments. [CPI's SL Series sensors](#) were developed specifically to withstand the rigors of heavy equipment applications.

The **Construction Industry Institute** has an in-depth look at the exciting productivity and performance enhancing impact that automation is having on excavating and earthmoving applications. [Read it here.](#)

In addition to high reliability and resistance to physical damage, one of the key requirements from equipment designers is that the position sensor be easily installed. CPI's SL Series sensor is the world's only linear position transducer for hydraulic cylinders that does not require core drilling of the piston rod. Additionally, it is the only sensor that can be used in telescoping cylinders.

And to make design even easier, CPI also offers Smart Cylinders. Customers simply provide their cylinder specifications and CPI configures and delivers complete cylinders, ready-to-use, with linear position transducers installed.

Do you want to muscle-up productivity, increase safety, and reduce maintenance costs by including position sensing in an automated application? We'd like to help. Click here and tell us what you need (sales@cpinj.com) or give us a call at 973-887-9400, press 1 for Customer Service.

[[Back to Top](#)]

Sealed Switch Panels Offer "Here, There, Anywhere" Design Flexibility



CPI's stainless steel switch panels offer equipment designers a rugged control solution that can be configured to meet unique size and placement constraints. Momentary and maintained switches are available, with SPST and SPDT configurations. Often these switches are mounted in areas enduring harsh conditions, such as a wheel fender or the outside of a truck, so durability is critical. CPI's Sealed Switch panels are currently being used in rough, unforgiving environments by sanitation truck manufacturers where the switches control the cart tipper during lifting and emptying of waste receptacles. It's a situation that demands absolute reliability—if the switch fails, work stops and waste cannot be collected.

CPI Sealed Switch Panels:

- Totally submersible down to 10 feet; designed for outdoor use
- Durable stainless steel faceplate
- For use in any harsh environment including specialty trucks, construction equipment, agricultural machinery, and marine applications
- Operating temperature: -40 to 220°F
- 5 million cycle capability

Do you have a switching application in hostile surroundings? We'd like to work with you on a high-reliability solution.

Give us a call at 973-887-9400, press 1 for Customer Service. Or e-mail (sales@cpinj.com).

And visit us at (www.cpinj.com) to learn more about our products.

[[Back to Top](#)]

CPI's Complete Thermal Switch Catalog Now Available on CD-ROM

In the last issue of SensAbility you read Mac Stuhler's article about

the parameters for [Applying Thermal Switches](#), and how critical it is to select the right switch for a particular application.

Control Products, Inc. offers thermal switch solutions for setpoints ranging from 0 to 1,850°F, and now we've fully documented all of them on CD-ROM. Complete with specifications, drawings, and application information, the CPI Thermal Switches CD-ROM Catalog enables designers to quickly resolve temperature control problems with a vast array of mounting, probe, and temperature options.



Plus, with links to the CPI website and online ordering, samples can be requested as quick as a click.

Best of all, the CD is free.

Facilitate your design process with the CPI Thermal Switches CD-ROM Catalog at your fingertips.

To get your free copy contact Control Products, Inc. 280 Ridgedale Avenue, East Hanover, NJ 07936.

Or call 973-887-9400, press 1 for Customer Service

Or e-mail sales@cpj-nj.com.

[[Back to Top](#)]

[CPI's E Series Switches Prevent a Boatload of...](#)

Dometic Corporation - Sanitation Systems has been applying their expertise in sanitation to the pleasure craft and recreation vehicle industries for over a quarter of a century. Products are marketed under the [SeaLand](#) brand through a worldwide network of distributors and dealers to a broad range of RV and pleasure boat manufacturers.



The SeaLand brand is well known for quality, and their customers have high expectations for reliability of all components within their systems. That is why CPI's E Series limit switches were specified by Dometic's engineers.



The CPI switch is used in a waste management application as a valve interlock to ensure that a pump cannot be turned on to evacuate the holding tank unless valves are in the proper position. This is critical, as failure could result in literally a boatload of sewage.

The valve and switch are located in the bilge, which presents a difficult environment in terms of humidity, temperature cycling, and salt air. CPI sealed switches are the ideal solution as they are truly waterproof and totally submersible, use stainless steel actuators, and meet ISO 8846 explosion proof requirements.

[Click here to explore the full line of E Series Waterproof Switches.](#)

Want to bring high reliability to your most demanding applications? We want to help. Tell us about your tough switching problem, and we'll work with you to find the best solution.

Give us a call at 973-887-9400, press 1 for Customer Service. Or e-mail (sales@cp-nj.com)

And visit us at www.cpi-nj.com to learn more about our full line.

[Back to Top](#)]

A National Safety Challenge and CPI's Series E Switches: Support Systems for Homeland Security

The Operation Safe Commerce (OSC) program has been focusing

on seagoing cargo containers; seeking to identify existing vulnerabilities in the supply chain and develop improved methods for ensuring the security of cargo entering and leaving the United States.

A number of companies are working with the Cargo Security Division of the Transportation Security Administration (TSA) to ensure the USA does not receive any threatening packages at our ports www.dot.gov/affairs/dot10302.htm.

CPI has been contacted by a number of subcontractors looking for extremely reliable waterproof switches to be used as door interlocks.



In this application, if a door is opened during shipment, the proper authorities will be alerted via an integrated monitoring system. Since CPI's E Series limit switches are extremely durable and completely waterproof, they are ideal for these extremely demanding applications. Salt air, submersion, temperature extremes, and humidity are among the conditions we expect to see; any of these could cause failure of unsealed or even "splashproof" or "weatherproof" type switches. But these harsh conditions are

not a problem for CPI's E Series limit switches, which offer a very economical and reliable solution.

[Click here to explore the full line of E Series Waterproof Switches.](#)

Bring us **your** switching challenge to us and let us help you develop a safe, reliable, efficient solution.

Give us a call at 973-887-9400, press 1 for Customer Service. Or, e-mail (sales@cpi-nj.com).

And visit us at www.cpi-nj.com to learn more about our full line.

[[Back to Top](#)]

For Our European Customers, Life Just Got Easier

Now, CPI truly has local presence throughout Europe with the help of [International Precision Products](#).

With over 30 years' experience, IPP is one of the leading European distributors for specialized electromechanical and electronic components.

(Pictured: Peter Carson and Michael Wolff of IPP)



"With sales and engineering support offices in Holland, France, Germany, Italy, and the UK, we are confident that IPP will facilitate European purchases of our products," says Mac Stuhler, Vice President of CPI.



IPP's main distribution center is near Schiphol Airport, where shipments are made on a daily basis to customers throughout Europe, providing just-in-time deliveries. IPP is our European "right arm."

When you talk to them, you're talking to us.

Click here to learn how IPP can help you with your switching and sensing needs. www.ippbv.com

[[Back to Top](#)]

The North American Continent—Smaller and Faster Than Ever

CPI will also have a wide presence in Canada thanks to [Xtronics](#), who will be



representing our SL Series sensor, waterproof switch, and thermal switch product lines and providing "next-door service" to our Canadian customers.

With over 20 years' experience, Xtronics serves the Canadian Industrial Automation, Aerospace & Defense, Energy Exploration, and Electronics industries coast to coast. And with offices throughout Canada, Xtronics is well positioned to provide Canadian customers with quick response to technical as well as commercial inquiries.

Our Canadian readers can find their closest Xtronics office by clicking here www.xtronics.ca/contact.html. And remember, we're there, too.

You Need A Limit Switch, But Which One?



With today's myriad technological applications, selecting the right limit switch can be quite a challenge. Many modern machines incorporate an assortment of functions that are controlled electronically. For safety and reliability, these systems require sensors and limit switches acting in a monitoring role.

The correct selection of a switch is crucial to effective operation. Application parameters plus unique scenarios and pitfalls must be clearly understood and carefully considered before the right switch can be selected. Parameters include:

- Electrical Endurance - current, voltage, type of electrical load, duty cycle
- Circuit Type - normally open, normally closed, SPST, SPDT
- Mechanical Endurance - times actuated to full travel, activation method, interface with limit switch actuator, how forces are applied
- Actuator Style - plunger, lever, roller lever, ball. Interface with limit switch actuator and how forces are applied must also be considered
- Travel Parameters - pre-travel, actuation point, over-travel, differential
- Mounting and Packaging - production assembly and servicing

Control Products, Inc. provides numerous switching solutions to a variety of industries. Most CPI products have been derived from customer applications, where off-the-shelf solutions would not do the job. CPI works closely with each and every one of our customers to ensure they get the right product for their need.

Mac Stuhler, Vice President of CPI has written an informative article on the selection of the correct limit switch.

Read [Mac's article](#), and then tell us your story... feedback@cpi-nj.com We're here to help.

You're Invited... MINExpo INTERNATIONAL® 2004

You've probably been hearing about the increased demand for raw materials coming from factories in the newly developed countries that are churning out goods for export and their own economies. This demand is putting a lot of pressure on the mining industry to bring more material out of the ground more quickly. If you're at all involved with the mining industry, or heavy construction where there is also a demand for increased productivity (see Automation article above), this is one expo you won't want to miss.



MINExpo INTERNATIONAL 2004 is the world's largest and most comprehensive exposition for the mining industry, featuring all the tools and techniques for today's mining business—from exploration to development, construction to extraction, processing to reclamation.

MINExpo International 2004 is nearly 1,300 exhibitors with the latest in applications, equipment, products, and services for mining and processing coal, metals, industrial, and agricultural minerals.

Control Products, Inc. will be there. We'll be showing how CPI products can help deliver efficiency, precision, reliability, durability, and safety to your most demanding applications.

Come visit us **September 27 - 30** in **Las Vegas, Nevada** at MINExpo INTERNATIONAL 2004. We'll be at **Booth 1761**, North Hall.

Take a look at the precise, efficient, reliable, and safe solutions from Control Products:

- Smart Cylinders
- SL Cylinder Sensors
- Waterproof switches
- Ultra high temp and low temp thermal switches

We'll also be handing out our free
Thermal Switches CD-ROM Catalog.

CPI Spotlight

Steve Hanily



At CPI, we pride ourselves in fulfilling orders quickly. Even custom orders are no problem. But manufacturing switches to precise customer specifications could be a time-consuming process if not for CNC (Computer Numerical Control) Programmer/Operator **Steve Hanily**.

Everything that an operator would be required to do with conventional machine tools is programmable with CNC machines.

Steve takes the drawings from our engineering department and programs the specifications and step-by-step instructions into the CNC equipment, which cuts the parts. As the parts come out of the machines, Steve inspects each one thoroughly using his expertise in quality assurance.

Once the parts pass Steve's close scrutiny, they go to the production line where the switches are assembled. Steve's CNC process is a major advantage for our customers, especially with short batch runs, because if a customer calls today and wants parts on short notice, we can cut the switch bodies and assemble the switches within days rather than ordering bodies and waiting weeks for delivery.

Once Steve writes a CNC program, it is kept on file so that future orders can be filled in even less time, every time.

Steve has been with CPI for 16 years. He started in the quality assurance department, moving to the thermal switch production department as production coordinator, and now working the CNC department since 2001.

Steve has worn a lot of hats at CPI and he is always willing to pitch in for other departments when the need arises.

When Steve Hanily isn't at CPI, he is deputy chief of the East Hanover, NJ Fire Department. A true outdoorsman, in his spare time you might find him hunting, fishing, or working around the yard.

CPI is proud to have Steve Hanily on our team. He enables us to

offer the outstanding service and on-time delivery CPI is known for.

[[Back to Top](#)]

What Do You Think?

Thank you for subscribing to SensAbility. We'd like to hear from you. Click here FEEDBACK@CPI-NJ.COM to e-mail your comments, suggestions, questions, or ideas.

Want to subscribe to SensAbility? If a friend forwarded this newsletter to you and you would like to receive it, [sign up here.](#)

If you would like to share this information with your colleagues, please feel free to forward this newsletter to them.

Control Products, Incorporated
280 Ridgedale Avenue
East Hanover, New Jersey 07936-2394
973 887-9400
www.cpi-nj.com

[[Back to Top](#)]