



The Acrodyne Newsletter

Volume 1 Issue 1

Product Range

We are proud to be associated with well-known brands including products bearing the logos below.



Welcome to the first edition of The Acrodyne Newsletter. We understand that you are constantly facing so many valve-related applications for which there are a wide range of products available for your consideration. Hence, we are publishing a regular newsletter this year as one of our useful ways of presenting information to you. In each issue, a "Product of the Month" will be featured, and this month we are putting the Storm Smart Positioner on the spotlight with an article over the page. It is also our aim to cover any contemporary and interesting application issues as our means of contributing to your knowledge of the process control industry and where the automation of valves fits within the industry. Of course, we would like to establish a bond with you by giving you insights into our company, our people and our manufacturers from time to time. Eventually, you will get to recognise our team members by their faces and not just by their voices, signatures and email addresses. Maria Scapin, our receptionist, is often your first contact person at Acrodyne so it is befitting that we feature her in the "Our People" segment of this issue.

We welcome your feedback about our newsletters as well as your suggestions for any particular products or applications that you would like to read about. With your input, we will do our best to provide you with an informative and relevant reading matter. Please email your comments and requests to our Sales and Marketing Manager, **Chris Hoare**, at choare@acrodyne.com.au.

News

January 2004 – First Storm Smart Positioners shipped into Australia

Nine units of the Exia SAA approved Storm Smart Positioners, mounted to Trevisan epoxy coated rack and pinion actuators and v-notch control valves were shipped to the project contractor for part of the recent Coode Island Terminals upgrade project. All stainless steel piping kits and mounting kits were designed and produced by Acrodyne for use in the corrosive Coode Island environment. The Storm Smart Positioner is designed and manufactured to operate in harsh environmental conditions with IP67 protection on the non-metallic enclosure and all stainless steel fasteners and porting.

March 2004 – Acrodyne personnel embark on Character First program

Acrodyne has signed up with Mr Brian Ellis of the Character Training Institute to run the Character First personal development program for its staff. The program covers 49 key Character Qualities important in today's business environment with the aims of providing personal staff development leading to better overall customer service.

If you would like to know more about Character First and how it can benefit your organisation, visit the Character First web site at www.characterfirst.com or contact Brian Ellis on (03) 5253 3272 or australia@characterfirst.com.

Product of the Month

This month we are featuring the Storm Smart Positioner. We recommend that you consider it for your process control system. Please see our article about it over the page.



Our People

Maria Scapin, our receptionist, is most often your first point of contact with our organisation if you phone or wander through our front door. Amongst her many other tasks, Maria organises our printed literature including the Acrodyne product binders. On a more personal note, Maria is married to Lou and they have two children, Brett and Amy. Brett is currently embarking on a promising music career while Amy is a Year 11 student. Apart from enjoying all those wonderful things that go along with managing a family, Maria enjoys gardening, going to a basketball match and coming to work. Yes, she enjoys work! And yes, she enjoys working with all of us!



Next Issue

In our next issue we will be featuring valve safety systems. Our Product of the Month will be the Netherlocks Safety Systems BV.





Smart Valve Positioner

ACRODYNE is an authorised Australian agent of **Storm**, a smart valve positioner developed and manufactured by Heap and Partners of the United Kingdom. Since its release to the market in March 2002, **Storm** has been gaining popularity and is widely used as an integral component of process control systems in the petrochemical, offshore exploration, water treatment, chemical, and mining industries.

Heap and Partners, specialists in fluid handling technology and equipment, designed **Storm** as the product that offers all of the advantages of an intelligent valve as well as address the need for easy installation, simple and intuitive set up, increased functionality, and maximum operating efficiency without compromising the operator's ability to specify advanced options and fieldbuses. It has been designed to the VDI/VDE standard for accessory mounting to actuators and can be supplied with standard or bespoke mounting kits to suit any actuator type. It is suitable for linear or rotary actuators, can be used in direct or reverse acting mode, and for double or single acting duties.

Within **Storm**, precise control is made possible by the use of an analogue pneumatic positioner based around the advanced piezo-pneumatic technology from Hoerbiger Origa. Its intelligence is provided through an in-built 16-bit RISC processor that is configured through an integrated LCD display and three-button keypad. The RISC processor ensures accuracy of control, enables increased functionality to be built-in with the standard unit without additional costs, and facilitates simplified commissioning and operation. All menu options are easy to follow thus eliminating the need to constantly refer to the manual.

At the heart of **Storm** are its auto-calibration routines. It is automatically calibrated upon installation thus fine adjustment of either the air inlets or the electronic controls are not required. The set-up routine includes auto-tuning of the PID control loop with an option to calibrate the 4-20mA loop. An innovative direct drive potentiometer with torque limiting clutch allows **Storm** to be mounted and calibrated quickly, eliminating the need for time-consuming alignment procedures. **Storm** then continues to set up the valve travel, control parameters and auto tunes the PID algorithm to give optimum performance tailored to the specific valve and actuator package. The three-term control improves accuracy and response time whilst eliminating overshoot. A typical auto set-up will take just less than 3minutes, thus a time saving of up to 1 hour when compared to the time it takes to set-up conventional positioners on a typical valve installation. For the advanced user **Storm** can be readily programmed to suit a wide range of options and quick reconfigurations are made through the keypad. Possible options include direct reverse, split travel and split range. It has three in-built characteristic curves, the factory standard being linear but can be changed to either equal percentage or quick opening. The user also has access to the PID settings for fine adjustments.

Storm has a number of accessible diagnostic functions that allow the operator to check actuator air leaks, incorrect piping, and changes in travel and response time. More advanced functions are available to check seat wear and deterioration of valve/actuator performance. A special diagnostic menu acts as an aid to valve trouble-shooting and fault detection.

Storm is energy efficient and safe for use in hazardous environments. One advantage of the use of piezo technology is that it eliminates the problem of static air bleed. The pneumatic positioning system is extremely efficient in its air consumption, with the control system flowing measured volumes of air during the positioning operation only. Once in position, the air flow is totally closed off which eliminates air wastage which translates to considerable cost savings on energy bills. Energy conservation is also achieved because the piezo valve operating on a minute voltage is driven directly from the 4-20mA data signal and without the need for a separate power supply. Operating on a power rating as low as 0.014mW, the piezo valves are intrinsically safe. Fully certified to EExia IIC T5, **Storm** can be specified for use in hazardous areas without added explosion protection costs being incurred.

The enclosure for **Storm** is one of its major features because it is what makes it capable for operation in the harshest of environments. It also provides excellent chemical resistance because it is manufactured from PPS, a corrosion resistant polymer. All external fittings and seals are made of stainless steel and viton. **Storm** is rated to IP67 and 1000 hour salt spray tested and is SAA certified intrinsically safe to EExia IIC T5 for use in hazardous areas. It is fitted with a high visibility beacon indicator.

Go for **simple set-up!**
Go for **sophisticated control!**
Go for the



The documents listed below are available in electronic format and are ready for email transmission to you.

- Storm** Technical Data (PDF file)
- Storm** Operating Manual (PDF file)

Contact **Dick Kors** at **ACRODYNE** on 03 9729 8666 for your copies and for more detailed information or clarifications.