



WEBTEC PRODUCTS LIMITED

# Product Update Autumn 2004

September is upon us already and it is time for our Autumn 2004 Product Update. The theme of this edition is one of preventative maintenance and condition monitoring so you can identify potential system faults and address them before they result in costly downtime and repairs.

This year has seen the arrival of the innovative new range of Webster CT Flowmeters. These allow easy and convenient monitoring of industrial hydraulic systems and are of great benefit in the early detection of system faults. For mobile applications, the HPM Series of handheld data loggers provide an easy to use diagnostic test system for preventative maintenance.

Webtec have teamed up with the National Fluid Power Training Centre to develop a new training course - "Management and Maintenance of Fluid Power Systems". The course has been specifically designed to help those responsible for maintaining hydraulic systems. Discounts are also available on Webster test equipment for course attendees.

Webtec hydraulic components also continue to evolve and offer both good quality and reliability at an economic price. The focus in this edition is on the VFC series of pressure compensated variable flow control valves.

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**For more information on any of the featured products or any of our wide range of hydraulic test equipment and components please call us on: 01480 397400 or email [sales@webtec.co.uk](mailto:sales@webtec.co.uk)**

**\*\* 2004 Price Lists & CD-Roms available on request \*\***



## NEC Birmingham, 28 - 30th September 2004

See the popular Webster Range of Hydraulic Test Equipment

**Stand 484**

in association with Hydraulic System Products Ltd (Webtec distributor)

For more information about the Motion & Control Exhibition visit [www.motionandcontrol.co.uk](http://www.motionandcontrol.co.uk)

**Manufacturers of hydraulic components and test equipment for the mobile, industrial and agricultural industries**



**Rental Service**



**HPM Portable Data Loggers and CT Flow Meters**



**New NFPC/Webtec Training Course**



**VFC Series Flow Control Valves**

# Company news

## Joseph Bramah Medal awarded to Roy Cuthbert, MD



Roy Cuthbert with the Joseph Bramah Medal

At the British Fluid Power Association AGM on 12th May 2004 at Blenheim Palace, Roy Cuthbert, Managing Director of Webtec Products Ltd, was presented with the prestigious Joseph Bramah Medal by Ian Morris, Director of the BFPA.

The Bramah Medal was awarded to Roy in recognition of his significant contribution to the Fluid Power Industry, particularly in the field of hydraulic engineering, during his distinguished career. The award is made by the Mechatronics division of the Institution of Mechanical Engineers. Roy has been a member of the IMechE since becoming a graduate in 1953.

Joseph Bramah has long been admired as one of the earliest innovators in the field of mechanics. He was born in 1748 and chose to follow a path of invention and mechanical innovation rather than taking over the family farm. Initially he made his name in 1784 with his patented "unpickable lock". It was the need for machine tools to make his locks in the required quantity and quality that led Joseph Bramah to develop the first hydraulic press which he patented in 1795.

Roy's heartfelt acceptance speech reflected his delight at receiving the award and also his passion for engineering. His name now joins a distinguished list of past recipients.

### UK Sales Contacts

Our UK sales office is always on hand to provide advice. Whether you want to check price and availability on one of our products or have a talk to one of our engineers for some technical advice we are always pleased to help.

**Adrian Cooper - UK Sales Manager**

James Pandya - Applications Engineer, Jane Giddings - UK Sales Co-ordinator  
Michael Musukutwa - Sales Engineer

## Why not try before you buy?

**A Webster hydraulic tester can save you time and money by helping you to quickly identify system faults, allowing you to take preventative action and avoid costly downtime.**

**Rent a Webster tester today  
and see the benefits for yourself**

Our Service Department has a variety of equipment for hire, including:

- **Digital portable hydraulic testers**
- **Low cost pump testers**
- **Portable readouts and data loggers**
- **Analogue portable hydraulic testers**

If you want to try using a Webster tester, or if you already own a tester but need a second one for a special job, hiring by the week could be the answer.

Our rates are very competitive and discounts are available when you place an order for your own unit\* - call for more details today

For rental, repair or recalibration of Webster test equipment contact us for a **FREE** quotation today:

**The Service Department, Webtec Products Ltd,**

Nuffield Road, St Ives, Cambs. PE27 3LZ  
Tel: 01480 397400/397444 Fax: 01480 466555  
email: service@webtec.co.uk



\* Conditions apply.

**Tel: 01480 397444**

**Fax: 01480 466555**

## **New portable data logger and flow meter are the ideal combination for testing mobile machinery**



**HPM460 portable  
data logger**

- **Portable**
- **Accurate**
- **User Friendly**

### **HPM Series Portable Data Loggers**

The new HPM series of hand-held data loggers are ideal hydraulic service and diagnostic instruments to measure flow, pressure, temperature, speed (frequency), current and voltage. There are two models available with either 4 or 6 inputs and all channels can be measured simultaneously. Automatic sensor recognition allows the use of any of the sensors in any of the available channels. Readings can be displayed, logged and if required transferred to a PC or printer via an integrated RS 232 port or optional USB adaptor. The HPM software for Windows

platforms allows further measurement evaluation and processing using a PC.

The HPM series includes high-speed data logging as standard with a scanning rate of 1 ms (1000 readings per second), making it possible to measure pressure spikes in real time. The HPM has ample memory allowing 250,000 readings to be stored and the large screen allows the user to monitor all six inputs simultaneously. Once the data has been collected the results can also be displayed graphically for fast on-site analysis.

### **CT-SR flow meters with built-in loading valve**

The CT-SR range of portable flow meters with built-in loading valve have been specially developed in conjunction with the HPM series and build on the technology of the Webster portable tester.

The CT-SR range of flow meters can measure flows from 10 to 750 lpm at up to 480 bar and have a built-in micro-processor to maximise accuracy to better than 1% of the indicated reading over a wide flow range. The flow meters have additional ports on top to allow temperature and pressure transducers to be mounted easily without

breaking into the circuit again. The CT-SR flow meters, like all sensors used with the HPM series, have sensor recognition (SR) enabling the user to just plug the flow meter in and the HPM readout automatically recognises the type and range of sensor, no configuration is required.

The combination of the HPM and CT-SR are an ideal tool for a service engineer to measure machine performance, combining a rugged flow meter with ease-of-use and powerful computer based diagnostics.

- **Rugged**
- **Compact**
- **Convenient**

**CT300R-SR flow  
meter with built-in  
loading valve**



## Pre-requisites

Prior knowledge of hydraulic systems, components and functionality

### Key aspects of the syllabus

- 1. Fundamental principles** - refresh your knowledge of circuit symbols and hydraulic principles
- 2. Causes of hydraulic failures** - identify how you will save money by maintaining your system
- 3. Hydraulic fluids** - know the different types of hydraulic fluids available and their characteristics
- 4. Contamination management** - gain hands-on experience of oil cleanliness measurement and identify how to prevent contaminant entering the system
- 5. Pro-active maintenance techniques** - practical methods for assessing pump and motor condition including test equipment selection and use
- 6. Application of diagnostics** - measurement of hydraulic component performance, checking flow, pressure and temperature
- 7. Fault finding** - the 'fault-cause-remedy' technique: a structured approach to recognising symptoms, identifying the underlying causes and rectifying the faults

**Equipment used:** • gear, turbine and variable orifice flow meters • portable hydraulic testers  
• contamination monitoring equipment • pressure, temperature and speed transducers  
• data-logging equipment

### FAX BACK

Please complete the form below and fax back to 01909 484571 if you are interested in attending the two day course in Management and Maintenance of Fluid Power Systems.

Name:

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Position:

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Company:

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Address:

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Postcode:

---

Telephone:

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Fax:

---

Email:

---

Website:

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Number of people from your company who might attend:

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**National Fluid Power Centre**, Carlton Road, Worksop, Nottinghamshire, S81 7HP  
Tel: +44 (0) 1909 512 555, Fax: +44 (0) 1909 484571  
Email: [enquiries@nfpc.co.uk](mailto:enquiries@nfpc.co.uk), Web: [www.nfpc.co.uk](http://www.nfpc.co.uk)

In association with  
Webtec Products Limited, Nuffield Road, St Ives, Cambridgeshire, PE27 3LZ  
[www.webtec.co.uk](http://www.webtec.co.uk)





## Management and Maintenance of Fluid Power Systems

Are you involved in maintaining fluid power systems?

"This new fully certificated two day course takes a fresh look at preventative maintenance techniques. Incorporating practical testing of hydraulic systems it provides delegates with the opportunity to use the latest Webster Diagnostic Test Equipment at the National Fluid Power Centre."

### On completion of the course you will know

- The causes of hydraulic failures
- The steps taken to prevent failure and avoid recurrence
- The different types of diagnostic equipment, selection procedure and use
- How to pinpoint hydraulic faults and manage your system
- How to interpret test readings and make necessary judgements

### The course

- Comprises an effective combination of theory and practice
- Includes extensive practical testing of hydraulic systems
- Focuses on problem solving in real circuits
- Is provided by qualified NFPC staff
- Small group sizes ensure a friendly and interactive course atmosphere
- Includes comprehensive course materials
- Awards a joint certificate from NFPC and Webtec

### The cost

- £450/person (ex vat) for the two day course
- Group rates available on request
- Course dates: 13-14 Sept 04, 11-12 Oct 04, 15-16 Nov 04
- Discounts available on Webster test equipment for all course attendees

*A more detailed syllabus and fax back can be found overleaf*

The course is to be run by the NFPC in association with Webtec Products Limited and will be held at the NFPC Technical Centre in Worksop

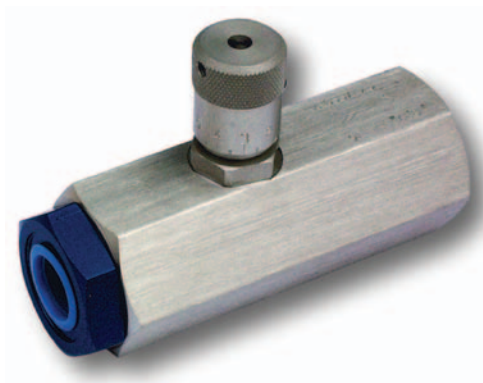


NEW condition monitoring solutions  
from Webtec inside . . . . .  
**Take 2 minutes now  
to save yourself hours**



**Product Update  
Autumn 2004**

## VFC series - pressure compensated variable flow control valve



The VFC series valves are designed to ensure a constant flow rate is maintained under varying working pressures, up to 210 bar.

These lightweight valves are available in three different sizes for adjustment up to 20, 40 or 55 lpm. The VFC permits uncontrolled flow in the reverse direction. The easily adjustable, knurled knob features weatherproof sealing along with a set screw, allowing it to be locked in any position.

Typical applications include hydraulic cylinders requiring constant extension or retraction speeds and hydraulic motors requiring constant rotational speeds. When used with a fixed delivery pump, the excess flow should be by-passed across a relief valve.

For further details contact the Webtec sales team.



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Certificate No.8242



email: [sales@webtec.co.uk](mailto:sales@webtec.co.uk)  
See us at: [www.webtec.co.uk](http://www.webtec.co.uk)



Webtec Products Limited reserve the right to make improvements and changes to the specification without notice.

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