

Post Office Box 19057 • St. Paul, MN 55119, USA • 612/731-1227

Water Jets Aiming for Profit

A One Day Seminar Cranfield, England: 22 October, 1987

Introduction

BHRA, The Fluid Engineering Centre is pleased to announce the 4th Water Jetting Discussion Meeting on 22 October 1987 at Cranfield.

Water jetting is now accepted as an effective means of cutting and cleaning in many industries. In too many cases however, full advantage is not being taken of recent developments in equipment and techniques.

One particular area of concern is the continued use of a jetting operator to direct the jet. For most applications, the human operator is a very inefficient jet manipulator. Spray obscures the workpiece, there is no tactile feedback of performance, communications are impaired by noise, and reaction forces limit the energy that can be applied. Automatic or semi-automatic jet manipulation is becoming essential for the profitable exploitation of the latest equipment, in addition to reducing health and safety hazards.

Abrasive jetting has made very significant advances over recent years. In particular it now provides an extremely flexible cutting tool, capable of cutting most materials in a wide range of operating conditions. Reliability of operation must be a major consideration in future developments if this versatile technique is to be profitably applied.

vers.

There is increasing interest in the use of water jetting techniques for cutting and cleaning underwater as well as for concepts cutting and removal on

and. A full discussion of present and future requirements in these and other areas of application will help to ensure that equipment development is directed at actual needs.

Continued, pg. 3. Aiming.



Triplex Systems Introduces New Product

Triplex Systems, Inc., Minneapolis, Minnesota is manufacturing and marketing an industrial quality line of high pressure water jet cleaning equipment.

Standard units are designed to develop pressures of 12,000 PSI at flow rates up to 7 GPM. The flow range and pressures are capable of handling a wide variety of heavy industrial and process industry cleaning needs. The units are available in base plate mounted, skid or trailer versions. Options include electric, diesel or gas prime mo-

Continued, pg. 2. Triplex.

Call for Papers

FOURTH U.S. WATER JET CONFERENCE August 27-28, 1987 University of California, Berkeley

The Fourth U.S. Water Jet Conference will be held on August 27-28, 1987, at the University of Camorina, between, it will focus on three areas: advances in fundamental understanding of fluid jet interactions with solids; new developments in the application of water jets; and field or factory experience in mining/civil engineering and manufacturing engineering.

Papers are invited on such areas as fundamental and applied research, jet-assisted cutting, mining and rock excavation, concrete cutting, abrasive jet machining, factory applications, advances in abrasive and nonabrasive water jets, and cleaning.

Information about exhibitions, industrial support, and conference organization may be obtained from Nanette Pike, University of California Extension, 2223 Fulton St., Berkeley, CA 94720; (415) 642-4151.

Directors	
Chairman of the Board Dr. Fun-Den Wang	303/278-3253
President Dr. David Summers	314/341-4311
Vice President Dr. James Evers	618/536-2368
Secretary Evette Steele	513/421-6827
Tressurer Neil Styler	412/462-8939
1986-88 Directors Pat DeBusk Michael Hood Jim Reichman George Savanick John Wolgamott	415/742-5639 206/872-8500 612/725-4543
Association Manager Don Nygaard Carousel Management Services	612/731-1227

Calendar Listing

AUGUST 27-28, 1987 -

Fourth U. S. Water Jet Conference University of California, Berkeley, For information: Nanette Pike, University of California Extension, 2223 Fulton St., Berkeley, CA 94720 (415) 642-4151

SEPTEMBER 9-11, 1987

International Water Jet Symposium Beijing, China Contact: International Water Jet Symposium c/o 108 S. Eldridge Way, Golden, CO 80401

OCTOBER 22, 1987

Water Jets Aiming For Profit Seminar Cranfield, England Contact: Lorraine Grove, BHRA, The Fluid Engineering Centre, Cranfield, Bedford, MK43 OAJ, England

NOTE: Complete details are contained within this issue of JET NEWS.

Triplex. Continued from pg. 1.

Triplex Systems, Inc. also manufactures custom high pressure systems with capabilities to 400 HP diesel units. Custom systems include applications involving use of water jets in cleaning processes as an effective tool for increasing plant efficiencies, and cleaning applications with speeds up to 150 ft. per minute.

Triplex Systems incorporates the latest safety features and conforms to the practices set forth by the U. S. Water Jet Association.

Your Literature Is Needed

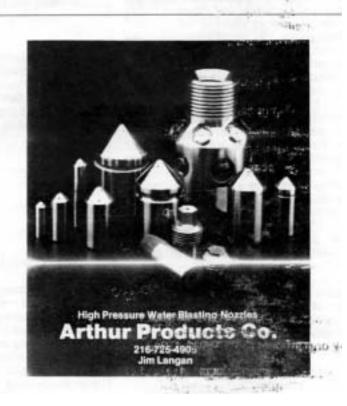
Throughout the year, the WJTA office receives inquiries for additional information on systems and equipment. In order to expedite handling these inquiries, we're requesting that all members submit any/all appropriate literature to the WJTA office, so that we may continue to build a current library and respond to these inquiries. If you must send your literature via UPS, please use this address: WJTA (c/o CGP), 1865 Old Hudson Road, St. Paul, MN 55119.

We have developed a 50,000 PSI pump that does not use intensifiers.

For information, contact the president of:

HYDRO-ERGON

7100 N. Lehigh Avenue Chicago, Illinois 60646



Aiming. Continued from pg. 1.

Date and Venue

Thursday, 22 October 1987 at the Cranfield Institute of Technology, Cranfield, England.

Papers will be presented by invited speakers on the following topics:

Abrasive Jetting Underwater Jetting Jetting of Reinforced Concrete Structures Automation and Manipulation Health and Safety

Technical Programme

The five topics will be covered in a series of technical sessions with adequate time allowed for questions and discussion. A timetable will be mailed to delegates in advance of the Seminar. As the Seminar is in the form of technical discussion there will be no printed proceedings. The fee will include refreshments and lunch.

Exhibition

During the Seminar organisations will have the opportunity to exhibit promotional litereature and associated material by prior arrangement with the Organisers.

Seminar Fee

From:

To be published in the reservation leaflet which will be available in June 1987.

Reservation Form

Will be available June 1987, please fill out the attached form and send it to the Organiser to ensure you receive full details.

INFORMATION REQUEST FORM

To: Lorraine Grove Seminar Organiser Water Jets Aiming for Profit BHRA, The Fluid Engineering Centre Cranfield Bedford, MK43 0AJ, England.

(Please type or use block	ietters)	
(Delete as appropriate)		
Prof/Dr/Ms InitialsSu	mame	
Positions/Appointment		
Organisation/Firm		
Postal Address		
1.0	Country	
Telephone	Telex	
1	Please tick appropriate b	oxes
I am interested in the purper W		
My organication to the second	in participating in the	
Please send ato annue details o Conferences and Pub		



Specialists in developing tools and components for waterblast cleaning

- Rotary Couplings
- Tank Cleaning Nozzles
- Rotary Lance Feeds
- Spin Nozzles for Hand Lances
- Rotary Line Moles

Write or call:

P.O. Box 2907 Durango, Colorado 81302

(303) 259-2869

A Paid Advertisement

PROBLEM

To find a cost-effective alternative to replacing completely plugged evaporators (Louisiana Pacific/Fibreboard, Antioch, California): length 40 ft., tubing (stainless steel) i.d. 1 1/2 in., bundle diameter 6ft. - 600-700 tubes. Estimated cost of replacement in 1975 more than \$1,000,000.

SOLUTION

Use of SUPER-WATER® concentrated industrial water blasting additive.

Total contractor and SUPER-WATER® costs \$13,500.

REFERENCE

Polymerblasting - A Chemist's Point of View, W. G. Howells. Proceedings of the Second U. S. Water Jet Conference, May 24-26, 1983. Reprints and referral to contractor involved available from:

> Berkeley Chemical Research, Inc. P. O. Box 9264 Berkeley, California 94709 (415) 526-6272

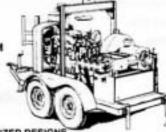
AQUA-DYI

INLINE VALVE PLUNGER PUMPS & WATER JET BLASTING EQUIPMENT

FROM 15 TO 500 HORSEPOWER TO 22,500 PSI.

FLOWS TO 350 GR

- DIESEL
- GASOLINE
- . PROPANE
- . ELECTRIC



SPECIALIZED DESIGNS

- CONCRETE DEMOLITION ABRASIVE CLEANING & CUTTING
- HYDROSTATIC TESTING REACTOR & TANK CLEANING
- UNDERSEA SYSTEMS

PLUS A FULL LINE OF WATER JETTING ACCESSORIES. ULTRA HIGH VELOCITY NOZZLES AND HOSE TO 80,000 PSI

(713) 681-3581

Texas Wats

National Wats 800-231-9174

800-392-4563 Telex 77-4570 2208 Karbach Street . Houston, Texas 77092 USA

Aiming. Continued from pg. 1.

Date and Venue

Thursday, 22 October 1987 at the Cranfield Institute of Technology, Cranfield, England.

Papers will be presented by invited speakers on the following topics:

Abrasive Jetting Underwater Jetting Jetting of Reinforced Concrete Structures Automation and Manipulation Health and Safety

Technical Programme

The five topics will be covered in a series of technical sessions with adequate time allowed for questions and discussion. A timetable will be mailed to delegates in advance of the Seminar. As the Seminar is in the form of technical discussion there will be no printed proceedings. The fee will include refreshments and lunch.

Exhibition

During the Seminar organisations will have the opportunity to exhibit promotional litereature and associated material by prior arrangement with the Organisers.

From:

To be published in the reservation leaflet which will be available in June 1987.

Reservation Form

Will be available June 1987, please fill out the attached form and send it to the Organiser to ensure you receive full details.

INFORMATION REQUEST FORM

To: Lorraine Grove Seminar Organiser Water Jets Aiming for Profit BHRA, The Fluid Engineering Centre Cranfield Bedford, MK43 0AJ, England.

(Please type or use block letters)

(Deiete as ap	ppropriate)			2.54
Prof/Dr/Ms	Initials	Surname		
Positions/A	ppointment			
Organisatio	n/Firm			
				1000
************			Country	SETUR.
Telephone.			Telex	

Please tick appropriate box	es
-----------------------------	----

-	Profit, please send me details	
1 -0 45	From product some me drames	
My or	ganisation is interested in participating in the	
	exhibition	
Diageo	send me more details of other BHRA	

Conferences and Publications

I am interested in attending Water Jets Aiming for



Specialists in developing tools and components for waterblast cleaning

- Rotary Couplings
- Tank Cleaning Nozzles
- Rotary Lance Feeds
- Spin Nozzles for Hand Lances
- Rotary Line Moles

Write or call:

P.O. Box 2907 Durango, Colorado 81302

(303) 259-2869

A Paid Advertisement

PROBLEM

To find a cost-effective alternative to replacing completely plugged evaporators (Louisiana Pacific/Fibreboard, Antioch, California): length 40 ft., tubing (stainless steel) i.d. 1 1/2 in., bundle diameter 6ft. - 600-700 tubes. Estimated cost of replacement in 1975 more than \$1,000,000.

Use of SUPER-WATER® concentrated industrial with blasting additive.

Total contractor and SUPER-WATER® costs \$13,500

Polymerblasting - A Chemist's Point of View, W. G. Howells. Proceedings of the Second U. S. Water Jet Conference, May 24-26, 1983. Reprints and referral to contractor involved available from:

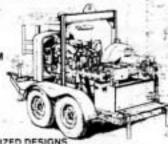
> Berkeley Chemical Research, Inc. P. O. Box 9264 Berkeley, California 94709 (415) 526-6272

INLINE VALVE PLUNGER PUMPS & WATER JET BLASTING EQUIPMENT

FROM 15 TO 500 HORSEPOWER TO 22,500 PSI.

FLOWS TO 350 GF

- . DIESEL
- GASOLINE
- PROPANE
- . ELECTRIC



SPECIALIZED DESIGNS

CONCRETE DEMOLITION ABRASIVE CLEANING & CUTTING HYDROSTATIC TESTING REACTOR & TANK CLEANING UNDERSEA SYCHEMAN

PLUS A FULL LINE OF WATER STORE AND SPACE TO BOOMES.

(713) 681-3581 Texas Wats Telex 77-4570 800-392-4563 800-231-9174 2208 Karbach Street . Houston Texas 77092 USA

Recommended Practices Booklet Available

Additional copies of the "Recommended Practices For The Use of Manually Operated High Pressure Water Jetting Equipment" as provided by members of WJTA is now available through the Association office.

These Recommended Practices cover the personnel requirements, operator training, operating procedures and recommended equipment for the proper operation of all types of high pressure water jetting equipment as normally used by industries concerned with construction, maintenance, repair, cleaning and demolition work.

For your copy of this publication, send \$5 to: U.S. Water Jet Technology Association, PO Box 19057, St. Paul, MN

55119.

1987 WJTA Membership Directory

The 1987 Directory has been mailed to all current members of WJTA. If you, as a member in good standing, require additional copies, contact the Association office.

> What is talent but originality robed in resourcefulness. What is success

but effort draped in determination.

What is achievement

but a dream dressed in work clothes.

What is accomplishment

but ability stripped of its doubts.

What is life.

but a series of opportunities masked as difficulties. William Arthur Ward



WATERJET CUTTING SYSTEMS

Safety Guidelines Revised In England

The development of the DIAJET system means that the operating pressure at which such jetting systems can be considered as representing a significant hazard has reduced.

The current Association of High Pressure Water Jetting Contractors' (A.H.P.W.J.C.) Safety Guidelines until recently only referred to systems with an operating pressure above 2,000 lbf/in.². However, DIAJET can cut steel (slowly) at 250 lbf/in.². At 5,000 lbf/in.² it can cut through 1/4 in. thick shielding steel at a 10 ft. standoff. We now regard a 20 ft, standoff as the minimum required behind the target materials for shielding material to survive for a useful period of time, when used with a 5,000 lbf/in.² DIAJET.

With this in mind, the A.H.P.W.J.C. has revised the range of equipment to which their guidelines apply as follows:-

"2.3 The term high pressure water jetting covers all water jetting processes including those using additives or abrasives where there is an energy input to increase the pressure of the

The reference to a lower pressure limit is dropped.

Recent further development of the equipment at B.H.R.A. has resulted in the design of an operationally robust configuration. Therefore, we are now in a position to offer laboratory development systems to interested organisations.

The above article was submitted by Roger A. Heron, Manager, High Pressure Engineering, BHRA.

IEN Introduces:

"A Guide To Marketing New Industrial Products"

New Informative Booklet Available

Industrial Equipment News, a publication of Thomas Publishing Company, has introduced a most informative new guide.

> "Launching a new industrial product is a complex process. Many people, with diverse responsibilities, must coordinate their activities to bring the product to market in the shortest possible time.

> In the risky, costly, competitive environment, timing plays a crucial role in the ultimate success and profitability of a new product.

> This publication has been prepared as a management tool to help decision makers and implementers to focus on the key areas of a new product introduction, and show how to shorten the time frames associated with them.

> By reviewing the entire launch program, from prototype testing through post-evaluation, you can decide which activities are applicable to your specific situation, and how to fit the "pieces" together. More importantly, you will be assured that no crucial item has been overlooked in getting the product launched as rapidly as possible."

The response to this comprehensive publication far exceeded IEN's expectations. We requested fifty copies for members' use, however, they were only able to send us three. To secure your booklet, write or call the Association office. A nominal charge of \$10 will be incurred to cover the Association's cost of reproduction and postage.

IS SOMEONE XXX RANOW not on our mailing list? A He you know of an interested person white should be the our JET NEWS mailing list, please send his/her name to:

JEENEWS

U.S. Water Jet Sechnology Ass'n P.O. Box 19057 St. Paul: MN 55119

He who would move the world must first move himself.

- Socrates

... This Space For Sale

these low rates:
Full Page \$ 150
1/2 Page \$ 90
1/4 Page \$ 60

You can advertise in JET NEWS at

1/4 Page \$ 60 Business Card \$ 25 B/W Photos (each) \$ 5

Ad Descline Page Date
Jul 10 Aug 1
Sep 10 Oct 1
Nov 10 Dec 1
Jun 10 Feb 1

Send your advertisement to: U.S. WATER JET! (FECHNOLOGY ASSOCIATION, P.O. Beet 19057, Saint Paul, MN. 55119 with your payment.

Postmaster: Please send Form 3579 to:
J. S. WATER JET TECHNOLOGY ASS'N
P.O. Box 19057
tt. Paul, MN 55119, USA
12/731-1227

4	MOVING	Plate out off	dis bonom el	the page littled	
	ming in it	Idress at the right ne NEW address	and muli to the sandwa below	e above address a	fler
ch	New Adde	**		microsco.	TO DO
	City			no d	4.500 00
See	State	y	. Zip Code	100 A 100 A	17,175
No.	1			學解學	142.65