

# ANNUNCIATOR

MARCH 1997



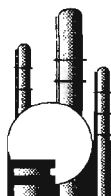
SARNIA



SECTION

The International Society  
for Measurement and Control





# **GREAT LAKES** (Division of **MENTEC** **INDUSTRIAL CONTROLS®**

**Phone: (519) 336-9512**

**Fax: (519) 336-9834**



**BROOKS** ... LOOP-POWERED Oval-Gear Flow Meters For High Viscosity Low Pressure Drop Applications, Rotameters, Purge-Meters, Massflow Meters & Controllers For Liquids & Gases, Turbine-Piston-BiRotor Flow Meters, Flow Monitoring-Control-Blending Instrumentation, Flow Control Valves



**BRISTOL** ..... ISOLOK Non-Fouling Piston-Type Liquid Samplers For Benzene & Other Difficult Services, Anti-Fugitive Emission Design Manual & Automatic Operation  
**EQUIPMENT COMPANY**



..... Severe Service Control Valves With Class 8 Shut-Off, Optical Laser-Beam Valve Positioning Systems, Controllers, Instantaneous Steam-Water Heaters, Steam-Water Mixers, Non-Fouling Gas & Steam Regulators, K-MAX Rotary Control Valves, Emergency Process Shut-Off Valves



**PERMA PURE**

... Nafion-Tube Process Gas Dryers For Analysers & High Volume Mainstream Applications, Custom Gas-Sample Conditioning Systems For CEMS Applications, Small Flow Self-Regenerating Heatless Air Dryers, Dew Points To -45°C



**SUPERIOR**  
**FLO PRODUCTS**

.... FLO-TUBE Multi-Port Averaging-Type Flow Sensors For Steam, Gas & Liquids, Hot-Tap Designs, Temp. & Pr. Ratings To 3,000°F / 5,000 psig



**TEXAS**  
**SAMPLING**

..... Custom Closed-Loop Sampling Systems For Liquids & Gases, Emission-Free Design With Zero Dead-Volume Sampling, Manual & Automatic Operation

**Tretrice**

..... Pressure-Gauges & Diaphragm Seals, Thermometers, Fail-Safe Temperature Regulators, Automatic Steam Tracing Control Valves To Prevent Instrument Enclosures From Overheating



..... High-Performance Ball & Butterfly Valves, API & EXXON Firesafe Approved, Pneumatic & Electric Actuators, Anti-Fugitive Emission Valves

**Yarway**

..... Steam Traps & Strainers & Expansion Joints

**GARY JENSEN • BRAD TAYLOR • KATHY SVOBODA**  
**TERRY KING • CLIFF NEEDHAM • GRAHAM RIDDELL**

# List of Advertisers

Company	Page No.	Company	Page No.
ABB-Kent Taylor .....	17	Lakeside Process Controls .....	80
Alpha Controls .....	39	Langtree Controls Ltd. ....	17
Armatek Controls .....	15	Lisle-Metrix .....	16
Associated Valve Corp. ....	9	Mac-Weld .....	60
Axiom Technologies Ltd. ....	37	Milltronics .....	16
Baker Instruments .....	4	Moore Products Co. (Canada) Inc. ....	23
Bestobell Canada .....	62	Novatech .....	10
Brian Controls .....	6	Phoenix Contact Ltd. ....	36
Cambridge Controls .....	27	Professional Valve .....	49
Campbell Scientific .....	20	Prosigma Analytics Inc. ....	21
Cancoppas Ltd. ....	48	Provincial Controls .....	59
Cantech Controls .....	35	R.A. Kirby Sales Inc. ....	55
Cantrils .....	42	Regional Process Equipment .....	8
CTH Industrial Controls .....	26	Romatec .....	18
CB Engineering .....	24	Rosemount .....	54
CEM Specialties Inc. ....	15	Samson Controls Ltd. ....	25
Contro Valve Inc. ....	33	Sarnia Piping Specialties .....	32, 57
Davis Controls .....	35	Semac Power & Controls .....	20
Durham Instruments .....	55	Sharp Valve .....	7
Dräger .....	21	Southwest Meters .....	4
Elsag Bailey Inc. ....	13	Spec (Sarnia) Ltd. ....	44
Endress & Hauser .....	8	Spirax Sarco .....	15
Farris Industries .....	57	Summit Controls Ltd. ....	58
Fisher Service .....	62	Syber Systems .....	44
Floval Equipment .....	39	Technorth Canada .....	35
Fryston Canada .....	45	Transcat .....	19
Great Lakes Industrial Controls .....	2	Tubetech Ltd. ....	12
HCS Heating & Control Systems .....	51	United Electric .....	19
Hardie Industrial Supplies .....	16	Utility & Industrial Supply .....	13
Honeywell Ltd. ....	63	Veronics Instrument .....	4
Huron Valve .....	22, 78	Wesco Industrial Control Products .	40, 41
IMO Industries .....	38	Westburne Lytle .....	12
Industrial Projects Ltd. ....	38	Westech Industrial .....	56, 61
Industrial Technical Services .....	22	Wika Instruments .....	22
Intertec Instrumentation .....	7	Willer Engineering .....	48
ISA Distribution Centre .....	60	Zirco .....	43
J&M Engineering .....	49		

## INSTRUMENTS

# VERONICS INC.

### MOISTURE ANALYSIS

- Microprocessor Based
- Levels from 1 ppb
- Enhanced Response
- On-Line Analysis
- Liquid Hydrocarbon Service
- Portable Systems

### GAS ANALYSERS

- Flue Gas
- Oxygen (ppm to 100%)
- Carbon Monoxide
- Carbon Dioxide
- Portable and Continuous
- Custom Systems

250 WYECROFT ROAD, UNIT 16  
OAKVILLE, ONTARIO L6K 3T7  
TEL (905) 842-5664 FAX (905) 842-0540

### FLOWMETERS

#### -Ultrasonic

- Portable and On-line
- Liquid and Gas Phase
- Single and Multichannel
- CEM Flowmeters
- Flare Gas Meters

#### - In-Line

- Turbines
- Contact Head
- Paddlewheels
- Low Flows (0.05 GPM)

### WASTEWATER ANALYZERS

- TC/TOC/TOD/Titrators

600-7676 ROUTE TRANSCANDIENNE  
ST-LAURENT, QC H4T 1V6  
TEL (514) 335-9482 FAX (514) 747-1717

## BAKER INSTRUMENTS LIMITED

42 DUFFLAW RD., TORONTO, ONTARIO M6A 2W1  
1-800-561-8187 FAX: (416)781-9484

**ALNOR**



VELOMETERS - DEWPOINTERS - THERMOMETERS - PYROMETERS  
DEAD WEIGHT TESTERS - TEMPERATURE CONTROLS  
LOW PRESSURE DIFFERENTIAL PRESSURE SWITCHES, GAUGES, MANOMETERS  
DIFFERENTIAL PRESSURE TRANSDUCERS - MAGNEHELIC GAUGES - ANALOG & DIGITAL TACHOMETERS  
TEMPERATURE, PRESSURE & FLOW RECORDERS  
ROTOMETERS, ORIFICE PLATES & FLANGES, OPEN FLOW MEASUREMENT

**OVER SIXTY YEARS** serving industry in Canada

## SOUTH-WEST METERS LIMITED

P.O. BOX 1083  
765 EVETT STREET  
SARNIA, ONTARIO N7S 5N3  
BUS: (519) 336-8628  
FAX: (519) 336-9082

**"WE MEASURE UP TO YOUR STANDARDS"**

**Shop and Field Services Provided:**

- Certified Meter Proving & Repair
- Instrument Repair
- Liquid Transfer Systems
- Weight & Measures Calibration
- Preventative Maintenance Programs
- Tank Level Equipment

# Contents

ISA Mission Statement .....	7
President's Corner .....	11
Sarnia Section Executive .....	14
ISA Member Benefits .....	26
Toronto Section ISA Instrument Show .....	28
Sarnia ISA Golf Tournament .....	29
DINNER MEETING NOTICE .....	30
Upcoming Meetings .....	31
Log On To The World .....	32
ISA Perspectives .....	34, 64
Internet Rates & BBS Update .....	46, 47
ISA Student Section Update .....	50
News Release .....	52, 53
President's Winter Meeting .....	53
Maintenance & Engineering Expo 97 .....	64
ISA Membership Application .....	65
User's Directory .....	66
Past President's Honour Roll .....	79

## Editor's Notes

**ADVERTISERS:** Please note that the deadline for the MAY ANNUNCIATOR is April 15, 1996. Please forward information to the editor by that date in order to have items updated.

**THE DINNER MEETINGS FOR THE 1996/97 SEASON  
WILL BE HELD AT THE  
SARNIA GOLF AND CURLING CLUB**

**ISA Sarnia Section**  
Box 206  
Sarnia, Ontario N7T 7H9

**ISA Sarnia Section BBS**  
(519) 541-0427

# Solutions in Measurement & Control

## Process Control - Calibration and Test Equipment

Measuring Instrumentation (for flow, level, pressure, temperature, pH, ORP, conductivity)

Safety and Environmental (gas detection, gas analyzing, CEM and ambient air quality monitoring)

### AMETEK

Pressure and temperature gauges, diaphragm seals, deadweight testers, pressure and temperature calibrators, transducers and transmitters

### ASD

Advanced Sensor Devices, Inc.

CEM monitoring systems



California Analytical

Gas analyzers



Manifold valves, gauge and needle valves

### CONTROL MICROSYSTEMS

Remote monitoring and control, telemetry and communication products, SCADA systems;

### COSA

Gas oxygen analyzers

### DELTA III

Flow switches, level switches

### Digitec

Digital process indicators, signal conditioning, alarms

### Fike

Rupture discs, explosion vents

### GEORGE FISCHER +GF+ SIGNET

Actuated valves, pressure regulating valves, flow instrumentation

### HELAND

Flow metering systems

### Honeywell

Pressure, level, flow, and temperature transmitters, controllers, recorders, digital control programmers, control valves

### INDUSTRIAL SCIENTIFIC CORPORATION

Portable and fixed gas detection

### J-TEC

Vortex flowmeters

### K&P

Batch controllers, flow totalizers, timers and counters

### KITEMA

Variable area flowmeters, turbine meters

### KURZ

Gas mass flow measuring systems

### McCROMETER

Primary flow elements, differential pressure flowmeters

### Meriam Instrument

Manometers, flow elements, flow and pressure calibration

### Mid-West Instrument

Differential pressure indicators and switches



Ambient air analyzers

### PENBERTHY, INC.

Jet pumps, sight flow indicators, level gauges and indicators, thermocouples and RTD's



Saab Tank Control

Radar level / tank gauging

### SPARLING

Magnetic flowmeters



Bimetal and gas actuated thermometers

### UE

Pressure and temperature controls

Sales, service, and distribution across Canada since 1956

stocking warehouses • on-line computer system • order tracking

specialized shop services • calibration services traceable to N.I.S.T. • field start up services

## ONTARIO REGION

Sarnia

tel.: (519) 337-7591 fax: (519) 336-0997

Mississauga

tel.: (905) 813-8310 fax: (905) 813-0570

or toll free: 1-800-313-3103

**BRIAN CONTROLS**  
A DIVISION OF **PEACOCK**

A WEIR GROUP COMPANY

# SHARP

## VALVE & INSTRUMENTATION INC.

SARNIA – MISSISSAUGA

*Official and Authorized Representatives for:*

ROCHESTER INSTRUMENT SYSTEMS, LIMITORQUE, FIKE,  
SHAND & JURS, L&J TECHNOLOGIES, RESISTOFLEX,  
WIKA, HEX VALVE, KOMAX HEATERS, DURABLA,  
LUDLOW-RENSSEALER

**PHONE: (519) 336-8484**

**FAX: (519) 336-0928**

**1407 PLANK ROAD  
SARNIA, ONTARIO**

COMPLETE PRESSURE RELIEF, BALL, GATE, GLOBE, PLUG,  
BUTTERFLY, CONTROL VALVE AND ACTUATOR REPAIR.  
FULL CALIBRATION SERVICE.

**INTERTEC**



**FURON  
UNITHERM**

ENCLOSURES CABINETS HEATERS MANIFOLDS  
PRE-INSULATED & TRACED BUNDLE

INTERTEC INSTRUMENTATION LTD., 400 MOROBEL DRIVE, MILTON, ONTARIO, L9T 4N6

TELEPHONE (905) 875 4727 FAX (905) 875 4729

REPRESENTED BY NORTHERN ABCOR PROCESS EQUIPMENT & CONTROLS

TELEPHONE 1 800 547 4443

## ISA's Mission

*To be the foremost worldwide society with  
the science and application of measurement  
and control technologies, and to advance  
members' competence, professionalism, and  
recognition.*

**Endress+Hauser**  
Measurement for Automation



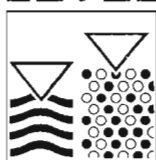
## FLOW



Electromagnetic  
Flowmeters, straight-tubed  
Coriolis Mass Flowmeter,  
Vortex Meter with E + H  
patented DSC sensor.

Level detection and  
measurement by:  
Conductivity, Vibronics,  
Capacitance, Hydrostatic,  
Ultrasonic & Microwave -  
the *widest* choice by any  
manufacturer.

## LEVEL

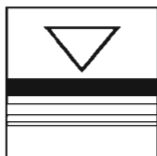


## WATER

## ANALYSIS

pH/Redox  
Conductivity  
Turbidity  
Dissolved Oxygen  
Chlorine

## PRESSURE



Cerabar family of Smart  
Pressure Transmitters &  
Switches, Deltabar Smart  
Differential Pressure  
Transmitters with self-  
checking ceramic cell.

## MOISTURE



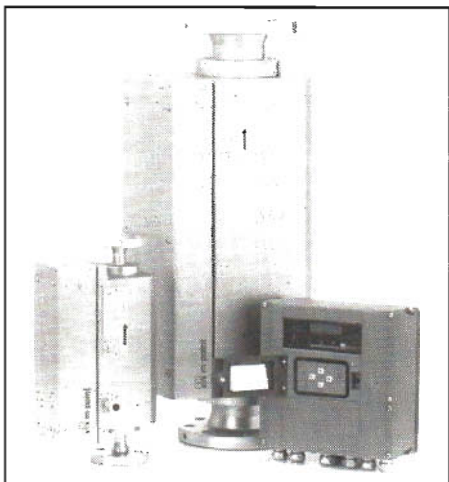
Full range of Hygrometers and  
Relative Humidity Meters using  
polymer and smart aluminum  
oxide sensors for all your  
moisture measurement needs  
in both gases and liquids.

**For sales and support call  
Regional Process Equipment  
Sarnia  
(519) 337-7758**



# mpoint

## Coriolis Meter for Mass Flow, Temperature & Density of Liquids & Slurries



- Straight through flow tubes: self-draining, resistant to corrosion
- Secondary containment standard
- Simultaneous mass, density & temperature
- Compact design
- 2-wire connection
- Easy to install, simple operator interface
- CSA Class I Div I & II, MCCR, (CRN)

## Regional Process Equipment

415 Exmouth St. #5B, Sarnia, Ont. N7T 5P1  
Ph: (519) 337-7758 Fx: (519) 337-7933  
Sarnia area representatives for

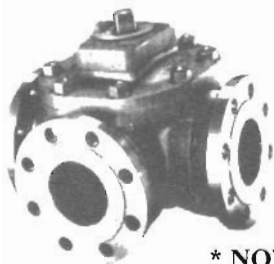
Endress + Hauser





# Regional Process Equipment

777 Campbell Street, Unit #2, Sarnia, Ontario, N7T 2J7  
PH: (519) 337 7758 FAX: (519) 337 7933



## Ball Valves

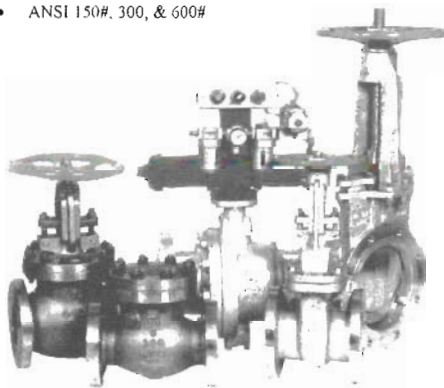
- ISO 9000 certified
- Exxon approved
- Nace Trim
- API 607 certified
- Metal Seat-High Temp
- 3 way, 2 & 4 seat



**\* NOW STOCKED IN SARNIA \***

## Tong Yung Gates Globes & Check Valves

- ISO 9000 Certified
- Exxon & API 607 approved
- Nace Trim
- ANSI 150#, 300, & 600#



## Full Automation & Control Services



Associated Valve

**\* NOW AVAILABLE FULL AUTOMATION \***

## Montreal

5600 Cypriot  
 Ville St-Laurent (Quebec) H4S 1V7  
 Tel.: (514) 339-5374 Fax: (514) 339-1550  
 Technical Support 1-800-465-5374  
 E-mail: novatech@netcom.ca




**Instrumentation • Process • Environment**

## Toronto

160 Wilkinson Road, Unit 38  
 Brampton (Ontario) L6T 4Z4  
 Tel.: (905) 453-7224 Fax: (905) 453-2464  
 Technical Support 1-800-465-5374  
 E-mail: novatech@netcom.ca

### GAS ANALYSIS

**1**



**Servomex**  
 LEADERS IN GAS ANALYSIS

Paramagnetic and zirconia oxygen analyzers.  
 Photometers for stack and process.  
 Continuous Emission Monitoring Systems (CEMS).

**8**



**EIT**

Toxic and combustible gas detection.  
 Ultrasonic flow and level monitoring.  
 Water quality analysis.


**2**



**Environmental Technologies Group, Inc.**

Open path FTIR systems.  
 Detection of metals in water.

**9**



**Molecular Analytics, LLC**

Ion-mobility spectrometers for emission, process and ambient monitoring.

**3**



**BEI**  
 Baldwin Environment, Inc.

Sample conditioning systems for: CEMS, both portable and fixed.  
 Sample probes.

**10**



**MECO**

Trace level gas moisture analyzers.  
 PPB, PPM detection levels.  
 Portable and fixed analyzers.

**4**



**GASCO**  
 GAS ANALYSIS SYSTEMS COMPANY, INC.

Portable FID/GC  
 In-door air quality.

**11**



**madur ELECTRONICS**

Portable stack monitoring analyzers.

### LIQUID ANALYSIS

**5**



**TYTRONICS INCORPORATED**

On-Line process titrators, colorimeters, and photometers.  
 TOC analyzers.

**12**




**ECD**

Industrial process pH, conductivity, ion-selective electrodes and transmitters.

### GENERAL PRODUCTS

**6**



**LMI**

Chemical metering pumps, controllers, and accessories.

**13**



**Sensortech Systems Inc.**

On-Line moisture measurement in solids.  
 Utilizing radio-frequency principle.


**7**



**NOVATECH Engineering Group**

Customized systems integrators.  
 Application engineering, technical support.  
 Sample multiplexing systems.  
 Continuous Emission Monitoring Systems.

**14**



**Pribusin Inc.**

Signal conditioners, isolators, alarm modules, and multiplexers.  
 Linearizers, integrators, and transmitters for frequency, temperature, and strain gauges.



The International Society  
for Measurement and Control

# President's Message



By the time this Annunciator is published we will have had our ISA Show. When I reflect back to last August and our Show Chairman and Co-Chairman who accepted the challenge were novices in the organization of what was needed and demanding into putting on a show.

First, it was definitely a challenge and providing their time as volunteer work made it more demanding as well as challenging, and by forging ahead with this responsibility finally ended as a successful show. This is not unusual when working within the ISA. Many similar functions, no matter how small or large they may be, all have one common factor, leadership training.

ISA is an organization dedicated to the development and understanding the science and the application of measurement and control technologies. This provides the member the opportunity to develop his leadership skills, his competence, his trust, his professional attributes and recognition from his peers. ISA has many opportunities for any member who wishes to further pursue the avenue to develop and tune his skills, build his confidence and augment his knowledge in the measurement and control sciences.

This month of March is not too late and also is an excellent time to encourage prospective members to join the ISA Sarnia Section. We have finished our Show and we have represented our section at the Engineering Week. This allows us an opportunity then to ask a co-worker to join the ISA Sarnia Section.

If any member has any suggestions, comments or recommendations please pass it on to any of the executive members or committee members. If you wish to participate in a committee or be part of the executive, submit your name to the President, your name would be welcomed. Remember one way to provide good feedback is to get involved and participate.

I am looking forward to seeing you and your prospective member at our March 31st meeting.

Regards,  
RANDY DENNIE, *President*

## ***Congratulations and Thank You, Wayne and Richard and Show Committee Members.***

The Executive Board and the members of the ISA Sarnia Section wish to extend thanks to Wayne Wilkins and Richard Felton for having a successful day show. This is our first one day table top show. The show was a sell out and there was even a waiting list of vendors. The attendance was a success and the exhibitors and the attendees were well appreciated. On behalf of the ISA Sarnia Section, please extend our gratitude to your team for a job well done.

# TubeTech LTD.

Instrumentation  
and Fluid Control

829 Phillip Street  
P.O. Box 968  
Sarnia, ON N7T 7K3

Tel: (519) 344-5271  
Fax: (519) 344-8334

BAILEY  
FISCHER  
PORTER

OHMART VEGA

ALLTEMP  
SENSORS

Hartman  
& Braun

ASCO

Barksdale

Parker  
Fluid Connectors

TLV

Bailey®

Customer Service is our best product !



## WESTBURNE LYTLE



INDUSTRIAL PRODUCTS DIVISION  
SARNIA

- |                   |  |
|-------------------|--|
| <b>A.S.I.</b>     | – Multipoint Level Indicators                                      |
| <b>ASCO</b>       | – Solenoid Valves, Pressure and Temperature Switches               |
| <b>CASH-ACME</b>  | – Reducing and Regulating Valves                                   |
| <b>CLIF MOCK</b>  | – Liquid and Gas sampling systems, Liquid P.D. meters              |
| <b>DOPAK</b>      | – Process Samplers   |
| <b>EL-O-MATIC</b> | – Actuators, Positioners, Switches, etc. for Quarter Turn Valves   |
| <b>E.V.I.</b>     | – Engineered Ball Valves for Special Applications                  |
| <b>GGOSCO</b>     | – Needle Valves  |
| <b>KAMMER</b>     | – Control Valves for Special Applications                          |
| <b>PROMAG</b>     | – Magnetic Liquid Level Indicators & Continuous Level Transmitters |
| <b>TRICENTRIC</b> | – Metal Seated, Class VI, Butterfly Valves                         |
| <b>VELAN</b>      | – Ball Valves - Cryogenic, Metal Seated, Resilient Seated          |

1231 Confederation Street , Sarnia, N7S 4M7  
Telephone: (519) 336-0014 Fax: (519) 336-7396



**Elsag Bailey**

**Elsag Bailey (Canada) Inc.**

134 Norfinch Drive, Toronto, Ontario M3N 1X7

Telephone: (416) 667-9800 / 1-800-663-7097/Fax: (416) 667-9816

**Bailey**

**TRANSMITTERS, RECORDERS, CONTROLLERS & ANALYZERS**  
For temperature, flow, level, combustion & emissions

**BAILEY  
FISCHER  
PORTER**

**MAGNETIC FLOWMETERS, MASS FLOWMETERS, ROTAMETERS,  
LEVEL INDICATORS, VORTEX METERS, FLUMES, ULTRASONIC  
LEVEL/FLOW & CONTROLLERS**

**TBI-Bailey**

**SENSORS, INDICATOR/ANALYZERS & CONTROLLERS**  
For pH, ORP and conductivity

**PRODUCTS REPRESENTED EXCLUSIVELY BY:**

TubeTech Ltd.  
829 Phillip Street  
P.O. Box 968  
Sarnia, ON N7T 7K3

Tel: (519) 344-5271  
Fax: (519) 344-8334

## **U&I SUPPLY**

**UTILITY & INDUSTRIAL SUPPLY LTD.**

645 KeddcO St., P.O. Box 999

Sarnia, Ontario N7T 7K6

Phone: (519) 344-3614 Fax: (519) 344-3181

**Chemtrol**  
A DIVISION OF NISCO INC.

Kaynar, PVC, CPVC, Ball,  
Check, Butterfly,  
Valves & Actuators



**IMPERIAL EASTMAN**

Tube Fittings, Including  
Hi-Seal, Braze-Seal, Hi Duty,  
and Poly-Flo, Tubing & Hose

**KEDDCO  
MFG. LTD.**

Orifice Plates, Spectacle  
Blinds, & Strainers

**Stewart R. Brown**

Static Bonding Equipment,  
Bonding Reels, Lights



A.C. Invertors, D.C.  
Controllers, Softs Starts

**Worcester  
Controls**

Advanced Ball Control  
Valves, Electrical &  
Pneumatic Actuators,  
Controllers, Positioners, &  
Fugitive Emission Valves

**SCULLY**

Level Probes, Sensors &  
Monitoring Scul-Tel System

**SIMCO**

Liquid Level Gauges &  
Valves

# ***Sarnia Section Executive 1996-97***

<b>Position</b>	<b>Incumbent</b>	<b>Phone</b>	<b>Fax</b>
		(Area Code 519)	
President	Randy Dennie	337-8251 ext.5871	339-7723
Vice-President	Andy Tucker	383-3704	383-8285
Education Chairman	Kalpen Vachharajani	332-0160 ext. 281	332-1186
Treasurer	Brian Smith	332-1212 ext.7920	339-7301
Assistant Treasurer	Jeff Talbot	344-5271	344-8334
Executive Assistant	Dave Gooch	337-1350	337-3105
Newsletter Chairman	Bob Devine	332-2300	332-6640
Newsletter Editor	Brad Simpson	339-3818	339-8675
Newsletter Assistant	Frank Baugh	337-8251 ext.5879	339-7723
Program Chairman	Bob Kelly	481-2726	481-2780
Program Assistant	Chuck Douglas	344-5271	344-8334
Honours & Awards Chairman	Aldo DeSantis	344-4300	344-0042
Honours & Awards Assistant	Guy Salt	344-4300	344-0042
Membership Chairman	Bill Arundell	337-7416	336-0998
Membership Assistant	Jennifer Southcombe	337-2301 ext. 480	332-3309
Student Section Liaison	Mike Grey	542-7751 ext.308	542-6667
Standards and Practices	Don Murch	431-1916	431-1127
Standards and Practices Asst.	Umesh Patel	339-9701	339-9702
Past President	Mike Murray	383-1709	339-0841

## CEMs for COMPLIANCE or PROCESS CONTROL?

NO<sub>x</sub> SO<sub>2</sub>

CO<sub>2</sub> TRS Hg

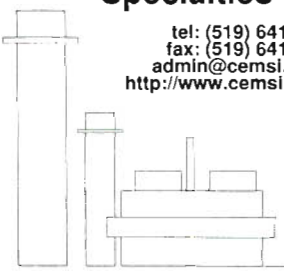
THC O<sub>2</sub>

CO

HCl NH<sub>3</sub>

### CEM Specialties Inc.

tel: (519) 641-6431  
fax: (519) 641-6536  
admin@cemsi.on.ca  
<http://www.cemsi.on.ca>



'SPECIALISTS IN  
CONTINUOUS EMISSIONS MONITORING'

- Discrete Gas Analyzer Systems
- Bodenseewerk/Perkin Elmer Analyzer Systems
- Sampling Probes and Heated Umbilicals
- FID Analyzers (Portable / 19" Rackmount)
- M&C Products Gas Conditioning Systems
- Opacity and Dust Concentration Monitors
- QA/QC Plans

*Working towards ISO 9001 Registration*

# spirax /sarco

### ***If it is a Question of...***

***HEAT TRANSFER, FLUID CONDITIONING, MONITORING, METERING AND/OR CONTROL, THEN SPIRAX SARCO CANADA CAN HELP YOU FIND THE ANSWER!***

***PHONE FOR YOUR GUIDE TO IMPROVING PLANT PROCESS AND ENERGY EFFICIENCY.***

***(905) 660-5510 Ask for Carol***

## **ARMATEK CONTROLS LIMITED**

## **PROCESS INSTRUMENTS SALES AND SERVICE**

ARMATEK - Instrument Accessories  
CELLEX - Instrument Heating Specialists  
DELAN - Level Instrumentation  
FLUID DATA/AMSCOR - Analytical Instruments  
GREAT PLAINS INDUSTRIES - Digital Flow Meters  
ITT BARTON - Industrial Instruments

MESA/NUSONICS - Ultrasonic Instruments  
MOORE INDUSTRIES - Electronic Modules  
PHASE DYNAMICS - Microwave Process Analyzers  
ROHRBACK/COSASCO - Corrosion Monitoring  
TELEDYNE ANALYTICAL - Gas Analyzers  
THERMO ELECTRIC - Temperature Specialists

Tel: (519) 332-0100 Fax: (519) 332-8821

**Serving the Process Industries since 1966**

## LISLE-METRIX LTD.

49 Sheffield Street, Toronto Ontario M6M 3E5  
Telephone: (416) 249-9151 Fax: (416) 249-2952

**WATER QUALITY ANALYZERS** - pH, ORP, Conductivity,  
Dissolved Oxygen, Turbidity

**FLOW METERS** - Area, Doppler, Flume, Impeller, Mass,  
Nozzle, Thermal, Turbine, Venturi

**PROCESS PHOTOMETERS** - Dust, Oil-In-Water,  
Ozone, Turbidity, Colour, Nitrate, Dissolved Organics,  
Solvents in Effluent, Water in Organic Solvents

**LEVEL SENSORS** - Conductance, Magnetic Coupled

**I.S. BARRIERS, ISOLATORS, LOGIC CONTROLS**

**PROXIMITY SWITCHES** - Capacitive, Inductive, Optical,  
Ultrasonic, Magnetic, Photoelectric, Fibre Optic

**PANEL INDICATORS & CONTROLLERS**



## HARDIE INDUSTRIAL SERVICES INC.

*Representing*

**GGOSCO**  
Custom Ball Valves

**KINETROL**  
Actuators

Instrumentation/Electrical Installations • Process Design • Project Management  
Contract Maintenance • Sales & Service  
Phone: (519) 649-1433 Fax: (519) 649-6559  
London, Ontario



## Technology Works!

### In Process Measurement Systems



• Ultrasonic Level Measurement



• Belt Scales/Flowmeters



• Stresswave Sensor



• Motion Sensors

Milltronics offers products for non-contacting ultrasonic level measurement for solids and liquids at ranges up to 60 m; single and multi-idler conveyor belt scales for weighing material moving on conveyor belts; dry solids flowmeters for continuous in-line weighing; and process protection equipment including flow/no flow switches and motion sensors.

For more information, Contact:

**Milltronics Ltd.**

P.O. Box 4225,  
Peterborough, Ontario K9J 7B1  
Tel: (705) 745-2431 Fax: (705) 745-0414





**INSTRUMENTATION INC.**

**THE WORLD LEADER IN THE DESIGN AND MANUFACTURE OF INSTRUMENTATION**

SMART TRANSMITTERS	MAGNETIC FLOWMETERS
MASS FLOWMETERS	WEDGE FLOW ELEMENTS
INTEGRAL ORIFICE ASSYS	RECORDERS
CONTROLLERS	ZIRCONIA OXYGEN ANALYZERS
ADVANCED CONTROLLERS	PACKAGE BOILER CONTROLS
WATER ANALYZERS - pH, CONDUCTIVITY, DISSOLVED O <sub>2</sub> , TURBIDITY	
AMMONIA, FLUORIDE, NITRATE, SILICA, PHOSPHATE ANALYZERS	

GAS CHROMATOGRAPHS, INFRARED & ULTRAVIOLET PHOTOMETERS  
ABB EXTREL MASS SPECTROMETERS

TO CONTACT YOUR LOCAL REPRESENTATIVE CALL

SARNIA - PHONE (519) 541-0011 FAX (519) 541-0012

## **LANGTREE CONTROLS LTD.**

P.O. Box 2326  
509 South Vidal Street  
Sarnia, Ontario  
N7T 7S6  
Phone: (519) 344-6868  
Fax: (519) 344-7944  
E-Mail: [langtree@sarnia.com](mailto:langtree@sarnia.com)



### **INSTRUMENT & ELECTRICAL DESIGN ENGINEERING**

#### **Services**

Feasibility Studies  
Budget Preparation  
Detailed Engineering  
Project Management  
Field Co-ordination  
AutoCad / Microstation PC

#### **Experience With**

Control Panel Design / Layout  
Instrument Installation Details  
Marshalling Rack / Field Wiring  
MCC Design / Layout  
Motor Control & Protection  
Variable Speed Drives

**THE "ROOT" TO QUALITY ENGINEERED CONTROLS !**



# **romatec**

1173 Michener Ct., Unit #1  
P.O. Box 2110  
Sarnia, Ontario N7S 5G5  
Tel.: (519) 337-7416  
Fax: (519) 336-0998  
Inwatts: 1-800-268-3137

*Serving Canada's Process Industries Since 1955*

## **ASHCROFT®**

- Pressure Gauges



## **JACOBY-TARBOX**

- Sight Flow Indicators

## **Bellofram**

- Transducers
- Regulators



- Opacity Monitors and Combustion Analyzers



SAFETY SYSTEMS

- Rupture Discs

## **Pulsafeeder**

- Metering Pumps



**DELPHIAN**

- Combustible Gas Monitors

## **ROSEMOUNT®**

- Combustion Controls



- Liquid Level Gauges
- Eductors

## **TN Technologies**

A Thermo Instruments Company

- Radar, Nuclear & Ultra-sonic Level Controls

*Also...*

**APOLLO • ITT • KOCH • 3P • TBV**

# GIVE 'EM HELL.



**UNITED ELECTRIC PRODUCTS ARE BUILT TO TAKE IT.**

Look to us for pressure and temperature switches, temperature sensors, transmitters and thermostats that meet your most demanding requirements in your most demanding environments. Our new product innovations include epoxy coating for wider NEMA 4/4X and corrosive locations, flush mount and ultra low, all welded pressure sensors as well as corrosion resistant pressure transmitters. A diverse growing line to meet your exacting specifications.



**QUALITY LIKE THIS IS NO EMPTY PROMISE.  
PUT US TO THE TEST.**

Call United Electric Controls at 905/625-5082.

United Electric Controls (Canada) Ltd. Tel 905/625-5082 Fax 905/625-5709



## Unleash The Unlimited Resources Of The Cat.

It's easy to receive a free copy of Transcat's new comprehensive, full-colour 1997 catalog of Test, Measurement and Calibration Instruments. Just call us at **800-828-1470**.

# TRANSCAT

*The Unlimited Resource*

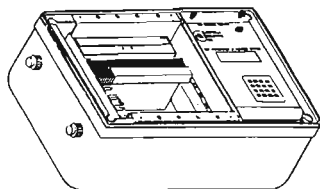
# SEMAC POWER & CONTROLS LTD

Custom Electrical / Mechanical Panel Shop  
 C.S.A. / U.L. Certified – I.B.E.W. / U.A.  
 Instrument / Control Technicians / Electricians  
 Installation / Service / Analyzer Shelters  
 PLC Controls / Scada / DCS Controls  
 High Voltage and Control Systems  
 24hr Emergency Service Available / Contract Basis  
 Competitive Pricing Market Researched

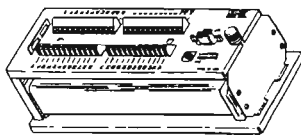
525 Vidal S. .... Sarnia (519) 336-5986  
 Fax ..... Sarnia (519) 336-4490



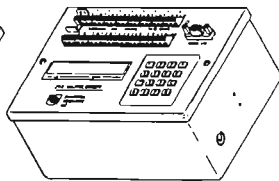
Campbell Scientific (Canada) Corp.  
**Data Acquisition**



CR7



CR10



21X

MEASURING: Temp Probes. Load Cells. Relays. Flow Meters. 4-20mA Transducers  
 Strain Gauges. Analog. Digital. Pressure Transducers. Meteorological Sensors

On Site Demonstrations Available

Est. 1978

192 st clair str. chatham, ontario N7L 3J6 (519) 354 7356 fax (519) 354 1558  
 11564 149 str. edmonton, alberta T5M 1W7 (403) 454 2505 fax (403) 454 2655



# PROSIGMA

Process Analyzers—Analyseurs de procédés

## Elsag Bailey Analytical Division



Opacity Monitors  
In-Situ CEM Systems  
Combustion Monitors  
Cross Stack CO Analyzers  
UV/IR Process Photometers  
Portable Flue Gas Analyzers

## BOMEM

Process FTIR Analyzers  
Extractive FTIR CEM Systems



## Delta F Corporation

Oxygen Analyzers

## z zellweger analytics

z astro TOC Analyzers

z polymetron pH, Conductivity,  
Silica, Oxygen, Sodium,  
Chlorine, Ozone, Hydrazine,  
Phosphates, Nitrates, Titrators

z BTG polymetron Turbidity Analyzers  
Suspended Solids Monitors



## Innovative Sensors, Inc.

Industrial pH/ORP Sensors



Shamrock Transportable CEM Systems  
Environmental Low Cost CEM Systems

## AEM SYSTEMS

Sampling Systems for  
Liquid and Gas : Process,  
Effluent, Boiler Feedwater,  
Ambient Air and Emission

## PROSIGMA ANALYTICS INC.

### Toronto

4141 Dixie Road,  
PO. Box 61  
Mississauga  
Ontario L4W 4X9  
Tel.: 905 206 0921  
Fax.: 905 206 1361

### Montréal

1051 Ave. St-Charles,  
Suite 106  
Vaudreuil-Dorion  
Québec J7V 8P5  
Tél.: 514 455 8185  
Fax: 514 455 8984

# Dräger

## Gas Detection

### Stationary Systems

#### Toxic Gases and Vapours

CO, H<sub>2</sub>S, CL<sub>2</sub>, CO<sub>2</sub>, NH<sub>3</sub>, O<sub>2</sub>  
HCL, HCN, NO<sub>2</sub>, PH<sub>3</sub>, SO<sub>2</sub>  
and many others

#### Combustible Gases

Methane, propane, solvents;  
over 400 different gases

♦ ♦ ♦

### Portable Monitors

Single and multi-gas monitors;  
Evaluate worker exposure;  
Confined space entry

♦ ♦ ♦

### Dräger Tubes

Detect over 500 different gases  
quickly, simply, accurately

♦ ♦ ♦

### Dräger CMS

Revolutionary measurement system,  
gas testing on a Chip

### Draeger Canada Ltd.

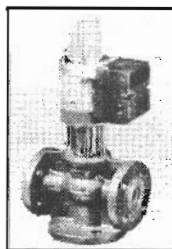
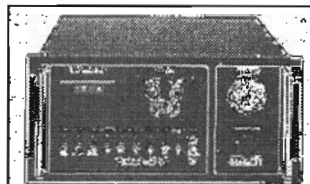
7565 Danbro Crescent  
Mississauga, Ontario L5N 6P9  
Tel. 905-821-8988 Fax 905-821-2565

# INDUSTRIAL TECHNICAL SERVICES



Dedicated/multi-function calibrators for every application. Low cost, easy to use, measured/simulated, LCD display, I.S. models.

J.U.M. Heated Hydrocarbon analyzer for high accuracy, sensitivity and stability. Methane and non-methane.

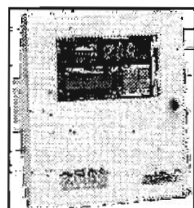


Magnetic modulating control valve:  
 \* 4-20 mA/0-10 DC in.  
 \* Fast acting  
 \* High turn down  
 \* Water/steam  
 \* Refrigerants



Zirconium Oxygen Analyzer

Small detachable sensor for easy serviceability. Microprocessor analyzer. Temps. to 2900°F. Combustion efficiency & RS485.



2395 Cawthra Rd., Unit 8, Mississauga, L5A 2W8 Ph:(905)275-2717 Fax:(905)275-2724 Toll Free: 1-888-487-8677  
 Local Rep: BSP Instruments, Wallaceburg John Eydt Ph:(519)627-8505 Fax:(519)627-7016



**WIKA INSTRUMENTS CANADA LTD.**

**Pressure, Vacuum and Specialty Gauges  
 Pressure Transmitters and Transducers  
 Digital Indicators, Chemical Seals**



**Precision General Inc.**



**Instruments, Inc.**



- Needle Valves • Block and Bleed Valves • Mini Valves
- Manifold Valves • Direct Mount Manifold Systems

145 Mayfair Dr., Sarnia, Ontario N7S 1L3  
 TEL: (519) 344-1339 FAX: (519) 344-1339

- Bimetal Thermometers
- Gas and Vapor Actuated Thermometers
- Thermowells

1535 Meyerside Dr., Unit 6, Mississauga, ON L5T 1M9  
 TEL: (905) 795-1677 FAX: (905) 795-1669



P.O. Box 386  
 Sarnia, Ontario N7T 7J2

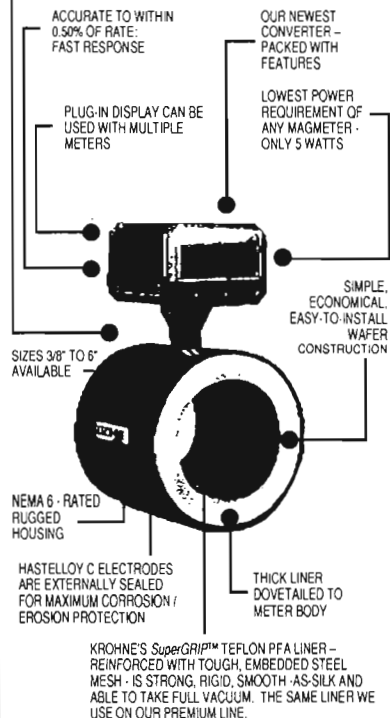
JOE LAWLESS  
 ED VANDEN EYNDE  
 RANDY HADDON  
 BRIAN DAVIDSON

Phone: (519) 336-3453  
 Fax: (519) 336-1537

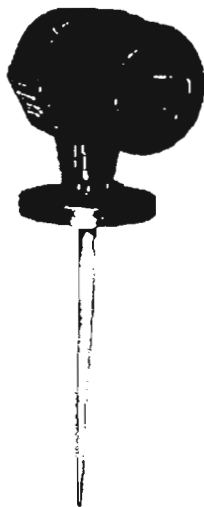
# NEW... from Krohne!

## **EcoFLUX™** **Low-Cost, Wafer** **MAGMETER**

### UNCOMPROMISED QUALITY AND PERFORMANCE... AT VERY LOW COST



## Food & Pharmaceutical PROCESS LEVELS



### **Krohne's New BM 70** **Wave Stick**

Here is a unique new, non-contact way to measure levels in closed process and storage vessels. Based on the widely used MB 70 LEVEL-RADAR gauge, the Wave Stick features a compact, tapered TEFLON PTFE probe, and is ideal for use in food and pharmaceutical processing applications.

#### **KEY FEATURES:**

- All parts in contact with process & tank atmosphere made of food grade TEFLON PTFE
- Clean-In-Place / Steam-In-Place capability
- Suitable for tank height from 0 to 30 ft. Process Measurement to within 8" of vessel top.
- Easy to install - compact fittings (2" ANSI/ 3" Tri-Clamp)
- Radar-based system provides high accuracy measurement, even under difficult process conditions.
- Low power consumption.
- Furnished with remote configuration, providing for long-distance data transmission via smart digital interface.

For the latest in Flow & Level Measurement  
call Moore Products Co. (Canada) Inc.  
Canadian Distributor for Krohne.

P.O. Box 370 Brampton, ON L6V 2L3  
Phone: (905) 457-9638 Fax: (905) 457-4182





## CB ENGINEERING (EASTERN) LTD.

P.O. Box 2523  
Sarnia, Ontario N7T 7H9  
Tel: (519) 337-1350  
Fax: (519) 337-3105  
Sales & Service: 1-800-99-CBENG

### OFFICES ACROSS CANADA

• CALGARY • SARNIA  
• EDMONTON • TORONTO  
• MONTREAL • VANCOUVER  
• WINNIPEG



BLH Electronics Canada

FORCE AND WEIGHT MEASUREMENT.  
BATCH/WEIGHT CONTROL SYSTEMS.  
WEB TENSION MEASUREMENT & CONTROL.



ADVANCED KVM SWITCHES FOR  
CONSOLIDATING CONTROL OF MULTIPLE  
COMPUTERS.



INDUSTRIAL FIRE & GAS DETECTION SYSTEMS  
HAZARD EVENTS MONITORING.  
SLICKWATCH OIL SLICK DETECTOR.



TURBINE METERS.  
LOW FLOW METERS (0.001 GPM).  
CALIBRATORS/FLOW PROVERS.



CONTINUOUS EMISSIONS MONITORING  
SYSTEMS



INDUSTRIAL COMPUTERS AND MONITORS  
DATA COLLECTION SYSTEMS.

## Intellution

PC BASED SCADA & MMI SOFTWARE FOR  
32 BIT WINDOWS APPLICATIONS.



VORTEX/MASS/MAGNETIC FLOWMETERS.  
RECORDERS/CONTROLLERS.  
PRESSURE/TEMPERATURE TRANSMITTERS.  
O<sub>2</sub>/pH/ORP/D.O./CONDUCTIVITY ANALYZERS.



HIGH ACCURACY MAGNETIC LIQUID LEVEL  
TRANSMITTERS.  
SEAL FLUID SUPPLY TANKS (SEAL POTS).



COMPLETE VALIDATION SYSTEMS FOR  
SENSOR CALIBRATION, PROCESS VALIDATION  
AND DATA COLLECTION.  
VOICE ALARMING.



INSULATED/HEATED INSTRUMENT  
ENCLOSURES.  
INSULATED/HEATED TUBING BUNDLES.



PC BASED REAL-TIME CONTROL SOFTWARE.



**Proud To Serve You Locally**

**SAMSON**

*1907 - 1997*

**Control Valves**

**Actuators**

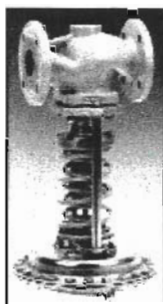
**Valve Accessories**

**Steam Conditioning Stations**

**Process Instrumentation**

**Self Operated Regulators**

**Valve Repair Centre**



**24 HR DELIVERY AND SERVICE**

**SAMSON CONTROLS INC.**

**TOLL FREE 1-800-7-SAMSON**

**(1-800-772-6766)**

**Tel: (519) 464-6018**

**Fax: (519) 246-1460**

**SAMSON**

***You Can Depend On Us***



**CTH INDUSTRIAL CONTROLS ONTARIO LTD.**  
 45 Bramalea Road Suite 210 Brampton Ontario L6T 2W4  
 Telephone (905) 792 6829 Fax (905) 792 6902



#### **ACTION INSTRUMENTS**

- Limit Alarms
- Signal Conditioners
- Transmitters
- Indicators

#### **AFE Technologies Inc.**

- Touch Screens
- Graphic Display Systems
- Datapanels



- Data Collectors and Loggers
- Smart Networked Signal Conditioners
- Multiplexers



- Pressure Switches
- Temperature Switches
- Flow Switches
- Pressure Transducers

#### **DIXSON, inc**

- Indicating Bargraphs and Alarms
- Horizontal and Vertical Units
- Programmable Configurations
- Nuclear Qualified Indicators



- Weight Controllers
- Rate Controllers
- Batching Systems
- Load Cells



- Corrosion Proof Thermoplastic Products
- Manual & Actuated Ball Valves
- Manual & Actuated Butterfly Valves
- Single and Duplex Bag Filters



- Incremental and Absolute Encoders
- Linear Scale Encoders
- Single to Six Axis Controllers

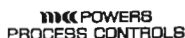


#### **SEMITRONIC**

- Frequency Transducers
- Current Transducers
- Voltage Transducers
- Hall Effect Sensors



- Industrial Computers
- Shoebox Computers
- Operator Workstations
- CPU Boards 486 P5



- Single and Dual Loop Controllers
- Auto/Manual Control Stations
- Recorders



- DC Voltmeters
- Process Monitors
- Frequency Meters
- Counters



- Signal Conditioners
- Power Supplies



## **YOUR ISA MEMBER BENEFITS**

You receive many benefits as an ISA member. In addition to developing valuable contacts with others in the instrumentation field through **Section Activities**, ISA offers . . .

**Division Activities**—An opportunity to join any of 24 technical interest divisions that keep you current in your particular field.

**Directory of Instrumentation**—A free annual guide of products, manufacturers, services, trade names, sales offices and more.

**Standards and Practices**—International industry guidelines that help improve performance and communication, reduce costs and promote safety. Free as issued.

**Leadership Development**—Educational programs and materials designed to enhance your leadership skills in preparation for Society and career advancement.

**Instrumentation Publications**—Over 400 publications and educational aids available at member discounts.

**INTECH**—The leading international journal of instrumentation that keeps you up to date every month—free.

**Inside ISA**—A free publication supplement that highlights member activities.

**Technical Training Courses**—An opportunity to update your technical skills at member discounted rates.

**Symposia, Conferences, Exhibits**—Forums that allow you to discuss practical applications with engineers, scientists, educators, researchers and technicians.

**Peer Recognition**—ISA honors and awards that acknowledge outstanding achievements.

**Resume Referral Service**—Free employment assistance to unemployed members.

**Optional MasterCard, Insurance**—An opportunity to get a MasterCard or sign up for supplemental insurance at low group rates.

FOR MORE INFORMATION ON ISA MEMBER BENEFITS, CONTACT:  
**Instrument Society of America**

67 Alexander Drive, PO Box 12277 • Research Triangle Park, NC 27709 • (919) 549-8411



ControlAir Inc.



J.M. CANTY, INC.



## PRODUCTS

ACTUATORS  
 AIR CYLINDERS  
 ANNUNCIATORS  
 BLEEDER CLEANERS  
 BTU METERS  
 CAMERA SYSTEMS  
 CONTROL VALVES  
 CONTROLLER (Batch)  
 CONTROLLER (Pressure)  
 CONTROLLER (Temp.)  
 CONTROLS  
 DIGITAL PROCESS INDICATOR  
 ELECTRIC ACTUATORS  
 FLOW INDICATORS  
 FLOW MONITORS  
 FLOW METERS  
 FLOW SWITCHES  
 FLOW TOTALIZERS  
 FLOW TRANSMITTERS  
 GRAPHIC DISPLAY  
 INDICATORS  
 INSTRUMENT AIR FILTER REG.  
 ISOLATORS  
 LEVEL INDICATION-CONTROL  
 LIGHTING (Vessel)  
 PIPE SPREADER  
 PRESSURE BOOSTERS  
 PRESSURE CONTROLLER  
 PRESSURE INDICATORS  
 PRESSURE REGULATORS  
 PRESSURE SWITCHES  
 PRESSURE TRANSDUCERS  
 PRESSURE TRANSMITTERS  
 REGULATORS  
 RTD's  
 SIGNAL CONDITIONERS  
 SIGNAL CONVERTERS  
 SIGHT GLASSES  
 TEMPERATURE INDICATORS  
 TEMPERATURE CONTROLLERS  
 TEMPERATURE SWITCHES  
 TRANSDUCERS  
 TRANSMITTERS  
 THERMOCOUPLES  
 VISION SYSTEM (Camera)  
 VALVE ACTUATORS  
 VALVES (Backpressure Relief)  
 VALVES (Control)  
 VALVES (Regulators)  
 WIND SPEED MONITOR



Contact the  
 Newsletter  
 Team for  
 Details!

6 LANSING SQUARE, SUITE 120  
 NORTH YORK, ONTARIO M2J 1T5  
 PHONE: (416) 499-8904  
 FAX: (416) 499-5381

# Qualified Buyers & Quality Suppliers

## Complete the Loop

at Canada's largest and most  
complete exposition of measurement  
and control technology.



**1997 ISA Instrument Show, Toronto Section • May 6, 7, 1997**  
The International Centre (Airport), Toronto, Ontario

### Experience Everything NEW

- Discover New Ideas, New Technology and New Solutions
- Bring your Imagination. Bring your Questions. **BRING YOUR TEAM!**

**SEE AND COMPARE:** • New Equipment • New Products • New Services

**TORONTO ISA '97 IS THE PERFECT PLACE TO:** • Explore, Collect New Information

- Examine Options • See Live Demonstration • Discover New Suppliers • Improve your Operations
- Increase Profits • Negotiate your Best Deals on New Equipment, Products or Services

**FOR MORE INFORMATION CALL:** Dan Mustata, Exhibit Sales at (416) 442-2023 or

Chris Seecy, Show Manager at (416) 442-2026/1-800-268-7742 (Cda), 1-800-387-0273 (U.S.A.) FAX: (416) 442-2207



## ISA Instrument Show

Sponsored by the Instrument Society of America, Toronto Section

**REGISTER NOW & SAVE \$5.00!** Advance price \$5.00 (\$10.00 onsite) GST inc.  
Complete this form and faxback to (416) 740-2580 or by mail with cheque (payable to  
1997 ISA INSTRUMENT SHOW - See address below) OR pay by credit card - **\$5.00 per  
registration (No Cash Please).** Your badge will be mailed to you in advance of the Show.  
**Deadline for pre-registering is April 10th, 1997. ACT NOW...REGISTER TODAY!**

PLEASE PRINT CLEARLY INCOMPLETE INFORMATION WILL DELAY YOUR SHOW BADGE

NAME (FIRST) (SURNAME) TITLE

COMPANY DIVISION

ADDRESS

CITY PROV./STATE POSTAL CODE

TELEPHONE FAX

CREDIT CARD NUMBER EXPIRY DATE

ADDITIONAL NAME (SEE ADJACENT SIDE FOR CODES) JOB CLASSIFICATION / BUSINESS CLASSIFICATION

ADDITIONAL NAME (SEE ADJACENT SIDE FOR CODES) JOB CLASSIFICATION / BUSINESS CLASSIFICATION

ADDITIONAL NAME (SEE ADJACENT SIDE FOR CODES) JOB CLASSIFICATION / BUSINESS CLASSIFICATION

### PLEASE COMPLETE BOTH SECTIONS

#### Job Classification (Check One)

- ☐ P - Product Design Engineering including applied R & D  
☐ S - Systems Design Engineering including applied R & D  
☐ D - Production Engineering  
☐ E - Plant Engineering or Maintenance  
☐ F - Software Engineering  
☐ G - Plant Information Systems

- ☐ H - Systems Integration  
☐ I - Measurement, Testing, Quality or Standards  
☐ J - Basic Research & Development  
☐ K - Technical or Engineering Support Operations  
☐ M - Purchasing or Procurement  
☐ N - Education or Training  
☐ O - Marketing or Sales

#### Business Classification (Check One)

- ☐ 01 - Petroleum, Gas, Mining  
☐ 02 - Food, Beverages, Tobacco  
☐ 03 - Textile Products  
☐ 04 - Pulp, Paper, Wood Products  
☐ 05 - Chemicals, Drugs, Plastics  
☐ 06 - Nuclear Products  
☐ 07 - Ceramics, Glass & Clay  
☐ 08 - Primary Metals  
☐ 09 - Machinery (except Electrical)  
☐ 10 - Electrical Apparatus  
☐ 11 - Aerospace & Ordnance  
☐ 12 - Instrumentation Systems  
☐ 13 - Computers & Peripheral Equip.  
☐ 14 - Electrical Measurement  
☐ 15 - Telemetry Comm. Equipment  
☐ 16 - Electronic & Electric Equip.  
☐ 17 - Process Control Instrumentation (except valves)  
☐ 18 - Analytical & Optical Instrum.  
☐ 19 - Control Valves, Regulators  
☐ 20 - Fabricated Metal & Plastic Prod.  
☐ 21 - Transportation Equipment including Automobiles  
☐ 22 - Utilities  
☐ 23 - Engineering & Construction  
☐ 24 - R & D or Consulting  
☐ 25 - Government including Military  
☐ 26 - Instrum. Repair Sales & Service  
☐ 27 - Education  
☐ 28 - Medical Research  
☐ 29 - Software or Integration Services

#### MAIL TO: ISA Instrument Show

c/o Conexsys Toronto, P.O. Box 386,  
Station B, Etobicoke, Ontario M9W 5L4

ISA 0123



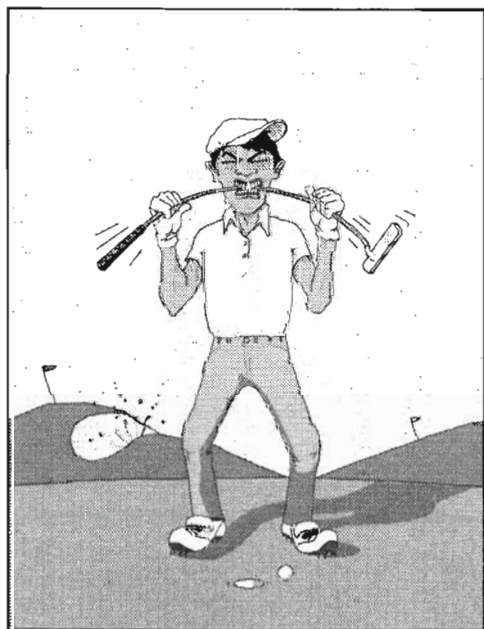
*The Third Annual*  
**ISA SARNIA SECTION**  
**GOLF TOURNAMENT**

**Date:** Friday, June 20, 1997

**Place:** St. Clair Parkway

**Cost:** \$50.00

**Tee Off:** 7:30 a.m.



Your Executive wishes to provide a fun day for all members and potential members with our third annual golf tournament. It will be an open invitational and our objective is to have everyone enjoy themselves whether they happen to be serious or simply a once a year golfer. The tournament will include green fees, dinner and prizes. Start lining up your team partners. More details will be forth coming as they become available. Mark down the date and let's make this years tournament a great success.

# ISA Sarnia Section “Dinner Meeting Notice”

**Monday, March 31, 1997**

**Sarnia Golf & Curling Club**

**500 Errol Road West, Sarnia**

**Phone: (519) 336-2201**

**Cocktails 6:00 p.m. Dinner 7:00 p.m.**

**All Guests are Welcome!**

## **GUEST SPEAKER**

**Ed Chovanec, FIKE CANADA, INC.**

**Topic: RUPTURE DISK OVERVIEW**



**Also...** TubeTech Ltd., Lakeside Process Controls Ltd. and Brian Controls will be manning table top displays during our cocktail hour and immediately after our dinner meeting. This event will be a regular feature at our dinner meetings. Vendors are requested to contact Bob Kelly or Chuck Douglas if interested in presenting their products at this time.



## **M • E • N • U**

**Vegetable Soup**

**10 oz. Steak**

**Baked Potato and Mixed Vegetables**

**Cherry Pie**

## **NOTE: KINDLY BOOK BEFORE DEADLINE INDICATION**

**Please phone in your reservation by Thursday, March 27**

**to either Gayle at Provincial Controls... 336-7301**

**or Maureen at Willer Engineering... 336-3006**

**Members \$10 • Guests \$15**

**Note: ALL Members and guests are requested to reserve in advance.**

**Please oblige... we need your support to plan your evening!**

# Meeting Dates

## EXECUTIVE MEETINGS

Date	Time	Place
April 28, 1997	7:00 p.m.	Sarnia Golf and Curling Club
June 23, 1997	T U R N O V E R   M E E T I N G	

## MEMBERSHIP DINNER MEETINGS

Cocktails at 6:00 p.m.   Dinner at 7:00 p.m.

Held on the Last Monday of the following months:

Date	Place
March 31, 1997	Sarnia Golf and Curling Club
May 26, 1997	A W A R D S   /   R E C O G N I T I O N   N I G H T

# Dinner Meeting Comments

Brent McLellan, Canadian Sales Manager of Swagelok of Canada Limited, our guest speaker at January 27, 1997 Dinner Meeting, provided an informative and interesting address on the topic of industrial leakage. Some eighty-five members and guests enjoyed the presentation on "Energy Management and How It Relates to Leakage". The data provided displayed some thought provoking savings that can be achieved.

## *Upcoming Dinner Meeting Guest Speaker Information*

The guest speaker for the March ISA Dinner Meeting will be Ed Chovanec, Regional Manager for FIKE Canada Inc. The address will cover rupture disc overview, definition and capabilities. His discussion will provide important disc design parameters and applications re: where to use a disc instead of a valve.

**NOTE:** Mark your calendars now regarding our Awards / Recognition Dinner Meeting!

Date	Guest Speaker	Topic
May 26, 1997	Brian Cunliffe (RBC Dominion Securities)	Inevitable Surprises

The May Dinner Meeting will feature a special menu (Surf and Turf) to highlight our annual spouses / significant other dinner. Plan now to attend this popular event.

# LOG ON TO THE WORLD OF MEASUREMENT AND CONTROL

**ISA ONLINE Now Available. Try It Today!**

- Network with peers **WORLDWIDE.**
- Get answers to questions.
- Participate in forums.
- Find products and services to meet your needs...all from your keyboard.

ISA moves onto the information superhighway with on-line services with an exciting new communication channel - **ISA ONLINE**. Expand your knowledge and get to know your peers as you participate in technical forums. Build your own "network" through Internet e-mail. Find the training you need to stay competitive. Read the latest news for measurement and control by accessing **INTECH, Industrial Computing, or Motion Control** on-line magazines.

Find the new arenas for discussion in our calendar of industry events and meetings.

And there's much more.

**Dial in Today:  
(412) WORLDISA**

**ISA OnLine Connection Information**  
Telephone 412/967-5347  
300-19200 Baud supported  
8 bits, no parity, 1 stop bit  
VT100, ANSI, RipScript terminal support  
or Telnet to isa.industry.net



The International  
Society for  
Measurement  
& Control

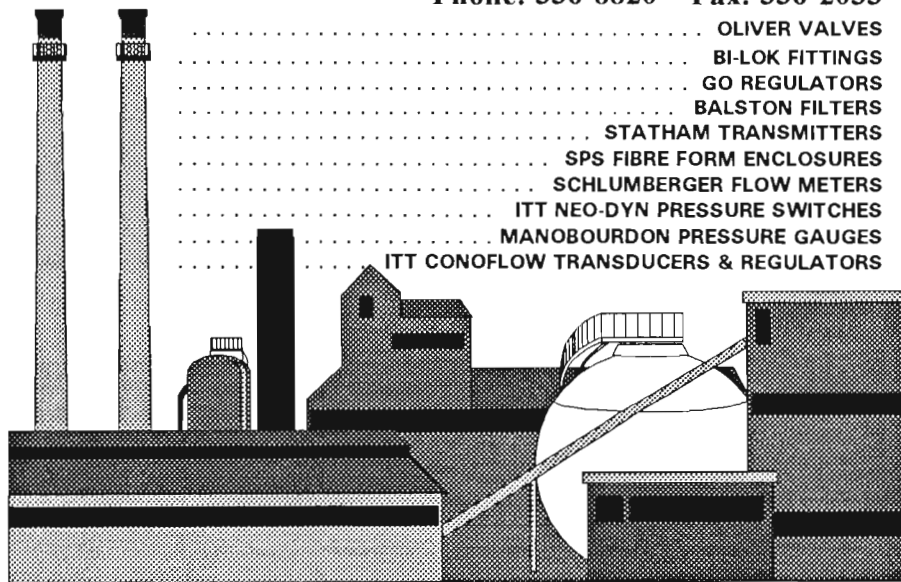
Need help? Call ANN (412) 967-3500 and ask for ISA Online Tech Support.

## SARNIA PIPING SPECIALTIES LTD.,

765 EVETT ST. P.O. Box 2018, Sarnia, Ontario. N7T 7L5

**Phone: 336-8820 Fax: 336-2033**

- ..... OLIVER VALVES
- ..... BI-LOK FITTINGS
- ..... GO REGULATORS
- ..... BALSTON FILTERS
- ..... STATHAM TRANSMITTERS
- ..... SPS FIBRE FORM ENCLOSURES
- ..... SCHLUMBERGER FLOW METERS
- ..... ITT NEO-DYN PRESSURE SWITCHES
- ..... MANOUBOURDON PRESSURE GAUGES
- ..... ITT CONOFLOW TRANSDUCERS & REGULATORS





# CONTRO VALVE INC. SERVICE & REPAIR CENTER

Contro Valve Inc. is your exclusive Dresser authorized full service MARC/GTC® Repair Center for all of your control and relief valve repair needs.



## **MARC Program - Masoneilan Authorized Repair Center**

- Complete in-house or on-site repair or overhaul of all control valves
- Field Diagnostic Testing Unit for in-line control valve analysis



## **GTC Program - Green Tag Center**

- Complete in-house or on-site repair for all pressure relief valves
- Electronic Valve Tester (EVT) for in-place valve performance analysis
- Field Reseating Machine
- Set and test facilities for air, liquid and steam service

---

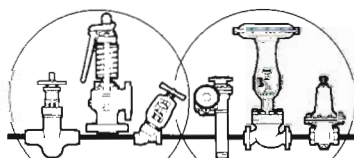
Contro Valve is your source for Dresser's Masoneilan®, Consolidated®, Hancock®, Dewrance® and Nilcor® valves and instrumentation.



CONTRO VALVE INC

907 Michigan Avenue, Pt. Edward, Ontario N7V 1H2

Tel.: (519) 344-4300 or Fax: (519) 344-0042



**Dresser Valve & Controls**

# ISA PERSPECTIVES



## Sarnia Section **1997 ISA Instrument Show**



Autotech  
BJ Software  
Balluff  
Barber Colman  
Carlo Gavazzi-Dupline  
Danfoss  
Dwyer  
Dynapar  
Eagle Signal  
Electromatic



ISO 9002 - 1994

**Davis Controls**  
LIMITED

TEL (905) 829-2000

FAX (905) 829-2830

London, Ont. Tel/Fax (519) 541-6953

Emco  
Hycal  
Klinger  
Mercoid  
Mitsubishi  
Uticor  
Veeder-Root  
Warrick

**CANTECH**

**CANTECH CONTROLS**

DIV. OF CANTECH CORPORATION

*"Serving industry with dependable measurement and control equipment"*

**Sarnia Office**

**Phone - (519) 332-6162**

**Fax - (519) 332-3944**

**ANDERSON GREENWOOD** - Instrument Manifolds, Gauge & Hand Valves, Metal/Soft Seated Spring Loaded & Pilot Operated Relief Valves, Rupture Disks

**CANTECH SYSTEMS** - Heat Tracing Controllers

**CEMCO** - Level Controls, Check Valves, Dump Valves, Throttling Valves

**CHECKPOINT SYSTEMS** - Chemical Injection Pumps

**CUTLER-HAMMER** - PB's, Starters, Contractors, VFD's, MCC's, Photo. & Prox. Sensors, PLC's  
Electrical Distribution Products

**CUTLER-HAMMER IDT** - Man Machine Interfaces and Industrial Computers

**DEVAR** - Signal Conditioners, Transmitters, Indicators

**DWYER** - Gauges, Level, Pressure, Temperature & Flow Instruments, Valves

**F.W. MURPHY** - Level, Vibration, Temperature & Pressure Switch Gauges

**G.H. FLOW** - Turbine Flow Meters

**GULF VALVE** - Wafer Check Valves

**INTEMPCO** - Temperature Sensors, Transmitters, Thermowells

**KEYSTONE** - Ball Valves and Actuators

**MICON** - Compressor Control Systems

**NEOTRONICS** - Confined Space Monitors

**OGONTZ** - Temperature Control Valves, Steam Traps

**OLDHAM** - Portable & Fixed Gas Monitors, Laser Opacimeters

**PENNY & GILES** - Paperless Chart Recorders

**RAYCHEM / CHEMELEX** - Electrical Heat Tracing  
Tracetek Leak Detection Systems, Monitoring Systems

**REOTEMP** - Bimetal Thermometers, Temperature Gauges

**SCIENTIFIC LININGS & COATINGS** - Weather Caps for Relief Valves

**SKINNER** - Solenoid Valves

**STRAHMAN** - Drain & Sampling Valves, Stem / Water Mixing Systems

**WOOD** - Flow, Level & Pressure Transmitters

*Cantech also provides Service, Repair & Rental for our Relief Valves,  
Gas Monitors and Video Control Panel.*

*2 for 1 anyone?*

**Problem :** You have one line to carry two 4-20mA signals,  
installing a new line is a hassle.

**Solution :** Key 90A/92A two channels/one line transmitter/receiver.

**From:** TechNorth Canada, PO Box 1082, Sarnia N7T 7K2  
Tel. 541 1720 Fax. 541 1721 E-Mail : flk@mail.cwconnect.ca

## Multi-function wiring devices save space, install faster, service easier.

Multi-function wiring devices from Phoenix Contact are designed to be a compact and cost efficient means of packaging many functions in today's space-efficient control systems — each function is packaged in only 1/4 inch (6.2 mm) width.

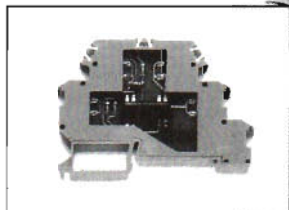
These DIN-rail mounted, modular blocks feature dead-front construction and captive screw-clamp termination for safe, reliable installation — in a snap. Phoenix Contact has the broadest line of multi-function wiring devices and feed-thru terminal blocks in the industry.

The grouping at right is only a sampling of the many application solutions available.

For application assistance, or a copy of our newest catalogue, call or fax.

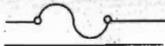
PHOENIX CONTACT LTD.  
235 Watline Ave.  
Mississauga, Ontario L4Z 1P3  
Phone: (905) 890-2820  
Fax: (905) 890-0180

**1-800-890-2820**

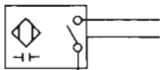


SMD technology allows relay isolation and contact ratings up to 3A in a terminal block only 1/4 inch (6.2 mm) wide.

Better space utilization for fused circuits.



Three or four wire sensors.



Fuse protection on analog signals.



Circuit testing or troubleshooting.



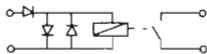
Thermocouples.



Status indication for current loops.



Relay isolation.



PHOENIX CONTACT

ISO 9002-1987



Cert # 002077

MISSISSAUGA, ONTARIO

**PHOENIX CONTACT**



## Axiom Technologies Limited

LONDON  
CHATHAM  
WINDSOR

Tel: (519) 351-2621

Fax: (519) 351-0117

Toll-Free: 1(800) 872-8018

# OMRON.

Timers, Counters, Relays, Intelligent Panel  
Meters, Process Controllers, PLC's,  
Temperature Controllers, Proximity Sensors,  
Photoelectrics, Laser Measurement Systems,  
Ultrasonic Sensors, Operator Interface  
Terminals.

# PHENIX CONTACT

Trabtech Surge Protection, Signal Conditioners,  
Power Supplies, High Density Terminal Blocks,  
Custom Interface Modules, Electronic Modules,  
Varioface Interface Modules.

# *Klockner* MOELLER

Power Distribution and Motor Control  
Components.

# INDUSTRIAL PROJECTS LTD.

204-7100 Woodbine Ave.

Markham, ON L3R 5J2

Tel: (905) 477-0017 Fax: (905) 477-1495

## Representing...

- © Conant Controls Inc.
- Selector Valves
  - Venting Valves
  - Stack Valves
  - Electric & Pneumatic Operators
  - Specials, Name Plates



- In-line Refractometers
- Black Liquor Analyzers
- Stock Consistency Transmitters
- Wire Gauges
- Beverage Analysis System



- Toxic and Combustible Gas Monitors



- Annunciators, Temperature and Vibration Monitors, Two and Four Wire Transmitters, Lamp Cabinets, Graphic Displays, Motion Detection, Leak Detection, Intrinsically Safe Barriers, Calibrators, Sequence of Events, Recorder, Current to Pressure Transducers, P to I Convertors, Smart/Programmable 2 Wire Transmitters, Signal Conditioners, Isolators, Nuclear Measurement - Density, Level, Mass Flow and Weight



- Pressure, Differential Pressure and Temperature Switches
- Pressure and Temperature Transmitters
- Smart/Hart Pressure, Differential Pressure, Flow, Gauge and Level Transmitters
- Float, Displacer, RF Probe and Ultra Sonic Level Switches (Point and Multi Point), Flow Switches



- Flow Meters, Rotometers



- Pitot Tube Multiport Flow Meters



1401 Meyerside Drive, Unit A  
Mississauga, Ontario  
L5T 1G8

tel: (905) 564-3344  
fax: (905) 564-3577  
e-mail: info@imo.ca

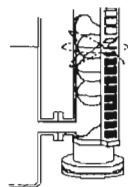


## Level Switches

Gems Sensors offers CSA approved level switches, in both Single and Multi-Float configurations. Available in Stainless Steel, CPVC, Brass, Buna N, Polypropylene, Teflon, and Polysulfone materials. A wide variety of mounting and electrical configurations are also available.

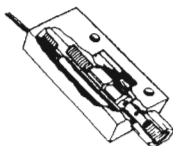
## SureSite

Gems Sensors offers CRN / ASME B31.1 or B31.3 approved Visual Magnetic Level Indicators. Pressures to 2650 psig (183 Bar), Temperatures to 750 degrees F (399 degrees C.). Available in Stainless Steel, PVC, CPVC, Polypropylene, PVDF, Hastelloy, or other exotic materials. Electronic Controls via CSA approved Switch Modules and / or Transmitters, rated for both Hazardous or non-Hazardous locations.



## Flow Switches

Gems Sensors offers CSA approved flow switches, ideal for Nitrogen purge gas seal applications. Available in a wide variety of flow settings from 50 cc/min. to 100 gpm. Available in Stainless Steel, Rytan, Bronze, and Polypropylene. Rated CSA approved for both Hazardous and Non-Hazardous locations.



## NOSHOK

Noshok offers gauges with accuracy's to ANSI 1A & 2A. Pressure ranges from Vacuum to 30,000 psi. 1-1/2" to 6" diameter dial faces. Available in ABS, Bronze, Stainless Steel, and Phenolic Case materials. NOSHOK will warrant, for "THREE YEARS", all 300, 500, 600, and 700 series liquid filled pressure gauges. Call and ask for a catalogue which details all the Gauge, Diaphragm, Bi-Metal Thermometers, and Needle Valves available.





**ALPHA** Controls and Instrumentation  
your partner in solving your  
measurement and control problems.

- ★ SALES
- ★ SERVICE
- ★ CALIBRATION
- ★ REPAIRS

- ◆ Calibration & Measuring Instruments
- ◆ Controllers & Recorders
- ◆ Dataloggers
- ◆ Digital Process Meters
- ◆ Flowmeters
- ◆ Air Quality Instruments
- ◆ Humidity Instruments
- ◆ Intrinsic Safety Products
- ◆ Level Instruments
- ◆ Pressure Products
- ◆ Signal Conditioners
- ◆ Temperature Sensors & Transmitters

**ALPHA**  
CONTROLS AND INSTRUMENTATION

361 Steelcase Road West, Units 5 & 6  
Markham, Ontario L3R 3V8

Tel: (905) 477-2133  
Fax: (905) 477-4219  
Toll Free: (800) 567-8686

# FLOVAL

EQUIPMENT LTD.

SARNIA OFFICE

**THE SOURCE FOR  
ALL YOUR FLOW  
REQUIREMENTS**

MR. JOHN A. SCHNURR  
251 N. VIDAL STREET  
SARNIA, ONTARIO  
N7T 5Y5  
TEL: (519) 383-1225  
FAX: (905) 669-4905

New ISA members  
have a lot to offer.



Make a point of introducing  
yourself at the next meeting.

**WESCO**  
the extra  
effort people

DISTRIBUTION



## **VI&C** PRODUCT GROUP

### **VALVE INSTRUMENTATION & CONTROL**

- |                      |  |   |
|----------------------|--|---|
| <b>ASCO</b>          | <small>RED HAT<br/>JOUOMATIC<br/>TRI POINT</small> | SOLENOID VALVES, BRASS, ST. ST., PLASTIC<br>AIR & SOLENOID SPOOL VALVES, PISTON VALVES<br>PRESSURE & TEMPERATURE SWITCHES |
| <b>ELASTO-VALVE</b>  |  | PINCH VALVES, MANUAL & AUTOMATED<br>IN LINE PRESSURE SENSORS  |
| <b>CHEMTROL</b>      |  | PLASTIC BALL, BUTTERFLY, DIAPHRAGM VALVES<br>MANUAL & AUTOMATED   |
| <b>CONTROLAIR</b>    |  | PNEUMATIC REGULATORS, BOOSTERS<br>I/P, E/P TRANSDUCERS  |
| <b>FUJI ELECTRIC</b> |  | PRESSURE TRANSMITTERS, RECORDERS<br>FLOWMETERS, CONTROLLERS   |
| <b>IOTRON</b>        |  | pH, ORP & ION SELECTIVE SENSORS<br>FLUORIDE RESISTANT, HI-TEMP  |
| <b>PARTLOW</b>       |  | CIRCULAR CHART RECORDERS<br>PROFILE, ANALOG, PID CONTROLLERS  |
| <b>PYROMATION</b>    |  | THERMOCOUPLES, RTD'S, ASSEMBLIES<br>ELEMENTS, COMPONENTS, PROTECTION TUBES  |
| <b>RAYTEK</b>        |  | INFRARED TEMPERATURE SENSORS<br>PORTABLE & FIXED  |
| <b>TURBO</b>         |  | AC & DC PULSED MAG METERS<br>HIGH ACCURACY, LOW FLOWS   |
| <b>WESCO</b>         |  | THERMOWELLS, DIAPHRAGM SEALS,<br>GAUGE SYPHONS, PROTECTION TUBE   |
- ACCESSORIES**

# **YOUR SINGLE SOURCE FOR COST**



# WESCO

## INDUSTRIAL CONTROL PRODUCTS

### ED&C PRODUCT GROUP

ELECTRICAL DISTRIBUTION & CONTROL



### CUTLER-HAMMER CANADA

CUTLER-HAMMER &  
WESTINGHOUSE PRODUCTS

CONTACTORS RELAYS

MICRO PLC'S STACK LIGHTS

MOTOR CONTROL CENTERS

STARTERS LIMIT SWITCHES

PUSHBUTTON DEVICES

ADJUSTABLE FREQUENCY DRIVES

INDUCTIVE PROXIMITY & PHOTO

ELECTRIC POSITION SENSORS

## WESCO

### SARNIA

TEL

519-336-0722

FAX

519-336-2499

### LONDON

TEL

519-659-9990

FAX

519-415-9607

FOR  
**VI&C**  
PRODUCTS

PRICING  
&

TECHNICAL  
SUPPORT

CALL

TEL

800-547-4445

FAX

800-552-3339

## EFFECTIVE CONTROL SOLUTIONS

# Controls

## CONTROL VALVES AND INSTRUMENTATION

REPRESENTING

**VALTEK**   
CONTROLS LTD.

**DANIEL**  
INDUSTRIES CANADA

*Greyline*  
instruments inc.

 **CELTEK**  
ELECTRONICS INC

**AMOT**  
**CONTROLS**

 **Bebco Industries**  
Enclosure Protection Systems Division

 **Appalachian Controls**  
Environmental  
..... WORLD LEADER IN TANK BLANKETING .....

 **TRANSMATI<sup>ON</sup>** inc.

**kämmer**  
**Valves**

 **ATLANTIC GROUP INC.**  
Specialty Valves and Process Equipment

### SARNIA OFFICE

5-1029 SALISBURY STREET  
SARNIA, ONTARIO N7S 4N8  
Phone: (519) 541-1973  
Toll Free: (800) 268-9094  
FAX: (905) 624-1878

### MISSISSAUGA OFFICE

12-5160 EXPLORER DRIVE  
MISSISSAUGA, ONT. L4W 4T7  
Phone: (905) 624-2275  
Toll Free: (800) 268-9094  
FAX: (905) 624-1878



**ZIRCO LTD**

*Calgary, Toronto, Sarnia*

**TOLL FREE: 1-800-461-3120**

- Detonation Flame Arrestors • Vapour Tight Thief Hatches • Vent Valves • Emergency Pressure Relief vents • Complete line of Flame Arrested Burners
- Conservation Pipe-away Vents

**ENARDO**

- Oil / Water Interface Detectors • Ground Water Monitor • Net Oil Meters • Multi Phase Flow Meters

**AGAR**

- Tank Blanketing Valves
- Tank De-Pad Valves

**VALVE CONCEPTS**

- Pressure Relief Valves
- Emergency Shut-down valves

**RUPTURE PIN TECHNOLOGY**

- Petroleum Analyzers
- PPM Monitors

**WEDGEWOOD TECHNOLOGY**

- Emergency Shut-in Safety Valves

**KING VALVES**

- Sealed Tank Gauging • ARUs Temperature Controllers • High Level Shutdowns
- Tank Flanges

**ZIRCO**



# SPEC (Sarnia) Limited

Specialty Process & Environmental Company

1550 Confederation Street, Sarnia, Ontario N7W 1A3

Tel: (519) 336-2405 • Fax: (519) 336-1177

## FOXBORO

*The Intelligent  
Automation People*

## KLINGER LEVEL GAUGES

**MIH PRODUCTS DIVISION**  
JORDAN EQUIPMENT CO. INC.

*Responsive Supplier  
Since 1987*

- Level and flow measurement
- Relief disc and vents
- Heat tracing expertise
- Environmental products
- Local inventory and EDI processing of orders

## PROQUIP

- Line Blinds
- Check Valves
- Rupture Discs



Liquid Controls  
Corporation

Absolute Accountability

## MICRO WIRE PRODUCTS

(1980) LIMITED



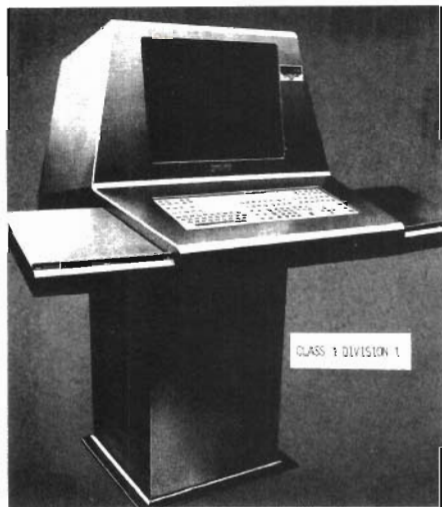
**THERMON**

**The Heat Tracing Specialists™**



Can-Ross Environmental Services Ltd.

**CAN-ROSS  
ENVIRONMENTAL  
PRODUCTS**



## CYBER SYSTEMS INC.

TEL. 905-792-6677 FAX. 905-792-7742

### PRODUCT LIST

- MTL • Intrinsically Safe Barriers
- A.H. Emery • Hydraulic Load Cell Weighing Systems
- Fuller • Electronic and Pneumatic Liquid Filling Systems
- Hillcroft • IS Earth Proving Unit • for tanker trucks etc.
- RGS • Intrinsically Safe Valves
- Lorod • Unique, Full-bore Valves and Instrument Isolators
- Expo Safety Systems, Purging and Pressurisation

For Div 1 and Div 2, the Mini-X and Mini-Z -Purge Systems are fully pneumatic in operation, and conform to North American Standards, NFPA 496-1993.

They are acceptable to Ontario Hydro, for installation in Ontario.

### TYPICAL APPLICATIONS

Computer Monitors & Terminals.  
Programmable Controllers.  
19" Rack Apparatus.  
Panels & Switchgear

Chart & Data Recorders.  
Gas Analysers.  
Motor Control Centers.  
Condition & Monitoring.

# SENTRY...

*The only name you need to know for  
Sample Conditioning Equipment.*

- Sampling and analysis systems for fossil, nuclear and co-gen plants.
- Pre-engineered single point sampling stations.
- World's largest supplier of sample coolers.
- Unique rod in tube pressure reduction devices.
- Packaged cooling water systems.
- Precise temperature control units.
- Spiral Tube Heat Exchangers.



**Sentry Equipment Corp.**

Phone: 414-567-7256

Fax: 414-567-4523



## **Fryston Canada Incorporated**

7370 Bramalea Road, Suite #30

Mississauga, ON L5S 1N6

Phone: 905-612-0566 or 1-800-387-7503

Fax: 905-612-0575

## **Complete Water Quality Monitoring Systems**

## **From alkalinity to zinc —**

*Hach's direct-reading instruments,  
single-dose reagents, clear  
instructions, and proven methods  
make water testing convenient.*

- **Test Kits.** Over 200 single- and multiple-parameter water testing kits
- **Portable and Laboratory Instruments.** Reliable colorimetric, pH, ISE, and turbidimetric instruments that provide accurate results
- **Process Systems.** Complete on-line systems to monitor turbidity, pH, chloride, hardness, silica and more



## **Fryston Canada Inc.**

7370 Bramalea Road  
Suite 30

Mississauga, ON L5S 1N6

Telephone: 905-612-0566

Fax: 905-612-0575



The International Society  
for Measurement and Control

## GROUP INTERNET RATES

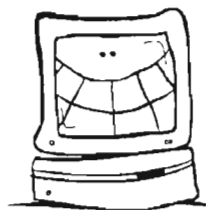
Our ISA Group rate at Electro-Byte is being reviewed. If your account is coming due, please let me know (email: [bsmith@ebtech.net](mailto:bsmith@ebtech.net)). I would like to know how many hours per month you normally use. Our original group account is \$10/month for 10 hours. (3 month contract = \$32.10 incl. GST). Extra hours cost \$1.00/hour. If you use more than 20 hours per month I would recommend switching to the normal 3 month contract, which costs \$64.50 including GST for 50 hours / month. Electro-Byte is offering free classes for New Users, Intermediate Users, Search Engines, Chat Programs and E-mail Programs.

**The Sarnia Section Home Page can be found at:**  
**<http://www2.ebtech.net/~bsmith/isasarni.html>**

## SARNIA SECTION BBS UPDATE

As of February 16th the BBS has received 1563 calls. There have been 544 messages in the Main Board conference, 1298 downloads and 35 uploads. There have been three new callers since the last report. If you are looking for a copy of the latest Internet WWW Browser from Netscape or Microsoft call the BBS and download it for free. There are also copies of other popular Internet programs plus copies of Instrument Sizing and selection programs. The BBS phone number is (519) 541-0427.

If you would like to learn more about the BBS and are interested in participating in a BBS seminar please let me know by calling...  
(519) 332-1212 x7920.



# *Safety Instrument Systems Course*

Harry Cheddie made a presentation on this subject at the November 25th dinner meeting. He offered to instruct a course if there is enough interest. The course would include more detailed information about designing safety interlock or instrumented systems. The current and developing standards would also be covered in more detail.

***If you are interested in attending this course or have questions about it, please contract our education chairman Kalpen Vachharajani by phone at ...***

***332-0160 ext. 281 or fax at 332-1186.***

## **“INTERNET *Tips & ISA* *Online* UPDATE”**

**Tips:** When typing an URL into your browser you do not need to type in the “http://”. Just type [www.isa.org](http://www.isa.org) for example.

When using an internet search engine that returns too many hits from your search, type specific information inside of “double quotations”.

This designates the text as a text string that the search engine must find an exact match for. It does not look for matches to the individual words.



ISA Online is developing a special area called “For Members Only”. This area is only available to ISA Members by entering a name and password. The information available is supposed to be similar to that which only members are provided. Up to now ISA Online has been completely open to anyone on the Internet. There have been a number of proposed items for members only. These include copies of technical papers that are at least one year old, ISA Standards, Magazine articles and newsletters.

List of Instrument / Electrical Manufacturers and Suppliers: I have constructed a web page that lists directories of companies and individual company web sites in the Instrument, Electrical and Process Control fields. The ISA Directory of Instrumentation and Thomas Register are examples of online directories that can be searched. It is listed in the table at the top of my home page at [www2.ebtech.net/~bsmith](http://www2.ebtech.net/~bsmith) or you can type in [www2.ebtech.net/~bsmith/vendors.html](http://www2.ebtech.net/~bsmith/vendors.html). The ~ is call a “Tilde” and is the upper character with the ` key.

Brian Smith

Internet: [bsmith@ebtech.net](mailto:bsmith@ebtech.net)  
[smithb@novachem.com](mailto:smithb@novachem.com)

Home Page: [www2.ebtech.net/~bsmith](http://www2.ebtech.net/~bsmith)



**Process Measurement • Control & Environmental Instrumentation**

1045 South Service Road West, Oakville, Ontario L6L 6K3

Tel: (905) 847-2740 Fax: (905) 827-6984

**Valve** *PMV* • Pneumatic & NEMA 4X or Class 1 Div 1 EXP or I.S. Electro-Pneumatic Positioners

**Control** • Quarter & Multi Turn Pneumatic Actuators

• Position Transmitters & Limit Switches

**Environmental** *Royce* • Interface Level - Total Suspended Solids Dissolved Oxygen - pH Fixed & Portable

*Epic* • Portable & Fixed Waste Water Sampler - Sludge Sampler

*ADI* • Gas Sampling Pumps

*Crowcon* • Personal Portable & Fixed Site Gas Detection Systems

*Foxcroft* • Residual Chlorine - Turbidity - Chlorine Automatic Rate Control

*Regal* • Gas Chlorinators

**Process** *Stere* • Universal Programmable Indicators - Transmitters - Isolators

*CRL* • Universal Programmable Bar Graph Indicators - Process & Temperature Controllers

*RC Systems* • EXP Universal Transmitter - Universal Graphic Display / Alarm

**Data Acquisition** *CEWE* • Electrical Measurement Transducers - Analogue Indicators

*Validyne* • P.C. Based Data Acquisition Cards Modular Signal Conditioners

**Measurement** *PMV* • Intelligent Valve Module

*Binmaster* • Rotary - Capacitance - Point On Demand Level Monitors

*FPP* • Oval Gear P.D. Flow Meters

*NICE* • Vortex Flow Meters

*Eldridge* • Thermal Dispersion Flow Meters

*KL Flow* • Pilot Tube - Venturi Flow Meters

*Kobold* • Flow - Level - Temperature - Pressure

*ICI* • Displacement - Incline - Acceleration

*Validyne* • Pressure

*Haven* • Process and Pressure Calibrators

**Service** *Cancoppas* • Service

• Commissioning

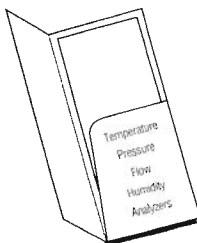
• Total Solutions - System Integration

• Custom Engineering - Design

**No matter  
what your destination  
in process measurement...**



**We're your first class ticket.**



**A**t Willer Engineering, we go beyond quality process measurement and analysis products to deliver a total package that includes:

- Engineering application assistance
- Technical product information
- Product demos
- Competitive pricing
- After sales service, support and warranty coverage

**Send for our latest  
Product News Bulletin.**



**WILLER  
ENGINEERING LIMITED**

Temperature • Pressure • Flow  
• Humidity • Analyzers

**Toronto**  
(416) 499-4421  
Fax: (416) 499-0816

**Montreal**  
(514) 333-8555  
Fax: (514) 333-4662

**Sarnia**  
(519) 336-3006  
Fax: (519) 344-0607

**Dartmouth**  
(902) 469-4400  
Fax: (902) 463-1010

**Sudbury**  
(705) 673-8900  
Fax: (705) 673-8806





## J & M ENGINEERING & SALES LTD.

2899 STEELES AVE., W., UNIT 4, DOWNSVIEW, ONTARIO, CANADA M3J 3A1  
TEL: (416) 665-2300 FAX: (416) 665-7530

*Representing the Experts in Measurement and Control*

### **Badger Meter Inc.**

*Liquid Meters and Batching Control Systems, Ultrasonic Flowmeters, Open Channel and Closed Pipe, Flow Tubes & Ultrasonic Level.*

### **Wallace & Tiernan Inc.**

*Flowmeters, Chlorinators, Lime Slakers, Metering Pumps, Feeders & Calibrators.*

### **Lumenite Electronic Company**

*Conductivity & RF Capacitance Level Products.*

### **Wilkerson Instrument Co., Inc.**

*Signal Conditioners, 2 Wire Transmitters, Indicators & Alarms.*

### **Flowdata Inc.**

*Positive Displacement Flowmeters & Flow Controls for Special Applications.*

### **L.J. Star Inc.**

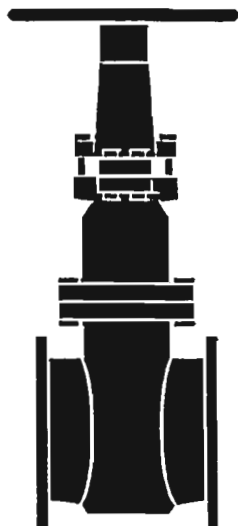
*Visual Flow & Sight Glass Indicators*

### **Danaher Controls**

*Digital Meters, Counter, Timers & Encoders.*

***"Where You Get Old Fashioned Service"***

**New ISA Members have  
a lot to offer.  
Bring a friend to the next meeting.**



## **Professional Valve Service Ltd.**

**Quality Service For Over 25 Yrs.**

859 Ontario Street, N7T 1N1  
P.O. Box 761 Sarnia, Ontario N7T 7J7  
Tel: (519) 336-3933 • Fax: (519) 336-6157



*— The Complete Shop and  
Mobile Valve Service —*

**24 HR SERVICE**





The International Society  
for Measurement and Control

# ISA

## Student Section

It's back to the books in a hectic term 5 for my fellow aspiring instrument technologists and I. Most of us 3rd year students have just finished up an eight month co-op term and we have found our way back to the college and into the loving arms of lab write-ups, tests and very late nights. The ISA Student Section parliament has just received a complete make-over as our predecessors are now out in the work force, hopefully. I would like to take a moment and introduce the new incumbents to all of you out there, as you will probably be hearing from us in the very near future. Let me start from the top, our new President of Operations is Mr. Ken Pollock, VP of Activities is Mr. Brad Sarson, Secretary/Treasurer is Mr. Ed Millenaar, 3rd Year Class Representative is Mr. Matt Draker, 2nd Year Class Representative is Mr. Josh Thomas, 1st Year Class Representative is Mr. Dan Comaau, and as you have probably guessed I have been elected Newsletter Editor.

On behalf of the Student Section, I would like to take this opportunity to thank the ISA for the scholarships that they have pledged for the students in the Instrumentation Program at Lambton College. The scholarships were awarded at the November 28, 1996 Awards Banquet. The recipients of the ISA Entrance Awards include: Ms. Michele Boucher, Mr. Gregory Stewart, Mr. William Schneck and Ms. Krista Knudsen for their outstanding performance in high school as they entered their first year of the Instrumentation Program. Most improved student went to Mr. Mike Mathieson, who is now in term 5. The highest GPA after term 2 was awarded to Ms. Lisa Chadebois, the highest GPA after term 5 was awarded to Mr. Tom Beaton, and the highest GPA after term 6 was awarded to Ms. Janice Haskell. Congratulations to these scholars on their achievements.

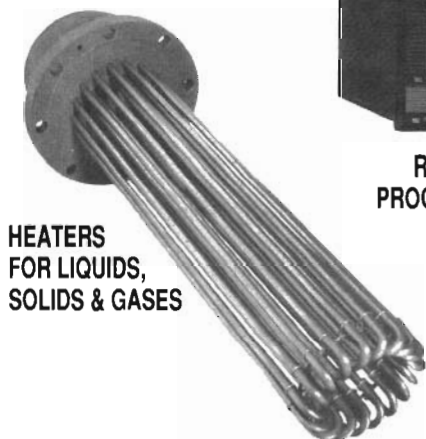
Over the past week you may have spotted some of us students passing through the ISA Show at the Holiday Inn on February 25, 1997. It was a pleasure for us students to be welcomed to this event as we were able to observe the latest technology displayed by so many companies, and to meet some of the faces behind those companies. We would also like to thank all that participated in the Engineering Week held at the Lambton Mall on February 28 and March 1, 1997. Again, this was a great opportunity for us to witness the various devices that were on display.

As future employers, if you didn't happen to make our acquaintance at either of these events, I am sure that you will most likely be hearing from us as we will be eagerly be submitting our resumes for any possible co-op experience that you could offer.

Joe Steele, *Student Section Newsletter Editor*

# H C S

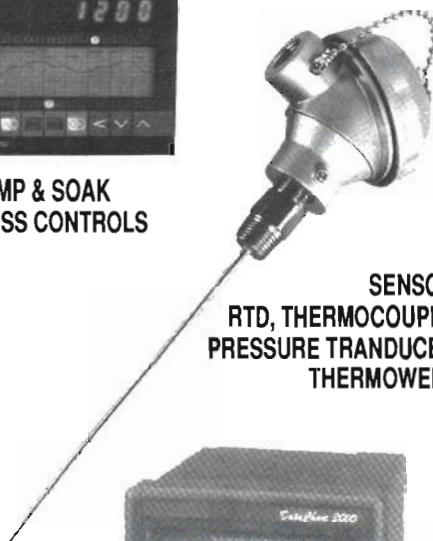
## HEATING & CONTROL SYSTEMS



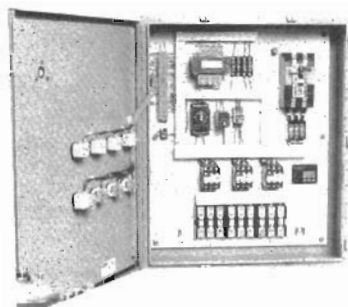
**HEATERS  
FOR LIQUIDS,  
SOLIDS & GASES**



**RAMP & SOAK  
PROCESS CONTROLS**



**SENSORS  
RTD, THERMOCOUPLES  
PRESSURE TRANSDUCERS  
THERMOWELLS**



**CUSTOM CONTROL PANELS**



**DATA ACQUISITION SYSTEMS  
PAPERLESS CHART RECORDERS**

**1-800-279-9912**

# NEWS RELEASE

## IMO INDUSTRIES

IMO is a well respected manufacturer of quality engineered products in all types of applications, and industries, world wide. Our vast experience has taken us from the automotive and petrochemical to military and navy applications, where reliability is critical. We welcome the opportunity to prove our superior product designs, vast knowledge, and experience. IMO Industries Inc., with 1996 sales of approximately \$600 million dollars (Cdn.), supplies electronic and mechanical controls, engineered power products and their support services customers worldwide. IMO Industries is very interested in working closely with you on all your projects. Please feel free to call us at any time, to discuss your requirements (Tel. No. 905-564-3344 / Fax. No. 905-564-3577).

## Industrial Projects

Industrial Projects is pleased to announce their exclusive representation of Conant Controls Inc. Valves, The Electron Machine Refractometers, International Sensor Technology Toxic and Combustible Gas Monitors, Ronan Engineering Process Monitoring and Nuclear Measurements, SOR Pressure, Temperature, Level and Flow Switches, King Rotometers and Torbar Flowmeters. Please feel free to contact us for information on these products... Phone: (905) 477-0017 or Fax (905) 477-1495.

## Foxboro Canada Inc.

We are pleased to announce that effective immediately, SPEC Sarnia Limited will be the official sales representative for Foxboro Canada Inc. in Southwestern Ontario.

All inquiries, RFQ's, orders and any other correspondence relating to Foxboro Measurement, Instruments and Valve Products should be sent to:

**SPEC Sarnia Limited**  
1550 Confederation Street,  
Sarnia, Ontario  
N7W 1A3  
Tel: (519) 336-2405  
Fax: (519) 336-1177

Foxboro is committed to providing all our customers with outstanding sales support and service. With the addition of SPEC Sarnia Limited... this tradition will continue.

## WIKA Instruments Canada Limited

WIKI Instruments is pleased to announce the appointment of PROVINCIAL CONTROLS as a Stocking Distributor for the Sarnia area. Product offering includes the complete line of pressure and temperature instrumentation, P.G.I. valves and manifolds, and Trend thermometers.

WIKI is pleased to be associated with Provincial Controls and is looking forward to a long lasting and prosperous relationship.

## TUBETECH Ltd.

TubeTech Ltd. is pleased to announce that OHMART/VEGA has selected TubeTech as the exclusive representative for their level instrumentation product line for Southwestern Ontario and the Hamilton/Niagara territory.

OHMART/VEGA's concept of "The Total Level Measurement Solution Company" with 12 different technologies will allow TubeTech to complete the mission of supplying a single source for level, temperature, pressure and flow.

# NEWS RELEASE

## NUMATICS

Numatics are introducing a complete and unique "Structural Component System" called **MODU-TEK**. Applications include - machine bases, work stations and machine guarding, but are only limited by the imagination. Features include integrated linear slides and gantry slides with up to 20 ft. travel -- no cutting, drilling or tapping required.

For more information contact...

**Provincial Controls at Tel (519) 336-7301 or Fax (519) 336-8082**

**Numatics Canada at Tel. (519) 452-1777 Attn. Fred Klaudi**

## New Advertisers

The Annunciator is pleased to announce the following new advertisers:

IMO Industries .....	Page 38
Industrial Projects Ltd. ....	Page 38
Samson Controls Ltd. ....	Page 25

## Winter's Presidents Meeting

The Winter meeting was held from February 8 to February 13 at West Palm Beach. There were 14 members from Canada who attended this meeting. I did not get any golfing or fishing.

*Some of the high points from the meeting:*

- Sunday was highlighted with the key speaker Robert Stevenson a motivation speaker whose topic was "From ordinary to Extraordinary"
- ISA Tech '97 is progressing, this is the first time for this format. It is an event which is theme based allowing companies and users to concentrate on problems and solutions that are directly related with the theme. The format is based on training programs at the beginning and ending of the Tech Sessions, ISA officers meeting, three days of plenary and technical sessions.
- Plans for future President meetings outside the USA ie; Europe
- Japan has been Chartered as an ISA region and work is being done to get a charter in China.
- Review and improve the International Student Competition guidelines.
- Improve the publication image and to provide the "Malloy" award to the highest publication sold.
- Enhance the WEBB page with news releases, electronic publications, and ISA Online.
- Work shops to be modularized.
- Staff members, Sally Walters and Cherie Gibson have resigned.
- Work to achieve goals established in the Strategic Planning.
- New By Laws accepted and adopted 10/10/96

# Rosemount Instruments Ltd

You know us for Our:

**Pressure, Temperature, Flow,  
Level & Analytical Transmitters**

Discover Our:

**Professional Response in Service Management**



## Field Service Programs

Right Start

Pre-Installation and  
Installation Assistance

Continuous Care

Preventative Maintenance  
Contracts

Rapid Response

On-Site Service Calls

Custom Services

Designed to  
meet your needs

## Depot Repair

Fixed Price Repair Agreements

Know the cost of  
Warranted repairs  
ahead of time

*Rapid Repair*

Fast economical  
repair agreements

PRISM Exchange

Upgrade your primary  
measurement device to  
the industry's best

**For the Leader in Instrumentation  
and Professional Service:**

**Call: 1-800-268-1151**

## Customer Support Centre

Tel: 1-800-268-1151

Fax: 1-800-563-3051

Service: 1-800-654-7768

---

**ROSEMOUNT®**

**FISHER-ROSEMOUNT™  
Managing The Process Better:**

# R.A. KIRBY SALES INC.

- SAAB TANK CONTROL - RADAR BASED LEVEL SYSTEMS
- MTS MAGNETOSTRICTIVE LEVEL SYSTEMS
- OPTEK PPM OIL/WATER, CONCENTRATION, COLOUR & TURBIDITY PHOTOMETERS
- THERMAL MASS FLOW METERS AND PROBES
- ZIRTEK HIGH TEMPERATURE O<sub>2</sub> ANALYZERS

#100 - 3995 BATHURST STREET  
NORTH YORK, ONTARIO M3H 5V3

TEL: 416-638-1080  
FAX: 416-638-9389

## SENSORS, SIGNAL CONDITIONING, DATA ACQUISITION & CALIBRATORS

**Westronics**

**interface**  
ADVANCED FORCE MEASUREMENT

**SENSORTRONICS**

**SENSIT**

**MASSA**

**Digitec**

**ENV**

**rotronic**  
instrument corp

**Measurement  
Systems**

**U**  
SYSTEMS



**Durham Instruments**

Products that measure. Service that measures up.

Toronto: (905) 839-9960  
FAX: (905) 839-4325

Montreal: (514) 697-7054  
FAX: (514) 697-4519

Calgary: (403) 242-4844  
FAX: (403) 242-4863

Ottawa:  
(613) 248-4200

Vancouver:  
(604) 662-7711

**schaevitz**

Accelerometers  
Chart Recorders  
Data Acquisition Systems  
Data Recorders  
Encoders  
Humidity  
Lasers  
Linear Displacement  
Load  
Panel Meters  
Non-Contacting Capacitive Gauging Systems  
Paperless Recorders  
Portable Calibrators  
Pressure  
Rotary Displacement  
Signal Conditioners  
Slope/Tilt  
Strain Gauges  
Temperature  
Torque  
Ultrasonics

For all your sensing, control, acquisition  
and calibration needs . . .

Call us Today!  
1-800-263-4673

**Perry & Giles**

POSITION SENSORS  
Designed to be Better

**Lucas NovaSensor**

**Leine & Linde**

**FOURTECH**

**ADTECH**

**MADE**  
TECHNOLOGIES

**KIPP & ZONEN**

**OGDEN**





## EXPERIENCE AND SOLUTIONS

### AIR MONITOR CORPORATION

- *airflow measuring stations*
- *air pressurization measuring*

### AMETEK

- *photometric process analyzers*
- *moisture analyzers*
- *process diode array*

### BENKE

- *distillation analyzers*
- *freeze, flash and cloud point analyzers*
- *viscosity analyzers*
- *NIR spectrometers*

### EG&G BERTHOLD

- *radiometric measurement*
- *level, density, massflow, basis weight, belt weigher, ash content, sulphur & lead*
- *microwave moisture measurement*

### KATES

- *flow rate controllers*

### MAIHAK

- *gas analyzers*
- *paramagnetic oxygen*
- *thermal conductivity*
- *total hydrocarbon FID*
- *TOC*

### MDA SCIENTIFIC

- *toxic substance monitoring*
- *trace contaminant analysis systems*
- *single, multipoint, personal*
- *chemcassette technology*

### METTLER TOLEDO (INGOLD)

- *pH and ORP measurement systems*
- *dissolved oxygen*
- *conductivity*
- *turbidity*

### PCME

- *baghouse monitoring*
- *particle emission*
- *dust monitors*
- *triboAce technology*
- *opacity/scintillation*

### SIEGER

- *combustible and toxic gas detection*
- *infra-red open path hydrocarbon gas detection*
- *infra-red point gas detection*

### SOLARTRON

- *liquid and gas density*
- *viscosity: dynamic and kinematic*
- *defined shear rate viscosity*

### TA INSTRUMENTS INC

- *thermal analysis*
- *rheology*

### WESTECH

- *sample systems*
- *packaged analyzer systems*
- *CEM's*
- *detonation flame arresters*

### WHESOE VAREC

- *flame arresters*
- *tank appurtenances and level gauging systems*
- *waste gas control equipment*
- *waste gas burners*
- *leak detection*

Halifax	Montreal	Toronto	Sarnia	Calgary	Edmonton	Vancouver
Tel: 902-457-1171	514-636-8761	905-890-5265	519-383-6320	403-252-8803	403-464-4740	604-737-8358
Fax: 902-457-1731	514-631-0857	905-890-6213	519-383-6322	403-253-6803	403-467-1605	604-737-8315

e-mail: westech@istar.ca



p r e s e n t s



TELEDYNE FLUID SYSTEMS

Farris Engineering

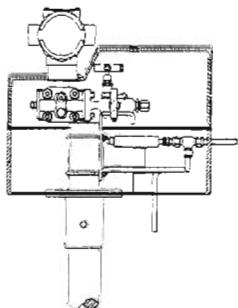
TEL: (519) 332-0141

**SIZE MASTER  
PLUS III  
INDUSTRY'S MOST  
EFFICIENT SIZING  
AND SELECTION  
PROGRAM**



**INSTRUMENT ENCLOSURES & HEATERS**

- SINGLE AND MULTIPLE TRANSMITTER INSTALLATIONS
- CUSTOM ANALYZER ENCLOSURES
- CUSTOM SAMPLE SYSTEM ENCLOSURES
- MODULAR INSTRUMENT HOUSINGS
- "SMART" TRANSMITTER ENCLOSURE
- COMPUTER HEAT CALCULATIONS
- CAD LAYOUT OF INSTRUMENTS
- RETROFIT FIELD REPLACEMENTS
- 100% CANADIAN (SARNIA) MANUFACTURED



distributed by:



**Sarnia Piping Specialties Ltd.**

785 EVETT STREET, P.O. BOX 2018  
SARNIA, ONTARIO N7T 7L1  
(519) 336-8820 FAX: (519) 336-2033



# ***Summit Controls Ltd.***

---

## ***Control Valves***

- Neles-Jamesbury
- Badger Meter
- Sinclair Collins

## ***Specialty Control Valves, Steam Conditionig & De-superheaters***

- BTG

## ***Ball & High Performance Butterfly Valves***

- Neles-Jamesbury

## ***Custom Designed Slide Gate Valves & Dampers***

- Deltavalve

## ***Plastic Valves & Filters***

- Hayward

## ***Valve Accessories***

- Neles-Jamesbury
- StoneL
- Burkert

## ***Control Loop Diagnostics***

- Neles-Jamesbury
- Expertune

## ***Sanitary Valves***

- Flow-Tek

## ***Flow & Level Sensors***

- Burkert

## ***Signal Conditioning***

- Action

## ***Services***

- Valve Automation Centre
- Installation & Repair

---

1-48 Queen St. E., Cambridge NC3 2A8 • Tel: (519) 651-2730  
1355 Confederation St., Sarnia N7S 4T2 • Tel: (519) 337-3200  
salesinfo@summitcontrols.com  
<http://www.summitcontrols.com>

## CASHCO

- PRESSURE REGULATORS
  - Reducing & Back Pressure / Relief
- CONTROL VALVES - Rotary & Linear
- MANUAL LOADERS and AIRSETS

## WIKA

- PRESSURE GAUGES - Test, Etc.
- CHEMICAL SEALS
- PRESSURE TRANSMITTERS / TRANSDUCERS

## TELEDYNE FARRIS

- SAFETY & RELIEF VALVES
- TANK VENTING
- TEST BENCHES

## APICAL

- CHARTS
  - Recording Chart Paper
  - Inking Supplies

## TREND

- THERMOMETERS - Bi-metal Gas Actuated

## MAGNETROL

- LEVEL CONTROLS - R.F. Capacitance, Ultrasonic & Buoyancy
  - Magnetic Level Indicator
  - Microwave
  - Thermal Dispersion
- FLOW CONTROLS - Vane, Piston Actuated Valve & Thermal Dispersion

## PRIBUSIN

- SIGNAL CONDITIONERS
- ALARM UNITS - Indicating

## THERMO-KINETICS

- TEMPERATURE - Measurement & Control
- SENSORS - Thermocouples, RTD's, Infrared Thermometers
- THERMOWELLS & PROTECTION TUBES
  - All sizes
- GAYESCO - Refracto-Pads & Flex-O Multicouples

## M.T.L.

- INTRINSIC SAFE BARRIERS & INDICATORS



# PROVINCIAL CONTROLS

DIVISION OF 660567 ONTARIO LIMITED

P.O. BOX 2946  
373 VIDAL ST. S., SARNIA, ONT. N7T 7W2

TELEPHONE: (519) 336-7301  
FAX: (519) 336-8082

## NUMATICS

- FILTER/REGULATOR/LUBRICATOR
- SOLENOID VALVES - General Purpose, Hazardous, Intrinsically Safe
- AIR CYLINDERS - NFPA, Small Bore, Compact
- ENERTROL - Linear Decelerators, Shock Absorbers
- AIR LOGIC CONTROL
- PANELS - Pneumatic, Electrical & Electronic
- AIR DRYERS - Refrigerated & Regenerative

## ERNST

- FLOW AND LEVEL INDICATORS
- SIGHT GLASSES - Glass & Gaskets
- FLOW METERS
- SIGHT FLOW INDICATORS
- EJECTORS & EDUCTORS

## ORANGE RESEARCH

- DIFFERENTIAL PRESSURE & FLOW GAUGES

## PERMACAL

- PRESSURE GAUGES - Direct Drive
  - Test & Process

## CONANT

- SELECTOR VALVES

## HANSEN

- QUICK CONNECTS - Pneumatic & Hydraulic

## IMPERIAL EASTMAN

- TUBE FITTINGS - Accessories

## KINETROL

- ACTUATORS, BRACKETS

## P.G.I. PROVINCIAL INSTRUMENT

- ENCLOSURES - Fiberglass Insulated

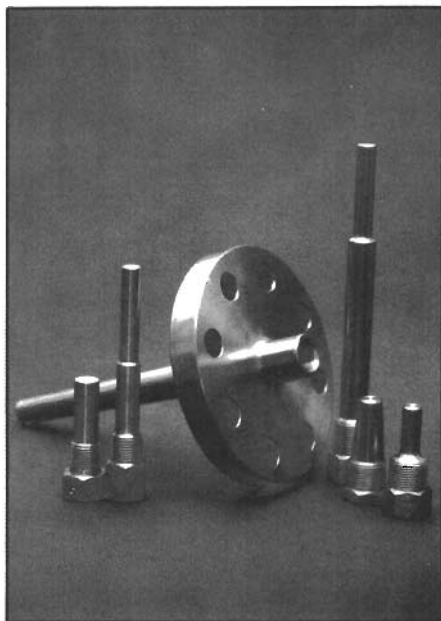
## VORTEC

- VORTEX COOLERS - Pneumatic Transfer / Handling Equipment

## DWYER

- DP GAUGES
- SWITCHES
- FLOW METERS

# ***Thermowells & Protection Tubes***



Above shows a small range and type of thermowells

*No matter how large or small, one off, rush, exotics material, project or stock, call or fax for courteous prompt attention*

Our thermowells are manufactured to accept standard or custom made thermometers, thermocouples, bulbs and RTD's.

## **Attributes:**

- ▼ Solid bore up to 50" long
- ▼ CNC machined, polished finish to assure maximum corrosion resistance.
- ▼ Wide selection threaded, flanged, socket weld, heavy duty tapered for steam lines, vanstone, multicouple units
- ▼ Custom made specials in 24 hours
- ▼ Competitive prices and large in house stock of wells and material

## **Specifications:**

- ▼ Velocity checks upon request to the power test code
- ▼ Manufactured in accordance with ASME, ASTM, ANSI and P.T.C.
- ▼ Canadian registration number
- ▼ Materials A350/LF2 A105 Carbon Steel, 316/L, 304/L, Monel, Alloy 20, Inconel, 446SS, 310SS, 347, 2205, Hastalloy, Titanium, Tantalum Oversheaths
- ▼ ISO 9002 Certified

# **MAC-WELD**

1324 Lougar Avenue,  
Sarnia, Ontario  
N7S 5N7

**1-800-563-0292**

Tel: (519) 332-1388

Fax: (519) 332-3280

Distributed by: YOUR LOCAL SALES  
REPRESENTATIVE

# searchpoint OPTIMA

## FIVE YEAR GUARANTEE

### SMALLER, LIGHTER, COST EFFECTIVE SEARCHPOINT OPTIMA TAKES A FRESH LOOK AT INFRARED FIXED POINT GAS DETECTION

The **Searchpoint Optima** is the result of rigorous field testing done under real-life conditions.

The result is a low cost, small, light yet robust point detector that can be retrofitted in existing gas detection systems.

**Searchpoint Optima** has no moving parts, is easy to maintain, and, with worldwide approvals, satisfies a vast range of applications and environmental conditions.

*For the full story, call Westech today!*

**Westech Industrial Ltd.** 1004, 1149 Vanier Road, Sarnia, Ontario N7S 3Y6 **(519) 383-6320**



#### WHY **OPTIMA**?

- Can detect a wide range of gases and vapours
- Self Compensating Optics
- Easy gas checking in any environment
- Ideal for retrofits
- Optional Interrogator for one man gas test
- 5 year guarantee



#### ANALYTICAL INSTRUMENTATION DRYERS

##### PUREGAS® HEATLESS AIR DRYERS AND ADSORBERS FOR:

- |  |  |
|--|--|
| <input type="checkbox"/> Removing H <sub>2</sub> O and CO <sub>2</sub> gases | <input type="checkbox"/> Dry gas reference for moisture analyzers                |
| <input type="checkbox"/> Dewpoints to -100° F.                               | <input type="checkbox"/> Dry box purging   |
| <input type="checkbox"/> Natural gas drying                                  | <input type="checkbox"/> Prevention of air line freeze-up                        |
| <input type="checkbox"/> Purging atmosphere chambers                         | <input type="checkbox"/> Providing dry cooling air for electronic stress testing |
| <input type="checkbox"/> Replacement of nitrogen bottles                     | <input type="checkbox"/> Explosion proof environments                            |
| <input type="checkbox"/> Purging infrared spectrophotometers                 |  |

Available as stand alone units with oil free compressors.

For more information call 1-800-787-3547

- ☐ Also representing Nicotra SCADA and monitoring systems

**canadian puregas equipment limited**

P. O. Box 280, Dunnville, Ontario. N1A 2X5

Tel. 905-774 8600 Fax 905-774-6974

- ☒ Check boxes and Fax for more information

# Start to Finish...Fisher Service is your control valve repair expert.



No other organization offers more expertise in control valve repair than Fisher Service Company.

Fisher Service Company can perform expert valve repairs either in-house or onsite at customer locations.

*Call your local Fisher-Rosemount Sales Representative today to find out more.*

FISHER SERVICE COMPANY  
(519) 332-2300  
581 VIDAL ST. S.  
SARNIA, ON N7T 2V8

**FISHER****FISHER-ROSEMOUNT****BEP Bestobel**

**Yves Routhier**  
Technical Sales Representative

373 Vidal Street S.  
Unit D3  
Sarnia, ON N7T 2V3  
Tel: (519) 336-0811  
Fax: (519) 336-5808

## LEVEL CONTROL

- Mobrey
- Madison
- Proximity

## VALVES & ACTUATORS

- Tomoe (Butterfly)
- Ashford
- Hytork

## WATER QUALITY ANALYZERS

- Zullig
- KDG Mobrey

## COMBUSTION ANALYSIS

- Telegan

## FLOW MEASUREMENT

- Erdco
- Mobrey
- Oilgear

## STEAM TRAPS & TRAP TESTERS

- Bestobell

## LEAK DETECTION

- Ion Track Instruments

## TEMPERATURE SENSING

- Wahl Instruments
- Armtec Industries



## Smart Choices from the Leader in Control

For effective measurement and control, choose quality devices from Honeywell's **TotalPlant®** portfolio. They'll help you:

- ✓ Increase productivity and profit
- ✓ Optimize use of raw materials
- ✓ Meet your customers' quality specifications
- ✓ Comply with environmental standards
- ✓ Enhance plant safety

Our **Smartline™** transmitters and flowmeters feature state-of-the-art microprocessor technology for accurate, reliable measurement of temperature, pressure, level and flow. They're field proven, easy to install and configure, and can be digitally integrated to the control system.

Honeywell offers **Leaderline™** controllers, programmers and recorders for almost any industrial application — from simple on-off control to feed forward, cascade and ratio control. Our line of circular and stripchart recorders includes advanced digital models with complex math and communication capabilities.

Superior product performance is built in and backed up by Honeywell's warranty program and comprehensive technical support.

For information, ordering or technical support, call:  
**Customer Response Centre 1-800-461-0013**

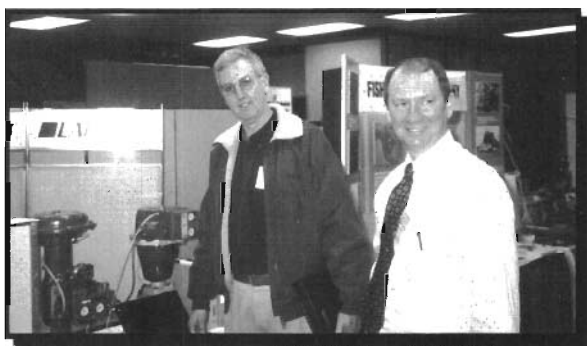
# Honeywell

*Helping You Control Your World*

# ISA PERSPECTIVES



## Sarnia Section **1997 ISA Instrument Show**





# Join ISA Today!

## Membership Form



### INSTRUMENT SOCIETY OF AMERICA

This form may be used by any interested person wanting to join ISA or ISA International, including students. For assistance, contact ISA Member & Customer Services at (919) 549-8411. Please type or use block letters. Sign and date below, in Section 3.

1

Name \_\_\_\_\_ (family last name) \_\_\_\_\_ (first name) \_\_\_\_\_ (middle initial) \_\_\_\_\_ ☐ Male ☐ Female Birthdate \_\_\_\_\_

Company Name \_\_\_\_\_ Division/Works \_\_\_\_\_

Position/Title \_\_\_\_\_

☐ Check here if you are a full-time student and complete the following: School \_\_\_\_\_ Year of Graduation \_\_\_\_\_

Mailing Address: ☐ Home ☐ Work NOTE: Student member applicant, please list permanent home address.

Street Address/P.O. Box \_\_\_\_\_ Mail Stop \_\_\_\_\_

City \_\_\_\_\_

State/Province \_\_\_\_\_ Postal Code \_\_\_\_\_ Country \_\_\_\_\_

Telephone (include area code or country/city code) \_\_\_\_\_ FAX \_\_\_\_\_ Telex \_\_\_\_\_

Have you ever been a member of ISA? ☐ Yes ☐ No Previous years of membership \_\_\_\_\_

Assign me to the \_\_\_\_\_ section or the section closest to my home address.

Highest Educational Degree Earned ☐ High School ☐ Associate ☐ Bachelor ☐ Master ☐ Doctorate

Are you a registered professional engineer? ☐ Yes ☐ No State/Country Registered \_\_\_\_\_

☐ From time to time we may make our mailing list available to companies whose products or services may interest you. If you do not want your name exchanged, please check this box. We will respect your wishes.

2

#### NOTE: Sections 2, 3, and 5 must be completed for processing.

Check your primary job function:

- ☐ A: General or Corporate Management
- ☐ B: Control Systems Engineering
- ☐ C: Design Engineering
- ☐ D: Production Engineering
- ☐ E: Plant Engineering or Maintenance
- ☐ F: Software Engineering
- ☐ G: Plant Information Systems
- ☐ H: Systems Integration
- ☐ I: Measurement, Testing, Quality, or Standards
- ☐ J: Research and Development
- ☐ K: Technical or Engineering Support
- ☐ L: Operations
- ☐ M: Purchasing or Procurement
- ☐ N: Education or Training
- ☐ O: Marketing or Sales
- ☐ P: Other. Describe \_\_\_\_\_

What is the primary end product manufactured or service performed at your company location? \_\_\_\_\_

☐ Check here if no manufacturing is done at this location.

3

Signature \_\_\_\_\_

Date \_\_\_\_\_

5

#### Dues Payment Information

Please select the level of membership for which applying:

- ☐ Regular Member: \$60 US (Tax Deductible) \$ \_\_\_\_\_
  - ☐ Student Member: \$9 US (Limited Benefits) \$ \_\_\_\_\_
  - ☐ Division Membership: \$5 US each. \$ \_\_\_\_\_
  - ☐ Industrial Computing Society Membership (reg. \$55): \$30 \$ \_\_\_\_\_
- must be an ISA member. Total Amount Due \$ \_\_\_\_\_

Annual ISA dues include a subscription to **INTECH**, for which a non-deductible allocation of \$8.00 is made for regular members and \$3.50 for student members.

NOTE: The following are acceptable for remitting dues payment. Please indicate the method used. Make payable to Instrument Society of America in US currency only. If paying with international funds, see special note below.

- ☐ Check ☐ Money Order
  - ☐ American Express ☐ Eurocard ☐ MasterCard ☐ Visa
- Acct # \_\_\_\_\_ Exp. Date \_\_\_\_\_

#### Special Note Regarding Transfer of International Funds

Credit Card Payment is preferred; checks with proper MICR bank encoding must be drawn on your bank's correspondent NY or other US bank. Amount payable to ISA must include any bank or other processing charges.

- ☐ Wire Transfer — Add \$5.00 US for processing. Send to ISA Account #1126294, Central Carolina Bank, ABA053100465. Transfer must show applicant's name and address.
- ☐ UNESCO Coupons ☐ Money Order — Add \$5.00 US for processing.

Mail completed form and payment to: Instrument Society of America  
Member & Customer Services  
PO Box 3561  
Durham, North Carolina 27702  
USA

If paying by credit card, fax to: (919) 549-8288

Division Enrollment — Also enroll me at \$5.00 each in the Divisions checked below. To join Divisions, you must also enroll as a regular or student member. ~~Circle~~

4

#### Automation & Technology Divisions

- ☐ (A) Analysis\*
- ☐ (C) Robotics & Expert Systems
- ☐ (D) Computer Technology\*
- ☐ (E) Open Systems Interconnection
- ☐ (H) Process Measurement & Control\*
- ☐ (I) Maintenance
- ☐ (J) Test Measurement\*
- ☐ (M) Automatic Control Systems\*
- ☐ (N) Telemetry & Communications
- ☐ (P) Electro-optics
- ☐ (W) Management\*

#### Industries & Sciences Divisions

- ☐ (B) Aerospace Industries\*
- ☐ (F) Mining & Metals
- ☐ (G) Chemical & Petroleum Industries\*
- ☐ (K) Construction and Design\*
- ☐ (L) Pulp & Paper Industry\*
- ☐ (O) Power Industry\*
- ☐ (R) Food & Pharmaceutical Industries\*
- ☐ (T) Textile Industry
- ☐ (U) Automotive & Vehicular
- ☐ (X) Water & Wastewater Industries
- ☐ (Y) Glass & Ceramics Industries
- ☐ (Z) Marketing & Sales\*

\* Students are entitled to one free membership each in the Automation & Technology and Industries & Sciences Divisions. Please choose and mark from the asterisked selections.

# USERS DIRECTORY

This index lists manufacturers and trade-names alphabetically and enables users to determine the local representative for a particular manufacturer or product.

## Manufacturer / Tradename

3 P  
3-D  
3M Circuit Tracer Kit  
A.H. Emery  
A.S.I.  
A.W. Sperry  
ACR Systems  
AD Technologies  
ADI  
AEM Systems  
AEMC  
AFE  
AFE Technologies Inc.  
APACS  
API Meters  
ARO  
ARi  
ASCO  
ASCO  
ASCO  
ASD  
Accutech  
Acromag  
Acrotech  
Action  
Action Instruments  
Action Instruments  
Action Instruments  
Advance Products Spray Shields  
Agar  
Air Flow  
Air Monitor Corp.  
Aladco Nu-Check Valves  
Alltemp Sensor RTO/TC/Wells  
Alnor  
Alnor Instruments  
Altek  
Altek  
American  
Ametek  
Ametek  
Ametek - Analyzers  
Ametek Gauges  
Amiad  
Amot  
Amot Controls  
Amprobe  
Analogic  
Anderson Greenwood  
Annubar/DSC  
Apical Charts  
Apollo  
Appalachian Controls  
Armatek  
Armstrong  
Armtec Industries  
Ascolectric  
Ashcroft  
Ashcroft  
Ashford Valve  
Astro  
Atkins  
Atlantic Group Inc.  
Atomac Ball & Check Valves

## Local Sales Representative

Romatec  
Alpha Controls & Instrumentation  
Transcat  
Syber Systems Inc.  
Westburne Lytle  
Transcat  
Alpha Controls & Instrumentation  
Durham Instruments  
Cancoppas Limited  
Prosigma Analytics Inc.  
Transcat  
Axiom Technologies Ltd.  
CTH Industrial Controls  
Moore Products Co. (Canada) Inc.  
Lisle-Matrix Ltd.  
Great Lakes Industrial Controls  
Alpha Controls & Instrumentation  
Tubetech Ltd.  
WESCO  
Westburne Lytle  
Brian Controls  
Brian Controls  
Willer Engineering  
Transcat  
Summit Controls Ltd.  
CTH Industrial Controls  
Cambridge Controls  
Heaters Controls & Sensors Ltd.  
Sarnia Piping Specialties  
Zirco Ltd.  
Transcat  
Westech Industrial Ltd.  
Provincial Controls  
Tubetech Ltd.  
Baker Instruments Ltd.  
Transcat  
Alpha Controls & Instrumentation  
Transcat  
Axiom Technologies Ltd.  
Brian Controls  
Transcat  
Westech Industrial Ltd.  
Hardie Industrial Services Inc.  
Floval Equipment Ltd.  
Great Lakes Industrial Controls  
Controls  
Transcat  
Transcat  
Cantech Controls  
Floval Equipment Ltd.  
Provincial Controls  
Romatec  
Controls  
Armatek Controls  
Willer Engineering  
BEP Bestobell Canada Ltd.  
Floval Equipment Ltd.  
Romatec  
Transcat  
BEP Bestobell Canada Ltd.  
Prosigma Analytics Inc.  
Transcat  
Controls  
Sarnia Piping Specialties

**Manufacturer / Tradename**

Aurora  
Autotech  
Azonix  
B & K  
B.N.W.  
BEHA  
BEI  
BJ Software  
BLH Electronics  
BOILER-GARD  
BOMEM  
BS & B  
BTG Inc.  
BTG Polymetron  
Babbitt  
Bacharach - Hand Held Instruments  
Backos  
Badger Meter  
Badger Meter  
Bailey  
Bailey/Fischer & Porter  
Baldwin Environmental Inc.  
Balluff  
Balston Filters  
Barber-Colman  
Barksdale  
Barnant  
Barnant  
Barton  
Baumann  
Beacon Electronics  
Beamex  
Bebco Industries  
Beckman Industrial  
Bellofram  
Benke  
Bestobell Steam, Div. of Richards Ind.  
Bestobell Valves  
Beta  
Beta  
Bi-Lok Fittings  
Biccotest  
Biddle  
Bin-Master  
Binmaster  
Bio-Tek  
Bodenseewerk/Perkin Elmer  
Bourdon-Sedeme (Manobourdon) Gauges  
Brandt  
Branson  
Bristol Babcock  
Brooklyn Thermometer  
Brooks  
Burkert  
Burling Instruments  
CEWE  
CRL  
CSI - Microloggers  
Cajon Pipe Fittings  
Cal  
California Analytical  
Can-Ross  
Cantech Systems  
Carle Chromatography  
Cash-Acme  
Cashco Canada  
Cashco Canada, Inc.  
Castell Interlocks  
Cellex  
Cellex  
Celtek Electronics

**Local Sales Representative**

Great Lakes Industrial Controls  
Davis Controls  
Transcat  
Transcat  
Floval Equipment Ltd.  
Transcat  
Willer Engineering  
Davis Controls  
CB Engineering  
Lisle-Metrix Ltd.  
Prosigma Analytics Inc.  
Romatec  
Summit Controls Ltd.  
Prosigma Analytics Inc.  
Industrial Technical Services  
Transcat  
Great Lakes Industrial Controls  
J & M Engineering & Sales Ltd.  
Summit Controls Ltd.  
Tubetech Ltd.  
Tubetech Ltd.  
Novatech  
Davis Controls  
Sarnia Piping Specialties  
Davis Controls  
Tubetech Ltd.  
Heaters Controls & Sensors Ltd.  
Transcat  
Armatek Controls  
Lakeside Process Controls  
R.A. Kirby Sales Inc.  
Transcat  
Cantrols  
Transcat  
Romatec  
Westech Industrial Ltd.  
BEP Bestobell Canada Ltd.  
BEP Bestobell Canada Ltd.  
Armatek Controls  
Transcat  
Sarnia Piping Specialties  
Transcat  
Transcat  
Regional Process Equipment  
Cancoppas Limited  
Transcat  
CEM Specialties Inc.  
Sarnia Piping Specialties  
Willer Engineering  
Transcat  
Sharp Valve & Instrumentation  
Transcat  
Great Lakes Industrial Controls  
Summit Controls Ltd.  
Baker Instruments Ltd.  
Cancoppas Limited  
Cancoppas Limited  
Campbell Scientific (Canada) Corp.  
Huron Valve & Fittings  
Davis Controls  
Brian Controls  
Spec Sarnia Limited  
Cantech Controls  
R.A. Kirby Sales Inc.  
Westburne Lytle  
Provincial Controls  
Cambridge Controls  
Great Lakes Industrial Controls  
Armatek Controls  
Spec Sarnia Limited  
Cantrols

**Manufacturer / Tradename**

Cemco  
Century Instrument  
Century Valve  
Cerabar  
Chandler  
Chatam Controls  
Checkpoint Systems  
Chemical Systems  
Chemline  
Chemtrol  
Chemtrol  
Chessel  
Chessell  
Clif Mock  
Colder  
Computer Keyboard Systems (CKS)  
Con-Tek  
Conant Controls Inc.  
Conant Valves  
Conders  
ConneXt  
Consolidated  
Consolidated Controls  
Control Instruments Corp.  
Control Microsystems  
Controlair  
Controlair Inc.  
Cooper Instruments  
Cosa  
Cosa  
Crowcon  
Crowcon  
Custom Control Sensors  
Cutler-Hammer  
Cybex  
DATATEST  
DGH  
Dahl  
Danaher Controls  
Danfoss  
Danfoss Mfg. Co. Ltd. - Denmark  
Daniel Industries  
Data Industrial Corporation  
Data Precision  
DateI  
Davis Instruments  
DeZurik  
Defelsko  
Delavan  
Delphian  
Delta F Corporation  
Delta-M  
Deltabar  
Deltacon  
Deltapilot  
Deltavalve  
Detector Electronics (Detronics)  
Devar  
DewPro  
Dewrance  
Dianachart  
Dickson  
Digitec  
Digitec  
Dixson Inc.  
Dopak  
Dover Gas Technologies  
Dow Plastic Lined Piping Products  
Drainall  
Druck  
Ducon Environmental Systems

**Local Sales Representative**

Cantech Controls  
Sarnia Piping Specialties  
Brian Controls  
Endress + Hauser  
Transcat  
Heaters Controls & Sensors Ltd.  
Cantech Controls  
R.A. Kirby Sales Inc.  
Floval Equipment Ltd.  
U & I Supply  
WESCO  
TubeTech Ltd.  
Willer Engineering  
Westburne Lytle  
Davis Controls  
CB Engineering  
Lakeside Process Controls  
Industrial Projects Ltd.  
Provincial Controls  
Transcat  
CTH Industrial Controls  
Contro Valve Inc.  
Transcat  
Willer Engineering  
Brian Controls  
WESCO  
Cambridge Controls  
Transcat  
Brian Controls  
Industrial Technical Services  
Cancoppas Limited  
Regional Process Equipment  
Willer Engineering  
WESCO  
CB Engineering  
R.A. Kirby Sales Inc.  
Alpha Controls & Instrumentation  
Armatek Controls  
J & M Engineering & Sales Ltd.  
Davis Controls  
Lisle-Metrix Ltd.  
Controls  
Cambridge Controls  
Transcat  
Transcat  
Transcat  
Floval Equipment Ltd.  
Transcat  
Armatek Controls  
Romatec  
Prosigma Analytics Inc.  
Brian Controls  
Endress + Hauser  
CTH Industrial Controls  
Endress + Hauser  
Summit Controls Ltd.  
CB Engineering  
Cantech Controls  
Endress + Hauser  
Contro Valve Inc.  
Alpha Controls & Instrumentation  
Transcat  
Brian Controls  
Durham Instruments  
CTH Industrial Controls  
Westburne Lytle  
Veronics  
Sarnia Piping Specialties  
Great Lakes Industrial Controls  
Transcat  
R.A. Kirby Sales Inc.

**Manufacturer / Tradename**

Durakool  
Duro-Sense  
Dwyer  
Dwyer  
Dwyer  
Dwyer  
Dwyer DP Gauges/Switches  
Dylon  
Dynapar  
E.G. & G. Chandler  
ECD  
ECD  
ECOM America Ltd.  
EG & G Berthold  
EG & G Flow Technology Inc.  
EIT  
EMCO  
ENU  
ETC  
Eagle Signal  
Eaton IDT  
Echotel Ultrasonic  
El-O-Matic  
Elasto-Valve  
Eldridge  
Electromatic  
Electromatic  
Elremco Timers - England  
Elsag Bailey  
Elsag Bailey Analytical Division  
Enardo  
Encoder  
Endress + Hauser  
Enertrol Shock Absorbers  
Enertrols  
Engineered Valves International (E.V.I.)  
Enraf Inc.  
Environmental Technologies Group Inc.  
Epic  
Erdco  
Erhard Valves - Germany  
Ernst Flow & Level  
Euchner  
Eurotherm  
Eurotron  
Exergen  
Exotherm  
Expertune  
Expo Safety Systems  
F.B. Leopold - USA  
F.W. Bell  
F.W. Murphy  
FCI  
FPP  
FUJI  
Fabco Air  
Fairchild  
Farris  
Farris Relief Valves  
Fieldview  
Fike  
Fike Canada Inc.  
Fischer & Porter  
Fischer & Porter  
Fisher Controls  
Fisher Research  
Fisher Service  
Fisher-Rosemount Systems  
Flow Meter Co. - England  
Flow Research  
Flow-Tek

**Local Sales Representative**

Davis Controls  
Transcat  
Baker Instruments Ltd.  
Cantech Controls  
Davis Controls  
Transcat  
Provincial Controls  
Great Lakes Industrial Controls  
Davis Controls  
R.A. Kirby Sales Inc.  
Novatech  
Transcat  
R.A. Kirby Sales Inc.  
Westech Industrial Ltd.  
CB Engineering  
Novatech  
Davis Controls  
Durham Instruments  
Transcat  
Davis Controls  
Cantech Controls  
Provincial Controls  
Westburne Lytle  
WESCO  
Cancoppas Limited  
Davis Controls  
Heaters Controls & Sensors Ltd.  
Lisle-Metrix Ltd.  
Tubetech Ltd.  
Prosigma Analytics Inc.  
Zirco Ltd.  
Axiom Technologies Ltd.  
Regional Process Equipment  
Provincial Controls  
Axiom Technologies Ltd.  
Westburne Lytle  
Willer Engineering  
Novatech  
Cancoppas Limited  
BEP Bestobell Canada Ltd.  
Lisle-Metrix Ltd.  
Provincial Controls  
Davis Controls  
Heaters Controls & Sensors Ltd.  
Industrial Technical Services  
Heaters Controls & Sensors Ltd.  
Heaters Controls & Sensors Ltd.  
Summit Controls Ltd.  
Syber Systems Inc.  
Lisle-Metrix Ltd.  
Transcat  
Cantech Controls  
Willer Engineering  
Cancoppas Limited  
Heaters Controls & Sensors Ltd.  
Davis Controls  
Regional Process Equipment  
Flovat Equipment Ltd.  
Provincial Controls  
Lakeside Process Controls  
Sharp Valve & Instrumentation  
Brian Controls  
Elsag Bailey  
TubeTech Ltd.  
Lakeside Process Control  
Transcat  
Lakeside Process Controls  
Lakeside Process Controls  
Lisle-Metrix Ltd.  
Flovat Equipment Ltd.  
Summit Controls Ltd.

## Manufacturer / Tradename

Flowdata Inc.  
Fluid Data/Amcor  
Fluke  
Foxboro  
Foxcroft  
Fuji  
Fuji Electric  
Fulier  
G.H. Flow  
G.W. Dahl  
GASCO  
GGOSCO Needle Valves  
GGOSCO Valves  
GO Regulators  
GO Switch (Proximity)  
GPE  
Galtek  
Gamma Silometer  
Gastech Instruments  
Gems Sensors  
General Eastern  
General Resistance  
Geokon  
George Fischer +GF+  
Global  
Graham Manufacturing  
Gralab  
Granucor  
Granuflow  
Granumet  
Graseby / STI  
Great Plains Industries  
Greyline Instruments  
H.D. Baumann  
HCS  
Hach  
Hancock  
Hansen Quik Connects  
Hardy Instruments  
Hartman-Technica  
Hartmann & Braun  
Hathaway  
Hathaway-Wodex  
Haven  
Haws  
Hayward  
Hayward  
Hedland  
Hedland Flowmeters  
Heise  
Hewlett Packard  
Hex Valve  
Hiltap Couplers  
Hiltcraft  
Hitachi  
Hitachi - Oscilloscopes  
Hoffer Flow Controls - USA  
Honeywell  
Honeywell  
Honeywell - Recorders  
Honeywell Controllers & Recorders  
Horiba  
Houston Atlas  
Huntron  
Hy-Cal  
HydroGuard  
IBM Industrial Computers  
ICI  
IDEC  
IET  
IMS

## Local Sales Representative

J & M Engineering & Sales Ltd.  
Armatek Controls  
Transcat  
Spec Sarnia Limited  
Cancoppas Limited  
Industrial Technical Services  
WESCO  
Syber Systems Inc.  
Cantech Controls  
Armatek Controls  
Novatech  
Westburne Lytle  
Hardie Industrial Services Inc.  
Sarnia Piping Specialties  
Lakeside Process Control  
Sharp Valve & Instrumentation  
Romatec  
Endress + Hauser  
R.A. Kirby Sales Inc.  
IMO Industries  
Willer Engineering  
Transcat  
Campbell Scientific (Canada) Corp.  
Brian Controls  
Transcat  
Lakeside Process Controls  
Transcat  
Endress + Hauser  
Endress + Hauser  
Endress + Hauser  
CB Engineering  
Armatek Controls  
Controls  
Lakeside Process Controls  
Great Lakes Industrial Controls  
Fryston Canada Inc.  
Contro Valve Inc.  
Provincial Controls  
CTH Industrial Controls  
Transcat  
TubeTech Ltd.  
Armatek Controls  
Alpha Controls & Instrumentation  
Cancoppas Limited  
Great Lakes Industrial Controls  
CTH Industrial Controls  
Summit Controls Ltd.  
Brian Controls  
R.A. Kirby Sales Inc.  
Transcat  
Transcat  
Sharp Valve & Instrumentation  
U & I Supply  
Syber Systems Inc.  
Davis Controls  
Transcat  
Lisle-Metrix Ltd.  
Brian Controls  
Davis Controls  
Transcat  
Provincial Controls  
Alpha Controls & Instrumentation  
R.A. Kirby Sales Inc.  
Transcat  
Davis Controls  
Endress + Hauser  
CB Engineering  
Cancoppas Limited  
Axiom Technologies Ltd.  
Transcat  
Great Lakes Industrial Controls

## Manufacturer / Tradename

ISI  
ITT Barton Instruments  
ITT Conoflow Regulators & Seals  
ITT Engineered Valves  
ITT Neo-Dyn Switches  
IVO Industries - USA  
Illinois Instruments  
Imperial Eastman  
Imperial Eastman  
Imperial Eastman Fittings  
Industrial Scientific  
Industrial Sensors  
Innovative Sensors Inc.  
Inor  
Intellution  
Intempco  
Interface  
Interface  
International Sensor Technology  
Ion Track Instrumentation (ITI)  
Ionics Instrument Division  
Iotron  
Ircon  
Isolok  
J-Tec  
J.M. Canty, Inc.  
J.U.M.  
JB Engineering  
Jacoby Tarbox  
Jensen  
Jerguson Level Gauges  
Jofra  
Johnson Yokogawa  
Jordan Controls, Inc.  
Julius Bauser - Germany  
K-Tek  
KDG Mobrey  
KEP  
KF Industries  
KL Flow  
KNF Neuberger  
KTM  
Kammer Control Valves  
Kammer Control Valves  
Kane-May  
Kates  
Kay Ray/Sensall  
Kaye  
Kaye Instruments  
Kedcco Mfg Ltd.  
Keller  
Kenmac  
Kenwood USA  
Ketema  
Kinetrol Actuators  
Kinetrol Actuators  
King Instrument Company  
King Valves  
Kipp & Zonen  
Klinger  
Klinger  
Kobold  
Kobold  
Koch  
Kotron Capacitance  
Krebs Engineer  
Kreyenborg  
Krohne  
Kurz  
Kurz  
L & J Technologies

## Local Sales Representative

Heaters Controls & Sensors Ltd.  
Armatek Controls  
Sarnia Piping Specialties  
Romatec  
Sarnia Piping Specialties  
Lisle-Metrix Ltd.  
Veronics  
Axiom Technologies Ltd.  
U & I Supply  
Provincial Controls  
Brian Controls  
Heaters Controls & Sensors Ltd.  
Prosigma Analytics Inc.  
Alpha Controls & Instrumentation  
CB Engineering  
Cantech Controls  
Durham Instruments  
Willer Engineering  
Industrial Projects Ltd.  
BEP Bestobell Canada Ltd.  
Veronics  
WESCO  
Willer Engineering  
Great Lakes Industrial Controls  
Brian Controls  
Cambridge Controls  
Industrial Technical Services  
Transcat  
Romatec  
Transcat  
Romatec  
Transcat  
CB Engineering  
Cambridge Controls  
Lisle-Metrix Ltd.  
CB Engineering  
BEP Bestobell Canada Ltd.  
Brian Controls  
Great Lakes Industrial Controls  
Cancoppas Limited  
Transcat  
Regional Process Equipment  
Controls  
Westburne Lytle  
Transcat  
Westech Industrial Ltd.  
Rosemount Instruments  
Transcat  
CB Engineering  
U & I Supply  
Campbell Scientific (Canada) Corp.  
Great Lakes Industrial Controls  
Transcat  
Brian Controls  
Hardie Industrial Services Inc.  
Provincial Controls  
Industrial Projects Ltd.  
Zirco Ltd.  
Durham Instruments  
Davis Controls  
Spec Sarnia Limited  
Cancoppas Limited  
Regional Process Equipment  
Romatec  
Provincial Controls  
Floval Equipment Ltd.  
Great Lakes Industrial Controls  
Moore Products Co. (Canada) Inc.  
Brian Controls  
Transcat  
Sharp Valve & Instrumentation

**Manufacturer / Tradename**

L.J. Star Inc.  
LAGCO Flumes - USA  
LC Meters  
LCI-Luwa  
LEOPOLD  
LFE Instruments - USA  
LI-COR  
LMI  
LMI  
Land  
Larad  
Laurence  
Leader  
Leaderline  
Lee-Dickens Ltd. - England  
Legris  
Leine & Linde  
Lenord + Bauer  
Leslie  
Lewis  
Limitorque  
Liquid-O-Ring  
Liquiphant  
Logic Beach  
Love  
Lucas Novasensor  
Lumenite Electronic Company  
M & C Products  
M point  
M-Tek  
M.T.S.  
MCS  
MDA Scientific  
MDI  
MKS  
MTL  
MTL Intrinsic Safe Barriers  
MaCWeld  
Madison  
Madur Electronics  
Magnetrol  
Magnetrol  
Magnetrol Level & Flow  
Maihak  
Major  
Manobourdon  
Marine Moisture Co.  
Martel  
Masonellan  
Massa  
Max  
McCrometer  
Mead  
Measurement Systems  
Meeco Inc.  
Mercoïd  
Meriam Instruments  
Meriam Instrumnets  
Mesa Laboratories  
Met One  
Metrix  
Metrix Timers  
Mettler Toledo  
Micon  
Micro Motion  
Micro Wire  
Micronics Ltd.  
Micropilot  
Mid-West Instrument  
Mid-West Instrument  
Mihjets

**Local Sales Representative**

J & M Engineering & Sales Ltd.  
Lisle-Metrix Ltd.  
Spec Sarnia Limited  
Great Lakes Industrial Controls  
Lisle-Metrix Ltd.  
Lisle-Metrix Ltd.  
Campbell Scientific (Canada) Corp.  
Novatech  
U & I Supply  
Transcat  
Syber Systems Inc.  
Great Lakes Industrial Controls  
Transcat  
Honeywell  
Lisle-Metrix Ltd.  
Axiom Technologies Ltd.  
Durham Instruments  
CTH Industrial Controls  
Great Lakes Industrial Controls  
Transcat  
Sharp Valve & Instrumentation  
Great Lakes Industrial Controls  
Endress + Hauser  
Durham Instruments  
Davis Controls  
Durham Instruments  
J & M Engineering & Sales Ltd.  
CEM Specialties Inc.  
Endress + Hauser  
Transcat  
R.A. Kirby Sales Inc.  
Heaters Controls & Sensors Ltd.  
Westech Industrial Ltd.  
Heaters Controls & Sensors Ltd.  
Transcat  
Syber Systems Inc.  
Provincial Controls  
Heaters Controls & Sensors Ltd.  
BEP Bestobell Canada Ltd.  
Novatech  
Davis Controls  
Fioval Equipment Ltd.  
Provincial Controls  
Westech Industrial Ltd.  
Alpha Controls & Instrumentation  
Sarnia Piping Specialties  
R.A. Kirby Sales Inc.  
Transcat  
Contro Valve Inc.  
Durham Instruments  
Willer Engineering  
Brian Controls  
Transcat  
Durham Instruments  
Novatech  
Davis Controls  
Transcat  
Brian Controls  
Armatek Controls  
Campbell Scientific (Canada) Corp.  
Transcat  
Lisle-Metrix Ltd.  
Westech Industrial Ltd.  
Cantech Controls  
Rosemount Instruments  
Spec Sarnia Limited  
Veronics  
Endress + Hauser  
Brian Controls  
Hardie Industrial Services Inc.  
Spec Sarnia Limited



**Manufacturer / Tradename**

Mikron  
 Milton Roy - Liquid Metronics Division  
 Milwaukee  
 Mini-X Purge Systems  
 Mini-Z Purge Systems  
 Mitac  
 Mitsubishi  
 Mobrey  
 Molecular Analytics LLC  
 Monarch  
 Monitek  
 Monitor Labs  
 Monitor Labs  
 Moore  
 Moore Industries  
 Moore Products Pressure Regulators  
 Mueller  
 Multi-Amp  
 Multi-Volt  
 Multicap  
 Multiglass  
 Mycro  
 Myron L  
 NBS  
 NGI  
 NICE  
 Nassau Instrument  
 Neles-Jamesbury  
 Neotronics  
 Neotronics  
 Nil-Cor  
 Nivocompact  
 Nivosonic  
 Norriseal Butterfly Valves  
 Norstat  
 Northern Vibrator  
 Noshok  
 Novatech Engineering Group  
 Numatics  
 Numatics Cylinders  
 Numatics F/R/Ls  
 Numatics Solenoid Valves  
 Nupro Valves  
 Nusonics  
 O'Brien Corporation  
 OSI Semitronic  
 Oakton  
 Ogden  
 Ogden  
 Ogontz  
 Oilgear  
 Oldham  
 Oliver Valves  
 Omron  
 Optek  
 Orange Research DP Switch  
 Orion  
 PCME  
 PGI Valves & Manifolds  
 PMV  
 PMV  
 PTC  
 Pacer Industries  
 Pamark Manifolds  
 Panalarm  
 Panalarm  
 Panametrics PCI Division  
 Papailias  
 Parker Hannifin  
 Partlow  
 Paul Mueller

**Local Sales Representative**

Transcat  
 U & I Supply  
 Floval Equipment Ltd.  
 Syber Systems Inc.  
 Syber Systems Inc.  
 CTH Industrial Controls  
 Davis Controls  
 BEP Bestobell Canada Ltd.  
 Novatech  
 Transcat  
 Willer Engineering  
 Brian Controls  
 Romatec  
 Moore Products Co. (Canada) Inc.  
 Armatek Controls  
 Transcat  
 Great Lakes Industrial Controls  
 Transcat  
 Transcat  
 Endress + Hauser  
 Great Lakes Industrial Controls  
 Moore Products Co. (Canada) Inc.  
 Transcat  
 Transcat  
 Transcat  
 Cancoppas Limited  
 Transcat  
 Summit Controls Ltd.  
 Cantech Controls  
 Transcat  
 Contro Valve Inc.  
 Endress + Hauser  
 Endress + Hauser  
 Sarnia Piping Specialties  
 Davis Controls  
 Floval Equipment Ltd.  
 IMO Industries  
 Novatech  
 Axiom Technologies Ltd.  
 Provincial Controls  
 Provincial Controls  
 Provincial Controls  
 Huron Valve & Fittings  
 Armatek Controls  
 CB Engineering  
 CTH Industrial Controls  
 Transcat  
 Durham Instruments  
 Heaters Controls & Sensors Ltd.  
 Cantech Controls  
 BEP Bestobell Canada Ltd.  
 Cantech Controls  
 Sarnia Piping Specialties  
 Axiom Technologies Ltd.  
 R.A. Kirby Sales Inc.  
 Provincial Controls  
 Transcat  
 Westech Industrial Ltd.  
 Provincial Controls  
 Cancoppas Limited  
 Regional Process Equipment  
 Transcat  
 Transcat  
 Provincial Controls  
 Cambridge Controls  
 Willer Engineering  
 Veronics  
 Great Lakes Industrial Controls  
 Tubetech Ltd.  
 WESCO  
 Great Lakes Industrial Controls

**Manufacturer / Tradename**

Pelican  
Penberthy  
Penberthy Instruments  
Penny & Giles  
Penny + Giles  
Pepperl + Fuchs - USA  
Perma-Pure  
Perma-cal Gauges  
Phipps & Bird  
Phoenix Contact  
Pick Heaters  
Polymetron  
Polytronics  
Porter Instrument Co. - USA  
Powers Process Control  
Powers Process Controls  
Precision Digital  
Precision Digital  
Precision Digital  
Precision Digital Corporation  
Preso  
Pribusin Inc.  
Pribusin Inc.  
Prolevel  
Promac  
Promac  
Promag  
Promag  
Promass  
Proquip  
Prosonic  
Protek  
Protimeter  
Provincial Instrument Enclosures  
Provox  
Prowirl  
Proximity Controls  
Pulsafeeder  
Purifics  
Pyromation  
QSDM  
QSDM  
Quad Tech  
Qualimetrics  
Quantum  
R.M. Young  
R.P. Adams  
RC Systems  
REBS  
REK RKC  
RGS  
RIMCO - Raingauges  
RIS  
Ralston  
Ralston  
Raychem  
Raytek  
Raytek  
Raytek  
Raytek/UE  
RdF  
Regal  
Research Control Valves  
Resistoflex  
Rexcon  
Rexroth  
Rezplast  
Rochester Instrument Systems  
Rohrbach Cosasco Systems  
Ronan  
Roper Pump

**Local Sales Representative**

Transcat  
Brian Controls  
Hardie Industrial Services Inc.  
Cantech Controls  
Durham Instruments  
Lisle-Metrix Ltd.  
Great Lakes Industrial Controls  
Provincial Controls  
Transcat  
Axiom Technologies Ltd.  
Sharp Valve & Instrumentation  
Prosigma Analytics Inc.  
Transcat  
Lisle-Metrix Ltd.  
Heaters Controls & Sensors Ltd.  
CTH Industrial Controls  
Alpha Controls & Instrumentation  
Armatek Controls  
R.A. Kirby Sales Inc.  
Cambridge Controls  
Willer Engineering  
Novatech  
Provincial Controls  
Endress + Hauser  
Armatek Controls  
Transcat  
Endress + Hauser  
Westburne Lytle  
Endress + Hauser  
Spec Sarnia Limited  
Endress + Hauser  
Industrial Technical Services  
Alpha Controls & Instrumentation  
Provincial Controls  
Lakeside Process Control  
Endress + Hauser  
BEP Bestobell Canada Ltd.  
Romatec  
Great Lakes Industrial Controls  
WESCO  
Alpha Controls & Instrumentation  
Willer Engineering  
Transcat  
Transcat  
Transcat  
Campbell Scientific (Canada) Corp.  
Great Lakes Industrial Controls  
Cancoppas Limited  
Campbell Scientific (Canada) Corp.  
Heaters Controls & Sensors Ltd.  
Syber Systems Inc.  
Campbell Scientific (Canada) Corp.  
Transcat  
Axiom Technologies Ltd.  
Transcat  
Great Lakes Industrial Controls  
Heaters Controls & Sensors Ltd.  
Transcat  
WESCO  
Great Lakes Industrial Controls  
Willer Engineering  
Cancoppas Limited  
Lakeside Process Control  
Sharp Valve & Instrumentation  
Axiom Technologies Ltd.  
Great Lakes Industrial Controls  
Great Lakes Industrial Controls  
Sharp Valve & Instrumentation  
Armatek Controls  
Industrial Projects Ltd.  
U & I Supply

## Manufacturer / Tradename

Rosemount  
Rosemount Analytical  
Rosemount Analytical  
Rosemount Combustion Control  
Rosemount RS3 Systems  
Rotomation  
Rotronic  
Rotronic  
Royce  
Ruffneck  
Rupture Pin Technology  
Rustrak  
S.P.S. Instrument Services  
SOR Inc.  
SPM  
SPS Fibre Form Enclosures  
SSI  
SSI Equipment  
STI  
Saab  
Saab Tank Radar Level  
Schaevitz  
Schlumberger/Neptune Flow Meters  
Scientific Linings & Coatings  
Seacor  
Sealed Unit Parts  
Seametrics Inc.  
Seaward  
Selco  
Senior Flexonics  
Sensall  
Sensidyne Gas Monitors  
Sensit  
Sensortech Systems Inc.  
Sensortronics  
Sensycon  
Sentry  
Serge-Baril  
Servomex  
Setra  
Stere  
Stere  
Shamrock Environmental  
Shan Rod Inc.  
Shand & Jurs  
Shimpo  
Showa  
Sieger  
Siemens  
Siemens Process Analyzers  
Sierra Monitor  
Signet Scientific  
Sigrist-Photometer Co. - Switzerland  
Silometer  
Simpson  
Sinclair Collins  
Skinner  
Smar  
Smartline  
Sno-Trik  
Solartron  
Soliphant  
Solomat  
South-West Meters  
Southwest Valve  
Sparling  
Staefa  
Stahl  
Statham  
StoneL  
Stonel

## Local Sales Representative

Rosemount Instruments  
Rosemount Instruments  
Transcat  
Romatec  
Lakeside Process Control  
Axiom Technologies Ltd.  
Alpha Controls & Instrumentation  
Durham Instruments  
Cancoppas Limited  
Great Lakes Industrial Controls  
Zirco Ltd.  
Transcat  
Sarnia Piping Specialties  
Industrial Projects Ltd.  
Transcat  
Sarnia Piping Specialties  
Great Lakes Industrial Controls  
Floval Equipment Ltd.  
Axiom Technologies Ltd.  
Brian Controls  
R.A. Kirby Sales Inc.  
Durham Instruments  
Sarnia Piping Specialties  
Cantech Controls  
Transcat  
Transcat  
Veronics  
Industrial Technical Services  
CTH Industrial Controls  
Regional Process Equipment  
Alpha Controls & Instrumentation  
Transcat  
Durham Instruments  
Novatech  
Durham Instruments  
TubeTech Ltd.  
Fryston Canada Inc.  
Great Lakes Industrial Controls  
Novatech  
Alpha Controls & Instrumentation  
Cancoppas Limited  
Regional Process Equipment  
Prosigma Analytics Inc.  
Floval Equipment Ltd.  
Sharp Valve & Instrumentation  
Transcat  
Durham Instruments  
Westech Industrial Ltd.  
Alpha Controls & Instrumentation  
Willer Engineering  
Transcat  
Hardie Industrial Services Inc.  
Lisle-Matrix Ltd.  
Endress + Hauser  
Transcat  
Summit Controls Ltd.  
Cantech Controls  
Industrial Technical Services  
Honeywell  
Huron Valve & Fittings  
Westech Industrial Ltd.  
Endress + Hauser  
Transcat  
Sarnia Piping Specialties  
Floval Equipment Ltd.  
Brian Controls  
Industrial Technical Services  
Alpha Controls & Instrumentation  
Sarnia Piping Specialties  
Summit Controls Ltd.  
Regional Process Equipment

**Manufacturer / Tradename**

Strahman  
Sugino  
Superior  
Swagelok Tube Fittings  
Syscon  
Systematix  
T.B. Woods  
TA Instruments  
TBI  
TBI-Bailey  
TBV  
TDC-3000  
TIF  
TLV  
TSI  
Tapecoat Canada  
Tate-Andale  
Taylor Hand Actuated Pressure Calibrator  
Techmaton  
Techne  
Technipower  
Tegam  
Tektronix  
Tel-Tru  
Tel-Tru  
Tel-Tru Thermometers  
Teledyne Analytical  
Teledyne Combustion Efficiency Analyzer  
Teledyne-Farris Relief Valves  
Telegan  
Telematic  
Tempco  
Tenor Industrial Control  
Testo Inc.  
Testoterm  
Texas Electronics - Raingauges  
Texas Sampling  
Texas Sampling Inc.  
The Electron Machine Corporation  
Theben  
Thermal Instrument Co.  
Thermo Electric  
Thermo Electric - Calibrators  
Thermo-Kinetics Temperature Products  
Thermon  
Thermox  
Time Electronics  
Tomoe Valves  
Torbar Flowmeters Ltd.  
Tour & Anderson  
Tower-Gard  
Transmaton  
Transmaton  
Transtector Systems  
Trend B-Metal Thermometers  
Trerice  
Tricentric  
Tripp-Lite  
Tritron  
Turbo  
Tytronics Inc.  
U.S. Gauge  
United Electric  
United Electric Controls (Canada) Ltd.  
United Sciences Inc.  
Universal  
Universal Analyzers  
Universal Enterprises  
Unomat  
Vaccon Vacuum Products  
Vaisala

**Local Sales Representative**

Cantech Controls  
Axiom Technologies Ltd.  
Great Lakes Industrial Controls  
Huron Valve & Fittings  
Heaters Controls & Sensors Ltd.  
Willer Engineering  
Axiom Technologies Ltd.  
Westech Industrial Ltd.  
TubeTech Ltd.  
Elsag Bailey  
Romatec  
Honeywell  
Transcat  
TubeTech Ltd.  
Willer Engineering  
Sarnia Piping Specialties  
Great Lakes Industrial Controls  
Transcat  
Lakeside Process Control  
Transcat  
Transcat  
Transcat  
Transcat  
Brian Controls  
Transcat  
Hardie Industrial Services Inc.  
Armatek Controls  
Transcat  
Provincial Controls  
BEP Bestobell Canada Ltd.  
Willer Engineering  
Heaters Controls & Sensors Ltd.  
Heaters Controls & Sensors Ltd.  
Baker Instruments Ltd.  
Transcat  
Campbell Scientific (Canada) Corp.  
Great Lakes Industrial Controls  
BEP Bestobell Canada Ltd.  
Industrial Projects Ltd.  
Davis Controls  
R.A. Kirby Sales Inc.  
Armatek Controls  
Transcat  
Provincial Controls  
Spec Sarnia Limited  
Willer Engineering  
Transcat  
BEP Bestobell Canada Ltd.  
Industrial Projects Ltd.  
Floval Equipment Ltd.  
Lisle-Metrix Ltd.  
Controls  
Transcat  
Cantech Controls  
Provincial Controls  
Great Lakes Industrial Controls  
Westburne Lytle  
Transcat  
Great Lakes Industrial Controls  
WESCO  
Novatech  
Transcat  
Brian Controls  
Cambridge Controls  
Willer Engineering  
Alpha Controls & Instrumentation  
Willer Engineering  
Transcat  
Transcat  
Provincial Controls  
Transcat

## Manufacturer / Tradename

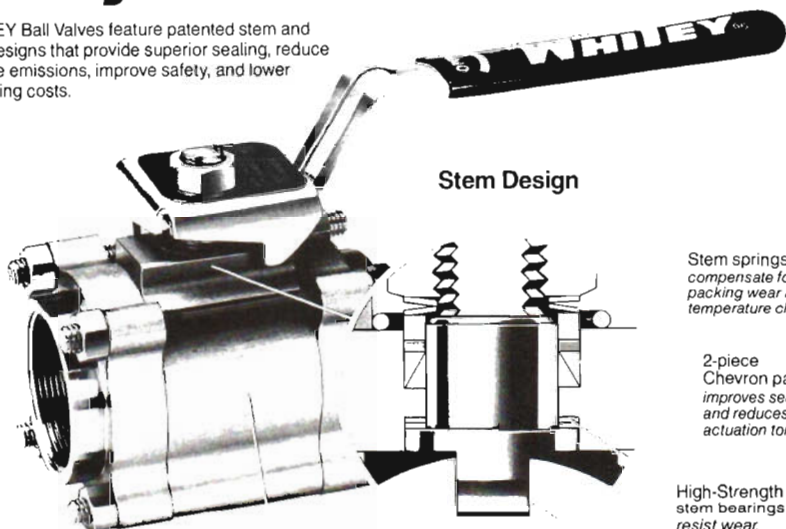
Vaisala - RH, Barometric Pressure  
Valhalla  
Validyne  
Valtek Controls  
Valve Concepts  
Valvtech  
Vector-Vid  
Veeder-Root  
Velan  
Veriflo  
Veris  
Versatile Instruments  
Viatran  
Vista Scientific  
Vitec  
Viz  
Vortec Coolers  
Vortisand  
WSA  
Wabco  
Wahl  
Walker Scientific  
Wallace & Tiernan  
Wallace & Tiernan - Pressure Calibrators  
Warren Jones Engineering - England  
Warrick  
Waterman Industries - USA  
Watts  
Watts  
Wedgewood Technology  
Weed  
Weidmuller - Conditioners/Power Supplies  
Weksler Instruments  
Westech  
Westinghouse  
Westronics  
Wey Valve  
Whesso Varec  
Whipps Inc. - USA  
Whitey Valves  
Whitman  
Wika  
Wika Chemical Seals  
Wika Gauges  
Wika Pressure Transmitters/Transducers  
Wilkerson  
Wilkerson Instrument Co. Inc.  
Williams Instrument Co.  
Winters  
Wood's  
Woodhead  
Worcester  
Worcester Controls  
Wright-Austin  
Xomox  
Yarway  
Yokogawa Test Equipment  
Zellweger Analytics  
Zirtek Corporation  
Zullig

## Local Sales Representative

Campbell Scientific (Canada) Corp.  
Transcat  
Cancoppas Limited  
Controls  
Zirco Ltd.  
Regional Process Equipment  
Transcat  
Davis Controls  
Westburne Lytle  
Armatek Controls  
Alpha Controls & Instrumentation  
Sharp Valve & Instrumentation  
Willer Engineering  
Transcat  
Transcat  
Transcat  
Provincial Controls  
Great Lakes Industrial Controls  
Great Lakes Industrial Controls  
Great Lakes Industrial Controls  
BEP Bestobell Canada Ltd.  
Transcat  
J & M Engineering & Sales Ltd.  
Transcat  
Lisle-Metrix Ltd.  
Davis Controls  
Lisle-Metrix Ltd.  
Floval Equipment Ltd.  
Great Lakes Industrial Controls  
Zirco Ltd.  
Cantech Controls  
CTH Industrial Controls  
Baker Instruments Ltd.  
Westech Industrial Ltd.  
WESCO  
Durham Instruments  
Great Lakes Industrial Controls  
Westech Industrial Ltd.  
Lisle-Metrix Ltd.  
Huron Valve & Fittings  
Davis Controls  
Sharp Valve & Instrumentation  
Provincial Controls  
Provincial Controls  
Provincial Controls  
Transcat  
J & M Engineering & Sales Ltd.  
Willer Engineering  
Floval Equipment Ltd.  
U & I Supply  
Axiom Technologies Ltd.  
Floval Equipment Ltd.  
U & I Supply  
Great Lakes Industrial Controls  
Regional Process Equipment  
Great Lakes Industrial Controls  
Transcat  
Prosigma Analytics Inc.  
R.A. Kirby Sales Inc.  
BEP Bestobell Canada Ltd.

# WHITEY® Ball Valves STOP hazardous and costly leaks

WHITEY Ball Valves feature patented stem and seat designs that provide superior sealing, reduce fugitive emissions, improve safety, and lower operating costs.



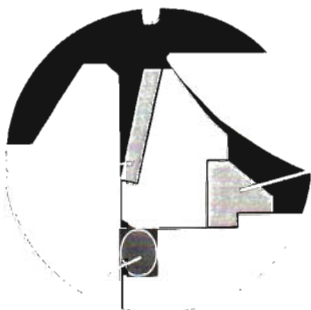
**Stem Design**

Stem springs –  
compensate for  
packing wear and  
temperature changes.

2-piece  
Chevron packing –  
improves seal  
and reduces  
actuation torque.

High-Strength  
stem bearings –  
resist wear.

**Seat  
Design**



Coned  
disc spring –  
live loads seat  
against the ball  
to compensate for pressure  
and temperature changes.

Bottom-loaded,  
blowout-proof stem –  
provides maximum safety.

Support ring –  
Supports seat  
to increase  
cycle life.

Encapsulated  
flange seal –  
maintains leak-tight seal  
over a wide variety of  
system conditions.

## Additional Features:

- 1/4 turn actuation
- Lever or oval handles
- Lockout and vent features (conform to OSHA 1910.119)
- 4-Bolt swing-out construction
- Stainless steel, carbon steel, brass, and special alloys
- Sizes from 1/4" to 2"
- 100% factory tested.

Information on the  
full line of WHITEY  
Process Ball Valves  
is available from  
your local Authorized  
Sales and Service  
Representative.



**HURON**  
**VALVE FITTING LIMITED**

1-800-265-7575  
336-3453

800 Confederation St.  
P.O. BOX 386  
SARNIA, ONT. N7T 7J2

A SWAGELOK® COMPANY

WHITEY Co.  
318 Bishop Road  
Highland Heights, OH 44143

© 1991 Swagelok Co. all rights reserved 175-640T

## Past-Presidents of the Sarnia Section of I.S.A.

1946/47	Bill Graeb	1971/72	Curt McDonald
1947/48	Amby Upfold	1972/73	Everett Maness
1948/49	Ron Chamberlane	1973/74	Stan Thrift
1949/50	Don Livingstone	1974/75	E. A. Comello
1950/51	Amby Upfold	1975/76	Bernard West
1951/52	Ken Goldring	1976/77	Jim Henrikson
1952/53	Amby Upfold	1977/78	Jim Johnson
1953/54	Warren McKay	1978/79	Ron Thurier
1954/55	Jack Heatley	1979/80	Dave Braedley
1955/56	Larry Hall	1980/81	John Stassen
1956/57	Harold Kohlmeier	1981/82	Wayne Jamieson
1957/58	Ron Asselstine	1982/83	Frank Bandura
1958/59	Mike Hicks	1983/84	John Tranter
1959/60	Mike Hicks	1984/85	Robb Sharp
1960/61	Mike Hicks	1985/86	Ron Kells
1961/62	George Mills	1986/87	Howie Whitton
1962/63	Robert Brayne	1987/88	Joe Lobo
1963/64	Robert Newman	1988/89	Irvin Hawkes
1964/65	Robert Newman	1989/90	Rich Patterson
1965/66	Ted Stock	1990/91	Ken Blair
1966/67	Ted Stock	1991/92	Jim Lomax
1967/68	Bill Rion	1992/93	Bob Kelly
1968/69	Bud Dodds	1993/94	Bill Arundell
1969/70	Ray Wechselberger	1994/95	Larry Corbett
1970/71	Bill Glendon	1995/96	Mike Murray



# **LAKE**SIDE

**FISHER®**

## **FISHER CONTROLS INTERNATIONAL, INC.**

Control valves - Globe and rotary

Noise and cavitation reduction control valves

Actuators and positioners - pneumatic, electric electro-hydraulic

REGULATORS - Steam, gas and liquids - tank blanketing

Process Instrumentation:

- Electronic and pneumatic controllers
- FIELDVUE™ - digital valve controllers

### **FISHER SERVICE**

- Valve repairs, factory and site
- Maintenance and shut-down management
- Diagnostics for pneumatically operated valves
- Start-up assistance
- Asset Management Service

### **CON-TEK**

- Steam Conditioning Valves and Desuperheaters

### **H.D. BAUMANN**

- Control Valves and Control Equipment
- General purpose control valves
- Corrosion resistant valves
- Low flow control valves

## **FISHER-ROSEMOUNT**

## **FISHER-ROSEMOUNT SYSTEMS INC.**

PROVOX distributed control systems and Rosemount System 3™

- Service:**
- Engineering and project management
  - Installation and start-up assistance
  - System life management

### **DeltaV**

- Scalable process system for small process control applications



**GO®  
SWITCH**

## **GENERAL EQUIPMENT & MANUFACTURING COMPANY INC.**

- Proximity limit switches

ISO 9001



Registered 1994

## **Lakeside Process Controls Ltd.**

581 Vidal Street South, Sarnia, Ontario, N7T 2V8

**Phone: (519) 332-2300 Fax: (519) 332-6640**

*"Superior Service Supporting You"*