

# ANNUNCIATOR

MAY 1998



SARNIA



SECTION

The International Society  
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**ADVERTISERS:** Please note that the deadline for the JULY ANNUNCIATOR is June 15, 1998. Please forward information to the editor by that date in order to have items updated.

**THE DINNER MEETINGS FOR THE 1997/98 SEASON WILL BE HELD AT THE SARNIA GOLF AND CURLING CLUB**

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

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## Upcoming Executive Meetings

June 29, 1998

*All regular meetings will be held at 6:30 p.m. at the Sarnia Golf & Curling Club*



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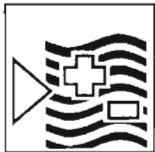
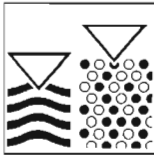
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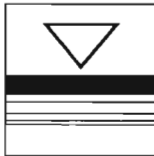
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# ***INTRODUCING...***

## ***Sarnia Section's Newest Member***

***Samir Mehta***

***Paton Controls,  
Sarnia***



***Position:***

Instrument Engineer

***Education:***

Bachelor Degree in  
Instrumentation & Control,  
India

***Background:***

Worked with Fisher-  
Rosemount India, as a Senior  
Project Engineer

***Samir can be contacted at:***

(Tel) 519-332-1717

(Fax) 519-332-8715

***A warm welcome to Samir as he joins the Sarnia Section and establishes his presence in the Sarnia area.***

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## President's Corner

My term is nearly over as President for your Sarnia Section Executive. It always surprises me when reviewing the passing time how fast it seems to be moving. I would like to thank all the people involved on the executive for helping me get through the year. We are in the process of finalizing the executive membership for next year. Volunteers are appreciated.

The section is in good shape financially. We are completing our planning on an education program on Fieldbus for our members and the instrumentation community of Sarnia. Interest is high for this and we are anticipating a good turnout. A new technical journal is being considered for the coming year and we hope to be able to present details of this in the upcoming months.

We will be sending representatives to the upcoming District 13 meeting (May 8 - 10) in Niagara-on-the-Lake and the Presidents summer meeting (June 20 - 25) in Montreal.

Our final dinner meeting for the year is on May 25. The speaker is Mr. Fairbanks who will talk about the history of Chemical Valley.

Thank you for the opportunity to have served you in this past year.

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## **Sarnia Section Executive 1997-98**

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|-------------------------------|---------------------|--------------------|------------|
|                               |                     | (Area Code 519)    |            |
| President                     | Andy Tucker         | 383-3704           | 383-8285   |
| Vice-President                | TBA                 |                    |            |
| Past President                | Randy Dennie        | 337-8252 ext. 5871 | 339-7723   |
| Education Chairman            | Kalpen Vachharajani | 332-1717           | 332-1186   |
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| Newsletter Editor             | Brad Simpson        | 337-3200           | 337-7068   |
| Newsletter Assistant          | Rob Thrift          | 336-0201           | 336-0209   |
| Web Master                    | Brian Smith         | 332-1212 ext. 7920 | 339-7305   |
| Program Chairman              | Ian Shouldice       | 1-800-268-9094     | 336-0997   |
| Program Assistant             | Glen Williamson     | 481-3202           | 481-3336   |
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| Honours & Awards Assistant    | Guy Salt            | 344-4300           | 344-0042   |
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| Membership Assistant          | Mike Murray         | 383-1709           | 339-0481   |
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| Standards and Practices       | Don Murch           | 431-1916           | 431-1127   |
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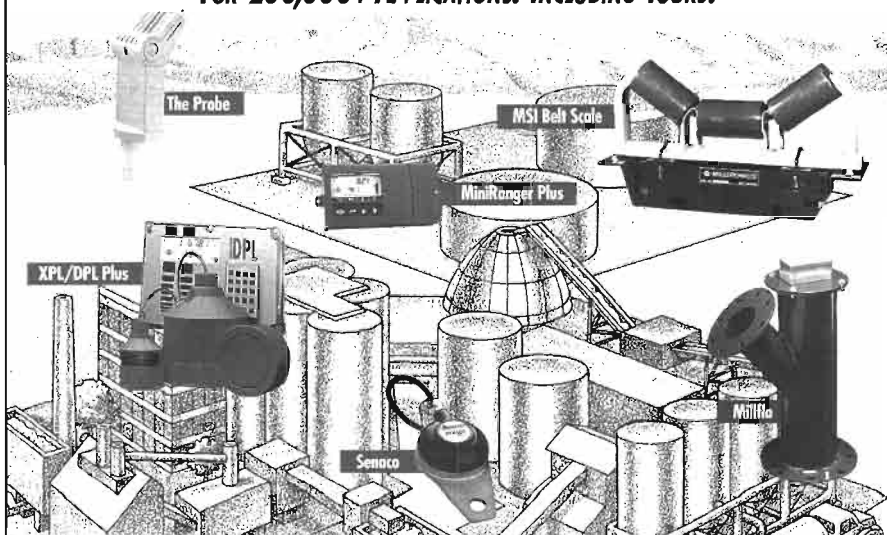
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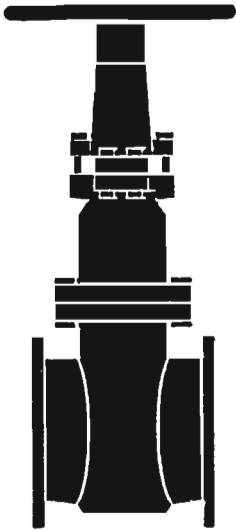
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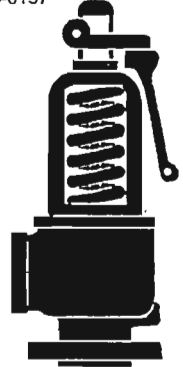
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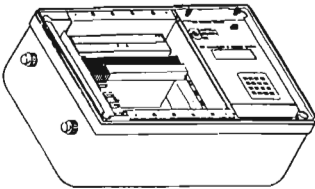
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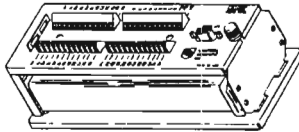


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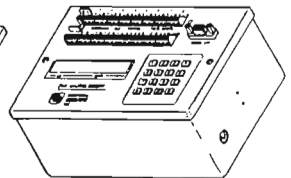
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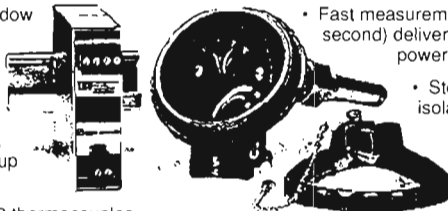
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On behalf of the ISA Student Section of Lambton College, I would like to thank the ISA Sarnia Section for providing the financial assistance necessary for making the technical field trip to Hiram Walker & Sons Limited of Windsor a success. Mike Grey and 12 accompanying students got the opportunity to view first hand, the processes and applications utilized in the manufacture and bottling of Canadian Club whiskey.

Results of the Student Section elections are in;

**PRESIDENT: Ed Millenaar**

**NEWSLETTER EDITOR: Trevor Johansen**

**THIRD YEAR REPRESENTATIVE: Josh Thomas**

**SECOND YEAR REPRESENTATIVE: Corey Robbins**

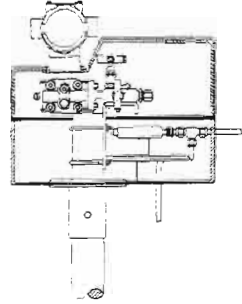
The Sarnia Section Golf Tournament is rapidly approaching and ISA students would like to participate in the event. If any company or organization is willing to sponsor a student for a day, we would be glad to hear from you! It may be arranged through myself as I may be reached during the evening at (519) 862-3157.

Thank You,  
Trevor Johansen



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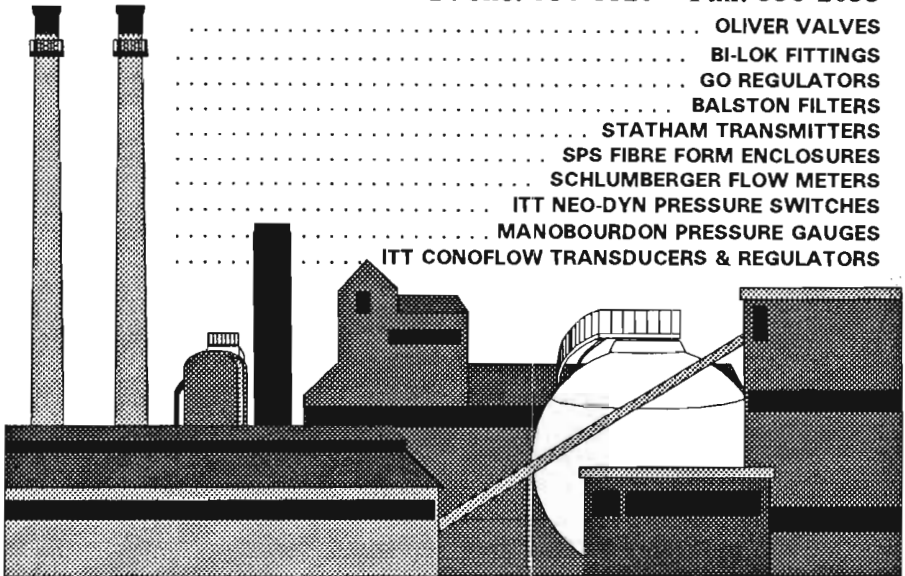
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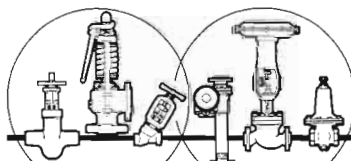
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| 1958/59 | Mike Hicks        | 1984/85 | Robb Sharp     |
| 1959/60 | Mike Hicks        | 1985/86 | Ron Kells      |
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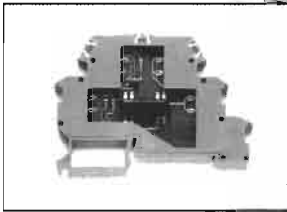
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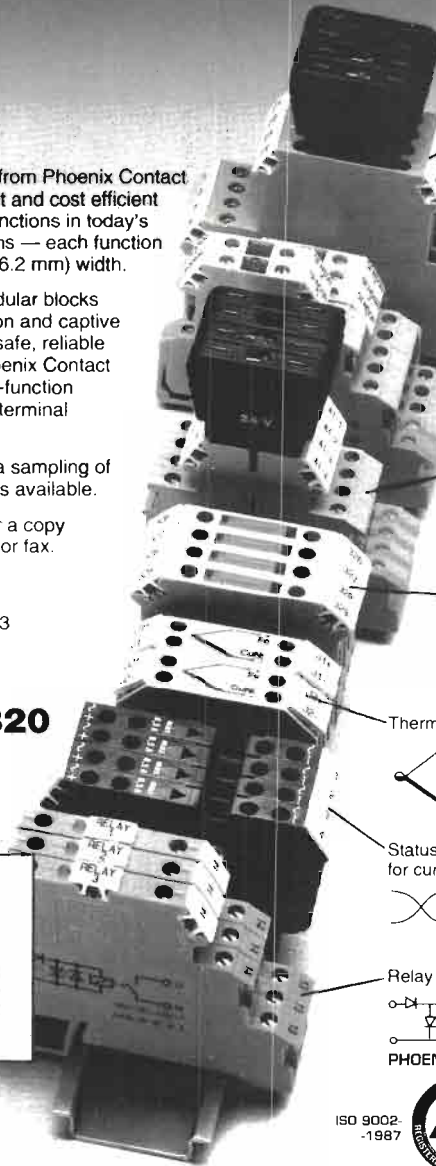
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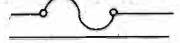
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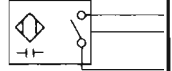
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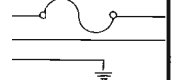
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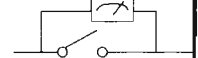
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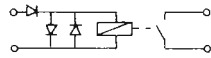
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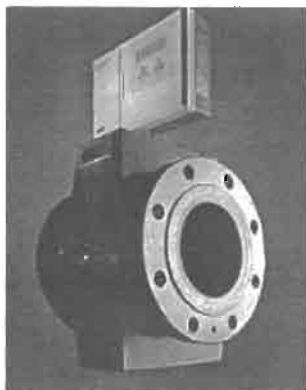
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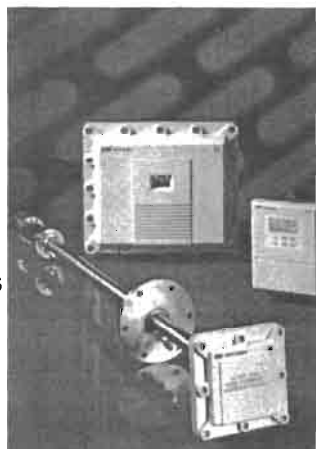
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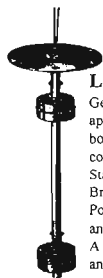
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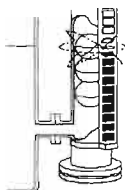


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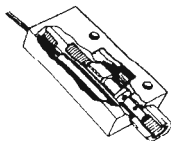
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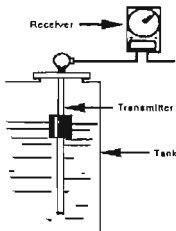
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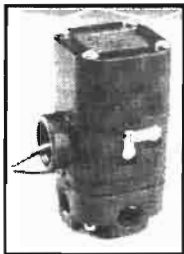
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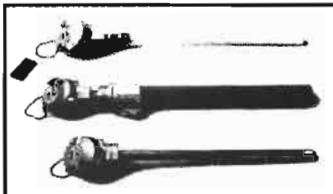
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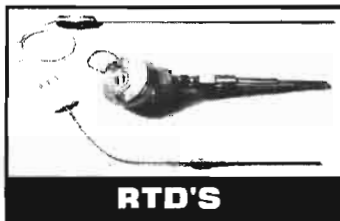
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# ISA Sarnia Section WEBMASTER REPORT

**February 23, 1998**

The ISA Sarnia Section Home Page has been moved from EBTech to Xcelco. The new address is [www.xcelco.on.ca/~btsmith/isasarni.htm](http://www.xcelco.on.ca/~btsmith/isasarni.htm)

The old address has an automatic link to the new address.

I'm working on an article for the March Annunciator titled "Temperature Measurement" which provides some basic temperature sensor information plus some specific temperature selection issues plus some information available on the internet. The article will also be posted on the Internet.

ISA Online has moved to a new server and updated it's pages. The address is still the same [www.isa.org](http://www.isa.org). The members only page allows members to update their membership information online, search for members contact information, search roster of society leaders and search the Measurement and Control Dictionary.

I'm acting as the editor of the next District 13 newsletter. It's been delayed because of a delay in receiving the District 13 VP's submission.

---

## ISA BBS UPDATE

As of February 21, 1998 there have been 1767 calls, 1454 downloads, 39 uploads and 654 messages. Call the BBS at 541-0427

# *Fellow Grade*

## **NOMINATION FACT SHEET**

### **WHAT IS THE ISA FELLOW GRADE?**

Fellow is an elected grade of membership. It is prestigious and is awarded by ISA to qualified Senior Members who have made exceptional engineering or scientific contributions.

### **WHAT ARE THE QUALIFICATIONS FOR FELLOW?**

1. Senior ISA Member for 5 years.
2. 10+ years of active work in instrumentation.
3. Outstanding engineering or scientific attainments.

NOTE: Society service is not a criterion for Fellow Grade.

### **WHO ISN'T ELIGIBLE?**

Members of the Executive Board and Admissions Committee are not eligible for Fellow grade election during their tenure; nor may they be evaluators of nominees for Fellow grade.

### **WHAT DOES THE ADMISSIONS COMMITTEE CONSIDER AN OUTSTANDING ENGINEERING OR SCIENTIFIC CONTRIBUTION?**

The description of a nominee's "contribution" in general, should not be a "job description" of the nominee's performance with his organization. The accomplishment may take many forms, including:

- Published Technical Papers
- Innovative Practices
- Educational Programs and Activities
- Leadership and Technical Management
- Research
- Patents
- Books
- Engineering Projects

For more specific examples of descriptions of contributions and sample citations, refer to "Part II. The Nomination Form, General Instructions" in the ISA Fellow grade Nomination Guide.

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- Electrical Measurement Transducers - Analogue Indicators



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- Modular Signal Conditioners

Control

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CEWE**

- Rotary - Capacitance - Point On Demand Level Monitors



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- Process and Pressure Calibrators
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- Vortex Flow Meters
- Thermal Dispersion Flow Meters
- Pitot Tube - Venturi Flow Meters



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**Binmaster**



Calibration

**Validyne  
Tek Know  
Haven  
MSR  
Kobold**

Flow / Level



**Service**

- Total Solutions - Systems Integration
- Commissioning
- Custom Engineering - Design



# ISA Sarnia Section "Dinner Meeting Notice"



**Monday, May 25, 1998**

**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...*

**CHARLES FAIRBANKS SR.**

*Topic...*

**"Lambton County's Oil Heritage"**



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Roasted Potato,  
Sugar Snap Peas

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White Chocolate Mousse

*\* For special dietary needs contact Hilda White at the Sarnia Golf and Curling Club 48 hours prior to meeting date.*

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

*Please phone in your reservation by Thursday, May 21*

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

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

**Members \$10 • Guests \$15**

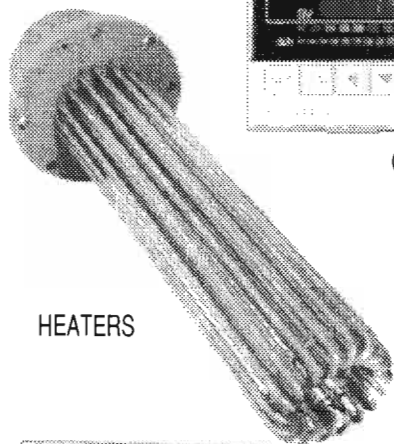
**Note:** ALL Members and guests are requested to reserve in advance. Please oblige... we need your support to plan your evening!

# ISA PERSPECTIVES

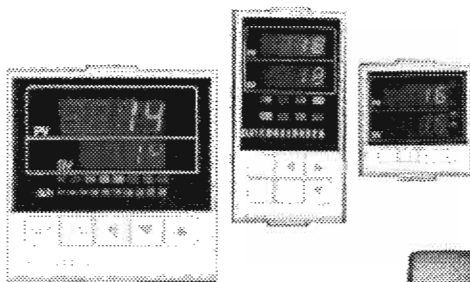


# HCS

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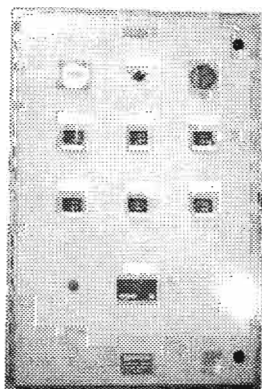
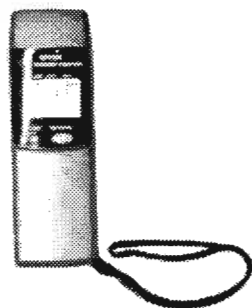


HEATERS

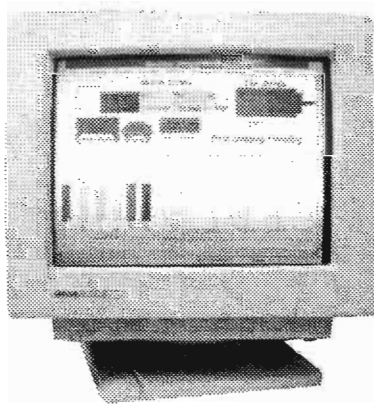


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*The Fourth Annual*  
**ISA SARNIA SECTION**  
**GOLF TOURNAMENT**

**Date:** Friday, June 12, 1998

**Place:** St. Clair Parkway

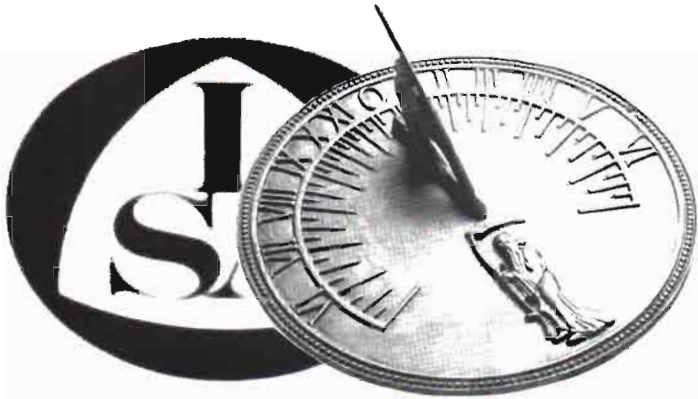
**Cost:** \$55.00

**Tee Off:** 8:00 a.m.



Your Executive wishes to provide a fun day for all members and potential members with our Fourth 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 year's tournament a great success.

# Some things you will always be able to count on



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- *viscosity analyzers*
- *NIR spectrometers*

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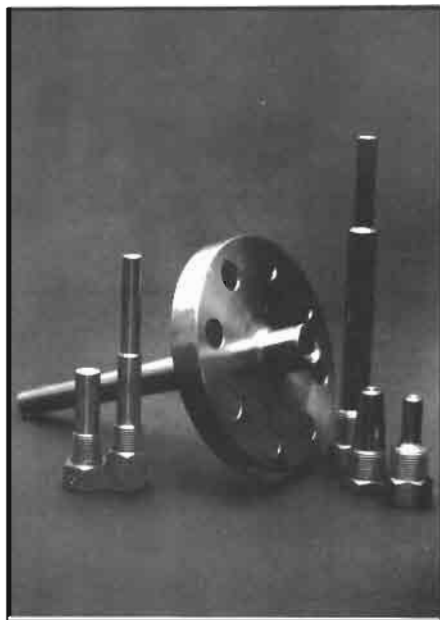
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- Thermocouples
- RTD Elements
- Thermowells



- Teflon Lined Butterfly and Plug Valves for Corrosive Service

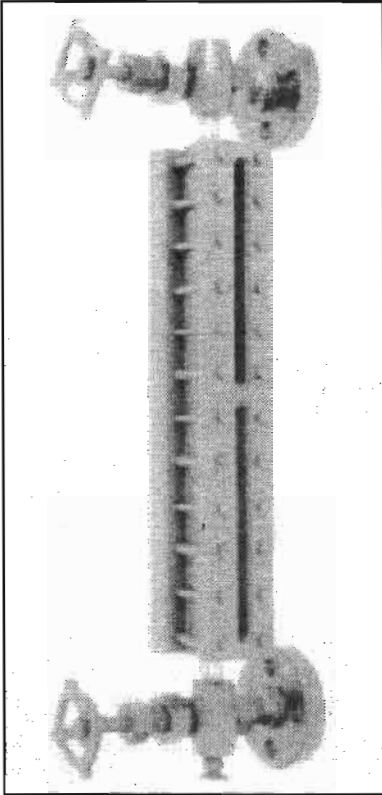


- Transducers and Positioners
- Regulators
- Volume Boosters



# **MAC-WELD**

## **MACHINING LTD.**



### ***Refurbish Your Level Gauges***

- ▼ NO TIME OR PARTS
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- ▼ REDUCE INVENTORY
- ▼ ONE DAY TURNAROUND
- ▼ GLASS • GASKETS • BOLTS
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- ▼ TORQUED & TESTED
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**1-800-563-0292**

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# 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

3D  
3D  
3M  
3P  
A&M Weston  
A.S.I.  
A.W. Sperry  
Accutech  
ACL  
ACR Systems  
Acromag  
Action Instruments  
Action Instruments  
Action Instruments  
Action Instruments  
Action Instruments  
AD Technologies  
ADI  
Advance Products Spray Shields  
AEM Systems  
AEMC  
AFE Technologies Inc.  
AGI - Atlantic Group Inc.  
Aim  
Air Flow  
Air Monitor Corp.  
AiRanger  
Aladco Nu-Check Valves  
Alltemp Sensors  
Alnor Instruments  
Altek  
Altek  
Amalogic  
American Reliance  
Ametek  
Ametek  
Ametek - Analyzers  
Ametek/Jofra  
Amiad  
Amot Controls  
Amot Controls  
Amprobe  
AMS  
Aoip  
APACS  
API Meters  
Apical Charts  
Apollo  
Appalachian Controls  
Applied System Technology  
ARi  
ARi  
Armatek  
Armtec Industries  
ARO  
ASCO  
ASCO  
ASCO  
ASCO  
Ascoelectric  
ASD  
Ashcroft  
Ashcroft  
Ashford Valve  
Astro  
Athena  
Atomac Ball & Check Valves  
Aurora  
Autotech  
Avcom  
Avo  
AYA

## Local Sales Representative

Alpha Controls & Instrumentation  
Transcat  
Transcat  
Romatec  
Transcat  
Westburne Lytle  
Transcat  
Brian Controls  
Transcat  
Alpha Controls & Instrumentation  
Willer Engineering  
Cambridge Controls  
CTH Industrial Controls  
Heaters Controls & Sensors Ltd.  
Summit Controls Ltd.  
Transcat  
Durham Instruments  
Cancoppas Limited  
Sarnia Piping Specialties  
ProSigma Analytics Inc.  
Transcat  
CTH Industrial Controls  
Controls  
Transcat  
Transcat  
Westech Industrial Ltd.  
Milltronics Limited  
Provincial Controls  
TubeTech Ltd.  
Transcat  
Alpha Controls & Instrumentation  
Transcat  
Transcat  
Transcat  
Brian Controls  
Transcat  
Willer Engineering  
Transcat  
Fival Equipment Ltd.  
Controls  
Great Lakes Industrial Controls  
Transcat  
Cambridge Controls  
Omnitronix  
Moore Products Co. (Canada) Inc.  
Lisle-Matrix Ltd.  
Provincial Controls  
Romatec  
Controls  
Transcat  
Alpha Controls & Instrumentation  
Heaters Controls & Sensors Ltd.  
Armatek Controls  
BEP Bestobell Canada Ltd.  
Great Lakes Industrial Controls  
Matheson Valves  
TubeTech Ltd.  
WESCO  
Westburne Lytle  
Fival Equipment Ltd.  
Brian Controls  
Romatec  
Transcat  
BEP Bestobell Canada Ltd.  
ProSigma Analytics Inc.  
Transcat  
Sarnia Piping Specialties  
Great Lakes Industrial Controls  
Davis Controls  
Transcat  
Transcat  
Transcat

## Manufacturer / Tradename

Azonix  
B&K  
B.N.W.  
B/W Controls  
Babbitt  
Bacharach  
Backos  
Badger Meter Inc.  
Badger Meter Inc.  
Bailey/Fischer & Porter  
Balluff  
Balston Filters  
Barber Colman  
Barber Eng.  
Barksdale  
Barnant  
Barnant  
Barton  
Baumann  
Beacon Electronics  
Beamex  
Bebco Industries  
Beede  
Beha  
BEI - Baldwin Environmental Inc.  
BEI - Baldwin Environmental Inc.  
Bellofram  
Benedict Computer  
Benke  
Bestobell Steam, Div. of Richards Ind.  
Bestobell Valves  
Beta  
Beta  
Beta Calibrators  
Biccotest  
Biddle  
Biddle/Avo  
Bi-Lok Fittings  
Binmaster  
Bin-Master  
BJM  
BLH Electronics  
Bodenseewerk/Perkin Elmer  
Boiler-Gard  
Bomem  
Bourdon-Sedeme (Manourbourdon) Gauges  
Brandt  
Brooklyn Thermometer  
Brooks  
Brown & Sharpe  
Brultech  
BS & B  
BTG Inc.  
BTG Polymetron  
Burkert  
Burkert  
Burkert  
BW  
Cajon Pipe Fittings  
Cal  
Calculated Instrumnets  
California Analytical  
Can-Ross  
Carle Chromatography  
Carlo Gavazzi  
Carlo Gavazzi-Dupline  
Cash-Acme  
Cashco Canada, Inc.  
Cashco Canada, Inc.  
Castell Interlocks  
CCS - Custom Control Sensors  
Cel Intruments  
Cellex  
Cellex  
Celtex Electronics, Inc.  
Centre Line  
Century Instrument  
Gerabar  
CEWE  
Chandler  
Chatam Controls

## Local Sales Representative

Transcat  
Transcat  
Floval Equipment Ltd.  
Ovantum Sales Inc.  
BSP Instruments  
Willer Engineering  
Great Lakes Industrial Controls  
J & M Engineering & Sales Ltd.  
Summit Controls Ltd.  
TubeTech Ltd.  
Davis Controls  
Sarnia Piping Specialties  
Davis Controls  
Ovantum Sales Inc.  
TubeTech Ltd.  
Heaters Controls & Sensors Ltd.  
Transcat  
Armatek Controls  
Lakeside Process Controls  
R.A. Kirby Sales Inc.  
Transcat  
Controls  
Transcat  
Transcat  
Novatech  
Willer Engineering  
Romatec  
Transcat  
Westech Industrial Ltd.  
BEP Bestobell Canada Ltd.  
BEP Bestobell Canada Ltd.  
Armatek Controls  
Transcat  
Line Process Controls  
Transcat  
Transcat  
Transcat  
Sarnia Piping Specialties  
Cancoppas Limited  
Regional Process Equipment  
Transcat  
CB Engineering  
CEM Specialties Inc.  
Lisle-Matrix Ltd.  
ProSigma Analytics Inc.  
Sarnia Piping Specialties  
Willer Engineering  
Transcat  
Great Lakes Industrial Controls  
Transcat  
Transcat  
Romatec  
Summit Controls Ltd.  
ProSigma Analytics Inc.  
Line Process Controls  
Ovantum Sales Inc.  
Summit Controls Ltd.  
Brian Controls  
Huron Valve & Fittings  
Davis Controls  
Transcat  
Brian Controls  
SPEC (Sarnia) Limited  
R.A. Kirby Sales Inc.  
Heaters Controls & Sensors Ltd.  
Davis Controls  
Westburne Lytle  
Cambridge Controls  
Provincial Controls  
Great Lakes Industrial Controls  
Industrial Projects Ltd.  
Transcat  
Armatek Controls  
SPEC (Sarnia) Limited  
Controls  
Matheson Valves  
Sarnia Piping Specialties  
Endress + Hauser  
Cancoppas Limited  
Transcat  
Heaters Controls & Sensors Ltd.

## Manufacturer / Tradename

Chemical Systems  
Chemline  
Chemtrol  
Chemtrol  
Chessell  
Cliff Mock  
CM - Century Valve  
Colder  
Columbia Scientific  
CompuFlo III  
Computer Keyboard Systems (CKS)  
Conant Controls Inc.  
Conant Valves  
Conders  
Conerstone  
Conoflow ITT  
Consolidated  
Consolidated Controls  
Con-Tek  
Control Instruments Corp.  
Control Microsystems  
ControlAir Inc.  
ControlAir Inc.  
Cooke  
Cooper Instruments  
Cosa  
Cosa  
CRL  
Crowcon  
Crowcon Gas Detection  
Crystal  
CSI - Microloggers  
Cutler-Hammer  
Cybex  
Cybex  
Dahl  
Danaher Controls  
Danfoss  
Danfoss Mfg. Co. Ltd. - Denmark  
Daniel  
Daniel Industries  
Daniel Industries Canada  
Data Industrial Corporation  
Data Precision  
Datacom Technologies  
Datatest  
Datatran  
Datexel  
Davenport  
Dekoron Unitherm  
Delavan  
Delphian  
Delphian  
Delta Controls  
Delta F Corporation  
Deltabar  
Delta-M  
Deltapilot  
Deltavalve  
Detector Electronics (Dettronics)  
Devar  
DewPro  
Dewrance  
DeZurik  
DGH  
DGS - Dover Gas Technologies  
Dickson  
Digitec  
Digitec  
Digitron  
Dixson  
Dixson, Inc.  
Dopak  
Dow Plastic Lined Piping Products  
DPL Plus  
Drager  
Drainall  
Druck  
Ducon Environmental Systems  
Durakool

## Local Sales Representative

R.A. Kirby Sales Inc.  
Floval Equipment Ltd.  
U & I Supply  
WESCO  
Willer Engineering  
Westburne Lytle  
Brian Controls  
Davis Controls  
R.A. Kirby Sales Inc.  
Milltronics Limited  
CB Engineering  
Industrial Projects Ltd.  
Provincial Controls  
Transcat  
Transcat  
Matheson Valves  
Contro Valve Inc.  
Transcat  
Lakeside Process Controls  
Willer Engineering  
Brian Controls  
Cambridge Controls  
WESCO  
Transcat  
Transcat  
Brian Controls  
Transcat  
Cancoppas Limited  
Cancoppas Limited  
Regional Process Equipment  
Transcat  
Campbell Scientific (Canada) Corp.  
WESCO  
CB Engineering  
CB Engineering  
Armatek Controls  
J & M Engineering & Sales Ltd.  
Davis Controls  
Lisle-Metrix Ltd.  
Westech Industrial Ltd.  
Cantrols  
Cantrols  
Cambridge Controls  
Transcat  
Transcat  
R.A. Kirby Sales Inc.  
Transcat  
Transcat  
Omnitronix  
Great Lakes Industrial Controls  
Armatek Controls  
BSP Instruments  
Romatec  
CTH Industrial Controls  
ProSigma Analytics Inc.  
Endress + Hauser  
Brian Controls  
Endress + Hauser  
Summit Controls Ltd.  
CB Engineering  
Transcat  
Endress + Hauser  
Contro Valve Inc.  
Floval Equipment Ltd.  
Alpha Controls & Instrumentation  
Veronics Inc.  
Transcat  
Brian Controls  
Durham Instruments  
Transcat  
Transcat  
CTH Industrial Controls  
Westburne Lytle  
Sarnia Piping Specialties  
Milltronics Limited  
Draeger Canada Ltd.  
Great Lakes Industrial Controls  
Transcat  
R.A. Kirby Sales Inc.  
Davis Controls

**Manufacturer / Tradename**

Dwyer  
Dwyer  
Dwyer  
Dwyer DP Gauges/Switches  
Dylon  
Dynamation  
Dynapar  
E.G. & G. Chandler  
E.I.L. Instruments  
Eagle Signal  
EAJ  
ECD  
EchoMax  
Echotel Ultrasonic  
EcoFLUX  
ECOM America Ltd.  
Edgetech  
EG & G Berthold  
EG & G Flow Technology Inc.  
EIT  
Elasto-Valve  
Elcometer  
Elcon  
Eldridge  
Eldridge Products  
Electromatic  
Electromatic  
El-O-Matic  
Elremco Timers - England  
Elsag Bailey  
Elsag Bailey Analytical Division  
EMCO  
Empro Shunts  
Endress + Hauser  
Enerrol Shock Absorbers  
Engineered Valves International (E.V.I.)  
Enraf Inc.  
ENU  
Environmental Technologies Group Inc.  
EPD Technology  
Epic  
Erdoc  
Erhard Valves - Germany  
Ernst Flow & Level  
ETC  
Etcon  
Euchner  
Eurotherm  
Eurotherm  
Eurotron  
Exact Flow  
Exergen  
Exotherm  
Exper Tune  
Extech  
F.B. Leopold - USA  
F.W. Bell  
Fairchild  
Farris  
Farris Relief Valves  
FCI  
Fieldview  
Fike Canada Inc.  
Fischer & Porter  
Fischer & Porter  
Fisher Controls  
Fisher Reseach  
Fisher Service  
Fisher-Rosemount Petroleum  
Fisher-Rosemount Systems  
Flexibox  
Flow & Level Controls  
Flow Meter Co. - England  
Flowdata Inc.  
Flowline  
Flowseal  
Flow-Tek  
Fluid Data/Amcor  
Fluidic  
Fluke

**Local Sales Representative**

Davis Controls  
Hardie Industrial Services Inc.  
Transcat  
Provincial Controls  
Great Lakes Industrial Controls  
Transcat  
Davis Controls  
R.A. Kirby Sales Inc.  
Transcat  
Davis Controls  
Transcat  
Novatech  
Milltronics Limited  
Provincial Controls  
Moore Products Co. (Canada) Inc.  
R.A. Kirby Sales Inc.  
Alpha Controls & Instrumentation  
Westech Industrial Ltd.  
CB Engineering  
Novatech  
WESCO  
Transcat  
Willer Engineering  
Cancoppas Limited  
Trillum Measurement and Control  
Davis Controls  
Heaters Controls & Sensors Ltd.  
Westburne Lytle  
Lisle-Matrix Ltd.  
TubeTech Ltd.  
ProSigma Analytics Inc.  
Davis Controls  
Transcat  
Regional Process Equipment  
Provincial Controls  
Westburne Lytle  
Willer Engineering  
Durham Instruments  
Novatech  
Transcat  
Cancoppas Limited  
BEP Bestobell Canada Ltd.  
Lisle-Matrix Ltd.  
Provincial Controls  
Transcat  
Transcat  
Davis Controls  
Heaters Controls & Sensors Ltd.  
Transcat  
BSP Instruments  
R.A. Kirby Sales Inc.  
Heaters Controls & Sensors Ltd.  
Heaters Controls & Sensors Ltd.  
Summit Controls Ltd.  
Transcat  
Lisle-Matrix Ltd.  
Transcat  
Line Process Controls  
Flovat Equipment Ltd.  
Provincial Controls  
Willer Engineering  
Lakeside Process Controls  
Brian Controls  
Elsag Bailey  
TubeTech Ltd.  
Lakeside Process Control  
Transcat  
Lakeside Process Controls  
Trillum Measurement and Control  
Lakeside Process Controls  
U & I Supply  
Trillum Measurement and Control  
Lisle-Matrix Ltd.  
J & M Engineering & Sales Ltd.  
Davis Controls  
Matheson Valves  
Summit Controls Ltd.  
Armatek Controls  
CB Engineering  
Transcat

**Manufacturer / Tradename**

Fox Industries  
 Foxboro  
 Foxcroft  
 FPP  
 Frontline  
 Fuji  
 Fuji Electric  
 Fuji Electric  
 Fujikin of America Inc.  
 Furon  
 Furon  
 Fuzypro  
 G.W. Dahl  
 Galtek  
 Gamma Silometer  
 Gasco Gas Analysis Systems Company, Inc.  
 Gastech  
 Gastech Instruments  
 Gems Sensors  
 Gemu  
 General Eastern  
 General Radio  
 General Resistance  
 Geokon  
 George Fischer +GF+  
 GGOSCO Needle Valves  
 GGOSCO Valves  
 GH Flow Automation  
 Gitta Proximity Sensors  
 Global  
 GO Regulators  
 GO Switch (Proximity)  
 GP-50  
 GPI  
 Graham Manufacturing  
 Gralab  
 Granucor  
 Granulflow  
 Granumet  
 Graseby / STI  
 Great Plains Industries  
 Greyline Instruments, Inc.  
 Griswold Separators  
 Gyrolok  
 H.D. Baumann  
 Hach  
 Halliburton  
 Hancock  
 Hanna  
 Hansen Quik Connects  
 Hardy Instruments  
 Hart Scientific  
 Hart Scientific  
 Hartman & Braun  
 Hartman-Technica  
 Harwil Corp.  
 Hathaway  
 Hathaway / Beta  
 Haven  
 Haws  
 Hayward  
 Hayward  
 HCS  
 HD Electric Company  
 Hecon  
 Hedland  
 Hedland Flowmeters  
 Heise  
 Heise  
 Hersey Flow Measurement  
 Hewlett Packard  
 Hiltap Couplers  
 Hitachi  
 Hoffer Flow Controls - USA  
 Hoke  
 Honeywell  
 Honeywell - Controllers & Recorders  
 Honeywell - Instruments  
 Honeywell - Instruments  
 Honeywell - Recorders

**Local Sales Representative**

BEP Bestobell Canada Ltd.  
 SPEC (Sarnia) Limited  
 Cancoppas Limited  
 Cancoppas Limited  
 Transcat  
 Heaters Controls & Sensors Ltd.  
 Transcat  
 WESCO  
 Ovantum Sales Inc.  
 Great Lakes Industrial Controls  
 Intertec  
 Heaters Controls & Sensors Ltd.  
 Armatek Controls  
 Romatec  
 Endress + Hauser  
 Novatech  
 Transcat  
 R.A. Kirby Sales Inc.  
 IMO Industries  
 Matheson Valves  
 Willer Engineering  
 Transcat  
 Transcat  
 Campbell Scientific (Canada) Corp.  
 Brian Controls  
 Westburne Lytle  
 Hardie Industrial Services Inc.  
 Ovantum Sales Inc.  
 Heaters Controls & Sensors Ltd.  
 Transcat  
 Sarnia Piping Specialties  
 Lakeside Process Control  
 Omnitronix  
 Transcat  
 Lakeside Process Controls  
 Transcat  
 Endress + Hauser  
 Endress + Hauser  
 Endress + Hauser  
 CB Engineering  
 Armatek Controls  
 Cantrols  
 Floval Equipment Ltd.  
 Summit Controls Ltd.  
 Lakeside Process Controls  
 Fryston Canada Inc.  
 Willer Engineering  
 Contro Valve Inc.  
 Transcat  
 Provincial Controls  
 CTH Industrial Controls  
 Alpha Controls & Instrumentation  
 Transcat  
 TubeTech Ltd.  
 Transcat  
 Ovantum Sales Inc.  
 Line Process Controls  
 Transcat  
 Cancoppas Limited  
 Great Lakes Industrial Controls  
 CTH Industrial Controls  
 Summit Controls Ltd.  
 Great Lakes Industrial Controls  
 Transcat  
 Transcat  
 Brian Controls  
 R.A. Kirby Sales Inc.  
 BSP Instruments  
 Transcat  
 Floval Equipment Ltd.  
 Transcat  
 U & I Supply  
 Transcat  
 Lisle-Metrix Ltd.  
 Summit Controls Ltd.  
 Davis Controls  
 Provincial Controls  
 Brian Controls  
 Floval Equipment Ltd.  
 Transcat

## Manufacturer / Tradename

Houston Atlas  
Huntron  
Hyberlab  
Hycal  
HydroGuard  
Hytork  
IBM Industrial Computers  
ICC Federated  
Ice  
ICI  
IET Labs  
Imperial Eastman Fittings  
Imperial Eastman Fittings  
IMS  
Industrial Control  
Industrial Scientific  
Industrial Sensors  
Industrial Tech. Services  
Infrared Engineering  
Ingredient Masters  
Innovative Sensors Inc.  
Inor  
Instek America  
Intellution  
Intempco Controls Ltd.  
Interface  
Interface  
International Data Sciences  
International Instruments  
International Sensor Technology  
Ion Track Instrumentation (ITI)  
Ionics Instrument Division  
Iotron  
Ircan  
ISI  
Isolok  
Isotek  
ITT Barton Instruments  
ITT Conoflow Transducers & Regulators  
ITT Engineered Valves  
ITT Neo-Dyn Pressure Switches  
ITT Pomona  
IVO Industries - USA  
J.M. Canty, Inc.  
Jacoby Tarbox  
Jerguson Level Gauges  
Jewell  
Jofra  
Johnson Yokogawa  
Jordan Controls, Inc.  
J-Tec  
Julius Bauser - Germany  
JUM  
Kammer Valves  
Kane-May  
Kates  
Kavlico  
Kay Ray / Sensall  
Kaye  
Kaye Instruments  
KDG Mobrey  
Keddco Mfg. Ltd.  
Keller  
Kenmac  
Kenwood USA  
Kep  
Kep  
Ketema  
KF Industries  
Kinetrol Actuators  
Kinetrol Actuators  
King Instrument Company  
Kipp & Zonen  
Kipp & Zonen  
Kistler-Mores  
Kitz  
KL Flow  
Klinger  
Klinger  
KNF Neuberger

## Local Sales Representative

R.A. Kirby Sales Inc.  
Transcat  
Transcat  
Davis Controls  
Endress + Hauser  
Matheson Valves  
CB Engineering  
Transcat  
Transcat  
Cancoppas Limited  
Transcat  
Provincial Controls  
U & I Supply  
Great Lakes Industrial Controls  
Transcat  
Brian Controls  
Heaters Controls & Sensors Ltd.  
BSP Instruments  
Willer Engineering  
Ovantum Sales Inc.  
ProSigma Analytics Inc.  
Alpha Controls & Instrumentation  
Transcat  
CB Engineering  
Matheson Valves  
Durham Instruments  
Willer Engineering  
Transcat  
Transcat  
Industrial Projects Ltd.  
BEP Bestobell Canada Ltd.  
Veronics Inc.  
WESCO  
Willer Engineering  
Heaters Controls & Sensors Ltd.  
Great Lakes Industrial Controls  
Transcat  
Armatek Controls  
Sarnia Piping Specialties  
Romatec  
Sarnia Piping Specialties  
Transcat  
Lisle-Matrix Ltd.  
Cambridge Controls  
Romatec  
Romatec  
Transcat  
Transcat  
CB Engineering  
Cambridge Controls  
Brian Controls  
Lisle-Matrix Ltd.  
BSP Instruments  
Matheson Valves  
Transcat  
Westech Industrial Ltd.  
Davis Controls  
Rosemount Instruments  
Transcat  
CB Engineering  
BEP Bestobell Canada Ltd.  
U & I Supply  
Campbell Scientific (Canada) Corp.  
Great Lakes Industrial Controls  
Transcat  
Brian Controls  
Transcat  
Brian Controls  
Great Lakes Industrial Controls  
Hardie Industrial Services Inc.  
Provincial Controls  
Industrial Projects Ltd.  
Durham Instruments  
Transcat  
Ovantum Sales Inc.  
Matheson Valves  
Cancoppas Limited  
Davis Controls  
SPEC (Sarnia) Limited  
Transcat

**Manufacturer / Tradename**

Kobold  
 Kobold  
 Kobold  
 Koch  
 Kotron Capacitance  
 Kreyenborg  
 Krohne  
 Krohne  
 K-Sun  
 K-Tek  
 KTM Ball Valves  
 Kuebler Control Eng.  
 Kurz  
 Kurz  
 Kyoritsu  
 Kyowa  
 L & J Technologies  
 L.J. Star Inc.  
 LAGCO Flumes - USA  
 Land  
 Laurel Electronics  
 Laurence  
 LC Meters  
 LCI-Luwa  
 Leader  
 Leaderline  
 Lee-Dickens Ltd. - England  
 Leica  
 Leine & Linde  
 Lem  
 LEOPOLD  
 Leslie  
 LFE API Instruments  
 LFE Instruments - USA  
 LI-COR  
 Linatex  
 Liquid-O-Ring  
 Liquiphant  
 Lloyd  
 LMI  
 LMI  
 Logic Beach  
 Logic Bench  
 Lucas Novasensor  
 Lufran  
 Lumenite Electronic Company  
 M & C Products  
 M point  
 M&G Check Valves  
 M. System  
 M.T.L.  
 M.T.S.  
 MA - Molecular Analytics LLC  
 Macro Sensors  
 Madison  
 Madison Co.  
 Madur Electronics  
 Magnetrol  
 Magnetrol Level & Flow  
 Maihak  
 Manobourdon Pressure Gauges  
 Marine Moisture Co.  
 Martel Electronics  
 Masoneilan  
 Massa  
 Master Appliance  
 Max  
 McCrometer  
 MCS  
 MDA Scientific  
 MDI  
 Measurement Systems  
 Meeco Inc.  
 Mensor  
 Mercoid  
 Meriam Instruments  
 Merian  
 Mesa Laboratories  
 Met One  
 Metratek

**Local Sales Representative**

Cancoppas Limited  
 Regional Process Equipment  
 Transcat  
 Romatec  
 Provincial Controls  
 Great Lakes Industrial Controls  
 Moore Products Co. (Canada) Inc.  
 Summit Controls Ltd.  
 Transcat  
 CB Engineering  
 Regional Process Equipment  
 Ovantum Sales Inc.  
 Brian Controls  
 Transcat  
 Omnitronix  
 Omnitronix  
 Line Process Controls  
 J & M Engineering & Sales Ltd.  
 Lisle-Metrix Ltd.  
 Transcat  
 Transcat  
 Great Lakes Industrial Controls  
 SPEC (Sarnia) Limited  
 Great Lakes Industrial Controls  
 Transcat  
 Honeywell  
 Lisle-Metrix Ltd.  
 Transcat  
 Durham Instruments  
 Transcat  
 Lisle-Metrix Ltd.  
 Lisle-Metrix Ltd.  
 Great Lakes Industrial Controls  
 Transcat  
 Lisle-Metrix Ltd.  
 Campbell Scientific (Canada) Corp.  
 Floval Equipment Ltd.  
 Great Lakes Industrial Controls  
 Endress + Hauser  
 Omnitronix  
 Novatech  
 U & I Supply  
 Durham Instruments  
 Transcat  
 Durham Instruments  
 Heaters Controls & Sensors Ltd.  
 J & M Engineering & Sales Ltd.  
 CEM Specialties Inc.  
 Endress + Hauser  
 Matheson Valves  
 Alpha Controls & Instrumentation  
 Provincial Controls  
 R.A. Kirby Sales Inc.  
 Novatech  
 Durham Instruments  
 BEP Bestobell Canada Ltd.  
 Ovantum Sales Inc.  
 Novatech  
 Floval Equipment Ltd.  
 Provincial Controls  
 Westech Industrial Ltd.  
 Sarnia Piping Specialties  
 R.A. Kirby Sales Inc.  
 Transcat  
 Contro Valve Inc.  
 Durham Instruments  
 Transcat  
 Willer Engineering  
 Brian Controls  
 Heaters Controls & Sensors Ltd.  
 Westech Industrial Ltd.  
 Heaters Controls & Sensors Ltd.  
 Durham Instruments  
 Novatech  
 Willer Engineering  
 Davis Controls  
 Brian Controls  
 Transcat  
 Armatek Controls  
 Campbell Scientific (Canada) Corp.  
 Transcat

**Manufacturer / Tradename****Local Sales Representative**

Metrix  
 Metrix Timers  
 Metrohm  
 Mettler Toledo (Ingold)  
 Micro Motion  
 Micro Wire Products  
 Micropilot  
 MicroRanger  
 Mid-West Instrument  
 Mid-West Instrument  
 Mihjets  
 Mihproducts Division  
 Mikron  
 Mikron  
 MillFlo  
 Milltronics  
 Milton Roy - Liquid Metronics Division  
 Milwaukee  
 MiniRanger Plus  
 Mitac  
 Mitsubishi  
 Mitutoyo  
 MKS  
 Mobrey  
 Modutec  
 Monarch  
 Monitek  
 Monitor Labs  
 Monitor Labs  
 Moore  
 Moore  
 Moore Industries  
 Moore Products  
 M-Tek  
 MTL Intrinsic Safe Barriers  
 Mueller  
 Multicap  
 Multiglass  
 MultiRanger Plus  
 Mycro  
 Myron L  
 Nassau Instrument  
 National Meter  
 NBS  
 NDT International  
 Neilsen-Kuljian  
 Neles-Jamesbury  
 NemaSoft  
 NICE  
 Nilcor  
 Nivocompact  
 Niversonic  
 Norriseal Butterfly Valves  
 Norstat  
 Northern Vibrator  
 Noshok  
 Novatech Engineering Group  
 Numatics Cylinders  
 Numatics F/R/Ls  
 Numatics Solenoid Valves  
 Nupro Valves  
 Nusonics  
 Oakton  
 O'Brien Corporation  
 OCM III  
 Ogden  
 Ogden  
 Ohmart Vega  
 Oil Gear  
 Oilgear  
 Olin Instruments  
 Oliver Valves  
 Optek  
 Optex  
 Optima  
 Opto 22  
 Orange Research DP Switch  
 Orbe Knife Gates Valves  
 Orion  
 OSI Semitronic

Transcat  
 Lisle-Metrix Ltd.  
 Transcat  
 Westech Industrial Ltd.  
 Rosemount Instruments  
 SPEC (Sarnia) Limited  
 Endress + Hauser  
 Milltronics Limited  
 Brian Controls  
 Hardie Industrial Services Inc.  
 SPEC (Sarnia) Limited  
 SPEC (Sarnia) Limited  
 Armatek Controls  
 Transcat  
 Milltronics Limited  
 Milltronics Limited  
 U & I Supply  
 Floval Equipment Ltd.  
 Milltronics Limited  
 CTH Industrial Controls  
 Davis Controls  
 Transcat  
 Transcat  
 BEP Bestobell Canada Ltd.  
 Transcat  
 Transcat  
 Willer Engineering  
 Brian Controls  
 Romatec  
 Moore Products Co. (Canada) Inc.  
 Summit Controls Ltd.  
 Armatek Controls  
 Transcat  
 Transcat  
 Provincial Controls  
 Great Lakes Industrial Controls  
 Endress + Hauser  
 Great Lakes Industrial Controls  
 Milltronics Limited  
 Moore Products Co. (Canada) Inc.  
 Transcat  
 Transcat  
 Transcat  
 Transcat  
 Transcat  
 Transcat  
 Summit Controls Ltd.  
 Davis Controls  
 Cancoppas Limited  
 Contro Valve Inc.  
 Endress + Hauser  
 Endress + Hauser  
 Sarnia Piping Specialties  
 Davis Controls  
 Floval Equipment Ltd.  
 IMO Industries  
 Novatech  
 Provincial Controls  
 Provincial Controls  
 Provincial Controls  
 Huron Valve & Fittings  
 Armatek Controls  
 Transcat  
 CB Engineering  
 Milltronics Limited  
 Durham Instruments  
 Heaters Controls & Sensors Ltd.  
 TubeTech Ltd.  
 Armatek Controls  
 BEP Bestobell Canada Ltd.  
 Veronics Inc.  
 Sarnia Piping Specialties  
 R.A. Kirby Sales Inc.  
 Heaters Controls & Sensors Ltd.  
 Westech Industrial Ltd.  
 CB Engineering  
 Provincial Controls  
 Regional Process Equipment  
 Transcat  
 CTH Industrial Controls

**Manufacturer / Tradename**

Pace  
 Pacer Industries  
 Pamark Manifolds  
 Panalarm  
 Panalarm  
 Panametrics PCI Division  
 Papailias  
 Parker Fluid Connectors  
 Partlow  
 Patriot  
 Paul Mueller  
 PCME  
 Pelican  
 Penberthy Instruments  
 Penberthy, Inc.  
 Penny + Giles  
 Pepperl + Fuchs - USA  
 Perma-cal Gauges  
 Perma-Pure  
 PGI  
 PGI Valves & Manifolds  
 Phase Dynamics  
 Phipps & Bird  
 PMV  
 PMV  
 Polymetron  
 Porter Instrument Co. - USA  
 Powers  
 Powers Process Controls  
 Powers Process Controls  
 Powertronics  
 Precision Digital Corp.  
 Precision Digital Corp.  
 Precision Digital Corp.  
 Precision Digital Corp.  
 Precision Digital Corp.  
 Precision Digital Corp.  
 Preso Meters Corp.  
 Pribusin Inc.  
 Pribusin Inc.  
 Progressive Electronics  
 Prolevel  
 Promac  
 Promag  
 Promag  
 Promag  
 Proquip  
 Prosonic  
 Protek  
 Provincial Instrument Enclosures  
 Provox  
 Prowirl  
 Proximity Controls  
 Pulsafeeder  
 Purifics  
 Pyromation, Inc.  
 QSDM  
 QSDM  
 Quadtech (Gen Rad)  
 Quality Control Equip.  
 R.M. Young  
 R.P. Adams  
 Radiant Heat  
 Ralston  
 Ralston  
 Ramsey Canada  
 Raychem  
 Raytek  
 Raytek  
 Raytek  
 Raytek  
 Raytek  
 Raytek / UE  
 RC Systems  
 RdF  
 RdF  
 REBS  
 Regal  
 REK RKC  
 Research Control Valves

**Local Sales Representative**

Transcat  
 Transcat  
 Provincial Controls  
 Cambridge Controls  
 Willer Engineering  
 Veronics Inc.  
 Great Lakes Industrial Controls  
 TubeTech Ltd.  
 WESCO  
 Durham Instruments  
 Great Lakes Industrial Controls  
 Westech Industrial Ltd.  
 Transcat  
 Hardie Industrial Services Inc.  
 Brian Controls  
 Durham Instruments  
 Lisle-Metrix Ltd.  
 Provincial Controls  
 Great Lakes Industrial Controls  
 Regional Process Equipment  
 Provincial Controls  
 Armatek Controls  
 Transcat  
 Cancoppas Limited  
 Regional Process Equipment  
 ProSigma Analytics Inc.  
 Lisle-Metrix Ltd.  
 Line Process Controls  
 CTH Industrial Controls  
 Heaters Controls & Sensors Ltd.  
 Transcat  
 Alpha Controls & Instrumentation  
 Armatek Controls  
 Cambridge Controls  
 CTH Industrial Controls  
 Ovantum Sales Inc.  
 R.A. Kirby Sales Inc.  
 Floval Equipment Ltd.  
 Novatech  
 Provincial Controls  
 Transcat  
 Endress + Hauser  
 Line Process Controls  
 Endress + Hauser  
 Westburne Lytle  
 Endress + Hauser  
 SPEC (Sarnia) Limited  
 Endress + Hauser  
 BSP Instruments  
 Provincial Controls  
 Lakeside Process Control  
 Endress + Hauser  
 BEP Bestobell Canada Ltd.  
 Romatec  
 Great Lakes Industrial Controls  
 WESCO  
 Alpha Controls & Instrumentation  
 Willer Engineering  
 Transcat  
 Ovantum Sales Inc.  
 Campbell Scientific (Canada) Corp.  
 Great Lakes Industrial Controls  
 Heaters Controls & Sensors Ltd.  
 Heaters Controls & Sensors Ltd.  
 Transcat  
 Ovantum Sales Inc.  
 Great Lakes Industrial Controls  
 Alpha Controls & Instrumentation  
 CTH Industrial Controls  
 Heaters Controls & Sensors Ltd.  
 Transcat  
 WESCO  
 Great Lakes Industrial Controls  
 Cancoppas Limited  
 Transcat  
 Willer Engineering  
 Campbell Scientific (Canada) Corp.  
 Cancoppas Limited  
 Heaters Controls & Sensors Ltd.  
 Lakeside Process Control

## Manufacturer / Tradename

Rexroth  
Rezplast  
RIMCO - Raingauges  
RKC  
Robertshaw  
Rochester  
Rohrback Cosasco Systems  
Ronan  
Roper Pump  
Rosemount  
Rosemount Analytical  
Rosemount Analytical  
Rosemount Combustion Control  
Rosemount RS3 Systems  
Rotek  
Rotronic  
Rotronic  
Rotronic Instruments  
Royce  
RTP  
Ruffneck Heaters  
Rustrack  
Rustrak  
S.P.S. Instrument Services  
Saab  
Saab Tank Radar Level  
Samson  
Schaevitz  
Schlumberger/Neptune Flow Meters  
Schonsted  
Sealed Unit Parts  
Seametrics Inc.  
SeaMetrics Inc.  
Seepex  
Selco / Asahi  
Selco / Asahi  
Senaco Plus  
Senior Flexonics  
Sensall  
Sensit  
Sensit  
Sensorex  
Sensorlink  
Sensortech Systems Inc.  
Sensortronics  
Sensotec  
Sensycon  
Sensycon  
Sentry  
Serge-Baril  
Servomex  
Setra  
Sfere  
Sfere  
Shamrock Environmental  
Shan Rod Inc.  
Shand & Jurs  
Shimpo  
Showa  
Sieger  
Siemens Process Analyzers  
Sierra Monitor  
Signet Scientific  
Sigrist-Photometer Co. - Switzerland  
Silometer  
Simpson  
Sinclair Collins  
Smar  
Smartline  
SMC Knifegate  
Sno-Trik  
Solartron  
Soliphant  
Solomat  
SOR Inc.  
South-West Meters  
Southwest Valve  
Sparling  
SPL Plus  
SPM

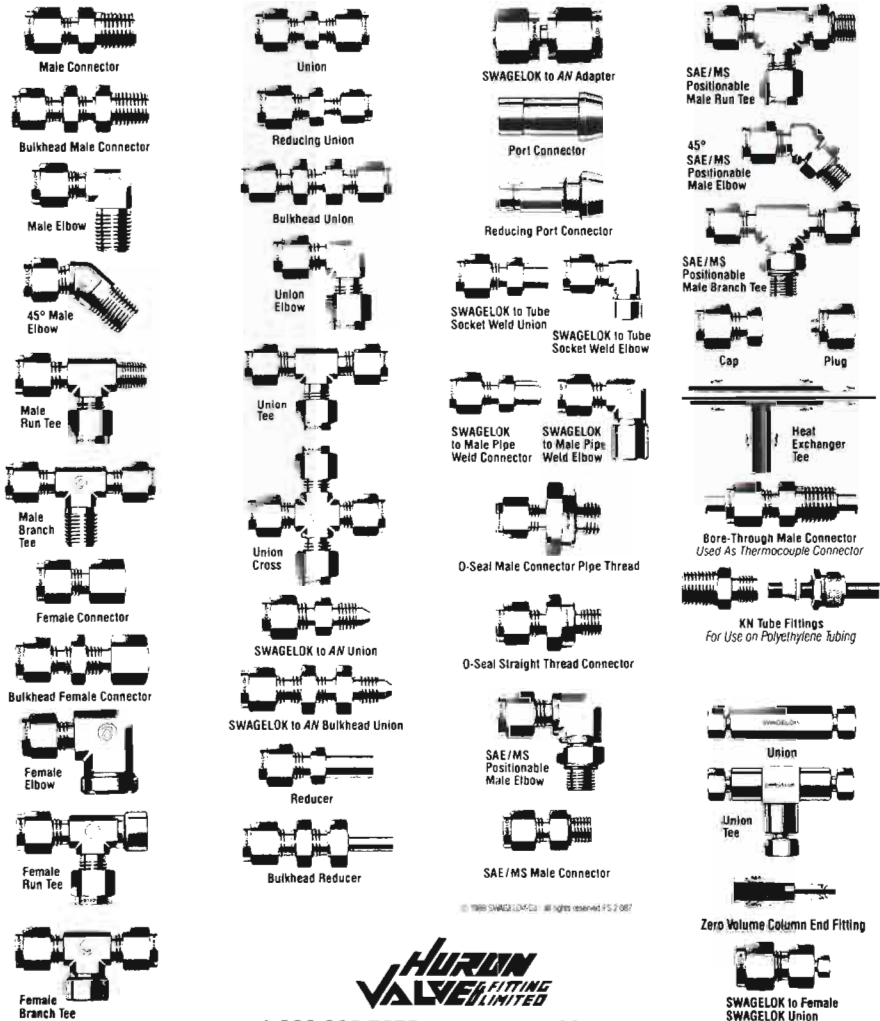
## Local Sales Representative

Great Lakes Industrial Controls  
Great Lakes Industrial Controls  
Campbell Scientific (Canada) Corp.  
Heaters Controls & Sensors Ltd.  
Line Process Controls  
Transcat  
Armatek Controls  
Industrial Projects Ltd.  
U & I Supply  
Rosemount Instruments  
Rosemount Instruments  
Transcat  
Romatec  
Lakeside Process Control  
Transcat  
Alpha Controls & Instrumentation  
Durham Instruments  
Transcat  
Cancoppas Limited  
Davis Controls  
Great Lakes Industrial Controls  
Transcat  
Omnitronix  
Sarnia Piping Specialties  
Brian Controls  
R.A. Kirby Sales Inc.  
Samson Controls  
Durham Instruments  
Sarnia Piping Specialties  
Transcat  
Transcat  
Line Process Controls  
Veronics Inc.  
U & I Supply  
CTH Industrial Controls  
Transcat  
Milltronics Limited  
Regional Process Equipment  
Alpha Controls & Instrumentation  
Durham Instruments  
Durham Instruments  
Transcat  
Transcat  
Novatech  
Durham Instruments  
Line Process Controls  
Elsag Bailey  
TubeTech Ltd.  
Fryston Canada Inc.  
Great Lakes Industrial Controls  
Novatech  
Alpha Controls & Instrumentation  
Cancoppas Limited  
Regional Process Equipment  
ProSigma Analytics Inc.  
Flovat Equipment Ltd.  
Line Process Controls  
Transcat  
Durham Instruments  
Westech Industrial Ltd.  
Willer Engineering  
Transcat  
Hardie Industrial Services Inc.  
Lisle-Matrix Ltd.  
Endress + Hauser  
Transcat  
Summit Controls Ltd.  
BSP Instruments  
Honeywell  
Matheson Valves  
Huron Valve & Fittings  
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Endress + Hauser  
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