

Oct 56

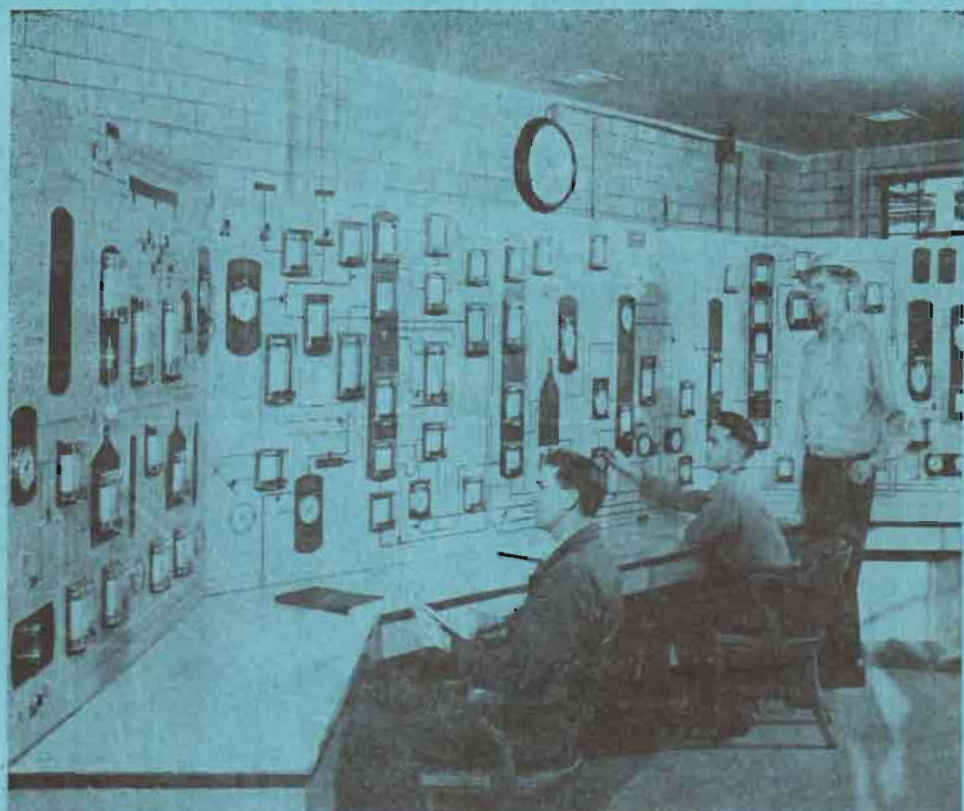
INSTRUMENT
SOCIETY of
AMERICA



SARNIA SECTION



Monthly Bulletin



WIDE-SCREEN PRESENTATION OF PETRO-CHEMICAL PLANT

by *Taylor*

Taylor Graphic Panels, contributing close supervisory control in the Petroleum Industry, are also serving in the Petro-Chemical field. Photographed above, for example, is the Taylor Panel at CIL'S Polythene Plant at Edmonton, Alberta.

The instrumentation here is served by Taylor Controls and Transmitters throughout the extensive intricate plant operation.

Taylor produces instruments for indicating, recording and controlling temperature, pressure, flow, liquid-level, speed, density and humidity.

Taylor Instrument Companies of Canada Limited,
P. O. Box 87, Station D, Toronto 9, Ontario. Branches
Montreal, Winnipeg, Calgary, Vancouver.

TAYLOR INSTRUMENTS MEAN ACCURACY FIRST



The Instrument Society of America

SARNIA SECTION

has as its objective the advancement of the arts and sciences associated with the theory, design, and use of measuring and control instruments in the various industries in the Sarnia area.

The immediate benefits derived by the Sarnia members include a monthly meeting at which a qualified speaker discusses an instrument subject after which members fraternize with other instrument men and interchange ideas and news at a social hour, a subscription to the "I.S.A. JOURNAL", a subscription to the Sarnia Section "BULLETIN", access to all technical data, servicing techniques and standardization policies developed by the National Committees of the ISA and an annual school for mechanics and technicians.

As a member of the National body of the Instrument Society of America, a rapidly growing and influential technical society, the member partakes indirectly in the progress of instrumentation made possible by the work of the various National Committees.

Executive Officers for the 1956-57 season are:

President	H. KOHLMEIER Polymer Corp. Ltd.
Vice-President	R. ASSELSTINE Canadian Oil Refineries Ltd.
Secretary	F. CROFT Catalytic Construction Co.
Treasurer	R. ROSE Catalytic Construction Co.

Meetings are held on the fourth Monday of each month from September to May inclusive at 8.00 P.M. The meetings are held at the Vendome Hotel unless otherwise announced.

Anyone earning his livelihood through the manufacture or use of instruments and who is acceptable to the executive body may become a member of the Sarnia Section, I.S.A. Dues are \$12.00 per annum. Associate Members are those who are associated with instruments but who do not earn their livelihood directly from them, such as stationary engineers, process operators, etc. Their dues are \$7.50 per annum.

Correspondence relating to the general activities of the Sarnia Section should be addressed to the Secretary, Mr. F. Croft, 612 St. Clair Ave., Pt. Edward, Ont. Dues should be made payable to the Sarnia Section, Instrument Society of America and sent to the Treasurer, Mr. R. J. Rose, 675 Woodhaven, Sarnia, Ont.

Correspondence concerning programs should be sent to the Program Chairman Mr. G. M. Hicks, 280 St. Vincent St., Sarnia, Ont.

Copy for "THE BULLETIN" should be sent to the Managing Editor, Mr. H. Hobbs, 122 Cameron Street, Sarnia, Ontario.

PRECISION INSTRUMENTS AND CONTROLS



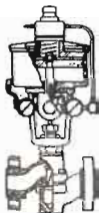
BARTON

BARTON DP FLOW-METERS—with stainless steel, rupture-proof bellows. Indicators, recorders and pneumatic transmitters are available (electric contacts optional).



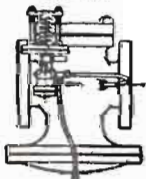
ALNOR

ALNOR INSTRUMENTS—for measuring surface and furnace temperatures—Alnor Velometers for air speed — Alnor Dewpointers — multi-circuit electrical thermometers.



CONOFLOW

CONOFLOW CONTROL VALVES—with powerful pneumatic motors. Also Butterfly, Saunders and Pulp Stock valves for throttling control. Instrument air differential and filter regulators.



SPENCE

SPENCE STEAM REGULATORS — Packless, non-wiredrawing, self-contained pressure, temperature, and back pressure regulators. Pump governors, desuperheaters and differential regulators.



ROCHESTER

ROCHESTER DIAL THERMOMETERS — of all stainless steel construction. Hermetically-sealed cases, an external calibrator, accuracy and fast response are standard features.

CONAX THERMOCOUPLES

BAKER INSTRUMENTS LIMITED
185 Davenport Rd., Toronto, Ontario

PRECISION INSTRUMENTS for MEASUREMENT and CONTROL

1. Precision resistors accuracy 0.05%
2. Resistance Decade Boxes
3. Voltage Dividers
4. Wheatstone Bridges
5. Temperature Bridges sensitivity to 0.001°C.
6. Temperature Controllers accuracy 0.1°C. or better
7. High Speed Voltage Stabilizers
Canadian design — made in Canada
8. Manganin wire
9. Selenium rectifiers from 1 to 20 Amps.
10. Photoelectric devices
11. Instruments to ASTM specifications
12. Smoke indicators
13. Flame failure indicators
14. Turbidity meters.

PLEASE CIRCLE THE NUMBER CORRESPONDING TO THE ITEM IN WHICH YOU ARE INTERESTED.

Name

Position

Company

Address

Mail your inquiry to

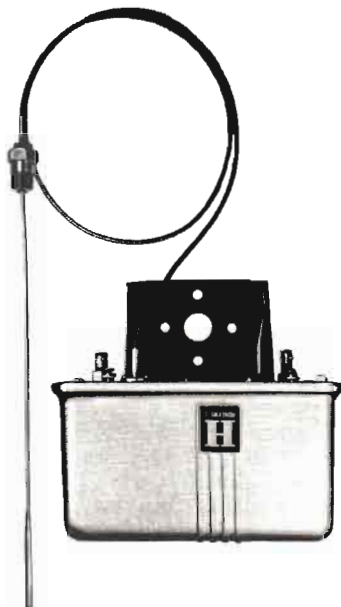
POLYTRONICS CO.

582 Bathurst St.
TORONTO 4, ONT.

THE NEW TEL-O-SET TRANSMITTER

For

Temperature
Gage Pressure
Absolute Pressure



This instrument answers the demand of industry for a versatile pneumatic transmitter. There is no need to add or change parts to get any span within the overall limits of the transmitter and these spans can be extremely narrow. The narrow span feature, coupled with high accuracy and rapid response, greatly enlarges the field of application for completely pneumatic systems. These features also make the transmitter particularly suitable for applications where close process control is essential — in the food, petroleum, chemical, and other industries.

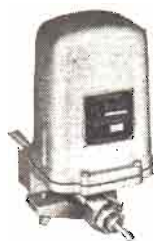
Range limits are — 375 to + 1,000 F, and 40 to 600 psi. A simple adjustment allows you to set the span limits of 20 psi and 50 F minimum, and 150 psi and 400 F maximum. Zero output can easily be adjusted to allow this span to cover any desired portion of the overall transmitter range.

For more information about this and other controls contact your nearest HONEYWELL Branch Office, or write HONEYWELL, Leaside, Toronto 17, Ontario.

Honeywell
Industrial Division



Brown Instruments



12A Temperature Transmitter



M/42 Indicating Pneumatic Transmitter



13A Differential Pressure (d/p) Cell



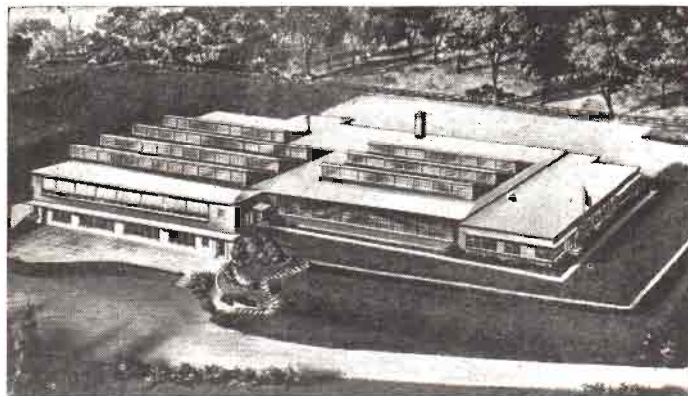
M/40 Recording Controller

PROCESS MEASUREMENT AND CONTROL

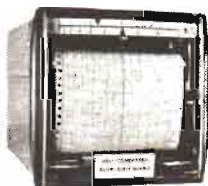
Complete process measurement and control instrumentation covering such variables as temperature, pressure, flow, liquid level, humidity, pH, conductivity, density, dew point, viscosity, force, speed, position, etc. etc. Instrument designs to suit conventional or graphic type panels — controllers for board or local mounting.

This complete line of Canadian made Foxboro instruments, combined with the wide application knowledge and engineering experience of Peacock Brothers Limited, guarantees the best instrumentation for almost any process.

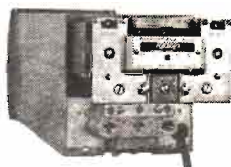
Pictured below is the Canadian home of Foxboro instruments — Canada's largest and most up-to-date process instrument manufacturing plant.



M/52 Consotrol Indicating Controller



M/53 Consotrol Recording Station



M/58 Consotrol Controller



M/59 Consotrol Valve Mounted Controller



PEACOCK BROTHERS LIMITED

Montreal

Sydney Toronto Sudbury Winnipeg Edmonton Calgary Vancouver

The "BULLETIN"

VOLUME 6 No. 2

OCTOBER 1956

EXECUTIVE MEETING SEPTEMBER 12, 1956

The Sarnia Section of the I.S.A. held its September Executive Meeting at the home of Mr. H. Kohlmeier, 957 Beverley Road, on the evening of September 12th, 1956.

Present were Messrs. Kohlmeier, Rose, Kirk, Asselstine, Hall & Croft.

Mr. Kohlmeier stated that our monthly bulletin was more successful than ever, due to excellent sale of advertising space to the Instrument Companies. He also said that the first General Meeting would be held at the Vendome Hotel on Monday, September 24th. The talk would be on Moore's Multi-Purpose Relays.

Refreshments after the meeting were discussed. It was decided to allow the Vendome Hotel to sell beer and coffee, on a trial basis.

Mr. Kohlmeier announced that Mr. E. Brown would be Advertising, Publicity and Membership Chairman.

The routine procedure for notification of change of address was discussed. It was decided that a change of address form would be printed. It would then be the responsibility of the Secretary to submit the change of address on the form to the Sarnia Business College, the Membership Chairman, the Treasurer, and the National Office. This would especially permit the Sarnia Business College to keep their mailing list up to date, and members who have moved would receive their copies of the Bulletin quickly.

It was also decided that the Secretary should report any changes in membership at the Executive Meeting. This will enable Company Representatives to be informed of any membership change.

Mr. Rose read the Financial Report, which had just been audited.

Mr. Kohlmeier reported that 140 students had registered for the Technology Course.

Mr. Hall mentioned that he would conduct another "poll" for the Instrument Night Classes which he is trying to organize for this year.

It was decided to leave the office for Special Events Chairman open. In other words, a Chairman would be appointed for each Special Event.

The letter received from National Office regarding Section Pennants was read to the Executive by the Secretary. It was apparent that this Section is not interested in spending \$37.50 on a pennant.

Mr. Hall kindly offered to have the October Executive Meeting at his home.



SEPTEMBER MEETING

Mr. H. S. Garrett, Manager, Application Engineering, Moore Products Company, Philadelphia, Pa., was the speaker at the first meeting of the 1956-57 season on September 24th, at the Vendome Hotel. Mr. Garrett was introduced by the Program Chairman, Mike Hicks, and thanked by John Heatley.

The speaker dealt first with the general principles of the Moore Null-matic Multi-function Relays illustrating his remarks with coloured slides. He then proceeded to discuss the various application of the relays showing a slide of the schematic hook-up of each application (These schematics plus other information were included in Bulletin AD68 which was given to each of the audience after the meeting).

The question period which followed brought up the question: Where do you use the Moore Inverse Derivative Controller and what is it? Mr. Garrett explained that it was just what it implied — a Derivative Controller hooked up in reverse and should be used in applications which called for a process which was faster than the control valve, particularly levels and flows.

The formal part of the meeting was followed by refreshments and individual discussions.



WHAT'S NEW

Excerpt from June 1956 issue of Control Engineering

Apparently absorbed in thoughts about miniaturization, conservation of equipment, overshoot, step-input, and the like, the engineer took his seat in the concert hall and proceeded to listen. He returned to his laboratory several hours later and entered the following remarks in his notebook:

"For considerable periods the oboe players had nothing to do. The number should be reduced, and the work spread out more evenly over the whole of the concert, thus eliminating peaks of activity."

"It was noted that all twelve first violins were playing identical notes. This seems unnecessary duplication; the staff of that section should be drastically cut. If a large volume of sound is required, it could be obtained by means of electronic-amplifier apparatus.

"Much effort was absorbed in the playing of sixteenth and so-called 'grace-notes'. This is an excessive refinement. It is recommended that all notes should be rounded out to the nearest eighth note. If this were done, it would be possible to use trainee and lower-grade operatives more exclusively.

"There is too much repetition of some musical passages. Scores should be drastically pruned. No useful purpose is served by repeating on horns and wood-winds a passage which has already been adequately handled by the strings. It is also estimated that if all redundant passages were eliminated the whole concert time could be reduced to twenty minutes, and there would be no need for an interval or intermission.

"The conductor concurs generally with these recommendations, but expresses the opinion that there might be some falling-off in box office receipts. In that unlikely event, it should be possible to close sections of the auditorium entirely, with a consequent savings in overhead, lighting, janitor service, heating, etc."

Announcing . . .

Instrument Maintenance Clinic

WEDNESDAY, OCTOBER 24th.

7 to 10 P.M.

SUBJECT: "The Brown Tel-O-Set Stack Controller"

**LECTURER: Mr. John Francis
Chief Service Engineer
Minneapolis-Honeywell Regulator Co.
Toronto, Ontario.**

MEMBERS ONLY



- Notes:
- (1) The place will probably be room 313, Sarnia Collegiate Institute & Technical School, Wellington Street, Sarnia and will be confirmed as soon as possible.
 - (2) This lecture will cover theory of operation and complete servicing procedure including stripping down and assembly.
 - (3) There will be no charge.
 - (4) Your company representative will contact you to find if you will definitely (barring illness) be there. We must have at least 20 to make this a success and to continue with other clinics.

Larry Hall
Chairman, Education Committee.

MEETING NOTICE

PLACE: VENDOME HOTEL

DATE: MONDAY, OCTOBER 22, 1956

TIME: 8.00 P.M.

SPEAKER: **MR. A. UPFOLD**
Polymer Corporation Limited

SUBJECT: **ELECTRONIC CONTROLLERS**
(What Makes Them Tick)
Electronic Controllers for those with little or no
Electrical Knowledge.

WRITTEN ON A ROLL CHART

Hark to the song of the Instrument-vendor,
Hear his melodic and beautiful cry,
Deep, haunting low notes, persuasive and tender,
Calling the gullible public to buy.

Come, see my instruments, beautiful instruments,
Here, well displayed by lithographer's art,
They'll serve you faithfully, nightfully, dayfully,
Steadfast, unfaltering. Eager to start.

What is your need, sir? Ready? Indeed sir,
Ready to pamper each foible or whim,
Name your desire, nor water, nor fire,
Can stay us from putting your process in trim.

Something to tell us, in manner mar-vell-us,
Just what composes our gaeous stream?
Name each component from coffee to donent,
And make operation a beautiful dream?

Tisket-a-tasket, we're glad that you asked it,
This is a job that we do rather well,
With all due modesty, frankness and honesty,
All that's worth knowing, our instruments tell.

How does it do it? (I'll quickly go through it,)
Here is a source of invisible light,
It's mirrored, refracted, reflected, subtracted
Goes round seven corners and then out of sight.

It shines thru each beautiful, intricate, molecule,
Baring it's secrets in manner unique.
Making a typical, pattern, electrical,
See it recording each valley and peak.

Hail to the instrument, beautiful instrument
Answer to all of our trouble and woe,
Come let us buy it and eagerly try it,
What it can tell us I'm dying to know.

Now it is settled then, here is my fountain pen,
Here is the order blank, dots mark the place.
Our big brass-bound de-luxe, (well worth 10 thousand bucks,)
Soon will b staring you full in the face.

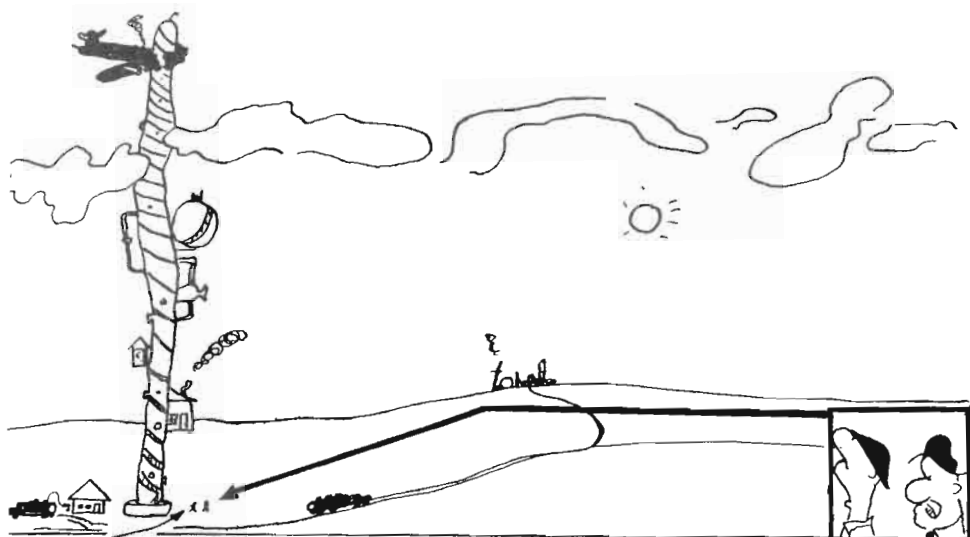
Rapidly days go by, quickly the seasons fly,
Worry comes anger and anger disgust
Seldom it seems to work, often it seems to shirk,
Seems rather something we never can trust.

Rally around to me, Instrument company,
This costly orphan we greatly abhor,
Noise makes it quiver, a breeze from the river,
Heat from sunshine or draft from the door.

With all respect that's due, may we point out to you,
That this behaviour is painful to see,
We are employed to be, slaves of fidelity,
Please act at once on your full guarantee.

Client, O client, be peaceful and quient.
Read all the fine print, accept our regret,
This sweeping guarantee, quite comprehensively,
Covers the district of Northern Tibet.

—H. Hobbs



QUIT COMPLAINING ABOUT THIS
ENGINEERING FEAT OF THE DECADE A
COMPLETE UNIT IN ONE TOWER, AND
GET UP THERE AND CHANGE THAT
TOP THERMOCOUPLE

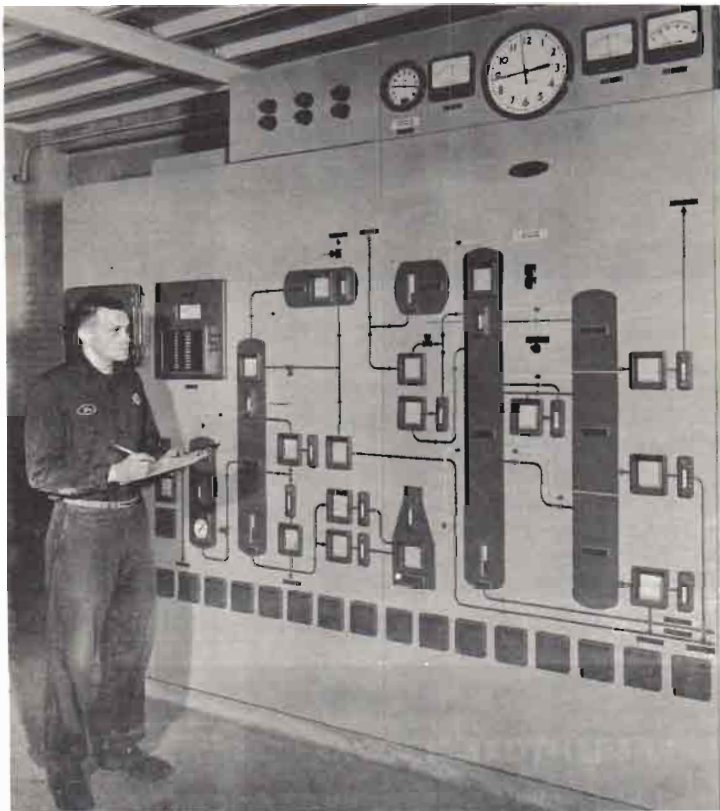


I KNEW THERE WOULD BE
TROUBLE WHEN THEY HIRED THAT
AMUSEMENT MACHINE REPAIR
MAN IN THE INSTRUMENT SHOP

Process-Instrument Systems Limited

1918 AVENUE ROAD, TORONTO 12, ONTARIO
ORchard 5514

- **Askania Hydraulic Controls for Heavy Duty Applications**
- **Bendix Viscosity Control**
- **Continental Butterfly Control Valves**
- **Daniel Orifice Fittings and Plates**
- **Dekoron Instrument Tubing**
- **Instrof Tubing Support**
- **Kates Flow Regulators**
- **Limatorque Electric Valve Operators**
- **Scam Annunciators**
- **Swartwout Electronic Controls**



SWARTWOUT AUTRONIC CONTROLS—
CRUDE OIL DISTILLATION UNIT—
REGENT REFINING LIMITED — PORT CREDIT, ONTARIO

- Positive Displacement Meters
- "American" Orifice Meters
- Orifice Plates and Meter Runs
- Needle Valves
- Robinson Orifice Fittings
- Cannon Meter Pens



Head Office:
MILTON, ONT.

Western Division:
EDMONTON, ALTA

Sales Offices also at Calgary and Regina

INDUSTRON

CORPORATION

297 CARLTON ST., TORONTO 2

WALnut 1-2032

HALLIKAINEN-SHELL — Continuous Recording Viscometer — Continuous Vapor Pressure Recorder — Continuous Flow Color Alarm — Continuous Initial Boiling Point Recorder — Continuous Dielectric Constant Recorder — Continuous Beta Ray Density Recorder — Recording Variable Area Flowmeter — Pneumatic Sine Wave Generator — Gas-Liquid Chromatography Unit (lab instr.) — Beta Ray Absorption Unit for analysis of Hydrogen in Liquid Hydrocarbons (lab instr.)

HALLIKAINEN-TIDE WATER OIL CO. — Continuous Acid Analyzer for gasoline alkylation plants.

LISTON-BECKER — Continuous Infrared Analyzer for Gas and Liquid Streams.

MANUFACTURERS ENGINEERING & EQUIPMENT CORP. — Continuous Recording Electrolytic PPM Water Analyzer for gases and liquids — Continuous Recording Ultraviolet & Photoelectric Analyzer — Continuous Recording Differential Refractometer — Differential Colorimeter for plastics and paints (lab. instr.)

"Continuous Analyzers for the Oil & Petrochemical Industries"

Introducing

EVERSHED



"Pressure — Temperature — Level — Flow"

EVERSHED & VIGNOLES (CANADA) LTD.

2781 Dufferin Street

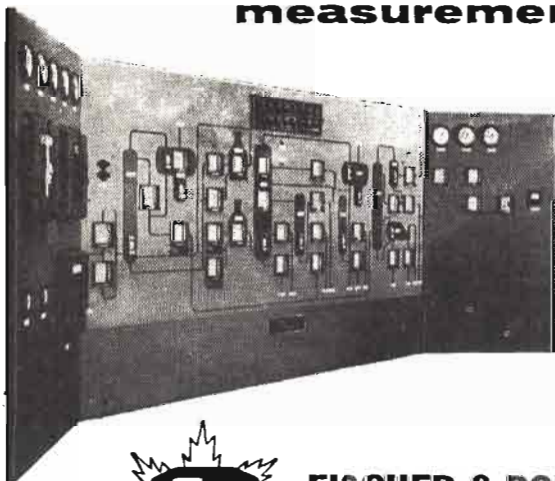
Toronto 10, Ontario

**when you have problems of
measurement and control**

CONSULT **FP**

the specialists in

- Complete Process Instrumentation
- Data Reduction
- Panel Boards (Graphic and Standard)
- Water Treatment Equipment



FISCHER & PORTER (Canada) LTD.

HEAD OFFICE & PLANT: TORONTO, ONTARIO

BRANCH OFFICES: MONTREAL & VANCOUVER

IN THE U.S.A.: FISCHER & PORTER COMPANY, HATBORO, PA.

How You Can Shorten Turnaround Time

Augment Your Repair Staff With Our Prompt Repair Service

When your own instrument repair department has its hands full during turnaround, use Manning, Maxwell & Moore of Canada, Ltd.'s prompt repair service on Consolidated Safety and Relief Valves and Ashcroft Gauges. The latest and most modern equipment for testing and calibrating work plus years of experience in instrument engineering and manufacturing should make us your headquarters for repairs your own men are too busy to handle. Each job is guaranteed and cost controlled. Drop us a card — or call GALT 2000 — for further information.

●

**MANNING, MAXWELL & MOORE
OF CANADA, LTD.**

GALT

ONTARIO

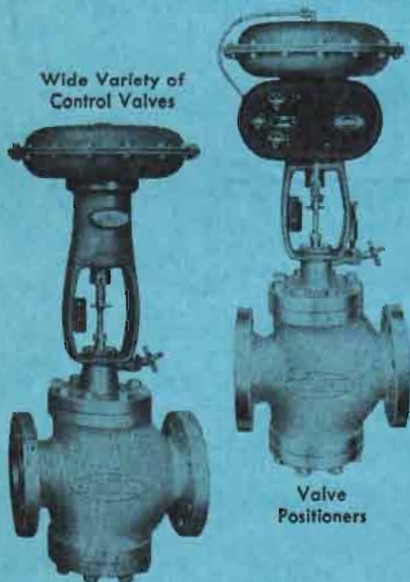
CANADA

Indicating,
Recording and
Non-Indicating
Controllers

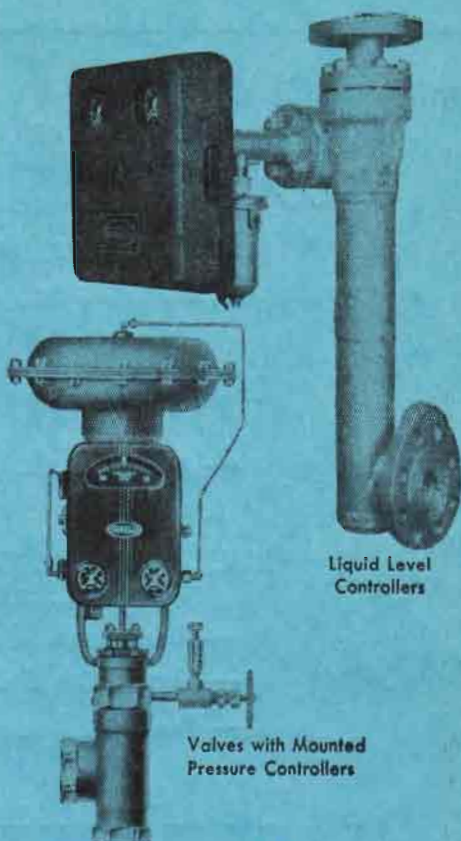


Differential Pressure Transmitters

Wide Variety of
Control Valves



Valve
Positioners



Liquid Level
Controllers

Valves with Mounted
Pressure Controllers

Mason-Neilan

**Serves the Process Industries
with Accurate and
Reliable Control Equipment**

Mason-Neilan offers a wide variety of standard and specialized automatic control equipment for process and associated services. Each type is a development of practical engineering based on experience gained in close contact with industrial control problems. Each is specifically designed to do an exceptional job. In Masonneilan products you get engineered equipment that assures superior performance, long life with minimum maintenance.

Industrial Control Specialists Since 1882

MASON-NEILAN REGULATOR CO., LTD.

5415 PARE ST., MONTREAL 16, P. Q.

VANCOUVER 10, B. C.
150 West First Ave.



TORONTO 18, ONT.
2842 Bloor St., West

Distributors in: Winnipeg • Regina • Calgary • Edmonton

We have the pleasure of serving industry in the Sarnia area for the following manufacturers of quality Instruments, Controls and Accessories:—

CHIKSAN OF CANADA LIMITED

—Swivel Joints

FISHER GOVERNOR COMPANY

WOODSTOCK, ONTARIO

—Diaphragm Control Valves

—Liquid Level Controls

—Pressure Reducing Valves

INDUSTROL CORPORATION

—Dryers

**MANNING, MAXWELL & MOORE
OF CANADA LIMITED**

GALT, ONTARIO

—Ashcroft Gauges & Hancock Valves

—Consolidated Safety and Relief Valves

—Microsen Electronic Controls

—American Thermometers

TRINITY EQUIPMENT CORPORATION

—Thermowells

G. W. Beecroft Company Limited

254 Merton Street

TORONTO 7, ONTARIO