

OAKTON Instruments Catalogue



OAKTON offers scientific instruments for research, industrial, and educational uses. These instruments are famous for their unique combination of innovative design and exceptional value, and represent "best buys" in their categories. This catalogue features pH, Conductivity, Dissolved Oxygen Measurement & Control products as well as Humidity, Weather & Temperature Measurement products, Specwell® Microscopes & more.

metex
corporation limited

CIRCLE READER SERVICE No. 1



steel, E2HP pump parts are interchangeable with standard Versa-Matic stainless steel pumps.

CIRCLE No. 2

High Pressure Pumps

Versa-Matic 2" high-pressure pumps provide reliable performance in applications where pressure is a concern. The E2HP delivers up to 200 pounds per square inch of pressure with standard flow at a rate of up to 69 gallons per minute. The E2HP features the Elima-Matic Air Valve system for non-stalling, non-icing and lube free operation. Constructed of stainless



**YORK FLUID
CONTROLS LIMITED**

2-Wire Electronic Switch



- Unit is powered from PLC/DCS discrete input, and switches using only two wires
- Local LCD display of process and programming values
- IAW® self dia-

gnostic provides a "live zero" similar to a transmitter's 4-20mA signal

- All solid state; no moving parts
- Set point and deadband adjustable up to 100% of range
- No calibration required; yields extended service life
- 3 year warranty

Provides the reliability features of a transmitter, at half the price!



**United Electric
Controls**

CIRCLE
No. 3

Single and Multi-Deck Vibratory Screener



Kason VIBRO-SCREEN® separators with single or multiple decks yield up to five precise particle classifications from 5cm to 25 microns (500 mesh). Available

with a variety of anti-blinding devices, they handle dry, moist, lumpy, stringy and otherwise difficult-to-handle bulk material on a batch or continuous basis. Constructed of stainless steel to industrial, food, dairy or pharmaceutical standards, in diameters from 460mm to 2540mm (18" to 100"). Options available for rapid screen changes, in-place cleaning, and fast, thorough washdown.



**Separator Engineering
Limited**

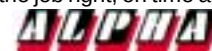
READER SERVICE No. 4

Temperature and Pressure Calibration Services



With critical analytical instruments you can't afford errors. Your entire process depends on accuracy at every stage. Alpha Controls can help keep your process on-line and operating at peak efficiency with fully tested, calibrated instru-

ments. RTD's, Transmitters and Gauges---we offer a full range of lab testing and calibration services for all makes of instruments. You can count on us to do the job right, on time and on budget.



CIRCLE READER SERVICE No. 5

Certified Humidity Calibration



Industrial Technical Services has the ability to do in-house calibration and certification of Relative Humidity and Temperature Instruments. This is accom-

plished by using: Environmental chamber, which is capable of going from as low as 5% RH to 98% RH and from -30°F to 350° F. High accuracy 100 Ohm Platinum RTD for temperature measurement. Chilled mirror Dew Point Hygrometer for best accuracy. The advantage of the chamber and instrumentation used by Industrial Technical Services, is that instruments which require multi point calibration with values above and below ambient conditions can be accomplished to a high degree of accuracy. Test equipment used for calibration are certified and traceable to national standards.

INDUSTRIAL TECHNICAL SERVICES

CIRCLE READER SERVICE No. 6

Air Amplifiers for Vacuum, Blowoff, Cooling or Conveying



Air Amplifiers use a small amount of filtered compressed air to deliver a large airflow for a wide range of conveying, ventilation, drying and cooling applications. The high-flow, bladeless blowers

don't require machine guards and are especially useful for removing metal chips and scrap, ventilating fumes or smoke, and conveying small parts, pellets, powders and dust. Air amplifiers are more compact and less expensive than variable speed blowers and fans.



PELMA Engineering Ltd.

CIRCLE READER SERVICE No. 7

Fuzzy Logic Controls



Heaters Controls and Sensors' Fuzypro Fuzzy Logic Controls have everything under control in this new brochure featuring Ramp Soak Profiling Controls, Limits, Process Controllers, Hot Runner Systems, High Accuracy Labor-

atory Controls, Percentage Controllers and Data Acquisition Systems. Heaters Controls and Sensors also carry out repairs and calibration for all makes of process and temperature controls.

Call: 1 800-279-9912



CIRCLE READER SERVICE No. 8



"Kascade" Internal Recycle High Capacity Screener

"Kascade" Internal Recycle screening decks increase capacity 60 to 160 % over screeners of equivalent diameter. Required as new when floor space is limited, or as retrofits to undercut cost of new equipment. Each Kascade deck features a 360° annular gap at its periphery and contains a screen whose mesh equals that of the conventional screen below it. Excess material cascades over the periphery of the upper screen, onto the lower screen for final separation.

CIRCLE READER SERVICE No. 9

SEPARATOR ENGINEERING LTD.

85-2220 Midland Ave Scarborough ON M1P 3E6

Tel: (416) 292-8822 Fax: (416) 292-3882



Portable Batch Sifter



This lightweight Batch Sifter scalps oversize particles from small batches of bulk material being loaded into drums, blenders, other process equipment and storage vessels.

The units are offered in diameters of 450, 600 and 750mm (18, 24 and 30 in.), with a single unbalanced-weight gyratory motor of ample capacity for typical batch requirements. Constructed of stainless steel and finished to worldwide standards for industrial, food, dairy or pharmaceutical applications. Optional caster-mounted stands provide in-plant mobility.

SEPARATOR ENGINEERING LTD.

CIRCLE READER SERVICE No. 11

Bag Dump Screener



VIBROSCREEN® Circular Vibratory Bag Dump Screeners scalp bag scraps and other oversize materials from manually dumped bulk materials while protecting the operator and plant environment against dust contamination.

Ambient air and dust from dumping activities is drawn through cartridge filters that derive vacuum from a top-mounted exhaust fan. Dust accumulated on the filter's exterior surfaces is dislodged by pulse jet nozzles that release short blasts of air on a timed cycle. Constructed of stainless steel in 610, 760 and 1015mm (24", 30" and 40") diameters, to industrial, food, dairy or pharmaceutical standards.

SEPARATOR ENGINEERING LTD.

CIRCLE READER SERVICE No. 12

Self-Contained, Vibratory Fluid Bed Dryer System



At less than half the size and weight of rectangular fluid bed systems of equivalent capacity, this compact fluid bed dryer system consolidates a CENTRI-SIFTER® centrifugal de-agglomerator, circular fluid bed

processor (1220mm [48"] diameter shown), heater, blower, and cyclone separator on a shippable frame. With on-site connections to a power source, bag house, and material inlet/outlet, it is ready to run on a batch or continuous basis. Reductions in interior weld seams and surface area cut cleaning time by more than 50 percent.

SEPARATOR ENGINEERING LTD.

CIRCLE READER SERVICE No. 10

Quick-Clean Centrifugal Screener



The Quick-Clean CENTRI-SIFTER® centrifugal screener features a hinged end cover and three-bearing shaft that cantilevers for quick removal of internal components.

Two external roller bearings are located at the motor end of the shaft and on a hinged end cover for maximum support. When the end cover is hinged open, the shaft becomes a stable cantilever, allowing internal components to slide freely from the opened cover end. Ideal for food, dairy pharmaceutical and other contamination-sensitive materials, and applications involving frequent screen changes.

SEPARATOR ENGINEERING LTD.

CIRCLE READER SERVICE No. 13

MINCO

48 Haggert Ave N Brampton ON L6X 1Y3

Tel: (905) 457-6322 Fax: (905) 457-4716

Toll Free 1-800-794-5883

MOD-TRONIC

INSTRUMENTS LIMITED



Thermofoil™ Heaters

Put the Heat Where You Need It

- Flexible etched foil heaters, up to 110 W/in²
- Precise, reliable heating with minimal space, mass & design overhead
- 200°C polyimide, 235°C rubber, 600° mica, 120°C transparent insulations provide efficient heat transfer
- Odd shapes, profiled or multiple elements
- Optional sensors & controllers

CIRCLE READER SERVICE No. 14



Fast Response RTD's

For Dynamic Temperature Tracking

- Unique low mass sensing element responds quickly
- 2 second time constant in flowing water
- Stainless steel cases for direct immersion
- Platinum, nickel, copper elements: 10 - 1000 ohm
- Straight, threaded and cut to length styles
- -269°C to 260°C (-452°F to 500°F) range
- Great for process lines, commercial appliances, etc.

CIRCLE READER SERVICE No. 15



Tempran™ Transmitters

Accurate, Reliable, Economical

- RTD & thermocouple transmitters with 4-20 mA on 1-5 VDC output and 0.1% accuracy. Fixed or rangeable
- 600 V input/output isolation on selected models
- Rugged potted construction
- Low cost signal conditioning for OEM equipment
- Fits connection heads, utility boxes, or DIN rail
- Nonincendive, intrinsically safe

CIRCLE READER SERVICE No. 16

I want to receive/continue to receive a **FREE** subscription. ☐ YES ☐ NO

Signature _____ Volume 9 Issue 3/03

TEL: _____

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Firms Main Business Is:

____ Pulp & Paper ____ Petroleum, Coal/Natural Gas ____ Rubber
____ Plastic Materials ____ Metal Processors ____ Food Processing
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____ Pharmaceuticals ____ Detergents/Cleaning Compounds
____ Protective Coatings ____ Utilities ____ Consulting Engineer
____ Government ____ Other _____

Number Of Employees At This Location:

____ 1-4 ____ 5-9 ____ 10-19 ____ 20-49 ____ 50-99 ____ 100-249 ____ 250-499 ____ 500 +
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40
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1/32 DIN Size Controller

• Structure

NEMA 4X protective construction.
Black enclosure color.

• Programmable Alarms

Units feature standard single alarm output.

• Multi-Input

Units feature multi-input capabilities: 5 thermocouple types and 1 RTD type.

• Auto/Manual Control

Manual override allows you to take control of your process at anytime.

• Superior Security Options

This feature eliminates potential operator error.

• PID Autotune

All units feature as standard full function third generation PID Autotune. This feature minimizes process overshoot under the most demanding applications.

• Large LED Display

All units feature bright display of either PV or SV, red 4 digits.



CIRCLE READER SERVICE No. 17



More Advertiser Products On www.process-controls.com!

PROCESS CONTROLS AND INSTRUMENTATION

www.process-controls.com

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1/8 DIN Digital Indicator

• Programmable Alarms

Unit features standard three alarm outputs.

• True Multi-Input

Unit features true multi-input capabilities: 10 thermocouple types, 2 RTD types, 2 current inputs, and 4 voltage inputs.

• Retransmission

Unit features standard 4-20mA process variable retransmission. Optional outputs available.

• Large LED Display

All units feature dual display. PV red 4 digits, SV green 4 digits.

• Structure

Unit available in standard DIN sizes (1/8 DIN). NEMA 4X protective construction. Black enclosure.

CIRCLE READER SERVICE No. 18



1/4 DIN Digital Programmable Controller

• Programmable Features

- Unit features nine patterns with up to nine steps per pattern. Steps can be programmed from 99 hours and 59 minutes each.

• **True Multi-Input** - Unit features true multi-input capabilities: 10 thermocouple types, 2 RTD types, 2 current inputs, and 4 voltage inputs.

• **Auto/Manual Control** - Manual override allows you to take control of your process at anytime.

• **PID Autotune** - All units feature as standard full function third generation PID Autotune. This feature minimizes process overshoot under the most demanding applications.

CIRCLE READER SERVICE No. 19

1, 2 & 6 Channel Strip Chart Recorders



A smaller, lighter true hybrid recorder with RS-232C as standard has been introduced by Shinko North America. Units feature true multi-input capabilities: 13 thermocouple types, 1 RTD type, 1 current input,

and 7 voltage inputs. All units feature full function bright red 18mm digital display of channel number, PV value, recording and alarm status, etc. Designed for harsh environments, rated to IP65 this compact low cost recorder features a 2 year warranty with UL, CSA and CE approvals.

CIRCLE READER SERVICE No. 125

Multi-Functional Program Controller



Structure - Unit available in standard DIN size (1/4 DIN) IP-54 protective construction.

Programming Features

Unit features large program storage capacity of 100 segments in 10 patterns.

Programmable Alarms - Unit features as standard 3 Alarm outputs with optional 1 Alarm.

True Multi-Input - Unit features true multi-input capabilities: 10 thermocouple types, 2 RTD types, 2 current inputs, and 1 voltage input.

Control Action - Unit features as standard full function third generation PID Autotune or ON/OFF servo output PID.

Heat/Cool Control Action (option)

CIRCLE READER SERVICE No. 126

PLACE
STAMP
HERE

For Faster Service: Fax 705 435-5277

PROCESS CONTROLS AND INSTRUMENTATION

102 WELLINGTON ST E

ALLISTON ON L9R 1G7

Dual Indoor Alarm High Level & Vacuum Detection System



The Model AL 102-2 is an indoor alarm that must be mounted in a non-hazardous area. It accepts two switch contact inputs. The high level alarm input is from a float switch. The interstice vacuum detection input is from a

vacuum switch VS9253. A green LED indicates that power is on. An audible alarm signal occurs when either external contact is closed. A red LED provides the visual alarm indication for each input contact. Each input contact has a corresponding toggle switch that is turned off to mute the buzzer. The red light remains on until the alarm condition is corrected.

CIRCLE READER SERVICE No. 20

Loss-In-Weight Feeders



The accurate feeding of dry bulk material is often critical to maintaining product quality. A feeder that weighs accurately and reliably can reduce material waste, improve blend consistency and increase profits. Thermo Ramsey's Loss-In-

Weight continuous or batch feeding systems measure the mass flow rate and total mass of various bulk materials. We incorporate the Standard, Low Capacity and Sanitary versions of our volumetric feeders into a complete gravimetric feeding system, thus providing higher accuracies of +/- .25% to 1% and a more reliable process control versus regular volumetric feeding systems.

CIRCLE READER SERVICE No. 21

Mixed Liquid Analyzer



The NEW Aysix 2000 Mixed Liquid Analyzer with the latest state of the art technology helps your wastewater treatment

process to operate at peak efficiency. The Model 2000 is a 2 channel analyzer designed for the continuous measurement of dissolved oxygen and/or suspended solids in mixed liquid aeration basins. It provides a high degree of flexibility and ease of use and is designed to operate with any combination of Aysix sensors in a variety of applications and delivers significantly reduced maintenance requirements with unsurpassed reliability and accuracy. The DO sensor used with this analyzer is an optical fluorescence type sensor and requires no membrane or cartridges to maintain, and no initial calibration.

CIRCLE READER SERVICE No. 22

Flux Pumps



New catalog from Flux Pumps Corporation featuring Stainless Steel and Mechanical Seal Tubesets and Pump Motors showing Model Numbers, Wetted Parts, Lengths, Maximum Diameters and Hose Connection Size for Polypropylene, Stainless

Steel, PVDF Aluminum Alloy and Hastelloy tubesets. Liquid Saver Pump Operation and Function, Pump-N-Mixer mixing only, pumping only or mixing and pumping simultaneously. Fume Glands Stainless Steel, Polypropylene and Brass. Accessories - Hand Nozzles, Suction Strainers, Attachment Clamps, Brackets, Ground Wires, Compression Glands. Liquid Meter FMC suitable for all corrosive and neutral liquids and Positive Displacement Drum Pumps

CIRCLE READER SERVICE No. 23



Laboratory Grade Melt Pressure Transducers

Pressure Ranges:

0-1,500 psi to 0-15,000 psi, Metric ranges are also available

Mounting: 1/2- 20 UNF thread - standard, M18 X1.5 also available

Mounting Torque: 500 inch pounds maximum, (150 inch pounds recommended)

Diaphragm Material: 15-5PH Stainless Steel

Overload Capacity: 2 times FSO (full scale output)

Temperature Ratings: Diaphragm 750°F, Electronics 225°F

Accuracy: Laboratory Grade .25% FSO

Repeatability: Better than .15% FSO

CIRCLE READER SERVICE No. 133

Custom Thermocouples & RTD Temperature Sensors



For more than 20 years Enercorp has been quietly manufacturing thermocouples, RTD's and thermistor assemblies to meet our

customer's specifications. Our business keeps growing because one happy customer tells another and so on and so on. We thought that maybe now that we make tens of thousands of temperature assemblies each year we should let the word out. Maybe you would like to be our next happy customer. Call us at **1 800 ENERCORP** for custom thermocouples and RTD temperature sensors made to your specifications in days or even hours.

CIRCLE READER SERVICE No. 134

IS INTRINSIC SAFETY A BARRIER?

MTL CAN HELP

www.mtl-inst.com
www.process-controls.com/MTL

CIRCLE READER SERVICE No. 24



Intrinsic Safety Catalogue

From the leader in **Intrinsic Safety**, for engineers involved in hazardous areas. Covering new MTL products and providing the definitive quick cross

reference for terminology, test authorities and standards, also contains generic information on internationally accepted electrical protection techniques.

CIRCLE READER SERVICE No. 25

IS LIGHTNING A PROBLEM?

MTL CAN HELP

www.mtlisurge.com
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CIRCLE READER SERVICE No. 26



Process I/O for Process Control

MTL offers a booklet and a poster which explains the advantages of Process I/O and how it can be integrated into your

process environment. They also explain how Process I/O can save time and money and allow the potential of open fieldbuses to be used with a variety of field instruments. Includes reasons to implement Process I/O instead of traditional I/O technology. **CIRCLE No. 27**

IS INTERFACES FIELDBUS CONNECTORS OPEN PROCESS CONTROL LIGHTNING PROTECTION

www.mtl-inst.com
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Surge Protection

New **FREE** guide - Surge Protection For All Your Industrial Equipment from MTL discusses how to protect vulnerable high performance electronic components

from damage and disruption caused by current surges and transient voltages. Surge protection devices divert surges safely to ground and limit voltages to acceptable levels.

CIRCLE READER SERVICE No. 28

IS YOUR PLC NOT UP TO YOUR ENVIRONMENT?

MTL CAN HELP

www.mtl-most.com
www.process-controls.com/MTL

CIRCLE READER SERVICE No. 29



Making Fieldbus Intrinsically Safe

MTL provides advanced information on MTL products designed and being tested on Fieldbus trial sites to those

interested in Fieldbus. Information contains a generic overview of the requirements of Intrinsic Safety Fieldbus as specified in the ISA standard, for those wishing to know more.

CIRCLE READER SERVICE No. 30

FIELDBUS/PROFIBUS Need CONNECTORS/PSU?

MTL CAN HELP

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CIRCLE READER SERVICE No. 31



MTL CANADA SAFETY INSTRUMENTATION

BE INFORMED AND UNDERSTAND

www.process-controls.com/MTL

20 Regan Road Unit 17
Brampton ON L7A 1C3
Tel: 905-840-7850
Fax: 905-840-7852

Parker polyflex™ Products



Quick Reference Guide provides overviews and brief specifications to help you select the right Parker polyflex™ products for your systems. Parker's Parflex Division offers an extensive selection of hose, tubing, fittings and accessory products for specific fluid handling applications industry wide. Some of the products featured are Oil Field Service Hose, High-Pressure Hydraulic Hose, High Pressure Testing Hose, and more.

products for specific fluid handling applications industry wide. Some of the products featured are Oil Field Service Hose, High-Pressure Hydraulic Hose, High Pressure Testing Hose, and more.

INDUSTRIAL MECHANICAL SPECIALTIES CIRCLE No. 32

Unit Heaters & Door Heaters - Heavy Industry - Paper Mills - Steel Plants



Our Unit Heaters are heavy duty industrial type constructed of Sch 40 steel pipe (or Sch 80 on request) with steel or aluminum fins. Fan guards are standard equipment.

All motors are heavy duty industrial type and permanently lubricated. The adjustable louvers and cabinets are fabricated from 14 gauge steel and finished in enamel.

INDUSTRIAL MECHANICAL SPECIALTIES CIRCLE No. 33

Industrial Cleaning Products from Stoneage WaterJet Tools

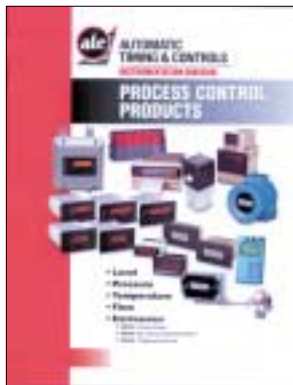


New 2003 Catalogue features Waterjet Basics, Waterjet Safety, Fluid Facts - Formulas & Conversions. Products featured are for Surface Cleaning, Pipe Cleaning, Sewer Jetting, Tube Cleaning, Rigid Tube Cleaning, No-Entry Vessel

Cleaning, Boiler & Big Vessel Cleaning, Specialty Systems, Swivels, Rotary Couplings, Hose Reels, Nozzles Tips and Fittings.

INDUSTRIAL MECHANICAL SPECIALTIES CIRCLE No. 34

Process Control Products



New Process Control Products catalog from Automatic Timing & Controls featuring Level, Pressure, Temperature, Flow and Enclosures. This catalog features Loop Powered Displays, Indicators/Totalizers, Pyrometers and features the new

Universal Process Meter Model 3820, Universal Process Meter with Totalizer Model 3870 and the new Ratemeter/Totalizer/Batch Controller model 3870. Many more products included in catalog.

ALC AUTOMATIC TIMING & CONTROLS CIRCLE READER SERVICE No. 35

Sub-Zero Spot Cooling from Compressed Air



Vortex Tubes are an effective, low cost solution to a wide variety of industrial spot and process cooling needs. With no moving parts, a vortex tube spins compressed air to separate the air

into cold and hot air streams. Vortex Tubes have a very wide range of application for spot cooling on machines, assembly lines and processes.

- Maintenance free - no moving parts
- Cycle repeatability within $\pm 1^\circ$
- Drops inlet temperature by up to 100°F
- Cools without electricity or refrigerants
- Exceptionally reliable, compact and lightweight

PELMAR Engineering Ltd. CIRCLE No. 36

ITW Vortec Cabinet Coolers



Keep Electrical Enclosures Cool, Clean and Protected.

Today's small and compact, multi-function electronic controls, variable speed drives, servos and programmable logic controllers are extremely sensitive to heat and contamination. Smaller cabinet sizes make temperature control difficult and contribute to significant premature failures. ITW Vortec's Vortex Cooler Enclosure Coolers are the affordable, low maintenance, easy to install alternative for keeping enclosures cool and clean without Freon or other agents.

PELMAR Engineering Ltd. CIRCLE No. 37

MTL CANADA SAFETY INSTRUMENTATION

BE INFORMED AND UNDERSTAND

MTL CAN HELP • INTRINSIC SAFETY • FIELDBUS • LIGHTNING

www.mtl-inst.com www.mtl-surge.com www.mtl-most.com
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Fieldbus - Investing In The Future



The MTL-Relcom range of physical layer components makes it easy to complete any fieldbus installation between control system and field instruments. Power supplies and wiring connection blocks cover every application in safe and hazardous areas,

providing the highest levels of availability, while maintaining a common architecture which is independent of the Zone or Division of use.

READER SERVICE No. 38

MTL - The Safe Choice For I/O



MTL8000 designed to address your process needs. Engineers can now choose from a wide range of process industry networks to connect field instruments to controllers. Using an open network reduces the cabling cost significantly and

gives access to more diagnostic data. The MTL8000 I/O system solves all of the practical problems so you can install an I/O bus on your plant today.

READER SERVICE No. 39

Intrinsic Safety Interfaces



MTL7700 the new industry standard. The MTL7700 series follows closely in the footsteps of the MTL700 but as a DIN rail mounting barrier providing quick and easy installation without the need for special hardware.

New Features:

- Bussed power
- Removable terminals

• Electronic fusing • Individual tagging • Cable screen earth • Proximity detector inputs • Dual channel modules • Relay and solid state switch modules

READER SERVICE No. 40

Pump Controllers



Our Pump Controllers are designed to automatically operate a pump to control the level of a liquid in a tank. They are

used in conjunction with Ktech multi-level float switches. Use two contacts to start and stop the pump. A relay circuit switches power to the fractional horsepower pump motor or to the three-phase contact of a large pump motor. Similarly, the switch contacts can be used to operate solenoid valves. Use additional contacts to indicate an alarm condition. These alarms provide an audible and visual signal. The audible signal can be muted after which the warning light remains on until the alarm condition is corrected. Controllers are manufactured to customer requirements.

Ktech
Industrial Products Inc.

CIRCLE No. 41

Multi-Level Float Switches



These switches are top-mounted with between one and four set-points. A single point sensor may be used to provide a high or low level alarm contact. The sensor is designed

to work directly with our Model AL101 or Model AL201 alarms. A multi-point sensor may be used to operate a solenoid valve or operate a pump indirectly through a relay. The float switch is factory sealed and explosion-proof. It is approved for hazardous locations, Class 1, Division 1 Group B, C, D. Explosion-proof housings are options.

Ktech
Industrial Products Inc.

CIRCLE No. 42



Heavy Duty Instruments Aftermarket Catalogue

Dixson, Inc. manufactures speedometers and tachometers to fit most any truck, bus, agricultural, construction or marine application. This informative 20 page brochure provides in-depth information on installation and calibration, ordering information and applications for Dixson's line of heavy duty electronic instruments.



**FORSTER INSTRUMENTS
LIMITED**

CIRCLE No. 47

Continuous Level Indicator System



The CL-100 Level Indicator microprocessor based control uses input from up to 8 sensors to calculate and display material level on an easy to read LED bar graph. The system is easily calibrated using the keypad on the front panel. Two

different material levels are used to calibrate the system: one high point and one low point. The microprocessor does the rest. It automatically averages the outputs from the sensors and indicates the material level from 0-100%. High and low alarm set points are also adjustable from the keypad.

Thermo Ramsey

CIRCLE READER SERVICE No. 43



Flow/No Flow Detectors

The Granuflow GTR 130 and DTR 131 non-contact flow sensors are ideal for monitoring solids flow in pipelines,

ducts, air-slides, and at transfer points of vibrating chutes, conveyor belts and bucket elevators. Some successful applications include the monitoring of roofing granules being applied to shingles, the flow of ingredients into extruders and mixers, and also the flow of additives into the production of wallboard. Thermo Ramsey has extensive experience in applying microwave technology in all kinds of applications in various industries.

Thermo Ramsey

CIRCLE READER SERVICE No. 44

Heavy-Duty Industrial Instruments



Since 1921, VDO automotive, nautical, aviation and industrial instruments have been unsurpassed for accuracy and reliability. This 32 page brochure describes the VDO line of tachometers, speedometers, pressure and temperature gauges to volt and ammeters, model numbers, product description, installation instructions and a cross reference guide.



**FORSTER INSTRUMENTS
LIMITED**

CIRCLE No. 48

Flanged Immersion Heaters



Wattco Flanged Immersion Heaters are built for use in high pressure applications where the immersion heater is bolted on to a

tank wall (such as those used in large vessels). The highest quality copper, steel and incoloy are used to maintain the maximum desired heat.

Wattco Screw-Plug Immersion Heaters are individually designed to provide the exact wattage densities and operating temperatures. They are designed to be immersed in various liquids and gases. The sheathed materials to be used are generally determined by the application and densities needed.

WATTCO

CIRCLE No. 45

Heating Elements & Control Systems



Wattco Electric Canad Ltd/Ltee., presents their line of heating elements, control systems, immersion heaters, cartridge heaters, tubular elements and finned tubular elements in this new brochure. Wattco can supply all products to meet all your heating needs with cartridge heaters, quartz heaters, strip heaters, silicone heaters, ceramic infrared heaters, radiant panels, band and drum heaters, thermostats - digital and bimetal and thermocouples. Heater products available in a variety of materials of construction.

WATTCO

CIRCLE No. 46



Counters, Hour Meters and Tachometers

Redington's new 'Eagle' family of digital electronic counters, hourmeters and tachometers use innovative technology to provide unparalleled accuracy and

reliability over a wide range of applications. Due to the many design options available, 'Eagle' represents the ultimate in practicality and flexibility. Can be specified in two ways; with terminal block or connector with wire leads. Installation is simple using the positive-locking mounting clip provided. An optional gasket provides reliable washdown protection.



**FORSTER INSTRUMENTS
LIMITED**

CIRCLE No. 49

Industrial Heating Solutions



All heaters are CSA approved, including heaters for Hazardous Locations. In addition to this approval CSA has tested and approved the line to UL standards. We are committed to manufacturing and supplying specialized Industrial Process Heaters and Temperature Control Systems that are designed to meet the unique heating requirements of each customer. Our long life, rugged products are designed to give you years of trouble free operation.



**ASB HEATING
ELEMENTS LIMITED**

CIRCLE READER SERVICE No. 50

1/16 DIN Temperature Controllers



These two 48 x 48mm size controllers of the gamadue® series, are suitable for a wide applications range. M1 (left) can be used as a simple controller while M3 (right) performs Heat/Cool control and provides the auxiliary current transformer input. Typical characteristics: autotune, IP65 front panel protection, serial communications, continuous retransmission output, custom linearisation.



CIRCLE READER SERVICE No. 52

UE 120 Series Switches



The United Electric 120 Series pressure, temperature and differential pressure switches have been redesigned for improved

performance with heightened safety standards. The widely used 120 series still offers you its classic features. The 120 Series now has an integral cover lock to provide tamper-resistance while meeting CENELEC standards, dual conduit openings, (available on certain pressure, differential types, and temperature types) providing mounting flexibility, and a redesigned cover with a handgrip for eased hand tightening.



United Electric Controls

**CIRCLE
No. 54**

Circulation Heaters



Compact and efficient, Circulation Heaters may be used in

forced or natural circulation systems to heat flowing gasses or liquids. Pipe plug or Flanged immersion heater, vessel, insulation, terminal enclosure, mounting brackets and inlet and outlet connections are included. Installation is simple with only basic wiring and piping connections required.

Applications include: **Heat transfer oils** - Molding dies and platens, closed loop heat transfer systems for heat sensitive materials **Fuel Oil Heating** - Pre-heating for delivery to burners, pre-heating to pumping viscosity. **Water** - Dishwashing & rinsing, hot water storage tanks, process water



**ASB HEATING
ELEMENTS LIMITED**

CIRCLE READER SERVICE No. 51

Ultrasonic Level Transmitters



SmartSonic offers a variety of non-contact ultrasonic level transmitters and broad processor capabilities that provide remote display, relay output, and full communication. The transmitters provide a continuous 4-20 mA output and optional RS-232/485 communication to interface directly to a PC, allowing data collection, parameter changes, and transmitter diagnostics. The range of transmitters allows users to read levels from 0.4 to 90 feet in liquids and one to 45 feet in granular and light bulk solids.



CIRCLE READER SERVICE No. 53

New Pressure Switch



Series 25 offers a self contained solution for direct control of AC loads up to 20 amps with adjustable pressure

ranges up to 475 psi. Adjustable set point and deadband feature is a real benefit for applications where a full function logic controller may not be available. Technicians can make on-the-fly corrections during development testing, start-up or maintenance. An easy to install solution for direct control of HVAC fans and blowers, as well as control of pumps, compressors, valves, and pilot lights. Compact design and low cost make it well suited for installation on OEM equipment.



United Electric Controls

**CIRCLE
No. 55**

Oil / Water Separator



Filter Innovations' oil/water separator with its coalescence principle of operation offers the user a number of advantages: • Capable of removing oil droplets down to and below 20 micron • Solids

settling removal capabilities for wastewater flow with multiple contaminants • Compact design conserves valuable floor space • Low maintenance/operating costs • Oil/water separation systems are available in carbon steel, stainless steel and fiberglass materials of construction to meet the varied needs of customer applications. The Filter Innovations Inc., Oil/Water Separators are designed to handle a variety of flow rates.



FILTER INNOVATIONS INC.

CIRCLE READER SERVICE No. 56

Activated Carbon Filtration



Filter Innovations Inc., carries a large inventory of virgin and reactivated carbons for the filtration of vapour and liquid streams. Different types of carbon available: pelletized, granular, powdered and reactivated, made out of several different materials such as coal, coconut shell and wood. A complete

line of carbon absorption equipment is available including vessels, canisters and panels. Complete changeout services are also available.



FILTER INNOVATIONS INC.

CIRCLE READER SERVICE No. 57

Automatic Self Indexing Filter



This automatic self indexing filter provides a highly efficient and reliable means of

removing solids from process liquid. The MYCO media filter is a non-pressurized system which is economical and easy to operate. It can handle occasional system upsets or overloads without blinding the filter media. The MYCO media filter is fully automatic requiring no operational intervention. Particle size removal is based on the media selected. The MYCO media filters can handle flows up to 700 GPM. Typical applications will include coolants, process water, cooling towers and oils.



FILTER INNOVATIONS INC.

CIRCLE READER SERVICE No. 58



Stainless Steel Cabinet Coolers

Use them anywhere! Heavy-gauge stainless steel construction.

Cabinet Coolers are heavy-duty industrial equipment. Cabinet Coolers all stainless steel-no aluminum or plated brass components. Corrosive environments and wash-down won't affect it. It'll never pit, corrode or contaminate your product. If you're an OEM, you'll find the fit and finish of our Cabinet Coolers a complement to your own equipment. Cabinet Coolers are available with or without an adjustable thermostatic control that's factory set for 90°F (32°C). Thermostatic systems reduce compressed air consumption and are ideal for varying heat loads. All include an air distribution kit to ensure even cooling in the control enclosure.

- Less expensive to operate • No Freon Leaks • No costly repair calls
- Minimal, if any, maintenance • Provide longer life to expensive controls
- No production down time waiting for repairs • Maintain NEMA 4, 4x, and 12 integrity • All models constructed of Stainless Steel

FOR THE PRICE OF OUR COMPETITORS' ALUMINUM COOLERS!

CIRCLE READER SERVICE No. 59



Filter/Ventilator Systems

For cooling with ambient air, ventilating, dustproofing and/or pressurizing electrical/electronic and other enclosures.

Filter/Ventilator Systems use clean filtered ambient air to forcefully blow away hot internal air. In most cases, this will maintain proper operating temperature for electronic/electric components. Purchase and operating costs are much less than chilled air equipment such as air conditioners or vortex tube cooling!

Electra-Kool™ Filter/Ventilator Systems use a pleated paper main filter that traps dust particles that the human eye cannot see! Because a wrap-around pre-filter is also furnished, and the main filter has a huge surface area, the filters generally last a long time. They also can be cleaned for re-use. Forcefully ventilate, cool & dust-proof electric enclosures:

- reduce production downtime! • stop manufacturing losses! • shrink maintenance labor costs! • improve reliability of controls! • minimize replacement parts cost! Use an Electra Kool Filter Ventilator System to ensure reliability in your controls!

CIRCLE READER SERVICE No. 61



Two Way Liquid Transfer and Liquid Spill Pick-Up

The two way liquid transfer and spill pick-up system both fills and/or empties a 55 gallon drum in less than 2 minutes.

Easily switches from vacuum mode, filling the container, to empty mode by turning dial on top of unit.

The smart way to clean up and transfer liquids:

- Beats shop vacuums on reliability, performance and price
- Larger tank capacity than industrial shop vacuums
- Eliminates double handling of toxic material and emptying vac canister

- Eliminates need for "floor dry" absorbent
- No efficiency loss after each use like electric-powered shop vacuums
- Both have automatic float valve to prevent overfilling
- Both easily pick up high viscosity liquids, chips & sludge
- Both safe in wet areas requiring no electricity

CIRCLE READER SERVICE No. 60



Carbicote® Strippable Coating

Water-based Strippable Coating that can be easily removed from many surfaces. Carbicote® is commonly used as safe peel-off protection for spray booth walls, lights, and windows. **Carbicote® Bright White Water Base** protects spray booth walls with a reflective

strippable coating. **Carbicote® Crystal Clear Water Base** protects spray booth lights and windows with a transparent strippable coating. Carbicote® is the EASY solution to Spray Booth Maintenance. **EASY to use.** Apply Carbicote® by spray, brush, or roller. It dries quickly, forming a removable barrier in minutes. Cleanup with soap and water, no solvent required! **EASY to strip.** Carbicote® has excellent cohesion. When pulled, it stretches and peels off in large sheets. It retains its flexibility, does not become brittle with age. Carbicote also has excellent adhesion. It adheres well to most surfaces including stainless steel. **EASY to store.** Carbicote® is nonflammable; store it in the painting area ready for use. No "flash fire" danger from open containers; no special paint locker needed.

READER SERVICE No. 62



10520 Yonge St. Unit 35B Suite 220
Richmond Hill ON L4C 3C7
Tel: (416) 410-1313 Fax: (416) 410-1806
Toll Free Tel: 877 797-2777
Toll Free Fax: 877 797-7660



The Problem Solving Company www.tech-sales.com sales@tech-sales.com
Vancouver Office

Tel: (604) 859-5393 Fax: (604) 859-6393

The Problem Solving Company



NEW PRODUCTS From Tech Sales Co.

High Efficiency Curtain Air Blow-Offs Reduce Air Consumption



NEX FLOW Technologies™ Air-Blade™ is the "new" air knife/air curtain style system for blow-off and cooling of parts, webs and other materials.

The system uses

the Coanda effect to amplify air flow dramatically reducing air consumption. Unlike other systems of its kind, the Air-Blade™ is **LOW IN COST but HIGH IN QUALITY** with a full flow design, rugged build and several mounting options to allow easy installation and maintenance by the customer. NEX FLOW Technologies™ Air-Blade™ is made of anodized aluminum or stainless steel for food and higher temperature environments. Instant ON/OFF with no moving parts for maintenance free operation. Sizes from 3" to 36". After 36" units can be combined for longer lengths. Applications include blow-off of water, coolant, and the cooling of webs and parts.

CIRCLE READER SERVICE No. 63

Lowest Cost Air Amplifier In Stock



Lowest Cost Air Amplifiers In Stock! - Rugged Air Amplifiers utilize the Coanda effect to amplify air flow dramatically reducing air consumption in blow-off applications. The unit is

made of strong lightweight zinc alloy for strength and longer life in difficult environments. High air-flow amplification with lower compressed air consumption than ejectors and venturis. Instant On/Off with no moving parts for maintenance free operation. Applications include: blow-off of water, coolant, etc., and the conveying of light materials. Sizes from 3/4" to 8".

CIRCLE READER SERVICE No. 64

Air-Blade Ionizer Is Efficient and Eliminates Static And Dirt From Charged Surfaces



NEX FLOW Technologies™ Air-Blade™ Ionizer easily removes dirt and static charge from plastic parts, moving webs and other charged surfaces by utilizing the highly efficient Air-Blade™ and a static bar made by Haug. Unlike many similar systems, the Air-Blade™ Ionizer uses fully shielded cable with its quality static bar for long life. The power supply is "repairable" and comes with a full two year warranty. For difficult, highly charged surfaces where a standard static bar is not enough, a unique "super static bar" with three times the output to the standard unit is available. Unlike many other systems of its kind, the Air-Blade™ is **LOW IN COST but HIGH IN QUALITY**. Made of standard anodized

aluminum or stainless steel versions for high temperature and food grade applications. A special Haug static bar is available for wash-down applications. Material flow rate is controlled easily with a pressure regulator. Sizes are available from 3" to 36" or longer as applications demand.

CIRCLE READER SERVICE No. 67

Ring-Vac™ Offers Superior Design For Conveying Of Materials



The "new" NEX FLOW Technologies™ Ring-Vac™ is the ideal system for conveying of materials, small parts ...even for great distances. Convey paper, plas-

tic pellets, chips, waste and other items by connecting a hose to each end of the powerful Ring-Vac™. Unlike many other systems of its kind the NEX FLOW Technologies™ Ring-Vac™ is **LOW IN COST but HIGH IN QUALITY**. Standard anodized aluminum or stainless steel versions for high temperature and food grade applications are available from stock. The unit is strongly built compared to some other makes with a simplified mounting system for ease of installation by the customer. Material flow rate is controlled easily with a pressure regulator. Sizes available are 1", 1-1/4", 1-1/2" and 2" outside diameters.

CIRCLE READER SERVICE No. 65

New "Split" Ring-Blade™ Offers Efficient Blow-Off For Wire, Cable, Rope and Extruded Parts



The "new" NEX FLOW Technologies™ Ring-Blade™ is an ideal system for removing water, dust, and light oils from wire, cable, rope and many types of ex-

truded shapes. The system uses the Coanda effect to amplify air flow dramatically reducing air consumption. The unit can be "split" and opened to allow for easy insertion of a continuous extruded shape. Unlike other systems of its kind, the Ring-Blade™ is **LOW IN COST but HIGH IN QUALITY**. Standard anodized aluminum or stainless steel versions for high temperature and food grade applications are available from stock. Easy installation and maintenance by the customer. Sizes from 1" to 6" inside diameters.

CIRCLE READER SERVICE No. 66

Corona Treating Systems



Taking unique advantage of open air Corona discharge, directed to the surface requiring treatment, Bottle-Dyne™ pre-

treating systems set new standards for Corona technology. It is now possible to inline Corona treatment on virtually any extrusion or injection blow molded container at line speeds of up to 7,000 parts per hour. Treatment is done delicately, quickly and efficiently, without damage to the surface being treated and without adverse effect on the molding, printing or labeling process.

CIRCLE READER SERVICE No. 68

Ultrasonic Cleaning Systems



Traditional Mould Cleaning methods are time consuming, labour intensive and abrasive. By using ultrasonics for mould maintenance, the result is a cleaner mould with reduced manual input and no wear leading to large cost savings.

Ultrasonic Cleaning Can Give The Following Advantages:

- Short and simple wash process
- No manual labour
- High level of cleanliness
- No abrasion of precise edges and surfaces
- Suitable for all moulds, large and small
- User friendly process and machinery



Typical cleaning applications are automotive and jet engine parts, bearings, hydraulic and pneumatic components, printed circuit boards, electric parts, precision parts, tools, nozzles and armatures. Finnsonic ultrasonic equipment is built to be long lasting and is made completely in stainless steel where only components of the highest quality are used.

CIRCLE READER SERVICE No. 69

See more of our products on www.tech-sales.com

Oil Skimmers - Wayne Mini Skimmers



Model DBS

Mini-skimmers have been in use throughout the world since 1990. Thousands are used daily to remove unwanted floating "tramp" oils. They are small, run very quietly, and use a very dependable permanent magnet motor! Standard models for industrial users include oil pickup rate to 1 gallon/hour, loose or fixed tail pulley design, and a choice of polyurethane or stainless steel belts in four standard length sizes.

CIRCLE No. 70



Model MSB

Model MSB lifts 1 quart to 4 gallons per hour. It can be supplied with Polyurethane belts for coolants or Stainless steel belts for parts-washers. The MSB Skimmer has four standard belt lengths and special belt lengths to 100 feet. The world's smallest oil skimmer Model MSB mounts on vertical/horizontal surfaces and fits into tiny spaces. It has a dependable permanent magnet motor!

CIRCLE No. 71



Economy Oil Skimmer

Economy Oil Skimmer for Coolants answers the need for a high quality, dependable but low cost belt type skimmer! 115/1/60 high quality, quiet & dependable permanent magnet motor with stainless steel cover and a six foot three prong cordset. A 1" wide flat polyurethane belt has great adherence for floating oils. Two standard lengths - 8" or 12" from mounting bracket base to the lowest point.

CIRCLE No. 72



Model SSP

MAXI-Skimmers™ these units utilize stainless steel or polyurethane belts 2" to 4" wide reaching from 1 to 50 ft. down and can collect from 2 to 10 gph. Totally corrosion resistant materials of construction.

CIRCLE No. 73



Model VSSP/4

**Adjustable Lift Rate
Belt Type Oil Skimmers**

Select your lift rate with a twist of the dial. Speed up (or slow down) the job of removing floating oil to suit your application. Costs about the same as other 5 gph belt oil skimmers. This skimmer is also corrosion-free, being made mostly of stainless steel parts and polymers. The VSSP/4 uses one 4" wide belt which can reach from 1 foot to 50 ft. down. There is a choice of stainless steel or polyurethane belts.

CIRCLE READER SERVICE No. 74

Air Assisted Ionizers

Air assisted ionizers serve two primary functions. The first is to neutralize the electrostatic charges holding dust particles to material surface and to blow or carry dust particles away. The second is the use of air as a carrier to overcome distances too great for an ionizer without air assistance. Tech Sales Co. offers a wide variety of Haug air assisted ionizers.

CIRCLE READER SERVICE No. 75



The **Ion Air Blower** is ideal for ionizing larger and hard to reach areas. It is available in three different sizes.

CIRCLE No. 76



The **Delta Blower** fans out air in a delta configuration and is ideal for sheet fed applications.

CIRCLE No. 77



The **Wing Jet** offers effective ionization for small areas or objects.

CIRCLE No. 78



The **Needle Ionizer** effectively removes dust particles from bottles and other small containers.

CIRCLE No. 79

Ionizing Bars

Haug high-efficiency ionizing bars eliminate electrostatic charges on the surface of plastics, paper, textiles and many other non-conducting materials through a steady and efficient balance output of positive and negative ions. All ionizing bars are operator friendly and safe to touch and are equipped with coaxial shielded cables, eliminating the possibility of interference with process controls or other nearby electronic equipment. Haug's exclusive and patented X-2000 cable system permits fast and easy power supply connection to the ionizing bars.

CIRCLE READER SERVICE No. 80



The **RN Ionizing Bar** is a standard touch-safe ionizer for web-based applications. It is available in custom lengths from 6" to 15 feet. It is also available in a daisy-chain version.

CIRCLE No. 81



The **VS Ionizing Bar** is a high-output ionizer designed to eliminate very strong surface charges. It is effective at distances up to approximately 8" from the web. It is touch-safe and can also be daisy-chained.

CIRCLE No. 82



The **PS Ionizing Bar** is a compact yet powerful ionizing bar. With dimensions of only 0.5" x 0.5", it is perfect for applications where working space is restricted.

CIRCLE No. 83



The **CI-SL** is a passive pre-ionizer that does not require a power supply. As a pre-ionizer it reduces surface charges permitting an active ionizing bar to easily eliminate the remaining charges.

CIRCLE No. 84

See more of our products on www.tech-sales.com

NEW PRODUCTS From Tech Sales Co.

New Dynamic Biodegradable Descaler

Dynamic Descaler is a safe nontoxic, biodegradable chemical to be used on the waterside of heat transfer equipment. You do not have to heat Dynamic Descaler. It is safer for the employees to use than other acid products. Your equipment will be cleaned in only hours without disassembling any part of the equipment. Equipment can also be cleaned without any down time (cleaning on the run).

Cleans down to the original surface without pitting. Dynamic Descaler is safe on copper, copper-nickel, bronze, brass, iron and rubber. It will extend the usable life of your equipment, especially when used as a part of a regularly scheduled preventative maintenance program. Removing the scale build up allows your equipment to operate more efficiently with less down time.

Dynamic Descaler is used by Ford Motor Company, General Motors, Rubbermaid, Dow Chemical, USX, Dayton Tire, Baker Hugh, Kennametal, Allegheny Power Systems and many others in the U.S. and worldwide.

This is the head from a heat exchanger cleaned with Dynamic Descaler at the General Motors Facility in Arlington, Texas. Notice that after cleaning the metal surface shines and there is absolutely no scale remaining whatsoever.



Before



After

For Safe Effective Cleaning Of:

- Heat Exchangers • Liquid Ring Vacuum Pumps
- Air Compressors • Condensers
- Cooling Tower • Boilers
- Furnaces • Lime Slurry Systems

**CIRCLE READER
SERVICE No. 85**

This is a heat exchanger cleaned with Dynamic Descaler at the General Motors Facility in Arlington, Texas. Dynamic Descaler was circulated for only 30 minutes. Notice that after cleaning 100% of the white lime scale is removed.



Before



After

DYNAMIC DESCALER

A new safe technology type acidic cleaner and degreaser. Formulated to rapidly clean mineral scale from water passages in water cooled or heated equipment. Improves efficiency, lowers cost, conserves energy and extends the usable life of cleaned equipment.

Safe on steel, iron, brass, copper, plastic, rubber and other materials found in most water cooled, heated or operated equipment. Do not use concentrated on stainless steel or aluminum heat exchange surfaces.

Used cold by circulating through water passages in water heat exchangers, coolers, pumps, boilers, compressors, condensers, extruders, molds, cooling towers, furnaces, water piping systems and other water side heat exchange surfaces.

Fortified with powerful low foaming wetting and penetrating agents, safe degreasing solvents and superior corrosion inhibitors to prevent corrosion of the steel, brass or copper surfaces being cleaned. Does not contain toxic cresols or other tar oils that require SARA title III, Section 313 spill loss or disposal reporting.

Dissolves all types of:

- Water Scale, Lime, Rust, and Lithium Carbonate • Effective
- Biodegradeable • Pleasant Odour
- Safe • Economical • Used Cold

Disposable Rotary Drum Filter For Clean, Cost-Saving Liquid-Solid Separation



The new rotary drum filter consists of a polycarbonate outer shell, housing a drum made from porous UHMW Polyethylene (15-45 micron sieve). A drum size of 3" diameter by 4.5" long gives a surface area of 42.4 in² and effective filtration area of approx. 14 in². Test results showed slurry-processing

rates of 1 to 3 liters per minute and a batch processing capacity of 900 liters (240 gallons) if continuously operated for an 8-hour period. Actual production performance is a function of the subject material/liquid characteristics to be separated, drum media choices (this is variable) and all operating conditions.

The new disposable rotary drum filter was designed for applications in laboratory, pilot plant, or other small capacity production applications. In addition the sealed, "throw away" eliminates the need centrifugal/ batch filtration units have for costly manual cleaning operations requiring the unit to be opened to an outside "uncontrolled," possibly contaminating environment.

READER SERVICE No. 86

Process Heating For Industry, Tubular Heaters For High Volume Applications & Coiled Heat Exchangers

The flexibility and versatility of electric heat allows it to be used in an infinite number of applications. This, combined with the fact that it is clean, efficient, and easy to control, makes it one of the best heat sources available to industry today. From a 13.5 Megawatt Air Heater for one of NASA's Mach 8 wind tunnels, to Circulation heaters for a variety of fluid heat transfer systems, to Duct heaters for forced air applications, to Flanged Immersion Heaters and Control Panels, Accutherm and Tech Sales Co., can provide the kind of trouble free thermal systems the industry expects from a quality supplier. The versatility of the metal sheathed tubular heater allows it to be used in a multiplicity of appliance applications. From coffee makers to livestock waterers the flexibility of this product is infinite. Accutherm has UL and CSA recognition for its products for both Immersion and Air Heating applications.

READER SERVICE No. 87



See more of our products on www.tech-sales.com

Electromagnetic Flow Meters



Badger Meter's advanced electromagnetic designs deliver up to 0.25% accuracy. The "straight spool" design virtually eliminates pressure loss. Since there are no moving parts in the flow stream, maintenance is kept to a minimum. A large variety

of size configurations are available from 1/24" to 54" (DN1.2 - DN1400.) Connections range from flanged to wafer to 3A approved sanitary fittings. Applications can be found in various industries, including food and beverage, pharmaceutical, chemical, pulp and paper, and mining.

TOLL FREE: 1-800-661-8823

MUIS CONTROLS

CIRCLE READER SERVICE No. 88

Sight Flow Indicators



OPW Engineered Systems has been manufacturing **Sight Flow Indicators** for over 60 years. Experience has led to many innovations in design and manufacturing, making VISI-FLO the most thoroughly engineered Sight Flow Indicator on the market. VISI-FLO's are available in two series: the Standard 1400 Series, and the 1500 High Pressure High Temperature Series. All VISI-FLO's carry full ANSI Service Ratings to ensure maximum reliability in even the harshest operating conditions.

TOLL FREE: 1-800-661-8823

MUIS CONTROLS

CIRCLE READER SERVICE No. 89

Mass Flow Controllers



Mass Flow Controllers are designed to indicate flow-rates and control set flow-rates of gases. Flowrates of Mass Flow Controllers are

unaffected by temperature and pressure variations within stated limitations. LCD readouts are supplied with direct reading readouts. Zero and span adjustments are conveniently accessible from the outside of transmitters. Eighteen conveniently overlapping flow ranges from 10 sml/min to 100sL/min (in terms of Nitrogen flow) are offered.

TOLL FREE: 1-800-661-8823

MUIS CONTROLS

CIRCLE READER SERVICE No. 90



E3 3" Bolted Plastic Pumps

Introducing the line of E3 3" bolted plastic pumps, the latest addition to the Versa-Matic line of precision quality diaphragm pumps. The new E3P was engineered to transfer large volumes of

chemicals safely and quickly. • **Leak-free bolted design** for a greater positive seal • **Epoxy-coated air section and stand** to prevent environmental attack • **Adjustable manifolds** for horizontal or vertical system configurations • **Non-stalling, lube-free air valve system**



YORK FLUID CONTROLS LIMITED

CIRCLE READER SERVICE No. 91

Three Piece High Cycle/Thermal Cycle Ball Valves



State of the art performance with a wide range of options. A high performance workhorse, this valve is a reliable package that handles the demands of high cycling and thermal cycling applications in high production environments. Ranging in size from 1/4" to 2 1/2", the valve is easily automated with pneumatic or electric actuators. A variety of body materials, seat materials and options means you will get exactly the right valve for your application.



CIRCLE READER SERVICE No. 92

Pressure Sensors

A complete line of Pressure Sensors and Diaphragm Seals isolate and protect instrumentation from the process line, providing accurate, repeatable pressure measurement of slurries and corrosive fluids. Series 40 and Series 42 Pressure Sensors are the industry standards for protecting instrumentation, and assuring accurate, dependable pressure measurement. Red Valve Pressure Sensors are used for such applications as sludge, raw sewage, grit, lime and carbon. A sensor with a transmitter may be used on positive displacement pumps to shut down the pump if pressure is lost. On filtration systems, a sensor can be used to detect when a filter needs replacement.



CIRCLE READER SERVICE No. 93

Self-Dumping Dewatering Hoopers



Slash maintenance, labour and contract costs. Stop shipping water with solids. Comply with environmental

regulations. Works like a giant coffee filter. Leak-proof container with stainless mesh liner supports a disposable filter, covering all inside surfaces. (1) Pump or dump sludge, slurries and wastes into patented Phase Separator(s), liquid drains, dewatered solids are retained in filter. (2) Dispose of or recycle solids. (3) Return clean and ready for reuse. Upgrade centrifuges, belt and filter presses and flimsy containers. A permanent cost-effective solution.



CIRCLE No. 94

ENVIRO SOLV INC



New Pitbull Tough Sump Pumps

NO rotating parts, bearings, shaft, impeller, diaphragms, floats, seals or electricity. Upgrade vertical centrifugal and diaphragm pumps. NO NPSH requirement—just enough

fill head to submerge the pump. Pitbull patented pneumatic displacement sump and transfer pumps are proven to reliably handle abrasive chunks, fines, hot corrosives, pipe-size trash, and condensate—with NO inherent limitation between solids passing, standby to maximum flow, and varying discharge heads.



CIRCLE No. 95

ENVIRO SOLV INC

New Hydraulic Submersible Pump Handles 5" Solids



The Godwin Heidra HS150V hydraulic submersible pump weighs only 165 lbs. and passes through a 24" manhole. With a fully recessed vortex impeller, it is able to pass 5" solids. It comes with a diesel hydraulic power unit and all necessary hose. Godwin-Dri-Prime cast iron and 316 stainless centrifugals to 16" x 16" can self-prime to 28 feet and run dry continuously.



CIRCLE No. 96

ENVIRO SOLV INC

High Range Current Sensor



Airotronics introduces the HCS Series featuring a GM/NOGO current sensor with sense capabilities from 8 to 60 amps AC.

Toroidal sensing provides total isolation between sensed current and the output circuit. The HCS is completely self powered, no external supply voltage needed, and provides a 1 amp solid-state 3-50VDC output to interface directly to a PLC input or control relays. Current ranges can be adjustable from 8 to 60 amps or can be factory fixed. Packaged in a compact 2" x 2" cube and totally encapsulated for protection from harsh and humid environments.



**CIRCLE READER
SERVICE No. 97**

1/16 DIN Temperature Controller



Model 1048 is a microprocessor based self tuning PID Temperature Controller housed in a 1/16 DIN case. It incorporates a dual LED display, red for actual process temperatures and

green for set point value. The main output (SPI) can be ordered as a relay or 12Vdc SSR trigger output. It is fitted as standard with a second relay output which may be configured for 6 alarm functions or as an independent second set point (SP2). All parameters are accessed via the front key pad which is sealed to IP65-NEMA-4, Supply voltage options are 85-265Vac or 24Vac/dc. Programmable for 5 different Thermocouple inputs and 2/3 wire PT100 (RTD).



**CIRCLE READER
SERVICE No. 98**



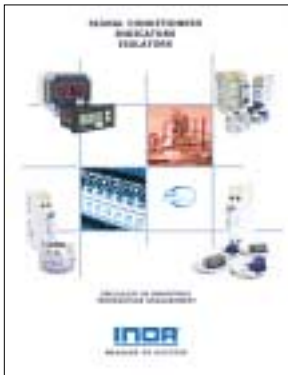
Portable Digital Industrial Stroboscope

Palm Strobe is the new industrial standard for high intensity, multifunction, ultra compact, Xenon stroboscopes. It offers the World's first removable, rechargeable battery pack. Stop-action and Slow-motion inspections are made simple with the unique one-touch joystick type tuning button. Additional features provide rapid x2 and +2 of current flash rate, Tachometer Mode

can even be operated "hands-free" with our standard tripod mounting bushing. Unique rugged industrial strength design offers: • Removable Battery Pack • One Hand Operation • Lightweight, Compact Size • Flash rated to 12,500 FPM, • Tachometer Mode • Remote Triggering/Pulse Output • Short Arc Lamp maximizes Light Output



**CIRCLE READER
SERVICE No. 99**



Signal Conditioners, Indicators, Isolators

Alpha Controls are specialists in industrial temperature measurement and are pleased to present the new Inor catalog featuring In-Head 2 wire Transmitters, In-

Head Profibus-PA Transmitters, DIN-Rail 2-wire transmitters, DIN-rail 4-wire Transmitters, Isolators & Isolation Transmitters, Alarm Units, Power Supplies, and Indicators to meet your industrial temperature measurement or signal conditioning needs.



**ALPHA CONTROLS
CIRCLE READER SERVICE No. 100**



Professional Multimeter Measurements

Professional Autoranging Multimeters with PC Interface • High Accuracy - 0.08% Basic DCV accuracy on Backlit 5000 count LCD display • High Resolution - 0.01mV, 0.1µA, 0.01W, 0.01nF, 0.001Hz • Wide Bandwidth - 40Hz to 20kHz

AC voltage bandwidth • PC Interface - Optional Windows compatible software • True RMS - for non-sinusoidal waveforms • Added features - Temperature, Relative, Min/Max and Peak Hold • Includes built-in stand with belt clip, CAT III test leads, protective holster, 9V battery, and temperature probe (MP530 only)



**CIRCLE READER
SERVICE No. 102**



Air Capture Hoods

ACCUBALANCE® Air Capture Hoods measure the air volume flowing through registers, diffusers and grilles. Weighing just seven and a half pounds the ACCUBALANCE is easy to carry, lift, and use.

Simply hold the ACCUBALANCE up to a diffuser or grill and read direct airflow of a supply or exhaust on the large digital display.

Sampling function allows for easy averaging of multiple measuring points. A variety of hood sizes to choose from, allowing you to take readings from most diffusers, registers or grilles.



**CIRCLE READER
SERVICE No. 103**



Hazardous Location Electrical Products

Protection against explosions represents safety technology at its highest level. R Stahl products are updated to the newest standard developments and technologies. This

new catalog features their line of Lighting Fixtures, Terminal Boxes, Plug & Receptacles, Control Devices, Control Stations, Disconnects, Fire Protection and Accessories. Also featured is an introduction to the Basis of Explosion Protection.



**ALPHA CONTROLS
CIRCLE READER SERVICE No. 101**

Stainless Steel Pneumatic Actuators



Chemline offers a new line of competitively priced rack and pinion rotary actuators of solid 316 stainless steel. They feature body, end caps and shaft of solid stainless, and polyaramide

(IXEF®) pistons. Output shaft and base mounting dimensions are according to ISO-5211. Polyacetal rings and bearings provide for long cycling life. Three sizes are available in both double acting and spring return models, offering output torques up to 1,400 inch pounds at 80 psi air supply.



CIRCLE READER SERVICE No. 104

Flow Transmitters



The Chemline Type 2110 is a 2-wire flow transmitter with a 4-20mA output. A coil effect pulse output sensor is employed.

In a NEMA 4X enclosure is an LCD digital display which shows flow rate or total flow in any volumetric unit. Calibration is easily performed in the field using the keypad.

Installation fittings are required. 3-wire units are available.

• Supply Voltage: 12 to 24 VDC • 1/2" - 24" sizes
• PVC, PP, PVDF or 316SS bodies
• LCD displays 4 digits for flow rate and 6 digits for total flow.



CIRCLE READER SERVICE No. 105

MINCO Thermofoil Heaters



Thermofoil heaters are thin, flexible heating elements consisting of an etched foil resistive element laminated between layers of flexible insulation. Since their introduction by MINCO, Thermofoil heaters have demonstrated significant advantages over conventional electronic heaters.

- **Precise Heating**
- **Faster Warmup and Longer Life**
- **Space and Weight Savings**
- **Custom Tailored For Better Fit**
- **Integral Temperature Sensors**

CIRCLE READER SERVICE No. 106

MINCOTemperature Sensors & Transmitters



A new catalog from MINCO contains a wide variety of sensor styles to fit most applications. MINCO's line of Temperature Sensor Assemblies, RTD and Thermocouple Probes, Accessories, Temperature Transmitters, Sanitary Sensors, Miniature Bearing

Detectors, EMCS Thermometers, Thermal Ribbons, Ceramic Elements and Precision Reference Thermometers, and complete product specifications are featured.

CIRCLE READER SERVICE No. 107

Love Controls 2003 Catalogue



Love Controls produces a broad range of instruments and sensors for temperature and process control. Instruments range from the simplest of single board controls to sophisticated microprocessor based products capable of computer communication. Temperature sensors include thermocouple, RTD, and thermistor assemblies and accessories. Organized into six separate product categories: Controls, Indicators, Sensors, Output Devices, Transmitters/Alarms, Data Communications and Recorders.

sensors include thermocouple, RTD, and thermistor assemblies and accessories. Organized into six separate product categories: Controls, Indicators, Sensors, Output Devices, Transmitters/Alarms, Data Communications and Recorders.

CIRCLE READER SERVICE No. 108

Absolute Process Instruments Signal Conditioning



API Signal Conditioners and Alarms are designed with complexity on the inside and simplicity of use on the outside. Whether you prefer factory ranged models calibrated for your application or Minute-Man™ Field-Rangeable units, API's standard features make the

installation and trouble shooting of your process effortless. Input/Output Loop Tracker™ LED's and functional Test Pushbutton verify your wiring connections. All API models are CSA approved and backed by a LIFETIME WARRANTY.

CIRCLE READER SERVICE No. 109

API-Camille Bauer Isolators, Transmitters, Transducers



A new catalog from API-Camille Bauer featuring complete product descriptions, product specifications, features, model numbers and full colour product pictures for their range of Sineax Loop Powered Signal Isolators, Programmable Conditioners &

Transmitters, Isolated Signal Conditioners, Temperature Transmitters & Loop Supplies, Head Mount Temperature Transmitters, and KINAX Angular Position Transducers.

CIRCLE READER SERVICE No. 110

EXERGEN Non-Contact Temperature Sensors

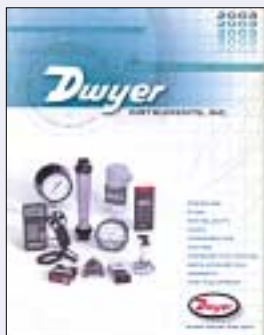


The NEW edition of this Non-Contact Temperature Sensors Handbook features: Profit Enhancing Applications, a Quick Selection Guide to help you select the correct sensor for your application, IRT/c™ Model specifications and drawings, Snake Eye - high speed thermal

switches, Microscanner D-Series Handheld IR Scanners (NIST traceable), IRT/c™ Accessories, Technical and Application Notes on using IRT/c's, plus, Specialty Controls & Data Acquisition for IRT/c's. A must read for temperature sensor users!

CIRCLE READER SERVICE No. 111

Dwyer Instruments 2003 Instruments Catalog



A broad range of measuring and control instruments for flow, level, pressure and temperature applications. Product families include: Dwyer Instruments, Mercoid Division, W. E. Anderson Division, Love Controls Division, Proximity Division, all widely

recognized brand name companies.

New 2003 catalogue presents complete product lines with product descriptions, specifications, reference charts, pressure conversion table and product applications.

CIRCLE READER SERVICE No. 112

Mercotac Rotating Electrical Connectors



Ideal for instrumentation, robotics, thermocouples, cable reels, strain gauges, packaging equipment, turntables, testing and control devices. Mercotac connectors can be used both horizontally and vertically.

- Sealed, ball bearing construction
- Increased reliability, no maintenance
- Extremely low electrical noise
- Less than 1 million resistance
- Durable, compact, low cost

CIRCLE READER SERVICE No. 113

Cecomp Electronics Digital Pressure Gauges, Switches



Digital pressure gauges, pressure switches & vacuum gauges designed to indicate, monitor and activate your process. This new "Falcon Series" features:

- 3 1/2 digit displays
- Diagnostic test function
- 316SS media compatibility
- Setpoint with relay outputs
- Retransmitted outputs
- Bicolour status indicators
- Test gauge accuracy (0.25%)
- Battery or external power
- Vibration and shock resistant

CIRCLE READER SERVICE No. 114

Visit our website www.mod-tronic.com for complete specifications on all of our product lines!

Custom Control Panels

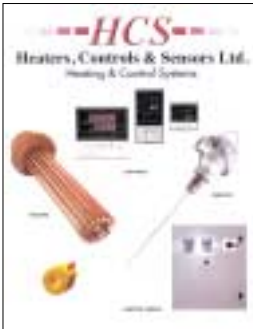


HCS manufactures custom control panels for a wide variety of applications. From panels that are needed to operate in 60°C environments, to laboratory controllers that are to maintain temperatures within $\pm 0.01^\circ\text{C}$. These custom panels could be made to withstand washdowns with corrosive chemicals with all components on the panel conforming to IP 65 and NEMA 4X. Integration of components for steam booster heaters or recirculation heaters with flow fail safe interlocks are also available.

--HCS--

CIRCLE READER SERVICE No. 115

Heating & Control Systems



HCS are Heating and Control Specialists, that design and engineer heating and process control systems for industrial applications. HCS offers a wide variety of industrial heaters for various applications. These electrical heaters; High Temperature Radiant Panels, Explosion Proof Process Heaters, Process Immersion Heaters, Circulation and Band Heaters, Flexible Heaters, Tubular Heaters, Coil/Cable Heaters, Finned Air Heaters, High Temperature MI Strip Heaters, Radiant Ceramic Heaters are featured along with Temperature Controls, Timers, Motor Controls and more.

--HCS--

CIRCLE READER SERVICE No. 116

MOD-MUX MODBUS Multiplexing I/O System



An innovative modular I/O system which provides a simple low cost solution for distributed I/O requirements. The MOD-MUX system consists of a stand-alone

Digital and Analog Input and Output modules which are connected together on a RS485 two wire multidrop network using the MODBUS protocol. Two baud rates are selectable, 9600 and 19200 baud. Typical response times are under 50ms. All modules plug into industry standard DIN rail mount 11 pin relay bases.

--HCS--

CIRCLE READER SERVICE No. 117

Close Coupled Centrifugal Pumps



When space is critical, cost savings important and dependable transfer of aggressive or ultrapure fluids a must, the Vanton series of close-coupled, end suction

thermoplastic centrifugal pumps is ideal. Its small footprint reduces space requirements by as much as 20%, initial cost is appreciably lower than conventional foot mounted centrifugal pumps, and its availability in solid molded homogeneous polypropylene and polyvinylidene fluoride assures reliable fluid handling without corrosion or product contamination.

VISSERS
SALES CORP.

CIRCLE
No. 118

Sealless, Self Priming Pumps



Flex-i-Liner® peristaltic type rotary pumps are engineered for dependable, leakproof handling of acids, caustics, salts, abrasive slurries, solvents, chlorides and other clear or viscous

fluids, even those containing soft solids. These nonmetallic pumps operate in either direction, wet or dry, and in any position. Their gentle pumping action minimizes foaming, prevents settling out of suspensions and permits safe handling of latex emulsions and other shear-sensitive liquids. Designed without stuffing boxes, glands, shaft seals or interval valves, there is no danger of external leakage.

VISSERS
SALES CORP.

CIRCLE
No. 119

Magnetically Driven Sealless Centrifugal Pumps



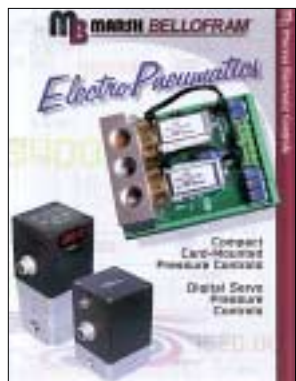
Vanton Chem-Gard® CGM-ANSI magnetically driven end suction process pumps are sealless, single stage, volute type centrifugals which are

designed to reflect the latest clean air regulations, to be environmentally safe, and to provide for the leakproof transfer of corrosive, toxic, hazardous and volatile liquids. These are not lined pumps. All fluid contact parts are made of solid, molded, stand-alone, chemically inert thermoplastic components. These sealless pumps are ideal for handling a broad range of corrosive and hazardous liquids.

VISSERS
SALES CORP.

CIRCLE
No. 120

Pressure Control Devices



Electro-pneumatic pressure control devices provide two levels of performance for manufacturing, productions and research processes. This new brochure provides detailed information on Marsh Bellofram's line of Compact

Card-Mount, Analog Servo, Digital Servo Pressure Controls. Application notes, Digital Panel Displays, Remote Pressure Sensors and Accessories with descriptions and specifications.

INDUSTRIAL TECHNICAL SERVICES
CIRCLE READER SERVICE No. 121

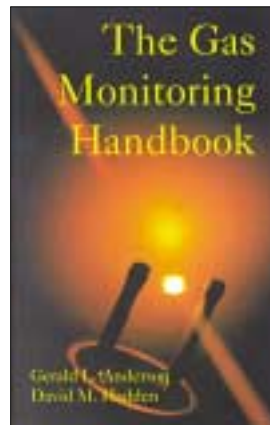
Phoenix II PID Controller



Simpson Electric's Phoenix II series consists of three models: the P20, P21 and P22. Available in several sizes and configurations, this series is certain to provide a PID controller suited to your individual application. All Phoenix II controllers give precise process control using fuzzy logic and PID auto-tune. Both combined, eliminate overshoot and reach set points in the shortest possible time. Additional features are available for advanced process control.

INDUSTRIAL TECHNICAL SERVICES
CIRCLE READER SERVICE No. 122

Gas Monitoring Handbook



Gas detection benefits everyone's health and safety. If you need to know more, if you are considering investing in a gas monitoring system or want to know how to make the most of the one you have, this book, written by two experts in the field, is for you. You will find advantages and disadvantages of technologies, strengths and weaknesses of different sensors, where sensors should be located and why & more!

INDUSTRIAL TECHNICAL SERVICES
CIRCLE READER SERVICE No. 123

PROCESS CONTROLS AND INSTRUMENTATION
102 WELLINGTON ST E
ALLISTON ON L9R 1G7

Melt Pressure Transducers



ONEhalf20 Melt Pressure Transducers are available in two distinct styles. The **CT Style Melt Pressure Transducer**, which is the classic Melt Pressure Transducer design. The **ONEhalf20** CT style Melt Pressure Transducer comprises a 6" rigid stem, along with 18" of flexible

capillary, for optimal thermal isolation. The **RT Style Melt Pressure Transducer**, which has only a 6" rigid stem, is a rigid stem only version of the classic Melt Pressure Transducer. Both styles of **ONEhalf20** Melt Pressure Transducers are available in a variety of pressure ranges, accuracy grades, and output options.

CIRCLE READER SERVICE No. 127

KOBOLD Product Summary



KOBOLD's NEW 128-page Product Summary, featuring hundreds of KOBOLD's top quality, cost-effective flow, pressure, level, temperature, analysis, food & beverage, and time instruments. Provides application information and product specifications for a

variety of instrumentation needs including switches, sensors, meters, transmitters and much more -- all designed and manufactured to the highest standards of quality.

CIRCLE READER SERVICE No. 130

Pressure Transducers, Accelerometers, Digital Manometers and Displays



New short-form Product Selection Guide from Setra Systems featuring their line of Pressure Transducers, Accelerometers, Digital Manometers and Digital Displays. Pressure transducer models are shown for test & measurement,

vacuum, industrial, HVAC/R, ultra-high purity and sanitary applications featuring applications, type of measurement, ranges, accuracy, thermal effect and more.

CIRCLE READER SERVICE No. 128

Paperless Recorder



The Data-Chart 5000 has 6 or 12 direct universal inputs that are menu selectable for DC voltage, DC current, thermocouples and RTD's. A powerful math package includes: +, -, x, /, square root,

logarithms, totalization, powers, timers, averages, plus more. Any of the direct input channels not being used can be set up as a calculated channel. In addition, 3 channels have been set aside as dedicated math channels for a total of 15 channels. Data is automatically downloaded to removable storage media.

CIRCLE READER SERVICE No. 131

Visser's Sales Product Catalogue



New catalogue featuring Metering Pumps, Metering Accessories, Magnetic Drive Gear Pumps, Centrifugal Pumps, Drum Pumps, Air Operated Diaphragm Pumps, Peristaltic Pumps, Progressive Cavity Pumps, Sanitary Lobe Pumps, Contractor Pumps, Mixers - Portables,

Top-Entry, and Specialty, Pressure Washers, Process Controls, Hand Held Meters and Testers, Polyethylene Tanks, Filter and Filtration Products, from industry leading manufacturers. Also featured is a Chemical Resistance Chart & Engineering Info.

CIRCLE READER SERVICE No. 129

Smoke House Sensors



Sensors used in smoke houses need to be super durable to withstand repeated insertions into meat, the high humidity and clean down cycles.

Enercorp's all teflon and 316 s/s design is up to the job. If we can make a probe to stand up to this environment ask us for a probe for your tough job.

CIRCLE READER SERVICE No. 132

NAME: _____ TITLE: _____

COMPANY: _____ ADDRESS: _____

CITY: _____ PROV: _____ POSTAL CODE: _____ TEL: _____ FAX: _____

Main Business Is: _____ Pulp & Paper _____ Petroleum, Coal/Natural Gas _____ Rubber _____ Plastic Materials _____ Metal Processors _____ Food Processing _____ Beverage Mfg _____ Non-Metallic Minerals _____ Textiles _____ Pharmaceuticals _____ Detergents/Cleaning Compounds _____ Protective Coatings _____ Utilities _____ Consulting Engineer _____ Government _____ Other _____

Volume 9 Issue 3/03

I want to receive/continue to receive a **FREE** subscription.

☐ YES ☐ NO

Signature: _____

Email: _____

Number Of Employees At This Location:

____ 1-4 ____ 5-9 ____ 10-19 ____ 20-49 ____ 50-99 ____ 100-249 ____ 250-499 ____ 500 +

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
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Strain Gauge Conditioner

The CIC-SG71 is a DIN rail mountable strain gauge signal conditioner. It can be used to condition the signal from any transducer with an output of 0.2 mV/V up to 15.0 mV/V. The CIC-SG71 can be powered from any 18 to 36 VDC source and requires less than 200 ma to operate. The power supply inputs are internally isolated to eliminate any grounding or common problems thus eliminating the need to have a separate power supply for your signal conditioning. The CIC-SG71 provides a very precise excitation voltage to the transducer at 2.5, 5.0 or 10.0 VDC up to 100 ma. Outputs from the CIC-SG71 are selectable at 0 to 10, +/- 5, +/- 10 or 4-20 ma and are filtered at 1 Khz. High frequency response is optional up to 10Khz. The CIC-SG71 also has an externally activated shunt calibration circuit as well as provisions for bridge completion resistors. • Excellent linearity, high input impedance • Wide gain range, 0.2 mV/V to 15.0 mV/V • +/- 20% zero suppression • Selectable excitation of 2.5, 5.0 or 10.0 VDC • Externally activated shunt calibration • Standard DIN rail mount enclosure

INSTRONICS INC.

CIRCLE READER SERVICE No. 135

Even More Product Information On www.process-controls.com



Universal Panel Meter

Fuji Electric's new FD5000 is a highly-modular 1/8 DIN panel meter with up to 18 different field-replaceable input boards. No need to

stock a variety of panel meters — simply install the appropriate input board for each process. The FD5000 offers optional alarms and analog outputs, in addition to RS232 or RS485 communications functions. Easily connect the FD5000 to a PC to process and control various data. The FD5000 accepts inputs from temperature probes, pressure transducers, load cells, strain gauges, potentiometers, pulse inputs, large voltage and current signals.

CIRCLE READER SERVICE No. 136



Drum and Container Pumps

The wide variety of fluids and container types/dimensions necessitates an extensive range of different drum pump models. Depending on the requirement, they are available in a variety of materials, equipped with motors

adapted to the output requirement for differing voltages as well as pneumatically operated, with the required delivery rate and suitable sealing system. Added to this are pump tubes in varying lengths and a wide range of accessories permitting, for example, adaptation to problem containers or application conditions.

CIRCLE READER SERVICE No. 137



Automatic Filters

The Amiad automatic self-cleaning electric filters, for high flow rates and a larger filtration area.

- For flow rates up to 1000 m³/hr.; 4400 US gpm per unit
- Filtration range: from 3500 to 10 micron
- Large filter area: 10,000 sq. cm.: 1550 sq inches
- Two cleaning methods: Brushes or Scanner
- Electronically monitored cleaning cycle with flexibility of control options
- Flushing according to pressure differential and/or according to time. Option for continuous flushing.

CIRCLE READER SERVICE No. 138

Dickson Monitoring Solutions



Dickson Temperature Humidity Data Loggers, Paperless Recorders, Temperature and Humidity Recorders, Non Contact Infrared Indicators are shown in this catalogue. A Data Logger Quick Selection Guide, information on How To Select A Data Logger, Common

Data Logger Questions, Product Descriptions, Recorder Selection Guide, Recorder Specifications, Recorder Accessories, information on How To Select The Appropriate Infrared Thermometer, Product Descriptions, Specifications, Ordering Information is presented.

CIRCLE READER SERVICE No. 139

Electromagnetic Flow Transmitters



The Chemline Type 3110 is an insertion type transmitter. Output is 4 to 20 mA signal proportional to flow rate. Compared to the paddle wheel type, these units are better designed to handle slurries and high viscosity fluids. They are not affected

by ferrous particles which will foul the magnetic rotors of the paddle wheel type. They are less costly than full port magmeters and easier to maintain. For plastic pipe 2" to 12" and metal pipe 2" to 16".

CIRCLE READER SERVICE No. 140

Heaters Controls and Sensors



New Short Form Catalogue from ASB Heating Elements Limited showing their line of Cartridge Heaters, Mica Band Heaters, Ceramic Band Heaters, Mica Strip Heaters, High Density Strip Heaters, Thermocouples and RTD Sensors, Mercury Relays, Solid State Relays,

and Temperature Controls. Catalogue presents product descriptions, model numbers, dimensional drawings, ordering information and much more. A must have catalogue if you're looking for heater product information.

CIRCLE READER SERVICE No. 141

WebAlert™ Web-Based Remote Monitoring And Data Logging

Walchem's **WebAlert™** is the first stand-alone remote monitoring device that will seamlessly web enable your installed equipment without having to replace or upgrade it. Your key system parameters (analog and digital) can now be monitored from any computer - anywhere in the world - with a standard web browser. **WebAlert™** has an embedded webserver allowing it to function as a website, thereby eliminating the need for proprietary software. All you need is a standard web browser. And, powered by Walchem's **ShoulderTap®** Technology, **WebAlert™** is only on-line when you need it...making it the world's first practical and secure industrial monitoring Internet solution.



The story behind **SHOULDER Tap**

1. User logs onto www.metexcorporation.com and enters ShoulderTap® ID, password and controller phone number.

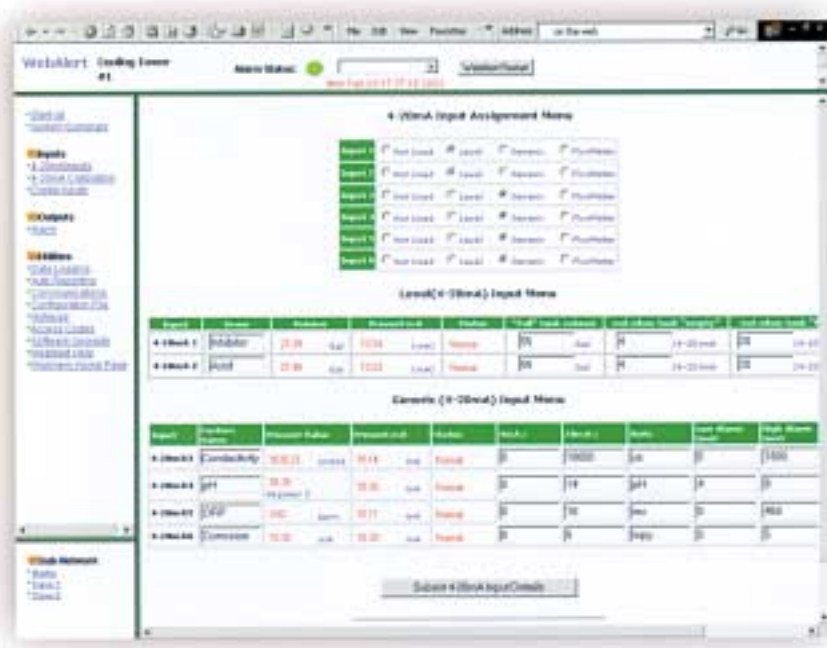
2. Metex Server "ShoulderTaps" WebAlert.



3. WebAlert dials out to local Internet Service Provider and logs onto Internet.



4. User is seamlessly connected to the WebAlert where he enters 2nd ID and password for added security.



You have direct access to your live data. **WebAlert™** pulls your older equipment into the Internet Age with real-time online monitoring, datalogging, auto-reporting and auto alarming. With the ability to monitor up to six (6) 4-20mA signals and two (2) discrete digital inputs, **WebAlert™** is designed for upgrading current control systems with remote communications and data acquisition technology. You decide where and when you need the information and **WebAlert™** makes it happen. **WebAlert™** is ideal in the following applications:

- Cooling Tower & Boiler Water
- Car Wash
- Wastewater Treatment
- RO/DI
- Level Monitoring
- Integration into Data Warehouses

And because **WebAlert™** is Internet based, it supports simultaneous multi-user access. Now you can monitor your data from several locations simultaneously. Password protected and safe, **WebAlert™** is ideal for remote communications of unmanned field installations with Internet, Modem-to-Modem and Ethernet (WAN) access. **WebAlert™** also supports local RS232 and Ethernet (LAN) as well as remote communications.



Receive alarms via cell phone text messaging.



Receive Datalogs, Alarms and Daily Summary Reports at up to four different email addresses.



Receive easy spreadsheet datalogs as an attachment to an email at user defined time periods

For larger installations that require additional inputs, **WebAlert™** can be networked together with Ethernet (future development), allowing access to several monitors from one phone line.

metex
corporation limited

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Tel: 416 240-1920

Fax: 416 240-7021

Email: sales@metexcorporation.com

Humidity Transmitters



Call us for all your humidity measuring needs. Our new transmitters feature 5 to 98%rH operating range and 1 or 2% calibrated accuracy traceable to NIST.

Many styles are available from stock when you need immediate delivery.

For more than 15 years Enercorp has been quietly manufacturing humidity sensors, transmitters, transducers and controllers. Our business keeps growing because one happy customer tells another and so on and so on.

We thought that maybe now that we make thousands of humidity instruments each year we should let the word out. Maybe you would like to be our next happy customer. Hope to hear from you soon.

CIRCLE No. 143

Wall Mount

This is the transmitter for storage areas and climate chambers. For areas with very little air movement a version is available in the same packaging with a built-in fan to draw air past the sensor. A 5 to 98% rH operating range, 2% accuracy and calibration certificate are standard.



CIRCLE No. 144

Keep a Record

Data loggers are fine if you need to do spread sheet calculations, but if you just need to keep a record of the humidity in a clean room or manufacturing area, this is a better choice. Install the AA battery, select 1, 7 or 31 day chart speed and you're in business.



CIRCLE No. 145

Aspirated wet dry bulb system

Wet and dry bulb systems can be trouble if you have to find a water source and create the proper air movement.



With our HT-WD just add water to the built-in reservoir, 24 volts to the fan and you're in business. We can build in a transducer to give you a direct rH reading in mA.

CIRCLE No. 146

Wet bulb Dry bulb input - 4-20mA rH output

Those really dirty or smoky environments can destroy a solid state humidity sensor in no time. Instead use our transducer to get a 4-20mA rH signal with wet and dry bulb RTD's which can be easily cleaned.



CIRCLE No. 147

Moisture in Solids

If you need to measure the moisture of paper, coffee, sisal or a large range of other solids the Aqua-Boy may be the answer. The Aqua-Boy is available with an extensive collection of probes designed to measure these sometimes difficult substances in seconds.



CIRCLE No. 148

ENERCOP

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sales@enercorp.com

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fax: 1(877)ENERCOP

instruments ltd