STEAMWISE

A quarterly publication by IDEKO, THE INDUSTRIAL ENGINEERING COMPANY

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FULL STEAM AHEAD!

EDITORIAL

In Lebanon, and generally in smaller countries, the job of a successful Agent / Manufacturer's representative, in many cases overlaps into that of the Consultant.

The Agent "consults" often with the Consultant to clarify Specs requirements, suggests alternatives, and helps the Contractor in a "Consultant's way" with the selection and sizing of the requirement.

We at Ideko, have placed utmost importance on our go**od** relationship with Consultants and Contractors alike. We have been generally successful in conforming to the Consultant's specs, while at the same time safeguarding the Customer's interest in the economic costing of the equipment. In a broader sense, our objective is to gain new and keep old customers. Sales will be a natural consequence and outcome of this relationship.

With the advent of the 21st Century, the globalization of Networking and Telecommunications in all aspects of life, it is feared that this human, person-to-person dialogue and direct contact and relationship will disappear and / or degenerate into a cold, computer-to-computer; machine dialogue, which is the price of progress.

Elie Eid, (Eng.) **Presid**ent

OUR CHOSEN SUPPLIER: IMI CASH VALVE INC.

A.W Cash Valve Manufacturing Co. was founded by Arthur Wise Cash in 1921, and was first located in Decatur, Illinois, In 1991, it was sold to IMI PLC, one of Britain's foremost engineering companies involved in a wide variety of high technology products. In January 1997, IMI Cash Valve moved to an ultra-modern 80,000 sq.ft facility in Cullmann, Alabama. Today IMI Cash Valve offers a unique combination of new equipment, new manufacturing capabilities and a highly trained work force supported by 70 years of experience in the valve industry.

Cash-Acme product line includes Domestic and Industrial Pressure Regulators (Water, Steam, Oil, and Air), Pressure and Temperature Relief Valves, Hydronic Valves, Back Pressure Valves, Vacuum Valves and Cryogenic Valves and Controls.

IDEKO has been the Lebanese representative of Cash Valve since the early 1980's. We have supplied/installed various control



valves, especially for steam service. IDEKO maintains in stock reasonable quantities of most current items, and delivery delays on non-stock items have been significantly improved.

We have also supplied Cash Valve to many countries in the Middle East.

Recently, the new G-4 Pilot Operated Pressure regulator was introduced. It is capable of maintaining a constant outlet pressure irrespective of the variations of Steam demand and inlet pressure, with an accuracy of plus or minus 0.5 PSI (See elsewhere in this issue).

Customers from around the world appreciate Cash Added Value from IMI Cash Valve. Let IDEKO and Cash Valve know how they can help you!

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AIMS OF THE ASME BOILER CODE



M any Consultants, Contractors and End-users with long experience in Boiler Applications, specify, install and operate ASME Code Boilers, yet have limited knowledge of its importance and application regarding safety in design and construction.

In the present paper, we strive to briefly outline the Boiler and Pressure Vessel Code, without going in its specifics and technicalities.

The ASME Code covers the Design, Construction and Testing of various types of Boilers and Pressure Vessels and appurtenances. Committee is an impartial and highly competent body of people, dedicated to the implementation of the Boiler Code.

This Code is revised regularly in accordance with the continuing advances in the Arts and Sciences in Mechanical Engineering, such as new and better materials, methods of construction etc... Such a procedure prevents the Code from becoming obsolete . The Boiler Code with its regular revisions, addenda and updates is approved and accepted in many overseas countries . It is the most specified Boiler Code outside of the U.S.

For whom does the ASME Boiler and Pressure Vessel Code exist and what benefits are derived therefrom?

a) The general Public and the Boiler Users and Owners: They benefit by the fact that Boilers, constructed in accordance with the ASME Code requirements do not

Form of Stamping on Completed Boilers Manufactured by (Name of Manufacturer) Maximum W.P., Water (Max. allow. working pressure when built) (Heating surface in sq ft. boiler or waterwalls Heating surface_ Sa ft Minimum relief valve capacity lb/hr or MBH Manufacturer's serial no... Year built Manufacturer's (Year Built) serial number Hot Water Boilers Steam Boilers

This Code has been formulated by the Boiler and Pressure Vessel Committee of "The American Society of Mechanical Engineers" in accordance with the Arts and Sciences in the field of Mechanical Engineering and the precepts of previous practical experience . The sole aim is the safety of operation of the Boilers and Pressure Vessels by elimination of all unsafe or dangerous conditions pertinent to their operation.

This Committee is answerable directly to the council of "The Society of Mechanical Engineers". Hence the Boiler and Pressure Vessel Code is an official document of the Society. This pose a threat of possible injury, loss of life or property damage. This is the Customer's best Safety Warranty.

b) Boiler Sales Groups and Boiler affiliated Industries: They benefit by the fact that Boilers, constructed in accordance with the ASME Code requirements are not subject to unethical and unfair competition, i.e. Competitors making and selling cheaper and unsafe products not complying with the Code.

In future issues, we shall present highlights of the ASME Code and the various Official bodies involved in its implementation.

THE MILLENIUM BUG AND US

As the 31st of December 1999 is getting closer, many of us are concerned with the Year 2000 Bug (Y2K Bug), and its possible effects on equipment, systems and services.

Being the Middle-East regional office for DONLEE Technologies (York-Shipley) and representative of FIREYE, we have made the necessary contacts with both our Principals regarding the effect of Y2K Bug on York-Shipley Boilers, Burners and Controls. We are pleased to confirm hereby that on our boilers, the only component inclusive of an internal clock is the Burner control. manufactured by FIREYE. Also, Fireye in turn, confirms that all its Controls of the series P.C.D. M and the micro-processor based series E will operate correctly in regards the Year 2000 Compliance.

DONLEE has and will continue to provide Year 2000 Compliant Equipment. Also, the administrative and manufacturing process at DONLEE has been checked for Y2K, and necessary amendments were introduced, to avoid any delay or disturbance due to the date change on midnight of December 31st.

We are therefore able to issue our customers, upon their request, with individual letters confirming Year 2000 compliance of any DONLEE Equipment (Boilers, burners, etc...) operating on their site.



INTRODUCING CASH VALVE'S NEW G-4 VALVE

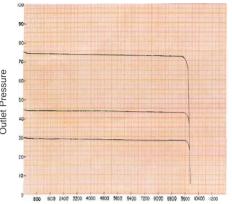
The most versatile pilot operated Steam pressure reducing valve is here! This Regulator combines many features, outlined below, that will

make it operate correctly where other valves fail. With an extremely compact design, the pilot built in the valve body, the G-4

valve is much smaller than any other regulator with the same duty. It is available in Bronze, Cast Iron,

The new G-4 Valve Stainless Steel and various Steel constructions, to

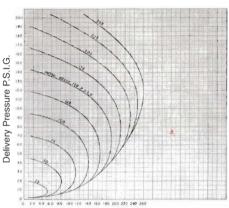
allow for pressures up to 600 PSI and temperatures up to 800°F. Also, the improved design of the valve assembly and body allows for very high flow rates to be achieved by the G-4. A 2" G-4 is capable of reducing the pressure of more than 8000 lbs per hour of steam



Steam Flow - LBS/hr.
Linear response

from 150 PSI to 80 PSI!

Above all, the major feature of the G-4 remains its ultra-linear response, whereby constant outlet pressure is maintained, regardless of changes in the flow rate or the inlet pressure. This is primordial in systems where equipment performance is very sensitive to pressure, and where constant pressure is to be maintained at equipment inlet.



Base Flow LBS. steam/hr Non-linear response

The attached figure shows difference between an ultra-linear reponse and an ordinary pressure reducer response. A typical G-4 Valve will maintain outlet pressure within 0.5% of its set value!

Although primarily designed for steam, the G-4 regulator works equally well with air and gases, with various outlet pressure ranges obtained by easily replaceable pressure springs.

LARGE ASSORTMENT OF VALVES AND FITTINGS BY METALURGICA IPÊ



M etalurgica Ipê, Sao Paulo (Brazil), ISO 9002, offers a large assortment of Valves and Fittings for Steam, Water, Oil and Gas Applications, conforming to ASME & ASTM American Standards and used in over 20 countries.



Metalurgica Ipê Items in our Stocks:

I t e m	B o d y	Preasure Ratings (PSI)		Available Sizes	
		STEAM	W.O.G	From	To
Globe Valves	Bronze, Threaded Ends BSP	200	400	1/2"	2"
Gate Valves	Bronze, Threaded Ends BSP, Rising Stem	200	400	1/2"	3"
Needle Valves	Bronze, Threaded Ends BSP	150	300	1/2"	3/4"
Lift Check Valves	Bronze, Threaded Ends BSP	200	400	3/4"	11/4"
Ball Valves	Bronze, Threaded Ends BSP	150	600	3/4"	1"
Filter Strainer	Bronze, Threaded Ends BSP	150	300	3/4"	11/4"
Sight Glass	Bronze, High resistance Glass, Threaded Ends BSP	50	100	3/4"	1"
Liquid Gauge set	Bronze	150		3/4"	

Ideko Sales Dept. will be pleased to specify and quote all your Metalurgica Ipê Valves requirements at competitive prices, directly from our stocks or ex-factory for special units.



"The Phoenix Phoenicia is rising

from its ashes!"

¶ he famous PHOENICIA HOTEL, Beirut, totally damaged and burned in the early years of the Civil War, has been under repair for 2 years now Contractor: **DEBBAS** ENTREPRISES). This involved the Supply of 3 York-Shipley Steam Boilers, 400 HP each, along with various Boiler Auxiliary Equipment, all by Donlee Technologies (York-Shipley). This will make the Phoenicia Hotel, the private user with the largest on-line Steam Power in Lebanon.

NEW BANQUE DU LIBAN Bldg., (E.M. Beirut Contractor: KHATER-ETCCO) shall equipped with 2 York-Shipley Hot Water Boilers of 40 HP each.

Further, a new Donlee Water Softener of 450,000 grains was ordered and shipped for WARNER LAMBERT S.A.L. This Water Softener joins other Donlee Equipment already installed at Warner Lambert Site at Nahr El-Kalb, Lebanon.

Elsewhere in the Middle-East, a



Beirut Commodore hotel, equipped with a Y-S Boiller

number of new Orders have been released recently, among which, an



Nizwa hospital, Sultanate of Oman

by **MODERN** FRUIT FACTORY - Homs - Syria for a 200 HP Steam Boiler.

During the last quarter of 1998, following Projects commissioned: Boiler, Deaerator Auxiliaries and **SIBLINE** at **CEMENT** FACTORY, Sibline, Lebanon, Boiler Auxiliaries **TANMIA AGRICULTURAL** DEVELOPMENT CO., Ablah. Boilers Lebanon, new COMMODORE HOTEL and HOPITAL RIZK, Beirut, Lebanon, 2 Steam Boilers of 250 HP each, complete Boiler Room Auxiliary equipment at NIZWA HOSPITAL - Nizwa - Sultanate of Oman, and one 200HP Boiler with Auxiliary Equipment at DELMON POULTRY, Manama, Bahrein.



Delmon Poultry Boiler, Manama, Bahrein

Boiler Orders under negotiation include presently:-

- A 1000 HP, Hi-Pressure Steam, Light Oil Unit with a Deaerator and Complete Auxiliary Equipment for Kuwait
- A 200 HP, Hi-Pressure Steam, Gas Unit with Auxiliary Equipment for Oman
- A number of smaller sized Boilers for Egypt.

NEW EVENTS

Boiler presentation at the Ashrea Lebanese Chapter

presentation on Boilers and Burners Classification was given by Ideko's President, Mr. Elie Eid on July 29th 98, at the Commodore Hotel - Beirut, at the request of the Ashrea Lebanese Chapter.



Mr. Elie Eid, lecturing at the Ashrea, Lebanese chapter

The presentation outlined the various classifications of Boilers and Burners and the development of same. A chart for matching Burners specifications to Boilers Capacities and ASME and U.L. requirements was drawn, as well as graphics for explaining Hi-Lo and Full Modulation Fring. The up-grading of the Mode of Firing and Flame Relay requirement was highlighted with increase in Boiler capacity.

Finally a broad definition of the Packaged Firetube Boiler was suggested, based on the above: "A Packaged Horizontal, Steel, ASME Code, Welded Construction, Scotch-Marine, Multipass Steam / Water Unit".

...FOR WE BELIEVE THAT CUSTOMER'S SATISFACTION IS A PRIORITY... WE HAVE LAUNCHED OUR COMBINED RESOURCES FULL STEAM AHEAD!

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