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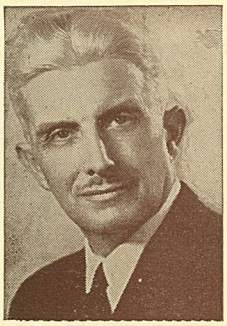
FALSE SECURITY

FREDERICK KRAISSL, JR., P. E., *President*
THE KRAISSL COMPANY, Inc.

It seems the "brain washers" have done their job well and that our current generation has been indoctrinated with all of the attributes that would have failed to make our country great.



Consulting Engineer
Kraissl Associates

The subjects of Great Britain, France, Holland and Spain who made security their fetish stayed home. Possibly they achieved security although subsequent history makes us doubt this. However, those who did not worship at this shrine settled in Canada, New Amsterdam, Massachusetts, Virginia, Carolina, Florida and other points of debarkation. They certainly did not have security but they made history.

The pioneers who journeyed westward on horse back and in covered wagons left security behind, trusting in God and themselves. The weaklings succumbed. The strong ones built the country.

Industries were needed. Everything was ventured from river boating to glass making. Many who ventured, failed but those who succeeded built our industrial empire. There was one common denominator. This was courage with the profit incentive. Without these attributes we could not have gotten started.

When it came to a defense of what had been achieved whether it was Red Skins or Red Coats, security was not even a consideration. So why are we susceptible to the Red philosophies of statism with its false goddess of security? What has happened to a dynamic race that is willing to trade the opportunity of achievement for the stultifying narcotic of security?

We find graduates of our schools of learning who are most interested in retirement programs, medical and hospitalization benefits, vacation and sick leave plans over and above the "going rate" which implies a standardized human performance. All of this points to one goal, the false one of security. If it was the minority so misguided, this might not be serious, but it appears this motivation predominates.

Now I submit that security is the enemy of progress and its end point, achievement; that one must depart from security in order to venture and without the spirit of venture or adventure there would be no pioneering and without the pioneer in any field there would be no discovery and without the discoverer there would be no new frontiers to explore and develop. This applies to the concrete as well as the abstract.

The space men leave security when they climb into their space capsules and the medical pioneers leave security when they inoculate themselves with a new serum to determine whether they have achieved death or a new cure.

Let us reorient our values for our young people. Let us place worthy accomplishment as our objective without looking backward to the snug harbor we may be leaving.

PRIVILEGES

ALICE L. KRAISSL, *Vice President*
THE KRAISSL COMPANY, Inc.

Whether or not you choose to believe it, work of your own choice is a privilege, and one you might not be able to enjoy if you lived in certain countries.

Consultant
Kraissl Associates

"Privilege" is defined, briefly, as an advantage. This implies that one who enjoys a privilege has an advantage over others. In the case of work, those next in line for a job feel that the present encumbent holds a position of vantage to which they may aspire, and the very least employee has a decided advantage over the person who has no job and desperately needs one.

Any privilege carries with it a certain amount of responsibility. At the minimum it is expected the job will be well done, initiative shown, and morale maintained by the example set.

Unfortunately in many instances privileges are abused, these abuses reacting ultimately not only to the disadvantage of the privileged individual which would only be just, but also to the disadvantage of many individuals who are caught in the tide of reform which results from indignation when abuses are recognized. Not the least of these is the flagrant abuse of expense account privileges. Legislation to prevent exorbitant deductions will inevitably react to the disadvantage of those who have conscientiously treated the expense account as the privilege it is.

The privilege of authority is also subject to abuse, where knowing the "right person" can result in gaining an advantage that might not be realized in fair competition. The adverse publicity attendant upon such cases when they become known, should do much to prevent recurrences although at times memories do seem too short where these matters are concerned.

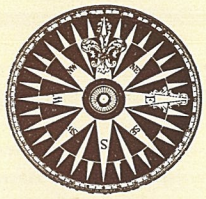
Basically an individual in a position of authority, be it industrial or governmental, has been accorded a privilege. It behooves him to bring to this privilege a strength of character enabling him by qualities of leadership and mastery of his subject to set the example for others to follow. Freedom of abuse of privilege on a high level should point the way for each lower echelon with a resultant benefit to all individuals involved.

EDITORIALS

Our editors are the senior officers of this company and our policy permits each of us to express thoughts which we believe can be contributions to the voice of public opinion in business. It must be emphasized that the thoughts expressed are those of the author and not necessarily endorsed by the rest of the Board of Directors of this company. Kraissl Associates, acting in the capacity as our consultants, handle the technical aspects of our public relations program.

We want this publication to be available when you are able to invite us to exchange current ideas, information and technical data without intrusion.

INDUSTRIAL AND MARINE FIELDS



DETERMINING FLOW RESISTANCE OF DUPLEX STRAINERS

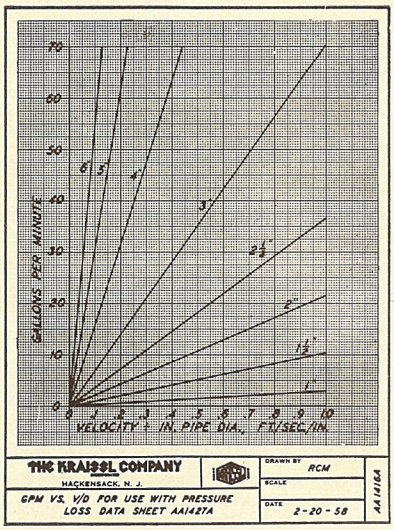
Reasons have been explained in another article why we consider it dangerous to compute the pressure drop through duplex strainers.

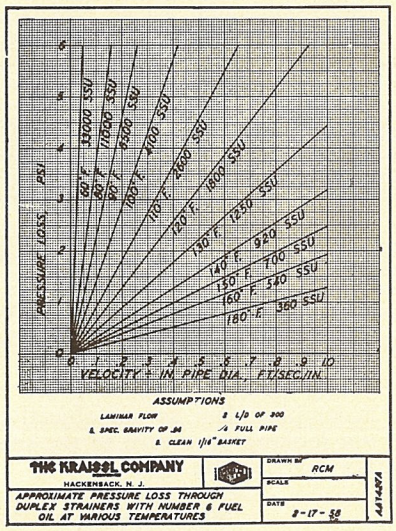
Fortunately computation methods based on a determined average flow resistance factor "K" or the frequently used L/D technique obtained in the turbulent range of medium to high Reynolds numbers usually produce very conservative pressure drop computations in the low Reynolds number zone of laminar flow. We have, therefore, dropped the use of the word computation and substituted estimate, although the same formulae and computation methods are employed.

We say "fortunately" because oils and other liquids of high viscosity present such a galaxy of problems that if tests were mandatory for all of the applications, the proper sizing and selection of duplex separators would be left in doubt. All engineers agree that it is preferable to be conservative and since we have made it a principle to minimize flow restriction by designing interior channels so they are not less than the nominal pipe size for which the separator is designed, we have felt that if the pipe size is properly selected for the viscosity of the liquid involved, the pressure drop through the duplex separator will be a minor fraction of the entire flow resistance of the pipe system.

For estimating the pressure drop through Duplex Strainers with oils of high viscosity in the laminar flow range we have used our Charts AA-1416A and AA-1427A successfully for over five years.

Chart Number AA-1416A gives flow in terms of velocity divided by pipe diameter. With this V/D factor we can go into Chart AA-1427A to estimate pressure drop. Because this was so much needed for Bunker C Heavy oil, this chart shows average viscosities of Bunker C oil at different temperatures. However, this chart is equally useful in estimating pressure drop of other petroleum oils in the

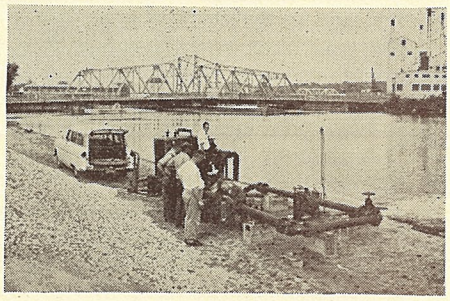




vicinity of the stated viscosities. Larger size copies of these charts are available for easy reference.

However, in the area of high Reynolds numbers which is usually experienced with water and similar liquids of low viscosity, it has been our experience that when the pressure drop through a strainer is the basis for specification, that only tests will suffice as we have determined from actual experience that computations based on currently accepted methods are very unreliable and can be as much as 200 to 300% inaccurate.

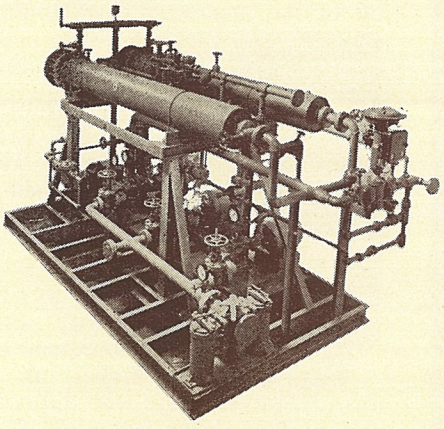
The photograph shows tests being made at a wharf on the Hackensack River and the "Horse tail" of discharge water can be observed.



PUMP AND HEATER SETS EMPLOY KRAISSL DUPLEX STRAINERS

Last issue we featured the pump and heater sets being supplied by Electric Pipe Line Inc. including two Kraissl Class 60 series reduction drive pumps and a duplex suction strainer.

This issue we are happy to present the pump and heater set being supplied by Walter H. Eagan Co., Inc. including one Kraissl suction and one Kraissl discharge duplex strainer. The suction strainer can be seen in the foreground. The discharge strainer is somewhat obscured by intervening equipment but can be identified at the other end of the assembly.



NEW KRAISSL CLASS 54 & 55 FOOT AND CHECK VALVES

We hope all readers will not neglect this announcement as we believe the new Kraissl Class 54 series Foot Valves and Class 55 series Check Valves will be welcomed for many applications.

The Class 54 series Foot Valves are so sized and manufactured that they will fit inside standard pipe sizes of indicated dimensions. This permits lowering and withdrawal for servicing through a pipe that can be installed as a protecting caisson. The light spring seated valve makes use of an "O" ring that is resistant to water, petroleum oils and gasoline. Special "O" rings can be supplied when necessary for quantity applications.

The assembly is protected by a perforated metal shield although a spring shaped debris shield can be supplied where desired.

Class 55 series Check Valves are suited to many fluids. They are now being furnished as standard equipment on all Kraissl Class 25 series rotary air pumps. They employ the same sealing principle and can operate in both a vertical and horizontal position. They can be used for working pressures up to 150 psig and in accordance with current procedure are tested at working pressure plus fifty per cent.

KRAISSL DUPLEX SEPARATORS EMPLOY TRUE PLUG VALVES PRECLUDING LIFTING JACKS FOR MOST SERVICES

One of the reasons why lifting jacks or plug lifters are not mandatory with most metals used in Kraissl Class 72 Series Duplex Separators is due to the employment of true plug valve design.

To clear up any misunderstanding between a true plug valve and other valves appearing to look like plug valves, it is well to define a plug valve. According to our definition in addition to having a taper, which automatically takes up wear, the surface of a true plug valve is continuous between port openings, which should not be greater than the channels with which they communicate. This provides a bearing surface, permitting the plug to rotate against this seating surface with minimum galling or scoring action. Bronze shafts have rotated in contact with bronze bearings in the presence of water for many years. Bronze and steel have rotated against iron surfaces under the presence of lubricating materials without the need for becoming lifted apart, also for many years.

There are many manufacturers of plug valves who do not find it necessary to supply lifting jacks or plug lifting devices as an integral part of their standard valves and most engineers have probably specified a number of such units with complete and continuous satisfaction.

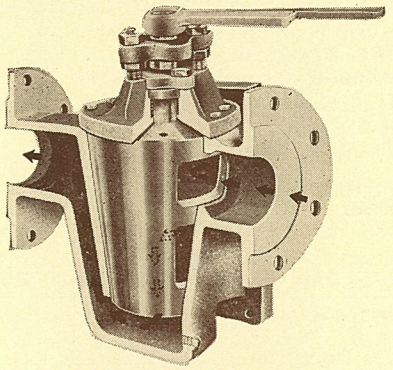
In addition, the taper angle of Kraissl plug valves has been so selected that wedging is minimized, and if some unusual exterior or accidental force is experienced, the wedging effect can be easily released.

This eliminates plug lifting devices or accessories and reduces the cost of the complete unit with many years of continuous satisfactory service in handling a variety of liquids to prove it.

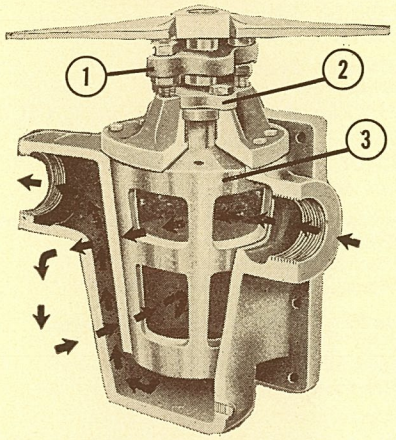
There are metals which do not operate satisfactorily in contact with each other without galling or scoring. Most of the stainless steels come in this category and lifting jacks or plug lifting devices have an application with these metals although experiments we have made with Teflon coated plugs seem to indicate that this is a satisfactory alternative as carelessness even with lifting jacks can cause galling or scoring with stainless steel duplex strainers.

We have lifting jacks or plug lifting devices designed, in production and in stock for most sizes of Kraissl duplex strainers so our comments are not based on inability to meet such specifications. We just hate to see our customers waste money on these devices just because they may be needed with valves that appear to look like plug valves but do not have the smooth, continuous surface, bearing effect of the true plug valve.

Always bear in mind that there is probably no tighter valve than a well designed and manufactured **true plug valve.** It is the one used in the laboratory under the name of "glass stop cock" when high vacuums must be maintained. The plug and the seat are ground together with fine grinding compound, just as we do by a similar process when we lap the plugs on the valve seat.



FLANGED VALVE
in one position



SCREWED VALVE
in second position

CLASS 74 SERIES DUPLEX ASSEMBLIES

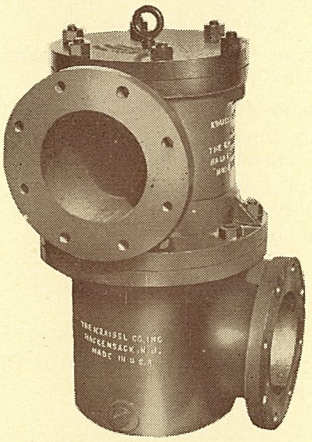
The advantages of the quick flow transfer of plug valves and the characteristic sealing surfaces of this design produce preferences for this type of valve for many services.

However, the reduction of pressure loss through any valve assembly requires that the area through the plug valve be as near the nominal area of the pipe size as possible. With all Kraissl Class 72 series duplex strainers, this is a built-in design characteristic, which carries up to the six inch size inclusive.

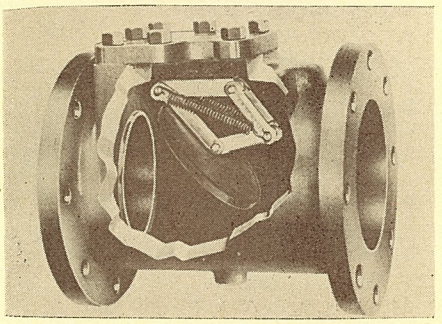
With plug valves larger than the six inch size, the double port transfer design would entail excessive size when minimum restriction of pipe area is a requirement.

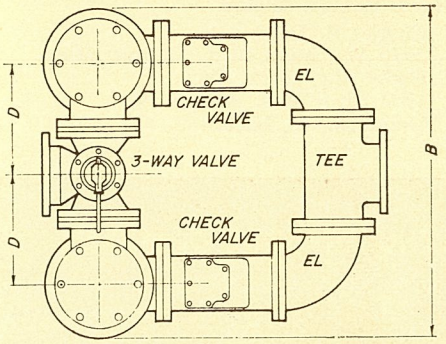
For many applications, the linking up of a standard type two way valve with satisfactory check valves, produces a very acceptable assembly. The swivel porting of our Class 74 series single strainers, minimizes the number of required fittings and when companioned with our BMS check valves supply a compact arrangement.

Please contact us for prices of complete assembly.



BMS CHECK VALVES





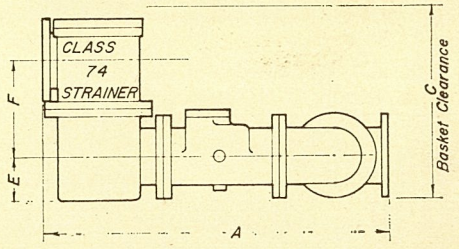


TABLE OF DIMENSIONS

SIZE	A	B	C	D	E	F
8	56 9/16	53 5/8	53 7/8	18 1/16	7	16 1/16
10	68	64 7/8	67 1/4	22 1/16	8 3/8	20 1/16
12	71 11/16	72 1/2	78 7/8	24 1/16	10	24 5/16

SALES REPRESENTATION

HOME OFFICE

We have reserved the areas of Connecticut, Delaware, Metropolitan New York, including the Hudson valley, Long Island, New Jersey and eastern Pennsylvania less Philadelphia District for coverage by Kraissl Company personnel.

Northeast Region

Robert Bacon Co.
Fruit St., Westboro, Mass.

John S. Stone
P. O. Box 247, Holcomb, N. Y.

Williams Bros., Inc., 70 Commercial St.,
Portland 3, Me.

Eastern Region

Valley Equipment Company
4105 Northern Pike, Monroeville, Pa.

J. W. Pearson Co., Box 282
Hatboro, Penn.

Shanklin Company
330 East 25th St., Baltimore, Md.

Southeast Region

Power Equipment Co.
1307 West Main St., Richmond, Va.

Dillon Supply Company—Main Office
Raleigh, N. C.

Dillon Supply Company
Durham, No. Carolina

Dillon Supply Company
Rocky Mt., No. Carolina

Dillon Supply Company
Goldsboro, North Carolina

Dillon Supply Company
Charlotte, No. Carolina

Boiler Supply Company, Inc.
490 Craighead Street, Nashville, Tenn.
2006 Sutherland Ave., Knoxville, Tenn.

Applied Engineering Co., Inc.
P. O. Box 506, Orangeburg, S. C.

Spotswood Parker & Co.
313 Techwood Drive, Atlanta, Ga.

T. W. McCuiston
540 S. W. 69th Ave., Miami, Fla.

North Central Region

Charles R. Davis
2970 W. Grand Blvd., Detroit, Mich.

Hetler Equipment Co.
1904 Clyde Park Ave., S. W.
Grand Rapids, Mich.

Central Region

W. G. Taylor Co.
1900 Euclid Bldg., Cleveland, Ohio

Lightfoot Pump & Equipment Co.
149 Hosack St., Columbus 7, Ohio

The Jordan Engineering Co.
7401 Shewango Way, Cincinnati 43, Ohio

T. A. Heidenreich Co., Inc.
5250 Keystone Ct., Indianapolis 20, Ind.

Lowden & Company
3404 N. Harlem Ave., Chicago, Ill.

A. K. Howell Co.
1001 Bellevue Ave., St. Louis, Mo.

South Central Region

Creole Engineering Co.
2617 Banks Street, New Orleans, La.

Albert Sterling & Assoc., Inc.
2611 Crocker St.
Houston, Texas

I. P. Newby & Assoc.
4431 Maple Ave.
Dallas 9, Texas

Northwest Region

Bruce P. Rutherford Co.
122 First Ave., S. W., Portland, Oregon

Bruce P. Rutherford Co.
1954 First Avenue South, Seattle, Wash.

Western Region

A. C. Cope Co.
435 Bryant Street, San Francisco, Cal.

Power Engineering Co.
1806 South State St., Salt Lake City, Utah

Thermo Tech Products Co.
1400 So. Lipan
Denver 23, Colorado

Southwest Region

Walter T. Humes Co.
230 East Anaheim, Wilmington, Cal.

Wagner Hydraulic Equip. Co.
10814 Santa Monica Blvd.
Los Angeles, California

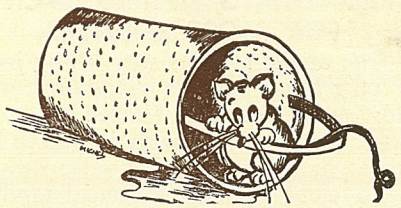
Canada—Ontario and Quebec Provinces

Kirk Equipment Ltd.
1460 Bishop Street
Montreal, Quebec, Canada

Canada—British Columbia Province

Fred McMeans & Co.
1608 West 5th Avenue
Vancouver, B. C., Canada

FOUND IN THE STRAINER BASKET



A doctor, who had made a specialty of Dermatology, was asked by one of his golfing partners why he had made this selection.

"There were three reasons", said the doctor, "My patients almost never interrupt my sleep, they rarely die from their ailment and they usually continue to need my services."

"Something always comes up to spoil my day."

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