KRAISSL QUARTERLY

Published By

THE KRAISSL COMPANY

INCORPORATED

PUMPS-SEPARATORS-ENGINEERING EQUIPMENT

HACKENSACK, NEW JERSEY

INDUSTRIAL

MARINE

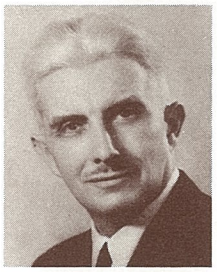
Volume 30 April 1985 No. 2

THE MAJOR JOB OF CONGRESS

By Frederick Kraissl, Jr., PhD., P.E.
Chairman and Chief Executive

Ask any man who was a school boy when I was, what is the primary job of congress and he should reply "Provide for the common Defense."

Why have we gotten so far away from this basic philosophy? We want no other countrys land, or possessions only regarding them as a potential threat when they are, and their armament exceeds their peace time needs by a wide margin.



Some history in our curricula might be informative to the current generation. The territory we acquired from other countries we bought and paid for at prices satisfactory to both parties at the time of the transaction.

We get along very well with our neighbors to the north and south, Canada and Mexico and I believe we have both of them reasonably convinced they have nothing to fear from us and could probably get them to join with us in joint projects of benefit to the human race if we ever get time from more pressing projects.

We fought two wars, the Korean and Vietnam, not for our benefit but to help others which should be the final test of our intent and good will, but not good judgment.

As a finale in Japan we authorized General Douglas MacArthur to set up an administration that has proven to be so efficient that they are one of our strongest competitors on a peace time basis.

Now we are faced with the matter of survival and we had better deal with the situation from strength rather than attempt to try negotiations from weakness. If we have the capability of making an attack on this country unprofitable, this must be the way to go and it may never be attempted so we can secure peace in our time by capability instead of humiliation by vulnerability.

THE EXPERIMENTS WITH THE DIESEL POWERED AUTOMOBILE ARE CONTINUING.

CAR ON WHICH DIESEL FILTER IS BEING TESTED

The principle of our fine mesh screen plus the rat trap sump to hold materials separated are being tested to a maximum.

The one thing that could not be anticipated was continuing colds. This area has been subjected to a bad winter which some commentators might call a masterpiece of understatement. One simply does not do well when ill and tests had to be postponed.

Some observations seem opportune. Too fine a mesh in the barrier insert provides resistance to flow. The hose supplying the fuel appears on the small side and any further increase in flow resistance tends to reduce the amount of fuel available for quick demand, caused by rapid accelleration.

We have therefore reverted to the mesh that was found satisfactory on boats using gasoline, as a starting point. If we find any inadequacy in fuel supply, we will gradually increase the fineness of the mesh until we no longer have a fuel quality problem. Usually, over the warm weather period, the problem is minimized but we have the satisfaction of knowing that with nothing but metal parts, there should be nothing to be dissolved by additives to gum up the diesel jets.

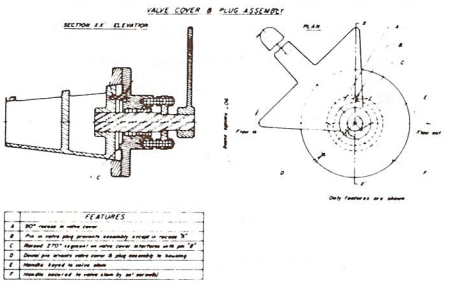
We will keep you informed of our findings as we go along.

VACATION NOTICE

The last week of July and first week of August have been set aside for our vacation period. This does not mean that we cannot help you during this period as we plan to maintain a skeleton staff for this purpose and a cadre in the machine shop for emergency requirements. However, we will be grateful if you will place any orders with which we may be favored in advance, reserving the time allotted to the vacation period for true emergency matters.

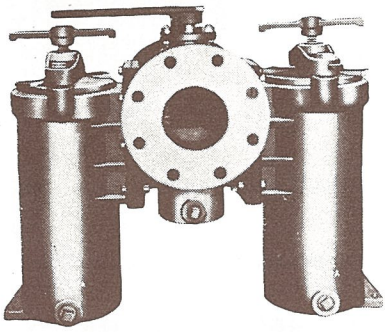
ASSEMBLY CONTROL

U.S. Patent No. 3,567,181



In this connection, we again draw attention to the reason for U. S. Patent No. 3,567,181. We were told that a competitive valve was inspected or serviced, put together wrong and instead of supplying oil to where lubrication was mandatory, it shut this off, ruining a very expensive compressor. The admonition was emphatic "Make this impossible with your valves." We believe we have done this as shown in our Drawing B-3607. This protection is supplied on all of our Class 72 Series Duplex line where this hazard applies and was considered satisfactory by the former unfortunate user of the competitive valve. We believe that if misassembly can happen once, it can happen again and this protection is a very important feature of our valves whether used separately or as an integral part of an assembly.

THE AVAILABLE VARIETY OF KRAISSL TRANSFER VALVES



CLASS 72A SERIES

We feel that we are the originators of transfer valves of our type since they came into being as the valve center of our three piece construction duplex separators. As no other organization to our knowledge, has offered a three piece construction duplex separator of the plug valve type we feel that our claim has merit. There is much to be said for three piece construction separators. The valve center is the most expensive part and a complete unit is not ruined if someone carelessly drops a heavy cast iron unit and knocks off a foot. The assembly provides heavy reinforcement around the junction of the valve and side body and since this construction minimizes unequal wall thickness there is no question that this provides very strong construction reminiscent of a high pressure autclave.

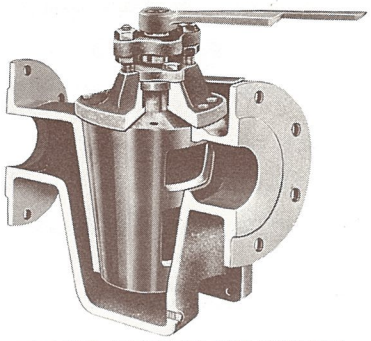
FEATURES

1. Independent adjustable locking flange
2. Accessible stuffing box gland.
3. Tapered valve plug designed for uninterrupted flow showing large internal port areas.

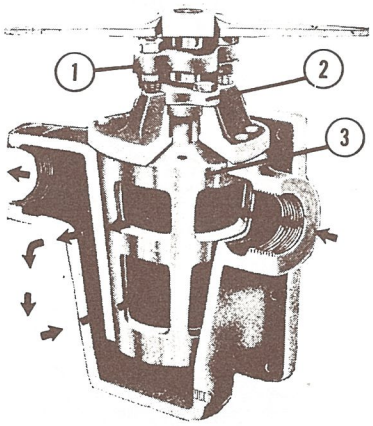
CLASS A RECTANGULAR FLANGED SIDE PORTS

Class 72 A Series

Many of our customers originated by employing our regular rectangular flanged valve center sections for the various services for which transfer valves are used, and in general these are needed where an In and Out flow must be channelled through one or two duplicate filters, heat exchangers, or similar installations requiring continuous service so that one assembly can be cleaned or serviced while the other is in operation. Many customers still employ the valves with rectangular side ports as the pressure drop is less, and they are also less costly. Such customers merely cut out rectangular steel plates with port cut-outs and weld them on the shells of the companion parts.



FLANGED VALVE IN ONE POSITION



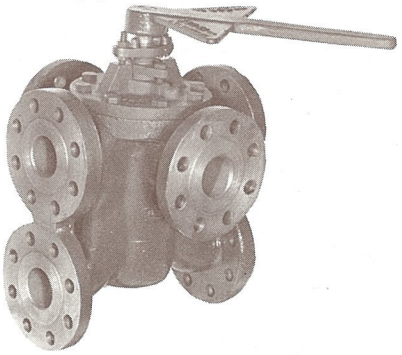
THREADED VALVE IN SECOND POSITION

The more the departure from the bearing and sealing surface of a classic plug valve, the greater the tendency toward seepage from the high pressure to the low pressure side. However it is appreciated that the internal porting reduces the continuity of surface and the requirement of "no shut off" tends in the same direction. However we still emphasize that good bearing and sealing surfaces are desirable and we have endeavored to maintain them without constricting our port specifications. We believe some competitors have gone too far by using what we term "key" construction for what we supply as a plug. Let us explain this as follows. From basic physics we learn that the fact that makes skating possible is that a person's weight concentrated on a narrow blade of minimum area causes a high build up of pressure and liquifies the solid ice under it so that actually a person is skating on a film of water which minimizes friction. This operates to disadvantage with a key type valve. The positive pressure is concentrated on the relatively small section of the key, making it a point of high friction just about mandating a lifting jack to raise the key from its seat so that it may be turned. With the plug type valve, the use of a lifting jack can be relagated, for many purposes, to dissimilar metals that might gall or score each other, or to such exceedingly high pressures that this possibility should be minimized.

72A-VA Rectangular side ports A-1869

CLASS AA VALVES

As early as 1960 some of our customers requested us to supply these valves with side ports that would mate with standard ASA flanges. We explained that they would be more costly due to increased weight and more complicated cores. Furthermore, increased pressure drop would result as flow direction would be forced to change by an equivalent number of elbows, also the more compact we make the valve the greater this would be aggravated. We early recognized that pressure drop should be minimized within economic limits, so we adopted as a standard, internal channels of not less than the area of the nominal pipe size of each valve.



CLASS AA VALVES STEEL CONSTRUCTION

72AA-VA ASA side ports B-3528B

TABLE OF DIMENSIONS - INCHES

MODEL	SIZE	FLG. DIA	B.C. DIA	NO. BOLT HOLES	BOLT HOLE DIA	R.F. DIA	MIN. APPX FLG. THK	APPX WGT LBS.	A	B	C ±1/64	D	E ±1/64	F	G
150# ASA FLANGES - 230 PSIG. MAX. W.P.															
72-37 AAFS	1 1/2	5	3 7/8	4	5/8	2 7/8	1/2	70	4 3/4	7 7/8	9 3/8	4 15/16	10	1	6 3/8
72-39 AAFS	2	6	4 3/4	4	3/4	3 5/8	9/16	100	5 3/8	9 5/16	12	6 1/4	12	1 7/16	6 3/4
72-41 AAFS	2 1/2	7	5 1/2	4	3/4	4 1/8	5/8	175	6	10 13/16	12 5/8	6 1/2	13	1 7/16	7 3/4
72-43 AAFS	3	7 1/2	6	4	3/4	5	11/16	185	7	11 3/8	12 1/2	6 3/8	14	1 1/8	7 3/4
72-47 AAFS	4	9	7 1/2	8	3/4	6 3/16	7/8	305	8 1/2	12 1/16	15 5/8	9	21	2 11/16	10 1/4
300# ASA FLANGES - 600 PSIG. MAX. W.P.															
72-37 AAFHS	1 1/2	6 1/8	4 1/2	4	7/8	2 7/8	3/4	90	5 1/16	9 7/16	9 3/8	4 15/16	10	1	6 3/8
72-39 AAFHS	2	6 1/2	5	8	3/4	3 5/8	13/16	115	6 5/8	9 9/16	12	6 1/4	12	1 7/16	6 3/4
72-41 AAFHS	2 1/2	7 1/2	5 7/8	8	7/8	4 1/8	15/16	185	7 1/16	11 1/16	12 5/8	6 1/2	13	1 7/16	7 3/4
72-43 AAFHS	3	8 1/4	6 5/8	8	7/8	5	1 1/16	185	7 5/8	10 1/16	12 1/2	6 3/8	18	2 9/16	8 1/4
72-47 AAFHS	4	10	7 7/8	8	7/8	6 3/16	1 3/16	355	20 1/2	12 9/16	15 5/8	9	21	2 11/16	10 1/4
600# ASA FLANGES - 1200 PSIG. MAX. W.P. (300° F. MAX. TEMP)															
72-33AA FHS-600	1	4 7/8	3 1/2	4	3/4	2	11/16		15 1/8	8 1/2	10 3/8	5 5/8	11	5/16	6 3/8
72-37AA FHS-600	1 1/2	6 1/8	4 1/2	4	7/8	2 7/8	7/8		15 3/4	9 1/8	10 3/8	5 5/8	11	3/8	6 3/8

* PLUS 1/16 R.F. ON 150 # & 300 # FLGS. & 1/4 R.F. ON 600 # FLGS.

CLASS AAA VALVES STEEL CONSTRUCTION

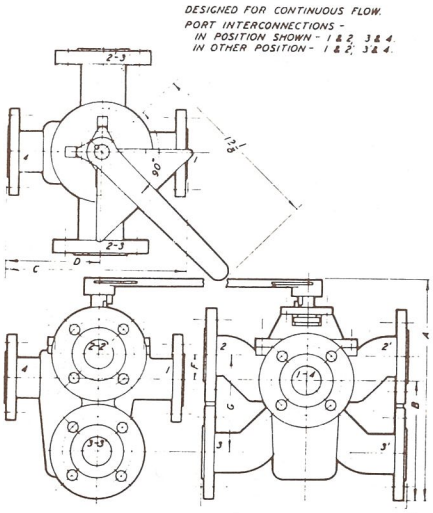
Although we consider it our prerogative to set up specification standards for our valves, we are always glad to comply with customers' requirements. We do not regard our transfer valves as a fitting due to their more important engineering functions. Consequently we do not regard ANSI specifications relating to fittings, as applying to our valves. However some customers have desired that the flanges on our valves conform to rigid ANSI specifications of fittings. We have attempted to obtain a consensus of these desires and have included them in the triple A specifications of our valves.

CLASS AAA VALVES STEEL CONSTRUCTION

TABLE OF DIMENSIONS - INCHES

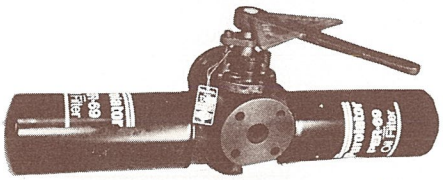
MODEL	SIZE	FLG. DIA.	B.C. DIA.	NO. 900 VALVES	900 HOLE DIA.	R.F. DIA.	* APPX. FLG. WGT. TH. LBS.	A	B	C ±.6 -0	D	E ±.6 -0	F	G
150# ASA FLANGES - 450 PSIG HYDROSTATIC TEST PRESSURE														
72-37 AAAFS	1 1/2	5	3 7/8	4	5/8	2 7/8	1/2	55	14 3/8	7 7/8	9 3/8	4 15/16	10	1 6 3/8
72-39 AAAFS	2	6	4 3/4	4	3/4	3 5/8	5/16	90	16 5/8	9 5/16	12	6 1/4	12	7/16 6 3/4
72-41 AAAFS	2 1/2	7	5 1/2	4	3/4	4 1/8	5/8	120	17 5/8	10 13/16	12 5/8	6 1/2	13	1/2 7/16 7 3/4
72-43 AAAFS	3	7 1/2	6	4	3/4	5	11/16	141	18 7/16	11 3/8	12 1/2	6 7/8	14	1/8 7 3/4
72-47 AAAFS	4	9	7 1/2	8	3/4	6 3/16	7/8	250	19 3/4	12 1/16	15 5/8	9	21	2 11/16 10 1/4
300# ASA FLANGES - 1125 PSIG HYDROSTATIC TEST PRESSURE														
72-37 AAAFHS	1 1/2	6 1/8	4 1/2	4	7/8	2 7/8	3/4	75	15 1/16	8 7/16	9 3/8	4 15/16	10	1 6 3/8
72-39 AAAFHS	2	6 1/2	5	8	3/4	3 5/8	13/16	110	16 5/8	9 5/16	12	6 1/4	12	7/16 6 3/4
72-41 AAAFHS	2 1/2	7 1/2	5 7/8	8	7/8	4 1/8	15/16	145	18 5/8	11 1/16	12 5/8	6 1/2	13	7/16 7 3/4
72-43 AAAFHS	3	8 1/4	6 3/8	8	7/8	5	1 1/16	170	19 3/16	12 1/8	12 1/2	6 7/8	15	1/2 8 1/2
72-47 AAAFHS	4	10	7 7/8	8	7/8	6 3/16	1 3/16	295	20 1/4	12 5/16	15 5/8	9	21	2 11/16 10 1/4
600# ASA FLANGES - 2225 PSIG HYDROSTATIC TEST PRESS.														
72-33AA FHS-600	1	4 7/8	3 1/2	4	3/4	2	11/16	75	15 1/8	8 1/2	10 5/16	5 5/8	11	5/16 6 3/8
72-37AAA FHS-600	1 1/2	6 1/8	4 1/2	4	7/8	2 7/8	7/8	80	15 3/4	9 1/4	10 5/16	5 5/8	11	5/16 6 3/8

*PLUS 1/16" R.F. ON 150 #, & 300 # FLGS. & 1/4 R.F. ON 600 # FLGS. TOLERANCE +1/8 - 0.

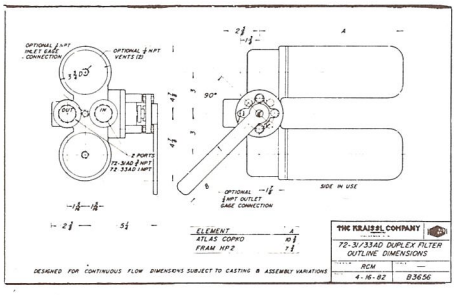


THE CLASS 72-37ACF VALVE FILTER ASSEMBLY

U.S PATENT NO. 3,567,181

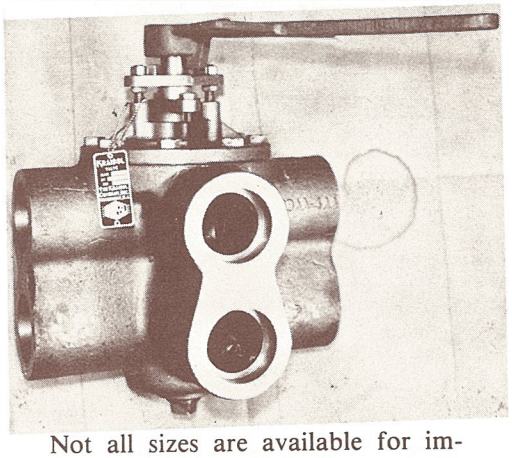


In previous notifications, we have shown design variations in both horizontal and vertical positions. With the sky-rocketing costs of patterns, we hoped to avoid unjustified investments. Our first inquiry came for the horizontal unit shown in the photograph, BUT the first order came for the vertical units so now we have authorized both.



STEEL VALVES WITH SOCKET WELD PORTS

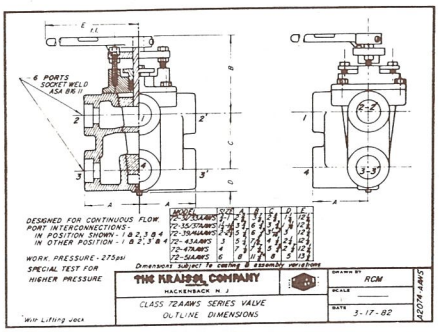
Enough of our customers prefer welded lines to make available a fairly extensive number of valves designed for socket welding.



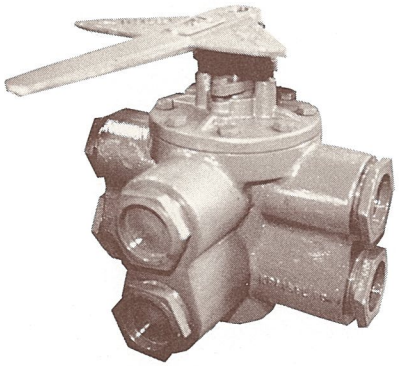
Not all sizes are available for immediate production as pattern costs are very high and nothing is gained by having valves priced so high that they cannot be used, as it must be clear that costs for special units must be amortised over a reasonable number.

Even when patterns are available, we would prefer orders for not less than five so the set up and machining charges can be spread over a reasonable number to keep the costs down.

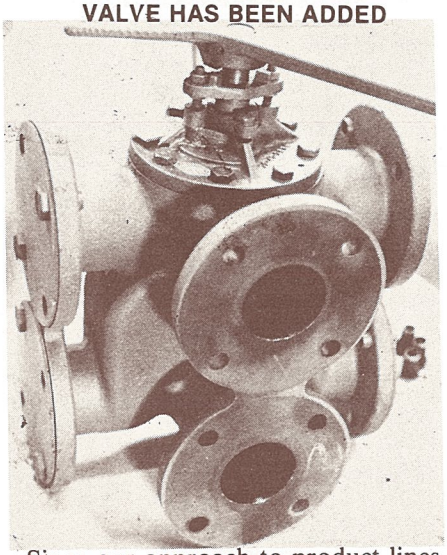
The attached drawing A-2074 AAWS shows sizes ¾ thru 6" that have already been designed. This should cover most needed sizes, but if you use any, we would appreciate as much lead time as possible, since special orders must be sent to the foundries as well as provision for machining and testing.



CLASS 72 THREADED PORT VALVES



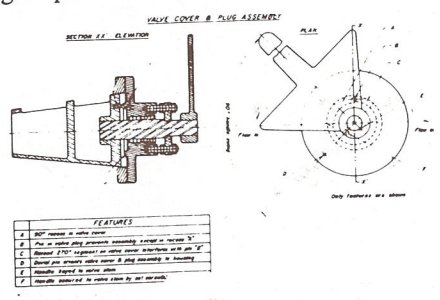
A NEW MODEL CLASS 72 SERIES VALVE HAS BEEN ADDED



Since our approach to product lines has always been engineering to meet customer requirements, we have expanded our Class 72 ABF(S) to cover the sizes of 72-37 ABF(S) to 72-47 ABF(S) inclusive. All of these units are not immediately available as they are at present, listed as specials, but they have been design authorized and prices can be quoted.

They Bring to designers who want front flanged porting, a model that can be wall or assembly mounted with inlet and outlet ports accesible from the front. All of our other features including our patented assembly protection have been retained.

In this connection, we again draw attention to the reason for U.S. Patent No. 3,567,181. We were told that a competitive valve was inspected or serviced, put together wrong and instead of suppling oil to where lubrication was mandatory, it shut this off, ruining a very expensive compressor. The admonition was emphatic "Make this impossible with your valves." We believe we have done this as shown in our Drawing B-3607. This protection is supplied on all of our Class 72 Series Duplex line where this hazard applies and was considered satisfactory by the former unfortunate user of the competitive valve. We believe that if misassembly can happen once, it can happen again and this protection is a very important feature of our valves whether used separately or as an integral part of an assembly.



SALES REPRESENTATION

HOME OFFICE

We have reserved the areas of Connecticut, 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

Boston-Cooper Corp.
Manor Parkway
Salem Ind. Pkwy, Salem, N.H. 03079

Capt. C. V. Watson
Maiden Cove Lane
Cape Elizabeth, Maine 04107

Eastern Region

Filtration Unlimited
Buffalo & John Streets
Akron, N. Y. 14001

Jobe & Co., Inc.
1815 Edison Hwy.
Baltimore, Md. 21213

Daily Associates
8 E. Mt. Vernon Ave.
Haddonfield, N. J. 08033

Fluid Conditioning Equip. Co.
28 Van Tassel Lane
Ballston Spa, N. Y. 12020

R. C. White, Div. Weldment Corp.
P.O. Box 267
Bethel Park, Pa. 15102

Southeast Region

Power Equipment Co.
1307 West Main Main St.
Richmond, Va. 23201

Dillon Supply Company—Main Office
Box 1111, S. West Street
Raleigh, N. C. 27602

Dillon Supply Company
Durham, No. Carolina 27702

Dillon Supply Company
Rocky Mt., No. Carolina 27801

Dillon Supply Company
Goldsboro, No. Carolina 27530

Dillon Supply Company
Charlotte, No. Carolina 28201

Boiler Supply Company
P.O. Box 40225
Nashville, Tenn. 37204

601 Van St., N.W.
Knoxville, Tenn. 37921

Applied Engineering Co., Inc.
P.O Box 1327
Orangeburg, S.C. 29115

W. T. Meyer Co.
5800 Coach Gate Wynde
Louisville, KY. 40207

Spotswood Parker & Co.
721 Miami Cir. NE, Atlanta, Ga. 30324

Proctor-Himic Co., Inc.
P. O. Box 36279
Birmingham, Alabama 35226

R.A. Litkenhaus & Assoc., Inc.
P.O. Box 16323
7825 Baymeadows Way, Suite 106B
Jacksonville, Florida 32216
Phone: (904) 373-3536

Florida Filters, Inc.
P.O. Box 370985
Buena Vista Station
Miami, Florida 33137

Florida Filters, Inc.
223 S. 13th St.
Tampa, Florida 33602

North Central Region

Comb & Groves, Inc.
336 W. Eight Mile Rd.
Ferndale, Mich. 48220

Hetler Equipment Co.
P. O. Box 1904
Grand Rapids, Mich. 49501

Central Region

M. Huffman Sales Co.
3404 Upton Ave.
Toledo, Ohio 43613

W. G. Taylor Co.
1900 Euclid Bldg., Cleveland, Ohio 44115

The Jordan Engineering Co.
P. O. Box 30017
Cincinnati, Ohio 45230

T. A. Heidenreich Co., Inc.
2525 E. 54th Street
Indianapolis, Ind. 46220

Tobra Engineering Co.
5438 Milwaukee Ave.
Chicago, Illinois 60630

A. K. Howell Co.
7603 Forsythe Ave.
St. Louis, Mo. 63105

Filtra Tech Systems
8535 Duluth St.
Golden Valley, MN 55427

South Central Region

Creole Engineering Co.
P.O. Box 23159, Harahan, La. 70183

Creole Enginering Co.
11724 Industriplex Blvd.
Baton Rouge, La. 70809

Jack Tyler Engineering Co.
6112 Patterson Ave.
Little Rock, Ark. 72209

Albert Sterling & Assoc., Inc.
5613 Winsome Lane
Houston, Texas 77057

Northwest Region

Baxter-Rutherford Inc.
P.O. Box 24324
911 South Homer Street
Seattle, Washington 98134

Western Region

Jay Besore & Assoc.
1690 Plymouth St.
Mountain View, Cal. 94043

Power Engineering Co.
P. O. Box 1777
Salt Lake City, Utah 84110

Killam Gas Burner Co.
1240 S. Bannock St.
Denver, Colorado 80223

Southwest Region

Wagner Hydraulic Equip. Co.
2089 Westwood Blvd.
Los Angeles, California 90025

Engineered Sales Company
5150 N. 16th Suite C-156
Phoenix, Arizona 85016

Phil-Lin Associates, Inc.
13344 Camino Del Norte
Albuquerque, New Mexico 87123

Canada—Ontario and Quebec Provinces

Kirk Equipment Ltd.
7435 Chester Ave., Suite 2
Montreal, Quebec, Canada H4VIM4

Kirk Equipment, Ltd.
1885 Wilson Ave., Suite 206
Weston, Toronto, Ontario, Canada M3H 1T9

Canada—British Columbia Province

Les Hall Filter Service Ltd.
346 E. Esplanade
North Vancouver, B.C. V7L 1A4

Canada—Alberta Province

H.F. Clarke Limited
5220-1A Street S. E.
Calgary, Alberta, Canada T2H 1J1

Hawaii

Foster Equipment Co.
P. O. Box 30188
Honolulu, Hawaii 96820

Mexico

Ingenieria Termo Industrial, S.A.
Iztaccihuatl No. 63, Col, Fl
Delegacion A. Obregon
Mexico, D. F. Mexico 01030

THE KRAISSL COMPANY
INCORPORATED
HACKENSACK, NEW JERSEY 07601
RETURN POSTAGE GUARANTEED

TRADE KRAISSL MARK

YOUR COPY OF

KRAISSL QUARTERLY

BULK RATE
U. S. POSTAGE
PAID
Permit No. 1268
Hackensack, N. J.