THE VANISHING ARTISAN
IN INDUSTRY

FREDERICK KRAISL, Jr., P.E.

If we really believe that competence, devotion to high standards of perfection, and personal pride in workmanship are important characteristics, we will be concerned about what is happening in American industry.

In the mad scramble to buy happiness which cannot be bought but must be earned, the purchasing capacity of the individual has become a standard for evaluation. I did not state that it is the only standard, because I am not that pessimistic, although this is true in many areas. True worth should be judged on a basis of superior character, and character is the sum of our past experiences. Consequently what a person does, and how he does it both reflects his character and moulds it. This is equally true whether the individual is occupied with intellectual considerations or prefers to devote himself to the production of things requiring great manual dexterity.

The relationship between art and science has always fascinated me, as it has developed through the ages. Without oversimplification I think it can be stated that almost every technique useful to man started out as an art, and then as we learned more about it our findings were classified, and as we all know, science is classified knowledge.

Consequently the artisan is the pioneer, the frontiersman if you will, in our mechanical progress, and as long as there are new frontiers who will say we do not need frontiersmen? The Space Age will need the artisan as much as past challenges to man's ingenuity so it is important to consider how his kind can be perpetuated.

Toward this end it might be pertinent to consider how he was developed. He started out as an apprentice. As a learner his wages were so low that Industry could afford to give him training without expense to the taxpayer. He wasted material, but this could also be afforded. He required the time of the artisan to whom he was apprenticed or by whom supervised, but this was considered justified, and it worked.

In the commendable motive to insure that production workers are paid a living wage, a system has been set up that precludes a general apprentice procedure in Industry. At current wages Industry must make efficient use of the man hours it buys or suffer the consequences. The fact that technical and clerical personnel must educate themselves at their own expense before being able to sell their services is usually ignored by social planners. Under an apprentice system the trainee had no expense and in most cases received some compensation.

Apprentices were usually best trained at wages where child labor laws now make employment difficult. It is considered preferable to permit juveniles to be idle, congregate in gangs with the possibility of becoming delinquents. The latest hours observed in Industry rarely approach the hours now threatened by curfew to control delinquency.

Young men who have served in the Armed Forces can obtain educational subsidies. Why must subsidized training be related to pushing a pen? If the question of whether the pen is mightier than the sword is debatable, why is not a more modern question of whether the pen is mightier than the milling machine or micrometer, even more pertinent?

A matter of social significance must also be resolved. Why should artisan fathers believe that their offspring is being bettered by sitting in front of a desk making marks on paper, as related to the fashioning of delicate tools or devices for production requirements? The man making the drawings is helpless to accomplish his objective unless he has available the services of artisans who can convert the designs into usable materials.

Public schooling should stress that aptitudes relating to manual dexterity should be as much encouraged as proficiency in other fields, but that this should not excuse the neglect of cultural subjects which are necessary for the full development of first class citizens.

Industry has available the diversified machines and some remaining artisans who could train sincere apprentices. We need a system that will make this possible.

THE SECRET INGREDIENT
OF SALESMANSHIP

LELAND E. MILLS, Vice President

Salesmanship means many things to many people. Perhaps in its purest or most abstract form it becomes an extension of the complete complex personality of a whole company or corporation. This is true whether a man represents a great giant of industry, or a small struggling enterprise, or one of the thousand upon thousands of small successful companies which are the backbone of American Industry.

It is possible that in fields such as ours, a man represents his company rather than acts as a salesman. A salesman according to my dictionary "Sells goods" and while we in the engineering field certainly aspire to eventually "Sell the goods", our primary concern is that the product we have, answers the need of the prospect or can be modified to do so. The end point of this theory, of course, is that a satisfied customer remains a customer.

It does not take too long for anyone engaged in a selling effort to develop either consciously or unconsciously, a personal philosophy. This philosophy must, of necessity, be colored to a great degree by his co-workers in the field, but more importantly, it will be colored by the quality and soundness of the basic engineering and sales philosophy of the company he represents.

A company unalterably committed to manufacturing the same thing in the same way, "As long as the public will buy it" it will completely stifle pride in workmanship at all levels. At the other extreme is the company that bewilders everyone connected with it by its com-
plete lack of stability and direction with a grasshopper-like approach to its problems.

Somewhere in the middle is the so-called Moderate Conservative. This is the wide awake company that is always seeking opportunity to improve the product by new methods or by inclusion of new industrial developments to benefit present as well as future users. This is the company that is a constant source of inspiration to all of its employees.

Everyone in an organization, and this is probably especially true of sales personnel, likes to feel that they work for a company whose reputation is based on progress which is established fact and not merely advertising fancy. It gives them a psychological "Shot in the arm" that actually makes them want to do a better job. As a result, everyone benefits — the company, the personnel, the customer. In my opinion, the secret ingredient in any product which makes it superior to others is "Pride in Workmanship" and this includes everyone connected with in from the Chairman of the Board of Directors to the Shipping Clerk who is the last one to see it as it leaves the plant.

EDITORIAL OPINIONS

Our editors are the senior officers of the company and this is the opportunity for each of us to express thoughts which we believe can be stated to advantage. It must be emphasized that the opinions expressed are those of the author and not necessary endorsed by the rest, or the Board of Directors of this Company.

Frederick Kraissl, Jr., P.E. Editor
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Alice L. Kraissl Associate Editor
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PERSONALS

Frederick Kraissl, Jr., P.E. was recently elected a Director of the American Boat and Yacht Council, Inc. This organization has accepted the assignment in the Boating Industry of recommending standards for best practices with emphasis on Safety. Projects are assigned to technical sub-committees that are composed of men with considerable experience in this field who serve on a voluntary basis without compensation as a public service.

INDUSTRIAL FIELD

OIL BURNING INDUSTRY

CLASS 66 SERIES PUMPS PROVIDE NEEDED FEATURES

Originally designed for supplying oil to mechanical atomizing oil burners, these pumps are not limited to this application. In actual tests at our plant a Class 66 Pump outlasted four other pumps on the same application for which we had used a competitive design before the 66 Series was available.

Important design features . . .

1. Ports in end plate provide easy access to pump interior and parts replacement without piping disassembly.
2. Pyramid tooth form provides maximum gear strength.
3. Flange mounting on end plates permits use of foot or direct mounting into machine or drive.
4. Integrated Rotor and shaft provides strong assembly with no weakening due to internal keys or pins.
5. Dowel pin alignment facilitates accurate assembly with proper working clearances.
6. Grooves vented to pump suction eliminate gaskets and insure face and end plate sealing.
7. Bearings are assembled close to load to minimize shaft deflection. Provision is made for renewal of lubricant.
8. Shaft seals isolate main bearings from abrasive liquids.
9. Hardened idler increases pump life.
10. Interchangeable return seal (not shown) vents stuffing box to pump suction to minimize chance of shaft leakage while also providing simple change of rotation in the field.

These pumps are being offered for pressures up to 300 PSIG for fuel oil applications and higher for applications where the oil has greater lubricating value. The basic limitation is the life of the bearings, as it is a well accepted principle with all rotary positive displacement pumps, that when the bearings go, the pump is finished. This is one reason for running pumps at slow speeds with liquids of limited lubricating value as this considerably increases bearing life. Other than this, the limitation on speed is the viscosity of the oil being handled. The attached charts show the capacities of the first three sizes of these pumps under different operating speeds consistent with the viscosity indicated. Write for full size easy to read data sheets of which are small prototypes.

CHARACTERISTIC CURVES

DATA BASED ON APPROXIMATE OIL VISCOSITY OF 200 SSU. SUGGESTED HORSEPOWER WILL VARY WITH VISCOSITY OF OIL.

SIZE 66-3
**NOMENCLATURE**

Class 66 Series Pumps are being reclassified under our additive code. These pumps are finished with flange mounting which carries the designation "A". The foot for foot mounting accommodates this flange so a pump head complete with foot is designated "AE". Thus the Class 66-3 Pump head with foot is designated 66-3AE. The Reducers Drive Units are designated by the suffix "RD". The 66-3 Reduction Drive Unit without motor is covered by the Code 66-3AERD. Likewise the 66-3 furnished with coupling and base plate for direct motor drive is designated 66-3AMED.

We have invited the attention of those interested, to the availability of our new patented Multi-Element Baskets which are being used in the Fuel Oil Burning Field where greater straining area for a given size strainer is sometimes desirable.

However, the application is by no means limited to this Industry and the need for greater straining area together with compact design, is often of great importance in the Marine Field.

Dual Element Baskets are interchangeable with Single Element Baskets in Kraissl Class 72 Series Strainers and greatly increase straining area at negligible cost. If you need greater straining area investigate what is available with Double Element Baskets and we are furnishing the following table showing sizes up to 4" inclusive for comparative purposes. We can furnish Multi-Element Baskets for our entire Class 72 Series.

**BOATING INDUSTRY**

**SPECIAL SALES REPRESENTATIVE STOCKING KRAISSL PRODUCTS IN NORTH FLORIDA**

Diesel Electric Service, Inc., of 1120 East Adams St., Jacksonville, Florida is carrying both our Class 73 Series Sea-View and 72-70 Series Fuel Filters in stock. Mr. Elmer F. Novak told us he would be glad to take care of the requirements of shipyards that can make use of his facilities.
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 Kraiss Company personnel.

Northeast Region
Robert Bacon Co.
272 Centre Street, Newton, Mass.
John S. Stone
P. O. Box 127, Holcomb, N. Y.

Eastern Region
Engineering Associates, Div. Trymac, Inc.
16 West 5th St., Erie, Pa.
Valley Equipment Company
404 Frick Building, Pittsburgh 19, Pa.
Shanklin Company
330 East 25th St., Baltimore, Md.
W. H. Titus
401 North Broad St., Philadelphia, Pa.

Southeast Region
L. M. Lee, Jr.
Richmond Federal Bldg., 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.

Central Region
Wm. G. Taylor
1900 Euclid Bldg., Cleveland, Ohio
Lightfoot Pump & Equipment Co.
1989 Guilford Rd., Columbus, Ohio
The Jordan Engineering Co.
Rosealawn Center Bldg., Cincinnati, Ohio
T. A. Heidenreich Co., Inc.
2036 East 46th St., Indianapolis, Ind.
Lowden & Company
3404 N. Harlem St., Chicago, Ill.
A. K. Howell Co.
1001 Bellevue Ave., St. Louis, Mo.

South Central Region
Cople Engineering Co.
2617 Banks Street, New Orleans, La.
3786 Scenic Highway, Baton Rouge, La.
Sterling & Newby Houston Corp.
2611 Crocker St.
Houston, Texas
Sterling & Newby—Dallas Corp.
4431 Maple Ave.
Dallas 9, Texas

Northwest Region
Bruce P. Rutherford, Inc.
122 First Ave., S. W., Portland, Oregon
Bruce P. Rutherford, Inc.
1934 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.—Power Plant
2466 So. Delaware
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 8th Avenue
Vancouver, B. C., Canada

FOUND IN THE STRAINER BASKET

“To do this job right”, said the art editor, “we need a picture of a girl wearing one of those religious gowns”.

Artist, “What do you mean—religious gown?”

Art editor, “Oh, you know, lo and behold.”

Reporter: “Boss I’ve got the perfect news story”.

City Editor: “Don’t tell me there is another case of man bites dog”.

Reporter: “Better than that, a Bull threw a Congressman”.

“Haven’t I seen you before?” asked the Judge.

“Maybe your Honor” said the tailor, “So many people owe me money I can’t remember all their faces”.

“Did you go to the doctors yesterday?”

“Yes”.

“Did he find out what you had?”

“Almost”.

“What do you mean, almost?”

“Well, I had $5.50 and he charged me $5.00”.

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