

**THE  
MACARONI  
JOURNAL**

**Volume 64  
No. 3**

**July, 1982**

# Macaroni Journal

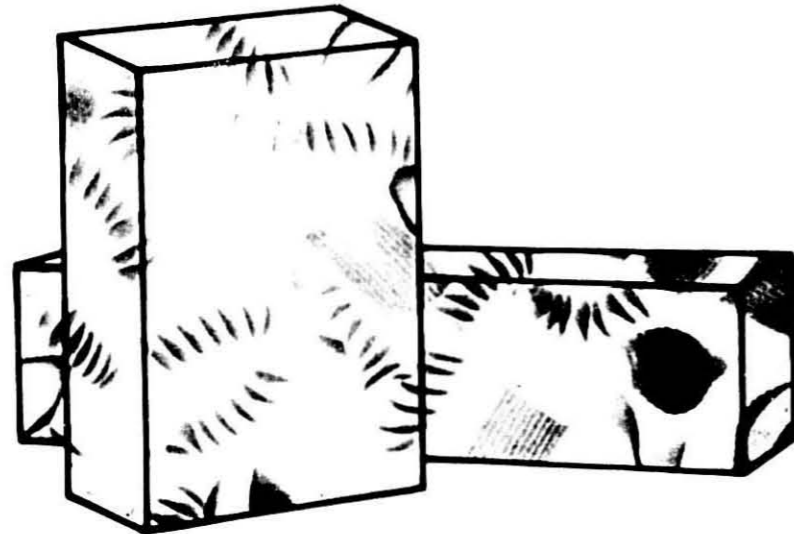
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JULY, 1982



The Broadmoor, Colorado Springs — 78th Annual Meeting N.P.A.

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In This Issue

News

Plant Operations Seminar



Group Tour to Golden Grain at Bridgview



Management Team at Bridgview - left to right

## PROGRAM

### 70th ANNUAL MEETING OF THE NATIONAL PASTA ASSOCIATION The Broadmoor, Colorado Springs, Colorado

#### Sunday, July 11, 1982

- 9:00 a.m. Executive Committee Meeting in Pourtales Room.
- 3:00 p.m. Board Meeting in Briefing Room West.
- 3:00 p.m. Convention Registration Desk open, Mezzanine Main.
- 6:30 p.m. Newcomers Reception, Pompeian Room.
- 7:00 p.m. Welcoming Reception for All, Pompeian Room.
- 8:00 p.m. Italian Dinner — President's Address, Main Ballroom.

#### Monday, July 12

- 9:00 a.m. Business Meeting in West Exhibit Hall.  
Opening Remarks, Committee Appointments — President L. R. Thurston, Jr
- 9:30 a.m. Things to do and see at the Broadmoor — Diane Butler, Social Director.
- 9:40 a.m. State of the Economy — Speaker Roy Romer, State Treasurer of Colorado.
- 10:15 a.m. Coffee Break.
- 10:30 a.m. Congressman Timothy E. Wirth will comment on the State of the Nation.
- 11:30 a.m. Consumer Affairs Council Meets.
- 2:00 p.m. Tennis Mixer at South Courts — sign up in advance.
- 6:00 p.m. Busses leave for Rotten Log Hollow Cookout.

#### Tuesday, July 13

- 9:00 a.m. Business Meeting in West Exhibit Hall.  
Report from North Dakota — George A. Sinner, President, Northern Crops Institute.
- 9:40 a.m. Report from Millers National Federation — James J. Feeney, Chairman of the Board.
- 10:20 a.m. Coffee Break.
- 10:40 a.m. Bob Mathias — Director, Olympic Training Center.
- 11:10 a.m. Lt. General Kenneth J. Thorneycroft, CF, deputy commander in chief, North American Aerospace Defense Command (NORAD).
- 1:00 p.m. Golf Tournament, East Course — sign up in advance.  
Open evening — no planned functions.

#### Wednesday, July 14

- 8:00 a.m. Council Breakfasts in Bailey/Stratta Room, West.
- 9:30 a.m. Business Meeting in West Exhibit Hall.  
Louis B. Raffel, President, American Egg Board.
- 10:00 a.m. C. Joan Reynolds, Wheat Industry Council.
- 10:20 a.m. Elinor Ehrman, Burson-Marsteller, presents the National Pasta Association product promotion report.
- 11:30 a.m. Directors Organization Meeting.
- 12:30 p.m. Directors Luncheon in Bailey/Stratta Room.
- 7:00 p.m. Suppliers' Social at the West Pool.
- 8:00 p.m. Dinner Dance in the West Ball room.

#### Thursday, July 15 — Departure.

## CONVENTION SPEAKERS



Rep. Timothy E. Wirth  
Second Congressional Dist. of Colorado



Bob Mathias  
Director, Olympic Training Center,  
Colorado Springs



Lt. Gen. K. J. Thorneycroft  
Deputy Commander-in-Chief, NORAD,  
Peterson AFB



George A. Sinner  
President, Northern Crops Institute,  
Casselton, North Dakota



James J. Feeney  
Chairman, Millers National Federation



Lester R. Thurston, Jr.  
President, National Pasta Association



Elinor Ehrman  
Senior Vice President, Burson-Marsteller



Louis B. Raffel  
President, American Egg Board



C. Joan Reynolds  
Executive Director, Wheat Industry Council

## FLOUR AND SEMOLINA QUALITY CHARACTERISTICS, STORAGE AND HANDLING

by Robert I. Bruning, Technical Center, International Multifoods

Semolina and durum flour are both food items covered under the Food and Drug Administration's standards of identity. All foods covered by these regulations must comply to the specifications as listed in the code of federal regulations. Items that do not comply with these regulations and are shipped in interstate commerce could be seized by the FDA for non-compliance. The regulation for durum flour is as follows:

- (a) Durum flour is the food prepared by grinding and bolting cleaned durum wheat. When tested for granulation as prescribed in 137.105, section (c) (4), not less than 98 percent of such flour passes through the No. 70 sieve. It is freed from bran coat or bran coat and germ to such extent that the percent of ash therein, calculated to a moisture-free basis, is not more than 15 percent.
- (b) For the purpose of this section, ash, moisture, and granulation are determined by the methods prescribed in 137.105, Section 8.

The definition for semolina is as follows:

- (a) Semolina is the food prepared by grinding and bolting cleaned durum wheat to such fineness that when tested by the method prescribed in 137.300, Section 10 (2), it passes through a No.

20 sieve, but not more than 3 percent passes through a No. 100 sieve. It is freed from bran coat or bran coat and germ to such extent that the percent of ash therein, calculated to a moisture-free basis, is not more than 0.92 percent.

There are many other foods standardized by the FDA. Most macaroni products, as well as cheeses, bakery products, cereal flours, canned foods, ice cream, and other items are included in the definitions established by the FDA. What this means is that any consumer or user of these standardized products is assured, by government regulation, that the product that he is using meets these standards.

### Other Factors

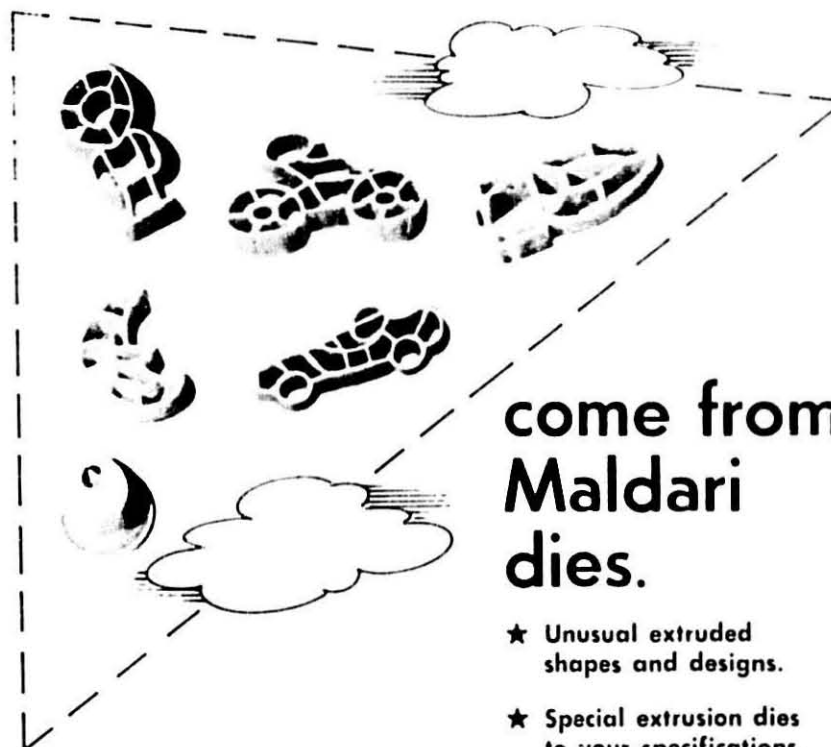
Using the FDA standards as a basis point, we could expand upon the various factors which the durum millers and macaroni manufacturers use to further identify the quality of durum flour and semolina. Paramount among these factors is appearance, color and speckiness. Speckiness is generally an objective factor. Color, however, is subjective, and very few of us perceive it in the same manner. Generally, however, all pasta people are agreed that the bright amber color is satisfactory, and shades of brown or grayness are unsatisfactory.

Another factor to consider is the granulation of semolina. It can relate directly to production and finished product quality. In modern high-speed macaroni presses, too coarse granules

are not incorporated in the dough during the mixing cycle. This results in white streaks and white speck on the surface of the finished pasta product. These spots are generally coarse particles in the semolina which remain over a U.S. No. 30 wire. Semolina should be of all one size, however, practically speaking, this is not feasible. The modern mills are engineered to produce uniform distribution of particles in semolina. It is difficult to chat particle size distribution without rupturing the entire flow and balling the mill. To demonstrate the importance that particle size plays in manufacturing, some of the pasta plants in Italy have devices of their plants to screen semolina to very uniform size. This is done by producing sifting devices which screen the coarse material and subject grinding before going into the plant. By having the uniform particle size, optimum production and quality are achieved.

The analytical factors of moisture and protein do not relate to quality factors of semolina, but they do serve to identify the wheat from which the semolina is milled. To expand further on this, we might examine the 1981 Durum Regional Survey published by Dakota State University. The semolina produced from the 1981 survey had an ash that ranged from low of 86 to a high of 70. The item on this same semolina varies

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The falling number test is a key analytical test. International Multifoods uses this test to establish minimum quality of test and other flouring ingredients. The particle size is determined by sieving the flour through a No. 20 sieve.



Experimental mills are used by International Multifoods to grind wheat samples into flour for pre-evaluation. The flour is made prior to large scale production.

### Flour Quality Characteristics

(Continued from page 8)

the low of 11.70 to a high of 15.20. Within these ranges there were no significant color differences or spaghetti processing differences.

Gluten quality is another factor of which there has been considerable interest in recent years. This is the result of the release of the stronger gluten-type durum wheats. Flour and semolina produced from these stronger gluten wheats seem to process more uniformly, and produces finished products that are more resistant to over-cooking.

In summary, the quality factors which we look for in semolina and durum flour are appearance (color, speckiness), granulation, moisture, ash, protein and gluten quality.

#### Testing Methods

There are several methods used for determining each of these factors. To evaluate appearance, the most widely used test is the slick test. This procedure requires a control sample and the unknown. The two samples are placed side by side and visually compared. Granulation is generally determined by following the procedure outlined by the W. S. Tyler Company in their Handbook 53.

This test consists of sifting a 100 gram portion over a series of nested sieves on the rotap sifter for 5 minutes. Each sieve fraction is then weighed to determine the percentage. Moisture, ash and protein are determined by AOAC or AACC published standard procedures. Gluten quality is a little more difficult to precisely define. Current methodologies, are the semi-micro sedimentation test and the mixography. These tests can generally identify the standard gluten durum varieties from the strong gluten durum varieties.

Another factor which should be mentioned when we discuss the quality of durum flour and semolina is testing for extraneous matter. Current industry emphasis on good manufacturing practice and wholesomeness and cleanliness of food requires that products used in the pasta industry be monitored for extraneous matter. Historically, durum products do not carry the filth load, insect fragments and rodent hairs, that other wheat flour products do. Our industry is fortunate in this respect. Over the years durum flour and

semolina have had insect fragments ranging from 0 to perhaps as high as 10, with an average of something around 2 or 3. The rodent hair count has averaged much less than 1, with only one sample out of 15 or 20 showing 1 rodent hair fragment. In contrast, the FDA has recently announced its "Defect Action Levels" for insect fragments and rodent hairs in wheat flour products. This level for insect fragments is an average of 50 or more per 50 grams, and for rodent hairs, an average of 1.0 or more per 50 grams. This average is based upon the examinations of six 50-gram samples. The regulatory agencies sample and test six samples from any given lot, and the average result of these six must not exceed the DAL's.

#### No Microbiological Standards

There are no established microbiological standards for durum flours and semolina, however, the general regulation covering all food items require that they be free from any pathogenic organisms. This would include items such as salmonella. Semolina and durum flour are foods of organic origin. As such they are subject to spoilage the same as any other fresh food. The elements of time, temperature and moisture all come into play in determining how long semolina or flour will keep without going out of condition. Storage tests have shown that in as little as 30 days at 100 degrees F, reactions take place which affect the odor and physical appearance of semolina. The same samples when stored at -20 degrees F will keep indefinitely. Bulk storage also accelerates the rate of deterioration of durum flour and semolina, as opposed to storage in bags. As a general rule, we do not like to hold any wheat flour in bulk storage for a period longer than two weeks without turning it. Storage beyond this time can increase the chance of the product becoming infested. Keep in mind flour is a food and as such will spoil if not handled properly.

#### Bulk Handling

The bulk handling of flour and semolina has greatly increased the efficiency of moving it from mill to consumer. Bulk handling has also brought upon us some problems which we must recognize. The two most annoying problems are the separation of fine and

coarse material when pneumatically loading and unloading semolina and the problem of condensation forming inside of bulk cars, particularly during the late fall and early spring season. The new high speed (slush loading) has minimized these problems, however, to a certain extent they still do exist. The principal difficulty in particle size separation or stratification in bulk systems is in the difficulty obtaining an accurate sample of the product. If we could examine a cross section of a bulk car, we would notice layers of coarse material and fine material, although by the use of a probe we can transcend these various layers, we will at times still find it difficult to obtain a truly representative sample. However, if we recognize this situation and obtain re-samples when one obviously is out-of-line, proper identification of a lot can be obtained.

#### Prince Foods Introduces Nation's First Light Pasta

The Prince Foods Company of Lowell, Mass., one of the nation's largest pasta makers, is introducing New Prince Light Spaghetti and Elbow Macaroni into selected markets this spring. Prince Light Spaghetti, with one-third less calories than regular pasta, is the first light pasta to be introduced in America.

The testing and introduction of the product were handled in conjunction with Prince's advertising agency, Bennett Advertising, Inc. of New York. Bennett arranged early testing and consumer research which discovered broad acceptance and demand for the product.

Prince Light is expected to attract consumers who do not presently eat pasta due to its high calorie perception, and to increase consumption among current calorie-conscious pasta consumers. Prince Light Spaghetti's appeal to these two groups promises strong growth for the new brand.

The product is initially being sold out in 20% of the country backed by media at a \$2,500,000 national level, via a testimonial campaign featuring N.Y. Yankee pitcher, Dave Rignetti, who refers to Prince Light as "Rignetti's spaghetti."

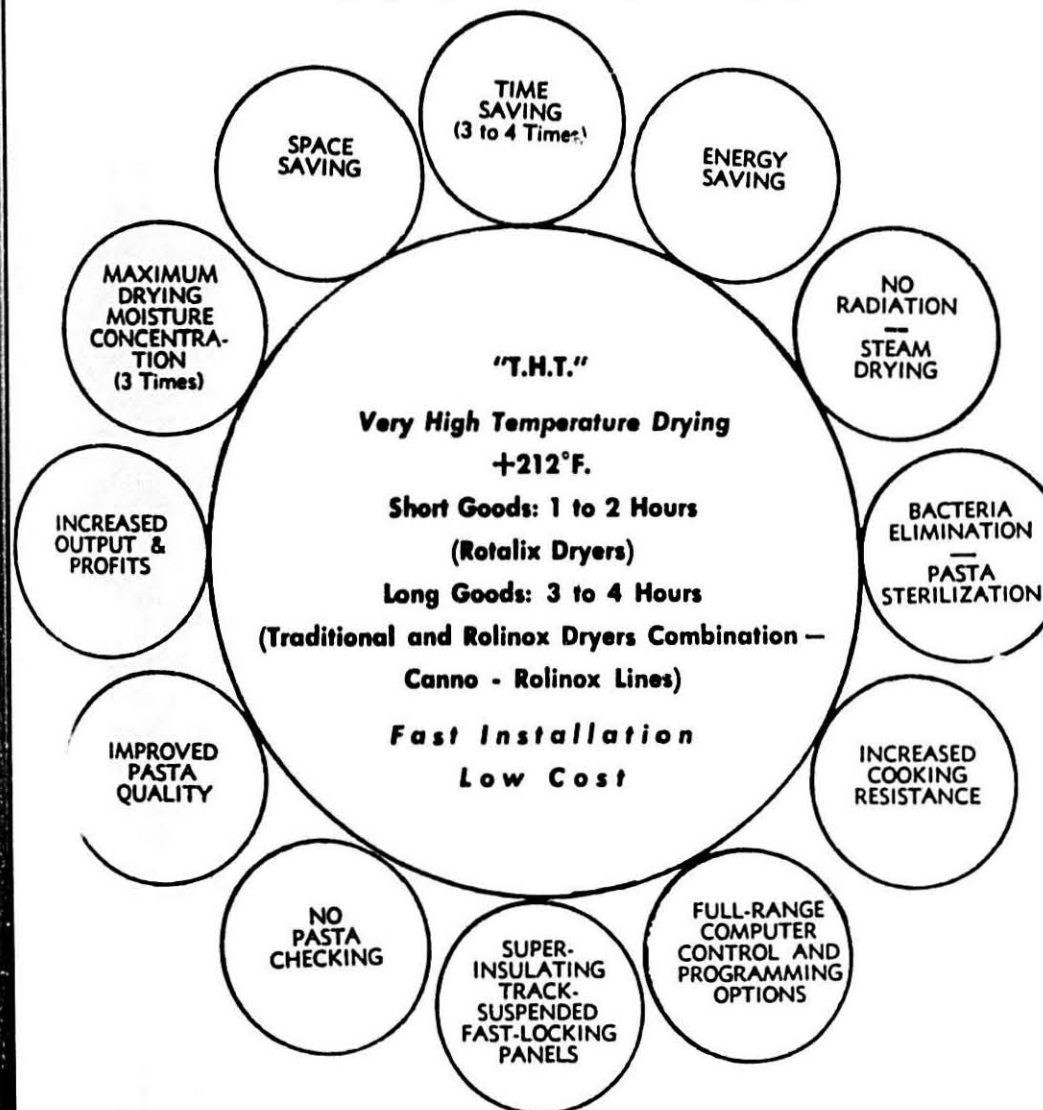
"Nutritive Values of Macaroni Spaghetti, and Egg Noodle Products": 12¢ each plus 25¢ postage and handling; \$10 per hundred plus freight.

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## FLOUR HANDLING AND BLENDING SYSTEMS FOR PASTA PRODUCTION

by Jim Cavender, AZO, Incorporated



Jim Cavender

When designing a flour handling system for a pasta plant we take five main areas into consideration which give us the basis for the system design:

### 1) The Storage Capacity Required:

The amount of flour stored in a system is dependent on many factors such as the system use rate, the proximity to the flour mill(s), and the amount of emergency reserve required, based on past experience.

By using these factors, the number of pounds of storage capacity for each type of flour can be determined. A method of keeping track of the flour inventory is also very important. There are three basic methods available:

a) **The use of multiple level indicators, each with its own light on the control panel:** By checking which lights are illuminated and knowing the location of this indicator, one can calculate the approximate number of cubic feet of flour at that point. The inaccuracy of the system is the distance between two level indicators. For example, a 12'  $\phi$  silo holds slightly more than 4,000 pounds of flour per linear foot of cylinder height. A 15'  $\phi$  silo, as used at Golden Grain, holds slightly more than 6,500 pounds per linear foot. Therefore, unless many level indicators are used, this method is not extremely accurate.

### b) Yo-Yo's and Ultrasonic Level Indicators:

Both of these types of units provide a digital readout in feet of product or percent full. We have found the ultrasonics to be more trouble-free for use on flour. The fine flour dust tends to cling to the cable used on a Yo-Yo which can get into the mechanism and cause maintenance problems. Ultrasonic units are used at Golden Grain with very good success. The units provide a digital readout in percent full and are fairly economical. The limitation of these devices, as well as the method mentioned in #1 above, is the conversion of this volumetric measure to pounds of product. The accuracy of this conversion is determined by the factor used as the bulk density of the material. Bulk density can vary greatly with the size of the silo due to compression, and varies with the different types of flour.

### c) Placing Silo on Load Cells:

This third method of measuring the flour in the silos is the most accurate, but is also the most expensive. It provides a digital readout in pounds of product. While this type of arrangement is best implemented when the silo is first installed, there are some alternative methods on the market which can be retrofitted into existing silos. The cost of this method depends on the accuracy desired, the size of the silos, and the use of the information received. The signal from the load cells can be used as high and low level indicators, it can send information to a central computer for inventory processing, it can provide a printed readout of the silo capacity at pre-determined intervals or upon operator demand, or it can simply provide a readout which can be observed and logged by the operator. There is an effect on the readout accuracy due to wind

or snow loading and sudden temperature variations. This effect can be eliminated by placing the silos indoors.

### 2) System Throughput and Number of Delivery Points:

Once the storage capacity has been determined, the next most important factor is the total throughput of the system. This is a function of the number of presses to be fed and the capacity of each press. With this information, the conveying rates for the press feed system can be determined. The rate is usually set 15-20% above the maximum use rate, depending on the total conveying distance. The longer the distance the greater the line clean-out time required between press changes, and therefore the lower the system throughput. Once the desired throughput is known and the conveying distance is established, the size of the conveying systems can be calculated which determines the line size, the blower horsepower and the filter area at the various points. An important consideration here, of course, is the possibility of future delivery points. This capacity should be included in the initial design of the system if additional points would be added in the foreseeable future. It is much less expensive to increase the size of a conveying system prior to the initial installation than it is to change at a later date. A future change can involve the change of blowers, conveying lines, diverter valves, filters and the associated electrical hardware.

### 3) System Sanitation:

The area of the sanitation of the system is probably one of the most important considerations in system design. This sanitation not only involves basic sanitary construction of the equipment itself, but the method of conveying and the location of sifting stations to insure no oversize trash gets into the product. While this area alone can be the basis for a separate discussion, the basics for the sanitation should be the following:

(Continued on page 13)

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## Flour Handling Systems

(Continued from page 10)

Clean interior design of all equipment with crevice-free interiors and a good FDA approved coating or stainless steel construction.

- b) Manways in all hoppers and bins so that access to the interior is easy to facilitate more frequent inspection and cleaning.
- c) Sifting the flour at more than one point to help insure that no oversize trash gets into the product. This is not only a sanitation concern, but also an equipment failure concern, as in the prevention of a nut or bolt from entering the press.

The best place to perform the first sifting operation is between the railcar and the storage silos. Sifting at this point prevents any trash that may be in the railcar from entering the system. The flour also should be sifted at the last point prior to entering the press. This can be accomplished by placing a sifter at the discharge of the press surge bin.

The type of conveying used is also an important factor in the dust-free nature of the total system. We use vacuum conveying wherever practical for several reasons. One of these reasons is the dust-free nature of vacuum conveying. Some of the other advantages of vacuum conveying will be discussed in more detail in the discussion of the Flour Blending System. Our basic rule in determining a conveying system is:

- a) Several pick-up points and one delivery point: Vacuum conveying is preferable.
- b) One pick-up point and several delivery points: Pressure conveying is preferable. If you have, in the case of a flour system at a pasta plant, several pick-up points; (the storage silos), and several delivery points, (the press bins), then a vacuum/pressure or pull-push system is highly advantageous. From a sanitation standpoint, this greatly reduces the dusting possibilities under the silos, and

in any other areas where the vacuum conveying is used.

- 4) **The Number of Different Flours to be Blended and the Approximate Percentages:** These are also very important in the design of the system. Generally, in pasta production there are three types of flour and regrind that can be used in various combinations. The systems are set up with a 0-100% capacity for regrind. This blending is accomplished through the use of variable speed rotary valves at the discharge of the storage silos and the regrind storage bins. These rotary valves feed a common vacuum conveying system which conveys the product to a vacuum receiver. The vacuum receiver discharges the flour into a pressure conveying system that feeds the various press surge bins.

This type of discharge system on the silo and the use of vacuum conveying is very critical. We use a fluidizing cone called a TURBO SEGMENT CONE for the silo discharge. This type of discharge uses much less height than alternative systems. This has the advantage of allowing a greater amount of storage with the same overall height, or the same storage capacity in a lower overall height. This is especially important with indoor installations, since it reduces the cost of the structure required to house the silos. For example, at Golden Grain each silo holds just over 9,000 cubic feet of flour. The alternate systems, using conventional air slide or vibrating discharge bottoms and a dual rotary valve arrangement, which is necessary when using a pressure conveying system to blend flours, held only 7,500 cubic feet per silo. This increased capacity, when multiplied by five silos, provided one additional silo of storage with the same or possibly less system cost.

This TURBO SEGMENT CONE is divided into four or five segments, depending on the size of the cone. Only one fluidizing blower is required for multiple silos. A series of valves at each cone channels the fluidizing air to one segment at a time. This sequential fluidizing provides total activation of the flour column and trouble-free discharge into the conveying system. This is especially

important when blending flours to insure that the rotary valves are running 100% full, and therefore the proportioning system can accurately blend the flours. This 100% filling of the rotary valve is only possible when the valve is feeding a vacuum conveying system. If pressure conveying is used to blend flours, a dual rotary valve assembly is required with one rotary valve at the discharge of the silo feeding a small hopper with vent socks, and a separate rotary valve at the discharge of this hopper feeding the conveying system. This is necessary due to leakage of the conveying air through the rotary valve, otherwise the rotary valve would run at varying efficiencies and the accuracy of blending would suffer. Remember that when using a pressure system, your highest pressure is at the pick-up point, and the system pressure decreases as you reach the delivery point. With a vacuum system, your highest pressure difference is at the delivery point and when the pick-up point are at almost atmospheric pressure.

Our control system allows the operator to dial in the percentage of the different flours he requires for each individual press. Once these percentages are entered, they are stored in the memory of the controller and will automatically set the speeds of the rotary valves to the proper speeds for the press that is calling for product. When the press fills, the rotary valves stop and the conveying system is allowed to purge before switching to the next press. After switching, the valves will start and run at the pre-set speeds to supply the formula dialed in for that particular press. A Tacometer at each rotary valve monitors the speed of the valves, and through the programmable controller, adjusts them constantly as the valve is running. With this system, you are able to obtain a 99+ percent consistency in the valve speed, thereby assuring a very accurate blending of the flours.

The holding capacity of the press bins is greatly determined by the amount of headroom available, the capacity of the press, the number of presses to be fed, and the capa-

(Continued on page 16)



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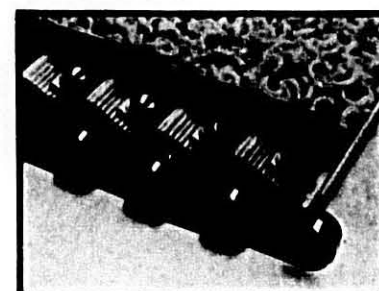
• High drying temperatures, in combination with ideal drying time, increase cooking quality of final product.

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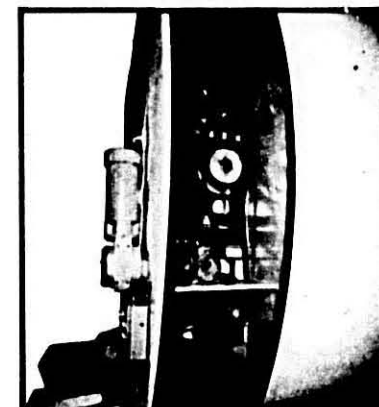
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JULY, 1982

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(Continued from page 13)

ing of the presses. The press bins at Golden Grain have a capacity of 10-12,000 pounds which seems to be a very workable amount. The discharge factor in the blending system. It is not desirable to use fluidizing as the discharge method at this point, since the fluidizing would tend to segregate the varying particle sizes and densities of products in the blend. Therefore, a rotary agitator, which not only provides trouble-free and consistent discharge of the bin, but also a slight mixing action at this discharge to further homogenize the blend. These units feed centrifugal sifters which further enhance the blending action and safety screen the product at the last point to entering the press. Level indicators in the spout between the sifter and the flour feeder on the press control the discharge of the press bin as the bin calls for product. This would require one operator at the console at almost all times, and while we do not recommend this, it is certainly an available alternative for use in a less automated facility.

We highly recommend the use of a graphic panel for the systems at particular facility. It is only through designed to meet the needs of the particular facility. A system that will provide an overall picture of the and years of trouble-free operation with important information system, but also provides the operator with important information.

Automation in a pasta plant can vary greatly, and the determining factor is the number of presses to be fed and the personnel available to make any operator changes. The system at Golden Grain is very automated. The operator dials in the formula for each press and the bin from which the various hours are to be pulled. Once this information is entered for each press, the system will automatically keep all of the press bins filled with the proper blend. The other sub-operation is entered for each press, the system will automatically keep all the bins filled with the proper blend. The other sub-operation is entered for each press, the system will automatically keep all the bins filled with the proper blend.

While this level of automation alternatives are available which would involve operator selection of a formula to fill each press bin, as the bin calls for product. This would require one operator at the console at almost all times, and while we do not recommend this, it is certainly an available alternative for use in a less automated facility.

(a) Consistent, trouble-free discharge of the silos  
(b) Silo pick-up using vacuum conveying to provide 100% filling of the rotary valves  
(c) A rotary agitator at a discharge of the press bin to further enhance the mixing  
(d) A sifter at the discharge of the press bin to safety screen the product and continue the mixing action

find that the first four points can be covered very quickly when setting up the parameters for system design. This fifth point usually begins the longest discussions since automation is becoming more and more important in the operation of the modern production facility. The advent of more sophisticated electronics makes higher and higher levels of automation easier and



Ralph A. Maldari

by Ralph A. Maldari, D. Maldari & Sons, Inc.

EXTRUSION DIES

In view of the many neophytes in the industry, it may be wise to review the history of Macaroni Dies in the United States. The first Macaroni Dies manufactured in this country were made of copper. Copper was selected as a standpoint of necessity because its physical properties bowed to its strength. With the advent of the Macaroni Die industry in the United States, there was a conspicuous absence of mechanized equipment. Dies were manufactured

(Continued on page 18)



AMBER MILLING DIVISION OF THE GRAIN TERMINAL ASSOCIATION

you to please all your busy customers. Speedy Amber delivery, smooth and durum flour that makes it easier for customers. We know you're busy about quality. So we're serious about pleasing our customers. We know you're busy about quality. So we're serious about pleasing our customers.

The cook with messy customers has to use her noodle.



## Extrusion Dies

(Continued from page 16)

entirely by primitive hand methods. The holes were hand punched through a maximum thickness of 1", and the outside diameter of the Die was obtained by chiseling the excess metal and filing. These manual methods of manufacture required a malleable material soft enough to yield to the great amount of hand-punching—and copper possessed this physical property.

The hand-punching methods were subsequently replaced by hand-driven drill presses in 1905, and two years later the power-driven drill presses and lathes were drafted into service.

With mechanization came the need for increased production by the Macaroni Manufacturers, obtained through the medium of greater pressures in extruders. Copper, with its property of malleability, was unable to withstand the greater pressures developed by the improved extruders. The problem, then, was to find a material which was not too difficult to machine yet strong enough to withstand the factors brought on by increased production, and this problem was resolved by the selection of a bronze alloy.

### Stainless Steel

Profit-minded manufacturers, however, demanded a still better material with a higher yield point to prevent bowing under the higher pressures—and #303 stainless steel was selected. Statistics disclosed that stainless steel was more wear resistant than bronze, but had the distinct disadvantage of a low coefficient of thermal conductivity. Thus, stainless steel will retain heat generated during operation and extrude a product with poor texture having a whitish appearance. To overcome this characteristic the stainless steel Die with bronze alloy or teflon inserts were developed. These materials were satisfactory until production output of extruders was steadily increased up to 4000 and 8000 pounds per hour. The problem of Die bowing was magnified by the fact that the European extruder manufacturers have no support under the Die during operation. This problem was solved by the discovery of #450 stainless steel with an approximate yield strength of 117,000 psi. With reference to Aluminum Bronze, we have been advised by the major mills that maximum yield strength for this alloy is in the area

of 40,000 to 45,000 psi which is roughly comparable to #303 stainless steel.

### Die Wear

One of our more serious concerns today is Die wear. Under normal circumstances we become conscious of Die wear through the warning medium of packaging—too heavy a product results in less volume per unit weight giving too much slack in packages. This applies predominantly to the solid and tubular products where gradual wear can seldom be detected by visual inspection of the product but must be determined by actual measurement. The fancy products generally give some indication of wear by a change in physical appearance. Sea Shells tend towards greater curvature, Mafalda towards a more pronounced wave, Rotini and Twists towards a tighter curl, etc, etc.

In Sea Shell production the flow of dough is at its maximum at the center of the Shell, making this point more susceptible to wear than the ends. As wear increases, the dough flows faster at the center thereby increasing curvature. Today by far the most common warning of wear in Shell Dies comes in the form of checking either during or after drying. This checking can be attributed directly to Die wear and can be eliminated by reducing the thickness of the Die outlet.

Wear in the wavy-type products, such as Mafalda and Rippled Lasagne, becomes physically evident by a more pronounced or closer-curved wave. A cross-section of this product should present a flat, noodle-type appearance. As you all undoubtedly know, the wave is the result of greater flow of dough on the ends of the slots in the Die, making these ends the points of greatest wear. An increase in wear is accompanied by an increase of flow of dough, resulting in a more pronounced wave. A cross-section of the product after wear is in evidence will disclose a flat noodle in the center and a spaghetti-like effect at the ends. This condition presents both drying and packaging problems and can be eliminated by proper Die maintenance.

The Rotini and Twists products present an analogous cross-sectional comparison to the Lasagne in that a cross-section of the product gives to wear is a noodle-type product, whereas after wear the ends (at the circum-

ference) develop a heavier spaghetti-like appearance which increases the flow of dough at these points resulting in a tighter curl or a greater degree of twisting.

Elbow-Macaroni wear is tricky since wear occurs at several points, and certain dimensional proportions must be maintained in order to obtain standard product curvature. Wear takes place at the outlet, at the pin tip, at the base of the notch, and in the case of brass pins at the pin stem between the notch and the tip of the pin.

Many of you have been plagued with product splits on short-cut products, and splits or weird distortions on long products. The cause, though not immediately detectable by visual inspection, can generally be traced to grit. In the case of splits, the grit lodges between the pin and the outlet (the grit being too large to be pushed out) and results in a definite split in the extruded product. In the case of the weird distortions of long tubular products, the grit is forced through the Die but in the process forces the pin to one side. Thus off-center pins—directly attributable to grit—is the basic cause.

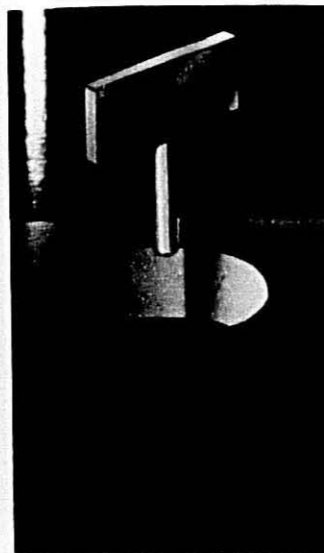
A rather mystifying condition is presented by uneven wall thickness extrusions of short cut products where grit definitely does not enter the picture. When proper and standard operational procedures are not carefully adhered to, the Die yields during production. This bending follows an elliptical pattern tending to distort the outlets, with the results the concentricity of pin and outlet is disturbed. The effect of this condition is uneven wall extrusions.

In these days of high volume extrusions, a major complaint appears to be wear versus number of hours production. Number of hours run can no longer be used as a yardstick for wear. We must today base our statistics on tonnage pushed through the Die, which will give us a more realistic basis for rate of wear.

### Specifications

In drawing up the specification for a new Die and/or product, we must go through a regular process of calculations taking into consideration all pertinent factors which may possibly affect the final product.

Our first decision is the selection of the material to be used. This selection is dependent upon the product itself, method of packaging, product



PIN IN POSITION



DOUGH BEING FORCED THROUGH DIE

MACARONI

appearance desired, and the rate of production. The intelligent selection of the most suitable material for a given application is highly important and often difficult, for many factors must be considered and balanced.

In keeping with today's technological improvements and high volume production, our basic material must be strong enough to stand up under a design which will provide for maximum output. This usually means more outlets per Die. We are intensely interested in the over-all physical properties of the metal, with machinability a primary factor. Applicable general properties will include resistance to corrosion, frictional resistance to the flow of dough, and wearability.

Let us take an illustrative example and go through the series of steps required in drawing up the specification of a spaghetti Die. One procedure in common practice today is to submit samples with the order. The samples are carefully measured, several measurements being taken over the entire length of the strand. This practice is very important, for the measurements at different points on a single strand will vary. Such variations may be moisture content of the mixture, stretching during extrusion, drying, and condition of the Die outlet. We are assuming, incidentally, that our files reveal no record of such a Die being manufactured for this particular cus-

tomers in the past. From these measurements an average figure is computed, which represents our basic figure for the dry product.

### Dehydration - Outlets

Our next step—and a truly important one—will be to determine the dehydration, or shrinkage, factor for the product. This factor must of necessity be based upon past experience and performance, for it varies with each manufacturer. It thus becomes a variable factor dependent upon the method of production used and outlet material decided upon. For example, the use of teflon will necessitate a higher shrinkage factor over metal. We add this factor to our basic sample size and arrive at our final outlet size.

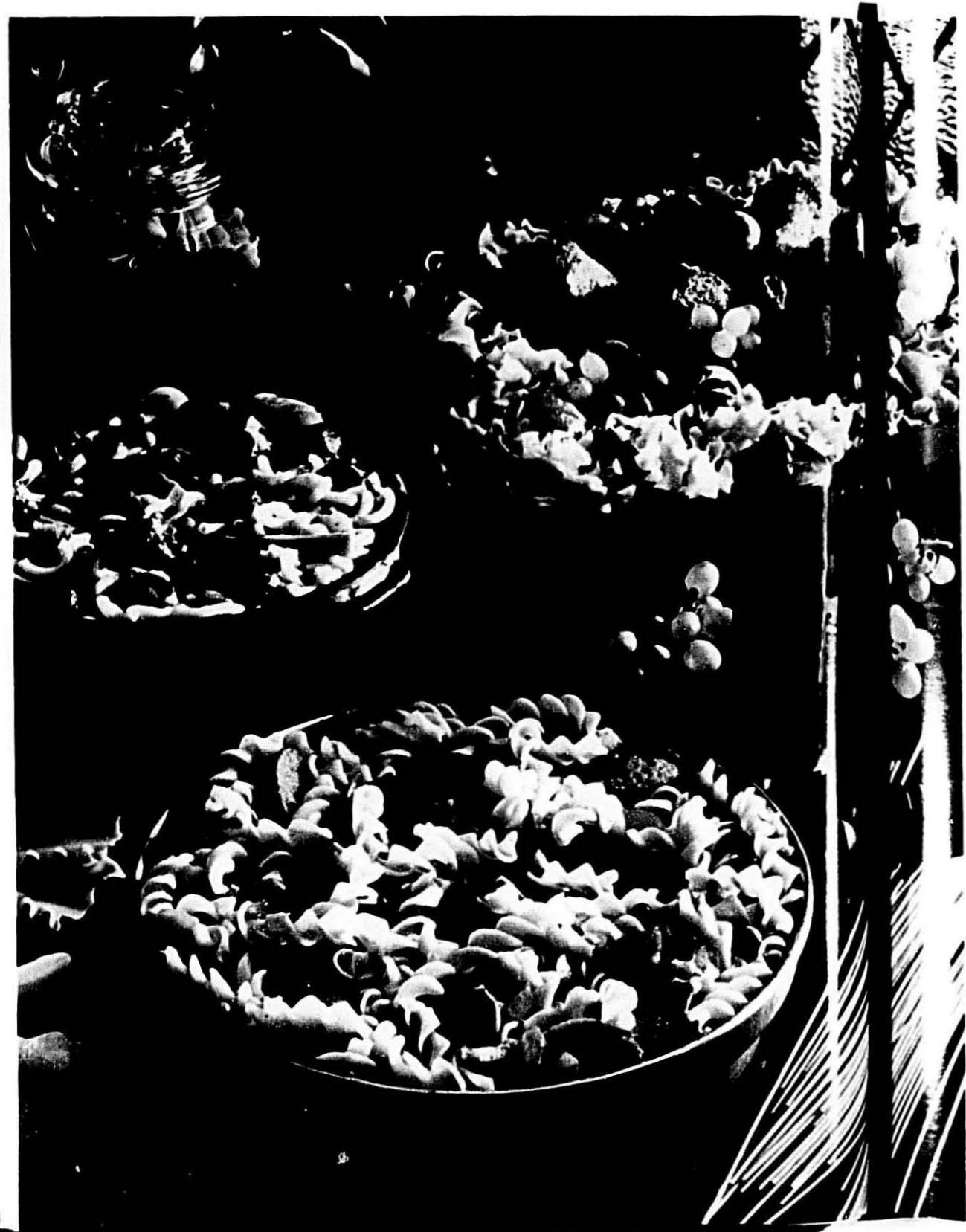
Our next calculation, which often presents a problem, is the determination of the number of outlets per Die. We find ourselves in a peculiar and sometimes embarrassing position on this point, for we have the extruder manufacturer on the one hand who has already set the rate of production for his press and who wants the Die manufactured with as many outlets as possible, and the macaroni manufacturer on the other hand who expects a perfect product from his Die. What are our problems? If the Die is designed with too many outlets we may be faced with the following possibilities:

1. The Die may be too weak, reach its yield point, and bend under pressure.
2. The dough may not have the opportunity to properly amalgamate prior to extrusion, which may result in a weak, low density product.
3. The press operator may feel that the extension rate is too great and make his mixture a little harder with subsequent damage to the Die.
4. We may get too much overlap on the sticks and consequently encounter difficulty in drying.

If the Die is designed with too few holes, we may get far too much back pressure with possible damage to either or both the Die and the press. In addition, our volume of production will be curtailed. In this respect collaboration with the macaroni manufacturer is essential in order that his requirements may be satisfied.

The Die with a pin presents additional problems, for we have wall thickness to consider. We have shrinkage both on the outside diameter and the inside diameter. The shrinkage factor is greater for the outside diameter than for the inside diameter, and extreme care must be exercised in drawing up the specifications, for his particular characteristic must be given close attention. Should we miscalculate

(Continued on page 22)



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## Extrusion Dies

(Continued from page 19)

late, then our wall thickness will be either too heavy or too thin with subsequent difficulty in drying, packaging, and cooking.

### Repairs & Reconditioning

We must next decide just how often Dies should be returned for repair and reconditioning. Every three months? Every six months? The answer is dependent upon a number of production and handling factors. A Die in continuous production must of necessity be repaired more often than a Die in limited production. The responsibility of setting tolerances for the product sizes rests with the manufacturer. Once these tolerances for the various products have been set, it will be an easy task to determine wear on the Die and return it for repairs. This task may be facilitated by the use of gages within the specified tolerances on the Die, or by enlisting the aid of quality control on the product. In view of the many variable factors which influence final product size, it may be beneficial to work out some program involving Die wear, though it most certainly will be more practical to work on product tolerances—which may result in a colossal headache.

Let us not be under the mistaken impression that all difficulties are the result of Die wear. This is not so, for improper maintenance will result in serious problems. For example, a Die not properly cleaned will have a thin crust of dough left on the outlet. This will affect both product size and appearance.

Pressures may have a decided effect on the extruded product. One problem which has gained prominence is the Noodle with a slight twist. A Die extruding 1000 pounds per hour manufactured to identical specifications as a Die extruding 3000 pounds per hour will not give the same twist as the latter Die as a result of different extruding pressures. The twist will be in direct proportion to pressure. Similarly, pressure may affect the wall thickness of the product. We find the same things apply to all products which curve or twist, such as Elbows, Rotini, Sea Shell, etc., etc.

On the subject of insert replacement: Inserts are manufactured in two ways

—the independently interchangeable insert which is completely finished outside the Die, and the insert that is finished in the Die itself. The former category includes inserts such as teflonized Noodles, Spaghetti in clusters, Rotini, Sea Shell, etc. We very strongly recommend that Dies be returned for replacement of all inserts because the chambers of the Die may be distorted making installation difficult. Forcing the insert in the Die may close the outlets or possibly distort the insert. If the insert does not fit properly we may get dough leakage which invariably changes the outlet specifications. If the insert protrudes slightly we get knife breakage. If the insert is recessed, then we will get a poor product cut. Should the Die be bowed or bent, we may encounter any of the above difficulties. The extruding surface of the Die may be damaged by the knife or during handling, and this condition must be corrected.

With reference to the insert which must be finished in the Die, in many instances this type insert may be used to obtain a greater number of outlets in the Die.

In conclusion, we have just scratched the surface on the subject of Dies. Each Die is customized to strict customer specifications, and problems peculiar to individualized operations and conditions are given close scrutiny. We welcome your questions, your advice, and your suggestions. We extend our cooperation and help to the full extent of our knowledge, manufacturing skills, and facilities.

### DPSC to Require Bar Code Markings

Bar code markings will be required by the Defense Personnel Support Center (DPSC) starting in July on all shipping containers and selected documentation for all subsistence items except brand name resale and chilled or freeze perishable items.

Navy Captain James E. Miller, director of subsistence for DPSC, said the 3-of-9 machine readable bar code symbology will be required in addition to the standard military markings currently called for.

The bar code markings for the national stock number of the contract number will be required on all shipping containers, and may be applied

by means of labels, Miller said. The 3-of-9 code, in addition to being machine readable, can be visually interpreted.

The new marking requirement is an implementation of the Department of Defense's Logistics Application of Automated Marking and Reading Symbols (LOGMARS) program. The use of machine-readable bar coding on shipping containers will expedite the handling of the items and reduce costs by eliminating paperwork involved in receipt, inventory control and shipping.

In addition, bar code markings also will help DPSC manage the items more efficiently. When shipments are received at defense depots, they will be machine scanned and the information fed directly into the depot's computers, making it immediately accessible to DPSC's computers.

Use of the new marking system will enable inventory managers to have more timely information concerning the items they manage, as well as, provide an expeditious and cost savings system for the selection and shipping of supplies at the depot level.

### Documents Available

Detailed requirements for this new marking system, including size, density, contrast, and code pattern are incorporated in MIL-STD-1189, Standard Symbology for Marking Unit Packs, Outer Containers, and Selected Documents, and in Change 3 to MIL-STD-129H, Marking for Shipmen and Storage. These documents may be obtained from the Naval Publications and Forms Center, 5801 Tabor Avenue, Philadelphia, Pa. 19120, by calling (215) 697-3321.

Contractors wishing more information may call Tom Frank (215) 652-2977, or may write the Defense Personnel Support Center, ATTN: DSC-STS, 2800 South 20th Street, Philadelphia, Pa. 19101.

DPSC buys and manages approximately 1,623 subsistence type items, including rations, for the military services and other federal agencies under a worldwide storage and distribution program. In Fiscal Year 1981 the center purchased more than \$1.4 billion worth of subsistence items.

DPSC purchases elbow macaroni, spaghetti, egg noodles, and lasagne for the military.

### Processor-Broker Relationships

NFA Executive Vice President Charles F. Haywood advised the Ozark Food Processors Association today that the industry must avoid looking for "the quick fix or the short term solution rather than improving on the basic sound principle of processor-broker relations which have been established for years."

Unfortunately," Mr. Haywood continued, "too often a relationship has existed for years between the processor and the brokers and the new people on the scene do not know the reasons that have made it special and successful."

Mr. Haywood spoke to the Ozark Food Processors Association at their meeting at the Fayetteville Hilton in Fayetteville, Arkansas. His talk highlighted responses he received from an informal survey of NFBA members on how they felt relationships with processors could be more effective.

### Tips for Processors

He passed along the following points to the processors:

— "... real motivation comes from the involvement process that allows the broker to become a part of his (the processor's) business team."

— "If he (the processor) is not willing to get involved with his brokers and to understand the responsibilities and motivating factors involved, he cannot get the same results as the principal who really tries to understand and work with his individual broker operation."

— "The processor we represent most successfully are those who believe in dialogue as opposed to monologue... where principals allow us to represent things we do an excellent job. The reason being that we have a very strong motivation to do so."

Mr. Haywood also reported to the Ozark processors that brokers feel they work best as an integral part of the processor's organization. Attainable goals should be jointly set, and attainment should be rewarded. By and large, according to the NFBA executive, brokers would far prefer rewards in the form of bonus incentives, rather than trips or premiums.

Mr. Haywood also reported that brokers state their motivation is self-generated "because we don't make a buck until we sell something." This ties in with the practice of some private label manufacturers of holding major volume customers as house accounts, offering the broker participation in the smaller volume accounts. "As a result, the broker recognizes the limited potential, and will fail to devote the energies and efforts towards building a business in an area where he feels his future income will be limited," he told the Ozark processors on behalf of NFBA members.

Other points passed on by Mr. Haywood included more flexibility on the part of the manufacturers, more attention to local market conditions, more product information the brokers can use for selling, and closer communication between brokers and processors.

### Wholesale Grocers' Convention

Steve Weinstein, Supermarket News columnist, reports: "The future is bright for wholesalers — and ostensibly for retailers as well. In his traditional talk as chairman, Ted Wetterau predicted good times would come soon, borne on the wings of a recovery by the economy and a technological revolution."

Prefacing a thought-provoking, hard-hitting talk, Super Valu's Jack Crocker said the future of grocery wholesaling is as bright as, or brighter than, ever before.

But many — including some of the optimists — have great doubts about the here and now. And Crocker, while optimistic in general, implied that the bright future might be in a somewhat different form than the way business is being done today, and some of those firms now operating might not be around to share that future.

Although he expressed great faith that the natural forces of the free-enterprise system would prevail and lead to efficiencies in general, and benefits for the consumer. Crocker warned that capitalism does not bring with it a free ride to riches. Rather he referred to it as "a cruel, self-cleaning system that will weed out the weak and benefit the strong."

Wetterau, in paraphrasing the introduction to Charles Dickens' *A Tale of Two Cities*, conceded that while the best of times might be forthcoming for wholesalers, the present, in many respects, constitutes the worst of times. The problems today, he said, include economic uncertainty, "disinflation," energy costs and expensive money.

One problem, everyone agrees, is that of economic conditions, coupled with an expectation that the cost of money this year will stay high.

### Money Squeeze Hurts

The money squeeze really is hurting wholesalers. Panelists at an Executive Roundtable workshop made such statements as: "Every retail account wants more; if we do everything they want, we will go broke," and "we prided ourselves that we could offer more than chains or co-ops. We will have to look at it differently."

What they are looking at includes: changing the fee structure; cutting down on some services and sharing others; offering fewer products, and being tougher on employees who do not perform.

Ed Walzer reported survey results concluding that while most executives feel Reaganomics will do the job, virtually none expect any real growth in the short term and, for many, a superior performance this year equates with not losing any ground.

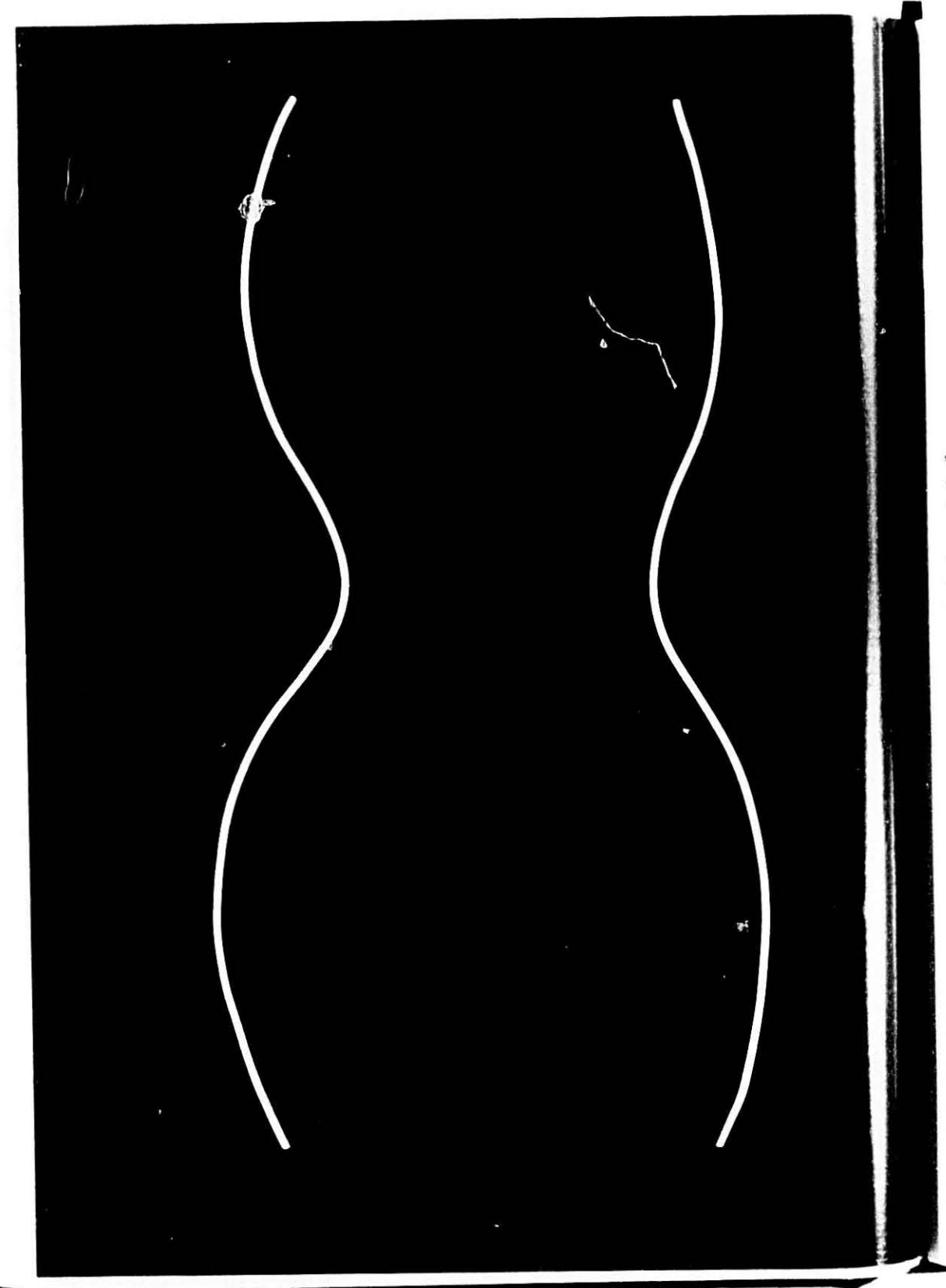
The strong, well-managed retailers and wholesalers continue to do well, but even some of them are having problems. And it's agreed that the weak are getting weaker.

### Wave of Industry Mergers

One result has been the great wave of industry mergers in recent months, which obviously has not yet crested. Walzer's statistics show that 70% of executives polled expect "a flurry" of mergers and acquisitions this year.

Some of the firms that are potential merger partners are in good shape and are amenable to sell for other reasons. But many are in trouble because of the economy. And for the buyers, acquisitions of a viable company can be a more economical way to expand into a new operating area than doing so from scratch with the high cost of acquiring capital.

(Continued on page 26)



# Pasta draws a fine line

Most everything about pasta is positive.

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Pastas – let's tell it like it is.

**ADM**

ADM also supplies quality shortening, corn sweeteners, oil, soy proteins, dough conditioners and vital wheat gluten for the pasta and baking industries.

## Wholesale Grocers

(Continued from page 23)

The general feeling of uncertainty pervading the industry has affected manufacturers as well. "Our credit department has never been so nervous," one supplier executive said.

More than ever before then, the stress is on good management and intelligent use of capital if most companies are to prosper and if some are to survive.

## Emphasize Value

As changing demographics, the economy and other key factors affect the way consumers plan, shop for, prepare and serve their meals, it has become increasingly important for retailers to emphasize value, said a speaker at the Food Marketing Institute's advertising/marketing executive conference recently.

Marion Plunkett, vice president and director of research for Ogilvy & Mather in Canada, also described how her advertising agency had taken advantage of Dominion Stores' reputation in planning an ad campaign for the chain.

Jennifer Stewart, senior vice president and director of research for Ogilvy & Mather in New York, outlined general issues food marketers will face in the '80s. Herbert Zeltner, president of Herbert Zeltner Marketing, Bedford, N.Y., discussed the impact of cable television on advertising.

## What Affects Shopping Habits

Plunkett said key trends affecting shopping patterns include changing demographic patterns, such as smaller families; economic pressure, "which means everyone wants to save money"; information overload, caused by numerous food publications, including those in the health and gourmet fields, and the changing home environment. There are more working wives, Plunkett noted, and more men are becoming involved in food preparation.

These and other factors, she said, are making value more important and a concept retailers should reinforce. She suggested this could be done by "maximizing" in-store promotional activity, providing more information on specials, emphasizing coupons, insuring that generics provide a value, simplifying labels and "spending more time

and attention providing a more pleasant atmosphere," among other methods.

Plunkett also talked about her company's work with Dominion Stores. The chain's long-standing slogan, Mainly Because of the Meat, had helped give it a strong meat image. The agency wanted to capitalize on this image, she said, but at the same time expand it to other aspects of the operation. It came up with a new slogan, You'll love Us For More Than Our Meat, which was used in TV advertising and also adapted for newspaper ads to promote gift certificates and other special programs.

Stewart said that where in the 1950s-1970s, power in the marketplace flowed from the food advertiser down to the consumer, this has now become reversed, with power stemming from the consumer. The consumer today, she said, feels more competent about making decisions. Another change, she said, has been a move from a pragmatic approach to eating to treating it as an event and a status symbol. At the same time, people are moving away from being conformists to becoming individualistic and venturesome in their eating habits. Once-predictable shopping, she said also, has become ad/hoc and opportunistic.

Zeltner noted the eventual result of the proliferation of cable TV stations is still unpredictable. Among its advertising implications, however, is the opportunity it gives retailers for low-cost, localized advertising. Another important factor, he said, is its lack of restriction on commercial lengths. It is a more versatile, more complex media choice, he said. Among problems still to be worked out with cable, he said however, is its spotty geographical coverage, financial complexities involving under-capitalized companies that are in the field, programming problems, copyright uncertainties and audience research difficulties.

The outlook for TV overall, he said, includes the continued evolution of revolutionary forms such as cable; continuing network share declines and increased localization for "narrowcasting." A new, strategic role for broadcast advertising may be on the horizon, he said, as opposed to the "primitive, blockbuster effort" it has been until now.

## Coupons Criticized

The president of Jewel Food Stores criticized manufacturers' use of coupons, refund offers and co-op funds in a speech before the Promotion Marketing Association of America.

James H. Henson said brand manufacturers should adopt a "generic mentality" and justify every penny spent on "noningredient costs" such as coupons, while insuring these costs represent value for the consumer. He added that manufacturers who do not heed the warning would produce an even greater "umbrella" under which generics would continue to grow.

## Customer's Demand Choices

"Jewel really has no stake in preserving generics. But we are committed to offering the choices our customers demand."

But he quickly added that it would be presumptuous for the chain to question the manufacturers' marketing strategy. "We only challenge them based on the effectiveness we see in our market," he said.

Henson listed four "sacred" noningredient costs that should be challenged.

—The manufacturer coupons is an expensive tool that creates little store display activity and is difficult to police for proper handling. Henson contended. "Except for special purposes, it is difficult for us to understand why coupons are so popular.

## Refund Offers Relation

—"It is my opinion that refund offers relate so little to product function or product characteristics that it would seem to be an excellent example of inefficient marketing costs. Yet, I agree with the idea that your dollars are spent in directing product straight to the consumer. I suppose my greatest disagreement is with the high administrative cost of refund promotions."

—Although he said he appreciates what is described by some reps as "flexibility" in the use of cooperative dollars. Henson said "some of the expectations from those funds are so loose they have to assume the manufacturer has no plans to deliver direct value to the customer with the money spent. It appears to be a method of refunding dollars or value to the consumer."

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## Quarterly Durum Report

The U.S. Department of Agriculture reports durum stocks up sharply, prices fell.

### Planting Intentions

The Crop Reporting Board on February 1, 1982 reported that farmers intend to seed 4.66 million acres of durum wheat in 1982, 21 percent less than last year's 5.88 million acres and 16 percent less than the 1980 seeded acreage. Decreases in acreage from last year indicated in all States. North Dakota's seeded acreage is down 17 percent from the acreage planted in 1981. According to the North Dakota Crop and Livestock Reporting Service, fieldwork by the end of April was in full swing as warm windy conditions promoted field drying. Durum plantings were about 10 days behind the average pace with 11 percent of the acreage planted compared to 39 percent a year ago.

### Stocks

Durum wheat stored on all positions on April 1, 1982 totaled 132 million bushels (3.60 million metric tons), 59 percent more than last year's 83.3 million bushels (2.27 million metric tons). Farm holdings of 106 million bushels (2.88 million metric tons) were 76 percent greater than last year's 60.6 million bushels (1.63 million metric tons). This year's farm stocks accounted for 80 percent of the total durum stocks compared with 72 percent a year ago. Off-farm stocks of 26.7 million bushels (725 thousand metric tons) were 14 percent more than last year's 23.3 million bushels (634 thousand metric tons). Disappearance during the January-March 1982 quarter totaled 20.1 million bushels (546 thousand metric tons) compared with 20.2 million bushels or 549 thousand metric ton disappearance during the same period a year ago.

### Exports

U.S. exports of durum wheat during the June-March period totaled 1.7 million metric tons, an increase of 497.4 thousand metric tons in comparison with the previous year's figure of 1.2 million metric tons. Algeria, zuela imported a total of 1.3 million metric tons. Exports of durum wheat out of Duluth/Superior since the opening, Netherlands, Tunisia and Vene-

## DURUM WHEAT: PROSPECTIVE PLANTINGS, FEBRUARY, 1982

State	Area Planted			
	1980	1981	Indicated 1982	1982/81
		1,000 Acres	Percent	
Minnesota	140	140	76	5
Montana	470	490	350	7
North Dakota	4,400	4,600	3,800	8
South Dakota	250	260	230	8
Arizona	160	216	110	51
California	105	170	95	56
United States	5,325	5,676	4,661	79.3

ing of the shipping season through May 7, 1982 totaled 6.1 million bushels in comparison with 7.8 million one year ago, a decrease of 1.7 million.

### Canadian Situation

Canadian durum wheat acreage cut 200,000 acres. According to Canadian Statistics, based on March 15 findings, Canadian farmers plan to decrease durum wheat plantings by 5.2 percent and if acreage intentions are carried out prairie farmers will plant 3,650,000 acres compared to 3,850,000 grown in 1981. The visible supply of Canadian durum wheat in licensed storage and in transit on April 28, 1982 amounted to 824.8 thousand metric tons, 103.8 thousand greater than last year. Canadian exports of durum wheat in the June-March 1981-1982 period amounted to 1.9 million metric tons compared with 1.7 million one year ago. Algeria, Italy and the U.S.S.R. were the largest importers taking a total of 1.7 million metric tons. Algeria signed a trade agreement with Canada to increase imports of Canadian durum wheat by 50 percent over the next three years.

### Planting Progress

Though cool and wet weather delayed the start of planting in North Dakota, warm and sunny conditions facilitated rapid progress. Moisture conditions were much better than in recent years. Topsoil moisture was adequate in 95% of the state, surplus in 5%, while subsoil reserves were 89% adequate and 11% short. A year ago, topsoil and subsoil moisture was 60% short statewide, and two years ago drought conditions prevailed.

### Durum in Greece

An 8% increase in the acreage in Greece planted to durum wheat was

noted by the Foreign Agricultural Service of U.S.D.A. The rise was attributed to European Community policies that are aimed at spurring durum production, as compared to soft wheat. Greece's soft wheat acreage has been reduced about 3%.

The F.A.S. also said that it is possible that Greece's barley acreage, for both winter and spring varieties, will be reduced for the 1982 crop, due in large part to shifts to durum wheat seedings.

### Jim Feeney Elected Chairman of Millers National Federation

Coming to the Federation's chairmanship at a time of major change in the character and even goals of the organization, at a time when flour milling is experiencing a high degree of turmoil, as well as domestic growth, and when the national and international economy are under stress, James J. Feeney is described by his peers as "highly qualified to take over the post."

### From General Mills

As vice-president and general manager of the Sperry Division of General Mills, Inc., Minneapolis. Mr. Feeney heads one of the largest specialty flour milling operations in the nation.

His experience at General Mills should be particularly valuable, since that company, once dominated by its flour milling operations, is now steadily diversified into a number of areas that might appear to relegate flour milling to a much less important position than was the case during the two years when the late Gerald S. Kennedy headed the Federation 26 years ago or when Mr. Feeney joined the company 34 years ago.

(Continued on page 30)

THE MACARONI JOURNAL

# ASEECO

## BUCKET ELEVATOR

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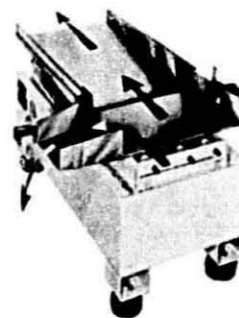


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### Jim Feeney Elected

(Continued from page 28)

Besides the eight flour mills scattered across the country, the Sperry Division has two food service plants, at St. Charles, Ill., and Lodi, Calif. These plants produce a broad line of flour mixes specially formulated for the institutional trade (different from the company's consumer mixes but drawing on grocery products research capabilities), sauces, puddings, potato products, and breakfast cereals.

Just as the Sperry Division serves as a "base of equity" for General Mills, it is Mr. Feeney's opinion that the Wheat Flour Institute has the same relationship to milling. This opinion not only reflects his status as the newly-elected chairman of the Federation, but also as a former chairman of the M.N.F.'s Wheat Flour Institute Committee.

From Mr. Feeney's point of view, the Federation actually has a "new charter" to focus its programs on membership services, technical matters and on assisting with specific governmental actions of importance to the industry. For the Wheat Flour Institute, that "new charter" focuses on positioning of the milling industry, not on public relations aimed at improving end-user appreciation for wheat flour foods, as has been the case in the past. "One of our most important tasks will be to position milling as an important part of the national economy," he noted.

### Millers Refocus Activities

Membership dues of Millers' National Federation were reduced by 40% for fiscal 1983 and commensurate reductions were made in the year's operating budget as part of a basic refocusing of Federation objectives and activities at the meeting of the board of directors in Palm Beach on April 21. The reduced budget reflects a change toward a more narrowly-focused Federation, with emphasis on maintaining a recognized presence in specific areas targeted solely to milling.

The 1983 budget for the year that began April 1, 1982, reflects expected income of \$626,575 and total expenses of \$591,520. Actual expenditures in the past year amounted to \$839,992.

### Wheat Flour Institute

A scaling-down in activities of the Wheat Flour Institute is the principal

budget-reducing development for fiscal 1983. Howard S. Holmes of Chelsea Milling Co., Chelsea, Mich., chairman of the Federation's W.F.I. Committee, presented its recommendations to the board. For 1982-83, the sum of \$62,825 is budgeted for W.F.I. and this is down from \$220,000 for 1981-82, which marked the start of a transition period as the Wheat Industry Council prepared to inaugurate its promotional efforts. The W.F.I. budget for two years ago was \$300,000.

Included in the W.F.I. budget for fiscal 1983 are funds to phase out existing programs, including Bread Fair fulfillments. That program is expected to become self-sustaining as operated by Sandra Day Enterprises. Also included are final production costs on a cake flour film strip, now near completion. No Sandwich Contest is planned. The budget for W.F.I. includes \$15,000 as available for expense as necessary, or for response to any problems arising.

### Leaner Staff

Further budget reductions reflect plans for a "leaner staff" in the coming year and combinations of job descriptions are under way. Recent resignations from the staff were those of Alison M. Heath, director of agricultural relations and export activities, and Lucien D. Agniel Jr., director of technical activities.

The Federation dues rate for fiscal 1983 is \$0.0022 per cwt of flour production in the previous quarter, down from \$0.0037 in 1982 and for a number of years prior to that. The dues rate on durum and rye mills is unchanged at \$0.0009 per cwt.

Robert M. Howard of International Multifoods Corp., Minneapolis, chairman of the Federation's Finance Committee, presented the budget and dues recommendations to the directors.

### A D M Third Quarter

Net income of Archer Daniels Midland Co. in the third quarter ended March 31 was below the comparable period a year ago.

Net earnings for the quarter totaled \$27,684,000, equal to 38¢ per share on the common stock, based on average shares of 72,593,000 shares. Net income in the third quarter a year ago was \$51,556,000, or 75¢ a share, on 69,087,000 shares outstanding.

The effect of commodity price decreases on last-in, first-out inventory valuations increased net earnings by \$39 million, or 54¢ a share, in the first nine months. In the nine months ended March 31, 1981, the effect of commodity price increases on LIFO inventory valuations reduced net earnings by \$38 million, or 58¢ per share.

### Peavey Announces Third Quarter, Nine Month Earnings

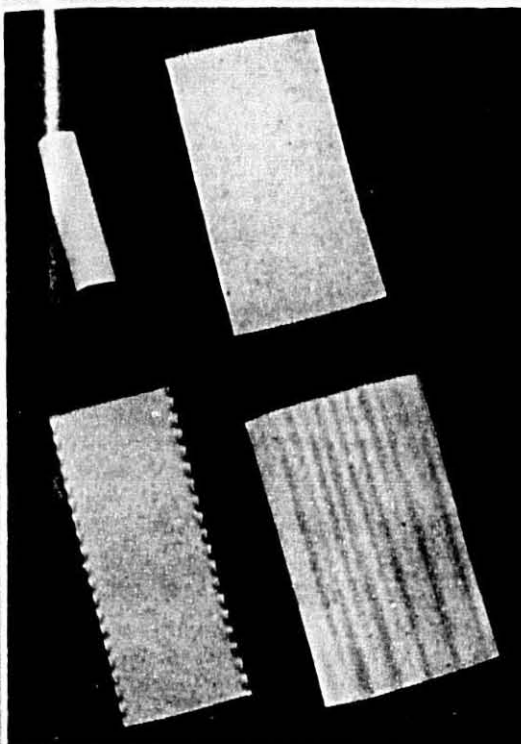
Peavey Company announced net earnings for the third quarter ended April 30, 1982 of \$1,729,000 or 28 cents per share on sales of \$178,579,000. This compares with net earnings of \$4,505,000 or 79 cents per share on sales of \$204,262,000 for the same period a year ago.

Net earnings for the nine months ended April 30 were \$10,349,000 or \$1.77 per share on sales of \$568,808,000. This compares with net earnings of \$17,676,000 or \$3.15 per share on sales of \$626,888,000 for the first nine months a year ago.

Peavey Chairman and Chief Executive Officer William G. Stocks said: "Agricultural and Food Group earnings declined substantially. Grain and flour volume for the third quarter and nine months was about equal to a year ago, but margins were sharply lower as extremely competitive conditions in grain merchandising and flour milling continued." Last year's Food Group earnings for both periods reflected a gain on the sale of the Brownberry Division.

Retail Group sales and earnings were up for the quarter and nine months, though last year's earnings were reduced by a loss relating to the disposition of U.S. Floor Systems, Inc. Fabric store sales and earnings improved for the quarter and nine months. Farm store earnings improved slightly for both periods in spite of poor farm economies in both the U.S. and Canada. Building Supply results continued to deteriorate due to depressed conditions in the building industry.

"Without improvement in our current operating environments, the pattern of lower earnings seem in our first nine months will probably continue for the fourth quarter," Stocks said.



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### Ten Companies Predominate On the Italian Market

In the last 50 years, the making of pastas has passed from the level of cottage industry to the status of medium — as well as large-scale industrial production.

At the end of World War I, 600 companies were engaged in making pastas on an important level. Today, there are about 300. Of those, 10 account for about half of total production. Eighty percent of annual output is due to the top 40 producers. The remaining 20 percent is divided among small companies and virtually shop-type producers.

The top 10 pasta-makers and their percentages of production are as follows:

Firm	Headquarters	Type of Production	Percentage (National output = 100%)
Barilla	Parma	Milling and manufacture	17%
Buitoni	Perugia	Manufacture	6%
Amato	Salerno	Milling and manufacture	5%
Agnesi	Imperia	Milling and manufacture	4%
De Cecco	Fara San Martino	Manufacture	3.5%
Ponte	Ponte San Giovanni	Milling and manufacture	3%
Voiglio	Naples	Manufacture	2.5%
Federici	Terni	Manufacture	1.5%
Spiga d'Oro	Perugia	Milling and manufacture	1.5%
Pezzullo	Salerno	Milling and manufacture	1%
<b>Total of the 10 top producers</b>			<b>45%</b>

### Italian Pasta

Paolo Antolini writes in the publication: "Italian Wines & Spirits" that Italy is clearly the world's leader in the manufacture of pasta.

Italians consume 25 kilos of pasta per person per year. Americans manage to eat about 5 kilos each, while the French do a bit better, putting away 6.5 kilos per capita a year. Pasta exports toward the commercially emerging countries represent a major factor in Italian trade.

It is not often realized that a basic equilibrium has been achieved between Italian production of hard-grained wheats and the large quantities of pasta consumed within the country. The fact that Italy each year imports a certain quantity of hard wheat is due primarily to two factors. Some grains are required for the intensive manufacture of specialized products. These

Pasta Production and Consumption				
	France	W. Germany	Nether.	U.K.
Number of makers (production capacity exceeding 1 ton a day)	20	30	4	7
Workers involved	2,722	2,040	275	500
Production in tons	291,300	210,300	32,000	4,110
Exports in tons	15,569	10,032	2,350	1,268
- Within EEC	9,543	4,510	646	389
- Other countries	8,027	5,522	1,684	879
Import in tons	51,510	48,433	8,340	20,171
- Within EEC	49,549	46,413	7,197	17,308
- Other countries	1,961	2,020	1,143	2,863
Total consumption in tons	327,245	248,701	37,990	43,009
Per capita consumption in kilos	6.11	4.1	2.7	0.77

The statistics - for 1979 - were provided by the European Federation of Associations of Pasta Producers (UNAFPA).

Braibanti and Co. of Milan is Europe's leading maker of machines and other equipment used in the production of pastas. The company was founded by a family of pasta makers from Parma. The firm is a leading ex-

porter of equipment, that activity amounting to 30 billion lire (about \$30 million) in 1979.

Other leading equipment manufacturers are Buhler of Uzwil, Switzerland, Pavan of Fallieva Veneta in Italy's Treviso province, whose exports amounted to 20 billion lire in 1979, and Bassano of Lyons, France.

World pasta consumption (kilos per capita annually)

Italy	25
Argentina	12
Tunisia	12
Libya	12
Venezuela	12
Spain	12
Switzerland	9
Chili	8
Greece	6.5
Peru	6.5
France	6
West Germany	6
East Germany	5.7
United States	5.5
Bolivia	5
Somalia	5
Yugoslavia	4
Turkey	4
Canada	4
Australia	4
Austria	3.5
Netherlands	3
Belgium	2.5
Egypt	1.2
Japan	1.1
Britain	0.7

World pasta production (Figures represent thousands of tons)	
Italy	1,600
U.S.A.	700
Spain	350
France	300
Argentina	250
W. Germany	200

(Continued on page 34)

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## Italian Pasta

(Continued from page 32)

For example, the National Research Institute, using radiation, was able to alter the DNA properties of the cells of wheat grains, producing the Creso variety. Creso wheat thrives in moist climates and its yield is comparable to that of soft-grain wheats. It also makes a superb pasta. At the same time, Italy has been able to achieve wonders in respect to intensive cultivation, establishing a world record in absolute terms in yields per hectare.

### Two Kinds of Pasta

There are two kinds of pasta—dried or "Italian pasta by the Neapolitan method"—and fresh pasta, whether smooth or stuffed. While some fresh pasta is made commercially, they are still very much a product of the home or small shop, whether prepared by hand or by machine.

Fresh pasta can be and often is made with soft-grain wheats, and eggs are frequently added to it. The amount of moisture in the fresh pasta is not limited as it is for dried pasta. However, there is a restriction on such pastas that are sold in sealed packages, whether under vacuum or sterilized. The moisture levels of those packaged fresh pastas must not exceed 30 per cent.

However, dried pastas are much more widely distributed and they are much more easily preserved and so quite convenient. Moisture levels can not exceed 12.5 per cent. The process is not simply dictated by Italian law (No. 58 enacted on July 4, 1967). It is also in keeping with the finest tradition of pasta making and is intended to result in a product that is good in itself, highly adapted to conservation and extremely nourishing.

Next month: The Contribution of Milling.

## Grain Export Nations Accuse One Another

The major grain exporting countries whose farmers are being hurt by weak grain prices and rising costs, accused one another of using unfair sales practices to unload surplus grain on the international market.

The recriminations were voiced during a two-day meeting of senior government officials from the U.S., Canada,

Australia, Argentina and the 10-nation Common Market in Ottawa in April.

It was the highest-level meeting of grain exporters attended by the Reagan administration since it took office.

The U.S. representative, Seeley G. Lodwick, under secretary of agriculture, warned the other grain exporters that the U.S. government has the legislative authority to match competition on the international grain market through export subsidies and special credits, if necessary.

To relieve surplus grain pressures, he said the U.S. has acted "decisively" through its acreage reduction program and its grain storage reserve policy. He called on the other grain exporters to take similar action.

Much of the criticism at the meeting was aimed at the Common Market for its longstanding practice of subsidizing grain exports of European farmers.

The U.S. also complained that countries like Canada and Australia with state marketing boards were more disposed to offer special credit terms to win grain sales than a country such as the U.S., which lacks such an agency.

### U.S. Criticized

The U.S. in turn was criticized for allegedly using its political clout to dominate markets of certain countries such as South Korea and the Philippines.

Sir Leslie Price, chairman of the Australian Wheat Board, said Australia doesn't regard "political persuasion" as an appropriate lever to increase wheat sales.

He said the U.S. is currently sole supplier of wheat to South Korea and the Philippines and has been trying "through its influence on the Indonesian government" to increase "the U.S. share of that market at Australia's expense." He said the U.S. had also asked India for 100% of its wheat market in the current year, making Australia's wheat negotiations with India late last year "difficult."

The recriminations reflected the pressures the wheat exporting governments are experiencing from their farmers, who, a U.S. official said, are facing the lowest prices relative to cost in 40 years.

In a joint statement, the wheat exporting countries generally agreed that the prospects "for longer term growth in world wheat trade remained good,

but following the significant increase in production this past year, a leveling off in trade could occur" in the 1982-83 crop year that starts this summer.

## U.S. Durum Growers Association

A new slate of officers was elected to head the United States Durum Growers Association, at the annual meeting of that group in Cando, N.D. on March 27th.

Monroe Scheffo of Bottineau, N.D., is the new president of the organization succeeding Norm Weckerly of Hurdsfield. Scheffo, a Bottineau area farmer, moves up from the office of vice president. He has been a director of the association for five years; and was a member of the trade team, sponsored by U.S. Wheat Associates, which conducted crop quality seminars in Europe in 1980.

Moving into the vice president's chair is Jerry Thuesen of Reserve, Montana. The new secretary-treasurer is DuWayne Tessman of Goodrich, N.D. One new director was elected at the annual meeting. Herb Olson of Langdon was named to replace Leland Nelson of Wolford.

A board of directors meeting was held on April 19th, with the new officers presiding. At that meeting, Bill Ongstad of Manfred, N.D. was named Durum Growers representative to North Dakota Wheat Commission meetings. He succeeds Monroe Scheffo in that responsibility.

### Durum Forum Date

In other business, the directors set November 11th and 12th as the dates for the 1982 International Durum Forum. They also adopted the following resolution:

"Since it is in this nation's best interest to maintain adequate supplies of food stocks for both domestic use and for export markets hereby be it resolved by the United States Durum Growers Association that the United States Department of Agriculture give consideration to raising the storage rate for durum wheat produced in the United States. Also that it give favorable consideration to a guarantee on farm storage facilities."

## International Durum Forum Minot, ND - Nov. 11-12

THE MACARONI JOURNAL

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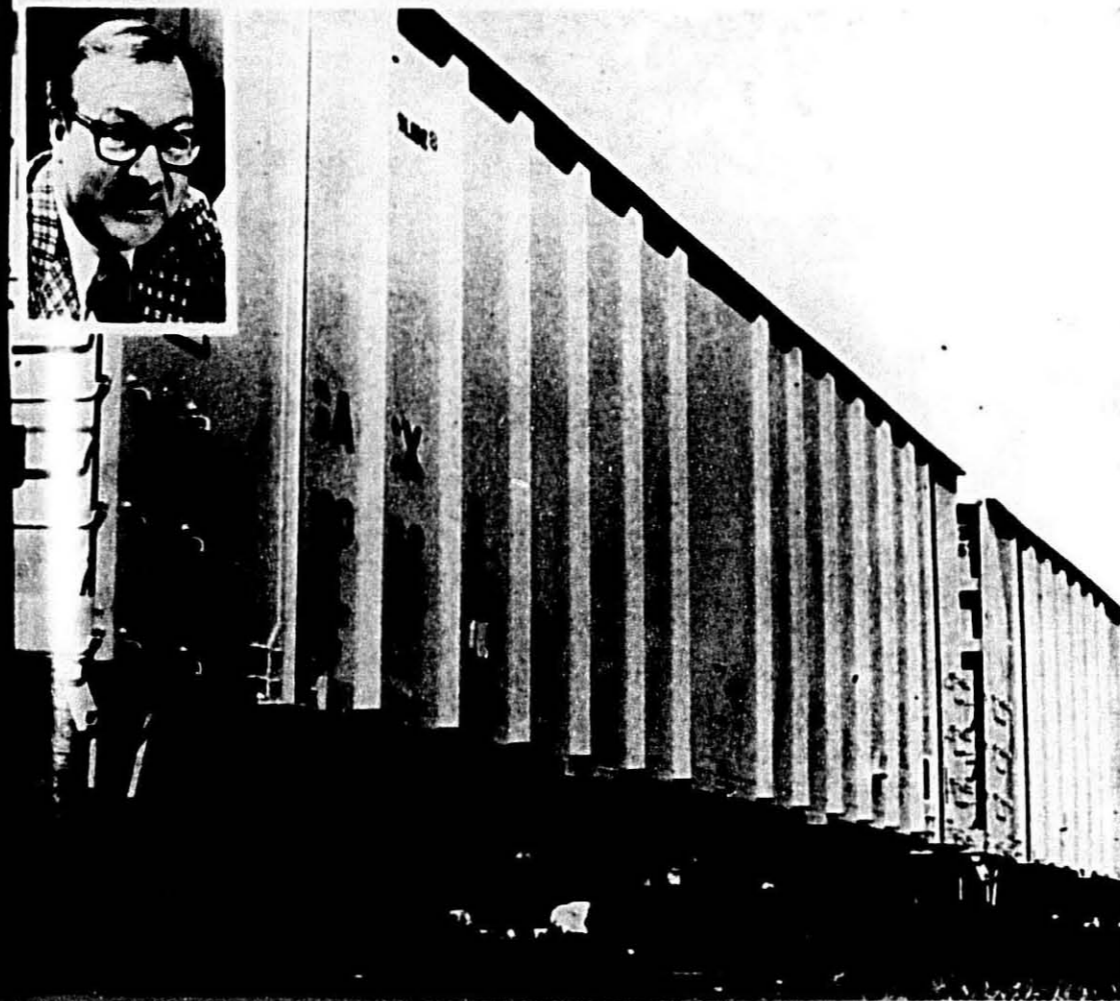
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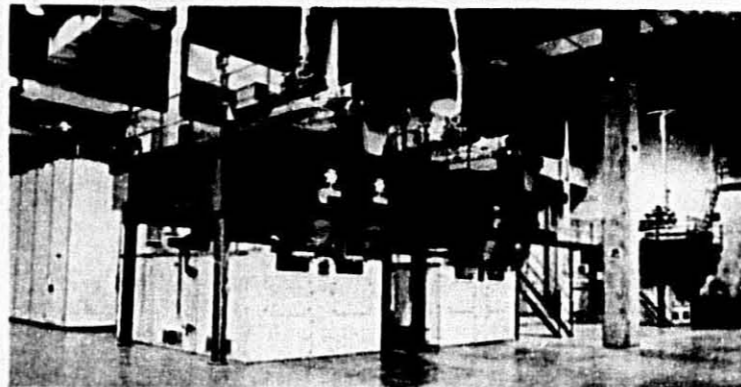
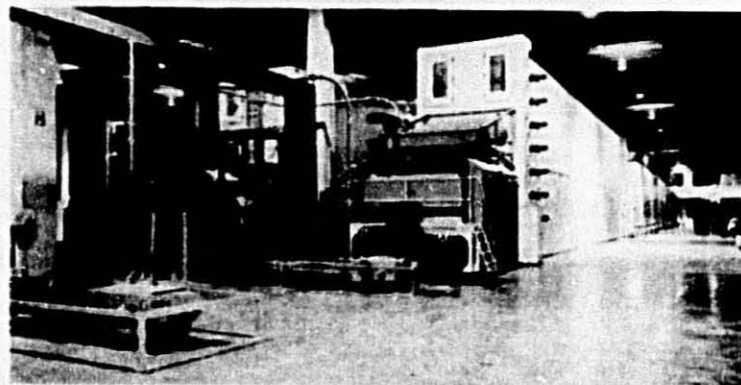
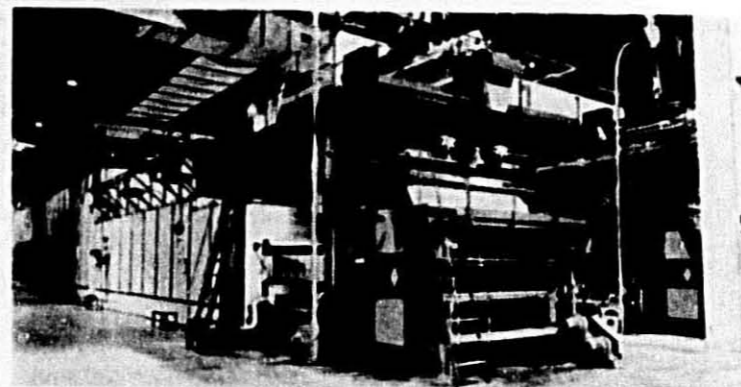


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## FAMILY BUSINESS COLUMN

by Frank M. Butrick, Akron, Ohio

### PART II — UNDERSTANDING THE FATHER/SON RELATIONSHIP

Ownership/management of a successful business is a source of great satisfaction and pride — and justifiably so. It is the result of years of dedication, of hard work and skill. So it is not surprising that the owner views his business as more than merely his source of income; he has far too much of himself invested in it. It is his own personal creation, a tribute to his abilities — literally, his life's work. And so it is perfectly natural, then, for the owner to want to see his business survive — to see it outlive his own working years. Undeniably, too, there is great personal satisfaction in having a son choose to "follow in his footsteps", to join the business, to work and learn, and someday continue the business on his own. However, making this wish into reality is not easy.

Sons have wishes and dreams of their own, which may not coincide with those of their fathers. Businessmen, preoccupied with their businesses and their own plans, often fail to see this divergency of goals. In part, the son's viewpoint is derived from the likelihood that he does not make career decisions in an adult manner — he simply reacts to his parents, and particularly to his father. Therefore, to understand his son, the businessman should first study his mirror very carefully.

#### Father, Know Thyself

Educators cannot create entrepreneurs, but they do claim that individuals with entrepreneurial ability can be found before high-school age. Not by scholastic attainment or athletic prowess or social accomplishments, but because they "hear a different drummer". Entrepreneurs are people with drive and self confidence, faith in his own ideas, and a willingness to focus upon their work to the exclusion of virtually everything else.

The business founder is usually not a college graduate; impatient to try out his own ideas, he goes to work. Ironically, he turns out to be a poor employee because of those very ideas — he wants to do things his own way. Orders, policy, instructions are irksome; he believes his own way is best.

So he starts a search for an employer smart enough to appreciate him. Finally, somewhere between the ages of 25 and 35 (usually), frustrated and unhappy, the typical entrepreneur-to-be quits working for others and starts his own business. The only boss he is really happy working for is himself.

#### He Is Tenacious

He starts out with an immunity to outsiders' advice, managerial inexperience, and too little capital. His only real asset is his arrogance and stubbornness; he will not give up. His capital melts quickly and his only substitute is energy, long hours, and incredibly hard work. The business comes foremost in the tireless owner's life, absorbing him almost completely. He spends long hours at work and home at night he thinks about his business. As might be expected, his family suffers; there is just not enough of him to go around. His wife has a part-time husband, and there is even less time for the children. The fellow next door has time for little-league ball games, backyard football, and fishing trips. But not the businessman. Not so surprisingly, after observing father's inability to relax and to enjoy his family, after listening to tirades about taxes, unions, and business problems, many sons want no part of such an all-consuming business career — there are easier ways to make a living.

Of course most sons have summer jobs in their father's business. But it is usually menial work which the son can accept philosophically; September is only three months away. High school is followed by college. Father says he wants his son to have all those things he never had, including a college education. But mostly he wants son in college so he will be rid of him for awhile. He wants his son to "grow up and become a man", but to do it somewhere else.

Colleges teach jobs, not business. Those professors never ran a business so they focus on the methods of large corporations. The son will learn little that pertains to his father's business or relates to his own future, so he returns with his adolescent prejudices and

opinions intact. Too many sons are lost to other careers and the professions, but some return to the family business from college.

#### Start Early to Share That Business

Fathers who would have their sons join their family business would start to involve them early —

1. Start to show the son at an early age (12 or 14) the "behind the scenes" planning, decision making, and risk taking involved in your job. Let him see your end of the business.

2. Show him the fun of problem solving and of challenge accepting. He will start at the bottom but be certain that he also clearly sees the top. He should know both ends well by high school age and before the break imposed by college.

#### Train Him in Summer

3. When your son works summer during school and college, give him the chance to find and solve problems, accept challenges, do his own planning, make his own decisions, take his own risks, and make his own mistakes. In short, let him try out little samples of management — of presidenting.

Just as the son becomes eager to flex his material muscles to see their business shift into high gear; to go, go, go — the father has about decided that he is going anywhere. Which creates a conflict which one business can stand.

#### Why Sons Join Business

Of course, sons decide to join the family business for a variety of reasons. First and best, is the son who was invited into the business when he was 12 or 14 years old; he grew up in it, working with his father. Others because they genuinely like their father and want to work for him, and because they never thought of doing anything else.

Some sons join the business because their fathers have sold them on the benefits of independence and individual initiative. Others because they believe they can make more money than with some other company. Of course some join their father's business be-

cause they are lazy and cannot get a job.

But whatever the reason for joining, the first thing the sons wants to do is to be helpful. So he starts making suggestions for changing or improving things. Like all young men, he believes that he can solve the problems of the world, state, county, city and most certainly, his father's family business. He soon discovers what his father learned a full generation earlier — that bosses (and especially so when they are fathers) are not interested in employee's ideas. Soon father and son work out the son's job description. It is simple: "Keep quiet and do as you're told".

#### Father Has Changed

But then, as the years roll by, the son's education is buttressed by practical experience. With maturity comes the certainty that his ideas are sound and he is eager to put them into practice. But he is around 30 by then — his father is in his mid 50's. And father has changed. In those early years he was a builder, taking great risks to accomplish rapid growth. But now he realizes his years are numbered; if he fumbles he will not have enough time to put it together again. So he has become conservative; he is more interested in protecting his winnings than in making any major risks. He no longer wants to risk rocking his own boat.

Just as the son becomes eager to flex his material muscles to see their business shift into high gear; to go, go, go — the father has about decided that he is going anywhere. Which creates a conflict which one business can stand.

#### NEAR MONTH: Don't Turn Your Son Away From Your Business.

This article is condensed from a chapter in the author's book, THE FAMILY BUSINESS, to be released by the National Press, Box 159, Akron, OH 44309.

MACARONI JOURNAL will be printing key chapters from the book, the first ever devoted exclusively to the personal relationships within the privately-owned business, during the forthcoming months. For information on the book, contact the publisher directly.

JULY, 1982

Frank Butrick, has, for over two decades, been a leading consultant, convention speaker and author on the family-owned business. He has written hundreds of magazine articles through the years and his concepts have been incorporated in numerous books. He averages nearly 50 convention appearances a year, and is active as a consultant, serving business owners all over America. If you have a situation upon which you would like Mr. Butrick's comments or advice, you may contact him through MACARONI JOURNAL, or by writing the IBI Press in Akron, or calling him at 216-253-1757. There is no cost or obligation — but if you write, be patient. His heavy travel schedule precludes quick replies to his correspondence.

#### Chesebrough-Pond's Appointments

George F. Goebeler has been appointed president of the International Division of Chesebrough-Pond's Inc., succeeding George W. Bieler who is retiring from the company. In addition, Charles R. Perrin will succeed Mr. Goebeler as president of the Packaged Foods Division. These appointments were effective June 1, 1982. The announcements were made by Ralph E. Ward, chairman and president of Chesebrough-Pond's.

Mr. Goebeler, currently president of the Packaged Foods Division and a corporate vice president, joined the company in 1968 as a brand manager in the Health and Beauty Products Division. He joined the Packaged Foods Division in 1972 and has been president and general manager of the division since 1979. A graduate of Iona College in New Rochelle, N.Y., Mr. Goebeler holds an MBA degree from the Wharton Graduate Division, University of Pennsylvania.

#### Charles R. Perrin

Mr. Perrin has been elected a corporate vice president, effective June 1, 1982. Currently he is vice president, marketing, for the Packaged Foods Division, having joined as a product manager in 1973. Previously he spent five years at General Foods Corporation in various marketing capacities. A graduate of Trinity College, Hart-

ford, Conn., Mr. Perrin holds an MBA degree from Columbia Graduate School of Business, Columbia University.

#### George W. Bieler

Mr. Bieler, president of the International Division and a corporate vice president, joined Chesebrough in 1958 and has served in many capacities in the International Division including general manager, Canada, and general manager, Australia, before returning to headquarters as general manager of the division in 1972. Commenting on Mr. Bieler's retirement, Mr. Ward said, "he has made numerous outstanding contributions to the growth and progress of our International Division in his long and productive career with the company. We wish George the best of good health and happiness in his retirement."

Chesebrough-Pond's Inc., headquartered in Greenwich, Connecticut, is a diversified worldwide manufacturer and marketer of branded consumer products for the entire family. Among the company's best known brand names are Ragu, Health-tex, Bass, Weejuns, Pond's, Adolph's, Vaseline, Cutex, Intensive Care, Cachet, Wind Song, Aviance, Chimere, Prince Matchabelli, O-tips, Aziza and Rave. Worldwide sales for 1981 totaled \$1,529,674,000.

#### National Restaurant Association Names Operating Chief

The Executive Committee of the National Restaurant Association meeting in special session in Washington, D.C. has chosen Robert B. Neville to serve as chief staff officer of the association.

Neville has served on the NRA staff for fourteen years as legal counsel and advisor to the association leadership. Since January, he has served as acting chief staff officer.

"Bob has been involved in formulating and implementing NRA policy for years," said NRA Chairman Walter Conti. "When the Board asked him to assume staff leadership of the association last winter, he quickly took hold of the organization and maintained its momentum."

The National Restaurant Association has 10,000 members.

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Finally we have the capability we've been trying to achieve for hundreds of years—drying macaroni products from the inside out. Until now we have had to wait for the product to 'sweat' or 'rest' so that the moisture would migrate to the surface, when we could again dry some more in small stages. We had to be careful not to 'case harden' the product so the moisture would not get trapped, thereby causing the product to keep drying on the outside, but not properly and to 'check' at a later date when that moisture finally did make its escape.

Microdry actually produces a better product than does conventional processing. The superior cooking strength and texture when ready to eat, and the enhancement and microbial safety when presented in the package. We will be pleased to submit samples of product made on the press same die, same raw material but dried in conventional Microdry units. You will readily see the color difference, cool taste the bite differences, and measure for yourself the stuff off each product.

- Kills all weevils—eggs and adults
- Kills all salmonella, Staphylococci and Coliforms. Greatly reduces total microbial counts
- Makes a product with better color

## WHAT USERS SAY:

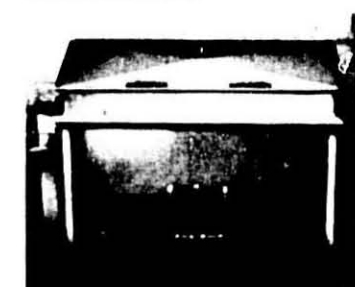
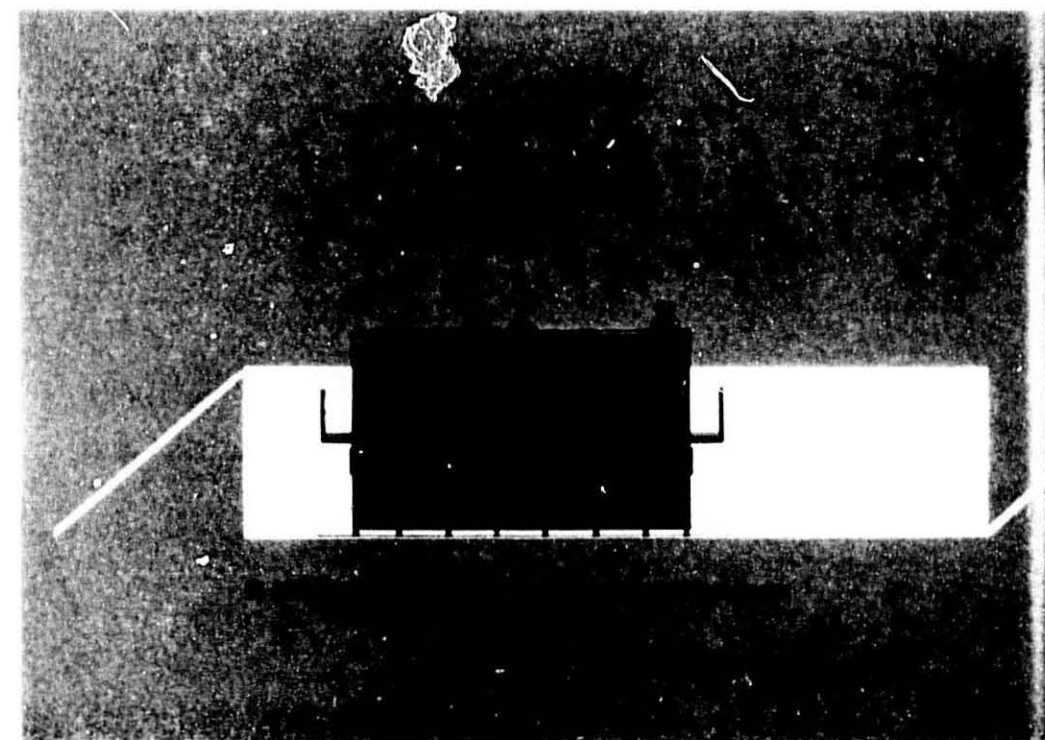
- Lowest downtime We keep an accurate record of all downtime and express it as a percentage of time down to time scheduled. Microdry leads the list at less than 2%.  
*Plant Manager of a leading mid-west operation*
- All future equipment will be Microdry.  
*Technical director of a large pasta plant*
- I guess the greatest compliment I can pay to Microdry is that if we were going to install another Short Cut line in our Operation, it would definitely be a Microdry Microwave Dryer.  
*Executive Vice President, pasta manufacturer*

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Pasta drying operation from production line comparisons by two processors. Shows total energy saved.



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#### Foremost McKesson Review

In spite of an excellent performance by C. F. Mueller Company's pasta operations in the fourth quarter and the year, the Foods Group's operating profit for the year declined 2% to \$44,418,000, while revenues increased 4% to \$1,029,888,000. The decline in profitability was due largely to cyclically depressed prices in both the dairy business and food ingredients.

#### Paste vs. Pasta

At the annual meeting of the American Association of Cereal Chemists in St. Louis: Quality production is needed to assure a dependable market for pasta products. C. Mickey Skinner, Skinner Macaroni, Inc., Omaha, pointed out. "We have a very interesting theory in our company and that theory is that if you produce a quality product con-

sistently you will satisfy the customer and they will remain loyal to your brand," Mr. Skinner said.

"We also feel that there is a difference between *paste* and *pasta*. Some people in our industry use various blends of raw material and make *paste*. Others in our industry are more discriminating and use durum semolina or durum patent flour and make *pasta*. Durum semolina is the raw material of choice for making quality *pasta* products."

#### In Memoriam



James J. Winston

James J. Winston of New York City and Amagansett, New York, died of a heart attack May 23. He was 68.

Born of immigrant parents, he worked his way through college to become a chemical analyst and early in his career went to work for Benjamin R. Jacobs who had been a chemist with the Department of Agriculture and set up the laboratory for the National Macaroni Manufacturers Association in 1920.

Mr. Winston became a partner of Mr. Jacobs and the Jacobs Laboratories were changed to Jacobs-Winston Laboratories.

Mr. Winston was named Director of Research of the National Macaroni Manufacturers Association upon Jacobs' retirement. He was involved in research in the food field for almost 50 years. During that time he helped establish standards of production, nutritional content, and sanitary conditions for a wide variety of products. He worked closely with the U.S. Food

& Drug Administration and helped clients comply with its regulations and requirements for such items as egg materials, meat, fish, pasta, and other foods.

He was the author of a basic industry text on pasta production and quality control and had written for leading scientific journals. A fellow of the American Institute of Chemists and other scientific and technical societies, he had been awarded a certificate of public service by New York state and received a tribute from North Dakota State University for his many years of service with the Cereal Chemistry and Technology Industrial Advisory Committee. Just a year ago he was tendered a testimonial dinner by the Scientists Division of the UJA-Federation in New York City.

He is survived by his widow Florida, sons Harold and Marvin and daughter-in-law Ellen, wife of Marvin. He cherished high grand-daughters Emily and Sarah. He also leaves a brother Joseph and sister Lee Morpstein.

The family would appreciate contributions to Temple Shaaray Tefila, 250 E. 79th Street, New York, NY 10021 or contributions to the Druse-Winston Scholarship Fund, c/o American Friends of Tel Aviv University, 342 Madison Avenue, New York, NY 10017.

#### Harold C. Saar

Harold C. Saar, 59, who for the past 14 years has been Regional Sales Manager in Chicago and the Midwest for Golden Grain Macaroni Company, died April 29, 1982.

Saar, a native of Chicago who made his home in Clarendon Hills, was survived by his widow, Jeanne, two sons, Randolph and Scott, and three grandchildren. A Memorial Fund in Saar's name has been established for the education of the grandchildren.

#### Ross Cameron

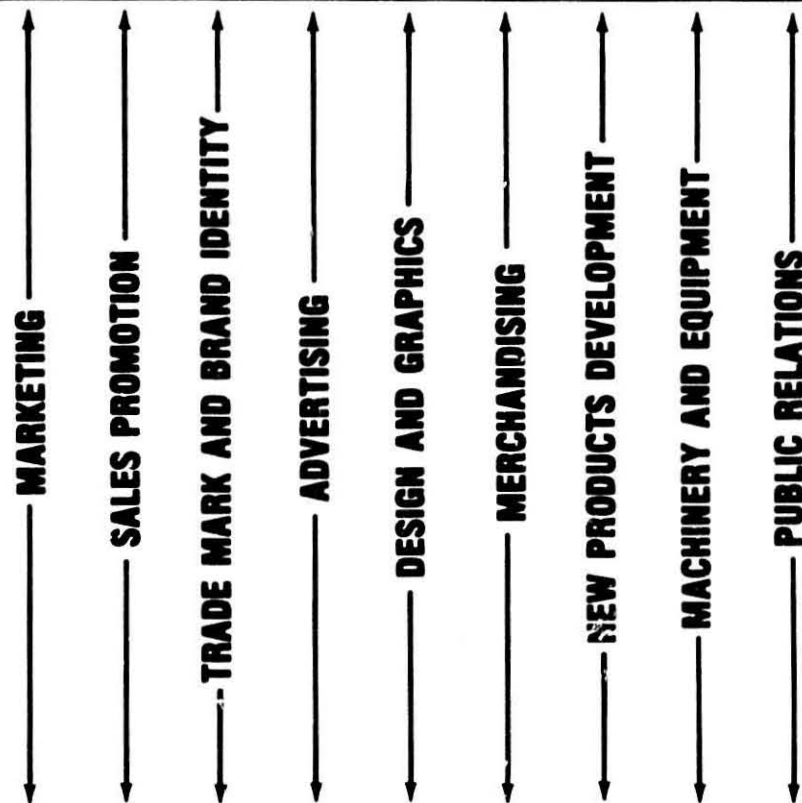
J. F. Ross Cameron, Vice-President of Royal Macaroni Company, San Francisco, California—born Sarah Marie, Ontario, April 24, 1936—died April 12, 1982. Survived by his widow Janie and daughters Vickie and Christie. The family would appreciate contributions to the American Cancer Society.

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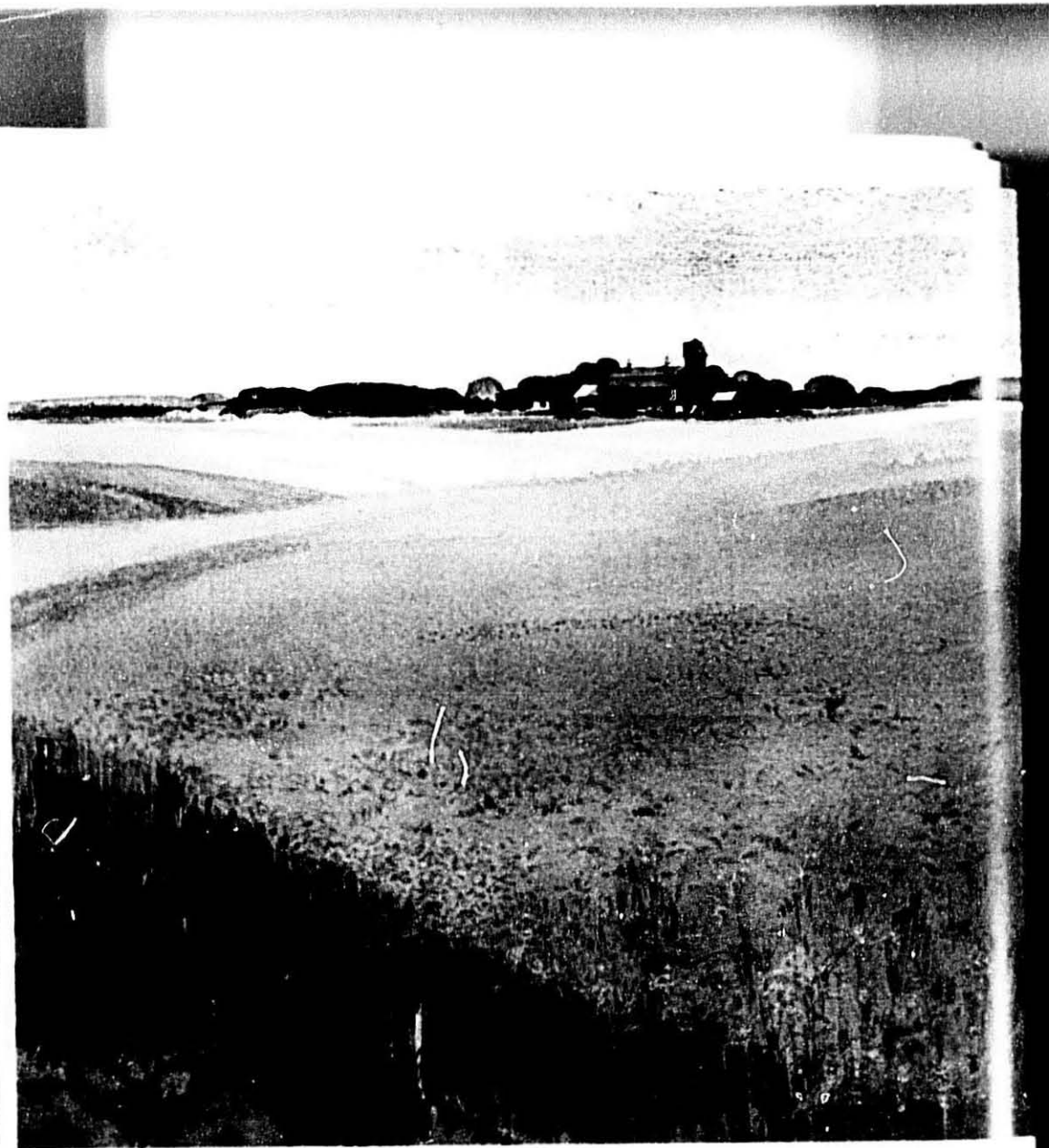
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