CORPORATE

profile...

From a modest start to a $150-million investment in chemicals—a large share for agricultural chemicals—is the recent history of U. S. Industrial Chemicals

AMERICAN INDUSTRY'S growing need for chemicals pointed our course." So begin executives of U. S. Industrial Chemicals Co. (the chemical division of National Distillers and Chemical Corp.), when telling how the company grew in less than a decade from a very modest start to nearly $150 million in gross chemical investment. And they plan to continue the push.

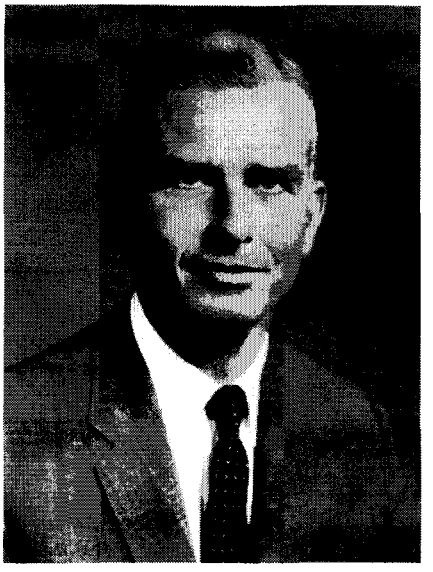
Chemicals related to agriculture now claim a big share of their attention. USI makes anhydrous ammonia, ammonium nitrate, nitric acid, phosphoric acid, sulfuric acid, nitrogen solutions for fertilizers; it's active in animal feed products; portions of its plastics go into agricultural use; similarly some of its intermediates find their way into agricultural chemicals.

Today, USI net sales total nearly $90 million annually, and chemicals will soon account for half the profits of the parent corporation. But while growth has been swift, even for the fast-moving chemical trade, progress has been both careful and well-planned. Chemicals for agriculture have been made one of several broad bases in the chemical industry.

When officials of the corporation decided in the late 1940's to turn to chemicals, they did not restrict their study to processes related to alcohol distillation. Instead they examined investment prospects and projected income factors for a number of markets; they came up with a new sodium/chlorine plant at Ashtabula, Ohio, in 1950. But this was just a beginning.

In 1951, Distillers acquired USI, then producing ethyl alcohol, solvents, anti-freeze, resins, and insecticides. Perhaps most important from Distillers' view, it also took over the existing USI sales force—whose strength coupled with a going chemical business offered real potential. The USI staff took charge of the parent's year-old sodium operations. The following year, 1952, marked the first full year of integrated USI/National Distillers operations (see graph).

At about the same time, the company joined hands with Panhandle Eastern Pipe Line Co. to form a 60/40 venture, National Petro-Chemicals. (In late 1957, USI took full ownership through a stock exchange.) The move started the timetable for some profitable activity: construction of units at Tuscola, Ill., for liquefied petroleum gas, ethylene, synthetic ethyl alcohol, and other chemicals in 1953 and 1954; installation of polyethylene facilities at Tuscola in 1955, and at Houston, Tex., in 1959.



The President . . .

Roy F. Coppedge, Jr.

Growing Need for Chemicals

After the merger with Distillers in 1951, USI purchased an interest in Intermountain Chemical (soda ash), and the following year it bought Algonquin Chemical. With the latter move, USI became the owner of two sulfuric acid plants and caustic-chlorine operations. At the same time, it started construction of sulfuric units at Tuscola. This acid was intended primarily for ethyl alcohol use, but the move was significant for another reason, too—it marked USI's entry into the fertilizer picture.

With by-product hydrogen available from ethylene cracking units, it looked economical for USI to make ammonia. So synthetic nitrogen units went on stream at Tuscola in 1955. When the original decision was reached it appeared that USI would have a good industrial market area almost alone. But conditions changed rapidly as other nitrogen producers came in, making the local condition highly competitive.

National Distillers' president, Roy F. Coppedge, Jr., sees Tuscola centered in an area of real growth—once markets get balanced. Farmer use of fertilizer per acre has been low in the area, but is picking up. As Coppedge notes, "Agriculture's chemicals are a vital part of any sound agricultural economy in the U. S." USI's nitrogen sales today are almost entirely to agricultural outlets. It sells only to fertilizer manufacturers, and not directly to farmers.

In 1956, USI finished a wet process phosphoric acid plant at the Tuscola complex. Aim: to use its spent sulfuric. The spent acid is consumed in treating phosphate rock.

And USI has had a number of non-agricultural chemical expansions and joint ventures:

- It teamed with P. R. Mallory and Sharon Steel in a project to produce titanium/zirconium and related metals
- It joined with American Potash and Food Machinery to develop boron high energy fuels
- It is completing a 30-million pound-per-year sebacic acid isomer facility at Tuscola
- It piloted tantalum/columbium processes.

To their credit, USI officials have not hesitated to take corrective steps when specific operations did not seem to provide enough return on investment, or fit in with future programs. In 1954, USI sold its anti-freeze facilities to Olin Mathieson, resin plant to Archer-Daniels-Midland, and insecticide business to Food Machinery & Chemical's Fairfield Division. Most of USI's expansion money ($75 to $80 million) came from those sales.

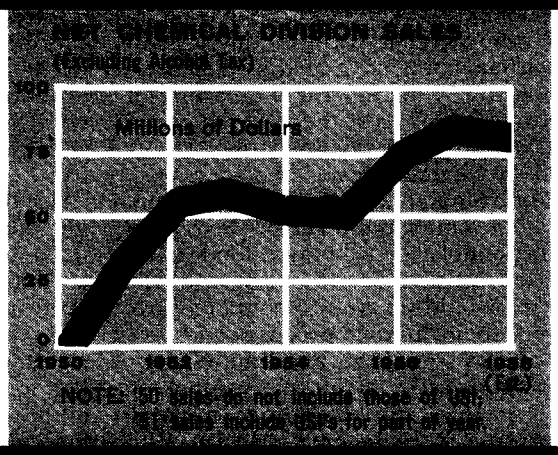
Today, USI is involved with agriculture through many products besides fertilizers. USI has long sold feed supplements from its fermentation residues. Parent Distillers also sells about $3.5 million worth of distillers dried feed in a normal year, from its beverage operations.

In late 1957, USI teamed with Feed Service Corp. of Crete, Nebr., in the distribution of Morea, a liquid feed for cattle. Each sells the premix—Feed Service in the Midwest, USI in the East and Far West. (The premix contains urea, ethyl alcohol, phosphoric acid, and trace minerals and vitamins.) USI supplies the alcohol requirements for both companies. Acceptance of Morea, say USI officials, has been gratifyingly prompt and widespread.

Today, rated annual capacities on some of USI's products are as follows:

National Distillers & Chemical Corp.

Chemicals for agriculture claim a big part of sales. Included are fertilizer chemicals derived from nitrogen and phosphorus, animal feed products, plastics, and intermediates for pesticides.



Sulfuric acid (100% H_2SO_4)	
Tuscola, Ill.	140,000 tons
Dubuque, Iowa	100,000 tons
Sunflower, Kan.	70,000 tons
Phosphoric acid (P_2O_5)	
Tuscola, Ill.	33,000 tons
Ammonia	
Tuscola, Ill.	60,000 tons

Agricultural chemical outlets now account for close to 15% of USI's total volume. But the future is mixed.

Urea definitely seems in the cards, but Robert E. Hulse, Distillers executive vice president in charge of USI's operations, sees it at least five years away. Urea probably will come only after Morea volume is large enough to support the entry. Hulse sees Morea premix bringing in as much as $5 to $7 million annually for USI, in addition to $7 to $10 million for Feed Service Corp. USI will continue to supply Morea's alcohol needs, but would have difficulty in handling its phosphoric acid, since fluoride-free acid is needed.

Just now Hulse finds it hard to work up much enthusiasm for further expansions in agricultural materials—and he's not using them as building blocks for early future growth. He sees relief in the ammonia supply/demand situation as about 3 to 5 years away—but adds that USI expects to make modest profit on its ammonia investment. Upgrading is the answer, and USI is plowing research dollars into the effort. It plans to expand polyethylene outlets in agriculture, and sees a growing market for the plastic as a competitor of paper bags.

What's immediately ahead for USI in farm market sales? Even though weather makes it hard to predict, Hulse sees '59 as a bit better than '58—with a 5 to 10% jump. USI's operating income is expected to rise to $26 million from $16 million in 1958. Official philosophy at USI today is to stay away from basic chemicals. Hulse points out that that's why money for the Houston plant was all channeled into polyethylene—none into ethylene.

With favorable depreciation now being taken, and a good cash flow, the years ahead, taking all into account, look fine indeed for USI.