WHO WHAT WHERE WHEN WHY ?

Hans F. Dresel Completes First Year as Philadelphia Manager of Felton Chemical

Hans F. Dresel completes his first year this month as manager of the Philadelphia office of the Felton Chemical Company, manufacturers of aromatic raw materials for perfumers, soap makers and flavor manufacturers as well as consumers.

Mr. Dresel has been closely allied with the chemical industry almost all his life. Born in Germany in 1899, he was raised in a family of chemists. His step-father is still one of the foremost food chemists in Europe. The young Dresel completed his studies at the University of Berlin. He was formerly manufacturing chemist in charge for a leading drug house and was also connected with a prominent soap manufacturer.

Before his appointment to the Philadelphia office last year, Dresel represented the Felton Chemical Company in New York City and Connecticut. Good-natured and pleasant, he has made a host of friends in the trade.

The main factory and offices of the Felton Chemical Company are in Brooklyn, New York; the Philadelphia office is located at 200 South 12th Street.

Small Capacity Positive Displacement Pump

There has long been a great need for a small pump to handle fluids at a relatively high pressure and at the same time in small quantities. To fill the gap that exists between the mechanical lubricator type and the rotary centrifugal type, the Homestead Valve Manufacturing Company of Coraopolis, Pennsylvania, has developed a minature triplex plunger reciprocating pump.

Depending upon the speed of the pump the capacity may be varied from about 15 to 120 gallons per hour. The power required by the pump is small, such that a ¼-horsepower electric motor will operate the pump at 60 gallons per hour capacity and 200 pounds pressure. It is a single acting plunger type having three cylinders of ¾" bore and ⅝" stroke with the plungers attached to cross-head guides which are driven by connecting rods from the crank shaft. The monel metal inlet valves are of the poppet type, positively actuated through a cam and tappet mechanism and the outlet check valves are of the ball type with adjustable limited lift for high-speed operation. The gears, crank shaft, connecting rods and cross-heads are entirely enclosed in a crank case with splash lubrication. The crank case is made of semi-steel. The cylinder head is made of a corrosion-resisting iron alloy and is removable from the crank case effecting economical maintenance.

This pump has a wide application because of the low horsepower required (1/6 to ½), the wide range of pressure (0 to 500 lbs.), and the positive displacement feature (high volumetric efficiency). Pure water, water containing various percentages of alkaline compounds, fuel oils, mineral oils and various chemicals are most readily handled by this pump. It is adaptable to a great variety of uses such as boiler feed, boiler compound injection, condensate returns, small hydraulic presses, fuel oil pumps for oil burners, pumping of chemicals, air conditioning apparatus and control apparatus.

The Homestead Valve Manufacturing Company will be glad to consider the application of this pump to any specific use. Prices and further detailed information will be furnished on request.

Steam-Jacketed Purolator

One of the biggest companies manufacturing bluing wax for use with boiled starch in the laundering of materials requiring a high finish, has installed a special steam-jacketed Purolator filter which, the company reports, is effecting substantial savings in manufacturing time and operating costs. The filter replaces a former system of screening the wax, a process which required frequent stoppage of operations and was wasteful of the wax. The filter installation was made by Motor Improvements, Inc., a pioneer manufacturer of lubricating-oil filters for automobile engines, and designer of special filters for many industrial purposes. The problem presented to filter engineers was one of temperature control.

The wax in liquid form, is pumped from a huge melting pot, at the rate of 30 to 50 gallons a minute, into a storage vat which automatically returns the overflow to the original container when enough wax has entered the storage vat for a run through the molding and packaging machinery. The liquid wax flows into a series of molds where it sets by the time a continuous conveyor has carried it to the packaging machine which picks the wax up with rubber suction fingers, wraps it in paper and inserts it into light cardboard boxes. All imperfect pieces are automatically rejected and carried back to the original melting pot for re-working.

In addition to settlings from the air of the room, there are thus carried into the melting pot, bits of contamination of various sorts, including pieces of paper, scraps of broken boxes, fibre, etc. Assurance of a pure product demanded the introduction of a filter between the melting pot and the storage vat but it was evident that passage of the molten wax through a cold filter would result in a solidifying of the wax with resultant clogging of the filter, or the delivery to the storage vat of a product too stiff to run properly into the molds.

Both the connections from the melting pot and the vat itself are steam-jacketed to insure the maintenance of proper temperature for the delivery of the wax to the molding machine and purolator engineers solved the problem of introducing filtration into this line by equipping a standard, motor-driven Purolator, with a steam-jacket capable of sustaining any pressures which might be introduced into the steam-line. Tests proved that the wax regularly arrived at the storage vat without any loss of temperature whatever.

The Purolator used was of the so-called metal-edge type, 50 inches long by 9 inches in diameter. The filtering element, 11½ by 2½ inches, is made of stainless steel ribbon with filtering slots .003 of an inch in width. The element revolves three times a minute, so that a fixed knife, touching its surface, keeps it clear.

Synthetic Wax

A high melting, synthetic wax has recently been introduced by the Glyco Products Co., Inc., 949 Broadway, New York, N. Y. This wax which has a melting point of 95-97° C. is hard, white and highly lustrous. It is non-toxic, free from odor and taste. Insoluble in water, it dissolves hot in hydrocarbon and chlorinated solvents, the best solvent being a mixture of one part of Butanol, six parts of Toluol and four parts of Butyl Acetate, which will hold in solution up to 5% Albacer at room temperatures. Albacer can be melted with synthetic resins, mineral and vegetable oils and other waxes producing products with many interesting properties.

Albacer is recommended by the manufacturers for polishes, cosmetics, paper and similar coatings, electrical insulation work, dental waxes, etc.

Chemical Raw Material Imports

Chemical imports continued upward in November reaching a total value of $10,861,500 compared with $10,117,600 during the preceding month, and were more than 25 per cent above November, 1934, according to C. C. Concannon, Chief of the Commerce Department's Chemical Division. The gain over November, 1934, was due very largely to increased receipts of fertilizer materials, both potash and nitrogen, paint oils, and carnauba wax, preliminary statistics show.

There was a marked increase in imports of fertilizer materials, with practically every type sharing in the gain. Imports of such materials totalled 151,965 tons, valued at $3,195,675, during the month compared with 80,175 tons, valued at $1,694,400, in November, 1934. Sodium nitrate fertilizer figured prominently in November imports totalling 22,256 tons, all of which came from Chile, except 52 tons of synthetic nitrate which was received from Germany, the statistics show. The high total reached by paint oil imports was due both to heavier receipts and higher invoice prices, particularly for tung oil. Receipts of rapeseed oil were 166 per cent above those of November, 1934, and imports of perilla advanced sharply from 222,000 to 2,503,000 pounds. Receipts of Chinese tung oil declined in quantity from 9,665,300 to 7,638,275 pounds but the value advanced from $693,350 to $1,382,300, it was stated.

Carnauba or Brazil wax, a raw material used in the manufacture of shoe and furniture polishes, increased sharply in November, compared with November, 1934, both in quantity and value, the former advancing from 294,830 to 724,600 pounds and the latter from $72,475 to $245,750.

Practically all other major items on the chemical import list declined during November, it was stated. Gums, resins and balsams decreased in value from $1,065,560 to $962,900; essential oils, from $641,400 to $545,600; coal-tar product which includes dyes, from $1,155,800 to $1,005,700; industrial chemicals from $1,721,000 to $1,282,370; toilet preparations from $483,380 to $407,000; and matches from $40,777 to $16,516, according to the Commerce Department.

While receipts of crude drugs declined in value in November, compared with the same month in 1934, imports of pyrethrum, an insecticide material included in this classification increased in quantity from 1,296,500 to 2,199,800 pounds, statistics show.