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CHEMICALS

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Two timely articles which will appear in the June issue of "THE GOLF COURSE SUPERINTENDENT."

## THE GOLF COURSE SUPERINTENDENT IN JAPAN by Charles Mainard Mallinckrodt Chemical Works

Of Japan's 100 million population, over 5 million are avid golf players. Japan's enthusiasm for golf received world-wide publicity in the fall of 1966 when the Canada Cup Tournament was held at the Yomiuri Country Club in Yokohama.

This fantastic enthusiasm for golf, and the extremely high ratio of players to golf courses, combined with the Japanese traditional desire for picturesque beauty in landscaping makes the task of the golf course superintendent unbelievably challenging. Nevertheless, he has risen to this challenge. Even though some private clubs may have as many as 150 to 200 players per day each, their hardworking and dedicated superintendents have produced and maintained some of the most beautiful golf courses in the world. No cost is spared in labor or time in achieving a beautiful course. The seemingly manicured courses of Japan are indeed a source of pride and "face" not only to the superintendent but to all the club's employees and members as well.

From the extreme of too much water in the rainy season, the superintendent must then contend with not enough water in the dry season. Golf courses in Japan seldom have irrigation systems except for on the greens. This is overcome to some extent by having a double set of greens at each hole.

Probably the most striking thing about the operation of the golf course as compared to the United States is the number of people employed. On the average 30 persons per 18 holes are necessary (many Japanese golf courses do consist of 36 holes); con-

sequently, it is very common to find 50 to 60 workers per club all reporting to the one golf course superintendent.

## A THOUGHT ABOUT AUTOMATIC IRRIGATION by Frank Dobie — The Sharon Club

Some of the features a superintendent may desire may already be standard in the industry; some others may be in use by a few other superintendents; and others may have never been tried before. Research by the superintendent into existing practices will disclose where his ideas fall. With a composite of the superintendents' ideas, an engineer can design a system that will not only be a replacement for his night waterman, but one that will fill all of his requirements of irrigation.

Since maintenance of the system would be handled by our personnel, we felt that they should be involved in every operation of installation. This way they would know first hand every component of our system.

A stock of spare parts for almost every portion of the system is maintained by our mechanic.

Since the original crew and myself will not be here forever, we have written a service manual and have made an "as-built" drawing of the system. The drawing is on a plastic overlay of an aerial photograph.

The requirements we wanted in our system are not important in themselves. They do illustrate that a system can be engineered and built to accommodate all the needs that you as a superintendent wish to fulfill in irrigating your course. By researching the experience of the many qualified irrigation engineers, contractors, and superintendents who have worked with automatic irrigation you can adapt their knowledge to your own situation.