

cision fertilizing, Graf attributes this to the variety of better equipment now available.

"On our 36-hole course we have about 175 acres of fairways, 15 acres of tees, eight acres of greens, and about six acres of sand," he says. "On a course of this size and diversity, you require the best in mobilized equipment to keep it operational."

Graf has modernized with such equipment as power sand trap rigs, utility trucksters with attached spray rigs that can pull right across greens without any damage, and other motorized units that have very effectively improved course management efficiency.

All together, these super-intendents have shown that modern turfgrass management is built on proven programs. Whether it be weed control or better fertility, the objective is quality turfgrass. □

## Rotary Engine Mower Tested By Irvine Ind.

The grass is not only greener on the Irvine Industrial Complex side of the fence, it's more plentiful. This was the finding of a group of German engineers and an executive of a leading U.S. landscaping supply firm. They were in Southern California recently to test a new German-made Wankel-engine powered rotary lawnmower.

A test team from the Wolf-Geraete Company of Betzdorf, West Germany, accompanied by W. Page Mays, Jr., manager of West Coast research and development for O. M. Scott and Sons, selected the IIC and the Irvine Company's nearby Big Canyon Country Club in Newport Beach for performance and reliability tests on two new mowers. They found that this area is one of the few places in the United States with the soil and climate in which all types of grasses can be grown year around.

Mays said the IIC was selected as a test site because its masterplanned industrial environment includes spacious grass corridors and lush landscaping.

Bill Borden, IIC environmental control manager, observed the tests at the IIC headquarters conducted by Mays and the three Wolf-Geraeta engineers. The team tested two self-propelled Wankel-powered mowers with results Borden termed "very impressive."

The mowers, driven by a 5-horsepower model of the Wankel rotary engine, are mini-versions of the

rotary engines used in the Mazda automobile. They have a unique blade system, which unlike rotary-blade mowers, neatly slices grass blades without tugging at them.

Borden noted the revolutionary new mowers sliced through grass in the IIC which was too lush and thick to be handled by a conventional piston-powered rotary mower.

Mays said the mowers tested at the IIC are now in limited production in Germany. The pair tested under a reciprocal agreement between Scott and Wolf-Geraete were operated 50 hours under a variety

of conditions, then disassembled to check their internal operation.

Horst Runte, head of the German engineering team, said particular attention was paid to condition of the rotor combustion seal, a critical factor in Wankel engine operation. Runte said advantages of the Wankel mower over conventional models include potentially greater reliability, better power to weight ratio, fewer exhaust emissions, and far less noise and vibration.

Mays said there are no immediate plans to market the Wolf-Geraete mower in the United States.



## MILORGANITE FOR DORMANT TURF

The following advantages of applying Milorganite on dormant turf may fit your maintenance program. Check them carefully.

- 1. It works!** Milwaukee Country Club has applied 800 to 1200 lbs. Milorganite per acre each and every winter since 1932. The time — Thanksgiving week, before heavy snow fall on irrigated creeping bentgrass fairways. It works on bluegrass and fescue too.
- 2. It Eliminates Spring Feeding!** The grass "greens up" early without over succulent growth. The first calendar year feeding at Milwaukee Country Club is the second week in June — Milorganite, naturally — again since 1932.
- 3. It's a Work Saver!** No more worries about wet Spring seasons and lack of Spring labor. November through January applications (slightly earlier in Northern Canada) are made on dormant turf with no golfer interference and when the work load is light.
- 4. Delivery is Prompt With Nitrogen at its Highest!** October through December are slow shipping months. Thus, rail cars and trucks can deliver promptly. The same months find production of Milorganite with nitrogen at its highest. It is not unusual to get a half percent bonus over the guarantee of 6%.
- 5. Storage is no problem!** Unlike chemicals and some synthetic organics, Milorganite is non-leachable. Its weight and adherence qualities also make it stay in place even on severe slopes.
- 6. Earlier greening than waiting until Spring and applying a chemical!** Plot work in Minnesota proves this. In one series of tests conventional applications of other nitrogen fertilizers failed to catch up with early winter applied Milorganite throughout the entire growing season!
- 7. It will not increase snowmold!** This disease, or for that matter any other, have never been problems at Milwaukee Country Club, where fairway fungicides have never been used. In plot work, we have purposely applied the excessive rate of 200 lbs. per 1,000 sq. ft. with no snowmold observed. Putting greens should be protected with the fungicide applied dry using Milorganite at 30 to 50 lbs. per 1,000 sq. ft. as the carrier. This has been standard practice for many years in the north country.



**CAUTION:** The above statements apply to Milorganite only. Disastrous results have occurred through the use of other fertilizer materials on dormant turf in some instances.

**ASK YOUR GRASS:** Convenience — Savings — Success have sold many clubs on a winter Milorganite application, in lieu of spring feeding. Just ask the grass, your grass, what it thinks of the suggestion. Do it this winter shortly before heavy snow falls.

THE SEWERAGE COMMISSION P. O. BOX 2079 • MILWAUKEE, WISCONSIN 53201