

# IRRIGATION COMPONENTS

By **CURT HARLER**/ Contributing Editor

Given today's high-management turfgrasses and the need to be frugal with water resources, irrigation has moved from being an art to a science. It involves choosing proper flow rates, maintaining accurate spray patterns, figuring sprinkler placement, and a host of other variables.

The starting point is to consider how much water will be applied at what rate to a particular area. This will vary with soil type, variety of grass being irrigated, and climate. Irrigation rates generally fall into three categories: low, or less than a half-inch per hour; medium, one-half to one inch per hour; and high, over an inch per hour.

Be sure that all components of the system — pump, pipe, sprinkler heads — are sized to deliver the volume of water needed. Note that systems using heads providing half-circle or quarter-circle coverage will have more complex calculations than simple full-circle coverage. For example, a full-circle head must have twice the flow of a half-circle head. If you are not comfortable with numbers and formulas, be sure to have a local dealer or engineer calculate the effect of any changes you make to an existing system before turning it up.

Below are several of the latest and best products available from leading irrigation firms for use in a variety of turfgrass applications.



**Valve & Filter Co. offers Hydro-Flo flowmeter & automatic filters.**

**T. CHRISTY ENTERPRISES**  
**800-258-4583**  
**www.bluglue.com**

Fix irrigation pipe quickly and economically with Slick-Wrap from Christy, Orange, CA. Slick-Wrap is a specially formulated water-activated fiberglass tape, and presents a permanent solution to leaks or joints. It can repair all types of pipe, including plastic, metal, copper and poly. The material can be used where traditional solutions have failed and comes in two sizes.

Circle No. 264

**AMERICAN GRANBY**  
**315-451-1100**  
**www.americangranby.com**

A series of pump start relays for irrigation systems, from American Granby, Liverpool, NY, are available in 2 hp and 5 hp models. They feature a UL and CSA rated contactor with an expected mechanical life up to 30 million operations. Pressure screw terminals accept 24 to 10 AWG wire. The relay is designed to be finger safe to prohibit touching of energized parts.

Circle No. 266

**EFCO, INC.**  
**818-362-0292**  
**email: efcoinc@aol.com**

Clean water is better for the pump, the pipe, the sprinkler heads and the turf. Efco, North Hollywood, CA produces a full line of basic filtration equipment ranging from the ODIS 1000 through the 4000.

Basic irrigation filter products are available through the company catalog, but all other systems are custom-made to meet the user's irrigation needs. Units can be ordered in thread, flange or victaulic models and are rated to standard 120 psi pressure with a maximum of 150 psi.

Circle No. 265

**HUNTER INDUSTRIES**  
**800-733-2823**  
**www.hunterindustries.com**

Among the newest irrigation products detailed in the latest catalog from Hunter, San Marcos, CA, is the ICC controller. It provides a powerful water-management tool for larger landscape projects. It can be housed in a metal or plastic cabinet depending on the application.

Circle No. 267

**K-RAIN MANUFACTURING**  
**561-844-1002**  
**www.k-rain.com**

K-Rain's new Pro-Plus sprinkler offers adjustable and true-continuous 360° coverage. This new sprinkler can be adjusted from 35° to 360°. Both adjustable and continuous circle heads are in one rotor. The Pro-Plus can be set before installation or while the system is op-



**Kifco, Inc.'s B140 can irrigate a football field (about one acre) in a single pass.**



**K-Rain's sprinkler is adjustable.**

erating. This product also offers a 5" riser that pops up through even the tallest turf. It can be retrofitted to any other sprinkler, says K-Rain. Circle 268

**KIFCO, INC.**  
**309-543-4425**  
**www.kifco.com**

Water-Reel irrigation equipment from Kifco, Havana, IL is designed to work efficiently, even under a variety of pressures. Units are portable, easy to install and work unattended. The B130 and B160 feature automatic shutdown for the water motor, a pressure gauge to read machine inlet pressure, a filter to insure clean water for the motor and a 3-wheeled chassis with steerable front wheel and tow bar. The B140 with Booster Pump and SRT100T Big Gun can irrigate a football field (about an acre) in a single pass. Free video on machine setup and operation available from Kifco. Circle No. 269

**KING SAFETY PRODUCTS**  
**800-633-0232**  
**www.kingsafety.com**

A new line of smaller, faster safety sealed irrigation connectors is available from King Safety Products, St. Charles, MO. Each of three connectors — small, medium or large — handles a wider range of wire combinations. They seal from the inside out and they provide a water-

tight/corrosion proof seal with just a twist. Also available, a complete electrical waterproof, 158-piece connector kit.

Circle No. 270

**NIBCO, INC.**  
**209-485-7171**  
**www.turfbubbler.com**

The Turf Bubbler Wick Irrigation system from Nibco, Fresno, CA saves up to 70 percent of water consumption as compared to traditional spray systems. It applies water by using a series of outlets in the turf, just under the mower-cut height. Watering times average 35-40 minutes, three times a week. Units have tested effective for tall fescue through Bermuda turf types. System is easy to install at about the same cost and time requirement as traditional systems.

Circle No. 271

**RAIN BIRD**  
**626-812-3600**  
**www.rainbird.com**

Rain Bird's Golf Division says it's enhanced the wiring to speed up installation of MSC+ and PAR+ satellite irrigation controllers. The controllers are available in two-wire, wireless and stand-alone designs and feature quicker connections between the Relay Output Modules (ROM-8) and the terminal strips on plastic pedestal models. The terminal strips are preinstalled on the rear section of the plastic pedestal and are points of connection for valve wires.

Circle No. 272

**RAINDRIP, INC.**  
**800-544-3747**  
**www.raindrip.com**

The Aqua-Pop pop-up irrigation assemblies rise up with only six pounds of water pressure to a height five or nine inches above ground cover. The sprinklers provide even coverage and retract back into the ground when not in use. They come barbed or threaded for connection to quarter- or half-inch PVC. All come with Micro Spray Jets in three different spray patterns: full, half, or quarter circle. Also available are pressure-compensating drippers that maintain rated flow rate for 10-60 psi inlet pressure.



**Raindrip Aqua-Pop sprinkler**

Circle No. 273

**SYNCRIFLO, INC.**  
**800-886-4443**  
**www.syncroflo.com**

Specifically designed to compensate immediately for low pressure or no-pressure conditions, the SyncroFlow Gator Pumping System is a programmable booster that constantly monitors water pressure within a system. The Norcross, GA firm's systems are available with capacities from 25 to 250 GPM. The Gator is housed in a low-profile, weather-resistant steel enclosure. Digital flow display, remote start sequencing and stainless steel enclosure are among options.

Circle No. 274

**TANAKA**  
**253-395-3900**  
**www.tanakapowerequipment.com**

The Tanaka TCP-210 centrifugal pump features the Sound Reduction System which significantly reduces engine noise. Standard features from the Kent, WA firm include spark arrester muffler, ceramic seals, ball bearings supporting the impeller shaft, as well as metal impellers and chambers. The TCP-210's 21cc engine pumps up to 31 GPM through 1-inch suction/discharge ports. Two 1 inch hose couplings, one garden

hose coupling, and 10 feet of reinforced intake hose are included. It is covered by a 1/2/5 warranty, providing one-year coverage for commercial use, two for homeowner use, and five on the ignition module.

Circle No. 275

**TRANSITIONAL SYSTEMS MFG.**  
**530-751-2610**

If your operation calls for linking two or more irrigation controllers on the same pump circuit at the same time, consider the Isolator from Transitional Systems, Yuba City, CA. It offers double protection by locking out all controllers except one. Priced at about the cost of a pump relay, it deals with feedback, polarity and phasing problems. Rated at 24 volts AC, with 5 Amp output, its life expectancy is 100 million operations.

Circle No. 276

**VALVE & FILTER CO.**  
**800-759-6554**  
**email:pleasantp@msn.com**

The VAF2000 line of automatic water filters in sizes from 10 gpm to unlimited flow with particle removal down to 15 microns. Ideal for landscape irrigation, three types of stainless steel screens are available. Firm also offers a low-cost, highly accurate flowmeter called the Hydro-Flow.



**Gator unit is programmable.**

It is especially suited for irrigation and monitoring flow to center pivot systems. Made by Valve & Filter, Arvada, CO, it reads accurately down to flows of one-third foot per minute.

Circle No. 277