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Wet Lab —

**Opened in 2007, the WET Lab's
state-of-the-art facilities can
accommodate large-scale
hydraulic equipment testing.**



WET Lab

Water and Energy Technology Laboratory

**Cutting-Edge Testing for
Cutting-Edge Technology**

With over 25 years of expertise in testing state-of-the-art irrigation and water-flow technology the International Center for Water Technology at Fresno State is now proud to announce the opening of the Water and Energy Technology or WET Lab.

This *solar-powered lab* offers new and expanded services to the irrigation, water-flow technology and energy industries. Whether it's clean energy, a high-pressure pump or the latest in irrigation technology, contact us today to see how we can meet your certified testing needs.



WET Lab *Facts*

| | |
|-----------------------------|-----------------------------------------------|
| WET Facility Size | 13,000 sq ft (1208 sq m) |
| Test Lab Size | 8,260 sq ft (767 sq m) |
| Year Opened | 2007 |
| Test Pit Depth..... | 22 feet (6.7 meters) |
| Test Pit Volume | 53,000 gallons (200,626.84 Liters) |
| Test Pump Motor Size | up to 300 Hp ¹ |
| Pump Testing Capacity | 500 to 6,000 GPM (32 to 380 L/s) ² |
| Flow Rate Capacity | Up to 6,000 GPM (380 L/s) |

¹Variable-frequency Drive (VFD) equipped

²VNIST traceable

Photovoltaic Panels Power Up

The WET Lab is the first green building to be constructed on the campus of Fresno State. The photovoltaic panels on the building roof are capable of generating up to 50 kilowatts of power. Operating parallel to grid power, solar-generated power can be used to run a 50 horsepower pump. The panels will produce enough power in 1 year to meet the energy needs equal to 10 to 15 homes.

WET Lab *Services* include:

1. Certified performance testing of pumps, hydrocyclones and media filters.
2. Hydraulic testing of valves, fittings, etc. to 6000 gpm (380 L/s).
3. Air and vacuum relief valve testing to 125 psig (860 kPa) pressure and 6.0 psig (40.0 kPa) vacuum.
4. Component operating pressure testing to 200 psi (1,370 kPa) depending on flow
5. Component leakage and burst pressure testing to 1500 psi (10,400 kPa).
6. Valve closing speed determinations to 600 gpm (38 L/s).
7. Performance tests on filters (headloss and particle separation efficiency).
8. Indoor sprinkler testing to a 100 ft (30.5 m) wetted radius.



9. Outdoor sprinkler testing to any wetted radius and capacity.
10. Elevated temperature testing of components to 180°F (82°C).
11. Cyclic endurance testing.
12. Drip emitter testing to characterize manufacturing uniformity and determine pressure and temperature relationships.
13. Quantified characterization of sprinkler drop spectrums.
14. Component failure analysis.
15. Material quality testing on polyethylene (ESCR) and polyvinyl chloride (acetone).
16. Electron microscope inspection.



Our *Customers* include:

Agricultural Products Inc., *Ontario, CA*
American AVK Company, *Minden, NV*
American Cyanamid Company, *Stamford, CT*
Ames Company, *Woodland, CA*
Antelco Corporation, *Longwood, FL*
Aquapore Moisture Systems, *Phoenix, AZ*
Automata, Inc., *Grass Valley, CA*
Big Canyon Country Club, *Newport Beach, CA*
Bowsmith Inc., *Exeter, CA*
Boyle Engineering Corp., *Fresno, CA*
Buckner Inc., *Fresno, CA*
CBG Enterprises (Gravi-Chek), *San Diego, CA*
Champion Irrigation, *Los Angeles, CA*
Chapin Watermatics, Inc., *Watertown, NY*
City of Newark, *Newark, NJ*

Claude Laval Corp, *Fresno, CA*
Dig Corporation, *San Marcos, CA*
Drip-In Irrigation, *Fresno, CA*
Dura Plastic Products, Inc., *Beaumont, CA*
E.I. Dupont, *Wilmington, DE*
Febco Division of CMB Ind., *Fresno, CA*
Geoflow SDI, *San Francisco, CA*
Greenscape Irrigation, Inc., *Greenlawn, NY*
Hardie Irrigation, *Laguna Niguel, CA*
Harkers Hollow Golf Club, *Phillipsburg, NJ*
HIT Products Corp., *Lindsay, CA*
Hunter Industries, *San Marcos, CA*
Inverness Golf Club, *Toledo, OH*
Iowa Export-Import Trading Co., *Des Moines, IA*
Irridelco International Corp., *Englewood Cliffs, NJ*



— **ICWT collaborates with the Central Valley Business Incubator to house entrepreneurs developing companies around water or energy technology.**

Irrrometer Co., Inc., *Riverside, CA*
J.M. Lord, Inc., *Fresno, CA*
K-Rain, *Riviera Beach, FL*
Materials Processing Corp., *Minneapolis, MN*
MWD of Southern California, *Los Angeles, CA*
Nantucket Cranberries, *Middleboro, MA*
Nelson Irrigation Corporation, *Walla Walla, WA*
Netafim Irrigation Inc., *Fresno, CA*
Pacific Gas & Electric Co., *Fresno, CA*
Paramount Farms, *Kettleman City, CA*
Pepco WCP, Inc., *Fresno, CA*
P.G.A. West, *LaQuinta, CA*
Plastro Irrigation Inc., *Suisan, CA*
PotLatch Corp., *Boardman, OR*
Rain Bird Sales, Inc., *Glendora, CA*
R & G Sloane Mfg. Co., *Sun Valley, CA*
Richdel/Garden America, *Carson City, NV*
Roberts Irrigation Products, Inc., *San Marcos, CA*

Safe-T-Lawn, Inc., *Miami, FL*
Santa Ana Country Club, *Santa Ana, CA*
SCGA Members Club, *Murrieta, CA*
Senninger Irrigation, Inc., *Orlando, FL*
Southern California Edison, *San Dimas, CA*
Superior Farming Co., *Bakersfield, CA*
Systematic Irrigation Cont. Inc., *Newport Beach, CA*
The Toro Company, *Riverside, CA*
Thompson Mfg. Co., *Chino, CA*
T-Systems International Inc., *San Diego, CA*
Turlock Irrigation District, *Turlock, CA*
Wade Mfg. International, *Fresno, CA*
Wadsworth Golf Construction Co., *Plainfield, IL*
Weather-Tec Corp., *Fresno, CA*
Western Ag Products, *Los Angeles CA*
Zurn Industries/Wilkins, *Paso Robles, CA*
(List not all inclusive.)