

Each water purification project can be unique. On-site Verification & Optimization is routinely performed before a purchase decision is made. Purifics facilitates and expedites on-site pilot verification using our Packaged Pilot Systems (PPS). The on-site test program consists of a series of test runs at various operating parameters to determine optimal process conditions and cost structure. Pilot tests are typically as short as one week in duration or up to several months, as required by the client / regulator.

The Packaged Pilot Systems are “SMART”, fully automated and operated by a touch-screen SCADA system that is equipped with full remote; control, data logging and video. PPS are easily delivered on-site and operational within an hour. The mobile systems are identical to full-scale systems. Consequently, full-scale system design is simply a linear scale-up of capacity based on the test data.

## On-Site Pilot Proposal & Protocol

An on-site verification proposal is available upon request for your specific requirement.

Prior to piloting, a pilot protocol is provided by Purifics and reviewed by the client. The goal of the protocol is to verify purification requirements to the client’s specifications, identify O&M cost, and to obtain the required engineering data for the design & regulatory approval of a full-scale water purification system.

## Verification Testing & Optimization

In the initial phase of the test program, purification is performed to the client’s specifications. Once effluent compliance is verified, optimization tests are performed to reduce O&M costs and equipment size. This is accomplished by varying flow rate, system power and other proprietary techniques. After optimization is complete, sustained purification is performed as per the pilot protocol.

## Laboratory Analysis

Laboratory testing & cost is the responsibility of the client. The client must select and approve the lab used in the program.



## Pilot Program Final Report & Full-Scale System Recommendation

At the conclusion of the on-site pilot verification a final test report, consisting of the objectives, description, results, discussion, conclusions, system recommendations, and an appendix of the test data is submitted to the client. A full-scale treatment train recommendation is made. This recommendation includes capital, operating and maintenance costs, as well as other system parameters.

## Mobilization & Demobilization

The mobile system is prepared for transport to the client’s site upon receipt of a purchase order. The delivery date can be as early as one week after receipt of the PO. The delivery time, method and other logistics are coordinated with the client. Logistics, such as the test location, site security and access, client procedures and regulations and power requirements, are discussed at this time.

The mobile system will be demobilized and returned to Purifics upon conclusion of the testing. Operation & disposal of the treated water is the responsibility of the client.





## Packaged Pilot Systems

| PPS             | 1                          | 4                          | 5                          | 7                          | 8                          |
|-----------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| Capacity        | 10-18 gpm<br>(0.6-1.1 L/s) | 10-18 gpm<br>(0.6-1.1 L/s) | 10-18 gpm<br>(0.6-1.1 L/s) | 10-18 gpm<br>(0.6-1.1 L/s) | 10-18 gpm<br>(0.6-1.1 L/s) |
| CUF M           | 10                         | 10                         | 10                         | 10                         | 10                         |
| Photo-Cat       |                            |                            |                            |                            | ✓                          |
| SRU 4           | ✓                          | ✓                          | ✓                          | ✓                          | ✓                          |
| DIT             | ✓                          | ✓                          | ✓                          | ✓                          | ✓                          |
| Enclosure Power | 480V/277V,<br>30 Amps*     | 480V/277V,<br>30 Amps*     | 480V,<br>30 Amps**         | 480V,<br>30 Amps**         | 480V,<br>80 Amps**         |
| Max Flow (gpm)  | 20                         | 20                         | 40                         | 40                         | 40                         |
| Size (ft)       | 20 x 8 x 8.5               | 20 x 8 x 8.5               | 20 x 8 x 8.5               | 20 x 8 x 8.5               | 40 x 8 x 9.5               |
| Weight          | 12,000 lbs                 | 12,000 lbs                 | 12,000 lbs                 | 12,000 lbs                 | 24,000 lbs                 |

\* 3 phase WYE, FLA    \*\* 3Ph, Delta, FLA

