



TRI NUCLEAR CORP.

UD-36A Underwater Demineralizer

Tri Nuclear has developed a versatile stand-alone underwater demineralizer which is ideal for use in the Spent Fuel Pool or Reactor Cavity and is the most widely used underwater demineralizer on the market.

Tri Nuclear's underwater demineralizers can be operated for long periods practically unattended without the need for maintenance or resin change out, all while controlling water chemistry and reducing pool water activity.

Because the portable underwater demineralizer is submerged, it needs no external shielding, or hoses running in or out of the water that may cause rippling, poor visibility or personnel contamination.

Tri Nuclear's underwater demineralizers operate under negative pressure which allows the pump to be gravity seated and does not require any special tooling to install or remove the pump underwater.

Features:

- Rapid system deployment via camlock hose connections, twist lock electrical connections, and control box upgrades
- Customer supplied resin for best results via proper selection
- Underwater service requiring no additional shielding
- Remote resin sluice and charge
- Lifting Certified per NUREG0612

Specifications:

- | | |
|---------------------------|------------|
| • System Flow Rate: | 75 GPM |
| • Resin Capacity: | 28 Cu. Ft. |
| • Diameter: | 36" |
| • System Height: | 89" |
| • Vessel Height: | 67-1/2" |
| • Pump Weight: | 50 lbs. |
| • Vessel Empty with Pump: | 550 lbs. |
| • Vessel Full with Pump: | 2,550 lbs. |



UD-36A Vessel with Pump & Hose

Operational Details:

The UD-36A system has two different system configurations identified by the method the system circulates water.

In the typical discharge away mode, unfiltered water from the pool enters the top of the vessel travels through the media bed, and is discharged away from the vessel back to the pool via the pump, discharge hose and diffuser.

In the suction toward mode, unfiltered water from the pool enters the suction hose via suction strainer, travels down the length of suction hose toward the vessel, travels through the media bed, and is discharged at the top of the vessel back to the pool via the pump.