

AQUAPRIMA AK-100

- 100% self sufficient stand alone supplying 3 micron filtration system.
- Stainless steel construction
- Aquaprima AK-100 Filter unit is specially designed for quick and easy retrofit with all WEDMs.
- Fully PLC controlled with automatic sludge discharge.
- Aquaprima AK-100 Filter unit is one hundred percent ecological, requiring virtually no attention.
- Overall tank capacity - 330 gallons
- The filter incorporates an automatic *EkoAdd* metering tank that greatly reduces resin consumption.



This filter unit is designed to operate together with wire EDMs, taking dirty water from the machine and filtering it to 3 microns to supply clean water for machining.

When the filter vessel reaches its cleaning capacity, which is detected by a pressure switch, a backwashing cycle is initiated. While in the backwashing cycle, clean filtered water is supplied to the machine's dielectric tank. Therefore, the machine has an endless supply of clean water.

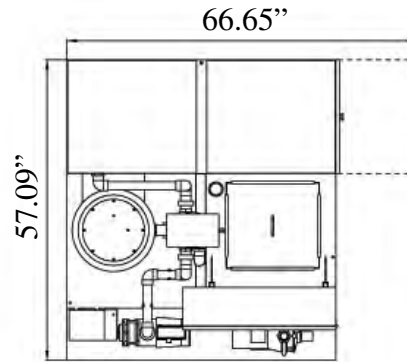
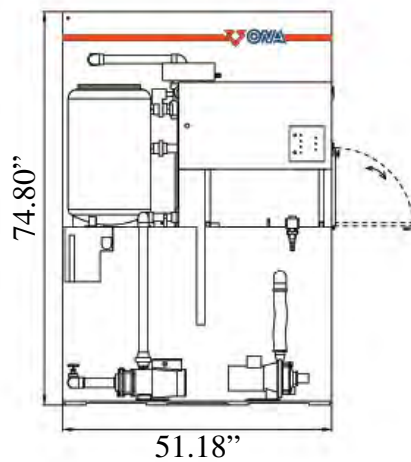
After a predetermined programmed number of backwashing cycles, a sludge removal cycle is initiated, discharging the sludge contained in the decanting tank into a sludge bag. When the sludge bag reaches its capacity an alarm will be generated.

Aquaprima AK-100 Filter unit is an automatic, self cleaning, mineral filter unit designed for WEDM filtration, and does not require filter media replacement.

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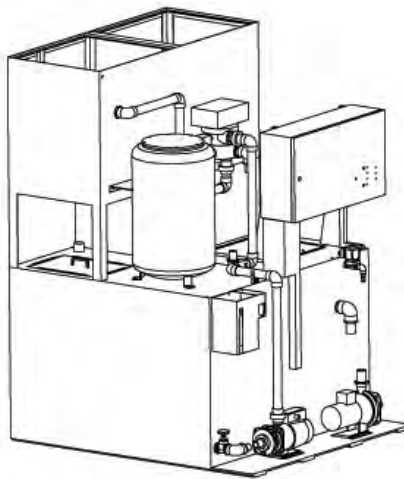
Filter Unit Layout



- Gross filtration flow in normal operation - 26 gpm
- Net filtration flow during normal operation - 21 gpm
- Net filtration flow during backwashing operation - 16 gpm

- Electrical connection to main power:

- 480V 3 phase 60Hz
- 3 KVA
- 7.6 amps



Control Unit

A PLC unit controls the complete filter operation. Alarms are signaled by acoustic horn and light. Alarms are identified in the PLC indicating LEDs lights, switches, and push buttons. They indicate where to start/stop the filter pump, test filter operation, proceed with sludge removal, reset alarms, and inhibit acoustic alarm horn.

- S1** - Filter Pump Switch ON/OFF
- S2** - Sludge Removal Switch AUTO/MANUAL
- S3** - Test Pushbutton
- S4** - Reset Pushbutton
- S17** - Horn Muting Pushbutton
- H2** - Filtration Cycle LED
- H3** - Decanting Tank Discharge LED
- H4** - Backwashing LED
- H5** - Sludge Discharge LED

