



US CENTRIFUGE & IGE SOLUTIONS ARE PLEASED TO INTRODUCE THE MODERN STONE FABRICATING INDUSTRY TO THE BENEFITS OF WATER RECYCLING WITH CENTRIFUGAL SEPARATION TECHNOLOGY

This specially developed / pre-engineered water clarifying system featuring the accelerated settling force of an automated self-cleaning centrifuge is designed to clarify and recycle the water of from a combination of stone fabricating machinery such as multiple saws / straight-line edgers / and or CNC machines.

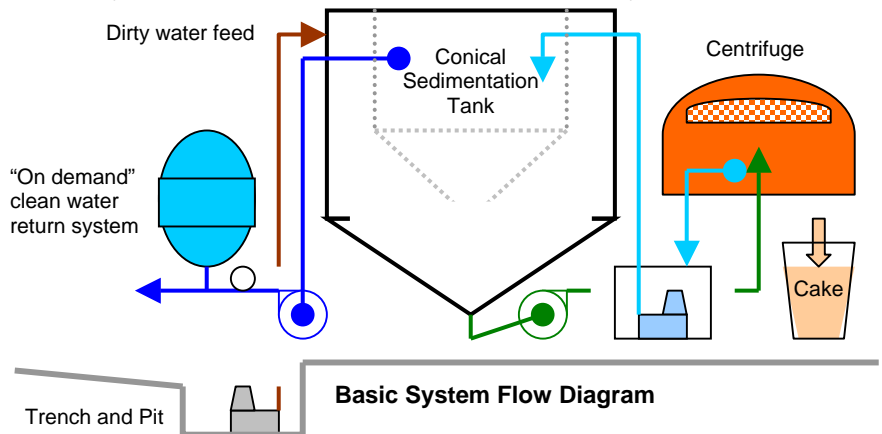
- **Maximum dirty water in-flow:** Up to 100-gpm average
- **A440 clarifying capacity:** Up to 2,400-gallons per hour
- **Maximum "mud" removal:** Up to 75-lbs of solids cake per hour
- **Average water quality:** Up to 99.9% clean recycled water

This system features US Centrifuge's new Duramatic Model A440 automatic self-cleaning centrifuge with separately driven plow system, PLC based centrifuge / system control panel, heavy duty steel machine support stand, integrated 1,500-gallon Conical Sedimentation Tank with integrated centrifuge feed pump, 200-gallon clarified water receiving tank with automatic float switch controlled lift pump, and 100-gpm @ 60-psi pressurized "on-demand" water return system.

Process Description: Dirty liquid from the operation drains into the floor trenches and runs into the below grade collection pit. A pump transfers the dirty water into the 1,500-gallon Conical Sedimentation Tank, which is sized for a minimum limit of 15-minutes retention / settling time @ 100-gpm. A 40-gpm pump continuously feeds the centrifuge concentrated "muddy" water off the bottom of the Conical Sedimentation Tank. The centrifuge separates the mud and discharges centrifugally clarified clean water into the 200-gallon catch tank. The centrifuge periodically stops and automatically discharges the separated solids cake into a sludge drum and / or hopper placed below the centrifuge. The clarified clean water in the catch tank is pumped into the center section of the Conical Sedimentation Tank. The centrifuged clean water and clean settled water are co-mingled in the center section of the conical tank. The clean water is intermittently returned to the stone fabricating machinery via the pressurized "on demand" return pump system.



The use of straight water is acceptable but reduces the usable life of the water even though the centrifuge can separate particles as small as 3-micron the overall particle count will continue to increase requiring the addition of fresh water and / or chemistry. US Centrifuge recommends using our specially formulated additives "Stone Cool" coolant to condition the water with lubricants and corrosion inhibitors and "Rock Flocc" to increase fine particle agglomeration and settling rates. This chemical addition improves the overall efficiency of the recycling system and increases the life of the stone fabricating machinery and tooling.



Overall system Specifications:

- Power requirements: 30-amp 480-volt 60-Hz 3-Ø
- Space requirements: 110"H x 96"W x 168" L
- Approximate weight: 5,000-lbs. (ships dedicated carrier)

Optional items include:

- Submersible pit pump system
- Flocculant dosing pump / Coolant-water make-up system