



Industrial Contractors' Supplies, Inc.

- Dust Director Division -

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H₂O Slurry Press - Compact, Portable - Wastewater Separation Station

- Slurry Separation: Solid from liquid separation
- Compresses the solids to *caked* plates
- Discharges crystal clear water for reuse or disposal



Air Powered, Filter Press Technology - Environmental, Economical Benefits:

- Fast Separation/Processing Times - Solids from the liquid
- Portable, Compact ~ *Goes Anywhere* - A forklift is not required
- Made in the USA from easily accessible, interchangeable replacement parts
- HD Construction: Reliable, Dependable - Self Operating . . .
- Debris *caked* plates are easy to handle: Plates dropped into 3 collection bins located beneath the filter plates (or a wheel barrel may be placed beneath the plates).
- Crystal clear water is discharged for immediate reuse or disposal.



Complies to Environmental Regulations - Eliminate Recycling / Disposal Cost . . . Provides Economical & Recycling Savings . . .

Fast Processing Times, Easy / Sensible Operation, Portable, Durable - 4 Models

H ₂ O - Mini	H ₂ O - 1	H ₂ O - 2	H ₂ O - 4	J103R3-16P
<p>Wheelbarrel design goes anywhere - processes slurry just as fast as you can make it.</p> <p>Equipped with easy to handle collection trays beneath the filter plates for easy cake removal.</p> <p>Uses the same HD pump and hydraulic ram as the larger 240 model.</p> <ul style="list-style-type: none"> • 38"l x 22"w x 31"h • Weight: 280 lbs. • 10" pneumatic wheels • <i>Easily</i> processes 60 gallons of slurry / hour • Compressed solid capacity: .25 cubic feet • 5 Filter Chambers • SCFM Minimal Air Requirement: 4 SCFM <p>Price: \$11,880.00</p>	<p>Fits through a 36" doorway with 3 collection bins beneath the filter chambers for easy removal of the caked plates.</p> <p>Easily outpaces most teams of concrete professionals using saws and grinders.</p> <ul style="list-style-type: none"> • 46"l x 31"w x 47"h • Weight: 620 lbs. • 6" rubber casters • <i>Easily</i> processes 240 gallons of slurry / hour • Compressed solid capacity: 1 cubic foot • 7 Filter Chambers • SCFM Minimal Air Requirement: 6 SCFM • Ships on 1 pallet <p>Price: \$15,880.00</p>	<p>Twice the collection capacity of H₂O - 1.</p> <p>Equipped with 3 collection bins or wheelbarrel design for easy cake removal.</p> <ul style="list-style-type: none"> • 56"l x 31"w x 47"h • Weight: 730 lbs. • 6" rubber casters or pads for stationary installation • <i>Easily</i> processes 420 gallons of slurry / hour • Compressed solid capacity: 2 cubic feet • 14 Filter Chambers • SCFM Minimal Air Requirement: 6 SCFM • Ships on 1.5 pallet <p>Price: \$19,880.00</p>	<p>Twice the capacity and processing speed of H₂O - 2.</p> <p>Includes 5 collection bins or use of a wheelbarrel for easy cake removal.</p> <ul style="list-style-type: none"> • 56"l x 31"w x 47"h • Weight: 990 lbs. • 6" rubber casters or pads for stationary installation • <i>Easily</i> processes 600 gallons of slurry / hour • Compressed solid capacity: 3.8 cubic feet • 24 Filter Chambers • SCFM Minimal Air Requirement: 6 SCFM • Ships on a 1.5 pallet <p>Price: \$24,880.00</p>	<p>J-Air Compressor Lightweight, high efficiency cooling, HD constructed, USA made</p> <p>Processes dry, caked plates, fast production times, 75' for discharge.</p> <p>Portable, Durable - Reliable: recommended for all Slurry Press models.</p> <ul style="list-style-type: none"> • Gas Engine: Subaru • Horsepower: 4.5 • Tank (gallons): 15.4 • CFM @ 100 psi: 9.0 • Weight: 195 lbs. • 3/8" NPI male thread outlet • Ships on a 1.5 pallet <p>Price: \$1,160.00</p>

Set-Up Information / Filtration Efficiency

Power Requirements.

- The H₂O Slurry Press will operate from any compressor. However, a 8 CFM compressor is recommended
- Properly tuned to your filtration requirements and processing times, the H₂O Slurry Press may be left to operate unattended.
- For crystal clear water output, efficiency of operation, and fast processing times, reference the following compressor settings:
 - 80 psi: Fast processing times, produces beautiful, dry, solid cakes, crystal clear water
 - 40 psi: Medium processing times, produces sloppy cakes, crystal clear water

Which Model to Purchase? Consider the following:

- How many gallons of slurry do you wish to process per hour / per day?
- What would a consistent number of gallons be throughout the day? Does the volume vary? Define hours in a day.
- Particle size? Density or thickness of the sediment in your slurry
- Ratio of sediment to water (i.e. 1 cup or 10 gallons of sediment to 55 gallons of water)
(Helpful Benchmark: 55 gallon drum of concrete slurry typically holds between 1 and 2 cubic feet of *compacted solid*)

Start-Up Operation: Pre-Coat Step.

- Each of the filter chambers includes a filter media cloth, secured in place with a gasket. Expected filter cloth life is 10 to 15 yrs.
- **Filter Cloth Filtration Efficiency Rating: 5 microns (.005 millimeters). Pre-coated Filter Cloth Efficiency: 1 to .6 microns.**
- Pre-coating the filter cloth should be your 1st step to ensure the purity of the liquid being discharge.

Two (2) Methods are used to Pre-Coat the Filter Cloths:

- 1) Loading Method - Using your own sediment. The H₂O Slurry Press it started at the slowest speed possible (1 - 10 psi). Depending on the particle size and volume of sediment in your slurry, pre-coating times will vary (2 to 40 minutes)
2. Mix Method - Mix 20 lbs. of diatomaceous earth (DE) with 10 gallons of water.
Pump this milkshake mixture through the filter chambers to instantly pre-coat the filter cloths. You may immediate being normal operation of the H₂O Slurry Press using its optimal operating speed of 80 psi.

Once the filter cloths are properly coated (determined by the purity of the water being discharged), you can increase the psi into the press. Note: If the water being discharge ever begins to look unacceptable (cloudy), simply reduce the psi to the pump. This will slow down the intake of slurry going into the H₂O Slurry Press while it continues to pre-coat the filter cloths. Additionally, if speed isn't too important you can leave the machine operating slowly . . .

The Pre-Coat Step of "Going slow and long enough" is only for 1st filling of the press. After the release of your first cakes, you'll still start the H₂O Slurry Press slowly (10 psi), but only for a few minutes as the filter cloths are already coated. As you observe the clarity of the water being discharged, the psi *may be* gradually increased to the optimal operating setting of 80 psi.

Filling the Filter Chambers - Emptying the Filter Chambers - Dropping the Caked Plates.

The powerful 3/4" diaphragm pump (completely adjustable, from 0 to 30 GPM or 0 to 100 psi of air) will push and compact the solids in the filter chambers. The filter chambers, held in place within the heavy framework of the H₂O Slurry Press and pressed together with 5000 lbs. of force from the hydraulic hand pump. As the filter chambers fill, pressure gradually increases . . . Additionally, the purity of the liquid being discharged also improves as the solids fill within the filter chambers.

Once full (the liquid being discharged will cease to flow), operator intervention is required:

- Reduce the air pressure from the compressor from 80 to 20 psi
- Open the Air Blow Down valve on the H₂O Press, to distribute the 20 psi of air over and through the filter chambers
This feature will dry any excess water still in the filter chambers, helping to ensure that the discharged cakes are solid. This is an optional step . . . typically lasts between 2 to 5 minutes
- Reduce the air pressure from the compressor to zero (0)
- Open the bleed value on the hydraulic hand pump to relieve its pressure on the iron compression plate, tilt the pump backwards
- Re-tract the compression plate (it is on wheels) and use the side handles on the filter chambers to pull them apart.
- As each filter chamber is separated, the caked plates are released and dropped into the collection trays (3) or a wheelbarrel.
- Any sludge is scraped from the filter cloth that did not fall into the collection trays (a plastic scraper is provided)
- Close the H₂O Slurry Press by sliding the filter chambers together towards the pump
- Re-positioning the compression plate and the cylinder, and hand pump the hydraulic ram to 5000 psi
- Turn-on the air pressure to 10 psi to start the process . . . gradually increasing to 80 psi.

HANDLING the DISCHARGE of CLEAN WATER.

You can choose to reuse the water being discharged by collecting it in a container and reusing it for your process. The water is not potable and cannot be consumed by humans. Or, you may choose to discharge the water to a drain. Note: It is the user's responsibility to ensure that the water being drained meets all requirements to send to drain. This typically involves using a pH Test Kit, one is included with each H₂O Slurry Press.

END of DAY CLEANING.

At the end of each day of use it is important to flush out any slurry from the system. This includes flushing the air pump and the filtration plates as well as any hoses. This can be done by directing the clean water discharge hose from the system and running its clean water right through the H₂O Slurry Press.