PURE CYCLE 50

Closed-loop water recycling system

FINAL SIZING BY SITE REVIEW



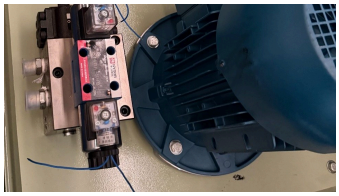
Pure Cycle 100 system shown

PRODUCT OVERVIEW

Pure Cycle 50 is the compact closed loop for smaller shops. A 30 m² (323 ft²) stainless chamber filter press squeezes the stone solids into cakes, a 2,000-gallon tank stores the filtered water, and a 5.4 HP pump sends it back to your machines.



Press in production (photo)



Hydraulic unit (actual photo)

52.8 GPM	323 ft²	2 microns	2,000 gal
Filtered water, nominal (12 m³/h)	Filter area (30 m²)	Filtration (manufacturer-stated)	Clean-water storage (7,571 L)

KEY SPECIFICATIONS

Output	52.8 GPM nominal (12 m³/h); up to 66.0 GPM (15 m³/h)
Filtration	Down to 2 microns (manufacturer-stated)
Filter press	30 m² (323 ft²); 37 plates, 24.8 in (630 mm)
Construction	Stainless steel, brushed; UL-certified motors specified
Plate handling	Hydraulic clamping; plate shifting confirmed with your order
Cake volume	119.4 gal (452 L) per cycle; 1⅛ in (30 mm) cakes
Delivery pump	5.4 HP (4 kW); 44.0 GPM at 315 ft listed
Slurry pump	Air-operated diaphragm, 2 in (DN50)
Electrical	3-phase; cabinet built for 208–240 V
Connections	U.S. flanges and NPT threads specified

WHY IT'S CALLED 50

The 30 m² press filters about 53 GPM (12 m³/h), up to 66 GPM at peak. The 2,000-gallon tank stores that water and the 44 GPM delivery pump feeds your machines; overflow goes back to the pit and is filtered again.

IDEAL APPLICATIONS

- Granite, quartz, porcelain and marble fabrication shops.
- Smaller shops: Next Level's sizing example is about 35 GPM of machine demand.
- Shops replacing settling pits or open-water recycling.
- A first closed loop that leaves room to step up to Pure Cycle 100.

INCLUDED CONFIGURATION

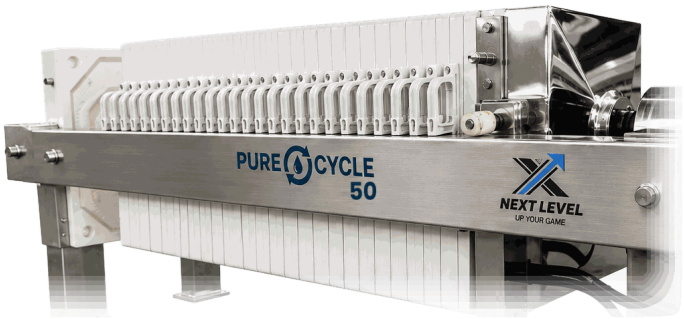
- 30 m² stainless chamber filter press with plates and cloths.
- Air-operated diaphragm slurry pump.
- 201 gal (760 L) precoat / flocculant tank with agitator.
- 5.4 HP multistage clean-water delivery pump.
- PLC control cabinet (built for 208–240 V) and hydraulic power unit.
- Two stainless filter-cake hoppers, side by side under the press.
- 2,000 gal storage tank and equipment interconnection piping.
- PAM starter quantity and documentation per your proposal.

BEFORE YOU ORDER

We confirm the electrical schedule (current and breaker), the plate-shifting arrangement and the pit size for your site. You provide the collection pit, foundation, three-phase power, compressed air and final hookups.

BUILT IN STAINLESS STEEL.

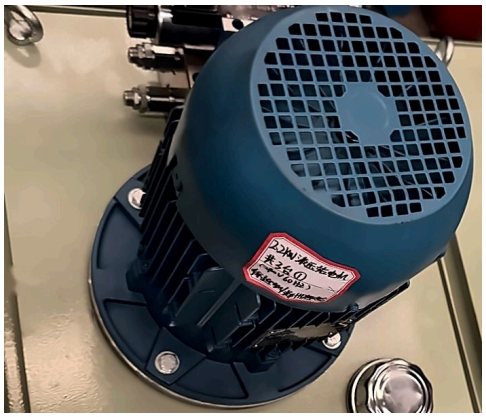
The same stainless build as Pure Cycle 100, with a 30 m² (323 ft²) press.



Stainless chamber filter press

Brushed stainless steel outside, polypropylene plates and cloths inside. The four concealed corner outlets keep the filtered water in closed pipes on its way to the storage tank.





Stainless cake hoppers.

Actual photo: a Pure Cycle 100 hopper, October 2026. Pure Cycle 50 has two stainless hoppers side by side under its 30 m² press, which is about 12 ft 5¼ in long and 2 ft 11⅜ in wide (3,790 × 900 mm).

UL-certified motors specified.

Next Level specifies UL-certified motors and U.S.-standard connections (ASME flanges, NPT threads) for U.S. installations. Actual photo: Pure Cycle 100 hydraulic-unit motor.

YOU PROVIDE

- Collection pit: design, permits and construction (size set by your site review).
- Level concrete foundation, unloading and placement of the equipment.
- Three-phase 60 Hz power by a licensed electrician, plus clean, dry compressed air.
- Shop distribution and return piping, unless ordered from Next Level.

OPTIONS & SUPPORT

- Elevated tank platform, hot-dip galvanized, 8 ft 2 in × 8 ft 2 in (2,500 × 2,500 mm); its rated load for your full tank is confirmed in writing before order.
- Shop water piping, quoted from your measured layout.
- Trench systems supplied; trench installation not included (installer referral on request).
- Installation, warranty and service scope are stated in your written quotation.

ONE CLOSED LOOP.

From your collection pit back to your machines.



Precoat tank, slurry pump, filter press with controls, storage tank and delivery pump. Component pictures are representative; your layout follows your site plan.

COLLECT. FILTER. STORE. RETURN.

The same water goes around again and again; only the solids leave, as dry filter cakes.

Collect
Shop slurry drains to your collection pit.

Feed
The air-operated pump feeds the press.

Filter
Plates and cloths hold the stone solids.

Store
Filtered water fills the 2,000 gal tank.

Return
The delivery pump supplies your machines; overflow goes back to the pit.

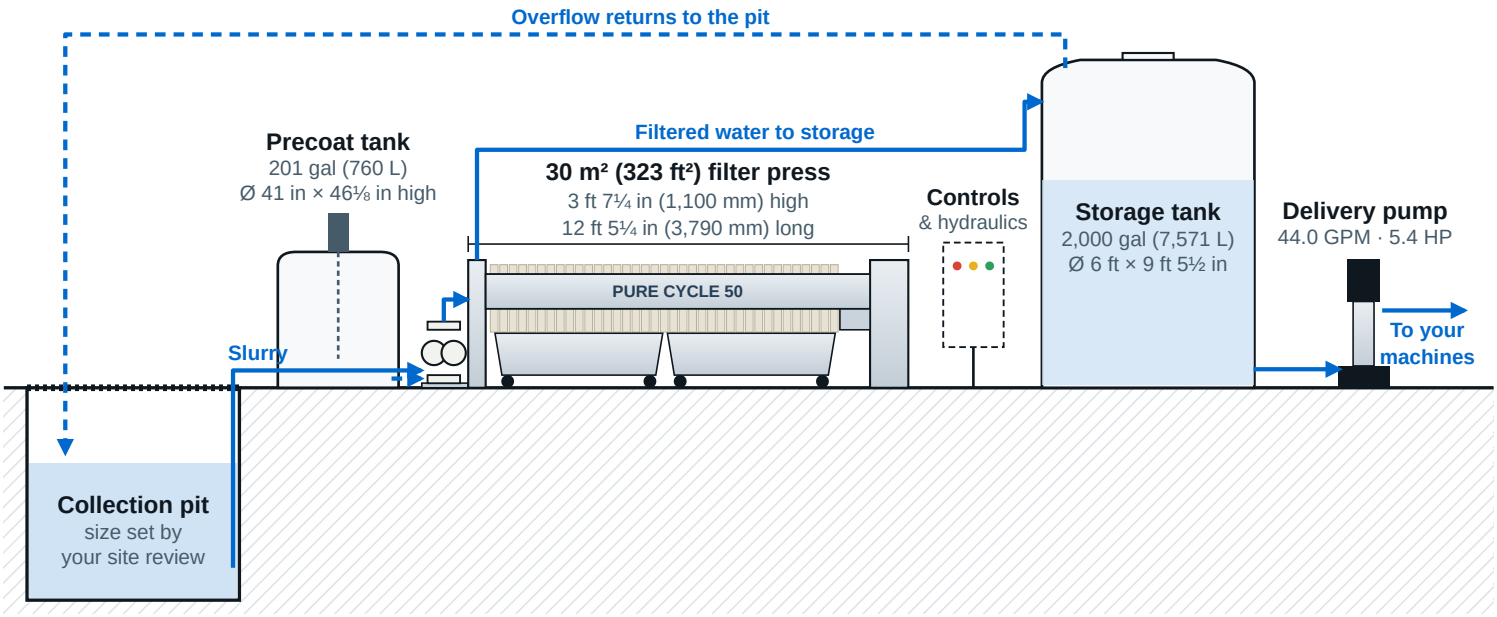
PURE CYCLE 50 OR PURE CYCLE 100?

	Pure Cycle 50	Pure Cycle 100
Filter press	**30 m² (323 ft²)**	50 m² (538 ft²)
Filtered water, nominal	**52.8 GPM (12 m³/h)**	105.7 GPM (24 m³/h)
Press maximum	**66.0 GPM (15 m³/h)**	132.1 GPM (30 m³/h)
Plates	**37 × 24.8 in (630 mm)**	38 × 34¼ in (870 mm)
Cake volume per cycle	**119.4 gal (452 L)**	197.6 gal (748 L)
Storage tank	**2,000 gal (7,571 L)**	2,500 gal (9,464 L)
Delivery pump (listed)	**44.0 GPM at 315 ft · 5.4 HP**	66.0 GPM at 328 ft · 10 HP
Press size (L × W)	**12 ft 5¼ in × 2 ft 11⅜ in**	13 ft 3¼ in × 4 ft 5⅛ in
Next Level sizing example	**≈35 GPM of machine demand**	≈69 GPM of machine demand

Sizing examples are Next Level estimates: Pure Cycle 50 for one CNC saw, an inline polisher, a hand router and three hand polishers; Pure Cycle 100 for two CNC saws, an inline polisher, a CNC router, a hand router and five hand polishers. Your layout is sized on your site review.

LAYOUT AND FOOTPRINT.

Indicative side view, drawn to scale from the equipment sizes. Your layout is drawn from your site plan.



EQUIPMENT SIZES

Filter press	12 ft 5¼ in × 2 ft 11⅜ in, 3 ft 7¼ in high (3,790 × 900 × 1,100 mm)
Press weight, full	5,203 lb (2,360 kg)
Foundation	Per the final installation drawing
Storage tank	72 in Ø × 113½ in (1,829 × 2,883 mm); water when full ≈16,700 lb (7.6 t)

EQUIPMENT SIZES (CONT.)

Precoat tank	41 in Ø × 46⅛ in (1,040 × 1,170 mm)
Delivery pump	15¾ × 14⅝ × 43¾ in (400 × 370 × 1,110 mm); 265 lb (120 kg)
Slurry pump	13⅜ × 9 × 22½ in (340 × 230 × 570 mm)
Collection pit	Sized on your site review
Controls & hydraulics	Split cabinet and hydraulic unit at the press; sizes on the final drawing

Press size and weight are quotation references. Clearances for plate shifting, hopper removal and service are confirmed on your final layout. This is not a construction drawing.

TECHNICAL SPECIFICATIONS

Pure Cycle 50 · complete technical data (U.S. / metric)

FILTER PRESS

Filter area	322.9 ft² (30 m²)
Plates	37 movable, 24.8 × 24.8 in (630 × 630 mm), virgin polypropylene
Filter cloths	37 + 1 set, polypropylene
Cake volume	119.4 gal (452 L) per cycle
Cake thickness	1⅛ in (30 mm)
Filtered water	52.8 GPM (12 m³/h) nominal; 66.0 GPM (15 m³/h) max.
Feed pressure	Up to 87 psi (0.6 MPa)
Clamping	Hydraulic, 2,611–3,191 psi (18–22 MPa), automatic pressure holding
Pressure limit	Below 3,626 psi (25 MPa); restarts below 2,611 psi (18 MPa)
Hydraulic cylinder	Φ 6.30 in (160 mm), single cylinder
Plate handling	Plate-shifting arrangement confirmed with your order
Operating temp.	Below 158 °F (70 °C)

BUILD & CONNECTIONS

Construction	Stainless steel, brushed (matte) finish
Motors	UL-certified motors specified
Controls	PLC control cabinet; split hydraulic power unit
Flanges / threads	U.S.-standard (ASME) flanges and NPT threads specified
Feed inlet	2½ in (DN65), at the fixed end
Filtrate outlets	2 in (DN50), four concealed corners
Hoppers	2, stainless, side by side under the press

ELECTRICAL

Supply	3-phase, 60 Hz; cabinet built for 208, 220, 230 or 240 V
Current / breaker	Confirmed with your order

SLURRY PUMP

Type	Air-operated double diaphragm; PP body; PTFE diaphragms, balls, seats
Connection	2 in (DN50)
Head / suction lift	Up to 276 ft (84 m) / 16.4 ft (5 m)
Air use	31.8 CFM (0.9 m³/min)
Max. solids	0.20 in (5 mm)

DELIVERY PUMP

Type	Vertical multistage, 22 stages, 304 stainless impellers
Listed flow / head	44.0 GPM at 315 ft (10 m³/h at 96 m)
Motor	5.4 HP (4 kW), IE3
Connections	2 in (DN50)

TANKS & PRESS SIZE

Precoat tank	201 gal (760 L); 41 in Ø × 46⅛ in; 88 rpm agitator; 1⅝ in (40 mm) ports
Storage tank	2,000 gal (7,571 L); about 72 in Ø × 113½ in
Press size	12 ft 5¼ in × 2 ft 11⅜ in × 3 ft 7¼ in (3,790 × 900 × 1,100 mm)
Press weight	5,203 lb (2,360 kg) at full load

Questions, or ready for a written quotation? **+1 941-900-3018** · **sales@nextlevel.plus** · **nextlevel.plus**

Factory data for the press, pumps and tanks; U.S. values are converted and rounded. Pump flows and heads are listed ratings, not a guaranteed duty point; filtered-water output depends on your slurry, flocculant dosing and cleaning cycle. Electrical values are confirmed with your order.