PURE CYCLE

TECHNICAL SPECIFICATION SHEET

PURE CYCLE 50

Closed-loop water recycling system

Pure Cycle 50 is the compact closed loop for smaller shops.



Pure Cycle 100 system shown

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)

A 323 ft² (30 m²) 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.

KEY FEATURES

- **Stainless chamber filter press**
  Brushed stainless steel outside, polypropylene plates and cloths inside.
- **UL-certified motors specified**
  Next Level specifies UL-certified motors and U.S.-standard connections (ASME flanges, NPT threads) for U.S. installations.

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.

PURE CYCLE 50 · TECHNICAL DATA

CLOSED-LOOP WATER RECYCLING SYSTEM

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.
Filtration	Down to 2 microns (manufacturer-stated)
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

BUILD & CONNECTIONS (CONT.)	
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)

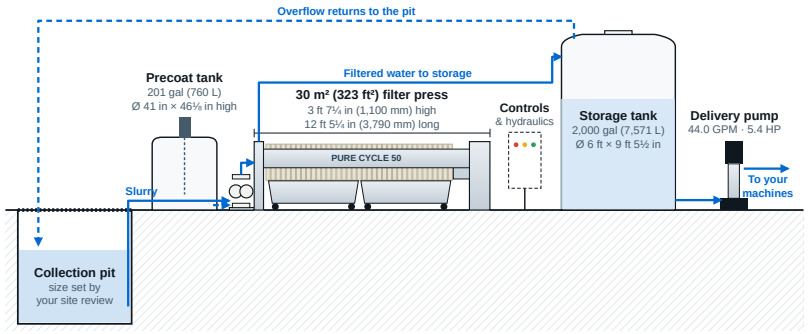
DELIVERY PUMP	
Type	Vertical multistage, 22 stages, 304 stainless impellers
Listed flow / head	44.0 GPM at 315 ft (10 m³/h at 96 m)
Motor	5.4 HP (4 kW), IE3
Connections	2 in (DN50)
Size / weight	15¾ × 14⅝ × 43¾ in (400 × 370 × 1,110 mm); 265 lb (120 kg)

DIMENSIONS AND WEIGHT	
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

INCLUDED AS STANDARD

- 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

LAYOUT AND DIMENSIONS



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

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. **Specifications subject to change without notice.** Images may show optional equipment. All dimensions and weights are approximate; U.S. values are converted from the factory's metric data. Document date: Nov 2026. Next Level Enterprises · www.nextlevel.plus · +1 941-900-3018 · sales@nextlevel.plus