PURE CYCLE

TECHNICAL SPECIFICATION SHEET

PURE CYCLE 100

Closed-loop water recycling system

Pure Cycle 100 turns your shop's slurry back into clean process water.



Pure Cycle 100 system

105.7 GPM	538 ft²	2 microns	2,500 gal
Filtered water, nominal (24 m³/h)	Filter area (50 m²)	Filtration (manufacturer-stated)	Clean-water storage (9,464 L)

A 538 ft² (50 m²) stainless chamber filter press squeezes the stone solids into cakes, a 2,500-gallon tank stores the filtered water, and a 10 HP pump sends it back to your saws, CNCs and polishers.

KEY FEATURES

- **Full stainless-steel press**
  Frame, stands, beams, hoppers and drip tray are stainless steel with a brushed finish.

APPLICATIONS Granite, quartz, porcelain and marble fabrication shops; CNC saws, bridge saws, sawjets, routers and polishers; shops replacing settling pits or open-water recycling; larger shops: Next Level's sizing example is about 69 GPM of machine demand.

PURE CYCLE 100 · TECHNICAL DATA

CLOSED-LOOP WATER RECYCLING SYSTEM

FILTER PRESS	
Filter area	538.2 ft² (50 m²)
Plates	38 movable, 34¼ × 34¼ in (870 × 870 mm), virgin polypropylene
Filter cloths	38 + 1 set, polypropylene
Cake volume	197.6 gal (748 L) per cycle
Cake thickness	1⅛ in (30 mm)
Filtered water	105.7 GPM (24 m³/h) nominal; 132.1 GPM (30 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 7.09 in (180 mm), single cylinder
Plate handling	Automatic plate pulling
Air blow-down	Valve-switched compressed-air connection, 2 in (DN50)
Operating temp.	Below 158 °F (70 °C)

BUILD & CONNECTIONS	
Construction	Full stainless steel, brushed finish
Motors	UL-certified (all motors)
Controls	PLC control cabinet; split hydraulic power unit
Flanges / threads	ASME B16.5 Class 150 RF flanges; NPT threads
Feed inlet	3 in (DN80) Class 150 RF flange
Filtrate outlets	2 in (DN50) Class 150 RF, four concealed corners
Hoppers	2, stainless, on casters, side by side under the press

ELECTRICAL	
Supply	240 V, 3-phase, 4-wire, 60 Hz
Full-load current	22 A
Main breaker	32 A
Cabinet voltage	Built for 208, 220, 230 or 240 V
Motors	Hydraulic 3 HP (2.2 kW); plate pulling 1 HP (0.75 kW); delivery pump 10 HP (7.5 kW); agitator ¾ HP (0.55 kW)

SLURRY PUMP	
Type	Air-operated double diaphragm; PP body; PTFE diaphragms, balls, seats
Connection	2½ in (DN65)
Flow	Up to 132 GPM (30 m³/h)
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	0.31 in (8 mm)

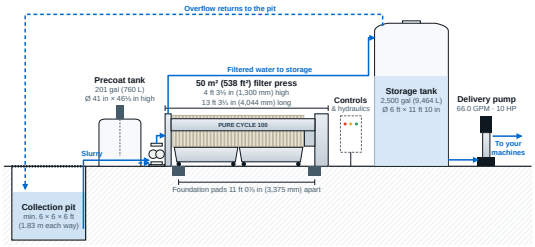
DELIVERY PUMP	
Type	Vertical multistage, 22 stages, 304 stainless impellers
Listed flow / head	66.0 GPM at 328 ft (15 m³/h at 100 m)
Motor	10 HP (7.5 kW), IE3
Connections	2 in (DN50)
Size / weight	17⅜ × 14⅝ × 49 in (440 × 370 × 1,245 mm); 778 lb (353 kg)

DIMENSIONS AND WEIGHT	
Precoat tank	201 gal (760 L); 41 in Ø × 46⅛ in; 88 rpm agitator; 1⅝ in (40 mm) ports
Storage tank	2,500 gal (9,464 L); about 72 in Ø × 142 in
Press size	13 ft 3¼ in × 4 ft 5⅛ in × 4 ft 3⅛ in (4,044 × 1,350 × 1,300 mm)
Press weight	8,944 lb (4,057 kg) at full load

INCLUDED AS STANDARD

- 50 m² stainless chamber filter press with automatic plate pulling, plates and cloths
- Air-operated diaphragm slurry pump, mounted at the press
- 201 gal (760 L) precoat / flocculant tank with agitator
- 10 HP multistage clean-water delivery pump
- PLC control cabinet (built for 208–240 V) and hydraulic power unit
- Two stainless filter-cake hoppers on casters, side by side under the press
- 2,500 gal storage tank, interconnection piping and connection flanges
- One pallet of PAM flocculant; installation drawings and operations manual

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. Final electrical values are on the equipment nameplates. **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