



Removes Solids and Oil from Water

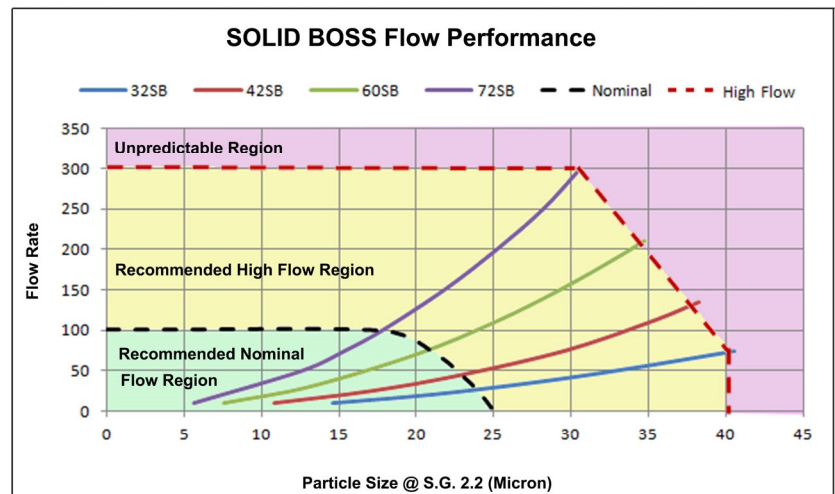
Applications:

- Deck Drains
- OWS Pre-Treatment
- Drilling Mud Separation
- Produced Water
- Industrial Wash Water
- Combined with Other Waste Water Treatment for Reuse of Process Water



Four Standard Sizes Available

- **MODEL 32SB: 25 gpm (5.6 m³/hr)**
(Handles surges to 75 gpm (17 m³/hr))
- **MODEL 42SB: 45 gpm (10 m³/hr)**
(Handles surges to 135 gpm (30 m³/hr))
- **MODEL 60SB: 70 gpm (16 m³/hr)**
(Handles surges to 210 gpm (47 m³/hr))
- **MODEL 72SB: 100 gpm (23 m³/hr)**
(Handles surges to 300 gpm (68 m³/hr))



**Remove those pesky solids and muds
before they can cause havoc**

SOLID BOSS

**RECOVERED
ENERGY, INC.**
11455 N. Rio Vista Rd., Pocatello, ID 83202
1-208-637-0645 www.recoveredenergy.com

SOLID BOSS

Specifications

Specifications (Solids /Oil/HiFlow))	32SB	42SB	60SB	72SB
Capacity (gpm / M3/hr)	25-75 / 5-17	45-135 / 10-30	70-210 / 16-47	100-300 / 22.5-67.5
Height (inch / mm)	80 / 2032	87 / 2210	100 / 2520	144 / 3225
Width (inch / mm)	53 / 1336	59 / 1498	65 / 1651	80 / 2032
Depth (inch / mm)	58 / 1473	66 / 1676	84 / 2134	94 / 2388
Dry Weight (lbs / kg)	2746 / 1246	3942 / 1789	5616/ 2548	7440 / 3375
Wet Weight (lbs / kg)	4145 / 1880	6341 / 2877	10514 / 4770	14200 / 6442

ALL UNITS

Specifications	Value	Comments
Expected Solids Removal	99+% down to 25 micron particle size High % down to as small as 1 micron particle size	Much finer particle size than clarifiers, skimmers or hydrocyclone systems
Solid Concentration	Can handle up to 50% solids for short periods	No other solids removal system can handle high concentrations of solids
Oil Removal (Option OR)	< 75 micron particle size	Removes heavy oils and emulsified solids Enhances coalescing of free and emulsified oil
HiFlow Capacity (Option HF)	Up to 3 times the nominal capacity	Allows higher flow during heavy rain conditions where there is excess water or temporary surges
Blowdown Requirements	As needed	Blows down to dewatering device or tote
Blowdown Discharge Pressure	10 psig less than air pressure based on pumping water, max 150 psig air pressure	Pumped to dewatering device or tote
Control System Type	PLC	Includes 10" HMI Touch screen
Control System Interface	Extra dry contacts	Easy to interface with main control system
Pressure Rating	70 psig	Can handle various ranges of pressure/vacuum
Operating Temp Range (process water)	5-40 C	Generally not affected by temperature
Single Phase Power Options	110 - 220vac	Any 1 phase power option
Three Phase Power Options	210 - 575vac	Any 3 phase power option to 575vac
Frequency	50 or 60 Hz	
Area Classification	Class I Div II standard	Class I Div I or NEMA 4X optional
Oil Content Monitor (Optional)	TD-107	Monitor is not supplied unless requested
Control Valves	Air operated spring return / solenoid	ASR for process control valves / Solenoid for pump control
Solids Level Sensor	Density meter and/or tuning fork	Tuning fork measures the heavy solids. Density meter measures the rag layer.
Oil Level Control (Part of Option OR)	Conductance	Guided wave optional
Blowdown Pump	Air diaphragm	With accu-flow control
Inlet Process Pump(Option PP)	Air diaphragm with accu-flow	Optional as needed - > 5 psig inlet pressure needed
Oil Pump(Part of Option OR)	Air diaphragm	With accu-flow control
Vessel Metallurgy	Carbon steel	1/8" corrosion allowance
Internal Protection	Anode protection	Option to galvanize inside
External Protection	Epoxy / urethane	Skid is powder coated
Skid	Included	
Piping and Manual Valves	Welded CS / 316 SS Air	

CONTACT:

BOSS
SEPARATORS

info@recoveredenergy.com



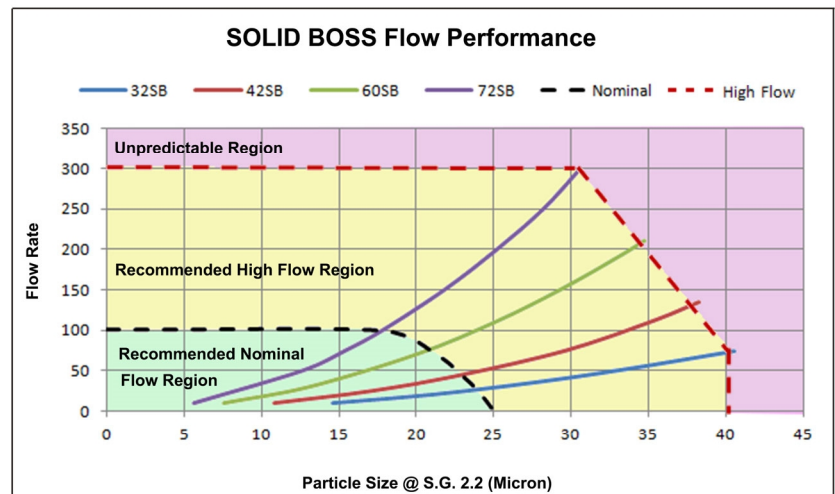
Removes Suspended Solids from Water

Applications:

- RO Pre-Treatment
- OWS Pre-Treatment
- Industrial Process Water
- Mining Water
- Agricultural Water
- Combined with Other Waste Water Treatment for Reuse of Process Water

Four Standard Sizes Available

- **MODEL 32SB: 25 gpm (5.6 m3/hr)**
(Handles surges to 75 gpm (17 m3/hr))
- **MODEL 42SB: 45 gpm (10 m3/hr)**
(Handles surges to 135 gpm (30 m3/hr))
- **MODEL 60SB: 70 gpm (16 m3/hr)**
(Handles surges to 210 gpm (47 m3/hr))
- **MODEL 72SB: 100 gpm (23 m3/hr)**
(Handles surges to 300 gpm (68 m3/hr))



**Remove those pesky solids and muds
before they can cause havoc**

**SOLID BOSS
SIMPLE**



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SOLID BOSS SIMPLE Specifications

<i>Specifications (Solids Only)</i>	<i>32SB</i>	<i>42SB</i>	<i>60SB</i>	<i>72SB</i>
Capacity (gpm / M3/hr)	25-75 / 5-17	45-135 / 10-30	70-210 / 16-47	100-300 / 22.5-67.5
Height (inch / mm)	80 / 2032	87 / 2210	100 / 2520	144 / 3225
Width (inch / mm)	40 / 1016	53 / 1346	65 / 1651	80 / 2032
Depth (inch / mm)	52 / 1321	66 / 1676	84 / 2134	94 / 2388
Dry Weight (lbs / kg)	2746 / 1246	3942 / 1789	5616 / 2548	7440 / 3375
Wet Weight (lbs / kg)	4145 / 1880	6341 / 2877	10514 / 4770	14200 / 6442

ALL UNITS

<i>Specifications</i>	<i>Value</i>	<i>Comments</i>
Expected Solids Removal	99+% down to 25 micron particle size High % down to as small as 1 micron particle size	Much finer particle size than clarifiers, skimmers or hydrocyclone systems
Solid Concentration	Can handle up to 50% solids for short periods	No other solids removal system can handle high concentrations of solids
Oil Removal	NA	Not available with this model
Turndown / Up	1-300%	Can handle short term surges up to 3 times nominal flow
Blowdown Requirements	As needed	Blows down overboard or to settling pond
Blowdown Discharge Pressure	1 psig less than inlet pressure	
Control System Type	Relays / Lights / Switches	
Control System Interface	Extra dry contacts	
Pressure Rating	70 psig	Can handle various ranges of pressure/vacuum
Operating Temp Range (process water)	5-40 C	Generally not affected by temperature
Single Phase Power Options	110 - 220vac	Any 1 phase power option
Three Phase Power Options	210 - 575vac	Any 3 phase power option to 575vac
Frequency	50 or 60 Hz	
Area Classification	NEMA 4X	
Control Valves	Solenoid Type	
Solids Level Control	Timer or manual control valve	No transmitter measure solids – solids are discharged at a specific rate
Blowdown Pump	None	Blowdown is from inlet pressure
Inlet Pressure	> 5 psig inlet pressure needed	Process pump required if inlet pressure is too low – recommend air diaphragm
Vessel Metallurgy	Carbon steel	1/8" corrosion allowance
Internal Protection	Anode protection	Option to galvanize inside
External Protection	Epoxy / urethane	
Skid	Included	
Piping and Manual Valves	Welded CS / 316 SS Air	

Contact Information:



info@recoveredenergy.com

Separation of Solids and Multiple Liquid Streams

Solids from Liquid Applications:

- Agricultural Waste Water & Muds
- Mining Waste Water
- Sewage Sludge Treatment
- Produced Water
- Industrial Wash Stations
- Combined with Other
Waste Water Treatment
for Reuse of Process Water

Liquid from Liquid Applications:

- Oil From Water
- Water From Oil/Fuels



Standard Flow Rates Available

- MODEL 32SB: 25 gpm (5 m3/hr)
- MODEL 42SB: 45 gpm (10 m3/hr)
- MODEL 60SB: 70 gpm (16 m3/hr)
- MODEL 72SB: 100 gpm (23 m3/hr)
- MODEL 96SB: 210 gpm (50 m3/hr)
- MODEL 120SB: 350 gpm (80 m3/hr)
- MODEL 132SB: 450 gpm (100 m3/hr)

Options:

- Completely Automatic or Completely Manual
- Hazardous or Non-Hazardous Area
- Pressurized or API Vessel
- Liquid/Solids, Liquid/Liquid or Liquid/Solid/Liquid
- Monitored or Unmonitored Oil Content
- Monitoring for pH, Turbidity, Flow, Etc.

SOLID BOSS

Specifications

Specifications	32SB	42SB	60SB	72SB
Capacity (gpm / M3/hr)	25-75 / 5-17	45-135 / 10-30	70-210 / 16-47	100-300 / 22.5-67.5
Height (inch / mm)	80 / 2032	87 / 2210	100 / 2520	144 / 3225
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Depth (inch / mm)	58 / 1473	66 / 1676	84 / 2134	94 / 2388
Dry Weight (lbs / kg)	2746 / 1246	3942 / 1789	5616 / 2548	7440 / 3375
Wet Weight (lbs / kg)	4145 / 1880	6341 / 2877	10514 / 4770	14200 / 6442
*Specifications are for SB only without any options. Dimensions can vary depending on options selected. Dimensions for larger sizes vary and will be provided at time of quote.				

ALL UNITS

Specifications	Value	Comments
Expected Solids Removal	99+% down to 25 micron particle size Smaller % down to 1 micron	Much finer particle size than clarifiers, skimmers or hydrocyclone systems
Solid Concentration	Can handle up to 50% solids for short periods	No other solids removal system can handle high concentrations of solids
Oil Removal (Option OR)	< 75 micron particle size	Certified systems are available that will get down to <5 ppm
Surge Capacity (Option HF)	Up to 3 times the nominal capacity	Allows higher flow during surges or upset conditions
Blowdown Requirements	As needed	Blows down to dewatering device, pond or tote
Blowdown Discharge Pressure	As needed	Blowdown from the system pressure or by adding a pump. Pressure is a function of the discharge lift requirements.
Control System Type	IDEC PLC	Includes 3" HMI Touch screen
Control System Interface	Extra dry contacts	Easy to interface with main control system
Pressure Rating	Vacuum to 15 psig pressure	Tested at 40 psig
Operating Temp Range (process water)	5-40 C	Generally not affected by temperature
Single Phase Power Options	110 - 220vac	Any 1 phase power option
Three Phase Power Options	210 - 575vac	Any 3 phase power option to 575vac
Frequency	50 or 60 Hz	
Area Classification	NEMA 4X	Class I Div I or II optional
Oil Content Monitor (Optional)	Brannstrom standard	Monitor is not supplied unless requested. Several OCM models to select from
Control Valves	Electric actuated	MOV or solenoid type
Solids Level Sensor	Standard is a timer	Tuning fork and/or density meter are available.
Oil Level Control (Part of Option OR)	Conductance	
Blowdown Pump	Positive displacement standard	Other types of pumps available
Inlet Process Pump (Option PP)	Positive displacement standard	Optional as needed - > 5 psig inlet pressure needed
Oil Discharge	MOV valve	Fill water pressure pushes oil out
Vessel Metallurgy	Carbon steel	1/8" corrosion allowance
Internal Protection	Anode protection	Option to galvanize inside
External Protection	Epoxy / urethane	Skid is powder coated
Skid	Included	
Piping and Manual Valves	Threaded bronze up to 2" /CS welded >2" / 304 SS Air	

CONTACT:

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Separation of Solids & Water & Oil

Easy Solids Disposal AND Reuse of Water

- Agricultural Waste Water & Muds
- Mining Waste Water
- Industrial Truck Wash Stations
 - Removes Oil in the same pass
- Dewatering Slurry Ponds

Standard Flow Rate 150 gpm

Higher Flows use Multiple Units



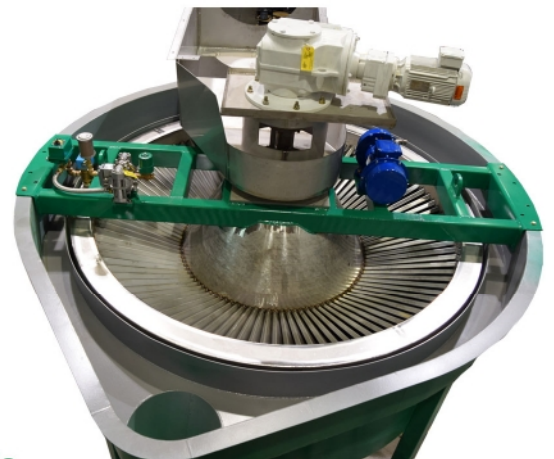
**NO POLYMERS NEEDED
MINIMAL MOVING PARTS
VERY LOW MAINTENANCE**

Includes:

- Patent Pending BOSS Plate pack
- Center Auger system
- Vibrator to aid in solids removal
- Knife Valve to control solids removal
- Control System

Optional

- Drum Screen for large solids
- Solids Pump
- Oil Removal Optional



SOLID BOSS 96SBS



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Specifications

<i>Specifications</i>	<i>Value</i>	<i>Comments</i>
<i>Expected Solids Removal</i>	99+% down to 25 micron particle size Some % down to as small as 1 micron particle size	Much finer particle size than clarifiers, skimmers or hydrocyclonesystems
<i>Solid Concentration</i>	Can handle up to 35% solids for short periods	No other solids removal system can handle such high concentrations of solids
<i>Oil Removal (Option OR)</i>	< 75 micron particle size	Removes heavy oils and some emulsified solids Enhances coalescing of free and emulsified oil
<i>Solids Discharge Requirements</i>	As needed	Drops onto a conveyor or it can be pumped
<i>Blowdown Discharge Pressure</i>	None, drops onto a conveyor	If pumped the discharge pressure can be whatever is required
<i>Control System Interface</i>	Extra dry contacts	Easy to interface with main control system
<i>Pressure Rating</i>	Atmospheric	Cannot handle any range of pressure or vacuum
<i>Operating Temp Range (process water)</i>	5-40 C	Generally not affected by temperature
<i>Single Phase Power Options</i>	110 - 220vac	
<i>Three Phase Power Options</i>	210 - 575vac	
<i>Frequency</i>	50 or 60 Hz	
<i>Area Classification</i>	NEMA 4X standard	Class I Div I or Class I Div II optional
<i>Oil Content Monitor (if required)</i>	GreenMon	Monitor is not supplied unless requested
<i>Control Valves</i>	Air operated spring return / solenoid	ASR for process control valves / Solenoid for pump control
<i>Solids Level Sensor</i>	Spectroscopy	Other types of level control optional
<i>Oil Level Control (Part of Option OR)</i>	Conductance	Guided wave optional
<i>Blowdown Pump</i>	Air diaphragm	Progressive Cavity Optional
<i>Inlet Process Pump (Option PP)</i>	Optional as needed - > 10 psig inlet pressure needed	
<i>Oil Pump (Part of Option OR)</i>	Air diaphragm	With accu-flow control
<i>Vessel Metallurgy</i>	Carbon steel	API design
<i>Internal Protection</i>	Epoxy coating	Plural coating optional
<i>External Protection</i>	Epoxy / urethane	Plural coating optional
<i>Skid</i>	Not skid mounted	Option UF is skid mounted
<i>Piping and Manual Valves</i>	Welded CS	

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