2023 Bid Specifications



RING-O-MATIC 850vx Bid Specifications



800 Gallon Capacity Trailer Mounted – Diesel Hydro Excavator Unit

	СОМ	PLY?
Description	YES	NO

Class:	
Must be a portable, self-contained hydro excavation unit.	
Equipped with a Tier 4 Final Industrial Diesel Engine, 800-	
gallon spoils tank, and 2 x 250-gallon fresh water tanks.	

Construction:	
Blower, water pump, and hydraulic system must be	
powered by the same engine and contain within an	
enclosed and lockable compartment.	
Entire system must come trailer-mounted with curbside	
controls.	
Maximum total width 96in.	
Maximum total length 262in.	
Maximum total height 91in.	
Frame must be made out of a minimum of 8" heavy duty C-	
Channel.	
Trailer Frame is equipped with 2 x 10,000lbs rated axles	
with total of 20,000lbs axle capacity.	
Machine must be equipped with a properly rated,	
greaseable tongue jack with spring assist retraction.	
Machine must be equipped with at a minimum of 4 heavy	
duty D-Rings for chain tie down, located on the frame.	
Trailer Frame must be equipped with an easy adjust pintle	
hitch.	
Trailer Frame must be equipped with two towing safety	
chains bolted to the frame.	
Trailer must be equipped with never adjust electric brakes	
with a break away safety cable.	
Tires must be 235/75 R 17.5 Load Range H.	
Trailer must be equipped with a proper VIN tag from	
original manufacturer with Date stamp of production, VIN	
Number, and GVWR rating.	

Trailer Frame must be equipped with license plate holder	
with light.	

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Engine Package / Control Panel:	ļ	
Engine must be EPA Tier 4 Final Compliant, liquid-cooled		
diesel with electric start housed inside a fully enclosed and		
lockable compartment.		
Tier 4 Final Industrial Diesel must produce a minimum of 49		
horsepower.		
Engine fuel tank capacity must be a minimum of 28 gallons.		
Engine must have an electronic Throttle Control.		
Engine must have a Digital Display Screen.		
Engine must have a Lockable Control Panel.		
Engine compartment must have lockable power pack doors.		
Control Panel must be located on the curbside of the unit.		
Engine must have a remote oil drain port or drain hose.		
Engine must be equipped with a 12-volt electrical system,		
Battery must 12 volts and have a minimum of 800 CCA.		
Trailer must have a strobe light mounted at tallest point on		
unit and two led work lights with on/off switches located in		
control panel.		
Control panel must be equipped with an Anti-freeze button		
that overrides the low water shutoff system.		

Blower (Vacuum) system:	
Blower must be a dual-lobe, oil bath bearing, positive	
displacement blower.	
Blower must be rated at a minimum of 1000 CFM and 15"	
HG.	
Blower to Engine belt must have an auto-tensioner pulley.	
Blower is equipped with a manual or electric 4-Way valve	
to be able to pressurize the system (reverse flow/pressure	
offload).	
Blower system is equipped with remote grease zerks for	
the 4-way valve.	

Blower system is equipped with a high dissipative and multi-chamber silencer, attached for blower exhaust.	
Blower system must be equipped with vacuum gauge.	

Blower (Vacuum) Filtration system:	
Blower must be protected by a baghouse that contains a wet/dry filter(s) with filtration rate down to .35 Micron and has a minimum filter media area of 105ft ² .	
Blower filtration system must have a large particle/dust chamber with a removable drain cap or valve.	
Blower filtration system must be capable of withstanding a pressurized system to blow out filters through the drain port or valve.	
Filter(s) within the baghouse must be easily accessible and can be removed with minimum tooling required.	
Filter(s) must be able to be rinsed with water and reused when dry.	

Water system:	
Machine must be equipped with a water pump that has a minimum rating of 6 GPM flow and 4,000 PSI.	
Water system must be equipped with a pressure gauge.	
Machine must be equipped with 2 x 250-gallon water tanks plumbed together and to the pump.	
Machine must be equipped with a low water shutoff switch	
that is wired into the water pump for auto shut-off.	
Water system must be equipped with a remote drain valve.	
Water pump must be run through an unloader valve.	
Water pump must be equipped with an electronic clutch.	
Machine must include 50' x 3/8" of high-pressure hose	
rated at 4,000psi on a lockable hose reel located on the	
curbside rear of the machine.	
Machine must be equipped with a quick connect water	
recirculation port.	

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Machine must be equipped with a minimum 5-gallon antifreeze system.	
Machine must be equipped with a minimum of two water pump switches, one located in the main control panel and the second switch located on the rear curb side of the machine.	
Machine water system must be equipped with a "Y-Strainer" with replaceable screen filter.	

Hydraulic system:	
Hydraulic system must be equipped with a mechanical gear	
driven hydraulic pump.	
Spoils Tank must be equipped with two hydraulic tilt	
cylinders with curb side controls.	
Spoils Tank Door must be equipped with a hydraulic power	
door lock with curb side controls. All locks and door	
components must be located on the outside of the	
door/spoils tank.	
Spoils Tank Door must be able to open 90° to the tank.	
Spoils Tank Door must be a full tank diameter, rear opening	
door.	
Hydraulic system must have an electronic shut-off located	
in control panel.	

Vacuum Tank:	
Tank must be an 800 Gallon Spoils capacity tank.	
Tank must have a minimum of one fluid level indicator (Sight Glass) in the rear door.	
Tank must have a 4" inlet valve and a 6" drain valve. The inlet valve must be equipped with a 3" or 4" Bauer or Camlock Connection.	
Tank Door must include storage for suction hose.	
Suction Hose storage located on rear door, must be fully accessible so the hose can be removed or put into storage from the curbside or rear of the trailer.	

Tooling/Potholing Equipment:	
Machine must be equipped with a 3" or 4" x 5' DiElectric	
suction tube that has a Bauer or Camlock style connection.	
Machine must be equipped with a 5' potholing lance with a	
rotary turbo nozzle with a minimum rating of 6 GPM and	
4000 PSI, equipped with a quick connect coupler.	
Machine must be equipped with a low GPM and low PSI	
flexible washdown gun, equipped with a quick connect	
coupler.	
Machine must be equipped with a minimum of 50' of	
industrial-rated 3" or 4" suction hose with Bauer or	
Camlock connections.	
Machine must be equipped with a tooling storage rack	
located on curbside.	

Additional Comments: