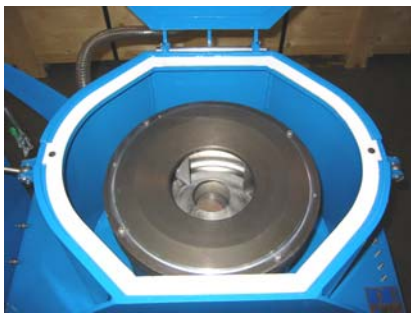




US Centrifuge's new Model M412 manual clean centrifuge features a rugged heavy-duty portable frame design with a hinged enclosure cover that includes a durable Teflon lid gasket. The standard centrifuge-bowl is a hard-anodized precision-machined aluminum assembly that includes a stainless steel feed-cone and impeller mechanism for maximum separating efficiency. The



removable standard bowl-liner is made from a durable 100-mil ABS-plastic and includes a bowl-liner lifting tool for easy removal bowl-liner of the separated sludge cake. Replacement plastic liners are affordably priced making spares an economical solution for faster clean outs and less down time. Spare bowl-lid SHCS and hex-key tool included.



Available options include:

- Stainless steel centrifuge-bowl assembly
- Stainless bowl-liner
- Self-draining centrifuge-bowl / bowl-liner
- Stainless steel machine frames
- Integrated air-powered feed pump
- Integrated motor starter or timer control box
- Locking balloon cushion casters



Use as a portable unit to serve multiple fluid reservoirs or permanently locate the machine to serve a single dedicated fluid reservoir. The M412 can also be

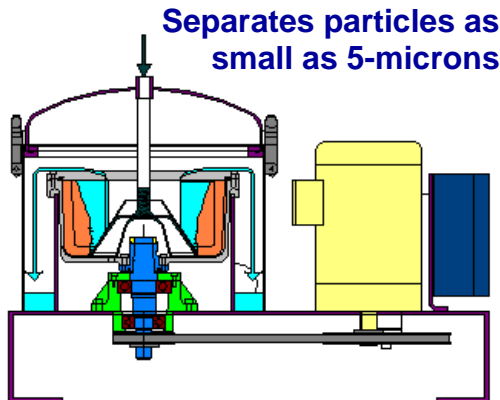


supplied as part of a complete pre-engineered system customized to suit a specific application and / or customer facility requirements. A variety of tanks, pumps, valves, piping, machine platforms, and system controls are available.



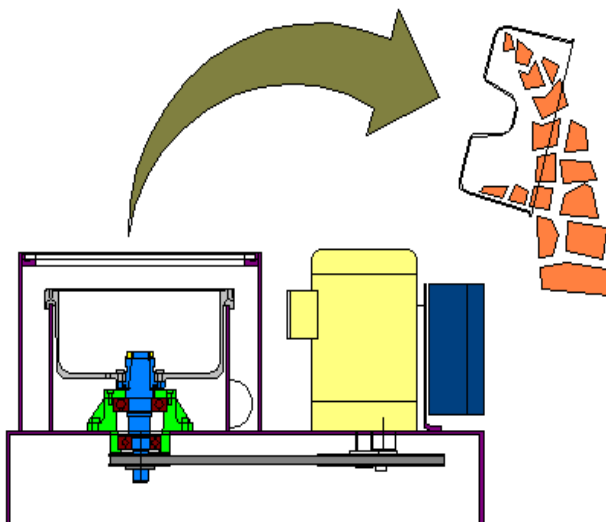
Specially designed and custom-built systems for specific application and / or facility requirements including tanks / pumps / valves / piping / platforms / and system controls.

How the manual clean unit works: The dirty liquid continuously feeds through the ¾" inlet / feed-tube and into the spinning bowl. The incoming liquid travels under the feed cone and into the bowl chamber where four impeller blades accelerate and maintain the liquid @ full rotational speed. The liquid then rises vertically up-ward through the bowl. Particles heavier than the liquid separate and move to the perimeter of the centrifuge-bowl depositing on the inside wall of



the bowl-liner forming a dense solids cake that becomes relatively moisture free under accelerated gravitational force. The clarified liquid exits through the center hole in the bowl-lid and into the bowl-enclosure where it collects and drains out through the 3" outlet fitting.

After an elapsed time period of process time the bowl-liner reaches it solids holding capacity and the machine is turned off coasting to a stop. The hinged enclosure cover is unlatched and opened. The bowl-lid is removed from the bowl-bottom after unscrewing the four SHCS using the provided hex-key tool. Using the provided bowl-liner lifting tool, the liner is removed from the bowl-bottom. The solids are then scrapped from the bowl-liner, which is then cleaned out and put back into the unit to resume operation.



Manual cleaning process typically requires 10-minutes

Model M412 Machine Specifications:

Maximum "G" force:	1,600-x gravity
Separating capacity:	1 to 15-gpm
Solids holding capacity:	Up to 1.0 gallon
Required inlet pressure:	10-psi @ 10-gpm
Liquid inlet fitting:	3/4" NPT
Liquid discharge fitting:	3" NPT
Liquid discharge height:	28" Liquid discharge pressure: Gravity return
Maximum temperature:	160°F
Noise level:	72 dB (A) per 8-hrs.
Drive motor:	2.0-hp 220/440 volt
Dimensions:	38"L x 16.5"W x 36"H
Weight:	400-lbs.

The M412 manual clean centrifuge offers advantages not found on competitive manual clean units:

- Rugged frame and integrated centrifuge-bowl enclosure manufactured from ¼" thick plate steel for added durability and longer working life.
- Hinged centrifuge-bowl enclosure lid secured by hand wheel clamps during operation also make opening the unit to access the centrifuge-bowl for cleaning quick and easy.
- The centrifuge-bowl enclosure lid is fitted with a standard Teflon lid gasket.
- Standard hard-anodized aluminum centrifuge-bowl surface finish for added durability and corrosion resistant.
- The centrifuge-bowl is equipped with a standard stainless steel feed cone and impeller assembly for improved separation efficiency.
- Durable easy to remove bowl-liners and included liner lifting tool make centrifuge-bowl clean outs quick and simple.
- The affordable 100-mil ABS plastic bowl-liners make having clean spares ready to re-install an economical solution for quicker clean out turnarounds.

- Stainless steel bowl-liners and self-draining bowl-liners are available.
- The spindle and centrifuge-bowl feature a tapered fit for smooth operation.
- The spindle bearing-housing and centrifuge-bowl assembly is easily and quickly removed from the machine frame as one unit for convenient and simplified maintenance when bearing replacement is necessary.
- The machine design lends itself to being easily and economically equipped with balloon cushion casters for portability.
- A variety of options and system accessories allow a customer to tailor a machine for their specific application and / or facility requirements.
- The M412 is very competitively priced when all the standard features and advantages are compared to competing units.

The M412 centrifuge is built for safe, quiet, reliable operation, and requires relatively little maintenance other than routine cleaning while being easy to maintenance when necessary.

Like all US Centrifuge equipment, the machine is American made and all engineering, manufacturing, service, and sales activities are located under one roof in Indianapolis for the convenience of our customers.



The M412 manual clean centrifuge is ideal for fluid clarification / liquid recycling applications where other filtration methods fail. And, the M412 can handle tough, abrasive, sticky, and hard packing materials with minimal wear and tear on the centrifuge. A sample of successful applications include:

- Carbide cutting oils
- Cold heading machine lubrication
- Die lube
- EDM fluids
- Grinding coolants
- Machining coolants
- Ophthalmic lenses
- Parts washing fluids
- Quench oils
- Screen print wash solvents
- Screw machine oil
- Thread and rolling oils
- UF pre-treatment
- Used oil clarification
- Vibratory finishing
- Water wash paint booth
- Wire drawing fluids

General application benefits include:

- Improved product quality
- Reduced machine downtime
- Minimized waste volumes
- Extended process liquid life