

ECONOMICAL CLARIFICATION USING MANUAL CENTRIFUGAL SEPARATION

In various clarification processes involving viscous liquids such as drawing and rolling oils the solids generated can cause excessive wear on tooling and adversely affect product quality.

To provide cost efficient liquid-solid separation, Filtertech offers the Model MCF, Manual Centrifuge. The Model MCF centrifuge utilizes centrifugal force, one of the most basic methods to separate solids from liquids based on their difference in specific gravity. The Model MCF magnifies this force up to 2,000 times through centrifugal action.

TYPICAL APPLICATIONS

- **Aluminum wire drawing**
- **Honing oils**
- **Industrial waste streams**
- **Metal grinding lubricants**
- **Phosphate baths**
- **Quenchants**
- **Rolling oils**
- **Vibratory finishing liquids**
- **Waste oil clarification**
- **Water wash paint booths**



Easily removable bowl liner with lifting tool.



Model MCF1-400 Manual Centrifuge with portable cart, one gallon solids capacity bowl, removable liner and capable of processing up to 15 gpm of process liquids. Unit shown with optional stand and

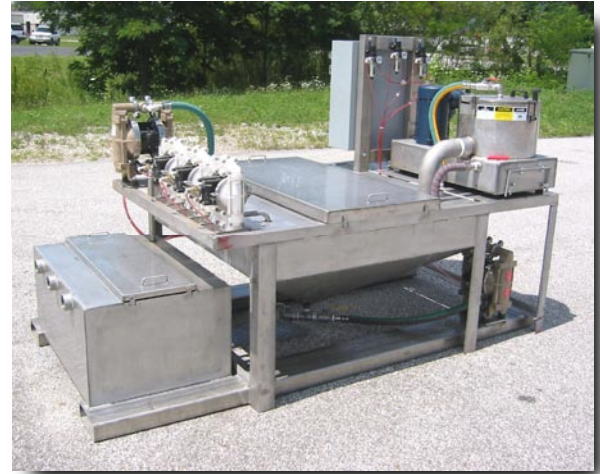
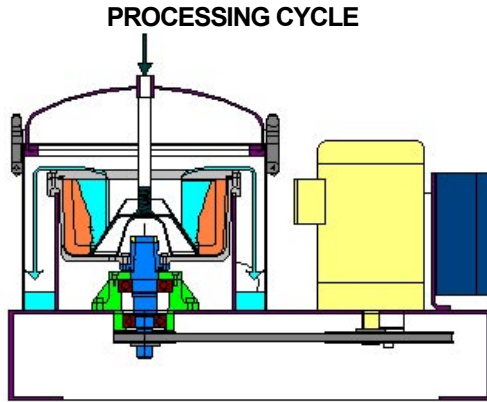
EQUIPMENT FEATURES

- Top feed with internal feed cone and impellers.
- Hard anodized aluminum bowl assembly with removable ABS bowl liners.
- Computer-balanced bowl assembly
- Alloy steel spindle with tapered fit into bowl nave.
- 3" NPT sloped discharge outlet.
- Hinged centrifuge bowl enclosure lid with hand level clamps.
- Rugged plate steel frame and integrated bowl enclosure.
- Optional progressive cavity or air-operated feed pump.
- Optional pre-mounted and wired "ON/OFF" motor starter.
- Optional portable stand with casters.

MODE OF OPERATION

Processing Cycle

The liquid continuously feeds into the spinning bowl by an optional feed pump. The liquid travel upward through the bowl and drains through an outlet connection in the base of the unit. The separated solids deposit on the wall of the bowl liner forming a solid cake. This process continues until the cake reaches the desired thickness.

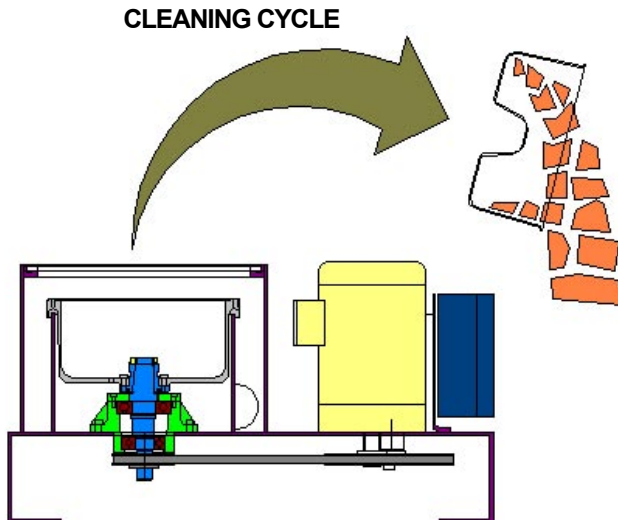


Easy opening housing cover showing stainless steel bowl.

Model MCF1-400 engineered system complete with pumps, reservoir tank, and controls.

Cleaning Cycle

After the bowl coasts to a stop, the enclosure cover is opened. The bowl lid is removed, and the bowl liner is lifted out for cleaning. After the liner is thoroughly cleaned, it is placed back into the bowl, the lid reinstalled, and the enclosure lid latched shut. The machine is now ready to begin processing again.



Removable bowl liners and lifting tool available in plastic or stainless steel.



SPECIFICATIONS - MANUAL

Model†	Flow rate* gpm (lpm)	Dimensions in (cm)			Dirty Inlet in (cm)	Clean Outlet in (cm)	Utilities		Bowl Volume gals (liters)	Max Rotor Speed (rpm)	Solids Capacity gals (liters)	Est. Weight
		A	B	C			Electric‡	Compressed Air				
MCF1-400	10 (38)	41" (104)	32" (81)	17" (43)	1" (2.5) NPT	3" (7.6) NPT	480 V, 3Ø, 3 Hp	Not Required	1.6 (5.4)	3,600	1.0 (3.8)	315 lbs.

† Feed rate is based on the density difference between the liquid and suspended solids. Capacity may vary depending upon model, liquid, solids and application. Consult factory for proper sizing of equipment.

‡ Other voltages available to meet your specific requirements.

* Nominal flow rate for non-viscous fluid applications.

Note: Stainless steel option available.

MANUAL CENTRIFUGE (MCF)