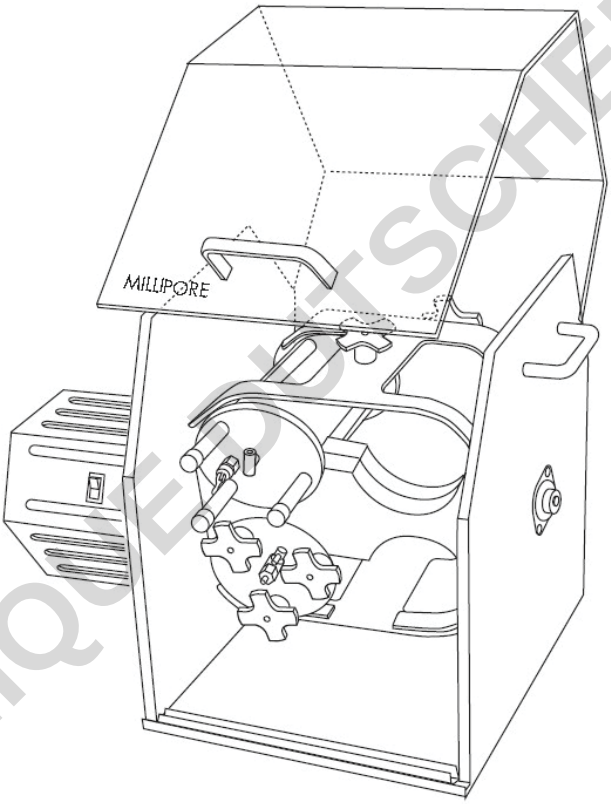
User Guide

Rotary Agitator

115V/60 Hz

YT310RAHW



DOMINIQUE DUTSCHER SAS

Introduction

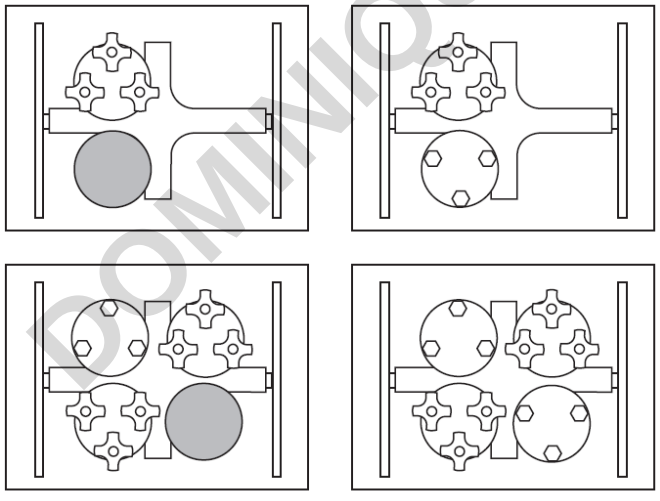
The Rotary Agitator is designed for use with the Zero Head-Space Extractor (ZHE) in the Toxicity Characteristics Leaching Procedure (TCLP). The Rotary Agitator provides end-over-end rotation, as required by the U.S. EPA, for thorough mixing and extraction of TCLP samples. The rotary agitator fits from one to four of ZHE units (or one to four two-liter bottles). The Rotary Agitator includes the following features:

- A safety shield covers the rotor and a motor guard designed for maximum safety.
- The Bodine® parallel shaft gear motor is designed for applications that require consistently long life and high output torque in relation to gear motor size.
- The agitator requires less bench or floor space than traditional models.
- The gear motor provides quiet operation.

Using the Rotary Agitator

1. Lift the cover and unscrew the handwheel knob by turning it counter-clockwise as you face the unit. Remove the knob and the ZHE retaining clamp, which extends across two ZHE chambers.
2. Place the ZHE unit, legs attached, in the chamber on the left side of the rotor spindle.

   CAUTION: When loading ZHE units into the rotary agitator, always load equal weight on opposite sides of the spindle axis or damage to the motor could occur. Counterweights are available (SD1P 554 C0). See the diagram below for the proper loading configurations.



Counterweight

Zero Head-Space Extractor (top)

Zero Head-Space Extractor (bottom)

3. Align the top plate of one ZHE unit with the bottom plate of the adjacent unit. The edges of the top and bottom plates of the ZHE units should lie next to the strips of padding in the chambers. The top and bottom of each ZHE unit should be flush with the edges of the spindle.
4. After loading the first side of the rotary agitator, replace the retaining clamp and the handwheel knob. Tighten the knob securely by turning it clockwise as you face the agitator.
5. Rotate the spindle to load the other two chambers. Remove the knob and the ZHE retaining clamp on this side of the spindle. Continue to load ZHE units (and counterweights if necessary) according to the diagram.
6. Replace the retaining clamp and the handwheel knob. Tighten the knob securely.
7. Remove the small red plug from the oil-fill vent. (The gearbox of the motor must be vented to prevent internal pressure build-up as the unit heats up.)
8. Turn on the rotary agitator by pressing the switch located on the top of the motor.

Maintenance

The Rotary Agitator has an oil-lubricated gear motor and is fitted with a type "1D" gear head. Check the oil level every four to five months, or after every 600 operating hours—whichever comes first. To lubricate the gear motor, use the following steps.

⚠ **WARNING:** Always disconnect the power source before servicing or working on any part of the Rotary Agitator.

1. Loosen the small nut located on top of the gear motor.
2. Pour the lubricant into the threaded hole until it reaches the top of the opening.

CAUTION: Use good quality, rust- and oxidation-inhibiting oil that conforms to AGMA #5 (SAE #50 non-detergent) and meets the following specifications:

- Viscosity range of 918-1122 SUS at 38 °C (100 °F)
- Viscosity index of 90 minimum
- Pour point of 0 °F (-17.8 °C) maximum

3. Replace the nut and tighten securely.

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Specifications

Agitator housing	Aluminum
Rotary spindle	Aluminum casting
Retainer clamps	Aluminum
Handwheel knobs	Plastic with brass thread insert
Electrical	115V/60 Hz, 0.63 A
Motor	1/15 HP Bodine 34R-2, parallel shaft
Speed	28 rpm
Safe torque	100 inch pounds
Dimensions	
Width	18 in.
Height	18 in.
Length	24 in.
Weight	35 in.

Product Ordering

Product	Catalogue No.
Rotary Agitator, 115V/60 Hz	YT310RAHW
*Replacement Motor Kit	YT310RAMK
*Counterweight	SD1P554C0

* Products not available for sale/discontinued.

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