



<<< RAVEN F-10300 PROCESS CENTRIFUGE >>>

Thank you for purchasing a Raven Environmental Products process control instrument.

Please call 800-545-6953, customer service, if you have any questions or comments about this product.

The Raven F-10300 Centrifuge is a rugged precision instrument. The included Raven B-10101-19 centrifuge tubes are made from high impact resistant polycarbonate plastic. Each unit is built with quality and craftsmanship in USA.

Unit and Use

The Raven F-10300 Centrifuge can be used for the Fifteen Minute Centrifuge Test referenced in the *US-EPA Process Control Manual for Aerobic Wastewater Treatment Facilities* and the *WPCF Manual of Practice OM-9: Activated Sludge*.

The Raven Centrifuge with Raven Centrifuge Tubes will provide quick, reliable concentration indications of mixed liquors from aeration basins, clarifier return sludge, and waste sludge removed from activated sludge systems.

Equipment and Features

F-10300 Centrifuge

Six-position rotor with 19mm Centrifuge Tubes rotates at a right angle to the axis of spin and provides a sharp, easily read solids/liquid interface.

Digital timer (with fifteen minute speed key) to start and automatically switch unit OFF at end of test.

Corrosion resistant stainless steel and aluminum construction for durability and easy cleaning.

1/8 HP, 3000 RPM, Totally Enclosed Fan-Cooled motor designed for use in dirty environments.

On/Off switch in rear of unit near power cord.

B-10101-19 Centrifuge Tubes (19mm)

Clear, impact resistant polycarbonate plastic eliminates costly breakage and will not cloud.

Steep tapered conical design for volumetric determination of settleable solids (similar to Imhoff® Cones) that provide accurate measurements at low concentrations, such as those normally encountered with mixed liquor, return or waste sludge samples.

Bright white markings, which contrast vividly with most sludge samples.

Centrifuge Test Procedure

Collect sample

Collect at least 50 ml. of sample for the centrifuge spin in a wide mouth container. If the Settleometer Test is being performed in conjunction with the centrifuge spin, the centrifuge sample can be taken from the same mixed liquor container.

Mix sample

The sample to be poured into the centrifuge tube should be gently mixed (but not shaken).

Fill a clean tube with sample, so that the bottom of the meniscus is at the 100% mark on the tube. Samples should be poured quickly to prevent settling in the sample collection container.

Prepare tube sample

Remove any air bubbles that may become entrained in the tube by tilting and tapping the outside tip of the tube with your finger.

Position tube samples in trunnion rings

Balanced condition must be maintained.

Use only an even number of tube filled samples.

Locate tube filled samples opposite one another (1&2, 3&4, 5&6).

Counterbalance unused trunnion rings.

All six centrifuge ring holders are to be occupied.

Position centrifuge on a flat level surface. Verify centrifuge is unplugged from power source, before inserting or removing tubes from ring holders. Place sample tubes in centrifuge ring holders opposite one another (1&2, 3&4, 5&6). All centrifuge tube rings shall have duplicate samples or water filled tubes, to maintain uniform loading on the unit during each test to assure a consistent speed (in RPM) for all spin tests.