

RBC RESTART PROCEDURES

If an RBC has been taken out of service for longer than a 2 - hour period, it should be re-balanced prior to putting it back on line. Once the unit stops rotating, the water from the biomass will drain back into the tank creating an immediate imbalance. If the RBC is out of service for an extended period, the submerged biomass also becomes heavier due to increased water absorption and solids collection.

If the RBC is restarted in this condition, the imbalance may jeopardize the integrity of the drive components and the media. Not only will the strain be experienced during initial start-up, but with each subsequent revolution until the unit achieves better balance.

If the RBC is stopped for any reason with any regularity without re-balancing, it will tend to stop in the same position each time, allowing the imbalance to become very severe. In some cases, a drive has been pulled right out of the concrete.

NOTE: DO NOT ROTATE THE RBC IF THE WATER LEVEL IS LOWER THAN THAT WHICH IS RECOMMENDED BY THE MANUFACTURER OR IF THE TANK IS EMPTY. DOING SO MAY JEOPARDIZE THE MEDIA, BEARINGS AND DRIVE COMPONENTS.

To rebalance the RBC, it must be rotated by hand to a point where what was at the 6 o'clock position is brought to the 12 o'clock position. (For reference, mark the media at 45-degree segments. A can of spray paint will do.)

To accomplish this, first lock out the power.

BELT DRIVEN: Remove the belt guard and apply a crank to the reducer sheave.

DIRECT DRIVE: Remove the face of the motor and rotate the motor fan hub.

It may not be possible to reach the 12 o'clock position on the first try. If this is the case, turn the unit as far as possible and insert a wood wedge between the belts and sheave. Leaving the wedge in place, continue this procedure and rotate every 4 – 6 hours.

Once the unit has been turned 180 degrees, block it in place. The “rule of thumb” is, this position should be maintained for about half the time the unit was out of service.

NOTE: IF THE UNIT BEGINS TO TURN, NEVER ATTEMPT TO STOP THE UNIT FROM ROTATING BY GRABBING THE BELTS, SHEAVE OR CRANK...JUST LET IT GO AND START OVER.

At the right time, remove the blocks and allow the unit to rotate on its own and settle. If the unit is relatively balanced, it will roll slowly, if at all. If it rolls quickly and settles in a very brief time, the balancing procedure should be repeated. Once the RBC is relatively well balanced, it can be safely put back on line under power.

If you have any questions regarding this procedure or your RBC operations in general, please do not hesitate to call.