REYCO Oil Miser® Sequence of Operation

The REYCO Oil Miser® System is designed to remove oil from fried product using airflow. The air is entrained with the surface oil at the suction plenum and is ducted to a high efficiency cyclone(s) where the oil is then separated. The oil discharges from the bottom of the cyclone through rotary airlock into a pump tank. The pump tank directs the oil into a positive displacement pump where it is pumped to a customer-supplied filtering system and returned to the fryer. The air is then ducted back to the conveyor where it is discharged through a return air hood mounted over the suction plenum and then onto the top of the product to help move the surface oil to the plenum.

SYSTEM

To operate the system, turn the system switch (marked "SYSTEM") to run and then pushing against spring tension, move the switch to start and allow it to return to run. The indicator light labeled 'SYSTEM' should now be illuminated and the Oil Miser® fan and rotary valve should be running. Please note that the rotary valve is interlocked with the fan and the fan will shut off if the rotary valve is disabled.

PUMP

To operate the pump, turn the system switch (marked "PUMP") to run and then pushing against spring tension, move the switch to start and allow it to return to run. The indicator light labeled 'PUMP' should now be illuminated and the Oil Miser® pump should be running and oil should be flowing to the customer supplied filter and fryer oil system.

CONVEYOR

To operate the conveyor, turn the system switch (marked "CONVEYOR") to run and then pushing against spring tension, move the switch to start and allow it to return to run. The indicator light labeled 'CONVEYOR' should now be illuminated and the Oil Miser® Conveyor should be running. The conveyor will be provided with a Variable Speed Motor Controller. The panel will have a potentiometer mounted under the conveyor switch that will allow the conveyor speed to be modified. The Oil Miser® System will operate at premium efficiency with a product depth of about 2".

AGITATOR

To operate the agitator before the Oil Miser® suction plenum, turn the system switch (marked "AGITATOR") to run and then pushing against spring tension, move the switch to start and allow it to return to run. The indicator light labeled 'AGITATOR' should now be illuminated and the Oil Miser® agitator should be running. The agitator will be provided with a Variable Speed Motor Controller. The panel will have a potentiometer mounted under the agitator switch that will allow the conveyor speed to be modified. The Oil Miser® System will operate at premium efficiency with the agitator speed set at about 50-60 cycles (hertz). Adjustments in impact amplitude can be made at the conveyor utilizing eccentric cams located at two places under each one of the agitator shaft bearing housings.

OIL INJECTION

REYCO Systems® are supplied with an oil injection system. These systems are provided to assist in the elimination of crumbs. The oil injection system uses filtered hot oil from the fryer system and injects the oil at two locations, one at the suction plenum opposite side of the duct and one at the duct transition before the cyclone(s). These injection points are controlled by two pneumatically actuated ball valves that are controlled by two timers located in the control panel. The suction plenum nozzle is typically on about 30 seconds every 5 minutes and the cyclone nozzle is on about 15 seconds every 5 minutes. These timers are variable and may be adjusted to the particular needs of the product.

CIP

CIP cleaning can be used for an Oil Miser® but REYCO Systems does not recommend it unless great caution is taken. Injecting water into hot oil presents a severe hazard. The CIP system **must** be interlocked so as to prevent water in the system any time there is hot oil present.

EMERGENCY

In case of emergency, push "Emergency Stop" button at the main control panel or turn disconnect switch at discharge rotary valves to OFF position, whichever is closer. This will stop all systems' operations.

CAUTION: THIS MACHINE HAS MOVING PARTS THAT CAN CAUSE SERIOUS INJURY. BEFORE OPERATING OR PERFORMING MAINTENANCE, THE FOLLOWING PRECAUTIONS MUST BE TAKEN:

MAKE SURE ALL MOVING PARTS ARE SHIELDED FROM PERSONNEL.
READ ALL INSTALLATION, MAINTENANCE AND OPERATING INSTRUCTIONS.
DO NOT OPERATE SYSTEM UNDER CONDITIONS OTHER THAN THOSE FOR WHICH THE SYSTEM WAS PURCHASED.

A FAILURE TO TAKE THESE PRECAUTIONS COULD RESULT IN SERIOUS BODILY INJURY AND PROPERTY DAMAGE.