

Common Washer Problems

Several common issues often arise when operating an industrial production parts washer. Difficulties starting the machine, unsatisfactory cleaning and parts not drying sufficiently are the main resulting deficiencies that usually can be attributed to a contributing factor. These issues can usually be remedied if the manufacturer is able to discover the root cause of the issue.

If the machine is having trouble starting or is otherwise incapable of running, it does not necessarily indicate a major problem. Rather, it may simply be an issue with the electrical controls. The first step necessary to get the machine running is to check all the emergency stop buttons on the machine and make sure they have not been pushed in to activate them accidentally. The operator must ensure that they are in the “out” or “run” position.

If this proves not to be the issue, check the voltage and amperage on the control panel. Make sure that the machine is receiving an adequate amount of energy and that the control panel lights come on when the master knife switch is in the “On” position. From there, be sure to press the green “Master Start” button that is on the control panel, usually at the top left side of the panel, and then check the PLC screen or lighted push buttons to confirm that the machine is in “Auto” mode, rather than “Manual” mode. Finally, look at the red, amber, and green warning light tree located on the top of the control panel. If the red or amber lights are on, a fault or component trouble may be the cause of the stoppage. See your control panel PLC screen or lighted push buttons for red or fault indications for the individual systems of the machine.

If the machine stoppage is due to a purchased component problem such as a blower motor, pump motor, drive motor or heating element, there are a few steps that can be taken. First, make sure the machine is off. Then check the failing component to see if it is physically jammed or otherwise stuck. If it appears to be acceptable, check the electrical box of the component and see if the conduit or wires leading to the box are damaged or have been pulled out. If the component has an inlet filter as is the case with a blower, then remove that filter and check to see if it is being clogged by excessive debris. Finally, check the service life of the component and compare that to how long the component has been in use. It may simply be nearing the end of the lifespan.

Occasionally the washer will stop producing clean parts. Whenever this happens, it is time to check the condition of the bath. If the bath is saturated with soil, then change the solution making up the bath, along with the filters cleaning the solution. After the solution is removed, then use a heated, high pressure power sprayer to clean the tank. This preventative maintenance should be performed regularly in order to prevent cleaning failures. If the bath is of acceptable quality, move on to other possible causes. Make sure that the bath soap concentration is correct and that the proper cleaning chemistry has been mixed into the bath. Next, inspect the spray headers, making sure that the cleaning solution is coming out of the nozzles in the correct spray pattern. If the nozzles are plugged or just dirty, clean or change the affected nozzles. Also look to ensure that the spray headers are in the proper position, and they have not been broken or bent by an improperly loaded part. Finally, check the pumps to be sure that they are pumping at the proper pressures. The correct pressure is indicated by the flow gauges on the filtration system, or in the control panel depending on the configuration of the machine.

The drying stage of the washing process is another area where problems occur. To troubleshoot your dryer, first turn off the machine. If the machine includes a blow off system, then check the air blower and make certain that they are operating at the proper pressure. The digital gauges for positive back pressure indicate the correct pressure for this stage. Then move on to check the hoses which lead from the blower(s) to the air knives or air nozzles. Make sure that they are not broken, split, or obstructed in any manner. To check these nozzles or knives you will have to remove the filter covers as the hosing is inside the machine and connected directly to the blowers. If the machine has a dryer system rather than blow off, check the squirrel cage blower and make sure that it is running. Also inspect the cage blower to see if the fins are obstructed. Then check the opening from the fan box to the drying stage and ensure that it is not obstructed, allowing for hot air to be re-circulated to the parts.

After performing these checks, if the problem is not solved or a specific problem is identified but requires assistance, you will need to contact the service department of the vendor who provided the washer. They will provide a crew to perform the necessary maintenance work and get your washer back up and running to the standards expected.