



MRT-1116
Solder Pot Fill Level

This document is to explain the fill level of the solder pot and the effects of an improperly filled solder pot.

The correct fill level is between $\frac{3}{4}$ " (19mm) and $\frac{7}{8}$ " (22.2mm) from the top of the solder tank. It is recommended to not fill the tank to more than $\frac{5}{8}$ " (15.8mm) from the top of the tank.

Below is a properly filled pot.

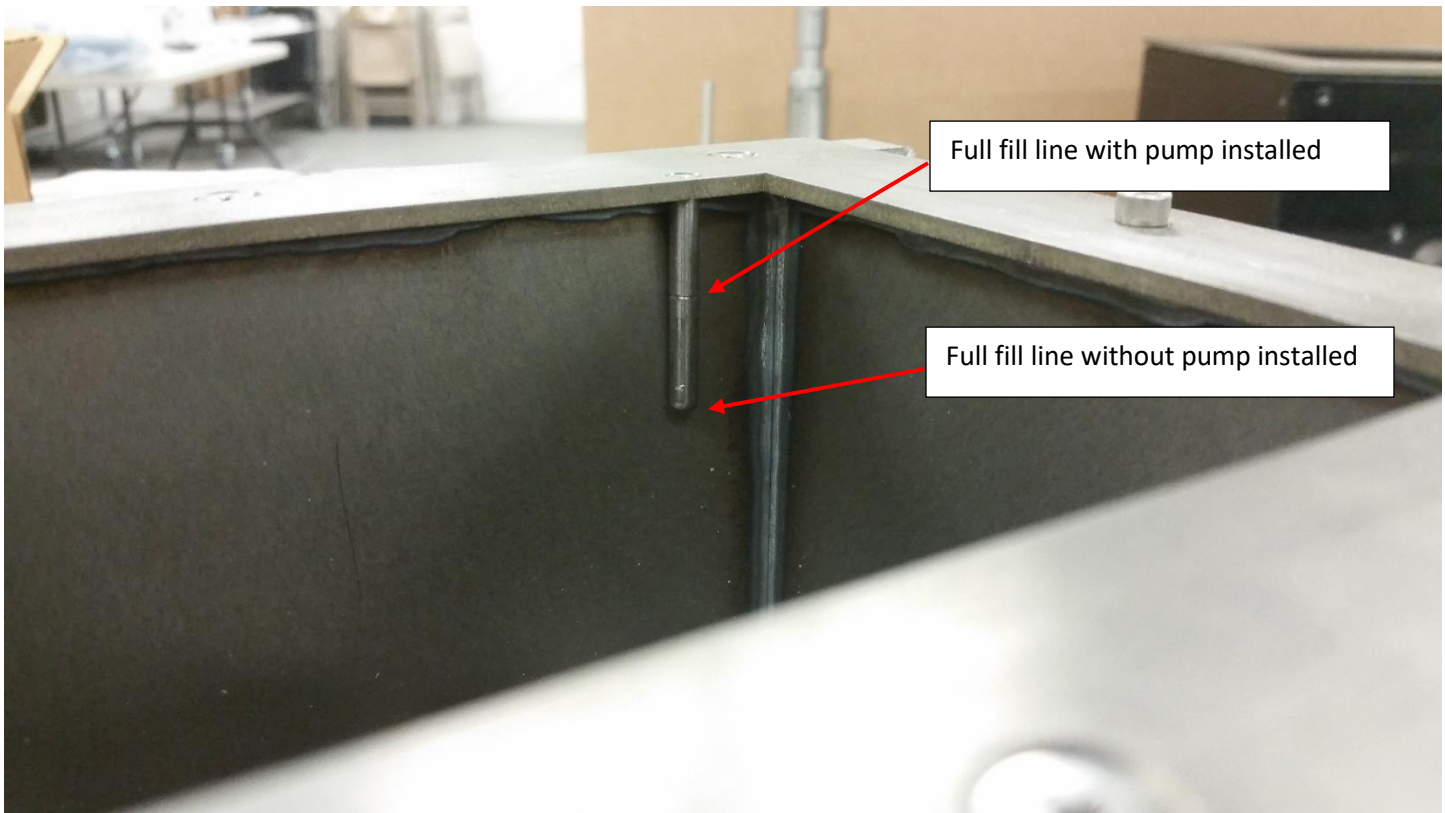


When using the auto solder feeder system, the low solder level probe must be properly set to keep the solder pot at proper fill level.

The low solder level probe must protrude through the removable N2 cover between $\frac{3}{4}$ " (19mm) and $\frac{7}{8}$ " (22.2mm).



Newer style solder pots have a fill gauge that shows proper fill level.



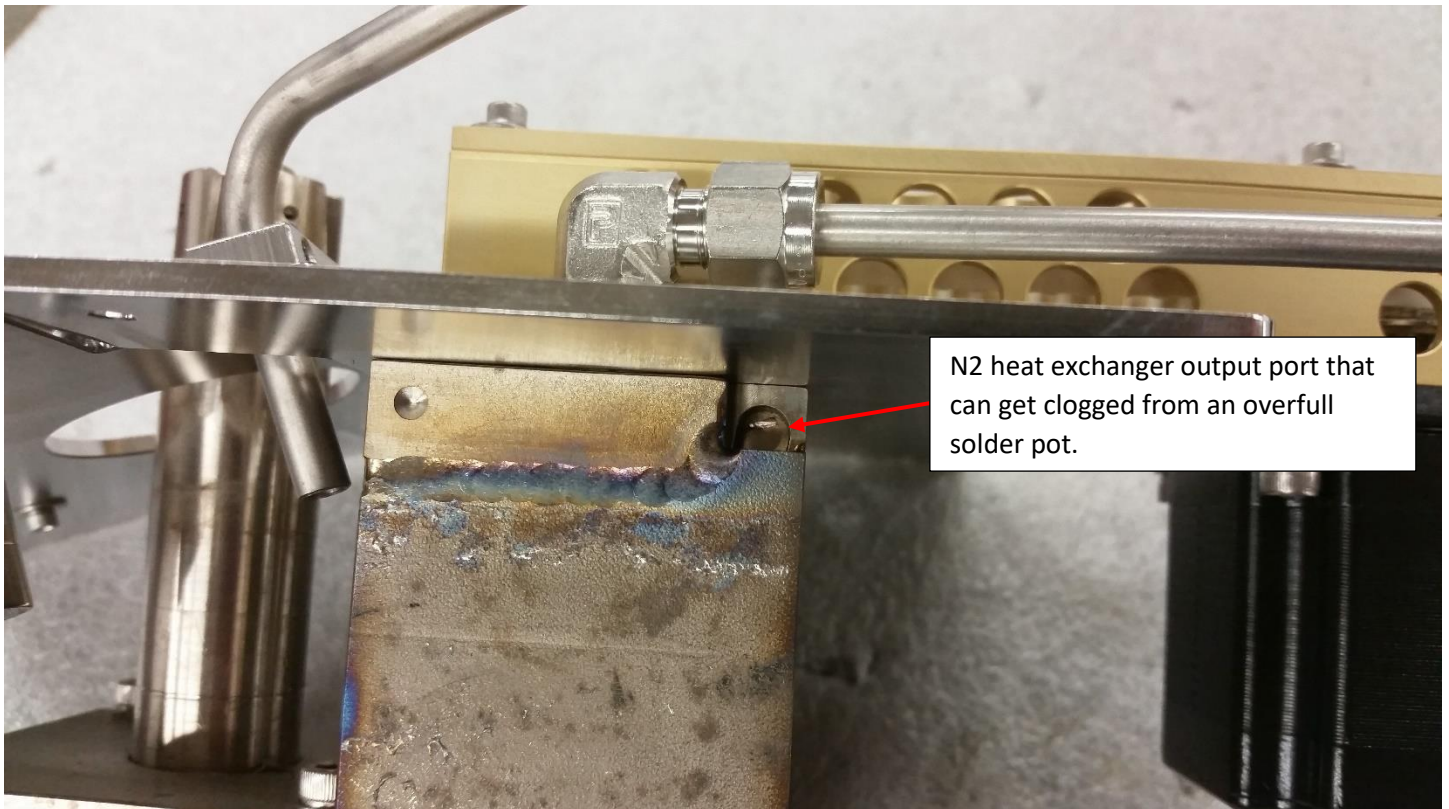
How the solder level system works.

The low solder level probe works using a differential pressure switch. When the solder falls below the low solder level tube, N2 pressure is released into the tank at 1 PSI (.068 bar). The differential pressure switch sees this pressure change and triggers a signal to the selective solder machine that solder is low and an indicator will show at the top of the software screen. If the machine is equipped with an auto solder feeder then it will start to fill the solder pot with solder till solder reaches the low solder level tube causing back pressure to the differential pressure switch resetting the low solder level signal.

What effects can an improperly filled solder pot have?

A solder pot that is too low will affect the solder dome height of the nozzle causing an increase in pump RPM.

A solder pot that is over full, less than 5/8" (15.8mm) from the top of the solder tank can cause the N2 heat exchanger to become clogged. If the N2 heat exchanger becomes clogged N2 will not inert the atmosphere around the solder nozzle.



If the clogged N2 heat exchanger becomes dislodged due to increased N2 pressure then the static pressure inside the tank can rise causing solder to fill the low solder level tube. A low solder level tube that is filled with solder will make the machine think that the solder level is okay.

Customer Service
Nordson SELECT, Inc.
22425 East Appleway Avenue
Suite 1
Liberty Lake, WA 99019
Office: +1.509.321.5710
Fax: +1.509.533.1299