SE dispensing Sept18

test quad size glass
mass test for large SE patterns:
aim for 0.3766g for 100micron
aim for 0.565g for 150 micron
aim for 0.753g for 200 micron

SE out at 11:30 (I1)
mass test1:
psi = 4 h20 = 7
program 19 with larger pattern (for stavelet quads)

syringe has visible large white streaks
expect line breaking
don't have a small se pattern to test currently - so will not verify the mass to previous mass test:(

no mass test performed
waitTimeAtStart=850
run sample 2 (first sample)
change to wiat time to 600
run sample 3
same settings run sample 4 and place glass slide

increase wait time back to 850 (probably just need longer wait time on end of line instead of shorter on the beginning)
run sample 5

increase pressure to 5 psi for sample 6
run sample 6
increase pressure to 7 psi for sample 7
run sample 7

araldite calibration
139.93

tmpLineAngle2_2
tmpLX2_2

tmpLY2_2
tmpLineSpeed2_2
lineDownZspeed2_2
lineUpZspeed2_2
waitTime2_2

SEtipZero
dispHeight

added a function called:
LineAtAngle_v2_2noWrkAdj (comment the line with the movetoZ function which moves to the workadjusted position)
copied point job 19 called thicknessTest (the SE star pattern)
into a pointJob 35 also called thicknessTest

added a waitTimeAtEnd (at end of the line dispens wait for a given amount of time, start with 0.5 ms) parameter to LineAtAngle2_2 and LineAtAngle2_2noWrkAdj

Take SE out of freezer at 2:46 (I2)

4psi:
mass test:
0.32 g first time
0.322 second time

7psi:
mass test 3
0.57

run sample 8
place slide on top
immediatly after dispensing it was apparent that the se was flowing more that previously (thicker lines) initial spread after placing slide was larger

mass test at 6psi
0.494 g

run sample 9: 6 psi, with araldite
run sample 10: 6 psi, with araldite, place 10g nut on top after robot placement

bring dots out
bring crosses out (same amount as araldite)
extend long "plus" cross a bit

SE out of freezer at 5:12 (K7, SpeedMix)
calibrate araldite tip:
139.81

mass test
7 psi

0.535g
mass test 2. 7.5psi
0.585

ran samples 11, 12, 13, 14, 15
psi 7.5
wait time at end 0.5 sec
11 - no araldite
12 - with araldite, placed 10 g nut ~10 min
13 - with araldite, placed 10 g nut, slid off a few times
14 - with araldite, placed 10 g nut for ~5 min
15 - no araldite, placed 10 g nut 5 min after slide placement

nut placement and timing may need to be worked out
is SE that was mixed with the SpeedMixer farther along in the curing cycle? Hard to say, samples are pretty similar. (also there was variability from placing the nut and time of nut placement)

It is clearly more uniform mix. still see dark lines where the initial pattern was dispensed.