

TEGA_Door_Open

Reconciled with block: tega_door_open\r26

Objectives: Open the TA Door and collect data that permits a calculation of the heat capacity of the female oven half. This version is to be used for TA#4 – Surface Phase Characterization ONLY.

Configuration: This procedure may begin with TEGA off, or it may be tacked on the end of some other procedure.

Filaments used: 0

SW Version (386):

SW Version (EGA):

Sweep and hop mode version(s): None

Super modes and Sweep modes used: None

1) TEGA ON (called in interop block)

2) Select oven (as input parameter) Sol _____ TA _____

3) Command TA Door Open

a) Open door default duration is 5 minutes

b) GV_TEGA_TA_DONE timeout is 10 minutes. If timeout does not go true the activity is terminated.

Heat manifolds to ensure pressure sensors work.

4) Start TA Manifold Heater to regulate at 20 C [**tweakable**]

5) Start EGA Manifold Heater to regulate at 35 C

6) Pause 5 minutes for manifolds to come to temperature

Exercise valves and carrier gas to check out flow and ensure no clogged frits.

7) Call tega_flow_car (executes Seq 90A open/close of carrier valve)

8) Pause 1 minute (to measure leaks)

9) Open bypass valve

10) Pause 1 minute (to check out EGA pressure sensor)

11) Close bypass valve

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- 12) Open oven inlet valve
- 13) Pause 1 minute (to measure flow rate to ensure frit is not plugged)
- 14) Close oven inlet valve
- 15) Set Carrier gas to off: Calls tega_stop_car
- 16) Open oven outlet valve
- 17) Pause 1 minute (to empty gas from TA manifold)
- 18) Close oven outlet valve
- 19) Stop TA manifold heater regulation
- 20) Turn manifold heater off
- 21) Stop EGA manifold heater regulation
- 22) Turn EGA manifold heater OFF

Check out oven fill and close oven for copper path

- 23) Start Oven fill – Shake for 15 secs (verifies LED operational)
 - a) Will not shake/LED Diff Parameters set to prevent
- 24) Close Oven – 10 secs
 - a) This has a 30 sec timeout for GV_TEGA_TA_DONE. IF GV does not go true, activity gracefully terminated.
- 25) Ramp oven as follows: Call tega_ramp (hidden child)
 - a) Ramp Segments: TA#4 = 0-3A (PIT values are different than Flight Values)
 - i) -50 to -30 at 20 K/min
 - ii) Hold at -30 for 1 minute
 - iii) -30 to -10 at 5 K/min
 - iv) Hold at -10 for 1 minute
 - v) -10 to -30 at -5 K/min
- 26) Shut down (call tega_power_off)