SQ5 – Valve Box thermal shield cooling

**Sensors and actuators used:**

- Temperature: TT700, TT704, TT705, TT706, TT707

- Valve: EV700

- Control valve: CV700

- Heater: EH700

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| --- | --- |
| **The user chooses:** | **Initial conditions:** |
| - Temperature: TT700L, TT700H, TT705L, TT705H, TT700C, TT700W | - Sequence 1 stopped  - Sequence 21 stopped |
| - Control valve: CV700%opening |  |

Subsequence

Subsequence

Valve Box, start cooling

TT700 <TT700L

Opening CV700, slope 10%/s,

Open EV700

TT704 < 200 K or TT706 < 200 K

(TT705 OR TT707)<TT705L OR

TT700<TT700C OR Stop

CV700 opened

Close EV700

(TT705 OR TT707)>TT705H

& TT700>TT700W

Stop

Stop

Starting LN2 flow

CV700 closed

Stop

Start LN2 Circulation

CV700 opened

Open EV700

Stop LN2 circulation

TT700 >TT700H OR Stop

Start GN2 heating

Start EH700

Stop heating

Stop EH700

Close filling valve

Closing CV700, slope 10%/s