

Leak Test of Seruci-0

Aria Internal Review

Carbosulcis August 6th, 2018

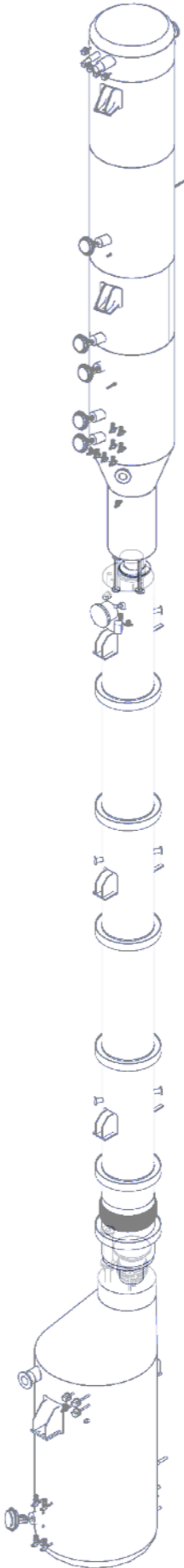
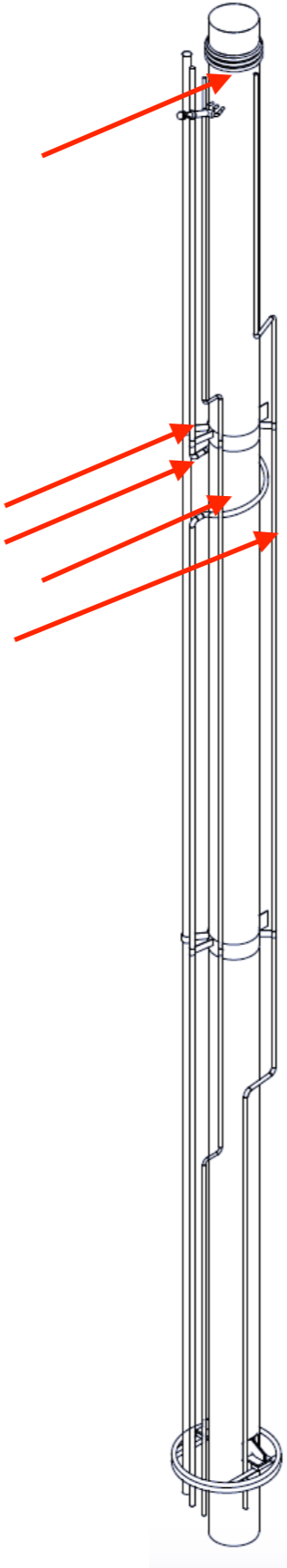
M. Razeti

INFN - Sezione di Cagliari

Seruci-0 Pilot Plant

Process Column C-101

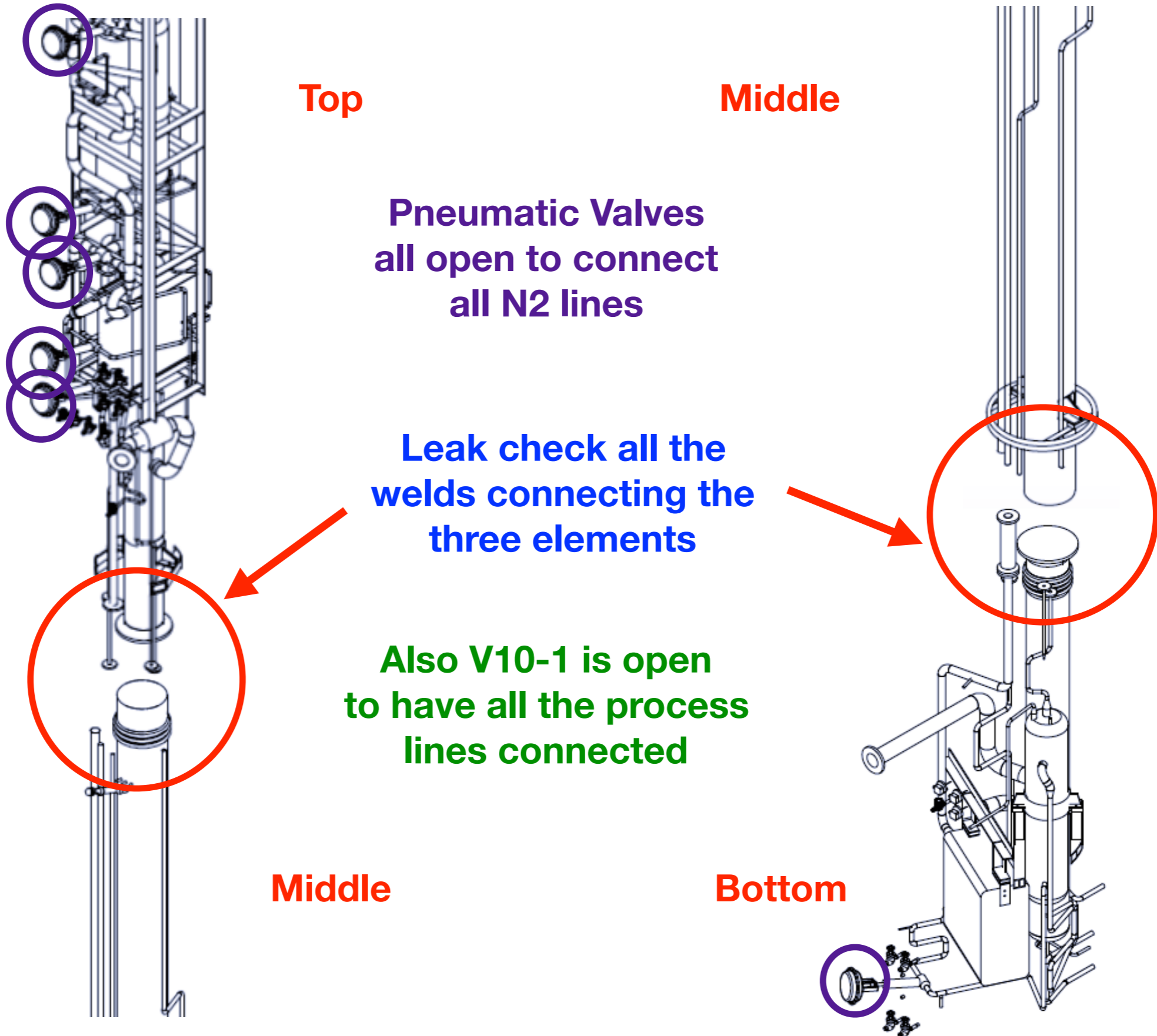
**Four Service Lines
(Feed, LN2, N2 Gas, N2
Degas)**



Top Module

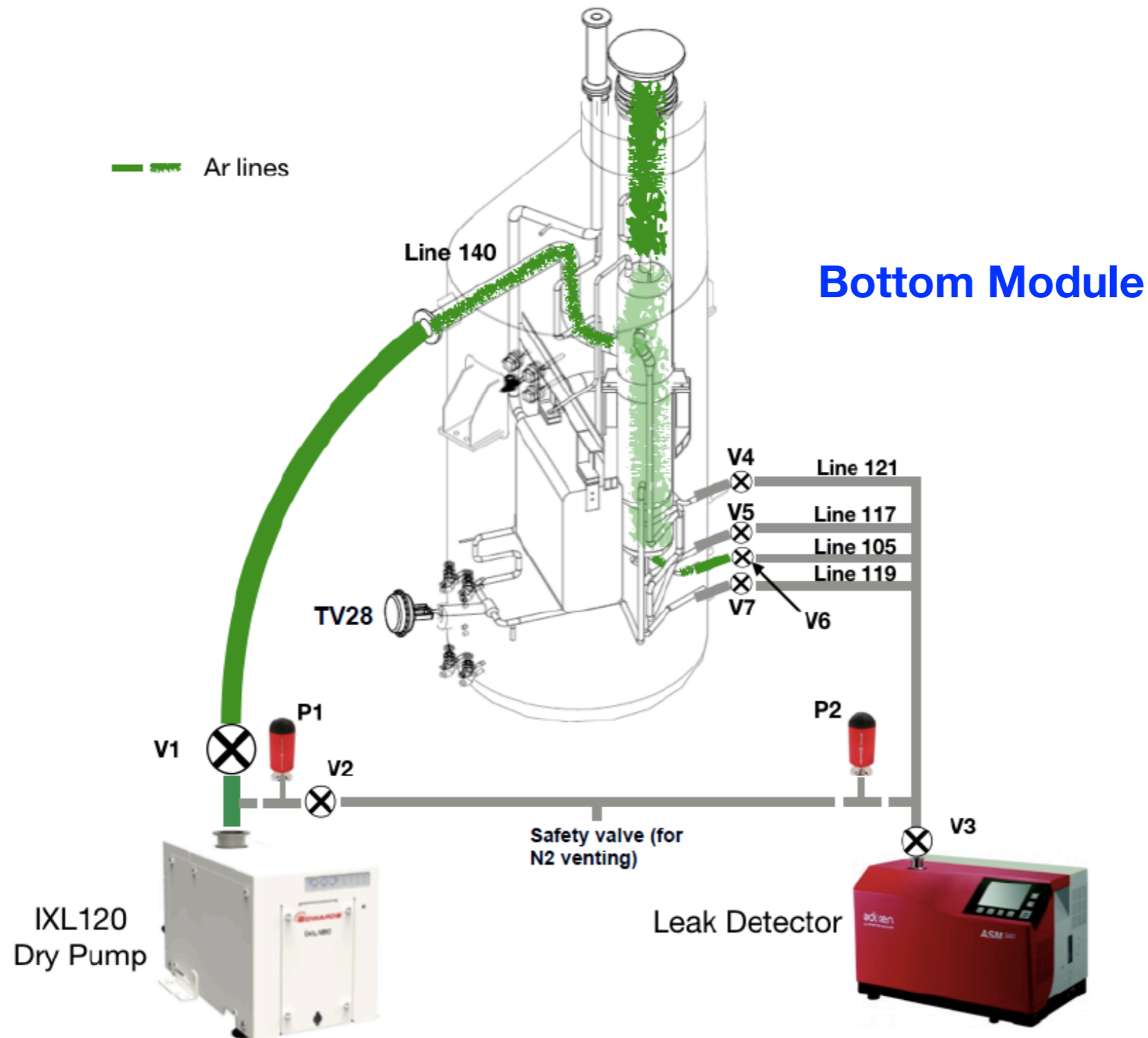
Middle Module

Bottom Module



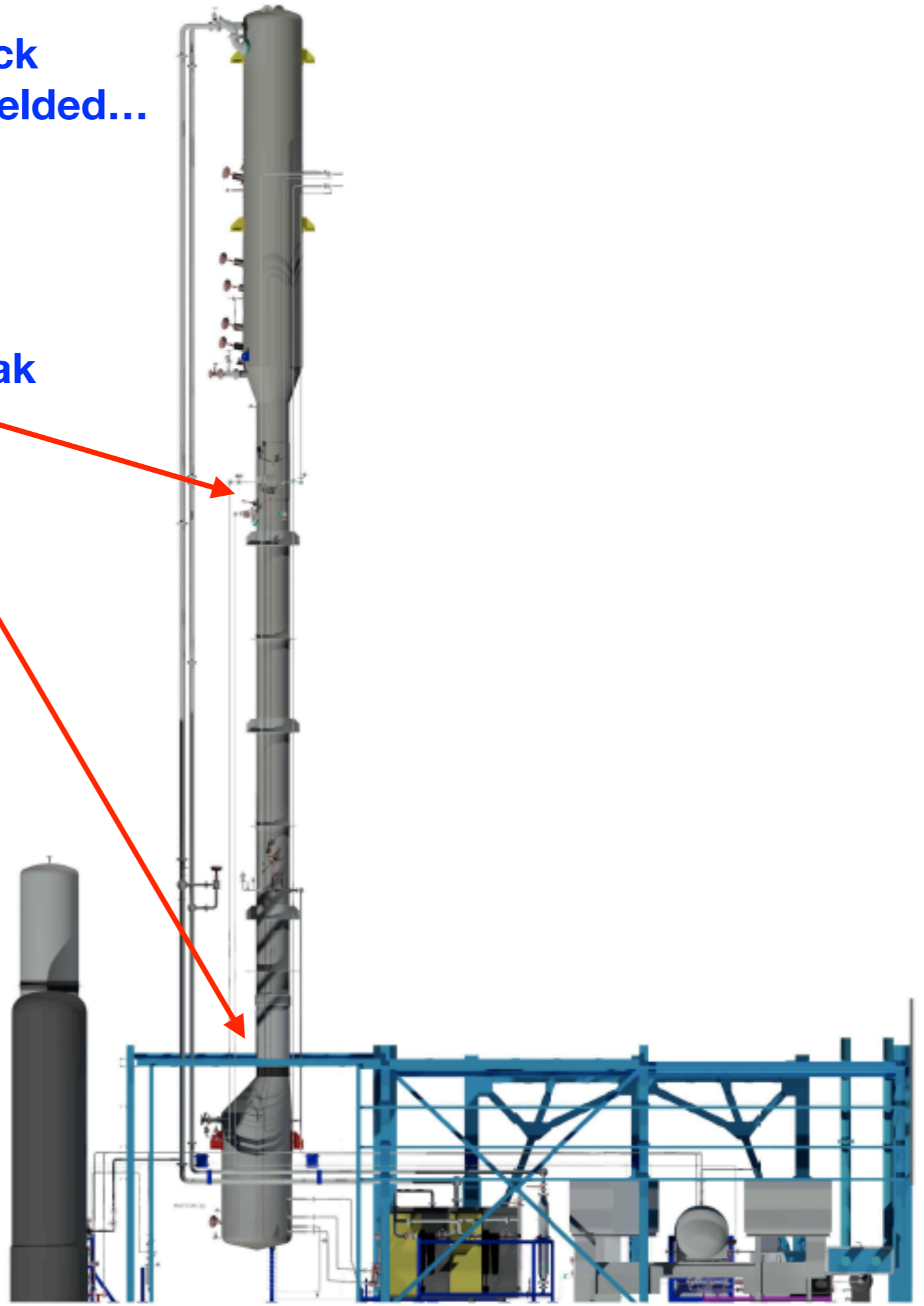
Leak Check of all the Internal Lines of Seruci 0

All the **PROCESS** and **NITROGEN** lines (105, 140, 117, 119, 121) are reachable from the **Bottom Module**

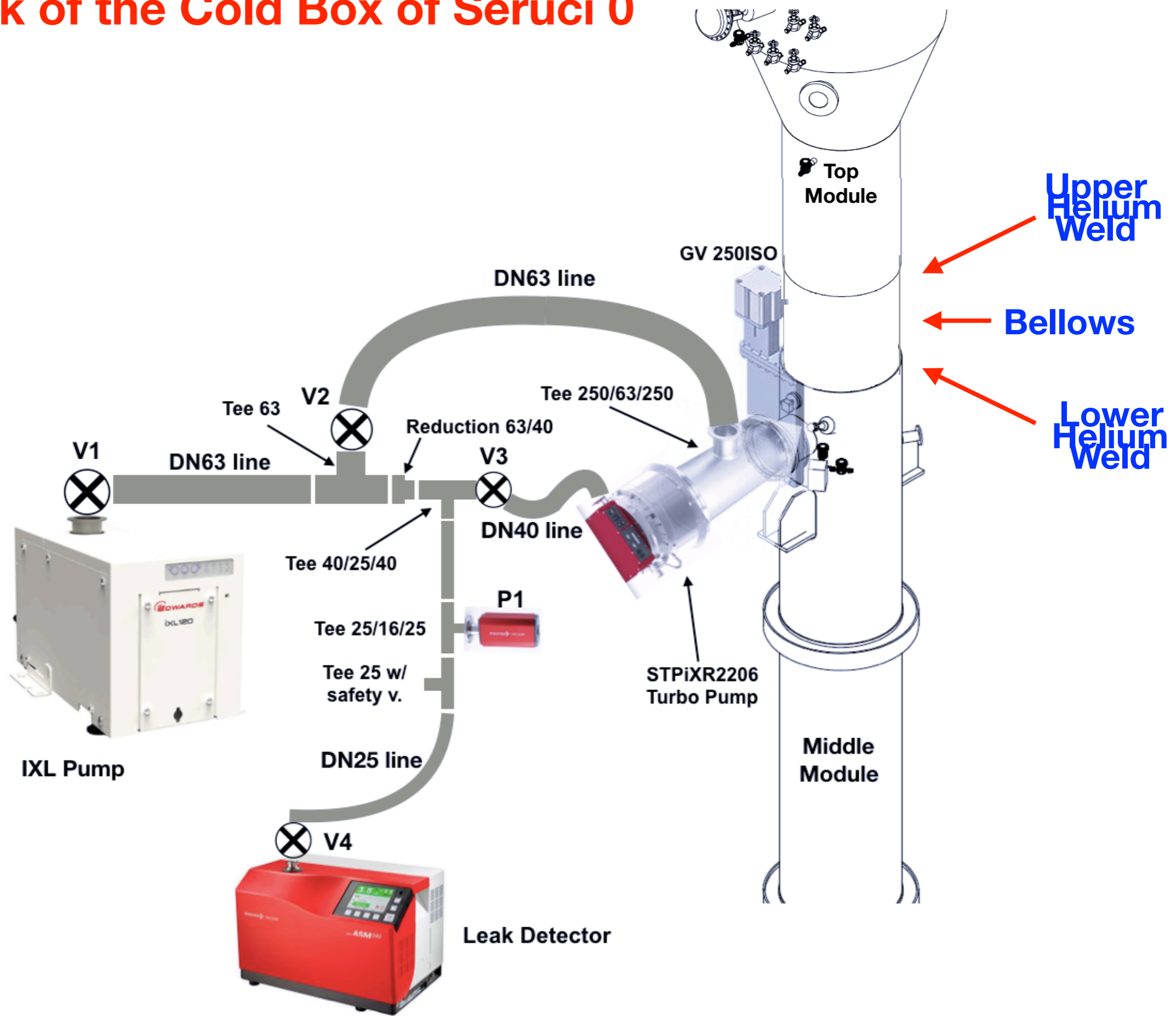


**After the Internal Lines Leak Check
the cold box will be closed and welded...**

**...and those welds need to be leak
checked.**



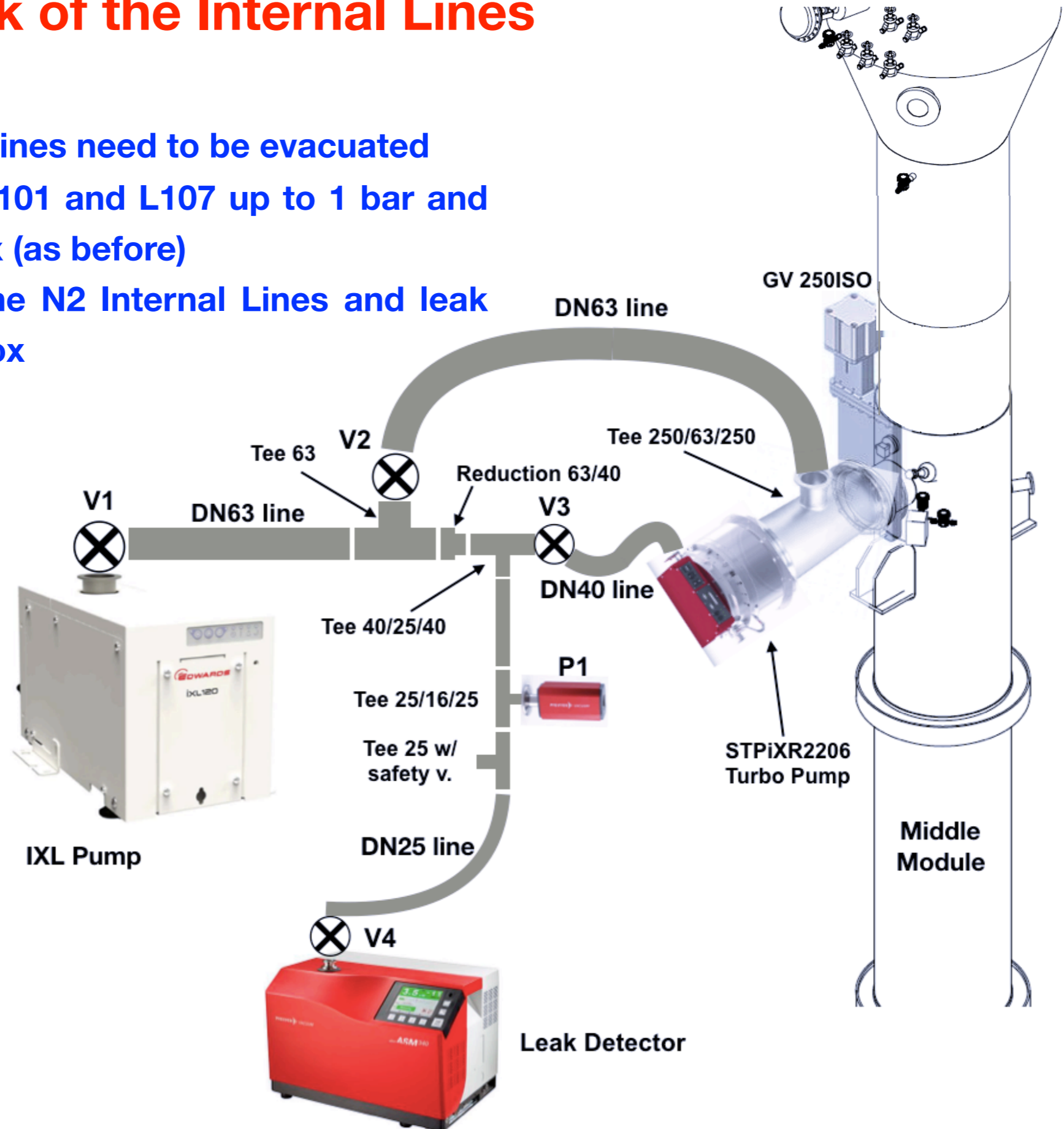
Leak Check of the Cold Box of Seruci 0



Global Leak Check of the Internal Lines

1. Cold Box and Internal Lines need to be evacuated
2. First fill with helium C-101 and L107 up to 1 bar and leak check the cold box (as before)
3. Then fill with helium the N2 Internal Lines and leak check again the cold box

It doesn't allow to pinpoint a possible leak in the system but provides the overall leak (or the background achieved).



The End