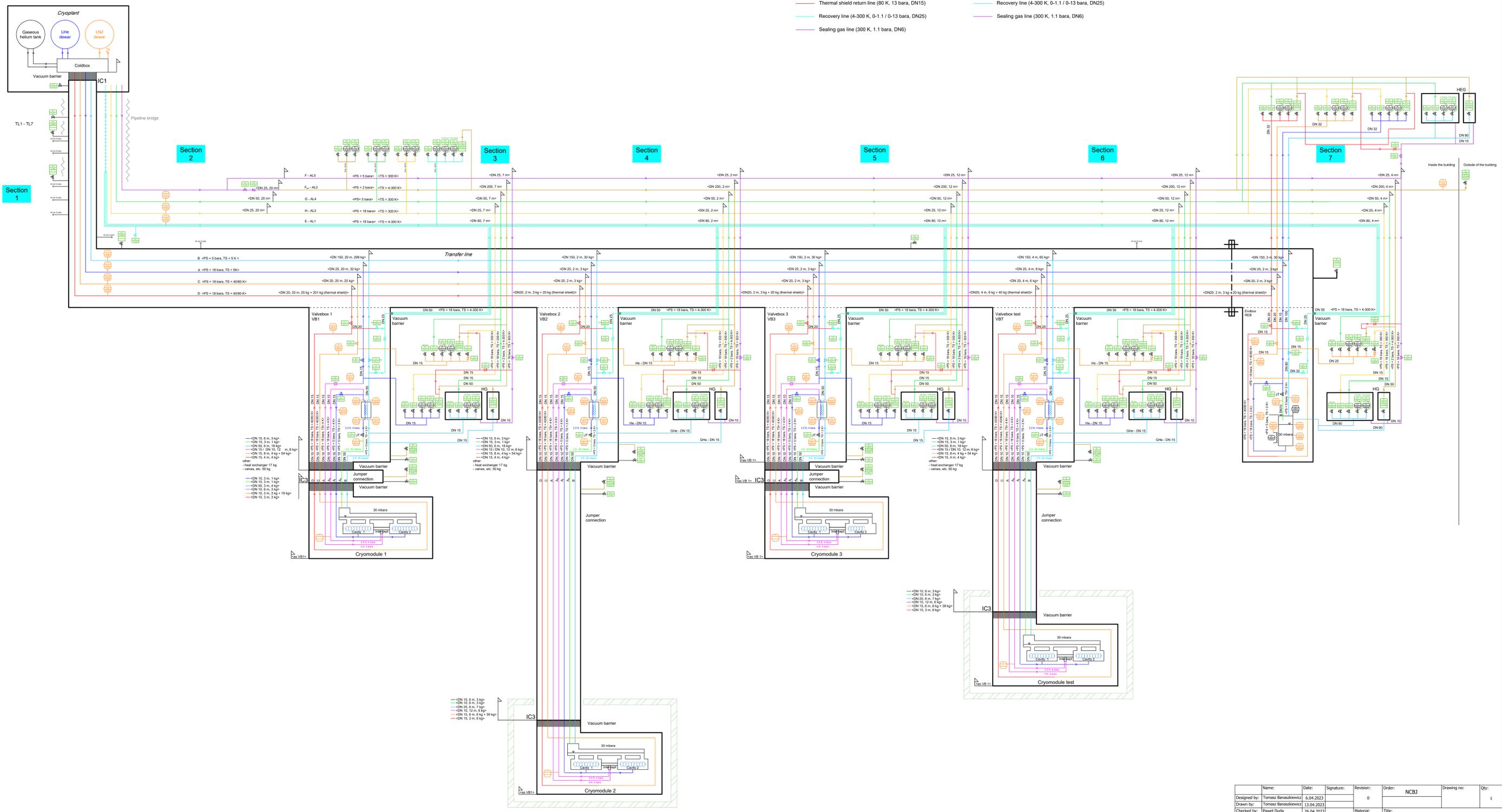


Rev	Date	Description	Init
A			
B			
C			

- Legend:**
- cryogenic control valve (out-off)
 - warm control valve (out-off)
 - hand-cool-off valve
 - safety valve
 - safety flap
 - burst disc
 - flow meter
 - temperature sensor
 - pressure transmitter
 - pressure indicator
 - liquid level sensor
 - heater
 - check valve
 - non-isolated line
 - line with heat exchanger
 - vacuum isolated line
 - heat exchanger
 - KF-40
- Instrumentation coding:**
- X... - Valvebox (VB1 / VB2 / VB3 / VB4 / VBE)
 - _X_ - line number (1-4)
 - ...X_ - sensor number
- Lines numbering:**
- 1 - He supply line
 - 2 - 2K supply line
 - 3 - He return line
 - 4 - Intercept line
 - 5 - Thermal shield supply line
 - 6 - Thermal shield return line
 - 7 - Recovery line
 - 8 - Purge in line
 - 9 - Purge return line
 - 10 - Safety valves relief line
 - 11 - Sealing gas line
- Valveboxes:**
- 1 - He supply line (5 K, 4 bara, DN15)
 - 2 - 2K supply line (2 K, 30 mbara, DN15)
 - 3 - He return line (3-5 K, 25-30 mbara, DN50)
 - 4 - Intercept line (5 K, 4 bara, DN15)
 - 5 - Thermal shield supply line (40 K, 13 bara, DN15)
 - 6 - Thermal shield return line (80 K, 13 bara, DN15)
 - 7 - Recovery line (4-300 K, 0-1.1 / 0-13 bara, DN25)
 - 8 - Purge in line (300 K, 4 / 13 bara, DN25)
 - 9 - Purge return line (300 K, <1.1 bara, DN50)
 - 10 - Safety valves relief line (4-300 K, 1.1 bara, DN200)
 - 11 - Sealing gas line (300 K, 1.1 bara, DN6)
- Endbox:**
- 1 - He supply line (5 K, 4 bara, DN25)
 - 2 - 2K supply line (2 K, 30 mbara, DN15)
 - 3 - He return line (3-5 K, 25-30 mbara, DN80)
 - 4 - Thermal shield supply line (40 K, 13 bara, DN20)
 - 5 - Thermal shield return line (80 K, 13 bara, DN20)
 - 6 - Recovery line (4-300 K, 0-1.1 / 0-13 bara, DN25)
 - 7 - Sealing gas line (300 K, 1.1 bara, DN6)
- Auxiliary lines:**
- 1 - Recovery line (4-300 K, 0-1.1 / 0-13 bara, DN80)
 - 2 - Purge in line (300 K, 4 / 13 bara, DN25)
 - 3 - Purge return line (300 K, <1.1 bara, DN50)
 - 4 - Safety valves relief line (4-300 K, 1.1 bara, DN200)
 - 5 - Sealing gas line (300 K, 1.1 bara, DN25)



Name:	Date:	Signature:	Revision:	Order:	NCBJ	Drawing no.:	Qty:
Designed by: Tomasz Banaszkiewicz	6.04.2023		0				1
Drawn by: Tomasz Banaszkiewicz	13.04.2023						
Checked by: Pawel Duda	26.04.2023						
Approved by: Pawel Duda	26.04.2023						
				P&ID POIFEL			
Wrocław University of Science and Technology Department of Cryogenic and Aerospac Engineering Wyb. Wyspiańskiego 27, 50-370 Wrocław, Poland				Scale:		Drawing no.:	
				N/A		N/A	
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