

DSG-RICH R&D Meeting

Date: March 14, 2022

Time: 11:00 AM – 12:00 PM

Attendees: Mary Ann Antonioli, Aaron Brown, Pablo Campero, Brian Eng, George Jacobs, Mindy Leffel, Tyler Lemon, and Amrit Yegneswaran

1. Hardware interlock system chassis testing underway

Mindy Leffel and Tyler Lemon

1. All 24 sensor PCBs connected to chassis with ~150-ft cables
2. Chassis has run for ~1 week with no issues
3. Sensors will be moved to inside dry cabinet for low-humidity tests
4. Sensor data in process of being added to archiver

2. Gas system hardware for RICH-II

System	Tubing outer diameter [inches]	Length [ft]	Color	Material
Nitrogen	1/2	100	N/A	Nylon
	1/4	400	Black	Nylon
Air-cooling	1	200	N/A	Nylon
	1/2	4 (need two)	N/A	Stainless steel

Tubing Needed for RICH-II

System	Fitting Type	Minimum Quantity	Comment
Nitrogen	1/2" OD line T-fitting	1	Splits main N ₂ supply line into two input lines
	1/2" OD 90° fitting	2	Help direct N ₂ input lines into detector
	Bulkhead 1/2" OD line feedthrough	4	Two for N ₂ input, two for N ₂ exhaust
	1/2" OD line to six 1/4" OD line manifold	2	Splits N ₂ input into six distribution lines

Additional fittings needed for RICH-II

3. INFN collaborators at JLab from March 14 to March 25, 2022

1. Luca Barion, Marco Contalbrigo, and Simone Vallarino arrived March 14
2. Plan to assemble electronic panel and perform initial read-out chain tests

4. Argonne collaborators at JLab from March 14 to March 18, 2022

1. Kevin Baily and Tom O'Connor scheduled to arrive at March 14, 2022
2. Plan is to assemble exit window