

E08-007 Run Plan

Plan for each kinematic setting:

- Take access and move BigBite (if needed).
- Set HRS angle and momentum ($\delta = -2\%$).
- Set FPP carbon doors.
- Set target to Al Dummy.
- Take 10 min. with open BB trigger.
- Set target to LH2.
- Take 10 min. with open BB trigger.
- Determine BB trigger configuration and shutdown unneeded LG blocks (in Shower, not Preshower).
- Run 8 hours LH2.
- Switch to Al target and run 15 min.
- Set HRS momentum ($\delta = 0\%$).
- Run 15 min. with Al dummy.
- Switch to LH2 and run 8 hours.
- Switch to optics target and run 5 min (Raster Off).
- Set HRS momentum ($\delta = +2\%$).
- Switch to Al target and run 15 min.
- Switch to LH2 and run 8 hours.

Notes:

- Maximize DAQ rate during run (DT ~30% is still fine).
- Online replay for each run.
- Continuous online monitoring of BB scalars .
- Ideally switching δ settings should be done in the beginning of each shift, switching kinematic settings should be done each morning (beginning of the day shift).
- Changes between kinematic settings should be done with an expert around!.

Setting	delta	Q ²	HRS Angle	HRS Momentum	BigBite Angle	electron (Angle/Momentum)	Beam Energy	Fpp Analyzers
1	-2	0.3505	57.500	0.6286	30.000	31.320/1.0072	1.194	3"
	0	0.3505	57.500	0.6162	30.000	31.320/1.0072	1.194	3"
	2	0.3505	57.500	0.6039	30.000	31.320/1.0072	1.194	3"
2	-2	0.2995	60.000	0.5761	30.000	28.509/1.0344	1.194	3"
	0	0.2995	60.000	0.5648	30.000	28.509/1.0344	1.194	3"
	2	0.2995	60.000	0.5535	30.000	28.509/1.0344	1.194	3"
3	-2	0.4512	53.000	0.7239	35.000	36.690/0.9536	1.194	3"+0.75"
	0	0.4512	53.000	0.7097	35.000	36.690/0.9536	1.194	3"+0.75"
	2	0.4512	53.000	0.6955	35.000	36.690/0.9536	1.194	3"+0.75"
4	-2	0.4051	55.000	0.6813	35.000	34.250/0.9782	1.194	3"+0.75"
	0	0.4051	55.000	0.6680	35.000	34.250/0.9782	1.194	3"+0.75"
	2	0.4051	55.000	0.6546	35.000	34.250/0.9782	1.194	3"+0.75"
5	-2	0.5494	49.000	0.8095	40.000	41.865/0.9012	1.194	3"+0.75"
	0	0.5494	49.000	0.7936	40.000	41.865/0.9012	1.194	3"+0.75"
	2	0.5494	49.000	0.7778	40.000	41.865/0.9012	1.194	3"+0.75"
6	-2	0.4993	51.000	0.7667	40.000	39.225/0.9279	1.194	3"+0.75"
	0	0.4993	51.000	0.7516	40.000	39.225/0.9279	1.194	3"+0.75"
	2	0.4993	51.000	0.7366	40.000	39.225/0.9279	1.194	3"+0.75"
7	-2	0.6013	47.000	0.8526	45.000	44.621/0.8736	1.194	3"+0.75"
	0	0.6013	47.000	0.8359	45.000	44.621/0.8736	1.194	3"+0.75"
	2	0.6013	47.000	0.8192	45.000	44.621/0.8736	1.194	3"+0.75"
8	-2	0.6958	43.500	0.9313	50.000	49.754/0.8232	1.194	3"+0.75"
	0	0.6958	43.500	0.9131	50.000	49.754/0.8232	1.194	3"+0.75"
	2	0.6958	43.500	0.8948	50.000	49.754/0.8232	1.194	3"+0.75"
9	-2	0.2523	62.500	0.5241		25.804/1.0596	1.194	1.5"
	0	0.2523	62.500	0.5138		25.804/1.0596	1.194	1.5"
	2	0.2523	62.500	0.5035		25.804/1.0596	1.194	1.5"
Systematic	0	2.1640	30.000	1.867	50	52.962/1.1708	2.324	
Alt	-2	0.7516	41.500	0.9712	50.000	52.889/0.7935	1.194	3"+0.75"
	0	0.7516	41.500	0.9521	50.000	52.889/0.7935	1.194	3"+0.75"
	2	0.7516	41.500	0.9331	50.000	52.889/0.7935	1.194	3"+0.75"
Alt	-2	0.8514	38.000	1.0460	60.000	58.778/0.7403	1.194	3"+0.75"
	0	0.8514	38.000	1.0255	60.000	58.778/0.7403	1.194	3"+0.75"
	2	0.8514	38.000	1.0050	60.000	58.778/0.7403	1.194	3"+0.75"
Alt	-2	0.9529	34.500	1.1194	65.000	65.259/0.6862	1.194	3"+0.75"
	0	0.9529	34.500	1.0975	65.000	65.259/0.6862	1.194	3"+0.75"
	2	0.9529	34.500	1.0755	65.000	65.259/0.6862	1.194	3"+0.75"

HRS momentum settings are calculated to account for energy loss in the target.