

C0 Spools -- Round 2

LOCATION	MAIN QUADS	SPOOL SLOT	TRIMS	STRENGTHS	MISC
Triplets (a) B49 / C11	Q1 / Q3 96.5" Q2 173.5" (LHC)	56.175"	HD+VD SQ	? 0.48 T.m ? 7.5 T.m/m	HBPM + VBPM 10 kA + 200 A
B48 / C12	Q4 75" (LHC)	56.175"	HD / VD SQ	0.48 T.m 7.5 T.m/m	HBPM / VBPM 10 kA
B47 / C13	Q5 54" (LHC)	56.175"	HD / VD SQ	0.48 T.m 7.5 T.m/m	HBPM / VBPM 10 kA
B46 / C14 (b)	Q6 55.19" (LBQ)	56.175"	HD / VD Q Sx	0.48 T.m ? 7.5 T.m/m 450 T.m/m^2	HBPM / VBPM 5 kA + ?
B45 / C15 (b)	Q7 55.19" (LBQ)	56.175"	HD / VD Q Sx	0.48 T.m ? 7.5 T.m/m 450 T.m/m^2	HBPM / VBPM 5 kA + ?
B44 / C16	66"	72"	HD / VD Q* Sx	0.48 T.m 25 T.m/m 450 T.m/m^2	?
B43 / C17	66"	72"	HD / VD Q* Sx	0.48 T.m 25 T.m/m 450 T.m/m^2	?

(a) 0.48 T.m dipoles can correct for transverse mis-alignments of 0.5mm systematic and +/- 0.25 mm random errors -- this is slightly less than the errors recently surveyed at the CDF triplets.

7.5 T.m/m skew quad can correct roll errors *locally* of 2.5 mrad -- considerably less than the ~9 mrad roll once discovered at CDF.

(b) 7.5 T.m/m is absolutely needed here to perform the low-beta matching.