

TS-SSC-92-071 *
June 2, 1992
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Pole Shim Size of DCA323

DCA323 is going to be assembled using ALL-Apical insulation. This coil is meant to be the test of the same configuration as DCA322. Although, the coil size turned out to be somehow different from DCA322. Considering the systematic -3.5 mil variation of full automatic sizing machine, inner coils seem to be the right size in average but will have 2 mil of up-down asymmetry. Outer coils are much smaller than standard value even we add 3.5 mil correction to it. However, outer coils are now known to have small unloading during excitation. Since DCA322 which had no shimming with 2 mil larger size than this magnet received 6 ksi outer pressure, this magnet can expect 5 ksi with no shimming. This is still large enough not to unload. To be the same for field component comparison, therefore, it is better not to have any shimming in this magnet.

DCA323		
	Inner	Outer
Upper Coil	1M-50-1027(+7.55)	1M-50-2028(-9.62)
Lower Coil	1M-50-1028(+5.32)	1M-50-2029(-10.1)

no shimming in this magnet assembly

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