

TS-SSC-91-225 * November 15,1991 Masayoshi Wake

Shimming of All Kapton Coil

For the first trial of the collaring of all kapton coil, we are going to use 1M-50-231, 1M-50-130 and 1M-50-131. The measurement summary of these coils is as follows. Units are in mil and the creep is the amount of size decrease after one hour.

coil	kapton	curing shim	oversize	creep
1M-50-231	1/2lap+2/3lap	4	+16.0	-
1M-50-130	1/2lap+2/3lap	11	+20.6	20
1M-50-131	1/2lap+2/3lap	0	+14.8	19

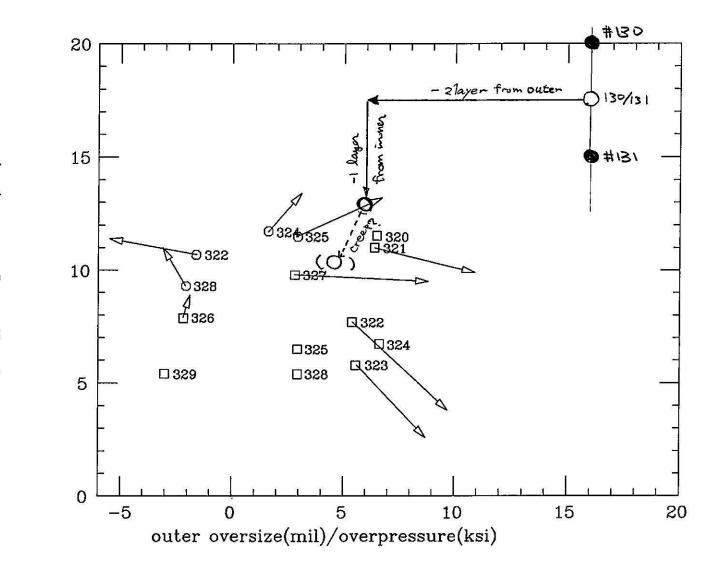
Though we have +16 mil oversize in outer coil, from the limitation of insulation requirement, what we can do is as much as removing 2 layer of ground wrap. There is still considerably large oversize in outercoil. By the removal of one layer of ground insulation from the inner coil, Inner coil size becomes about right. Since the creeping of all Kapton insulation is about twice as normal Kapton/glas insulation¹, both pressure will be reduced but estimation of this effect is difficult at present.

Action:

remove two layer of Kapton from outer and remove one layer from inner

^{*}Distribution: R.Bossert, J.Carson, S.Delchamps, I.Gonczy, W.Koska, G.Pewitt, R.Sims, J.Strait

¹R.E.Shims, TS-SSC-91-213



inner oversize(mil)/overpressure(ksi)

2