

Memo to: Brian Smith, Dean Sorenson, Gianni Tassotto 11-6-91

From: Wayne Koska

Subject: End Force on 50 mm Collider Dipole Magnets

Brian,

The return end bullets of DCA313 were torqued to 20 inch-lbs prior to welding of the extension tube. The resulting average force per bullet after welding was 1260 lbs. (This value was obtained by averaging over bullets 2 through 4, bullet 1 had a shorted gauge and could not be used.) This is an acceptable value for end force. Therefore, all 50 mm Collider Dipole magnets (beginning with the lead end of DCA313) should have their lead end set screws and return end bushing screws torqued to 20 in-lb until further notice.

cc J. Carson  
D. Smith  
J. Strait

Memo to: Dean Sorenson

10-23-91

From: Wayne Koska, Jim Strait

Subject: End Force on DCA313 Return End

Dean,

On 10-22-91 we requested that you have the DCA312 lead end set screws torqued to 20 inch-lbs. From the data taken at the return end of DCA312 we estimated this should provide an end force of between 1000 and 1500 lbs per bullet, or a total end force of 4000 to 6000 lbs.

We now request that you also torque the return end of DCA313 to 20 inch-lbs. We will use the bullet gauges to determine if the estimate of the final end force is correct.

Please do not proceed with setting the torque on the lead end of DCA313 until we have evaluated the data from its return end and have provided you with further instructions.

cc J. Carson  
D. Smith  
B. Smith

Memo to: Dean Sorenson

10-22-91

From: Wayne Koska, Jim Strait

Subject: End Force on DCA312 Lead End

Dean,

Please torque the DCA312 lead end set screws to 20 inch-lbs of torque. From the data taken at the return end of DCA312 we estimate this should provide an end force of between 1000 and 1500 lbs per bullet, or a total end force of 4000 to 6000 lbs.