

HTS Solenoid Design Review

Status / Schedule

Michael Anerella

Status

Design:

- All components modeled in Pro/Engineer, integrated into the assembly model
- Drawings completed for Coil Assembly
- Drawings need to be completed for Yoke Assembly, Leads, tooling, etc.

Assembly:

- Coil bobbins machined
- Coils wound & temporarily clamped
 - Testing (LN2 cold dunk) to be completed ~ end of October
- Remaining parts need to be machined
- Final assembly needs to be completed

(Best-case scenario) Schedule

NOTE: Dates revised after meeting, to reflect return of hardware from TJNL in 11/07

Design:

- Minor design changes (yoke mount to flange maybe, etc. but NO coil changes per RG)
- ~ 25-50 drawings needed → ~ 12-14 weeks Feb-07
- Model / draw shipping tooling → ~ 1 month Dec-06

Assembly:

- Build shipping fixture ~ 1 months Oct-07
- Make / buy parts ~ 4 months Jan-08
- Assemble components & Install
 - Install shipping tooling onto coils Nov-07
 - Ship to TJNL Dec-07
 - Fabricate lead assemblies ~ 2 weeks Feb-08
 - Attach leads to coils, install yokes ~ 2 weeks Mar-08
 - Complete installation w/AES, test ~ 8 weeks? May-08