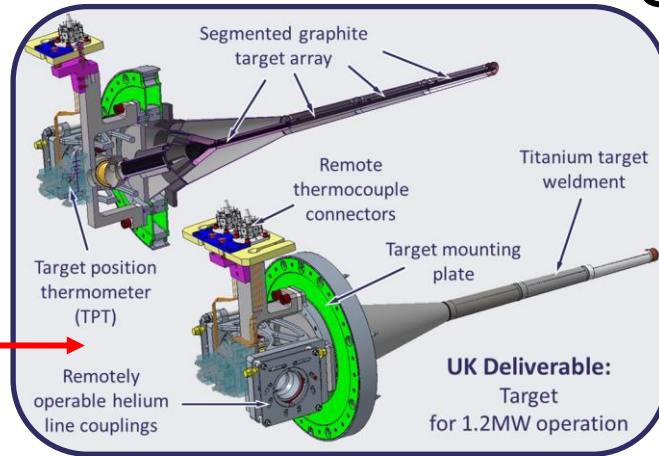


LBNF - Beamline – Target Complex

- Targetry

- Includes

- Target
 - Baffle
 - Helium gas cooling system for target
 - Remote handling for target



- AD Recent Work

- Support UKRI/RAL for Target, Baffle, & Cooling System
 - Understanding code compliance
 - Procurement Readiness Review for UKRI Cooling System components

- Horns

- Includes

- 3 Horns
 - 3 Modules (hold components)
 - Stripline Block
 - Utilities penetrations

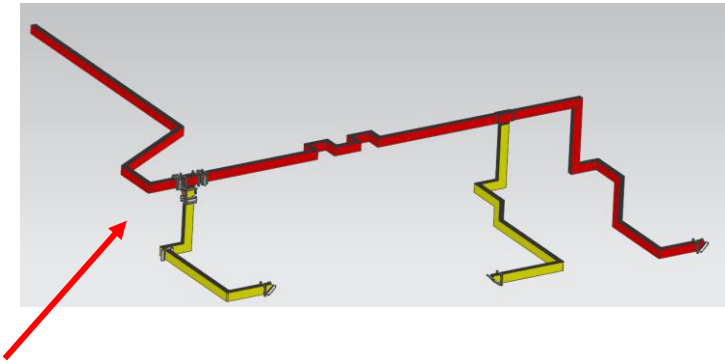


- AD Recent Work

- Design/Drawings/Review of Horns B and C inner & outer conductors
 - Horn A prototype assembly
 - Procurement continues
 - Some re-design as needed
 - Design/Drawings/Review of modules and their drive systems



LBNF - Beamline – Target Complex



- Horns Power Supply

- Includes

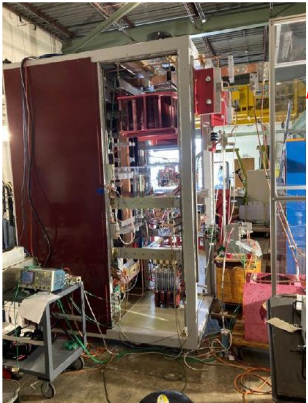
- 32 cell system (16 cabinets) to provide current
- One supply for Horn Test Stand and another for LBNF Target Station

- Stripline

- Includes

- Electrical Bus for carrying current to horns (in series) from Horns Power Supply
 - 9 conductor layers for 300,000A

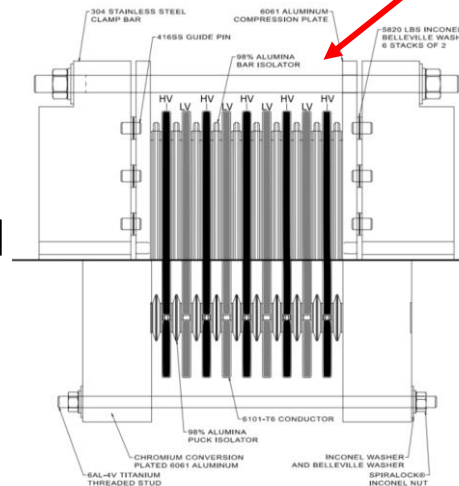
- AD Recent Work



- Single cell prototype testing is ongoing
- Final design is complete
- Procurement for Horn Test Stand Power supply has commenced



- AD Recent Work



- Finished design/drawings/review of part of stripline where Horns Power Supply connects
- Finished design/drawings/review of common elements (straights and corners) and stands
- Starting full design of Horns Test Stand Stripline

LBNF - Beamline – Target Complex

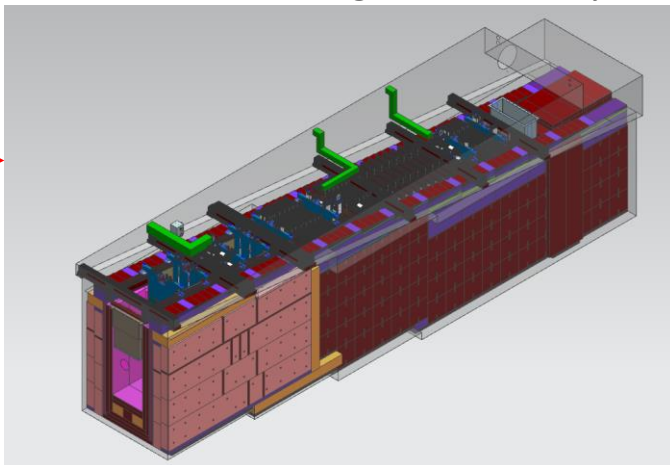
- Target Shield Pile

- Includes

- Bulk steel for CF to install
 - Top layer of steel which hangs from bulk shielding
 - Hatch cover system that is gas tight
 - Shielding outside of the hatch

- AD Recent Work

- Some support for drafting
 - Work is being done mainly in PPD



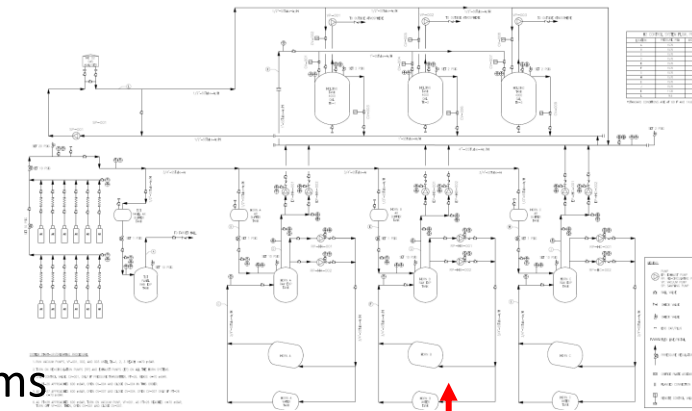
- RAW

- Includes

- Six RAW systems
 - Two intermediate systems
 - Two water exchange systems
 - One Hydrogen & Argon gas control system
 - Water cooling skid for Horn Test Stand

- AD Recent Work

- Four systems are designed
 - Others are at different levels of completeness
 - Gas control system prototype is being assembled
 - Finishing Horn Test Stand water skid design and preparing for procurement



LBNF - Beamline – Target Complex

- Remote Handling

- Includes

- Outfitting Work Cell with Operations Room and Morgue area
 - Equipment used during remote handling including vision system
 - 8 Shield doors with motorized drives

- AD Recent Work

- Working on remote handling procedures and identifying equipment needed
 - Preliminary design of shield doors complete
 - Overseeing ANL group doing 1 final design

- Test Stand

- Includes

- Physical Structure to hold horn during test
 - Magnetic probe/measurement system

- AD Recent Work

- Steel frame is assembled and in place
 - Await metrology

