Phase I TPC Gas System

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MĀNOA

Items to ship to KEK

- Various monitoring devices
  - 3 Flow and 2 pressure devices
  - Cables for operation

  Need by end of June.
  Can go in crate
- Various steel tubes, hoses, tools
  - 20 – 30 meters of tube, 8 flex hoses
  - Tube bender
  - Various connectors for gas tubes

  Need by end of June.
  Can go in crate
- Bottle regulator??
  - May buy in Japan
  - Working with Nakayama-san now

  Need by end of June.
  Can go in crate if bought here
- Scale for bottle

  Need before Phase I start (by Jan. 2016)
- Various valves and fixtures
  - 16 valves (8 ball, 8 metering) and 2 back pressure regulators

  Need by end of June.
  Can go in crate
- Leak detection equipment
  - Helium “sniffer” (working with Nakayama-san)
  - Swagelok “Snoop Liquid Leak Detector”

  Need by end of June.
  Can go in crate

Schedule

- Build and test electrical power box for gas system devices
  - Finish by end of week. Under construction now
- Test full field cage with full length tubing with up to 8 parallel gas paths
  - By June 5 at latest
- Propose rigid and flex tubing paths inside cave for phase I
  - By end of next week
  - More on this later…

Work Needed From Others

- Igal:
  - Completed TPC with full fieldcage and 2 alpha sources
    - Igal is working on this now
- Marc:
  - Advising and construction of flex hose mounting structure in BEAST support strut
  - How much room is available in shipping crate? Can gas system components be accommodated?
- Sven/Nakayama-san:
  - Information on available leak detection equipment at KEK
- Nakayama-san:
  - Information about compatibility of Japanese bottle regulator
- Sven:
  - Slide 1 in BEAST Schedule shows gas lines installation needs KEK approval. Could you elaborate, please?

Remaining Purchases

- 8 Flex hoses (~$130 ea.)
- Bottle scale
- Leak detection equipment
  - Waiting to hear about helium sniffer
  - Will purchase liquid from Swagelok
- Cable(s) for gas system electronics
- Regulator for Japanese gas bottle
- More SS tubing
  - Should get about 100 ft ($2.00/ft)