

Scraper Meeting Minutes

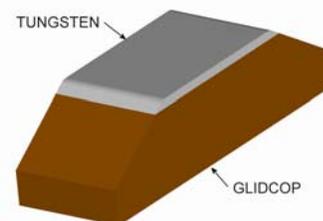
Thursday, December 09, 2004

From Mark Jaski

Borland, Michael
Capatina, Daniela
Chae, Yong-Chul
Emery, Louis
Harkay, Kathy
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Questions and Answers

1. Where does the vertical scraper get installed?
 - a. Either in section six of sectors 35 or 37. Section 35 current monitor vacuum chamber may need to be modified to make more room.
2. Where does the horizontal scraper get installed?
 - a. Same as above
3. What is the geometry of the horizontal scraper blade? The vertical blade is defined by Chae.
 - a. The horizontal scraper blade only needs to be 8 mm to 10 mm thick (as thick as the vacuum chamber opening. The length of the scraping edge, total length and angle will be determined by Chae.
4. Does the vertical scraper need to move away for injection like the horizontal scraper?
 - a. No
5. Does the horizontal scraper require RF fingers to reduce wake field effects like the vertical scraper? Is this requirement more relaxed in the horizontal scraper?
 - a. The requirement is more relaxed for the horizontal scraper. The horizontal scraper may not need RF fingers. Chae will look into this.
6. Can a scraper blade have a tungsten piece brazed to the tip (see figure)? How thick should the piece be?
 - a. Yes, it should be 4 mm thick minimum.
7. Does there need to be two horizontal blades (inboard and outboard)? Two



- vertical blades (top and bottom)?
- a. Yes
8. Will there be more than one vertical scraper or more than one horizontal scraper in the storage ring?
- a. Possibly

Other Stuff

1. The estimated operating distances for the horizontal scraper are:
 - a. inboard scraper: 12 mm from centerline
 - b. outboard scraper: 4mm from centerline
2. The horizontal scraper blades need only to travel from touching the centerline to 25 mm from centerline.
3. It is best to make the scrapers symmetrical. The horizontal scraper will have a blade for both inboard and outboard. The vertical scraper will have a blade for both top and bottom.
 - a. The horizontal scrapers that are currently installed in sectors 39 and 40 are single scrapers. There is a scraper on the inboard side of the device and an open cavity on the outboard side that creates heating problems.
4. A proposal was presented to move RF fingers in and out with the scraper movement using gears.
- 5.