Design of TIDVG#4
A. Perillo-Marcone (EN-STI)
Current Dump at LSS1 – TIDVG#3

Iron Shielding (EN-GJL-200)
Copper Core (OFE, C10100 H02)
Graphite: 2.7m (2020 PT)
Aluminium: 0.8m (EN AW 6082 T6)
Tungsten: 0.3m (Densimet 180)
Copper (OFE, C10100 H02)

Cooling circuit for copper core
Cooling pipes for shielding
Beam opening

15th July 2016  Design of TIDVG#4 – A. Perillo-Marcone
TIDVG#4 - Design

Dump inside vacuum chamber
(SS 316L seamless tube)

CDD: SPSTIDV4XXXX
Smarteam: ST0762531*
TIDVG#4 - Design

• Main modifications:
  • Replacement of copper OFE by CuCrZr – less manufacturing time.
  • The Aluminium blocks are removed.
TIDVG#4 - Design

• Main modifications:
  • Two cooling circuits.
  • More reliable springs.
  • The copper block is integrated into the core.
Summary of Changes in TIDVG#4 with respect to TIDVG#3

- Geometry of beam opening slightly modified inside the dump.
- Flanges at upstream/downstream ends are identical.
- Modified shape of vacuum chamber upstream/downstream of dump.
- Addition of SS vacuum chamber around the dump.
- Removal of aluminium block inside the dump
- Modification of lengths and materials inside the dump.
Thank you for your attention.