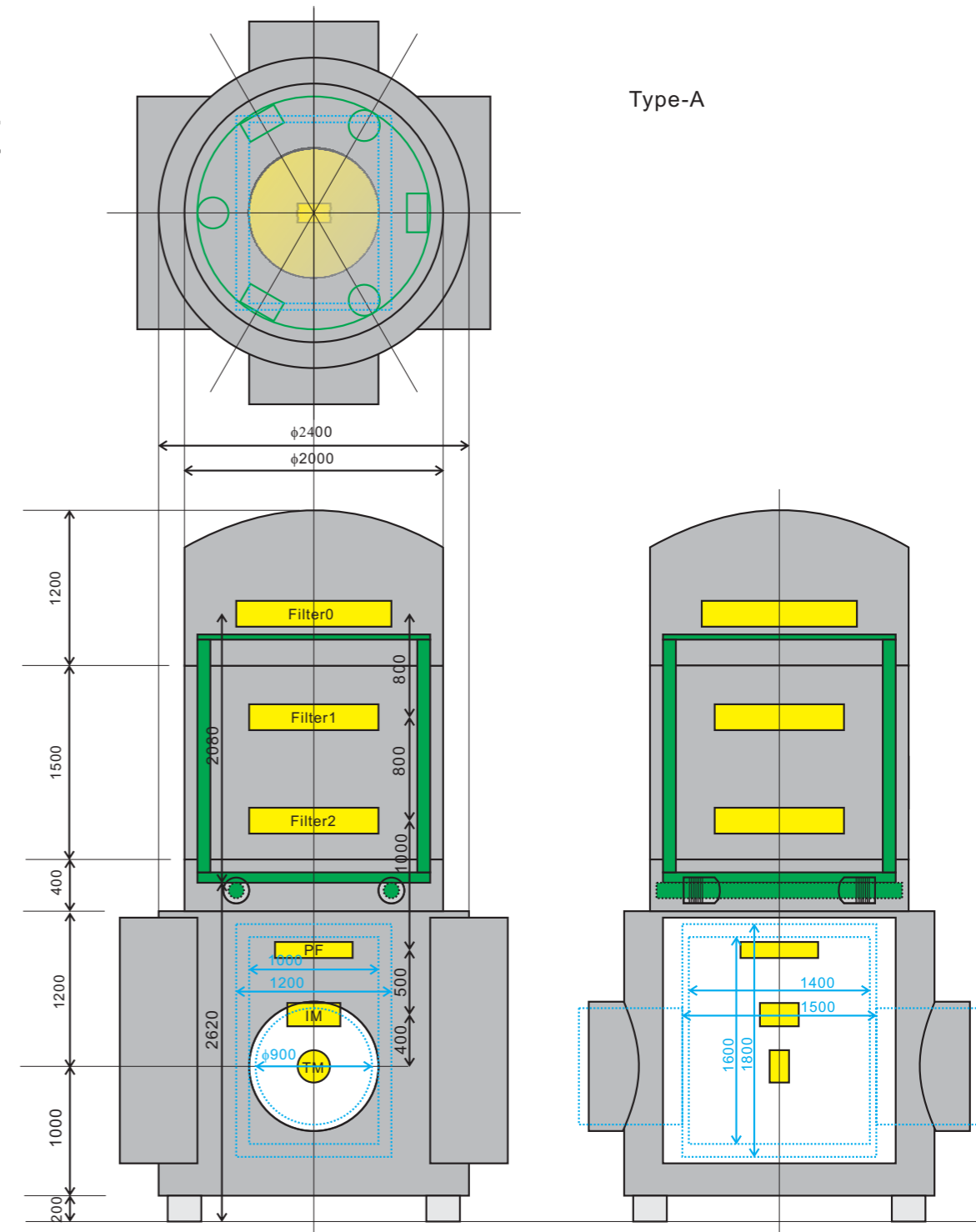
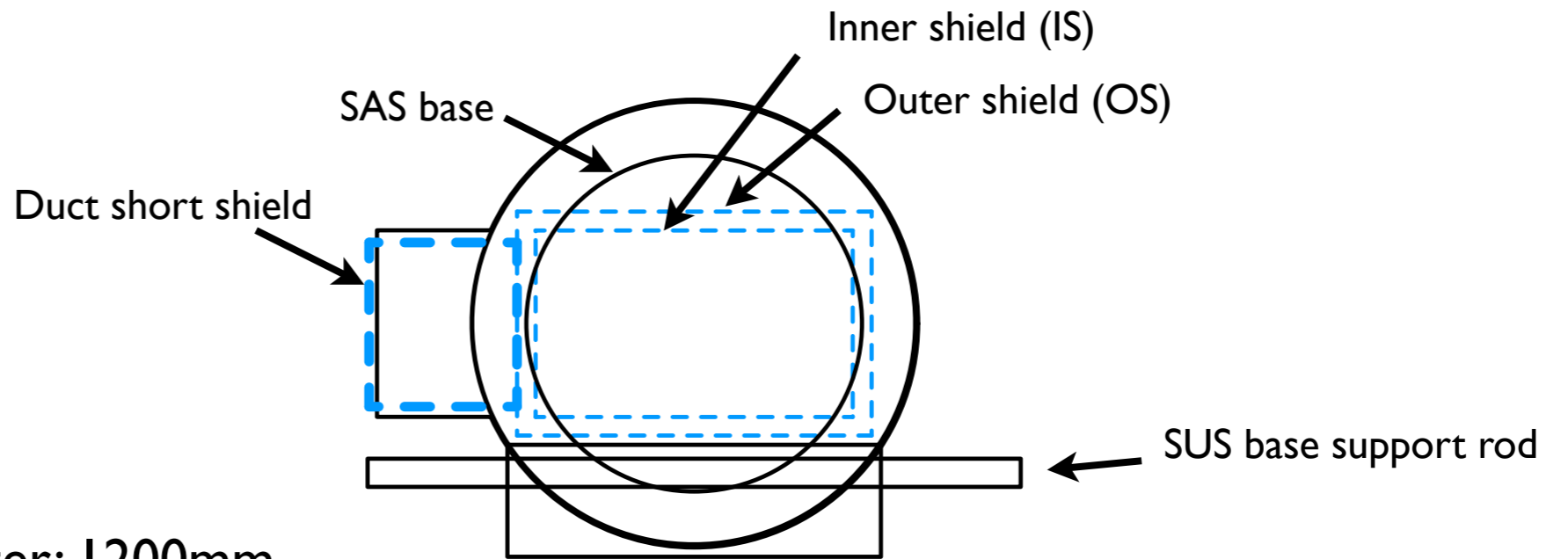


LCGT cryostat meeting

Takashi Uchiyama
2010/07/30

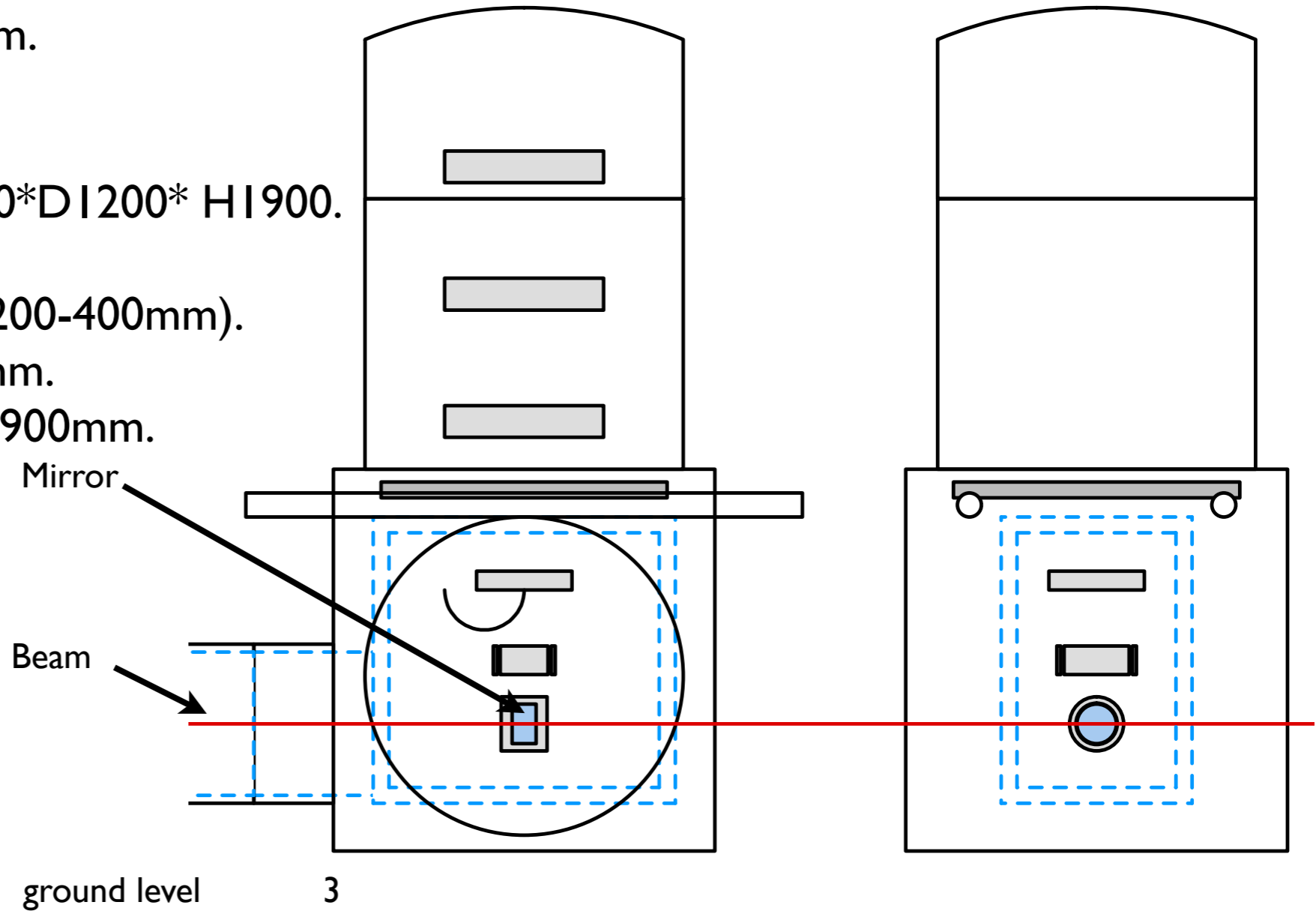
- 高橋さんの図をベースに、低温部の再構築を行っている。
- まだ中途段階で、試行錯誤中。
- 垂直円柱構造。
- ミラータンク低温部のdimensionが $\Phi 2400 \times 2800$. (まだ検討中)
- DBBのある常温部3段目も低温部に内蔵した構造になっている。
- SAS, SAS base 常温タンクを外すことで、上部フランジから低温シールドをインストールできる構造。



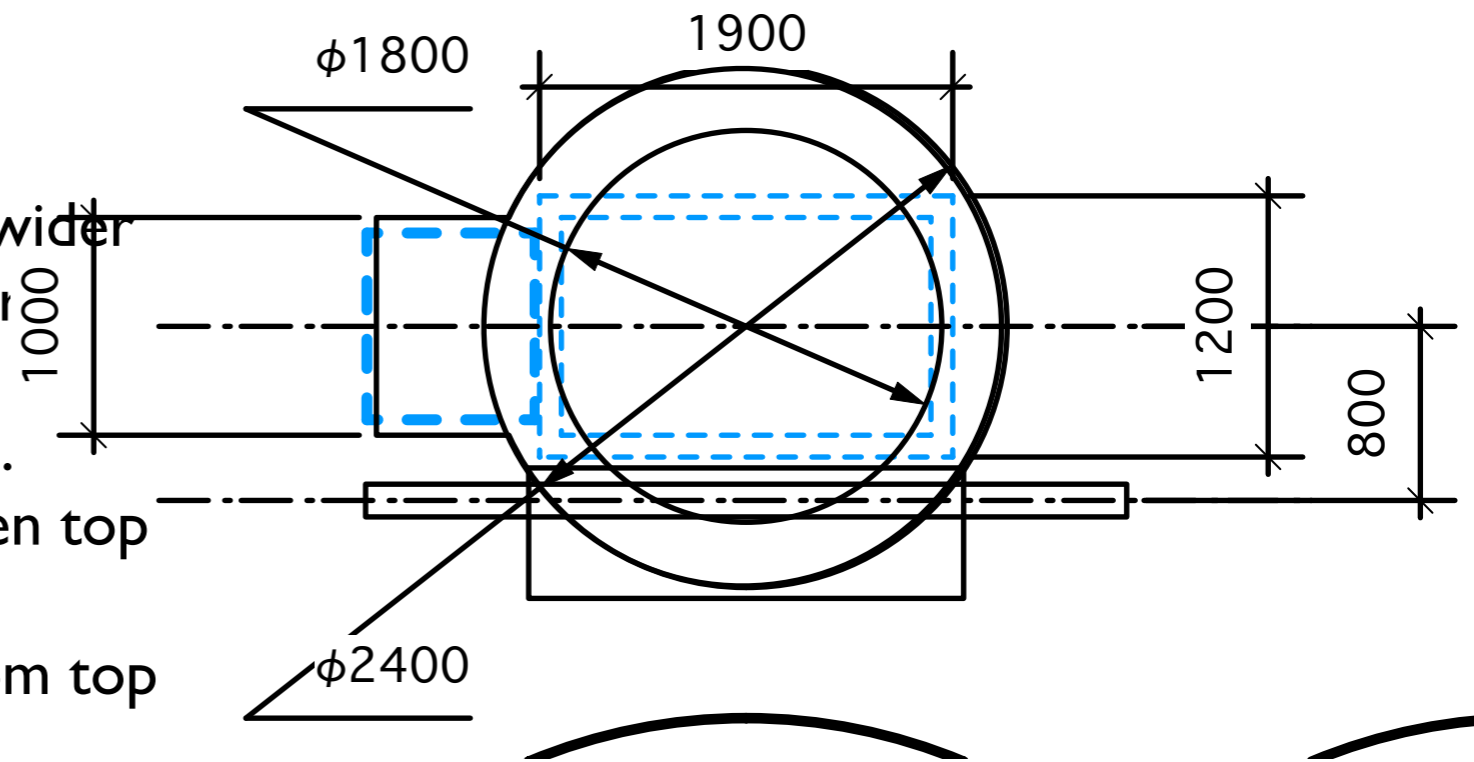


- Important parameters
- Beam height, Mirror center: 1200mm.
- Inner shield(IS): W1600*D1000* H1700.
- Bottom of SAS base: 2620mm.

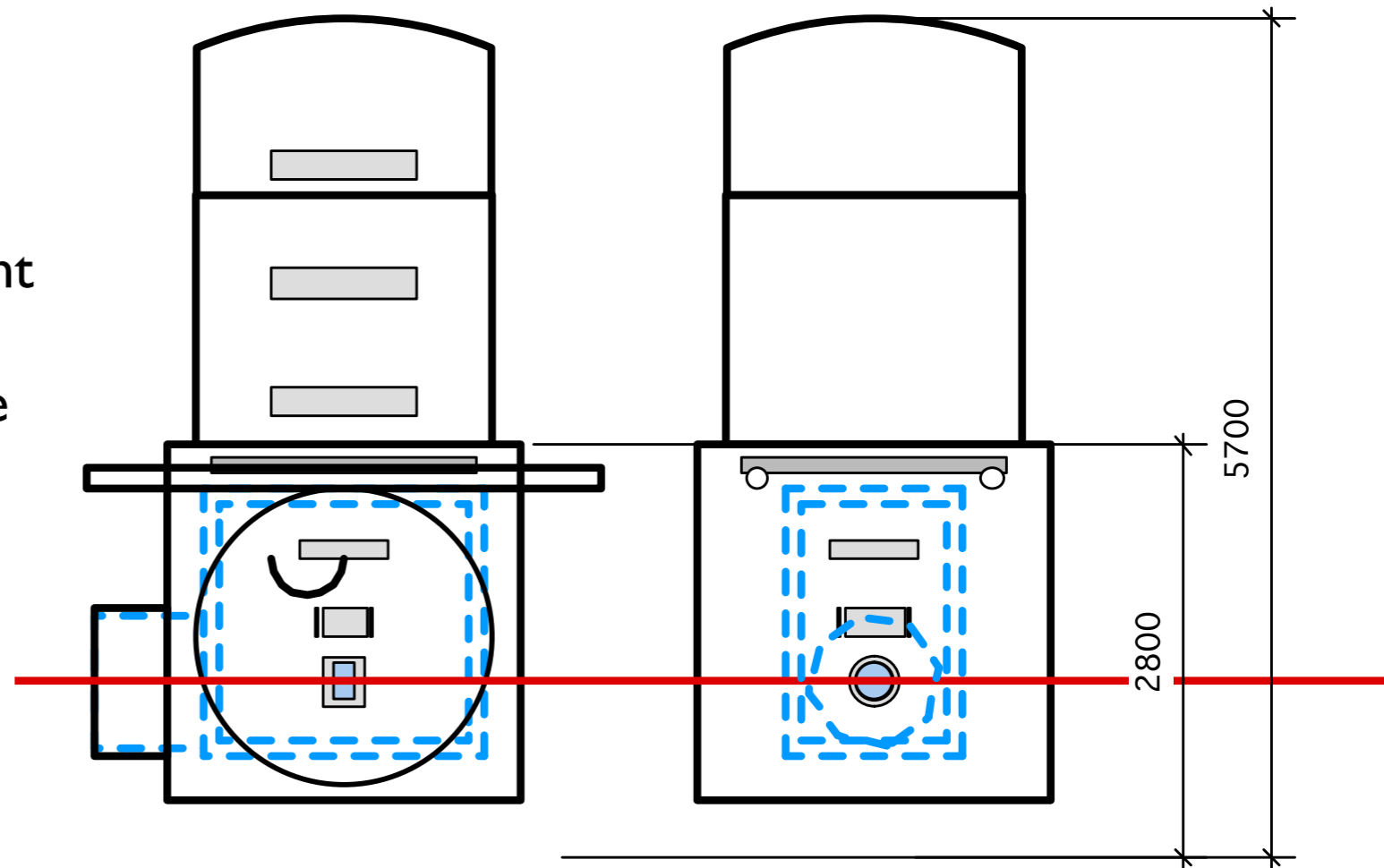
- Sub parameters
- Outer shield(OS): W1800*D1200* H1900.
- Surface area: 16m²
- Bottom of IS: 800mm (1200-400mm).
- Beam duct radius: 1000mm.
- Beam duct shield radius: 900mm.



- 垂直円柱形状の真空容器。
- Diameter of cryostat: 2400mm.
- depend on size of OS(1900*1200).
- SAS base support rods are separated wider for installation of radiation shields later
- Radiation shield installation procedure.
- Step 0: Remove SAS with its base. Open top flange.
- Step 1: Install outer & inner shields from top flange.
- Step 2: Connect thermal conductors for cryocoolers.
- Step 3: Install duct short shield from tank inside.
- Problem: Structure of Inner shield.
 - Width of inner shield: 1000.
 - Duct shield diameter: 900.



- Radiation shields are placed higher than before, because the beam height was set at 1200mm.
- DBB and SAS base support rods are set on cryogenic part of the tank.
- Height of the cryogenic part is also higher, 2400 ->2800mm.



- Now considering how to set thermal conductors for cryocoolers.

