TBPS Tilted Section Production
Building 187 Layout
Tracker Layout

Tilted Section:
- Layer 1: 24 rings, 3 different angles → 3 sets of jigs
- Layer 2: 24 rings, 3 different angles → 3 sets of jigs
- Layer 3: 24 rings, 2 different angles → 2 sets of jigs
1 set of jigs (for Layer 1 Ring 47 deg)

1 jig for gluing Al-CF connector to the cooling plates

2 jigs for bending the pipes (inner and outer)

1 jig for bending U-Pipe

1 jig for preparing the sandwich (not designed yet)

2 jigs for gluing inner and outer cooling pipes

1 carrier frame

⇒ For 1 ring type: 8 jigs

but carrier frame can be used for the whole Layer 1 rings

U-pipe jig can be used for the all rings
Number of Jigs needed

**Tilted Section**:
- Layer 1: 24 rings, 3 different angles $\Rightarrow$ 3 sets of jigs
- Layer 2: 24 rings, 3 different angles $\Rightarrow$ 3 sets of jigs
- Layer 3: 24 rings, 2 different angles $\Rightarrow$ 2 sets of jigs

Total 72 rings. Total 8 sets.

For 1 ring type (1 set): 8 jigs

but carrier frame can be used for the whole Layer 1 rings

U-pipe jig can be used for all rings

$\Rightarrow$ 6 Jigs

For the 72 rings of TBPS Tilted Section

8*6 = 48 Jigs

3 Carrier Frames

1 U Pipe Jig

**Building 187 is the place where the rings will be produced.**

TBPS Tilted Section Production – Bldg 187

Pierre.rose@cern.ch
3D of current Building 187
Aim of designing the Building

- Make a status of the building
- Figure space needed for jigs
- Know how to implement the jigs for production
- Buy furniture needed
- Remove unnecessary items
Thank you for your attention!