The Canted-Cosine-Theta (CCT) PSI magnet program aims at demonstrating that the CCT technology has the potential for the development of 16 T dipole magnets, required for high performance particle colliders. The first step in this direction is the implementation of a Nb₃Sn 1-m-long, 2-layer CCT single-aperture dipole model, referred to as Canted Dipole One (CD1) which is designed to achieve a peak field in a 63 mm bore of ~11 T. The in-house production/assembly of CD1 requires to setup at PSI a number of fabrication steps. In this poster, the authors review the status of advancement of the production process of Nb₃Sn CCT model magnets at PSI.

Conclusions
- At PSI, the infrastructure for the production of the CD1 model magnet is currently under preparation
- Major progress on the production steps has been done
- The first model magnet will be ready by the end of 2018
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PSI CCT Program
Canted Dipole 1 (CD1)
- 1-m-long
- 63-mm-bore
- 2-layers CCT single-aperture
- Bladder and keys mechanical structure
Al-Bronze Former (50 turns)
- 3-mm-thick spars
- 10.6-mm-deep channels
- Minimum rib thickness 0.35 mm

Nb₃Sn Cable
- 21 x 0.85 mm φ strands (RRP 108/127)

1. Coil Winding (Instrumentation 1)
- Outer Layer (OL)
- Inner Layer (IL)
- Flags V. Taps

2. Heat Treatment
- Vacuum Reaction furnace for superconducting coils and cables
  - Available heating volume 250 mm x 250 mm x 2000 mm
  - 6 heating zones
  - Heat treatment for Nb₃Sn of 180 h at up to 660 °C in inert atmosphere (Ar)

3. Instrumentation 2
- Power supply connection

4. Splices Preparation

5. Vacuum Impregnation Process

6. Instrumentation 3 (short model)

7. Assembly and Loading
- Horizontal and vertical keys
- Al-Bronze Pads
- Protective Al Shell
- Coils
- Al Shell
- Iron Yoke
- CD1 cross section

Mechanical Structure (short model)

Formers (short model)

Cable