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## Development of Winding Technology for ITER PF6 Double Pancakes

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The Poloidal Field (PF) coils are one of the main sub-systems of ITER magnets. The PF6 coil is being manufactured by the Institute of Plasma Physics, Chinese Academy of Sciences (ASIPP) as per the Poloidal Field coils cooperation agreement between ASIPP and Fusion for Energy (F4E).

ITER PF6 winding pack is composed by stacking of 9 double pancakes. Series double pancakes are being wound in ASIPP with a “two-in hand” configuration. This paper focuses on the main winding process and results of ITER PF6 double pancakes. The winding workshop is composed by two symmetric winding lines. During each double pancake winding, two conductors were simultaneously de-spoiled, straightened, ultrasonic cleaned, sandblasted and then bent to the correct radius. Followed by manual cleaning, the conductors were wrapped with turn insulation by automatic wrapping head. Finally the conductors were accurately deposited onto the rotary table. 0.05% conductor forwarding length measurement and  $\pm 0.5\text{mm}$  radial build-up for each turn were achieved, which indicated well winding controlling. By now, 6 out of 9 ITER PF6 double pancakes winding has been successfully accomplished.

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