











Poloidal and Toroidal Coils for COMPASS

In 1987 the Company manufactured the poloidal and toroidal coils for the COMPASS Tokamak installed by UKAEA laboratories at Culham (UK).

This Tokamak has the peculiarity that the toroidal coils can be disassembled to replace the vacuum chamber. This allows for maximum working flexibility of the magnet.

Its 16 toroidal coils are water cooled and electrically connected by butt and lap joints (for disassembly in two halves). The 12 poloidal coils consisted of 18×18 mm hollow copper spirals.

TOROIDAL COILS



Type of winding	N° 16 rectangular coils, 1750 x 1200 composed in a torus \varnothing 2600 mm outer diam.
Nominal peak current	91,000 A
Conductor	N° 4 oxygen-free copper turns per coil
Type of cooling	Water cooling
Coil weight	400 Kg

POLOIDAL COILS



Turne of winding	Calanaid
Type or winding	Sulenulu
Conductor	Oxygen-free copper conductor 8x15 mm2
Type of cooling	Water cooling