0° Experiment Dipoles

MAGNETS FOR FUSION

MAGNETS FOR HIGH ENERGY PHYSICS

MAGNETS FOR MEDICAL APPLICATIONS

SYSTEMS FOR ENERGY

SERVICES & REPAIRS

These dipoles, delivered in 1997, are part of the "0° Experiment Facility" which is one detector of the COSY Synchrotron at Jülich Lab. (D).
The dipoles are composed by a "C" profile laminated yoke, split in two halves and assembled with resistive coils. The coils are wound with OF copper (18x36 ∅ 6 mm for D1/D3, and 14x14 ∅ 6 mm for D2), glass insulated and impregnated with epoxy resin by using a VPI technique.

	Dim.	D1/D3	D2
Bmax.	[T]	1.6	1.6
Nominal current at 1.6 T	[A]	4660	1375
Dc power at 1.6 T	[KW]	46	215
Overall dim. b x l x h	[m]	1.3x0.9x1.6	3x1.6x2.7
Weight	[t]	11	62