







Superconducting Dipole D2

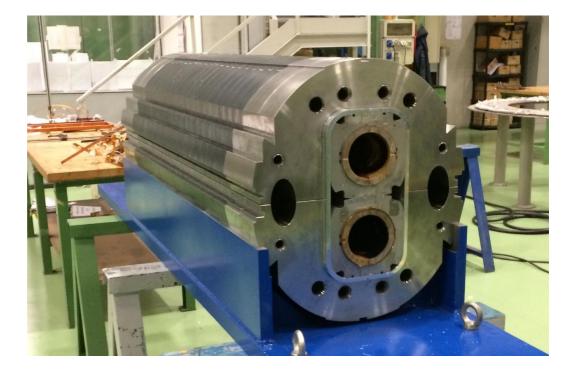
High Luminosity LHC (HL-LHC) is a project aiming to upgrade the LHC collider after 2026 in order to maintain scientific progress and exploit its fully capacity.

By increasing its peak luminosity by a factor five over nominal value it will be able to reach a higher level of integrated luminosity, nearly ten times the initial LHC design target.

ASG manufactured a short model of a Superconducting Dipole D2 for the High Luminosity Upgrade of LHC and has been awarded of a contract for the construction of the prototype.

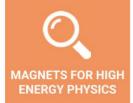
The short model of D2 magnet is a 1.6 m twin aperture (105 mm each one) magnet with a separation between apertures of 188 mm, generating an integrated magnetic dipolar field of $35 \text{ T} \cdot \text{m}$ with the same polarity.

The prototype of D2 magnet is 8.155 m twin aperture (105 mm each one) magnet with a separation between apertures at 1.9 K of 188 mm, generating in both apertures an integrated magnetic dipolar field of 35 T·m with the same polarity.







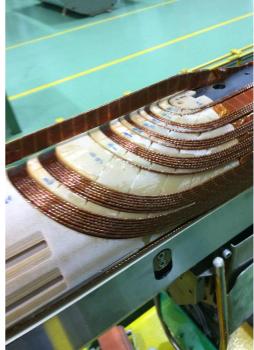


MAGNETS FOR MEDICAL APPLICATIONS



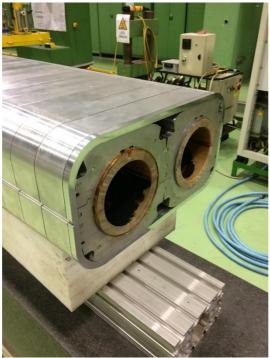






D2 short model – detail of winding

D2 short model – coil detail





D2 model ready for shipment

D2 model collared coils