

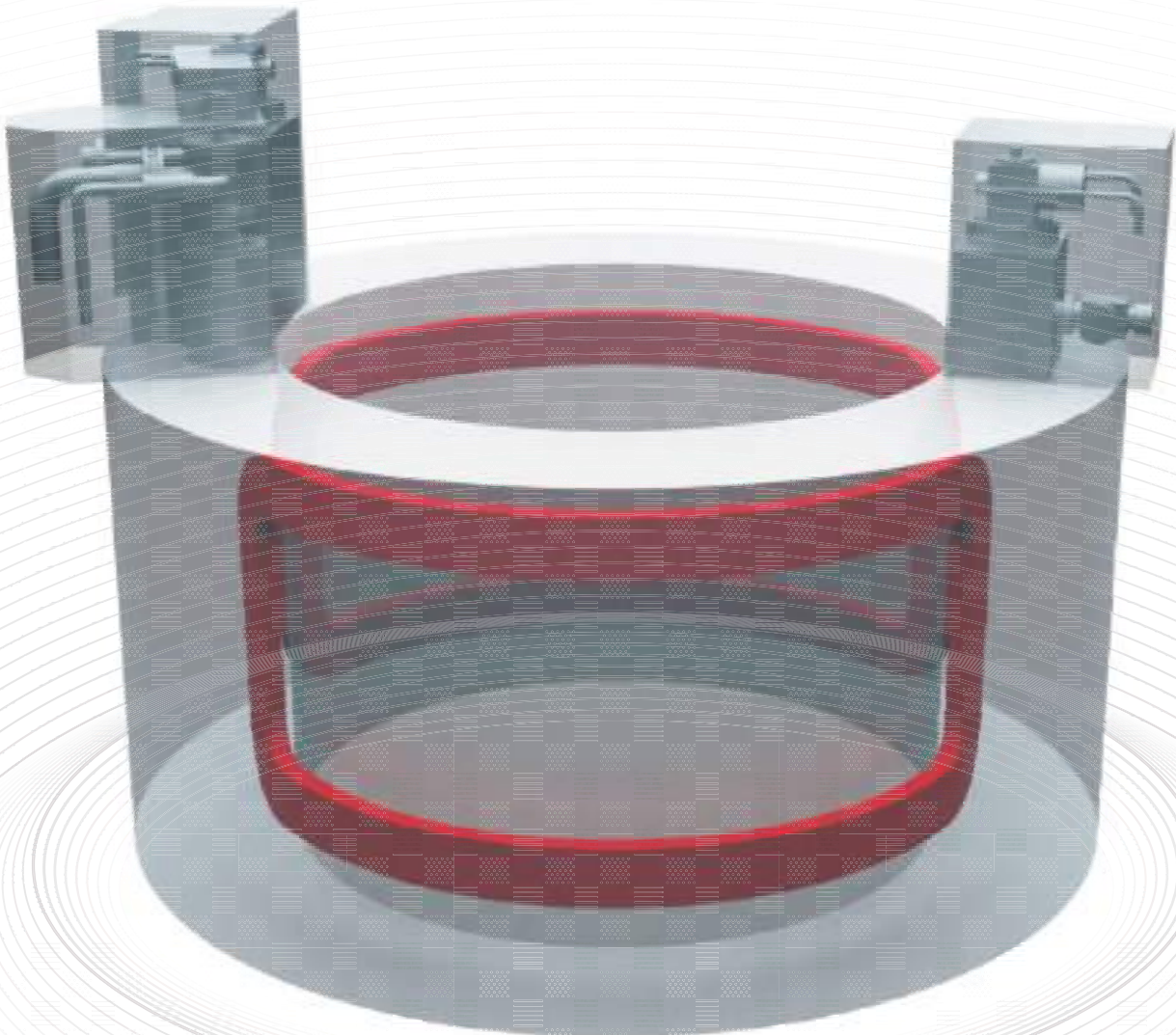
Superconducting Magnet for MCZ

Magnetic field improves crystal silicon quality

Superconducting Magnet

Generation of magnetic field enables semiconductor wafer pulling process to produce high-quality single crystal silicon.

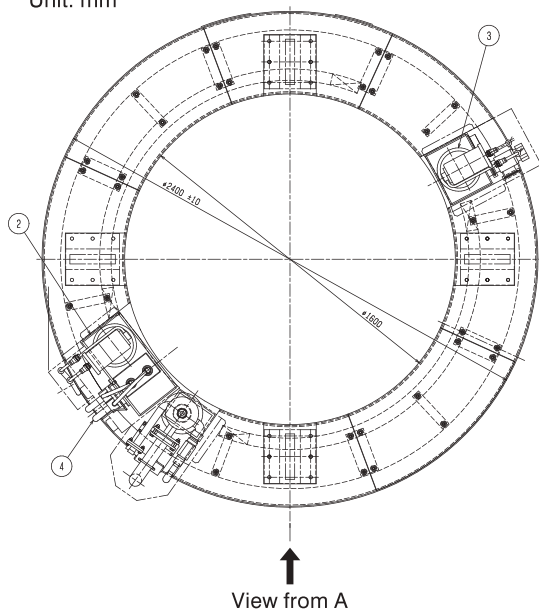
Application of saddle-type coils efficiently creates a wide-ranging horizontal magnetic field, resulting in magnets with superior features, such as compact, size, lightweight body and small stray field.



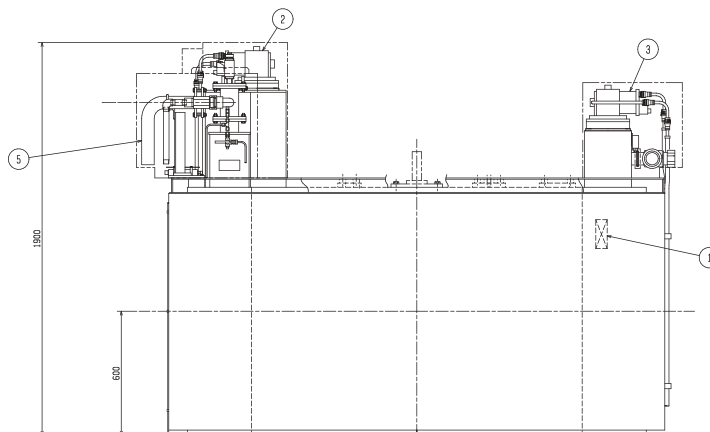
Superconducting Magnet for MCZ

Appearance and Dimensions

Unit: mm



- ① Superconducting coil
- ② 10K refrigerator
- ③ 4K refrigerator
- ④ Current lead
- ⑤ Liquid helium filling port



(View from A)

Inner Diameter : Approx. 1,600 mm
Outer Diameter : Approx. 2,400 mm
Height : Approx. 1,200 mm (Maximum Approx. 1,900mm)
Weight : Approx. 13,000 kg

Features

Saddle-shaped coil generates a wide horizontal magnetic field in a cylindrical shape
Minimizes leakage magnetic field
Wet cooling with liquid helium provides stable cooling

Main Specifications

Magnetic field direction	Horizontal
Magnetic field strength (standard)	0.4 Tesla (4,000 Gauss) at center of bore
Magnetic stray field	<0.01Tesla(100 Gauss) at Approx. 3.0m from center
Cooling type	Wet cooling with liquid helium



Safety Warning

Please be sure to read the instruction manual prior to use, to ensure proper use of the products listed in this catalog.

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