

Different insulation schemes were tried in inner layer quench heaters in order to find a lay-out which copes with the problem of bubbles formation. Coil 108 and coil 109 were instrumented with standard inner layer traces. In coil 110, a layer of polyimide was glued (by pressing) to the top surface of the coil (the one not in contact with the coil). In coil 111, the additional layer of polyimide was laminated. Figure 3 shows the inner bore of the coil after cold test. Coil 111, the coil with laminated encapsulated trace, is the one with larger bubbles. Coil 110 (pressed encapsulated trace) has also bubbles. Following this negative results, the option to protect the magnet with inner layer heaters have been abandoned.

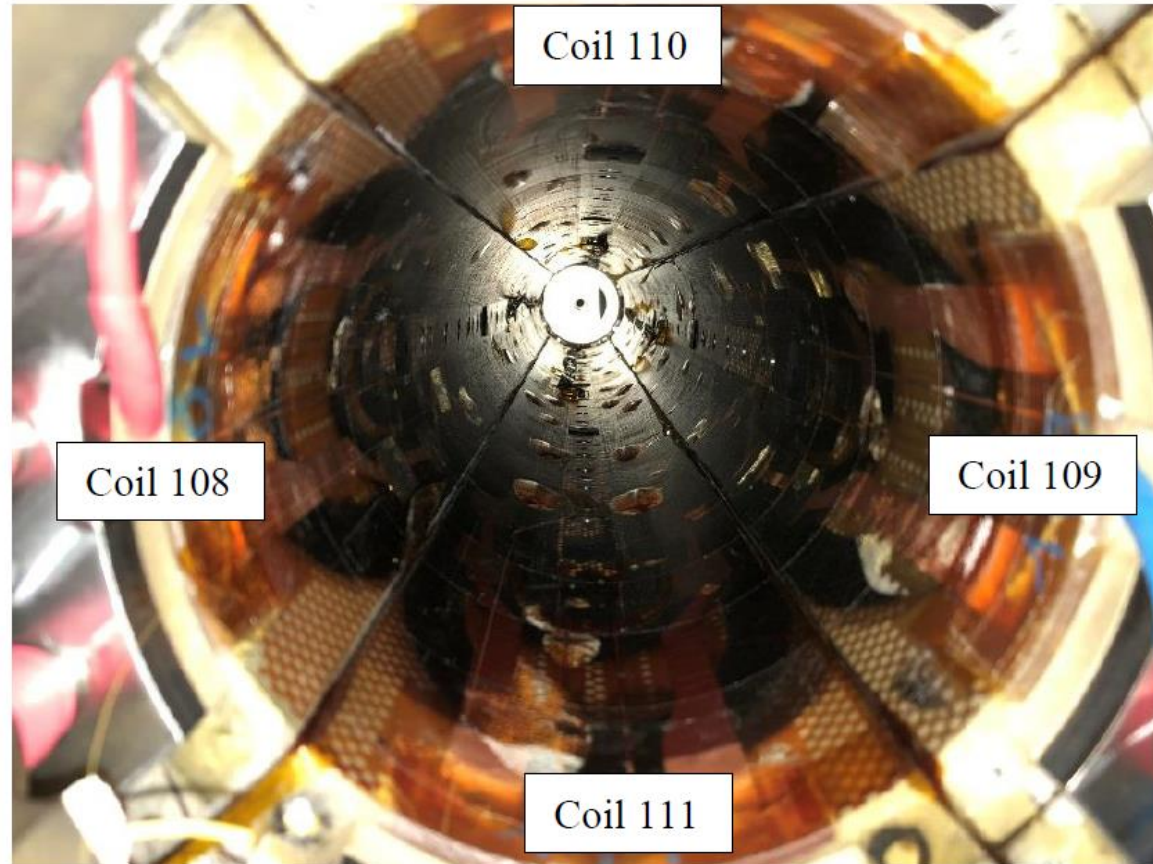


Figure 3. View of the inner layer heaters after cold powering test (heaters were never powered).