

Corrosion on the Aluminum Endplate of the CDC

C.A. Meyer, 21 June, 2010

- The inside of the aluminum endplate shows a lot of scratching and corrosion that is not typical of the smooth surface of tooling plate. These extensive imperfections are not present on the outside surface of the plate.
- The imperfections appear to be the result of the plate being attached to a metal backing plate during machining. The blemishes are likely the result of the cooling fluid being in prolonged contact with the backing plate.
- The imperfections are 1-2 mils deep in the surface and do not come out with cleaning. It could be possible to grind the plate down to get rid of them, but our impression is that they will not impact the chamber performance. They are all inside the major gas volume, which is the last place the gas flows before exiting.
- The photographs in this document show the scratches and blemishes on the endplate and will serve as a reference to this issue.
- We have cleaned the plate and all the holes. We have also cleaned the blemishes to the best of our ability at CMU.

























