Status of Lab G Status and Test Plans

Al Moretti; BD/Proton Source

Neutrino Factory and Muon Collider Collaboration Meeting

May 3, 2001

Fermilab

Lab G

Test Bed for High Electric Field Cavities in Large Magnetic Fields
And Fast Beam Detectors in Large X-Ray and Magnetic Fields:

Linac Type Modulator and Controls

12 MW 805 MHz Klystron and Waveguide

High Gradient 805 MHz Test cavity Completed

Cavity High Vacuum System

Cavity Water System

5.0 T Solenoid

Support Cryogenic System

X-Ray Shielded Cave

Status of Lab G Currently:

All major systems have been successfully tested and operated by Themselves.

Final integration of major systems currently taking place.

First turn-on of open cell cavity with high power rf Mid May.

Complete testing of Open Cell Cavity in about 6 weeks.

Schedule of Plans (Depends on Priority of the Open Cell and the One Cell Be Cavity and it's schedule)

Currently the Open Cell is installed in the Lab G Solenoid and being made ready for rf testing in high magnetic field.

1. May 18 th. Complete installation and testing of all systems.

2. May 21 st. Begin high power rf turn on with no magnetic field. Detector testing could begin.

3. June 4 th. First turn on of rf with magnetic field with coils in solenoidal mode.

4. June 18 th. First turn on of rf with magnetic field with coils in opposition.

5. July 6 th. Open Cell Cavity testing completed.

6. July 9 th. Begin installation of the one Cell Be Cavity or continue detector testing.

With the Current Priority This Could Slip by Several Weeks.

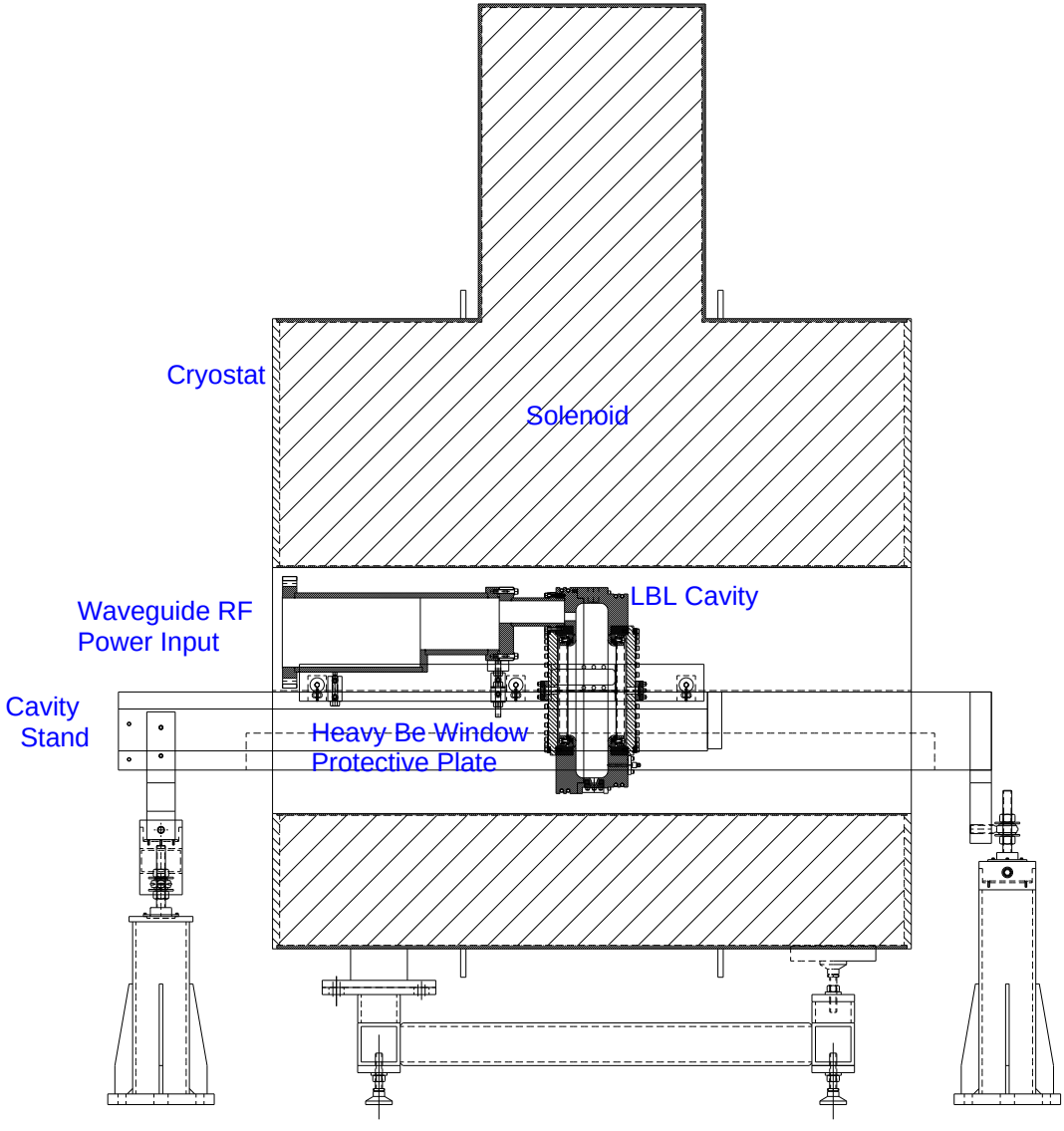


Figure 4, LBL Cavity in The Solenoid Inside the Cave

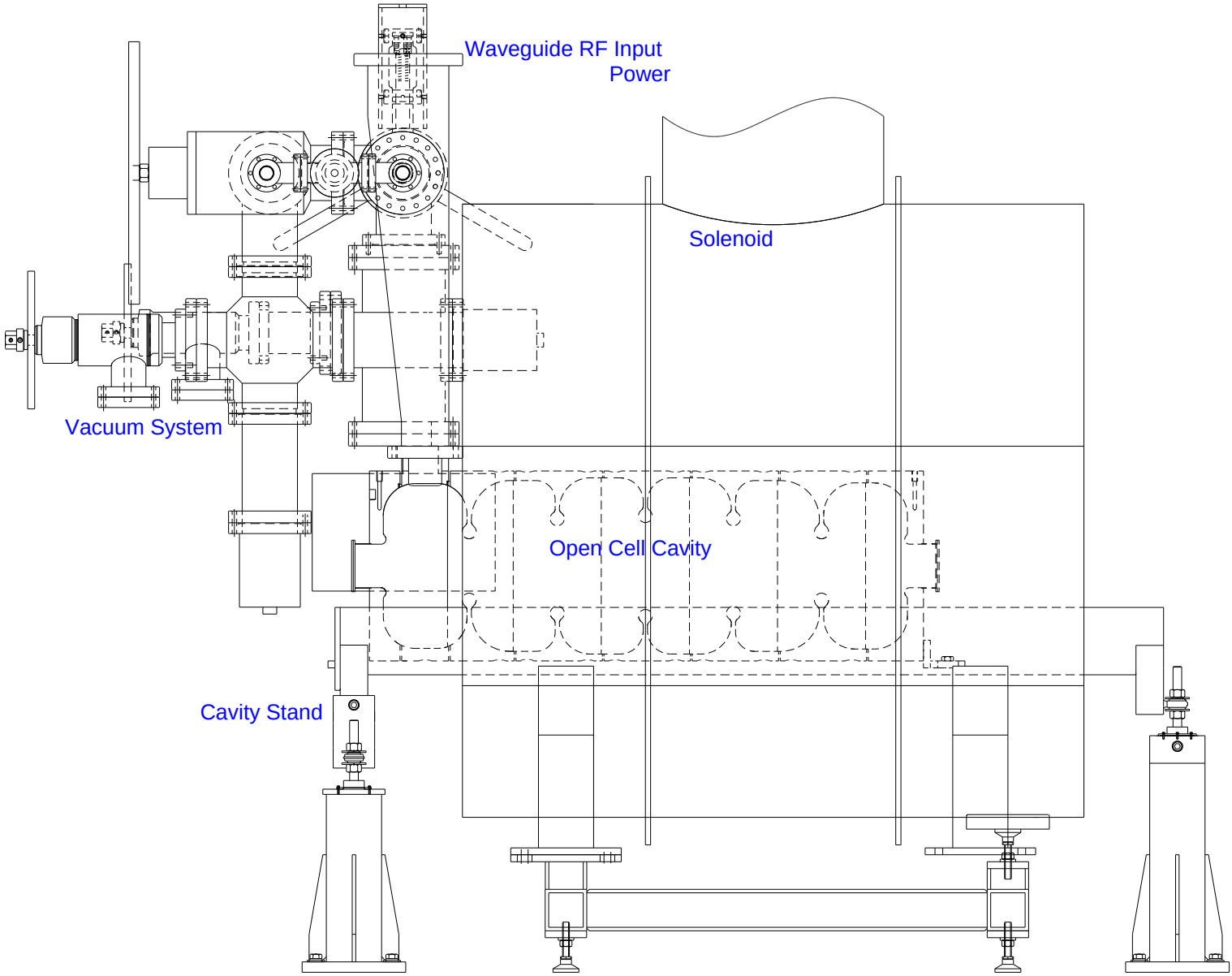


Figure 3, Layout of Equipment Inside of Cave Lab G

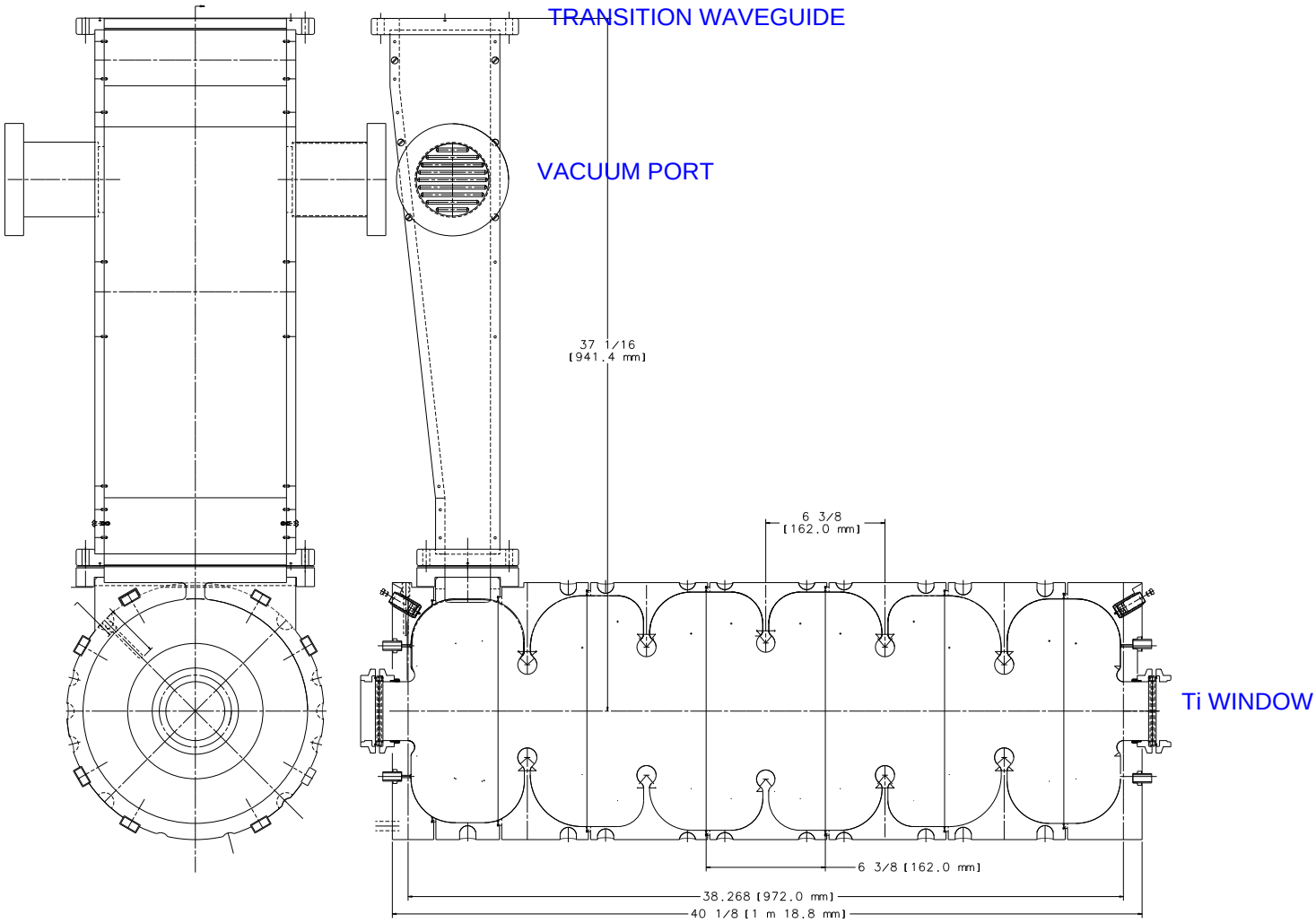
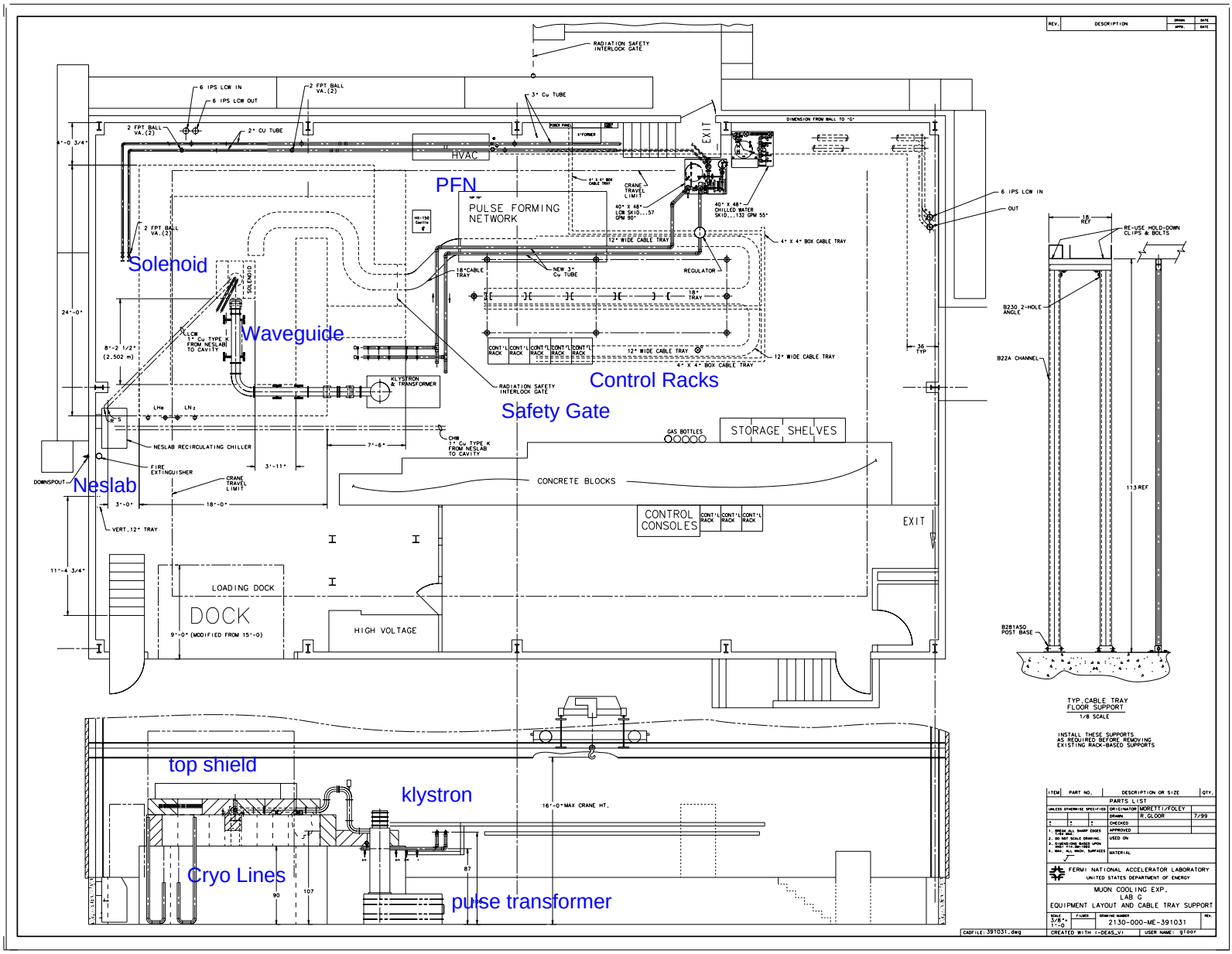
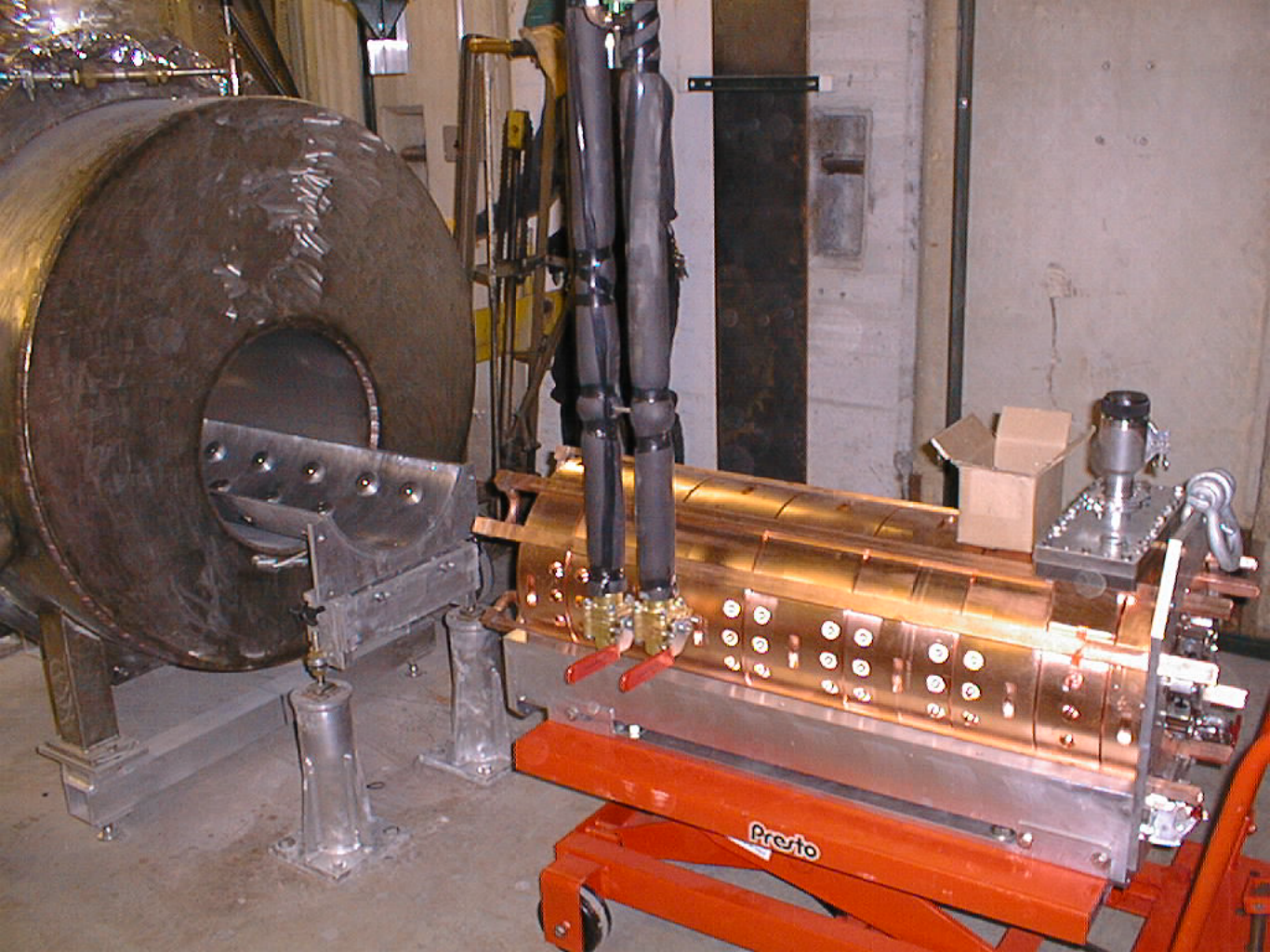


Figure 2, OPEN CELL 805 MHZ CAVITY



Figure, 1, Layout of the Test Facility

DANNY DOUGLAS
HIGH VOLTAGE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