

## Specifications:

- Rail spark gap
- Two capacitors, each 2.85  $\mu\text{F}$  60 kV connected in parallel to form an assembly
- Load is connected by the parallel plate line via the rail spark gap. See Fig. 1
- Parallel plates were used to minimize the inductance of the system
- Charging voltage varies from 20 to 45 kV
- Stored energy in the system varies from 1.1 to 5.8 kJ
- For short-circuited condition 1/4 period is 1.2  $\mu\text{s}$
- For short-circuited condition, maximum current varies from 151 to 340 kA
- For safety the system is enclosed and the emergency “dump” circuits/switch is provided.
- 200-300 kV Mini-Marx generator activates the rail spark gap
- 10 V trigger generator is required to activate the whole system.

## Applications

- Study of plasma focus, Z and  $\Theta$ -pinches, and imploding liners.
- Research in RF/HPM generation.



**Figure 1.** Front view of the bank.

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