The RBMK

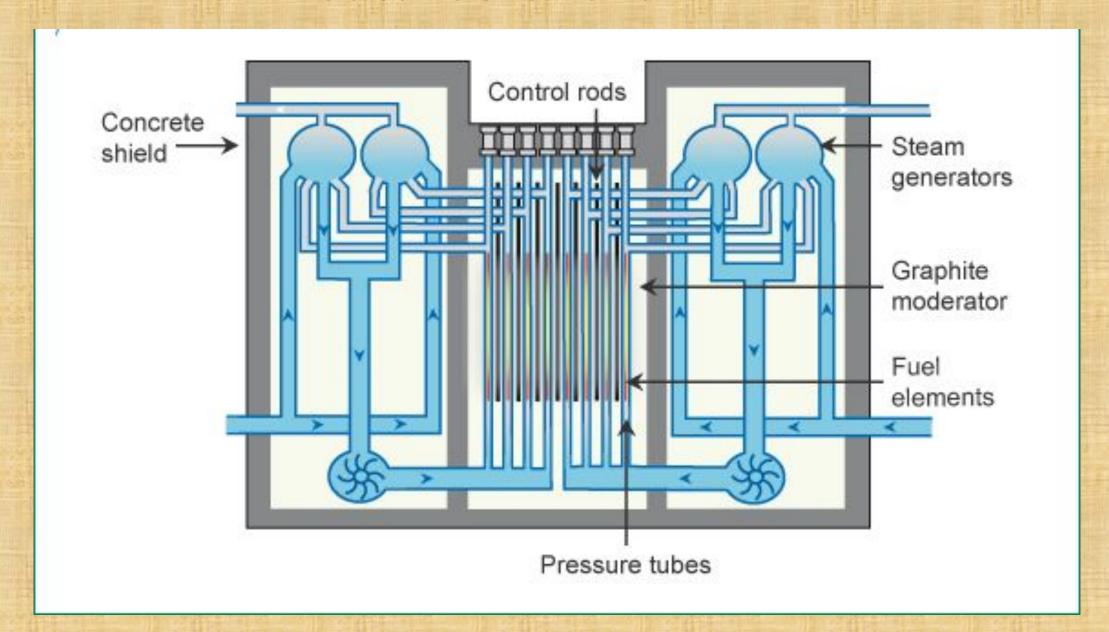


SPECIFICATION

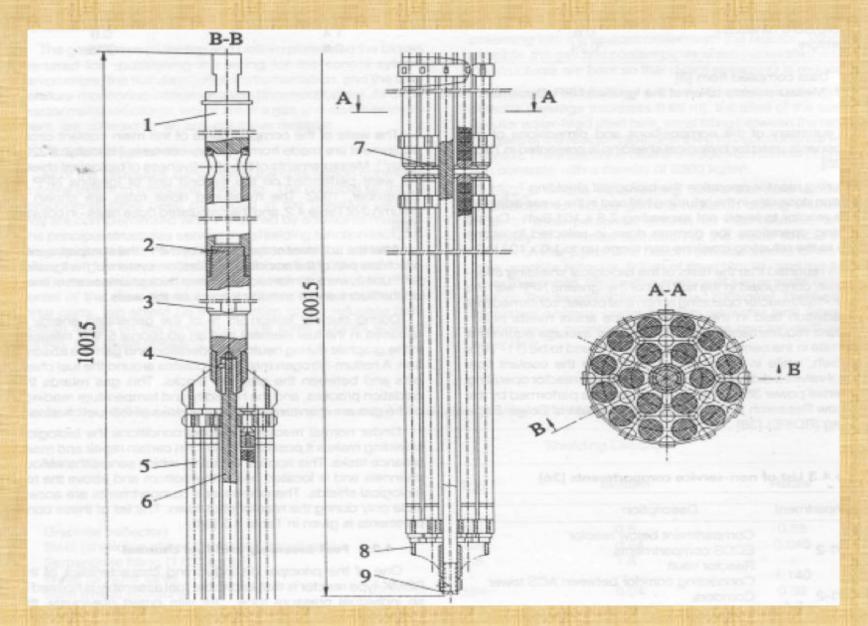
The RBMK (Russian: Реактор Мощности Большой Канальный Reaktor Bolshoy Moshchnosti Kanalnyy, "High Power Channel-type Reactor") a class is graphite-moderated nuclear power reactor designed and built by the Soviet Union.



Features of the RBMK



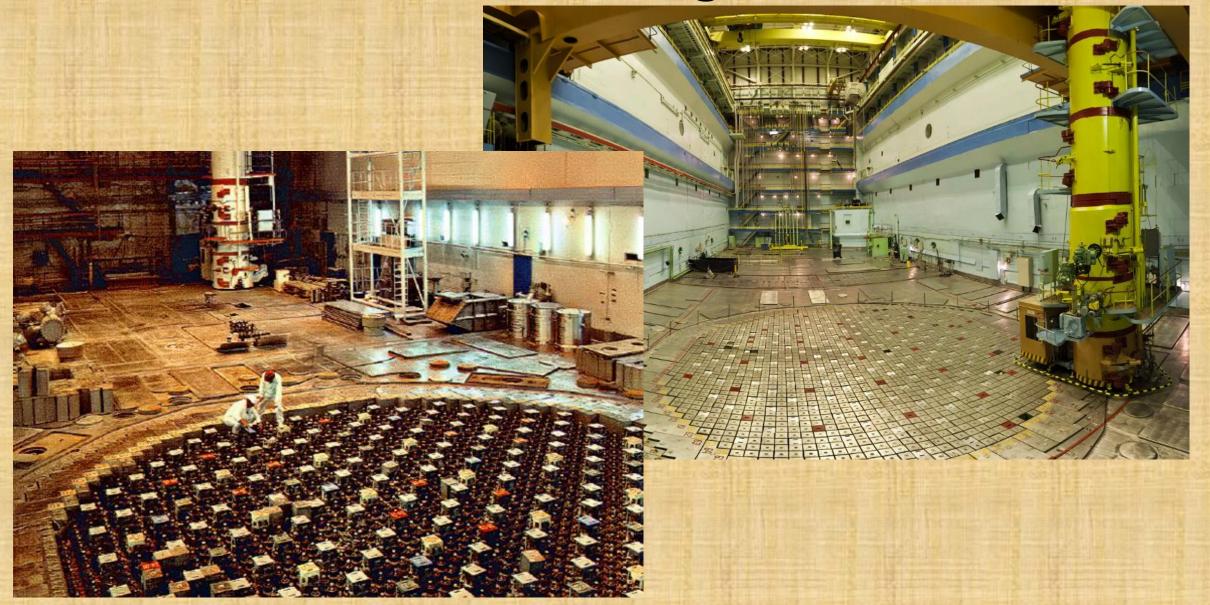
Fuel



Pressure tubes

Within the reactor each fuel assembly is positioned in its own vertical pressure tube or channel about 7 m long. Each channel is individually cooled by pressurised water which is allowed to boil in the tube and emerges at about 290°C.

Refuelling

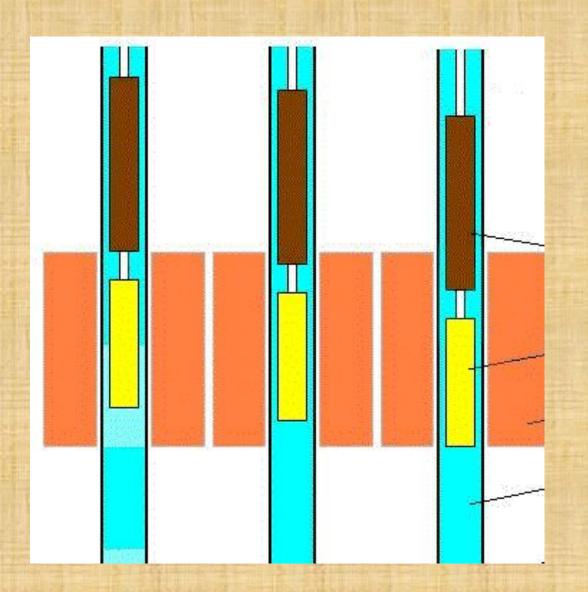


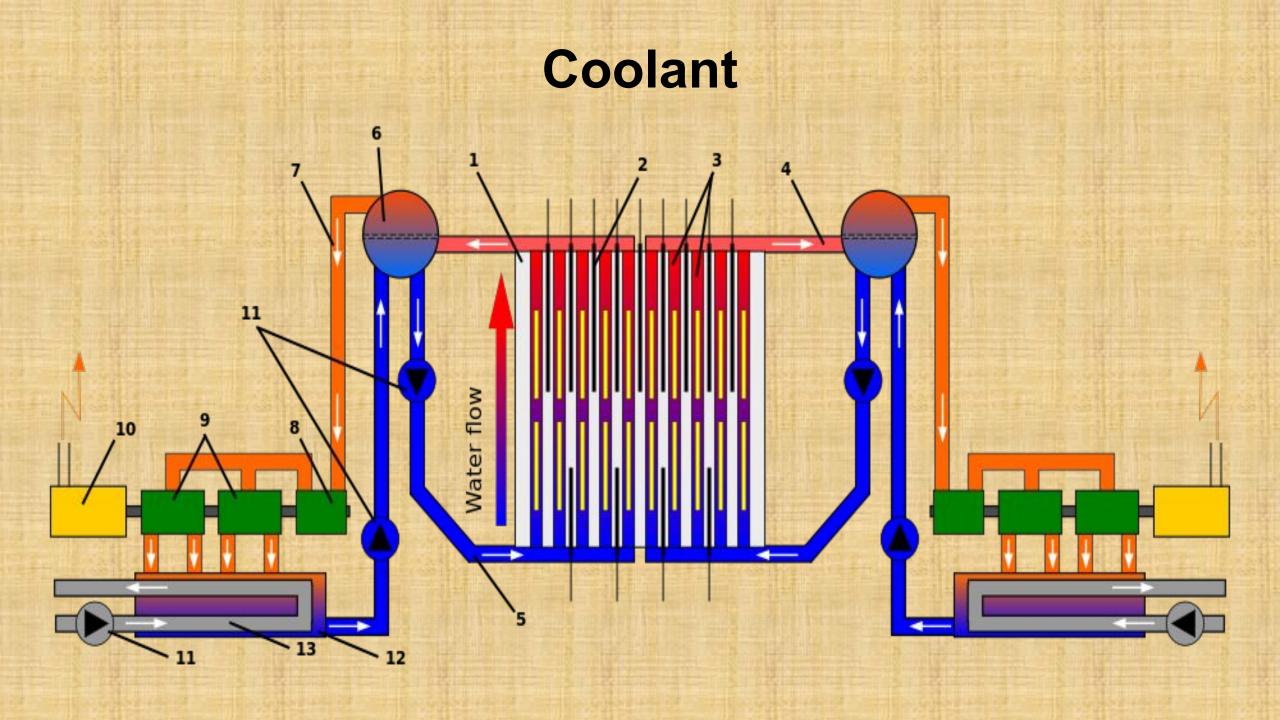
Graphite moderator

A series of graphite blocks surround, and hence separate, the pressure tubes. They act as a moderator to slow down the neutrons released during fission so that a continuous fission chain reaction can be maintained.

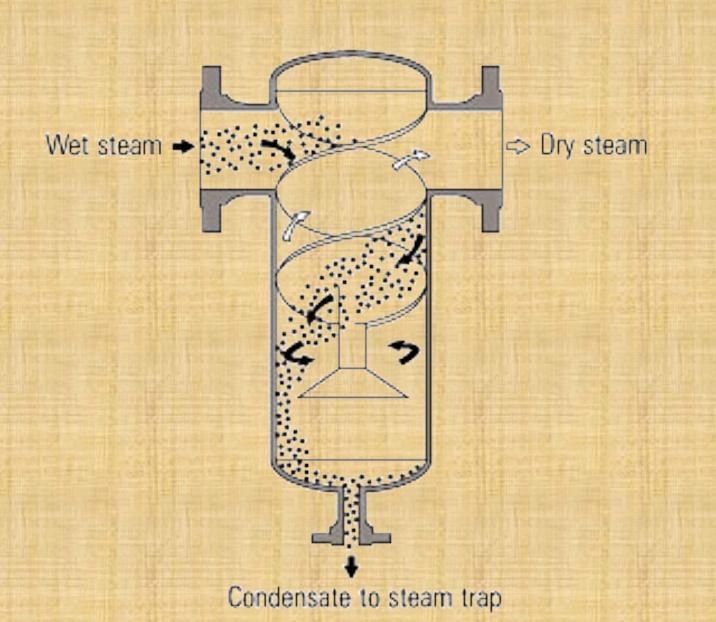
Control rods

Boron carbide control rods absorb neutrons to control the rate of fission.





Steam separator



Containment

The reactor core is located in a reinforced concrete lined cavity that acts as a radiation shield.



Thank you for your attention