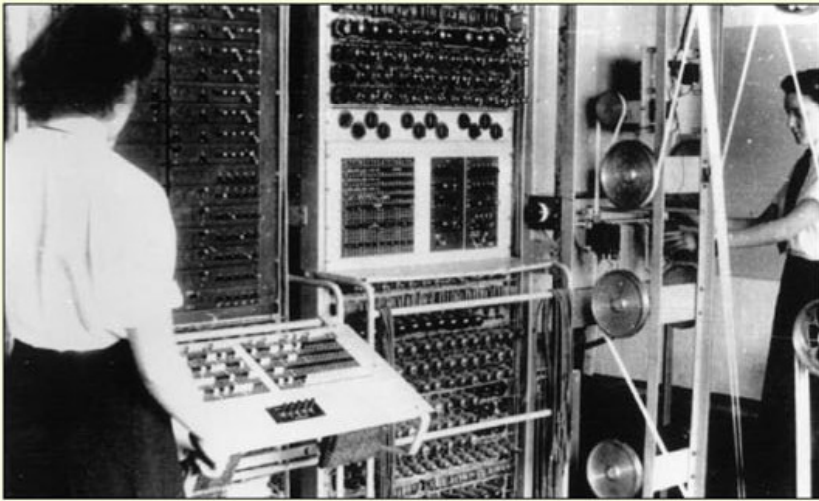


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Colossus



This was a machine designed and built at the General Post Office (GPO) Research Station at Dollis Hill by Tommy Flowers. It worked using a very large number of thermionic valves (1,500/2,400) and was the world's first electronic, digital, programmable computer.

Colossus was designed to help decode messages sent by Enigma (Lorenz) machines and it cut down the decoding time from weeks to hours. The previous machine, "Heath Robinson", had also been built at Dollis Hill. The possibility of using such machines was proposed by the mathematician, Max Newman. Even while the first Colossus was being built a more efficient Mark II version was being planned and 10 machines were built during the war.

Tommy Flowers was confident that valves were reliable enough for this application because of his work on repeaters used to boost signals in long distance telephone cables.

The invention of the transistor led to valves being phased out in most applications but they are still used locally by Marshalls to produce the amplified sound still prized by bands and musicians all over the world.