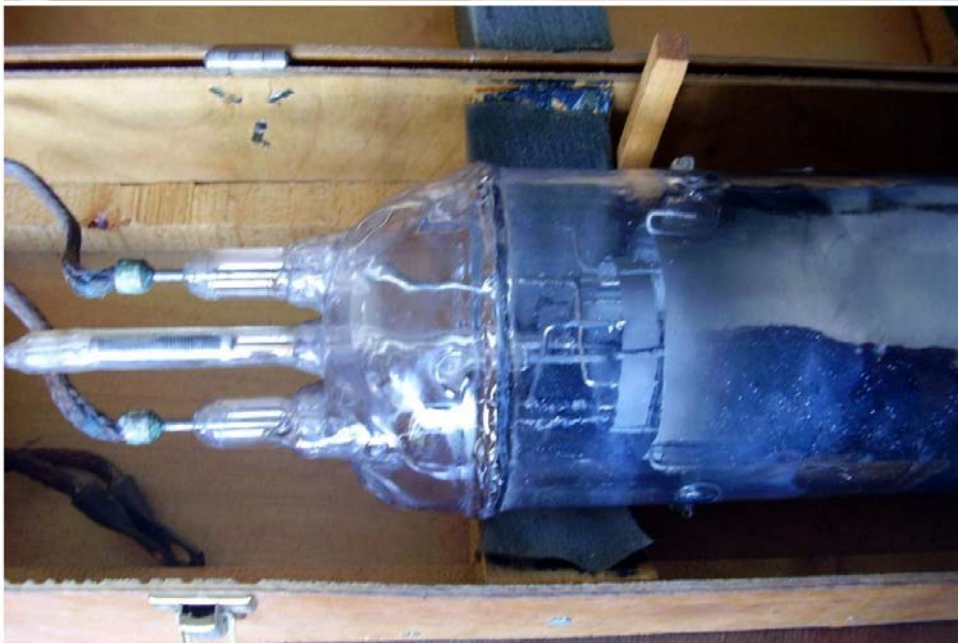
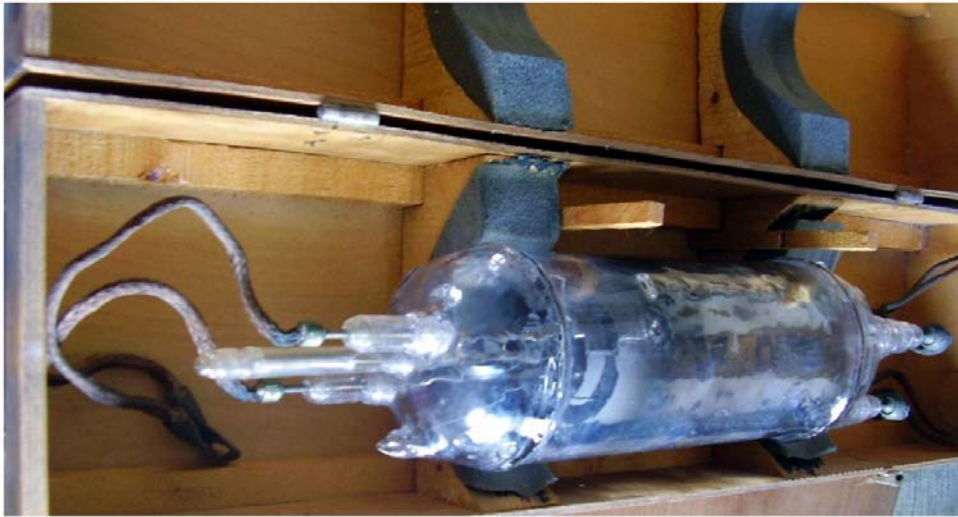
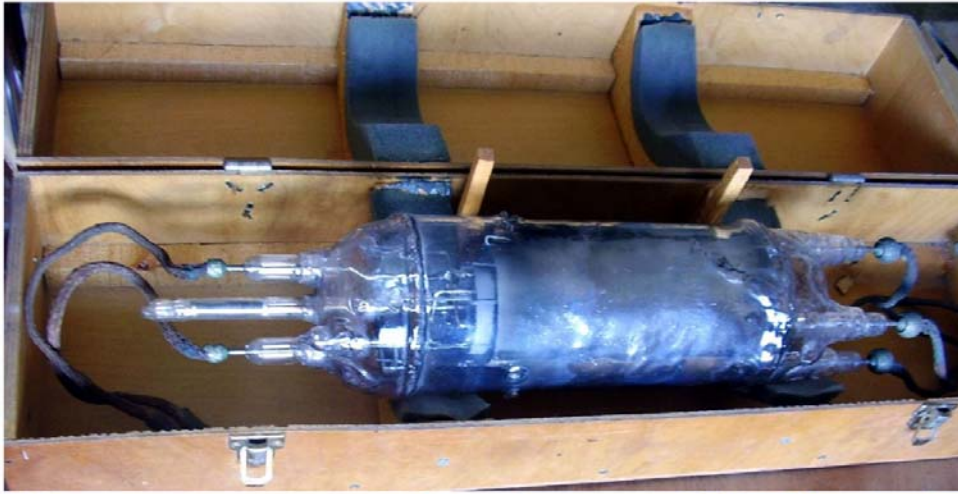


TYS5-2000 – Transmitting Triode, Convection-Cooled



Around 1920 Mullard started using silica envelopes for high-power transmitting tubes. Silica well withstands high temperatures without softening as glass does. Use of this material, with melting point in excess of 2000°C, made possible the construction of relatively compact tubes, characterized by enhanced convection cooling, since anodes could be operated near 1000°C.

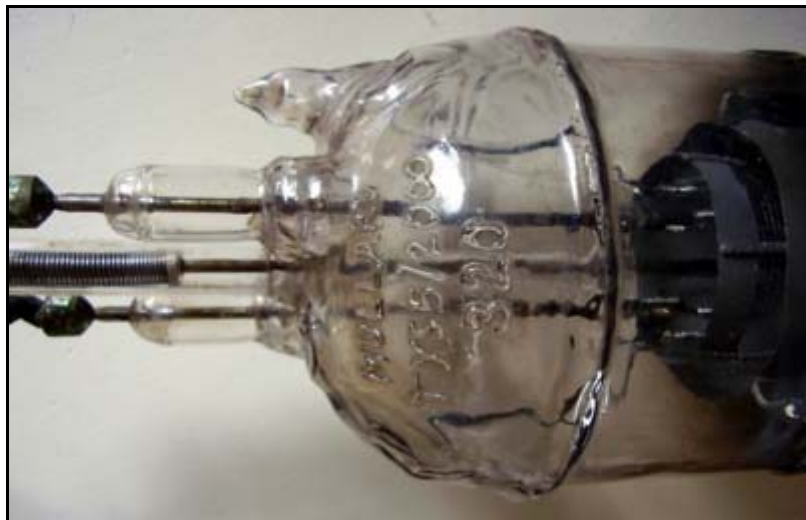
Manufacturing of silica valves was a painstaking matter, the envelope being hand crafted more or less as a patchwork of fused mosaic tiles. Special care was required to make reliable seals to the tungsten rods of electrodes. Due to their exceedingly high cost and to the very limited production, silica tubes found just niche applications in Great Britain, mainly with Admiralty. They were eventually superseded by external anode types which could be easily cooled by air or water flow.

TYS5-2000 is a power triode capable of dissipating 2 kW, intended for use in RF heating equipment or in transmitters up to 30 MHz.

Thoriated-tungsten filament operates at 14.5 volts drawing 26 amps.

Body measures 477 mm length by 115 mm max diameter, connecting flexible wires are 253 to 255 mm long. 1.02 kg weight.

Data for [TYS5-2000](#).



Detailed view of the code, hand-written with fused-silica paste. Click on the image to enlarge.