

# What is a transformer?

*A transformer is not something, which people know much about; it's not as glamorous as a large machine, a rotating machine, for example, or a power station; but they're, still an essential part of our system, and without them we couldn't have electricity as we know it today.*

Maurice Woollard. Born 1922, at HSPT 1936-1985



When you switch on your light, cooker or television, the electricity you use is drawn from the National Grid. The grid is a network of cables, some above the ground and some below, which distribute electricity across the country. On one end of the grid is a power station, on the other your home, and in between you find several power transformers.

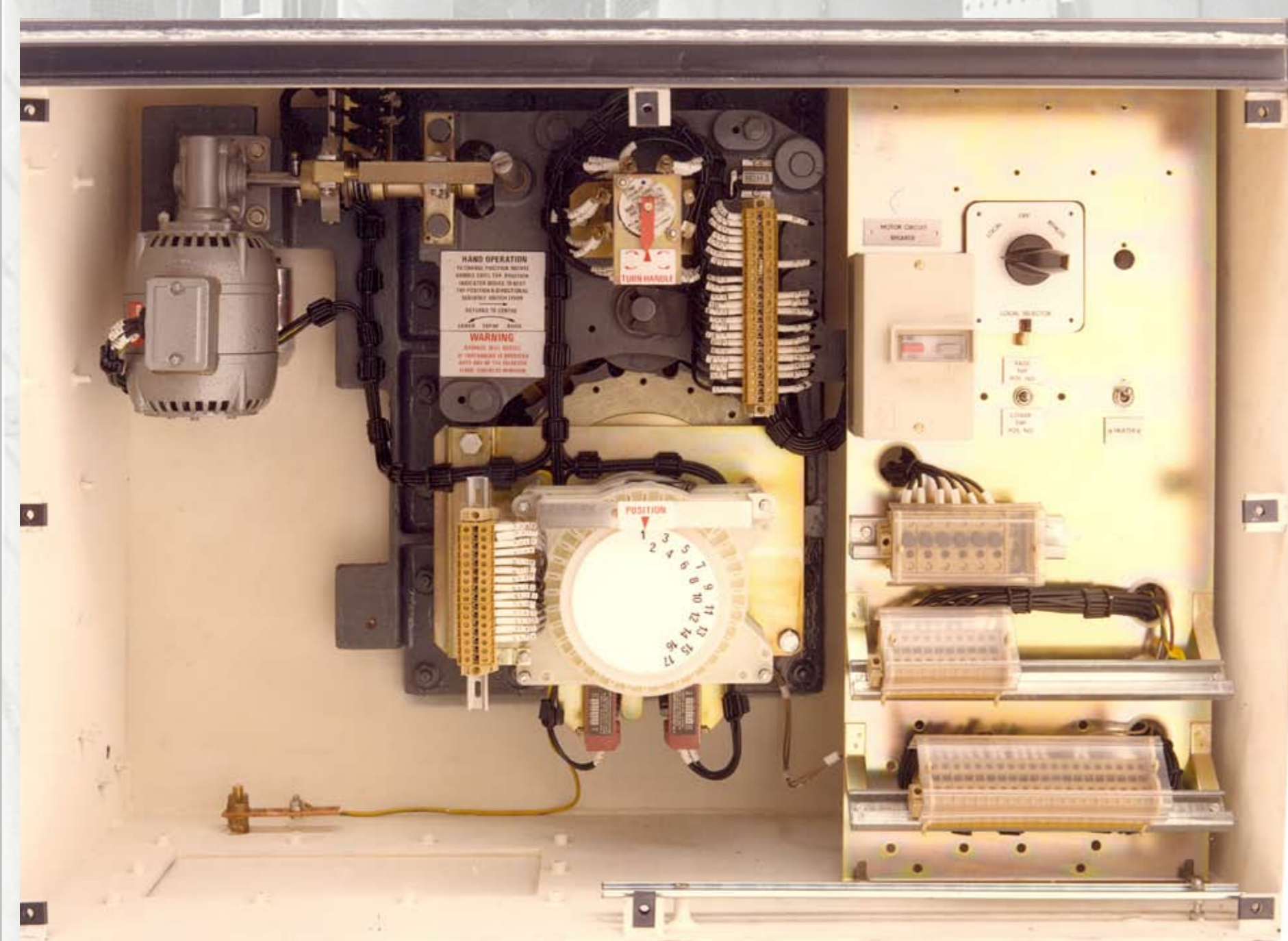
A transformer either steps up or steps down the voltage, making it possible to transmit electricity along the lines efficiently. They vary in size. HSPT made 440kV (used for the 'supergrid', the national distribution system) to 11kV transformers (used for local distribution, for example supplying an industrial estate).

Hundreds of transformers made in Fulbourne Road are still in operation across the country and around the world. Possibly the nearest one can be seen from Waitrose car park in South Woodford.



## **What is a tapchanger?**

Tapchangers tap into the windings of a transformer and ensure you get electricity at the correct voltage at your home. Thousands of tapchangers made in Fulbourne Road are operating in electricity supply systems around the world in conjunction with transformers made by many different manufacturers.



*inside of a tapchanger*

## **What about aeroplanes?**

Although the name Hawker Siddeley is synonymous with aircraft, no aircraft were ever built at the Fulbourne Road Factory. The Hawker Siddeley Group was originally an aircraft manufacturer but diversified into heavy electrical and diesel engines.

