

The Fullagar Diesel Generating Plant

Napier's Faraday Centre houses one of the few remaining examples of a unique stage in the evolution of internal combustion engines. The Fullagar engine is basically a two-stroke diesel that has four cylinders, each housing a pair of opposing pistons linked by oblique rods. The object of the design was to provide a high power output (by the standards of 1912) in a compact space, ideal for marine use but also adaptable for use as generating plant. As far as we are aware, it is the only remaining example of a Fullagar engine of this particular specification and layout.

Installed in Napier in 1925, it became relegated to back up duties once Napier was connected to the National Grid in the late 1920s, but carried out these duties until 1970. It no longer runs due to absence of fuel supply and silencer, however it has been fitted with a friction drive, Perspex crankcase windows and internal lighting to enable the unique mechanism to be seen in motion.

In addition to the documents shown here, the Faraday Centre has extensive paper records relating to the design, installation and running of the Fullagar.