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Adding A Generator

How is adding a generator eco friendly?

This is a section I have devoted much time to and consider myself somewhat of a leading head in the field.

Combustion engines produce lots of readily available power and are available to the masses, sure you can go out and buy a petrol 2-stroke generator for £99.00 and run it all day long on petrol to produce electricity but that would be defeating my whole objective of creating power from sustainable resources!

Generators can be purchased for peanuts, which coincidentally leads me onto our next topic, the Diesel Engine.

Diesel Engine History

Rudolf Diesel (March 18, 1858 - September 30, 1913) was a German inventor, famous for the invention of the Diesel engine. He was born in Paris and died on the English Channel.

Early life

Although Diesel was born in Paris, his parents were German. His father was a leather craftsman, and his mother a governess and language tutor. Rudolf was a good student in primary school and was admitted at the age of 12 to the Ecole Primaire Superieure, then regarded as the best in Paris. On the outbreak of the Franco-Prussian War, however, he and his parents were considered enemy aliens, and were deported to neutral asylum in London. A cousin helped him to return to his father's home town, Augsburg, where he entered the Royal County Trade School. From there he won a scholarship to the Technische Hochschule of Munich, where he was an outstanding student. He became a protégé of Carl von Linde, the pioneer of refrigeration. He was a devout Lutheran.

After graduation, he was employed for two years as a machinist and designer in Winterthur, Switzerland. After this, he returned to Paris, where he was employed as a refrigeration engineer at Linde Refrigeration Enterprises. In Paris he became a connoisseur of the fine arts and an internationalist. He

married in 1883, and had three children. He set up his first shop-laboratory in 1885 in Paris, and began full-time work on his engine. This continued when he moved to Berlin, working again for Linde Enterprises. In 1892 he was granted a German patent for the engine, and found some support for its continued development, this time in Augsburg.

The invention

Rudolf Diesel developed the idea of an engine that relied on a high compression of the fuel to ignite it, eliminating the spark plug used in the Nikolaus Otto internal combustion engine. He received a patent for the device on February 23, 1892 and a major milestone was achieved when he was able to run a single piston engine for one minute on February 17, 1894. The engine was fuelled by powdered coal injected with compressed air. This machine stood 10 feet (3 m) tall, and achieved a compression of 80 atmospheres (8100 kPa). He built an improved prototype in early 1897 while working at the Maschinenfabrik Augsburg (from 1906 on the MAN) plant at Augsburg. Diesel's engine had some similarities with an engine invented by Herbert Akroyd Stuart in 1890. Diesel was embroiled for some years in various patent disputes and arguments over priority, but in the end he prevailed, and his invention came to be called the diesel engine. He continued its development over the next three years, began production (the first commercial engine was at a brewery in the United States), and secured licenses from firms in several countries. He became a millionaire.

Later life

Diesel was something of an unstable character, having several nervous breakdowns, and was somewhat paranoid at times. He defended his priority of invention tenaciously. Diesel toured the United States as a lecturer in 1904, and he self-published a two volume work on his social philosophy. He died under suspicious circumstances during a crossing of the English Channel to Harwich on September 29, 1913, possibly by suicide. A cross in his journal on the date he died was an indicator of suicide. A briefcase containing a very small sum of money and a large amount of bank statements showing debts was left to his wife, Martha. Another theory revolves around the German Military, which was beginning to use his engines on their submarines—something which Mr. Diesel opposed—and perhaps feared his potentially providing the technology to the British Royal Navy for use in their own submarines. His body was found in the Channel a

few days later. As was usual at the time, the seamen only took his belongings (identified later by Diesel's younger son Eugen) and then threw the body back into the sea.

After Diesel's death, the diesel engine underwent much further development, and became a very important replacement for the steam engine in many applications. This engine required a heavier, more robust construction than the gasoline engine, making it unsuitable for certain applications (such as aviation), but allowed the use of cheaper fuels. Diesel was especially interested in using coal dust or vegetable oil as fuel for the engine, but this never materialized in any major way, at least until recent rises in fuel prices and concerns about oil reserves lead to more widespread use of vegetable oil and biodiesel—most Diesel engines will function just as well using either. But the primary source of fuel has been what became known as diesel fuel, an oil byproduct derived from the refining of petroleum. The Diesel engine became widespread in many other applications, such as stationary engines, submarines, ships, and much later, locomotives

Summary of Rudolph's Engine

So there you have it, the modern day Diesel engine was not originally designed to run on Diesel but actually on oil!



Any doubts or questions please mail me molesmail@gmail.com and I will do my best to advise you.