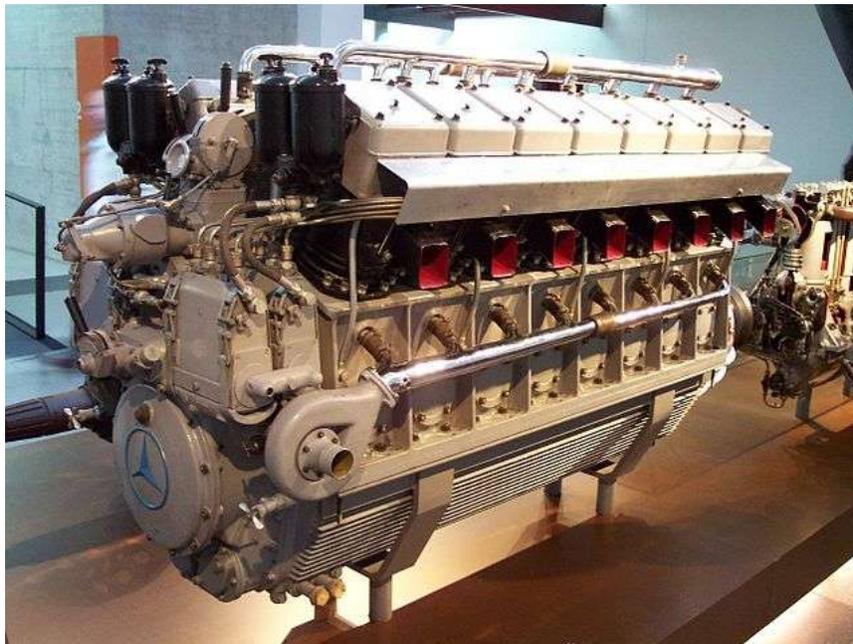


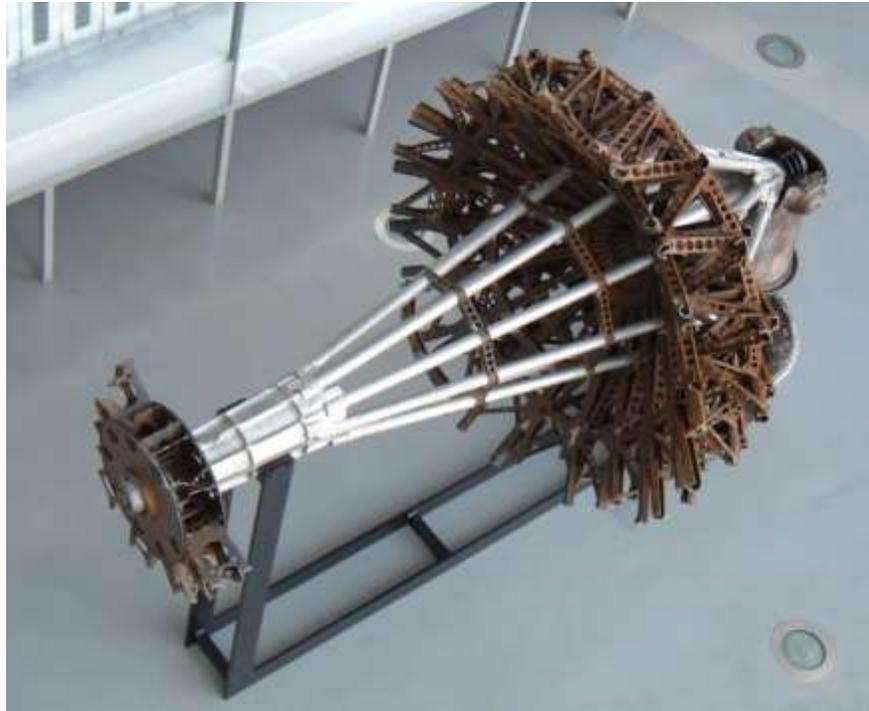
The *Graf Zeppelin II* (LZ-130)

Originally the LZ-130 - *Graf Zeppelin II*'s design was based on the *Hindenburg*, with some innovations. The engine pods were completely redesigned, as the diesel engines powered tractor propellers in lieu of the push propellers used on earlier zeppelins. The propellers themselves were redesigned. Instead of a 2-blade propeller carved from a single piece of wood, the LZ-130 used 3-blade propellers, each blade being made out of 'plastic-wood' and attached to a hub. This eliminated the problem of imbalance caused by moisture absorption that plagued the earlier design. The engines were also fitted with a system to recover and condense water vapor from the engine exhaust. This water was used to compensate part of the weight lost due through fuel consumption.



The Daimler Benz 602 V16-cylinder diesel engine. Four of these 1200 horsepower (890 kW) engines were used to power the Graf Zeppelin II

After the fiery crash of the *Hindenburg*, Dr. Hugo Eckener redesigned the airship to use helium as the lifting gas, even though this meant it would have a lower payload. Dr. Eckener visited President Roosevelt in Washington to request that helium (which only the United States was producing) be sold to Germany for use in its zeppelins. However after the annexation of Austria in March of 1938, the request was denied and the *Graf Zeppelin II* was inflated using hydrogen.



*Bow structure of the LZ 130 Graf Zeppelin on display at the Zeppelin Museum in Friedrichshafen.
Photograph by Willy Logan*

The evolution of the political situation in Germany resulted in restrictions being placed on the use of the zeppelin. It was not allowed to carry any passengers and after little more than one year it was grounded. In early 1940 it was deflated and its duralumin structure was scrapped and used for the construction of war planes. The structure of the LZ-131 (its construction having been halted) suffered the same fate. As a final stake in the heart of the German zeppelin industry, the three airship hangars that had been constructed in Frankfurt-am-Main were razed on May 6, 1940, three years, to the day, after the crash of the *Hindenburg*.