

## Compressors

Compressors are pumps that handle compressible gases rather than liquids; they present the same basic options though the increase in the density as the fluid passes through the impeller requires modified impeller geometry. This can be seen in the geometry of the typical centrifugal compressor shown in Figure 1 where, in comparison with the liquid machine, the flow passage increases less in cross-sectional area as the flow proceeds through the impeller (in order to adjust for the increase in fluid density).

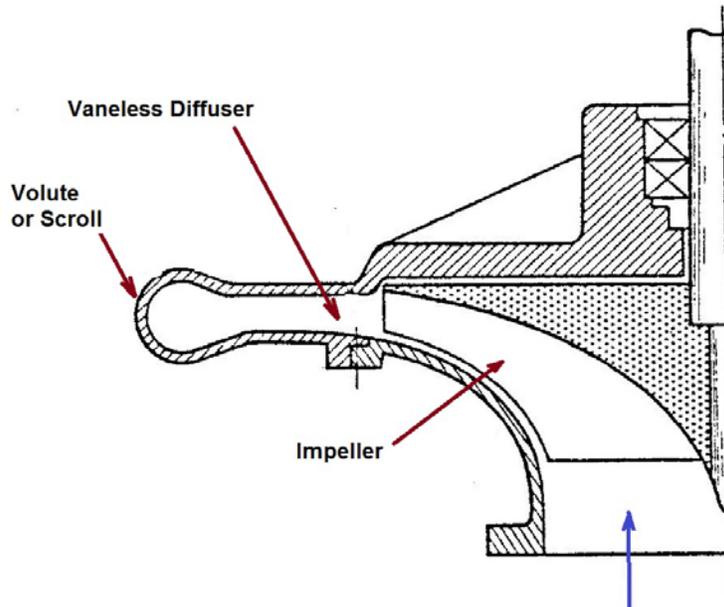


Figure 1: Typical centrifugal compressor.

Many compressors such as those in gas turbine engines are multi-stage axial machines with many rotors and stators decreasing in size as the density increases as illustrated in Figure 2.

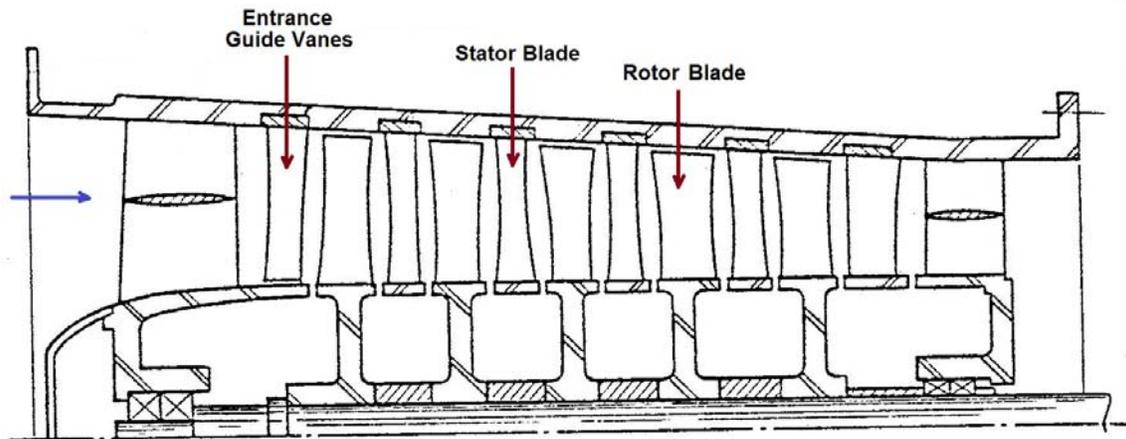


Figure 2: Typical axial compressor.