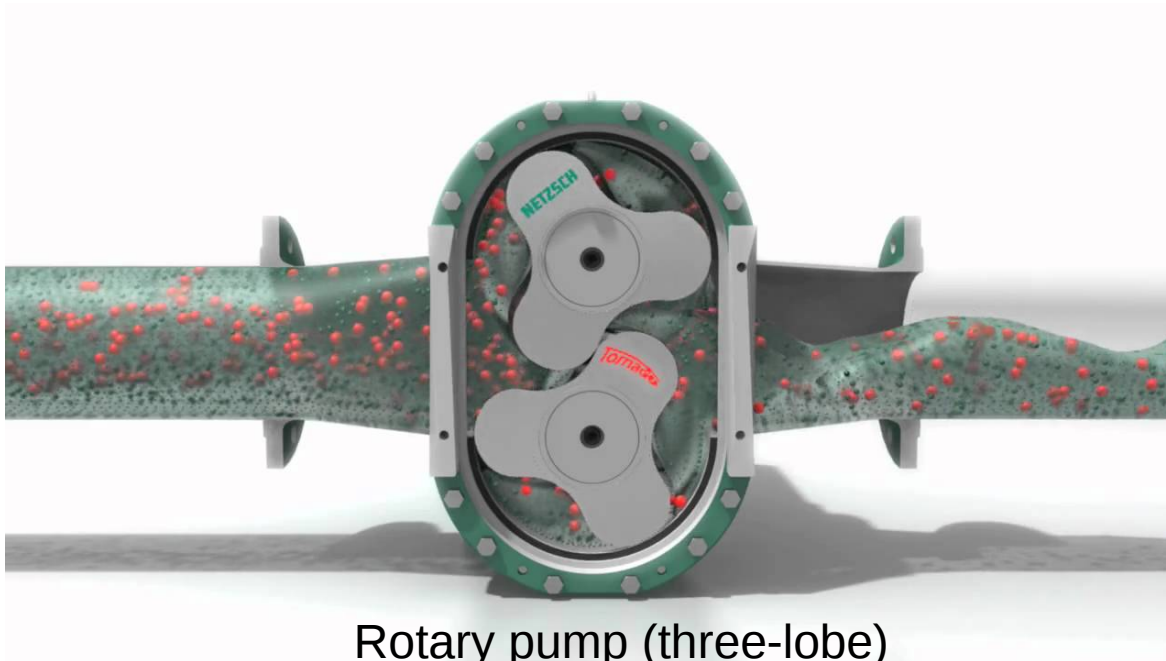
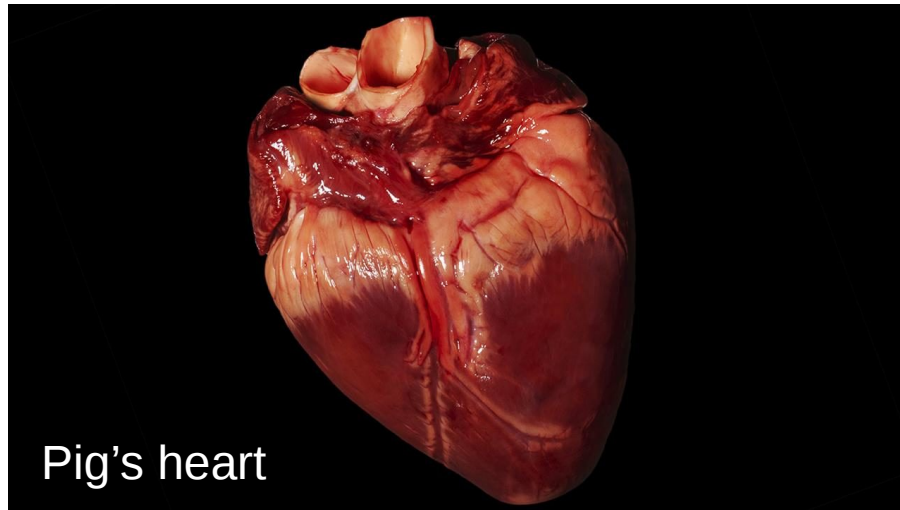


IIA. Pumps

Positive Displacement Pumps



Rotary pump (three-lobe)



Pig's heart



Peristaltic pump

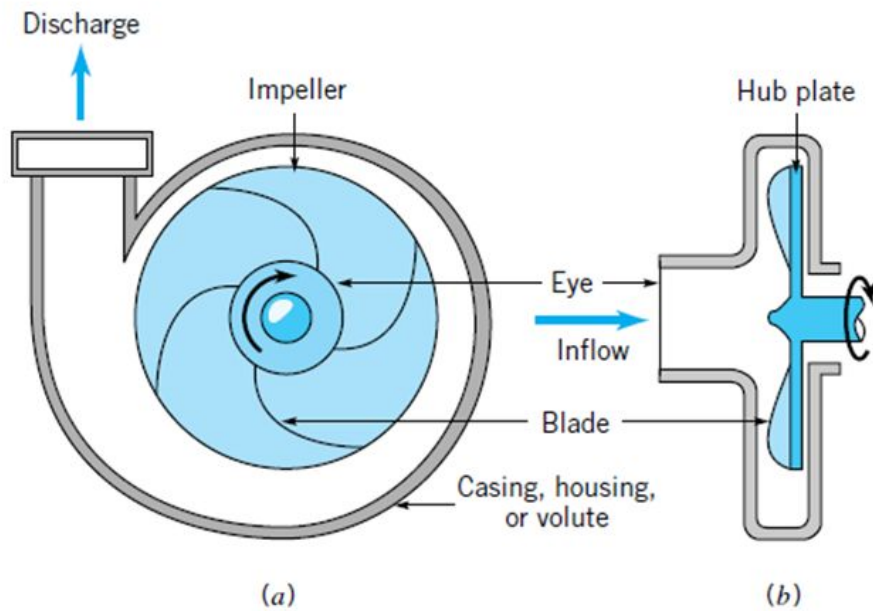
<https://commons.wikimedia.org/w/index.php?curid=1079142>

https://i.ytimg.com/vi/eDTske_nSel/maxresdefault.jpg

<http://www.sciencemag.org/news/2016/04/researchers-keep-pig-hearts-alive-baboons-more-2-years>

<https://www.pumpsandsystems.com/peristaltic-pumps/december-2012-peristaltic-pumps-water-and-wastewater>

Radial centrifugal pumps



Axial flow pumps

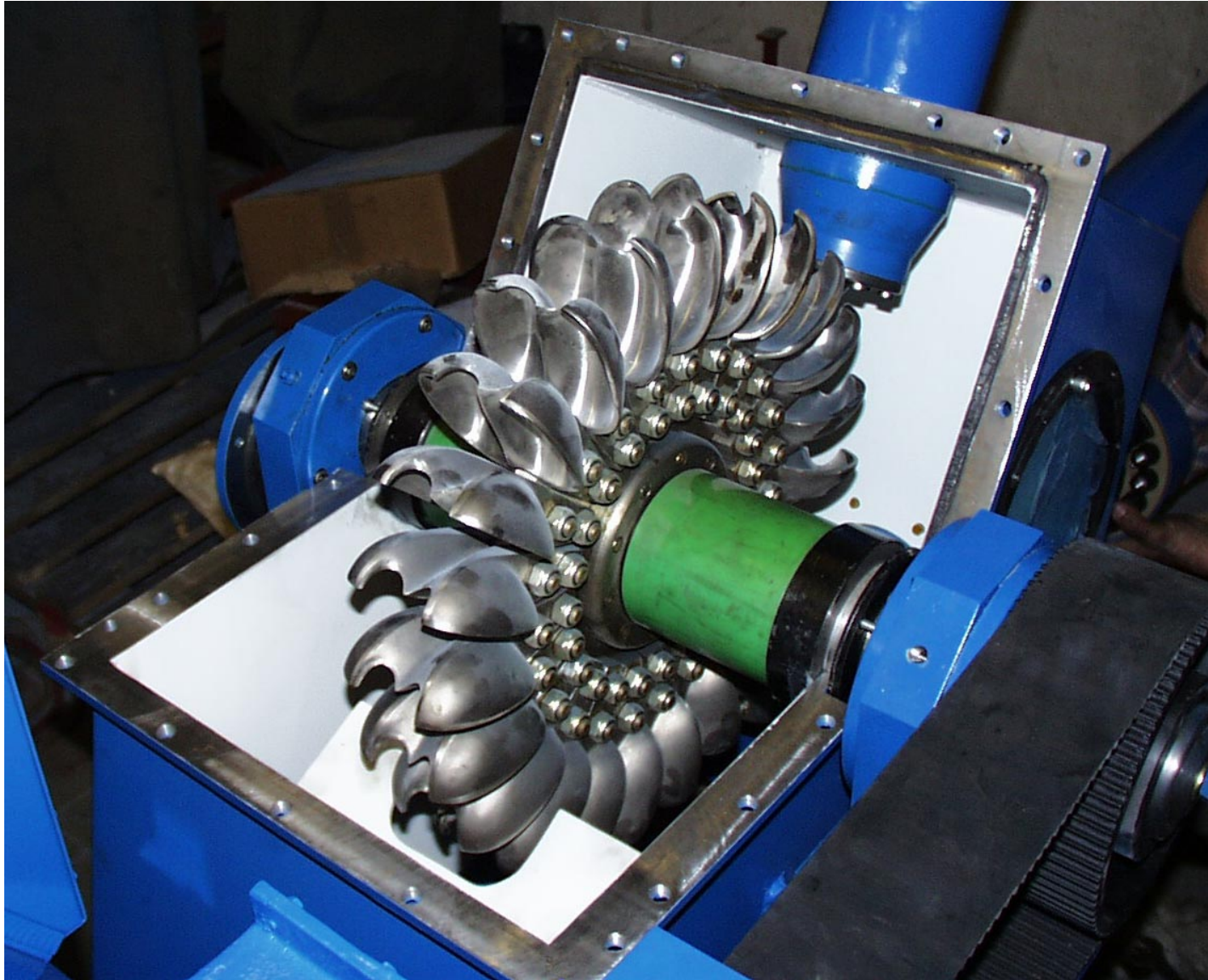


<http://www.quaxpumps.com/products/axial-flow/>
https://en.wikipedia.org/wiki/List_of_aircraft_propeller_manufacturers
<https://www.amazon.com/Lasko-3723-20-Inch-Premium-3-SPEED/dp/B000HHJ2I2>

IIB. Turbines

Impulse Turbines

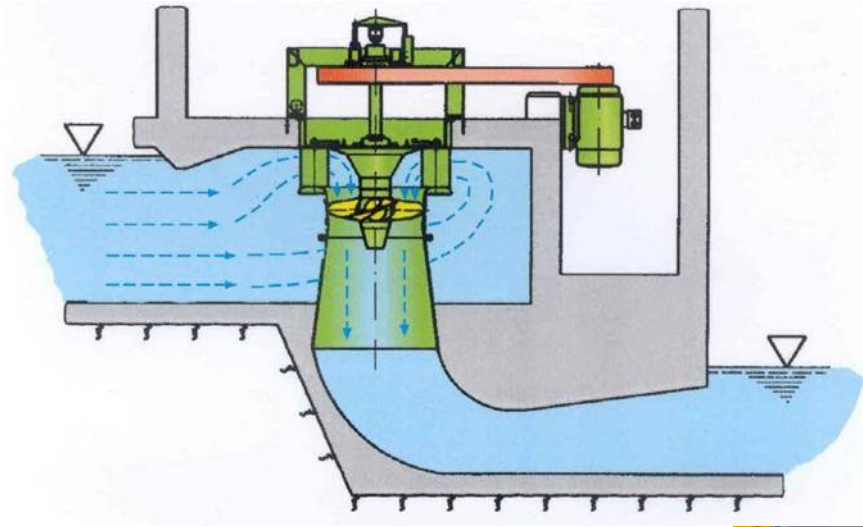
Pelton Wheel



Francis Turbine

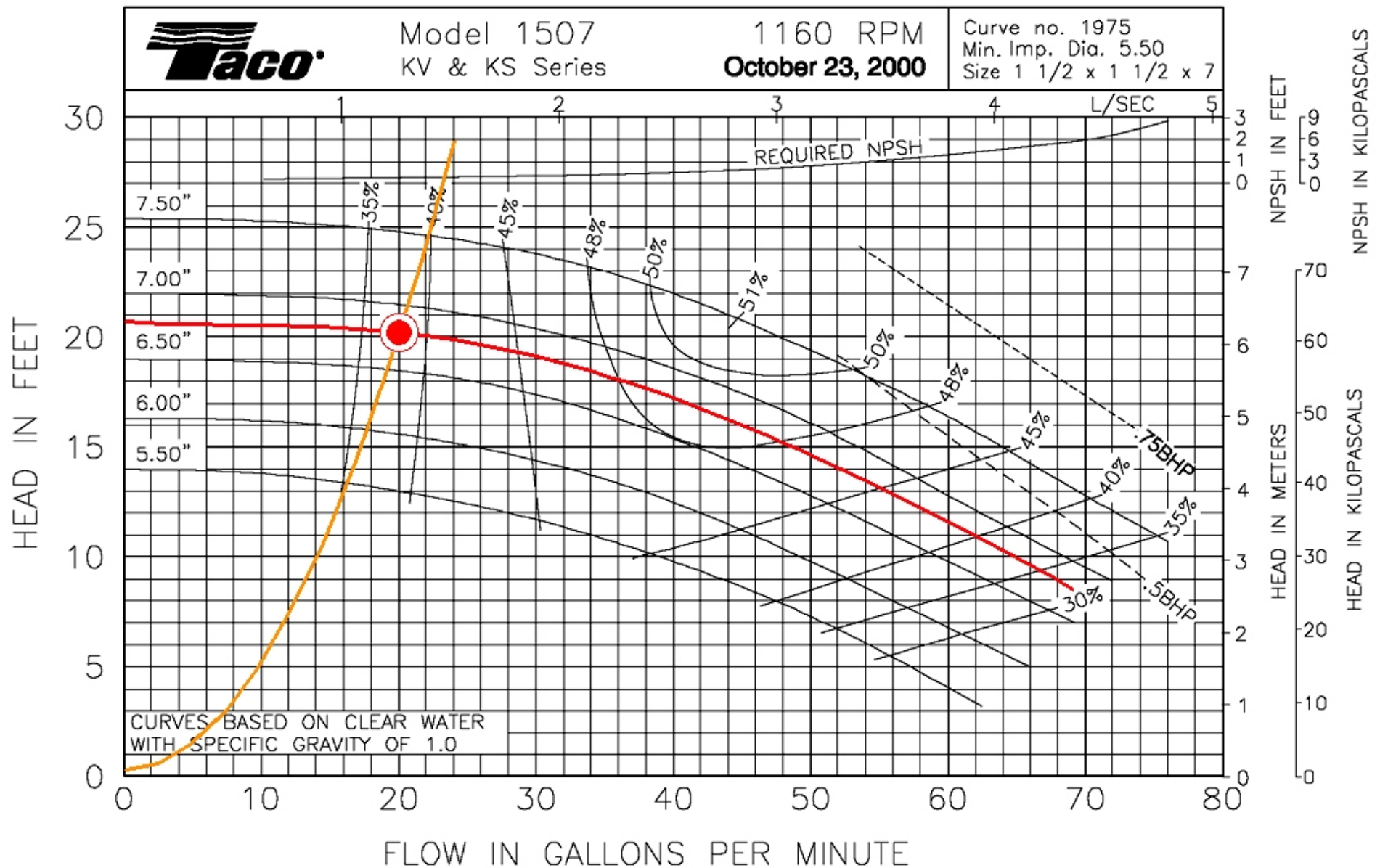


Kaplan Turbine



III. Performance Curves

Pump Performance Curve



Pump Operating Point

