

Ch 3 : Properties of Gases

- ① Relation between C_p and C_v
- ② work done during the Isothermal process
- ③ Law of Adiabatic Process [$PV^\gamma = \text{constant}$]
- ④ Work Done during the Adiabatic process.
- ⑤ Work done during the polytropic process.
- ⑥ Heat transfer during the polytropic process.

⑦ practice sum

Ch 4 : Properties of Steam

- ① Steam formation
- ② Bucket or Barrel calorimeter
Throttling calorimeter
separating calorimeter
combined separating and throttling calorimeter
- ③ practice sum

Ch 8 : Pumps

- ① Operation of single acting reciprocating pump.
- ② Operation of double acting reciprocating pump.

(3) Operation of plunger pump

(4) Operation of bucket pump

(5) Suction pipe with foot valve and a strainer.
diagram: centrifugal pump

(6) Vane Pump

Ch: 9

(1) Operation of a compressor

(2) centrifugal compressor

(3) comparison between reciprocating and rotodynamic compressors

Ch: 11

(1) Oldham's coupling

(2) Universal coupling or Hooke's joint

(3) centrifugal clutch

(4) Internal expanding shoe brake

Ch: 12

(1) Stepped or cone pulley drive

(2) Velocity ratio of belt drives

③ Slip and creep in belt drives

④ Bevel gears

⑤ Comparison of belt drive, chain drive and gear drive.

⑥ Fast or loose pulley drive