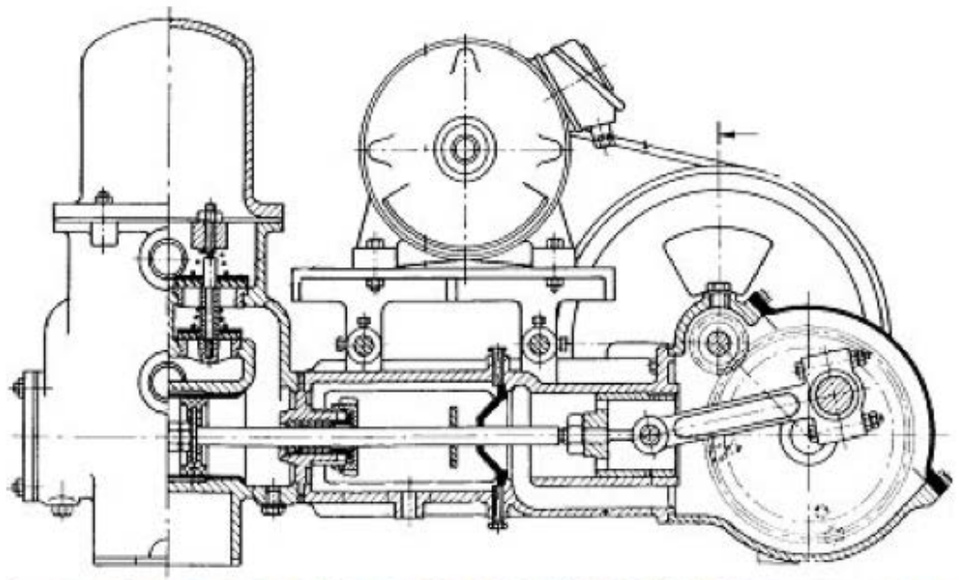
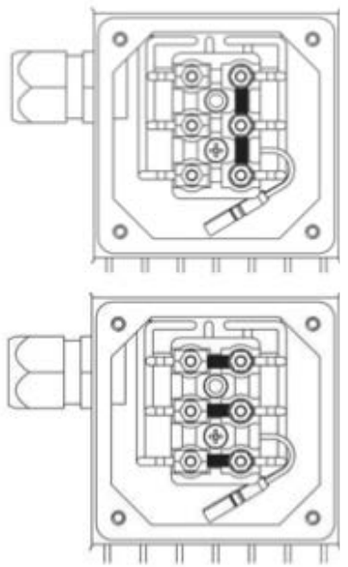
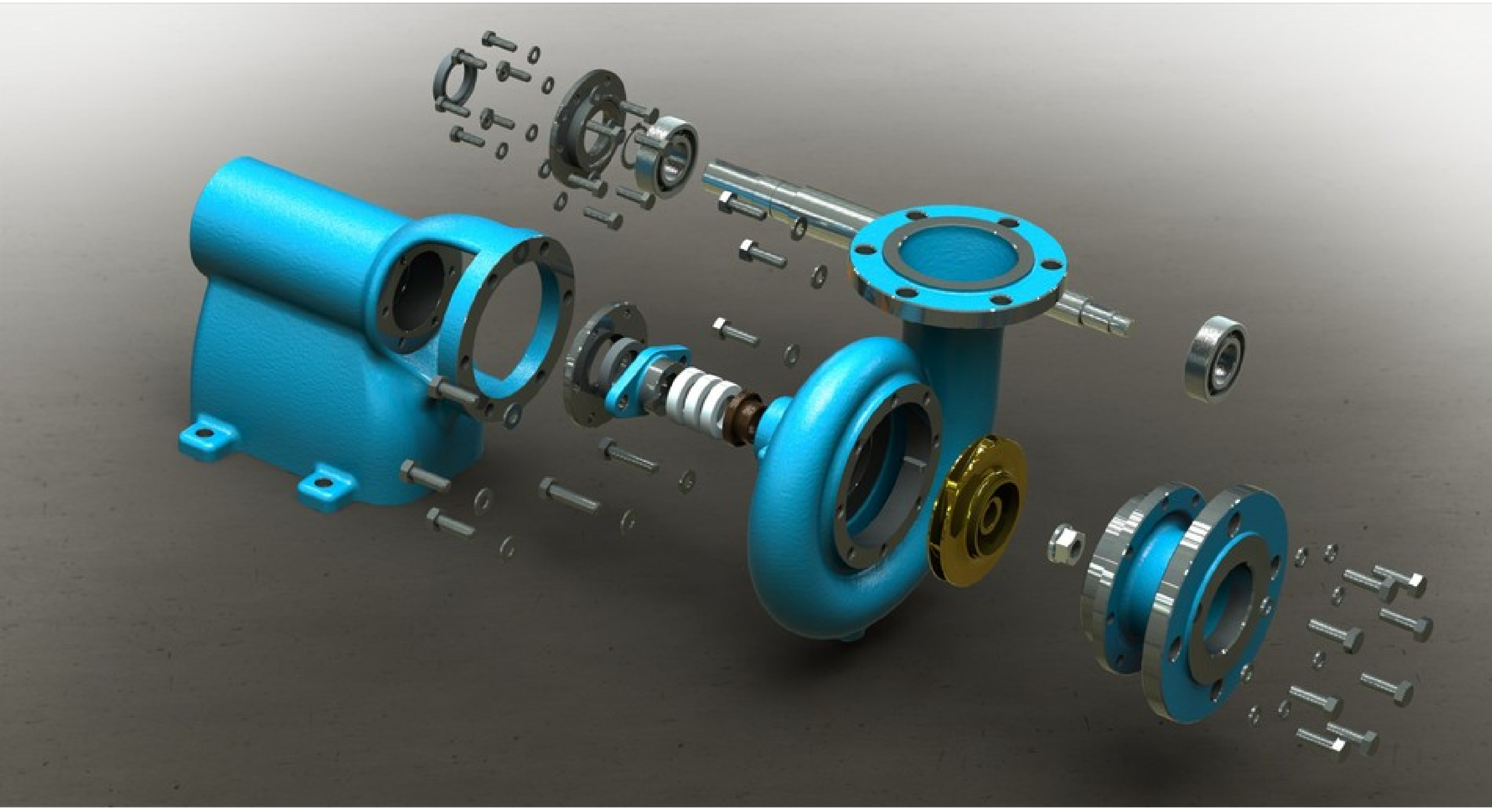
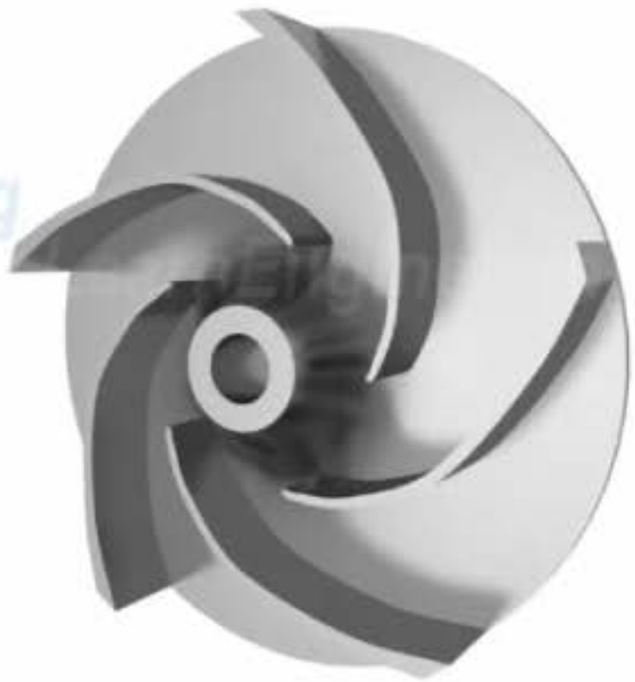
Impuls Pumps





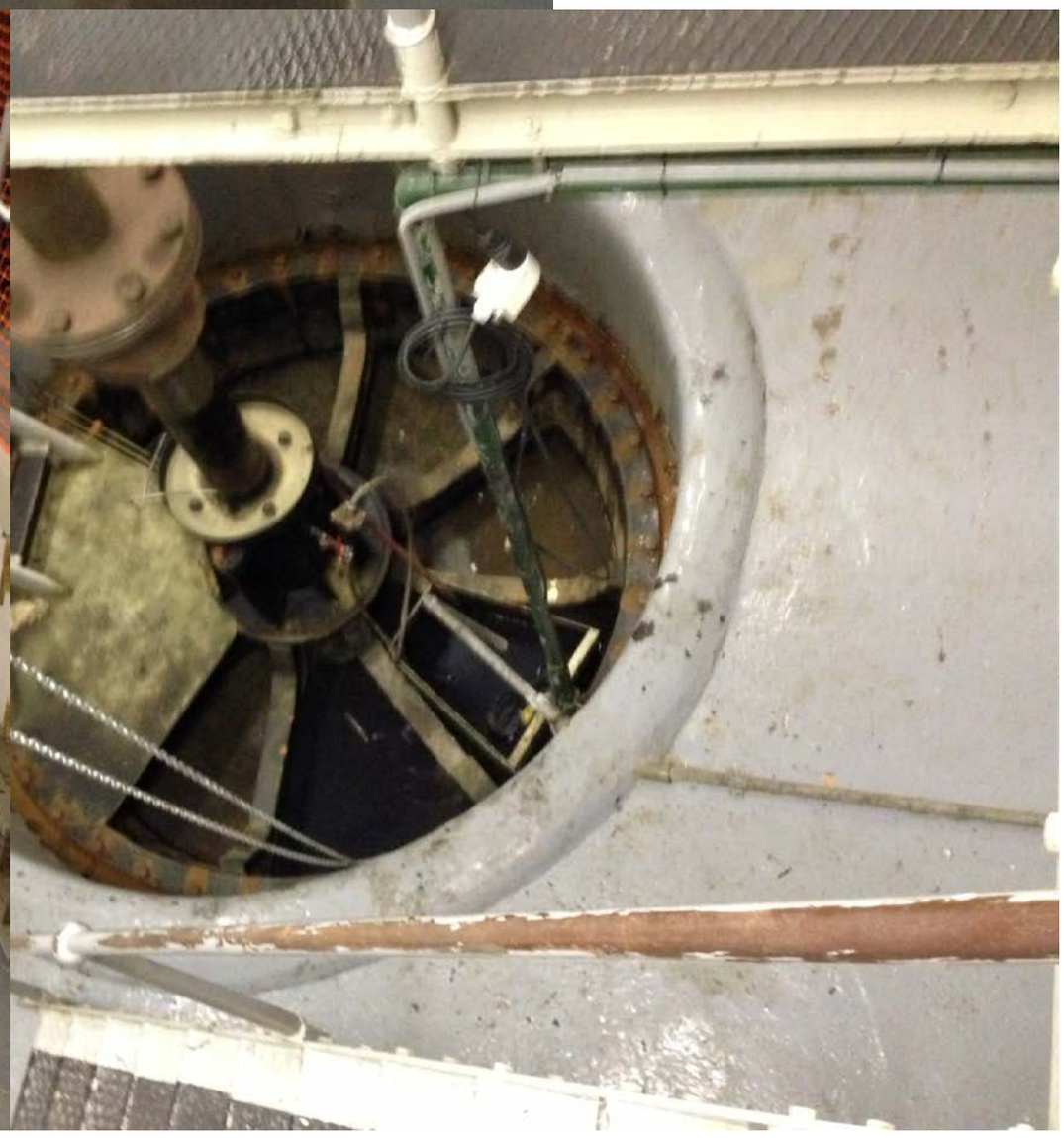


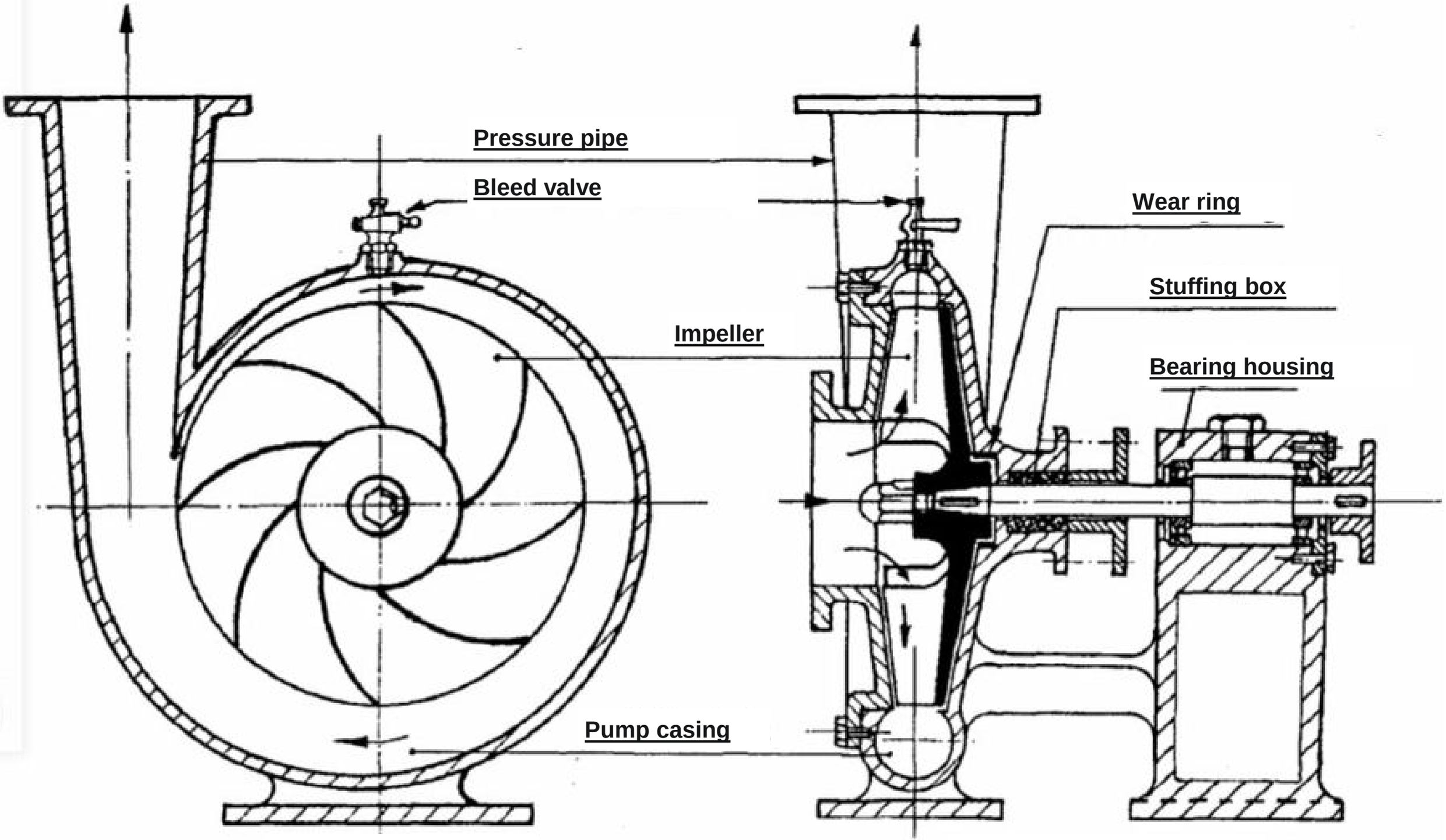
ENCLOSED IMPELLE
R



SEMI-OPEN IMPELLER

OPEN IMPELLER



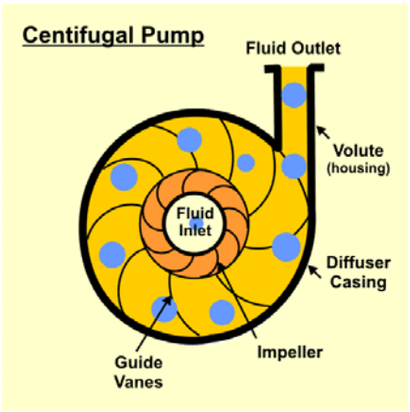


Cross section

longitudinal section

$Fc = m \times \omega^2 \times R$

Fc = Centrifugal Force in Newton



m = mass

m = sm x V
m = ρ x V

ρ = Density

ρ air = 1,25 kg/m³
ρ water = 1000 kg/m³

V = volume

ω = Angular velocity

ω = 2 x π x n

π = 3,1417
n = rotation speed in RPS

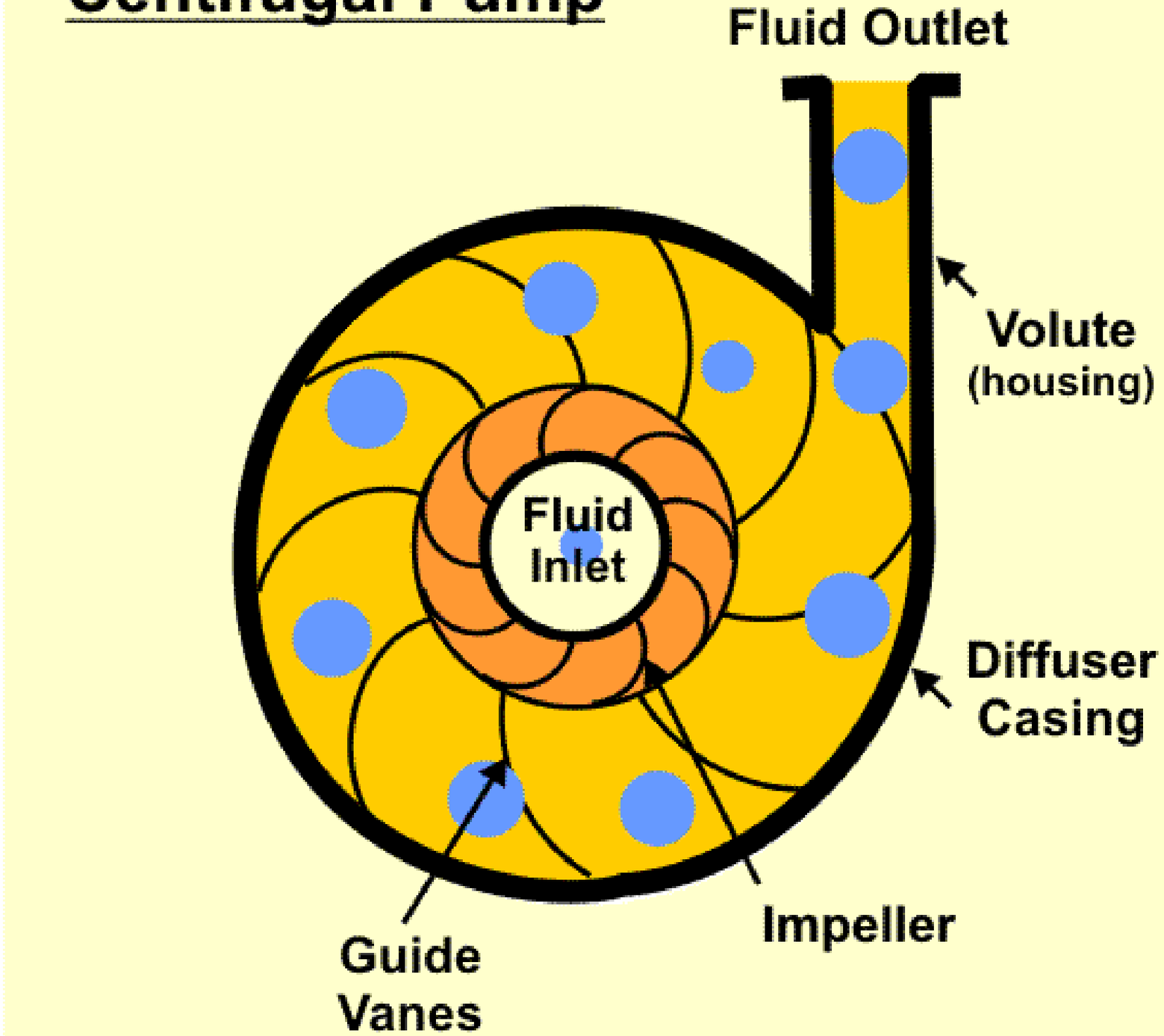
ω x ω = ω²

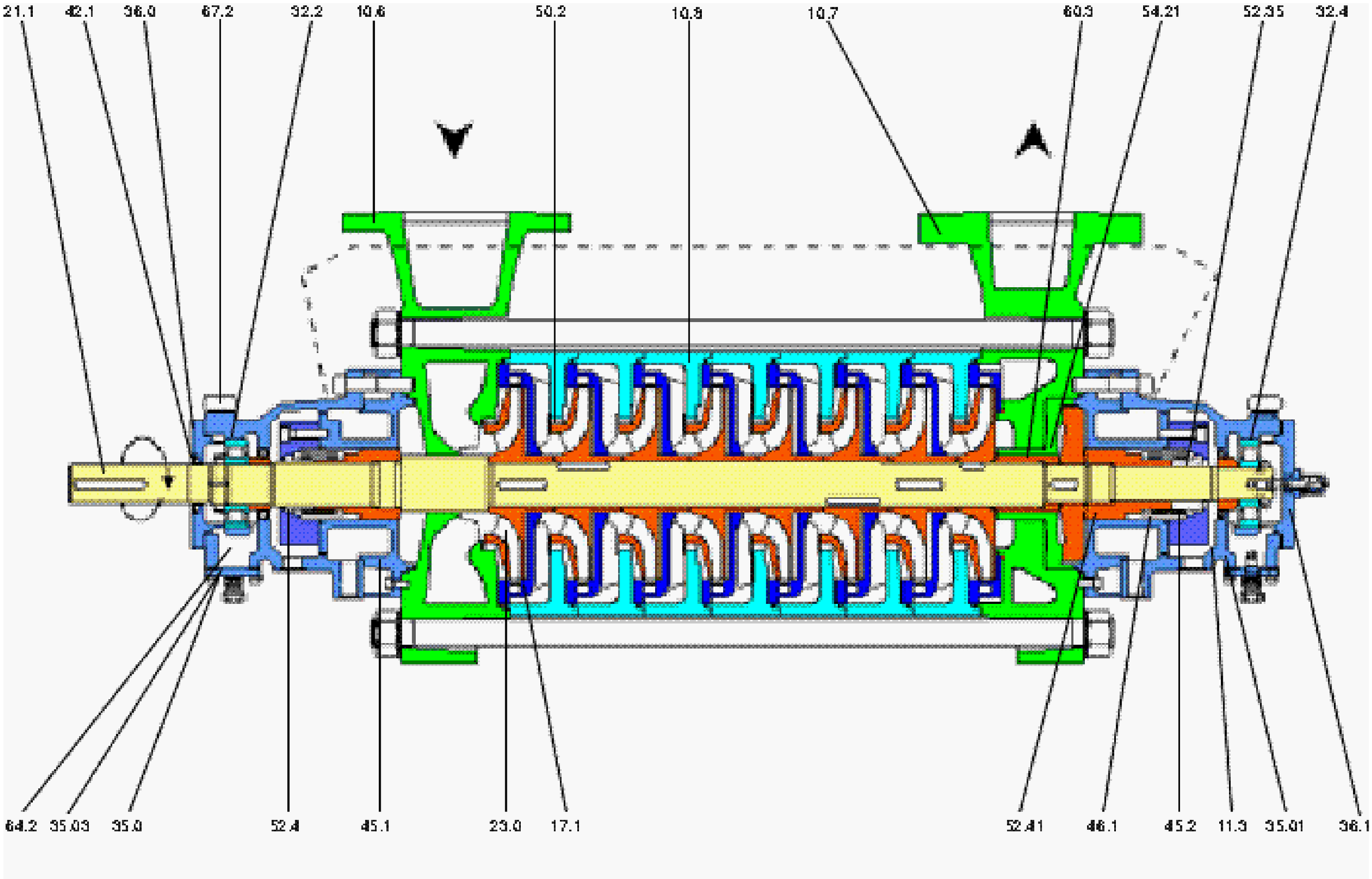
R = Radius

R = ½ x D

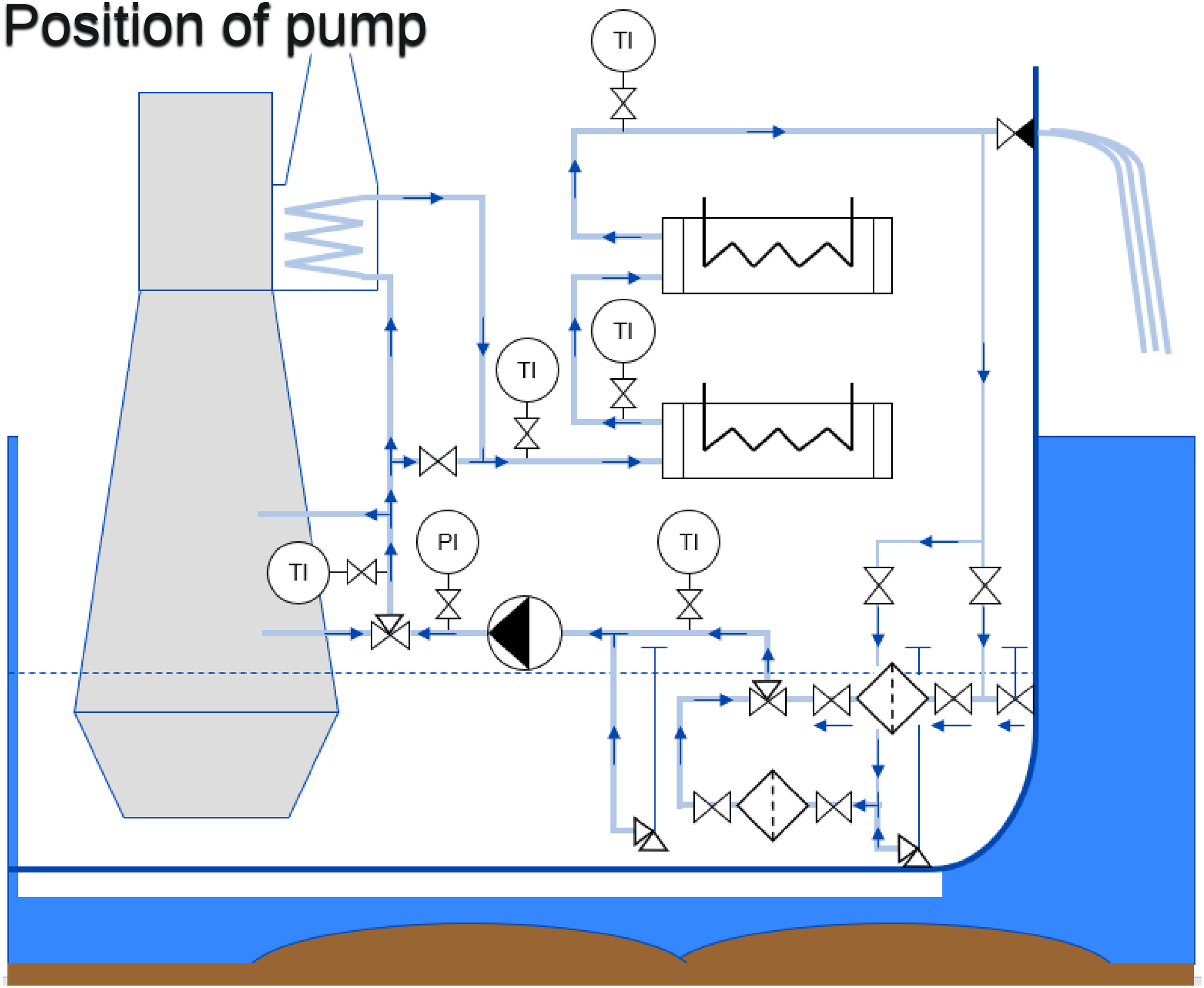
D = diameter impeller

Centifugal Pump

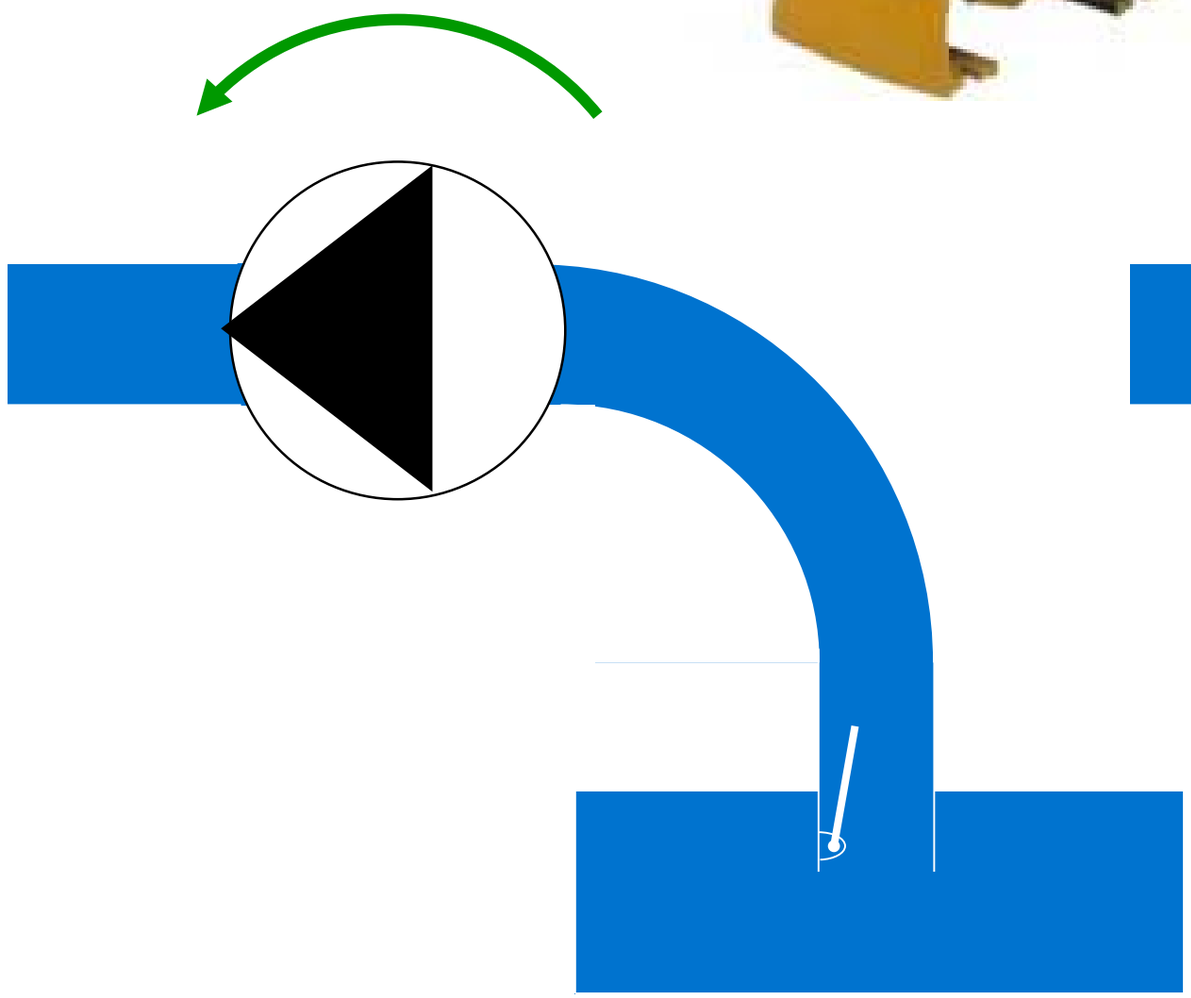


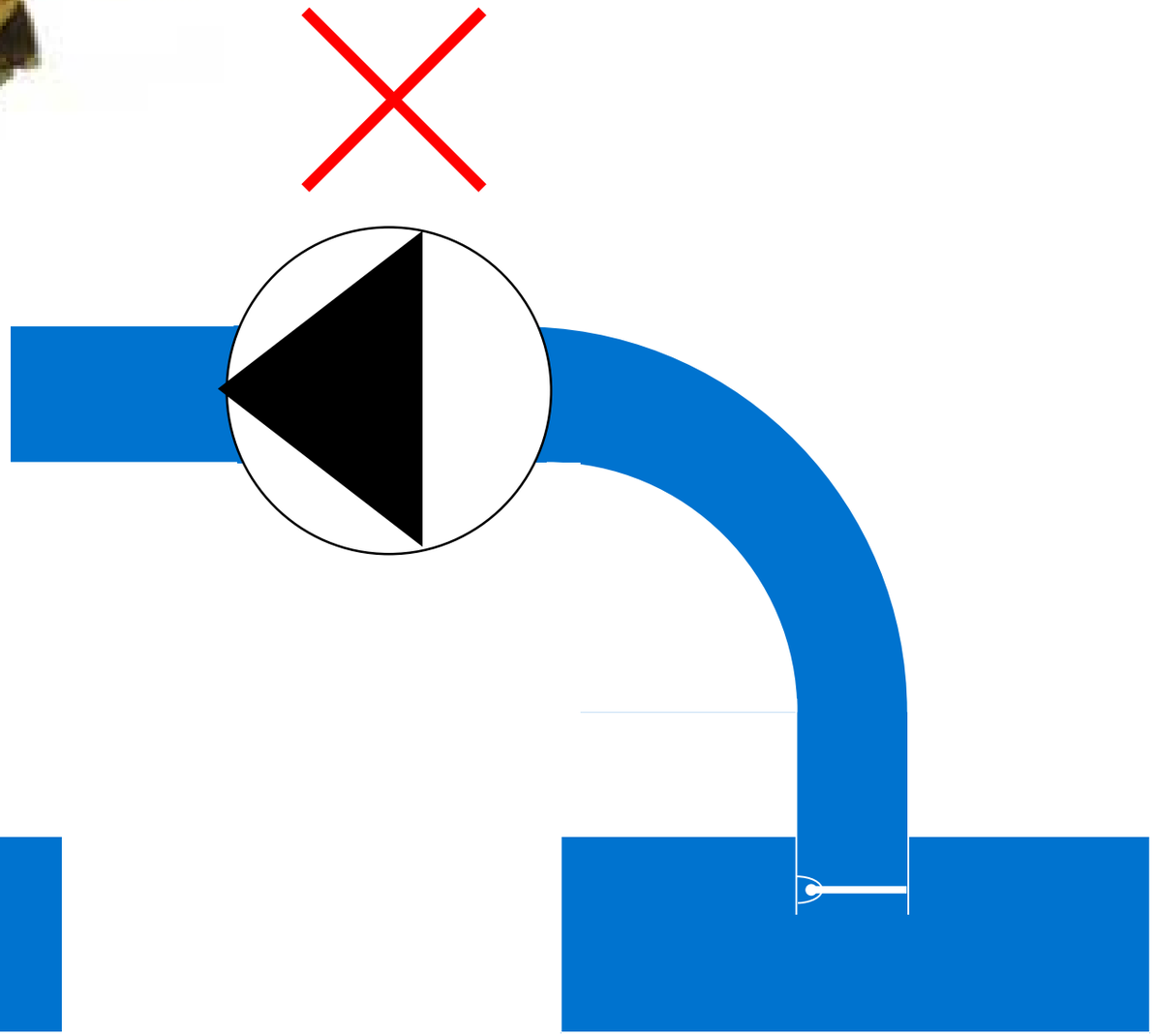

21.1
42.1
36.0
67.2
32.2
10.6
50.2
10.9
10.7
60.3
54.21
52.35
32.4
64.2
35.03
35.0
52.4
45.1
23.0
17.1
52.41
46.1
45.2
11.3
35.01
36.1

Position of pump

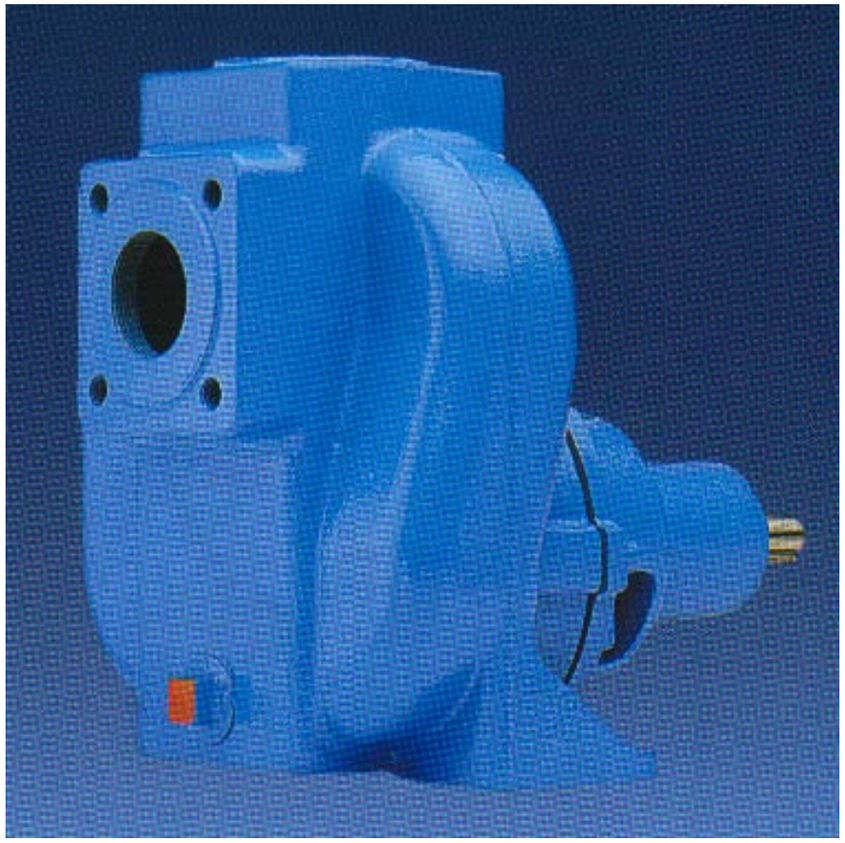


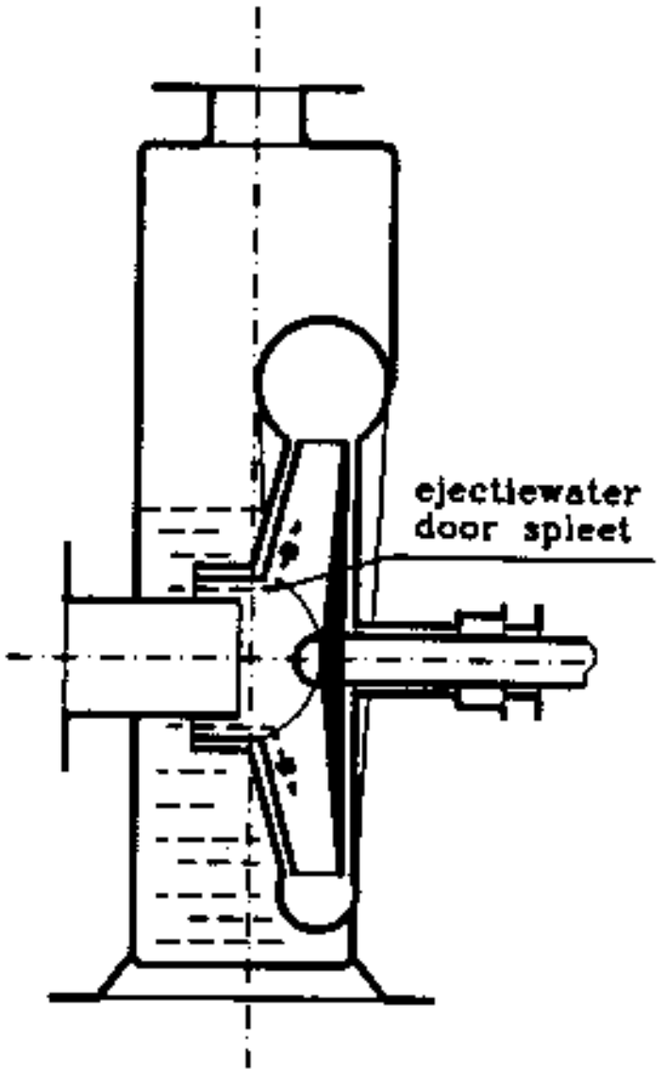
Foot valve

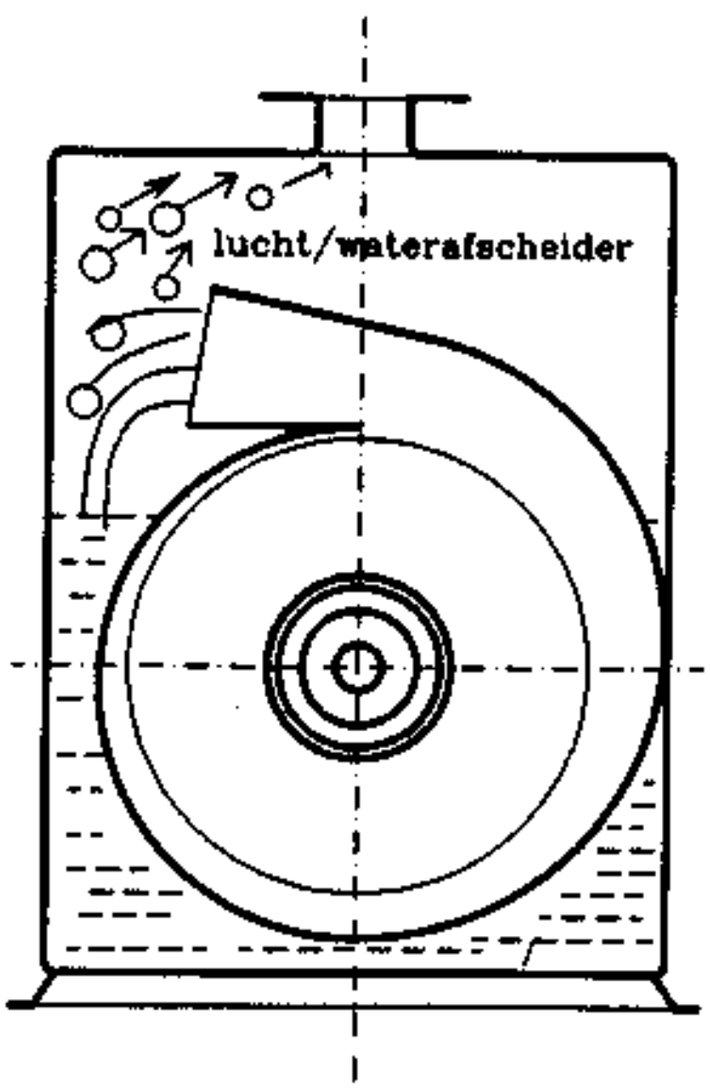


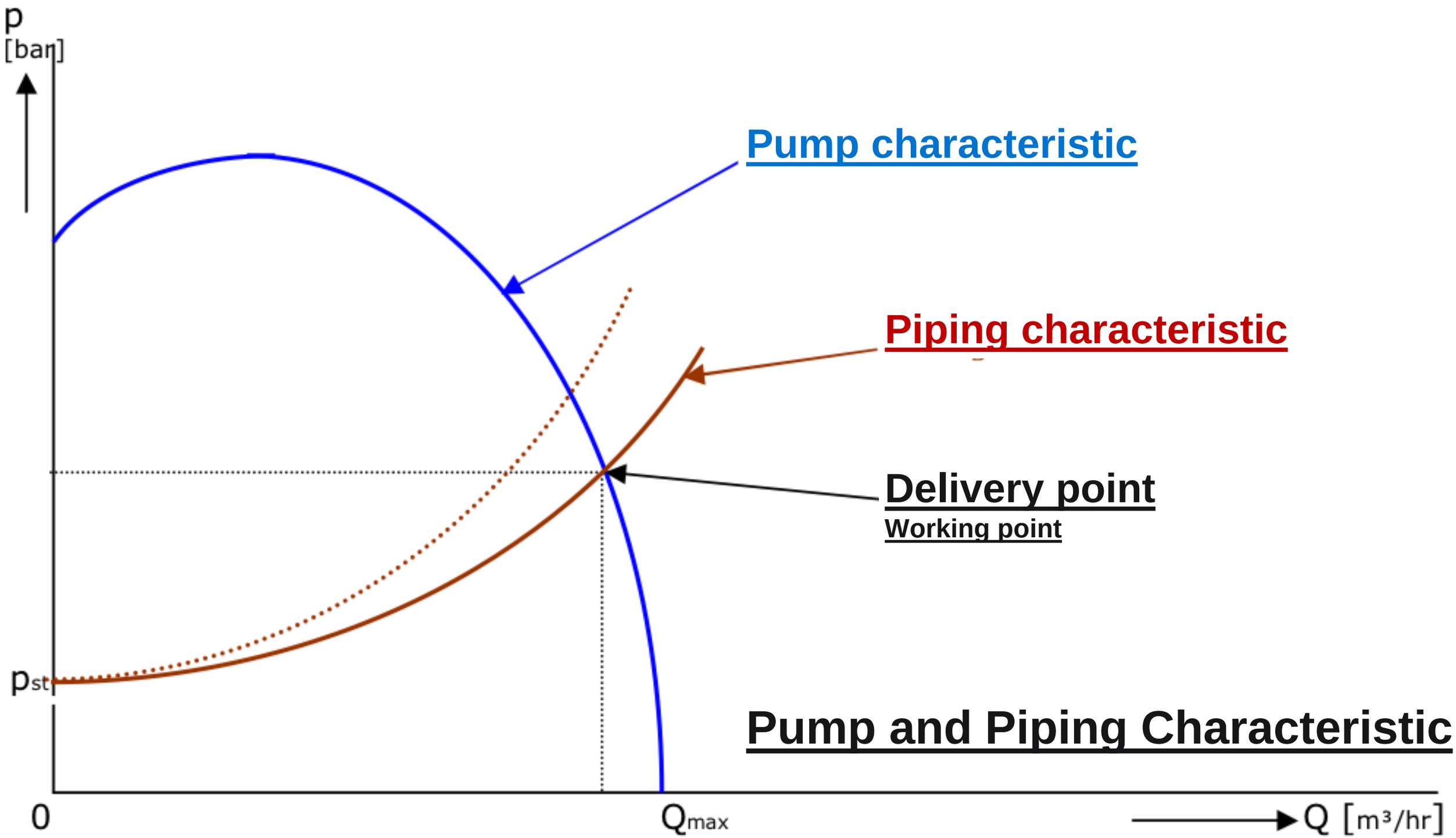


Water retaining housing



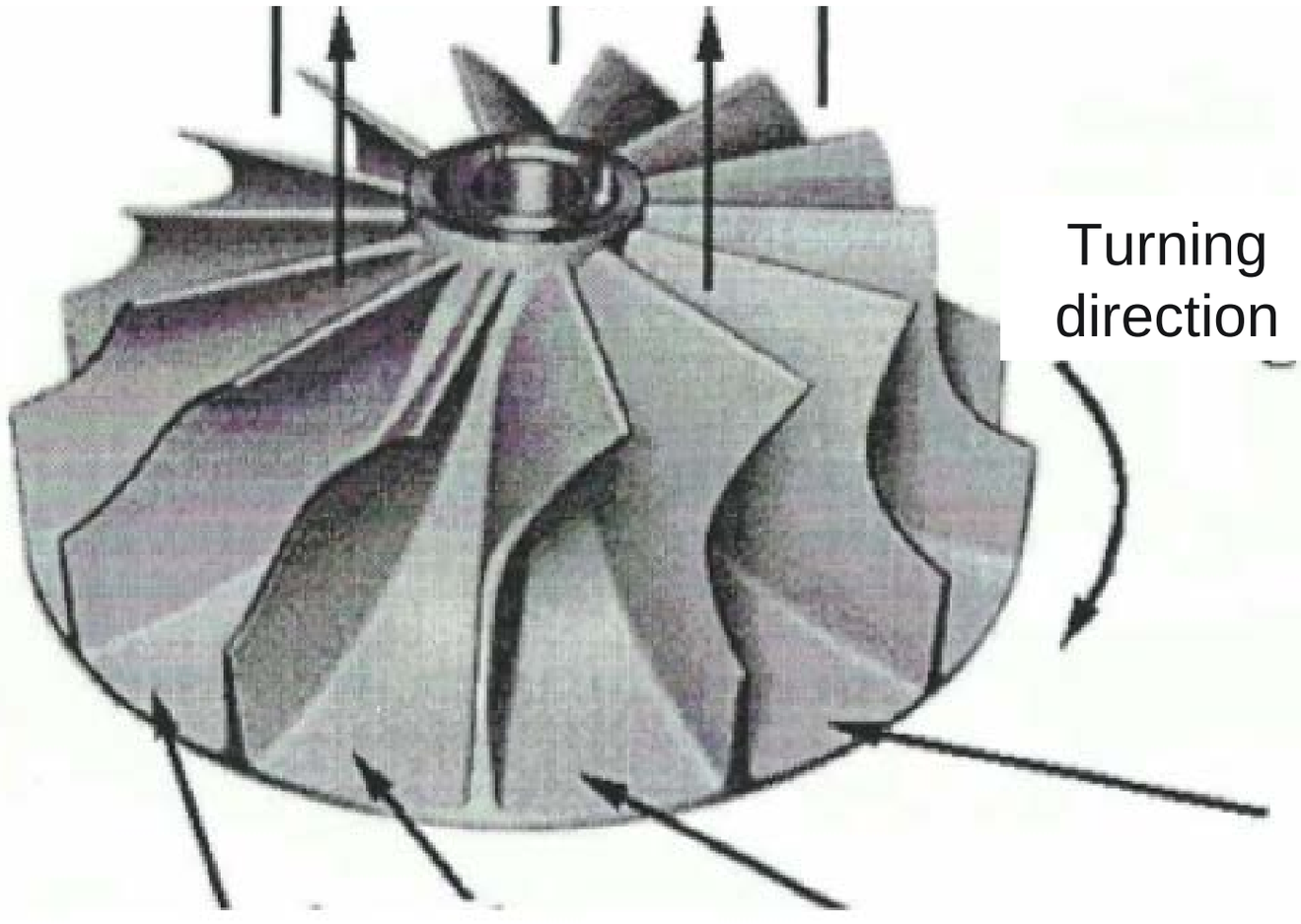


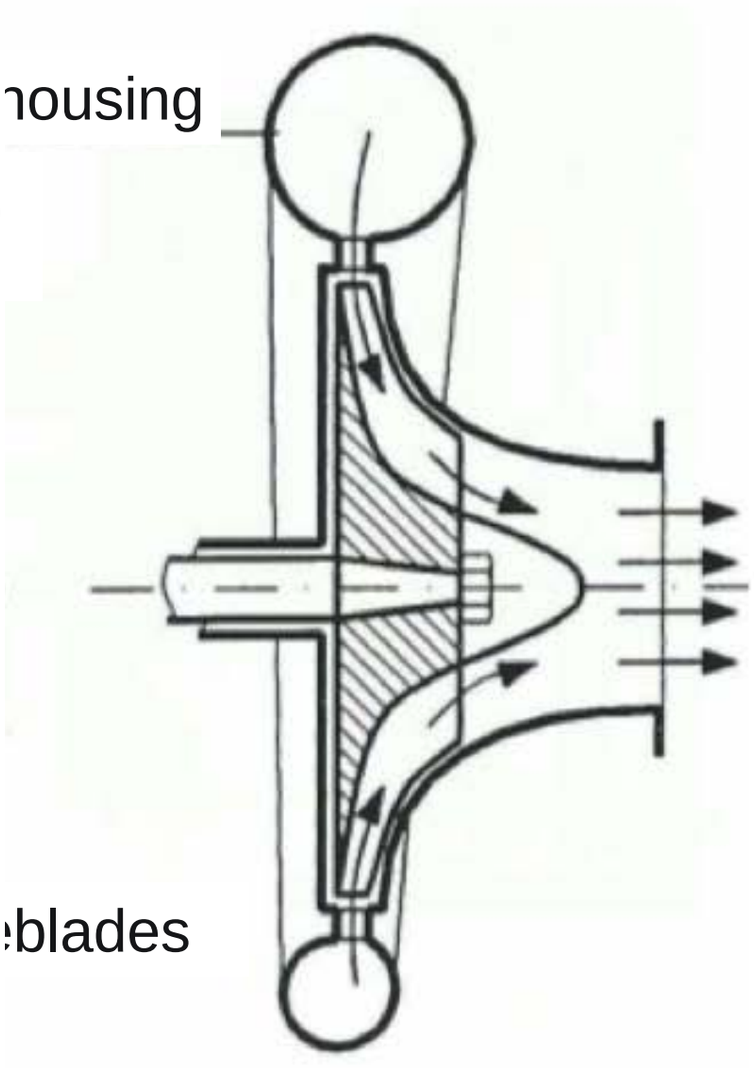



p
[bar]
Pump characteristic
Piping characteristic
Delivery point
Working point
Pump and Piping Characteristic
pst
0
Qmax
Q [m³/hr]

Is this a pump or a motor?

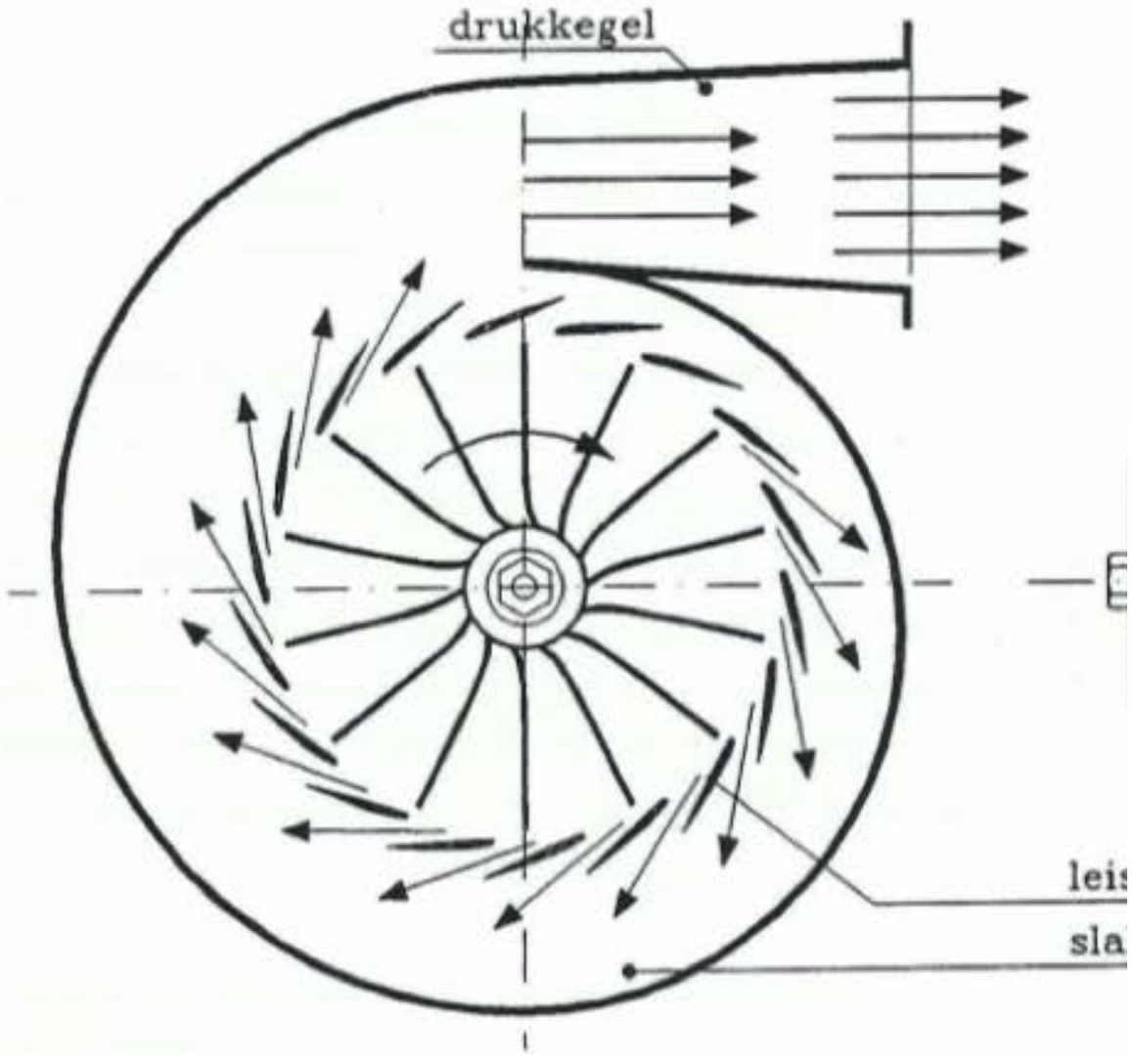
This what it’s impellor looks like?

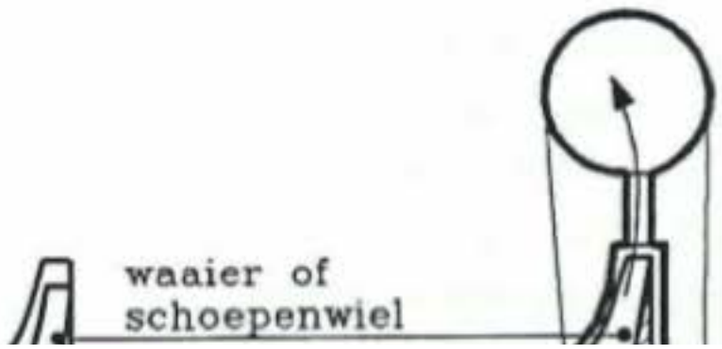




Crosssection drawing

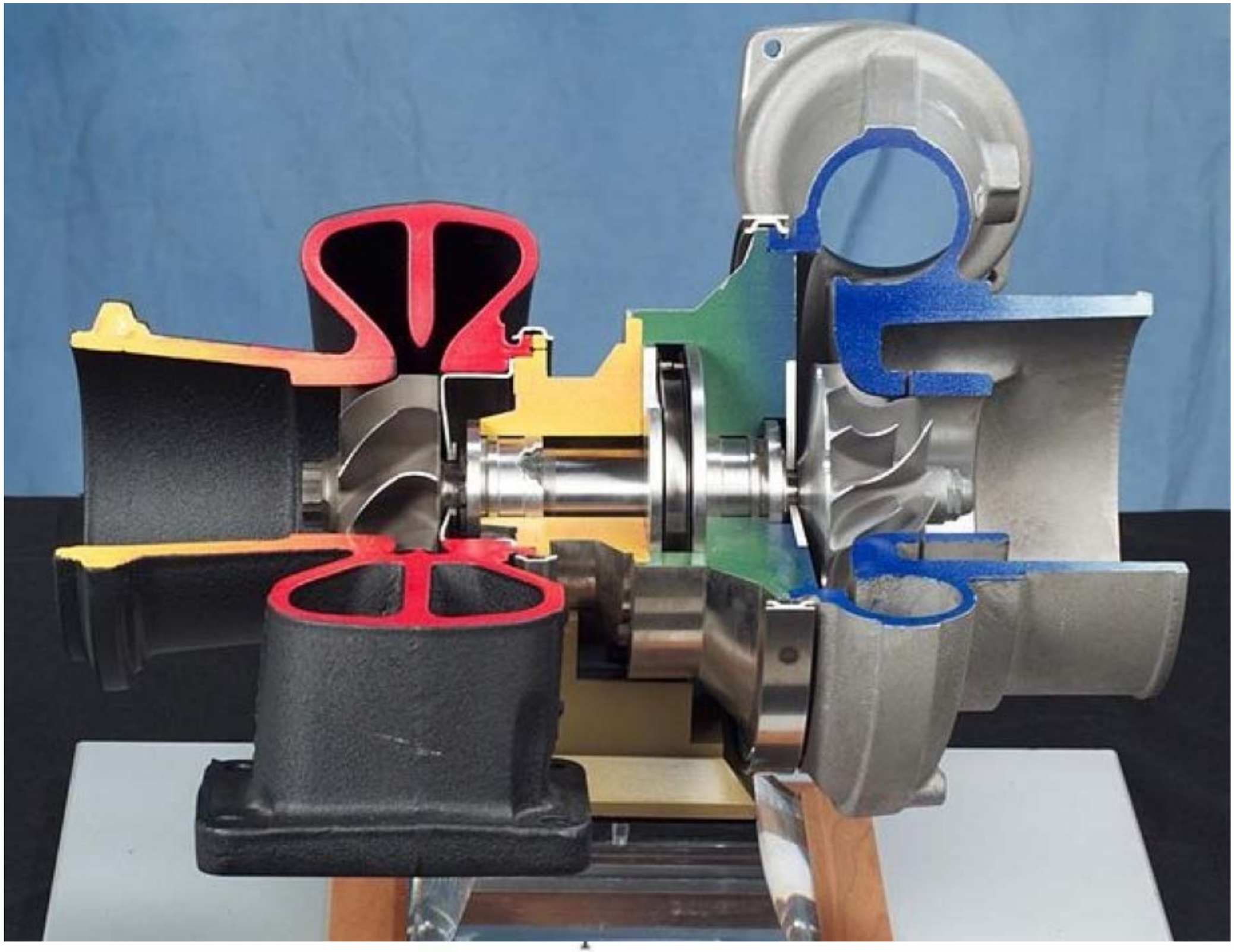
This is the pump it drives

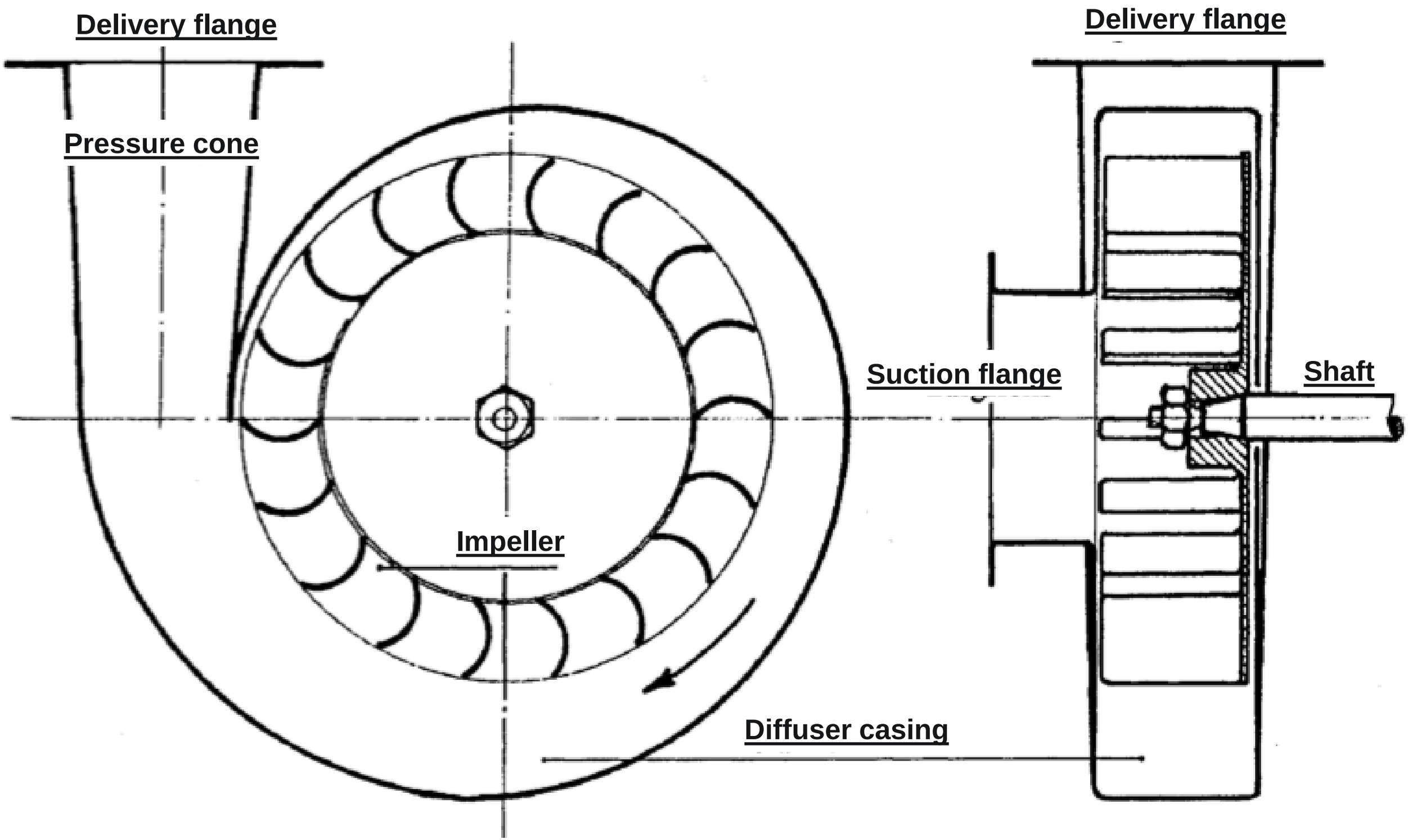


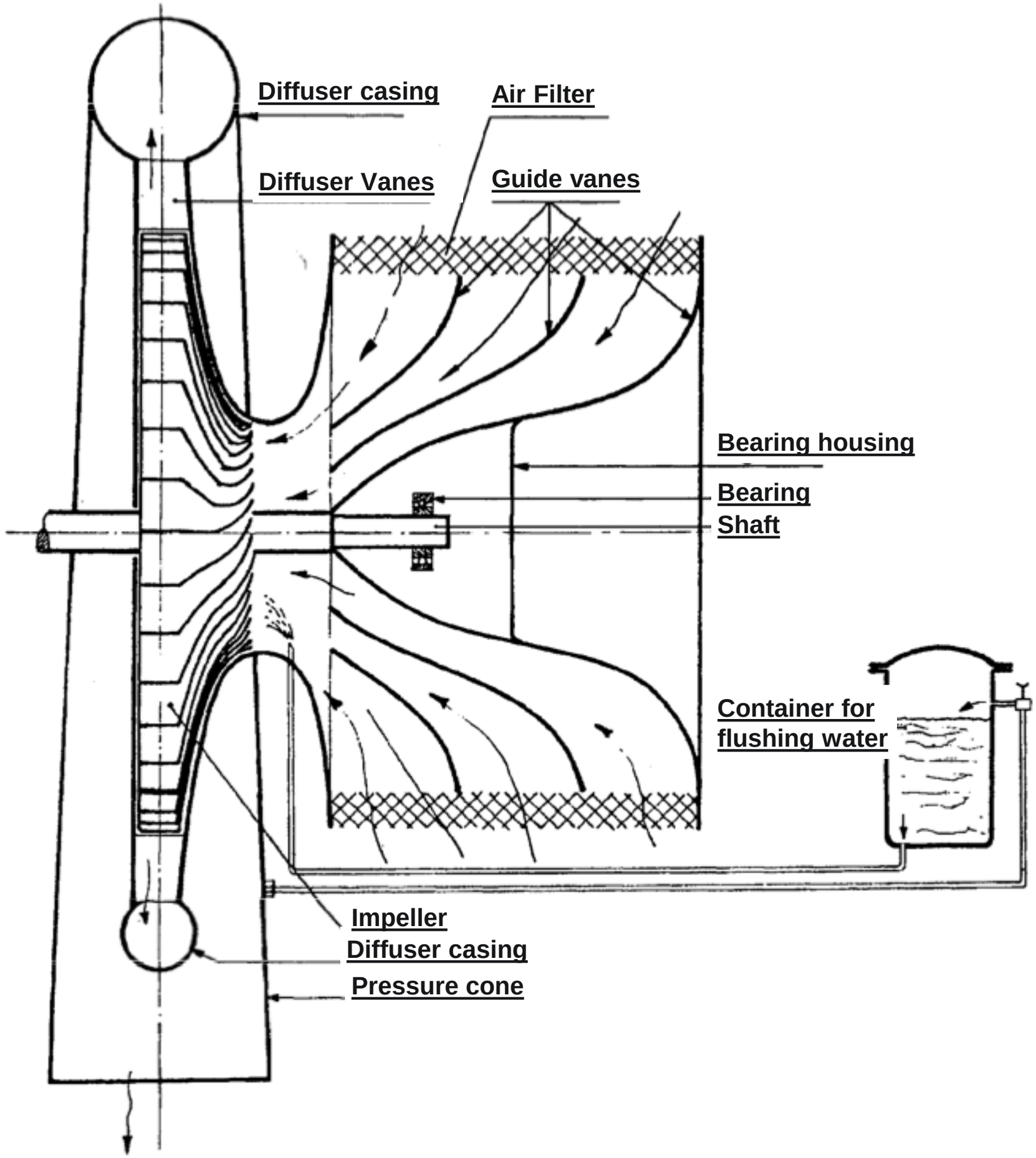


And the impellor of the pump

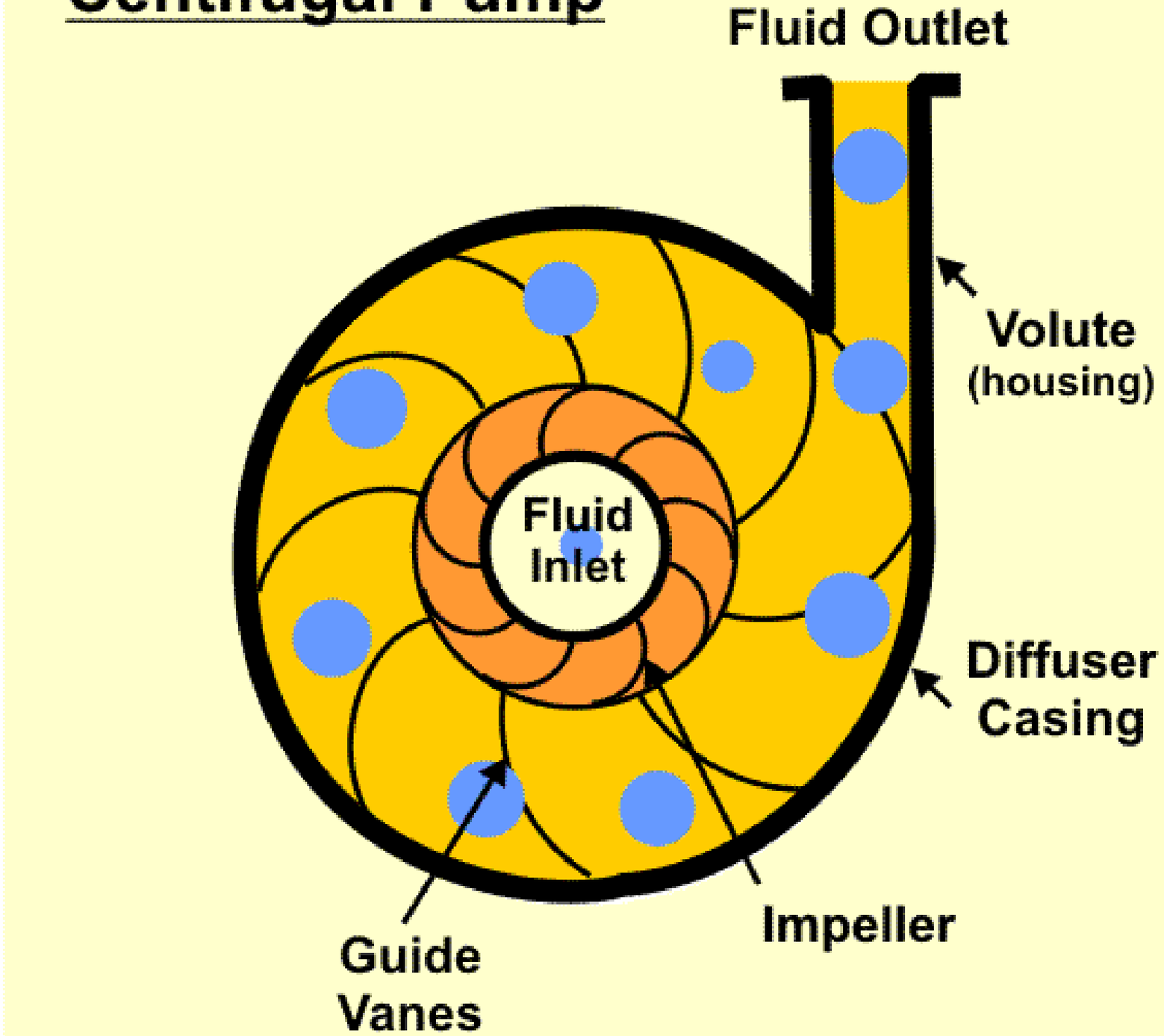
Turbo



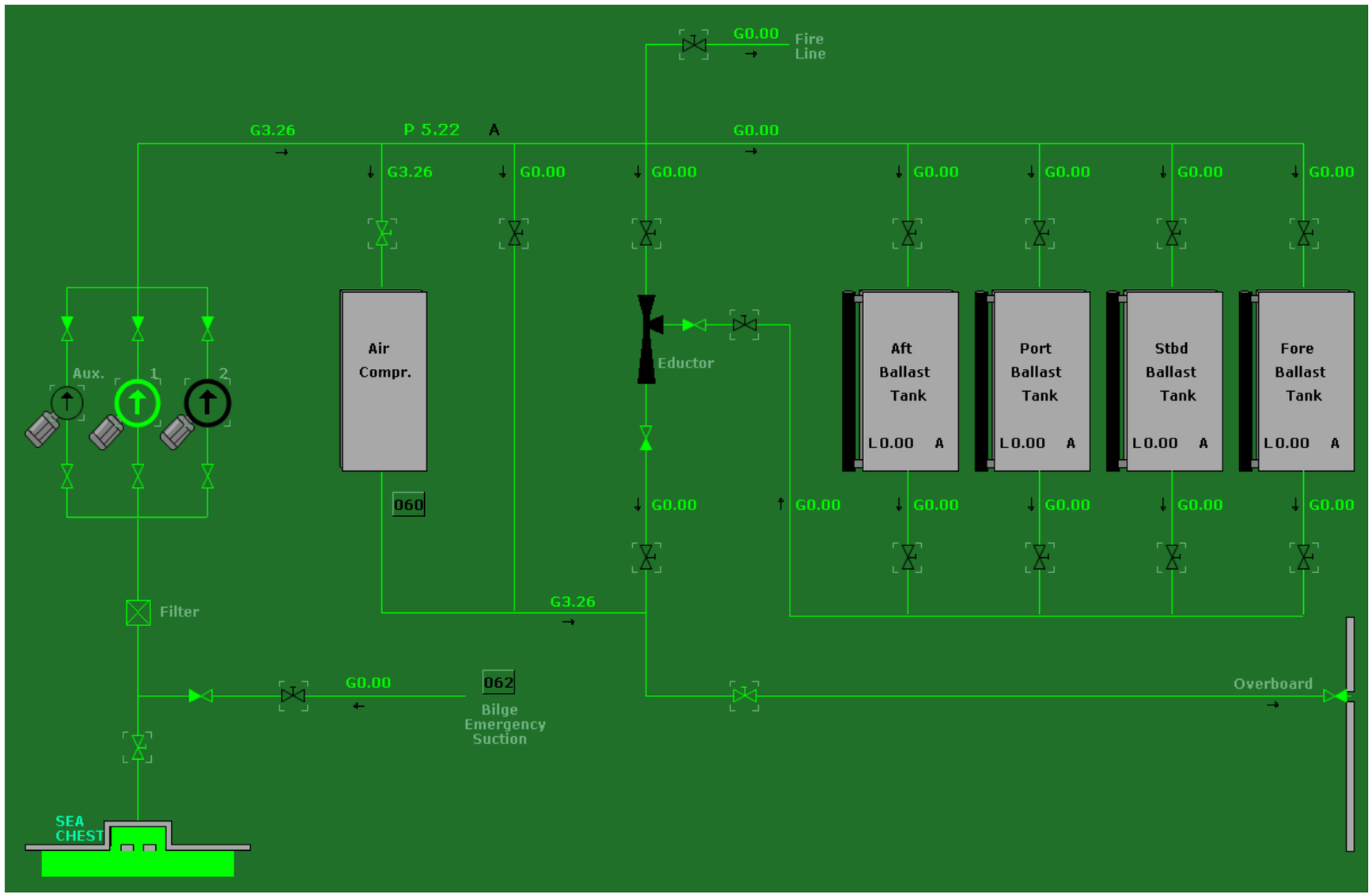

Delivery flange
Pressure cone
Impeller
Diffuser casing
Delivery flange
Suction flange
Shaft


Diffuser casing
Air Filter
Diffuser Vanes
Guide vanes
Bearing housing
Bearing
Shaft
Container for
flushing water
Impeller
Diffuser casing
Pressure cone

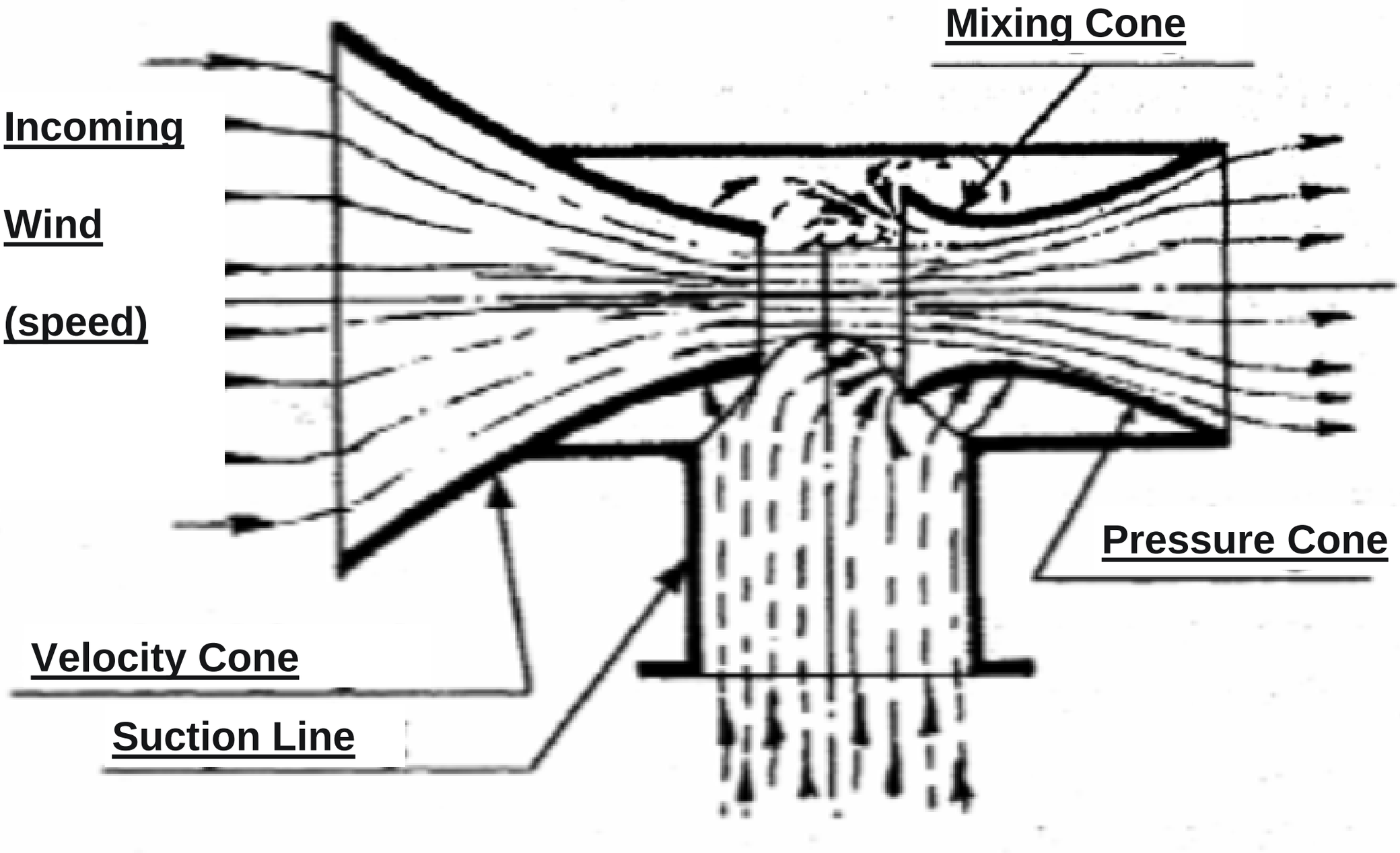
Centifugal Pump



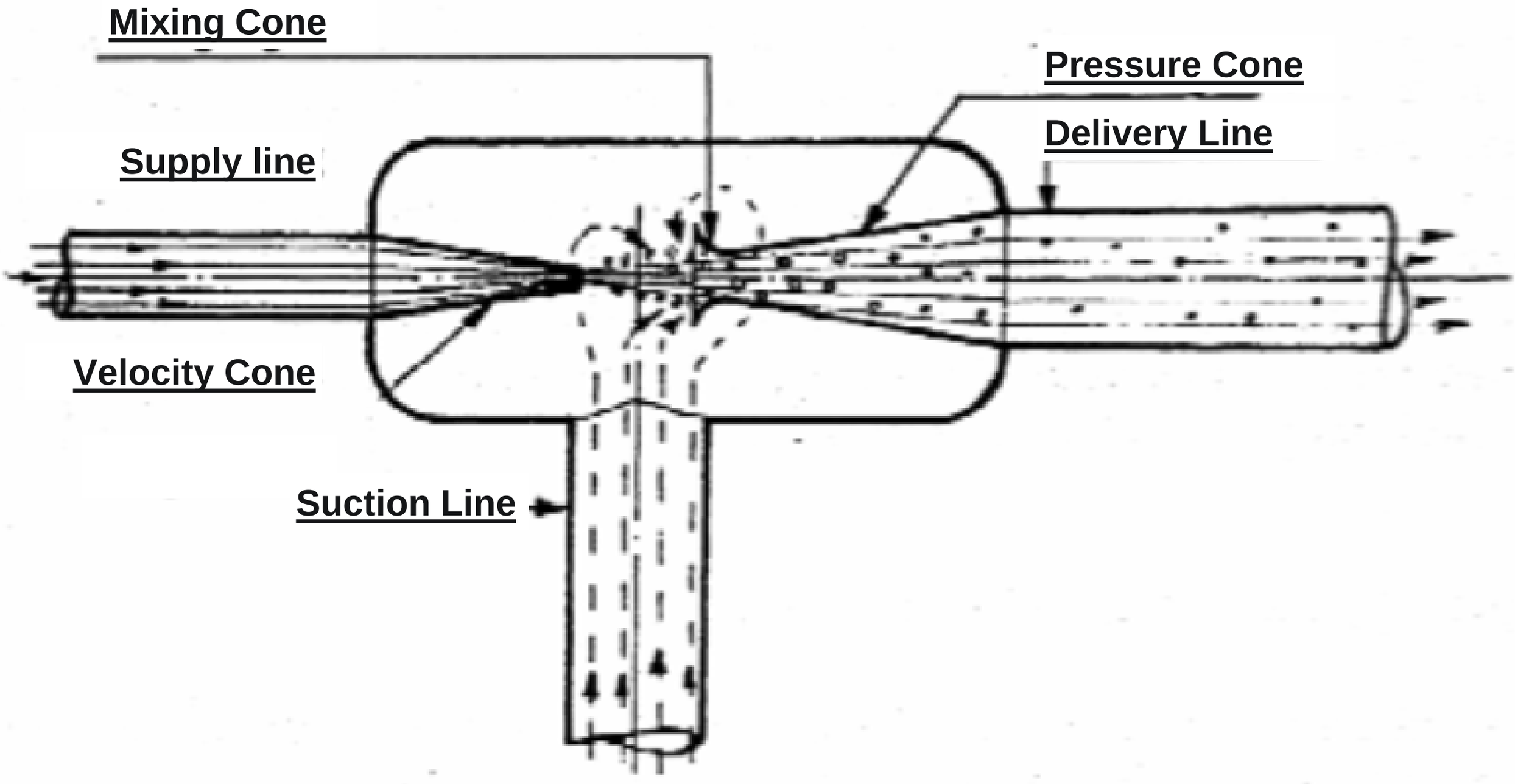
Ejectors


G0.00
Fire
Line
G3.26
P 5.22
A
G0.00
G3.26
G0.00
G0.00
G0.00
G0.00
G0.00
G0.00
Air
Compr.
Eductor
Aft
Ballast
Tank
L0.00 A
Port
Ballast
Tank
L0.00 A
Stbd
Ballast
Tank
L0.00 A
Fore
Ballast
Tank
L0.00 A
Aux.
1
2
060
G0.00
G0.00
G0.00
G0.00
G0.00
G0.00
Filter
G3.26
G0.00
062
Bilge
Emergency
Suction
Overboard
SEA
CHEST

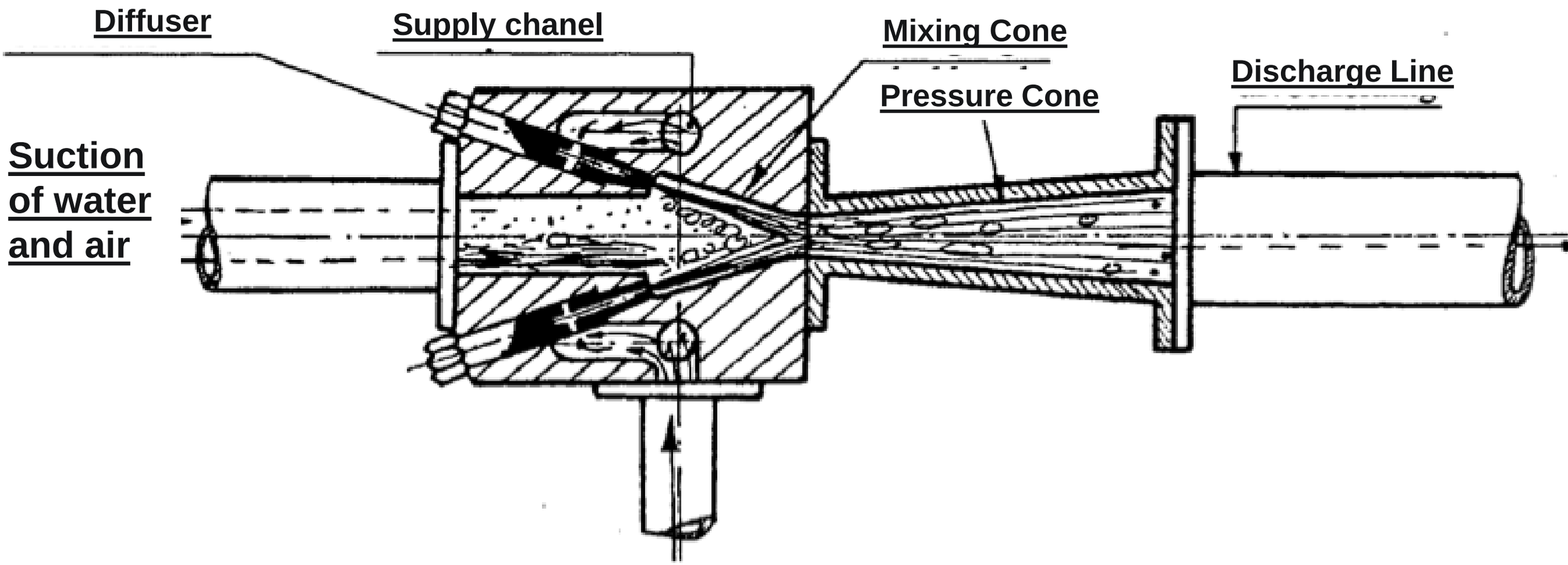
Kinetic Therm



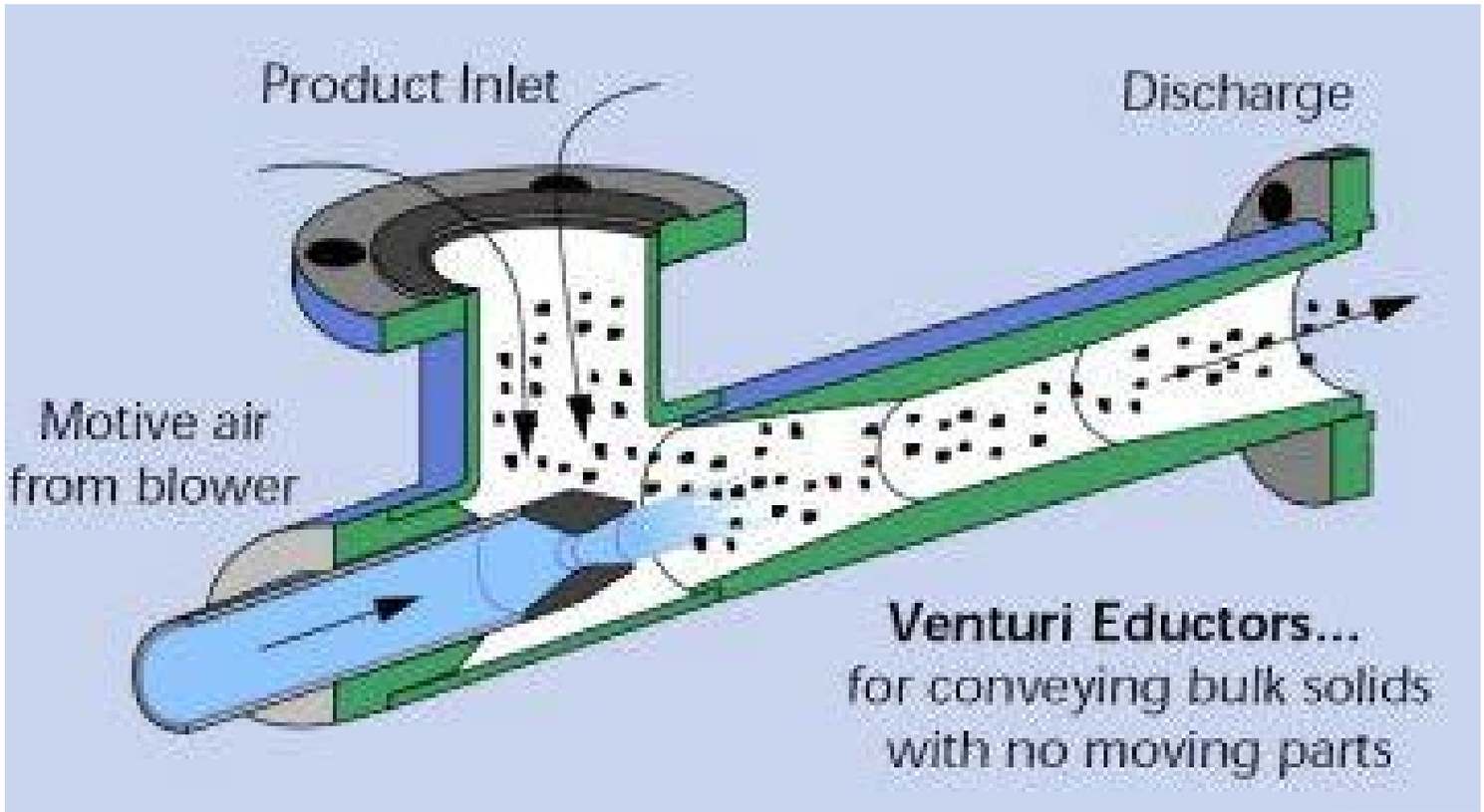
Air jet – Air Ejector

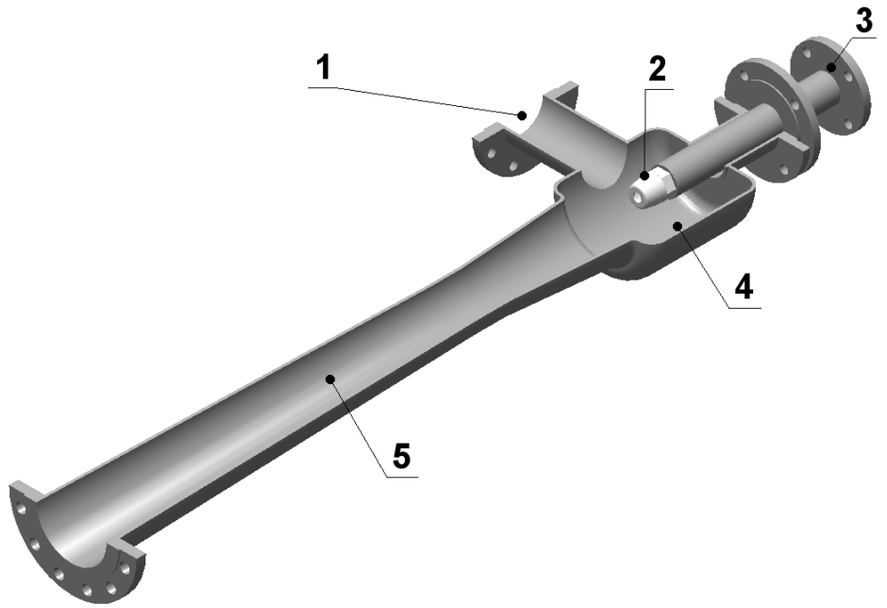


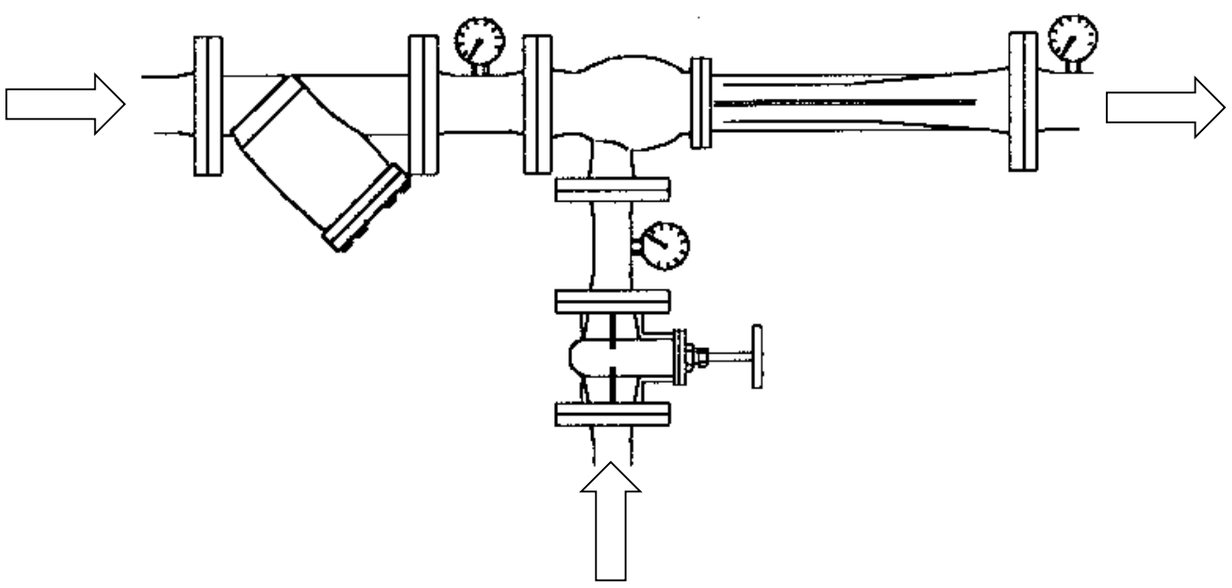
Water jet – Air/ Water Ejector

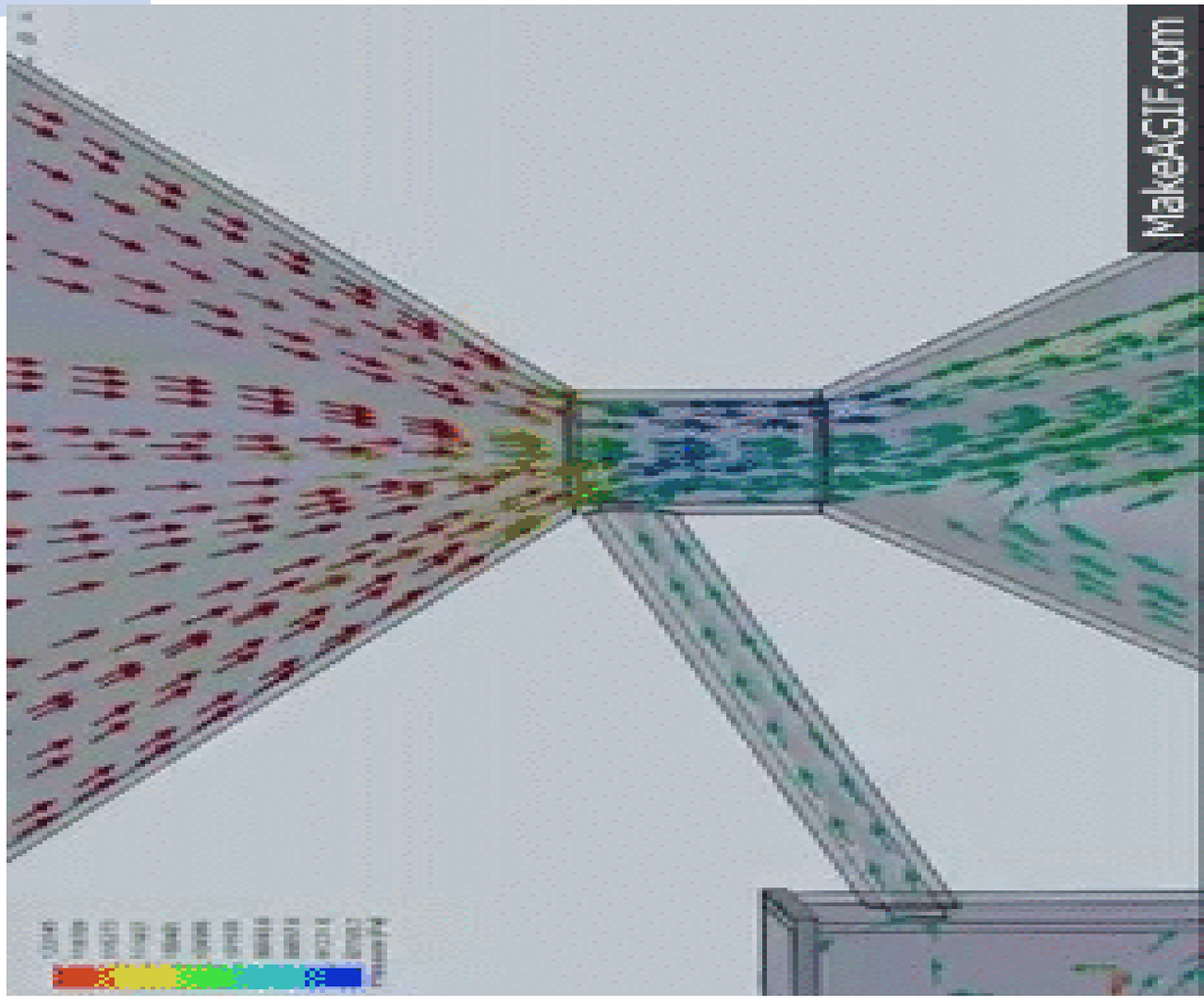


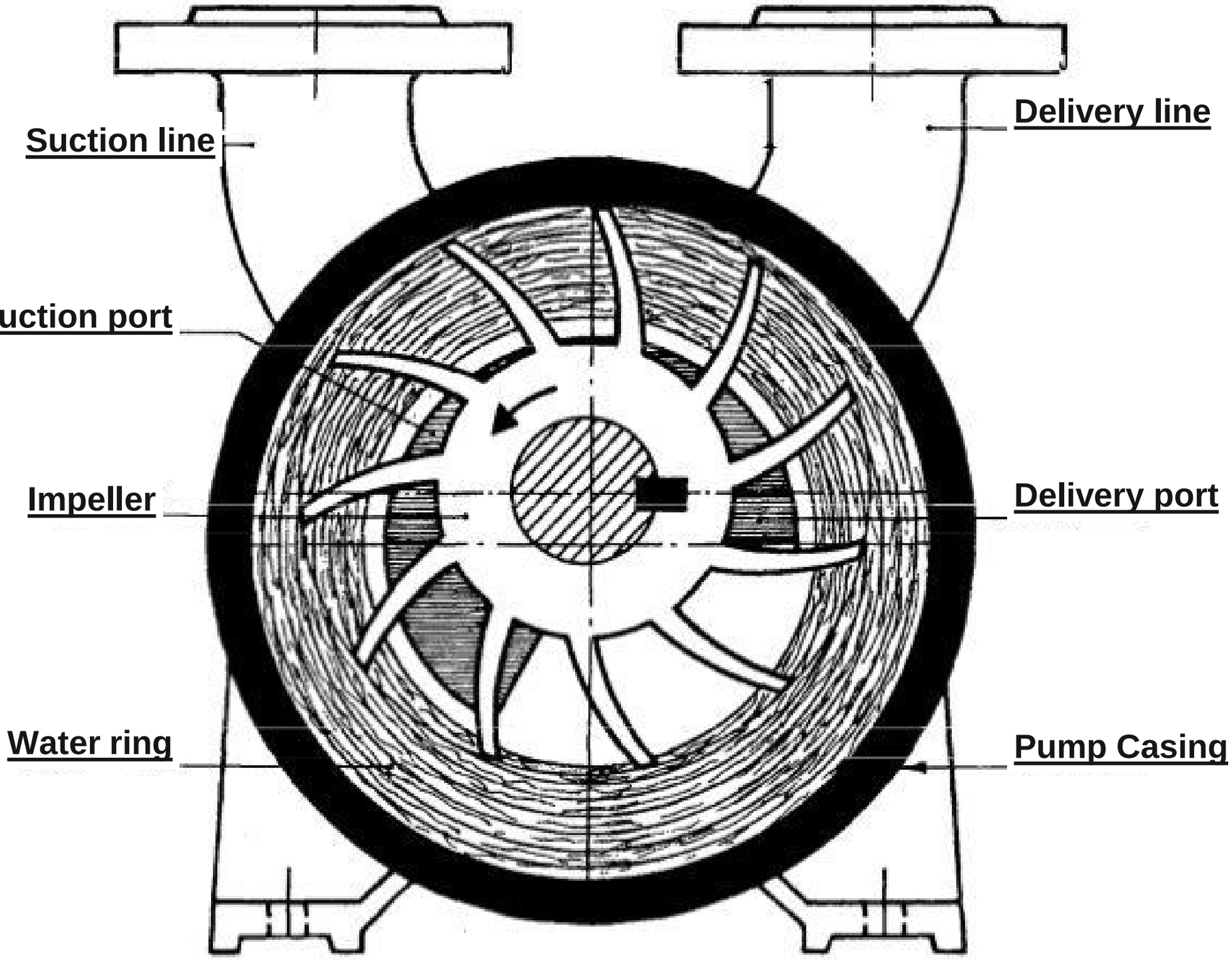
Water jet – Air/ Water Ejector


Product Inlet
Discharge
Motive air
from blower
Venturi Eductors...
for conveying bulk solids
with no moving parts

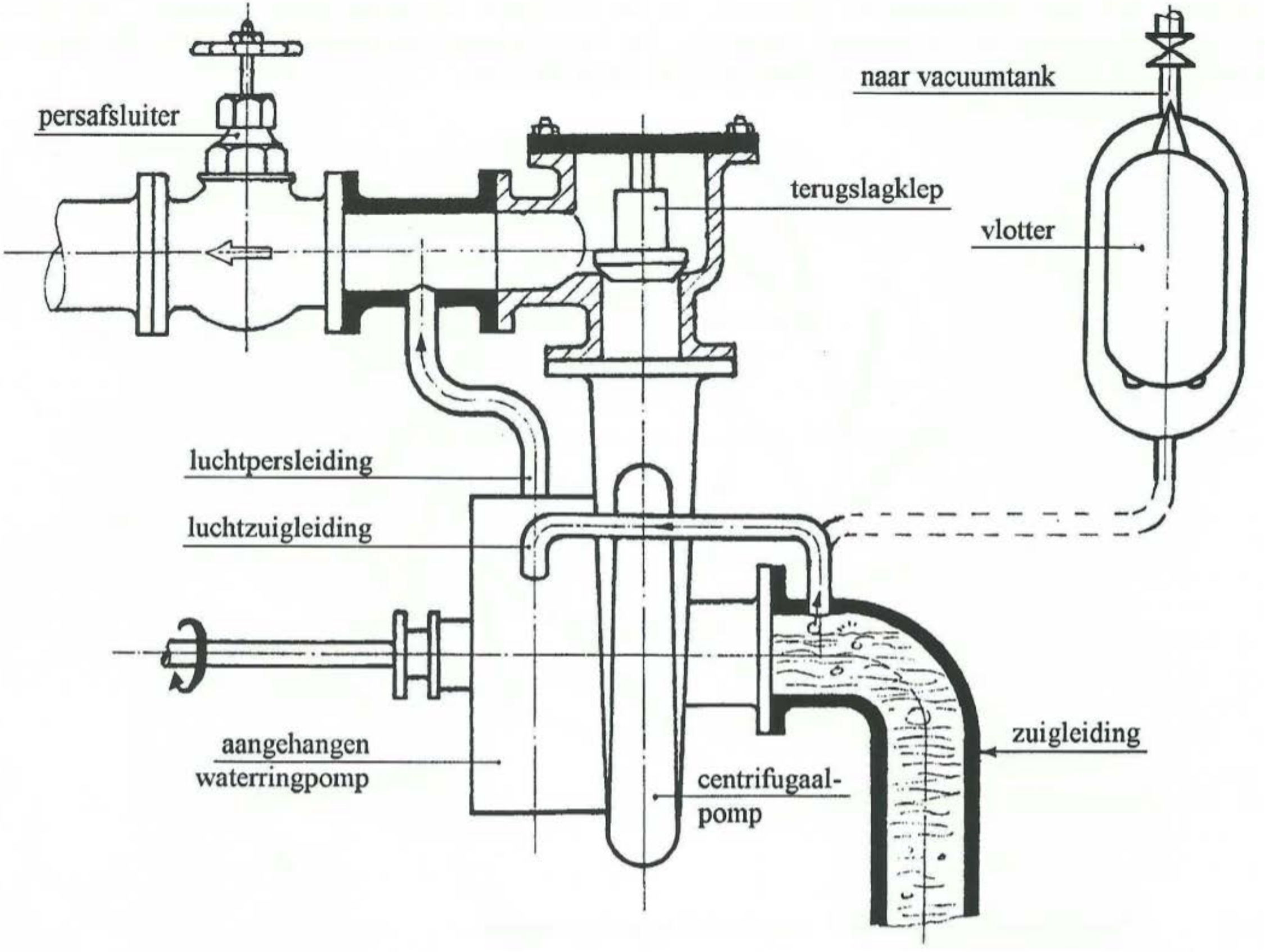

1
2
3
4
5




MakeAGIF.com



Waterring pump


naar vacuumtank
persafsluiter
terugslagklep
vlotter
luchtpersleiding
luchtzuigleiding
aangehangen
waterringpomp
centrifugaal-
pomp
zuigleiding