

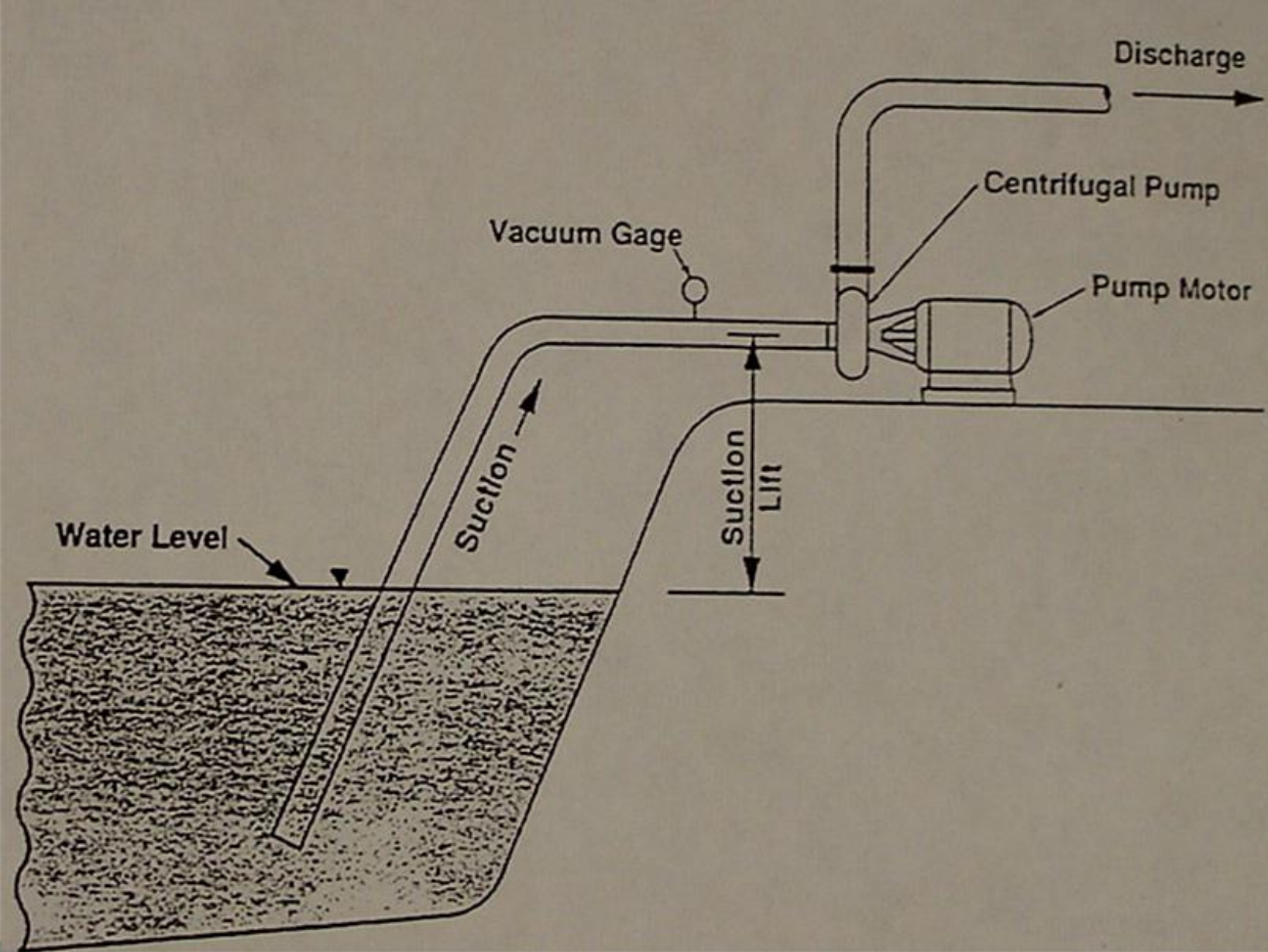
POMPAJ TESİSLERİ ve MAKİNALARI

Prof. Dr. Davut KARAYEL

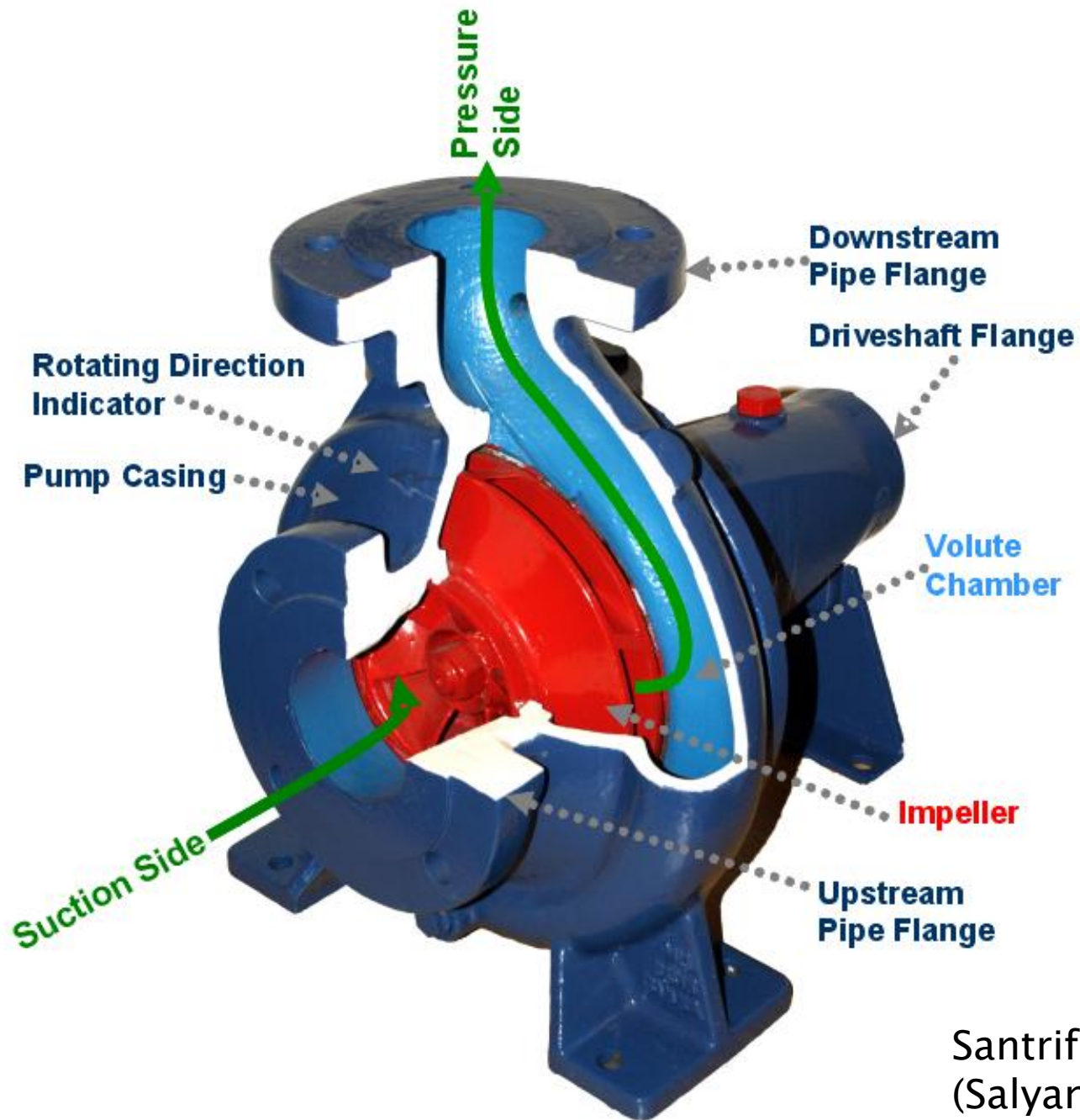
Akdeniz Üniversitesi

Ziraat Fakültesi

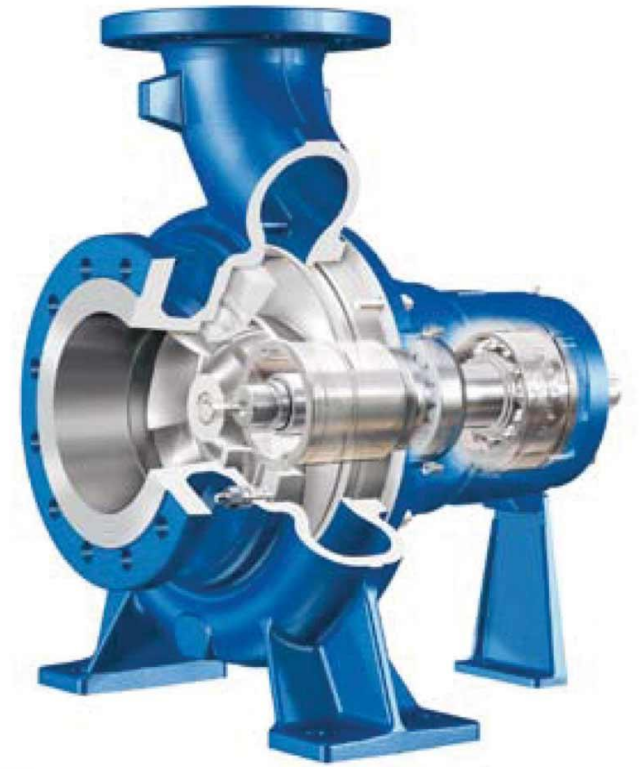
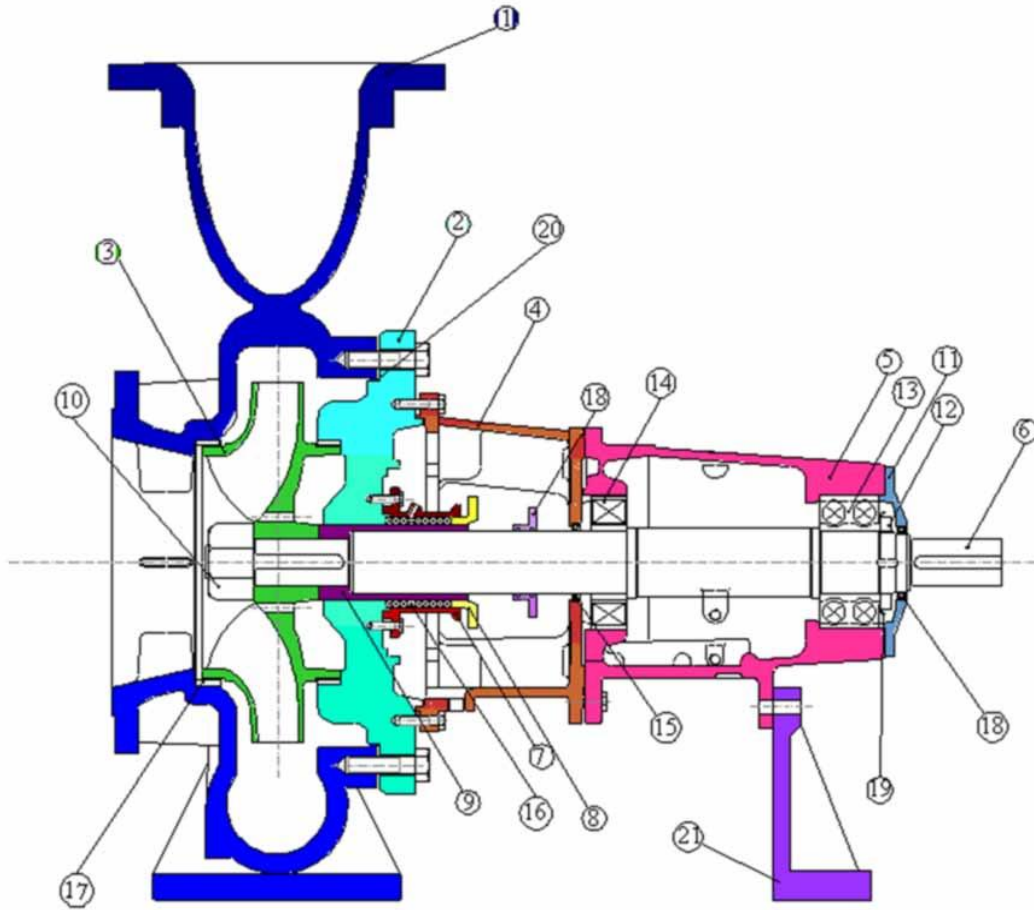
Tarım Makinaları ve Teknolojileri Mühendisliği Bölümü



Yatay eksenli tipik bir pompaj tesisi

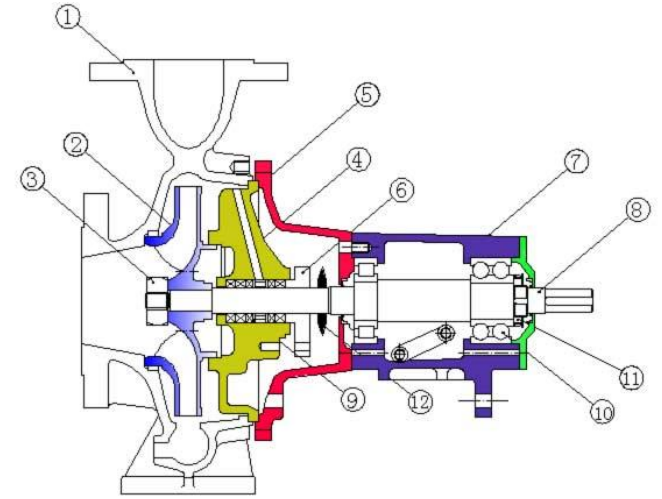


Santrifüj pompa
(Salyangoz gövdeli)



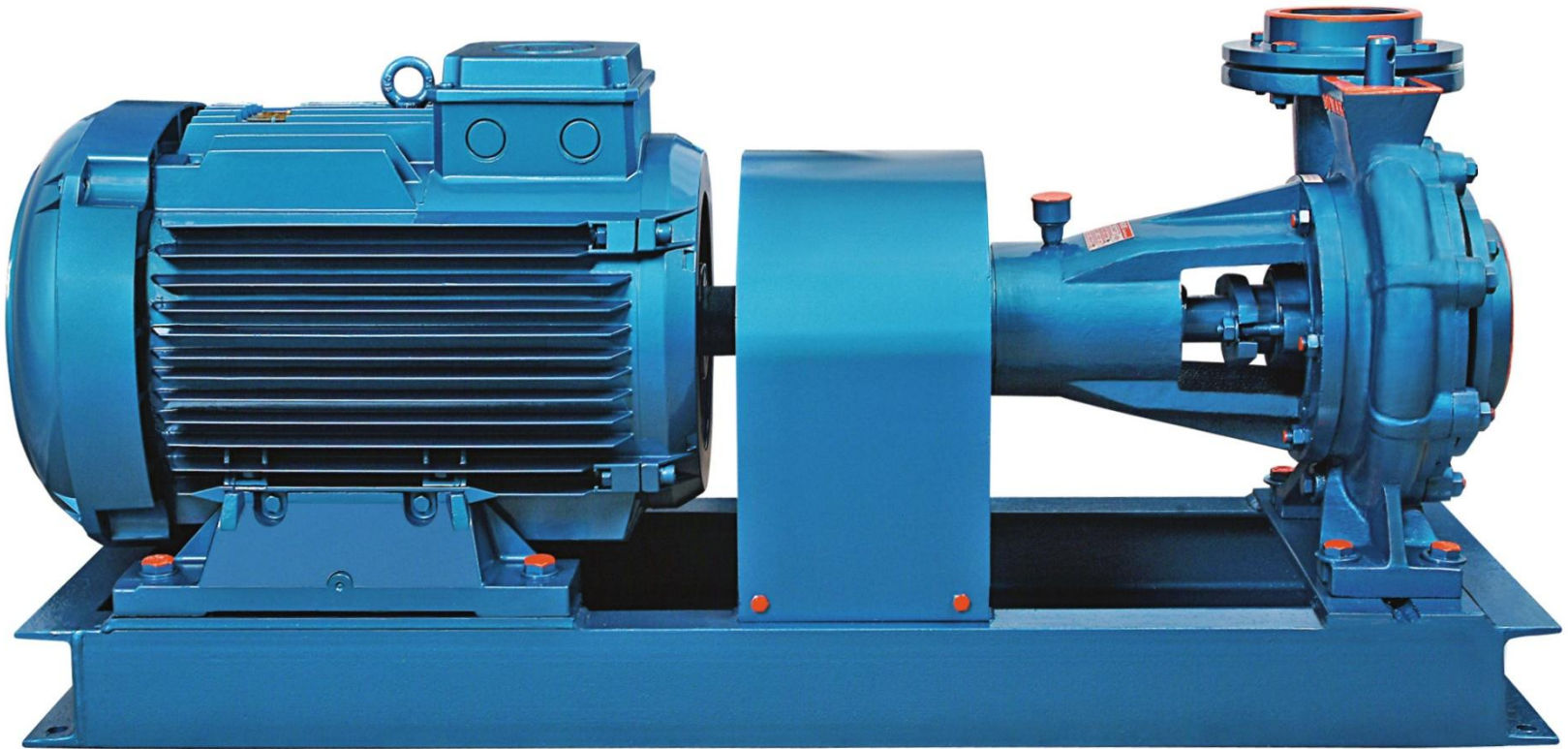
- | | |
|-----|---------------------------|
| 1. | POMPA GÖVDESİ (SALYANGOZ) |
| 2. | SALMASTRA KUTUSU |
| 3. | POMPA FANI |
| 4. | ARA PARÇA |
| 5. | YATAK TAŞIYICI |
| 6. | POMPA MİLİ |
| 7. | SALMASTRA YUVASI |
| 8. | SALMASTRA BASKI KAPAĞI |
| 9. | SALMASTRA BURCU |
| 10. | POMPA MİL SOMUNU |
| 11. | BİLYA BASKI KAPAĞI |
| 12. | RULMAN SOMUNU |
| 13. | KAPLIN TARAFI RULMANI |
| 14. | FAN TARAFI RULMANI |
| 15. | ARAPARÇA YAĞ KEÇESİ |
| 16. | FENER HALKASI |
| 17. | FAN AŞINMA HALKASI |
| 18. | REFLEKTÖR |
| 19. | RULMAN SOMUN PULU |
| 20. | SALMASTRA KUTUSU O-RİNG İ |
| 21. | YATAK ALTLIĞI AYAĞI |

Santrifüj pompa kesit görünüşü
(Salyangoz gövdeli)

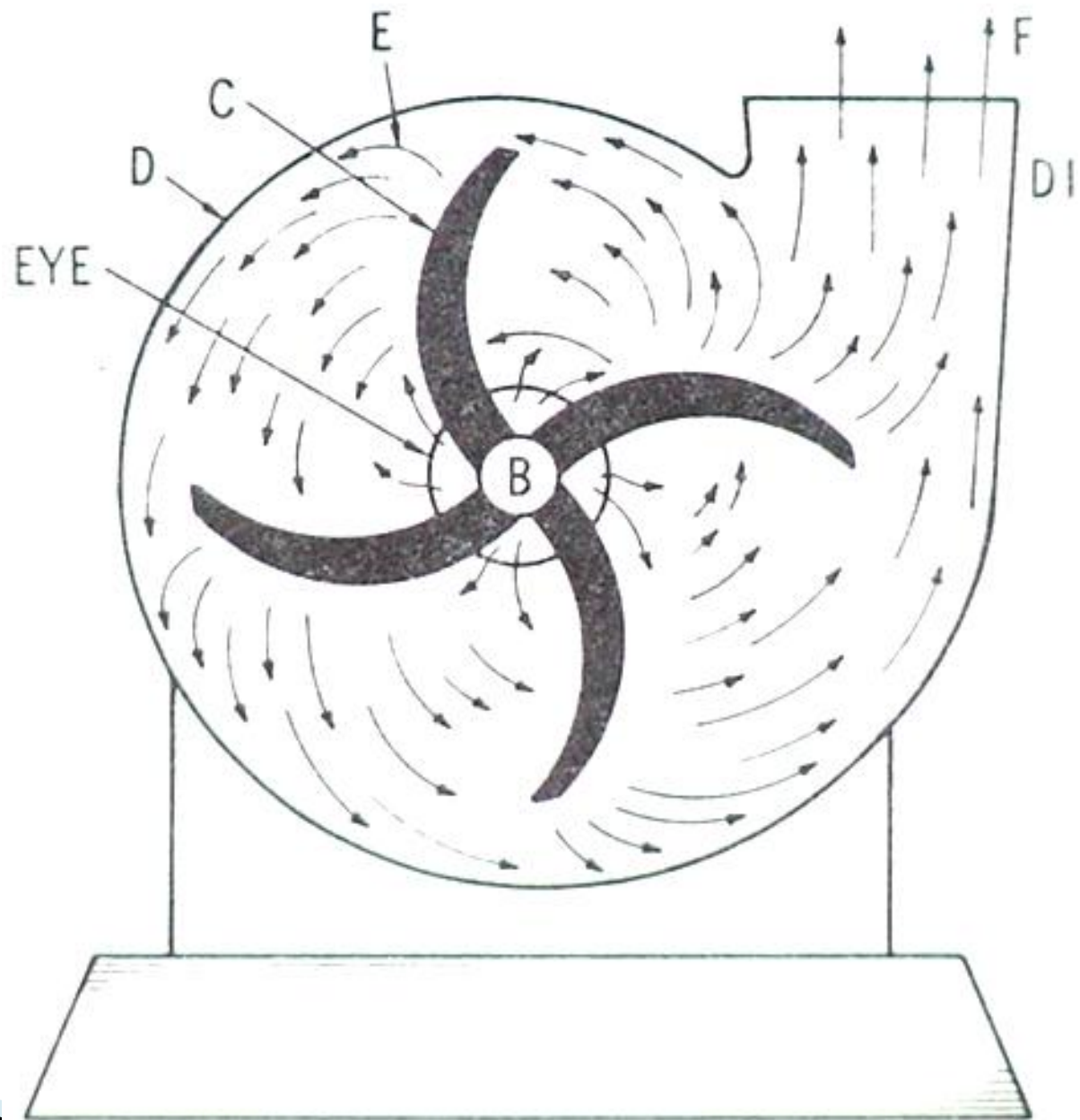


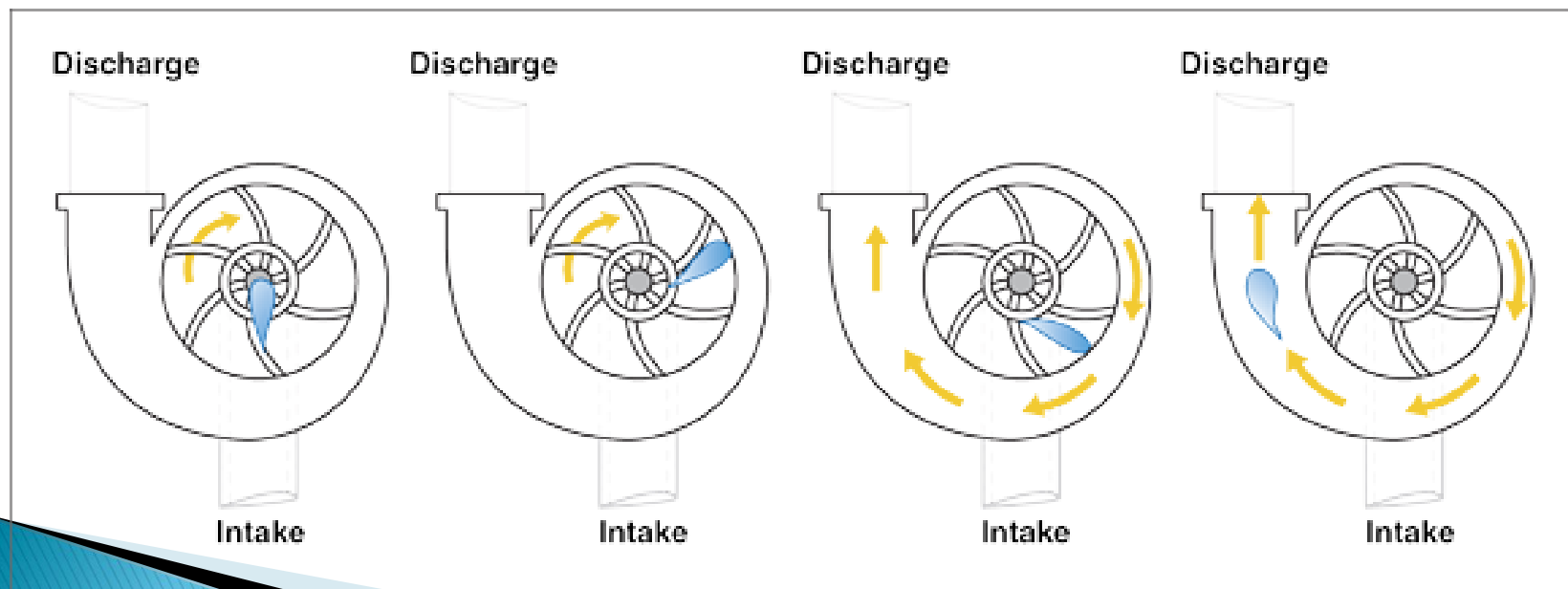
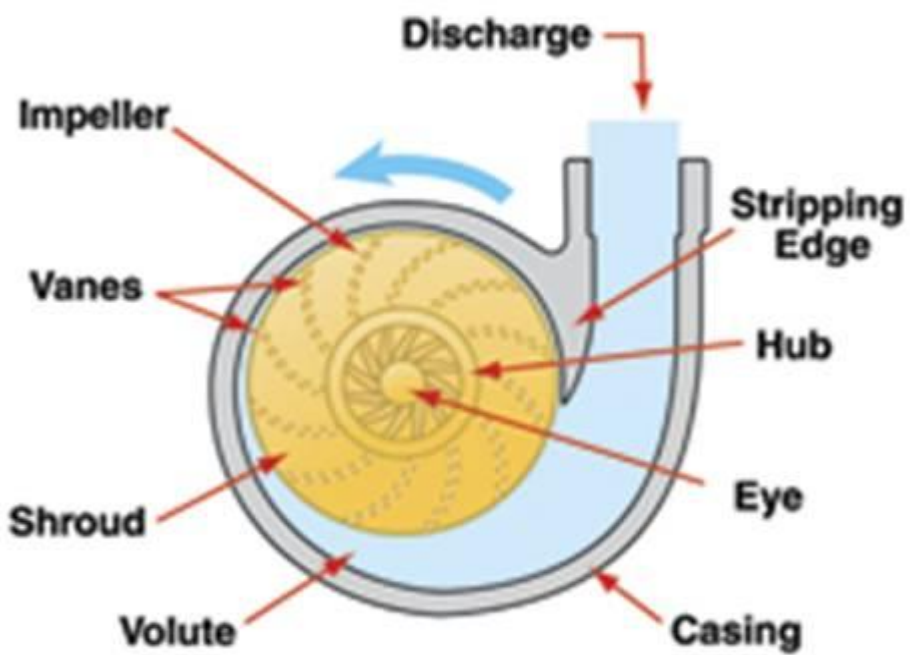
1. **POMPA GÖVDESİ**
2. **POMPA FANI**
3. **FAN SOMUNU**
4. **SALMASTRA KUTUSU**
5. **ARA PARÇA**
6. **SALMATRA BASKI KAPAÇ**
7. **YATAK TAŞIYICI**
8. **POMPA MİLİ**
9. **FENER HALKASI**
10. **POMPA RULMANI**
11. **RULMAN SOMUNU**
12. **REFLEKTÖR**

Santrifüj pompa kesit görünüşü
(Salyangoz-volüt gövdeli)



Santrifüj pompa (Salyangoz gövdeli-
Elektrik motoru tahrikli)







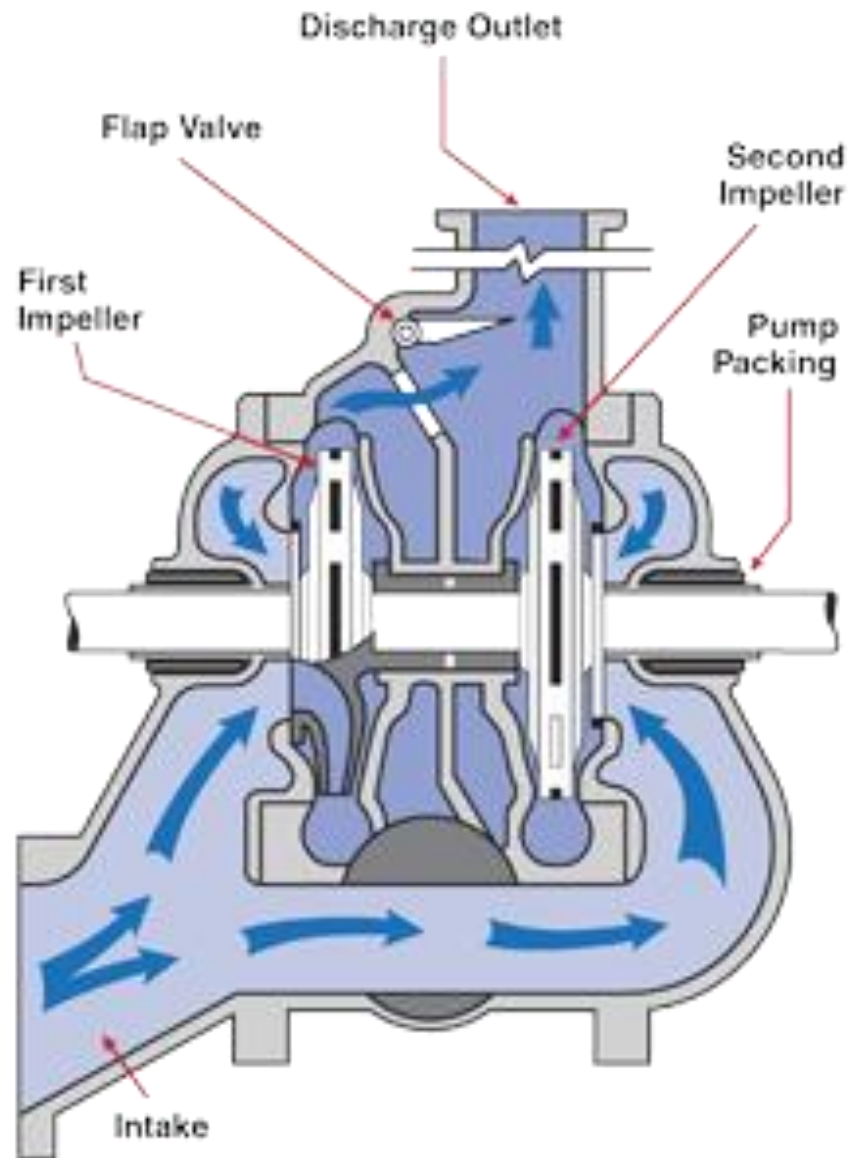
Kademeli santrifüj pompa (difüzör gövdeli)



Kademeli pompa kesit görünüşü

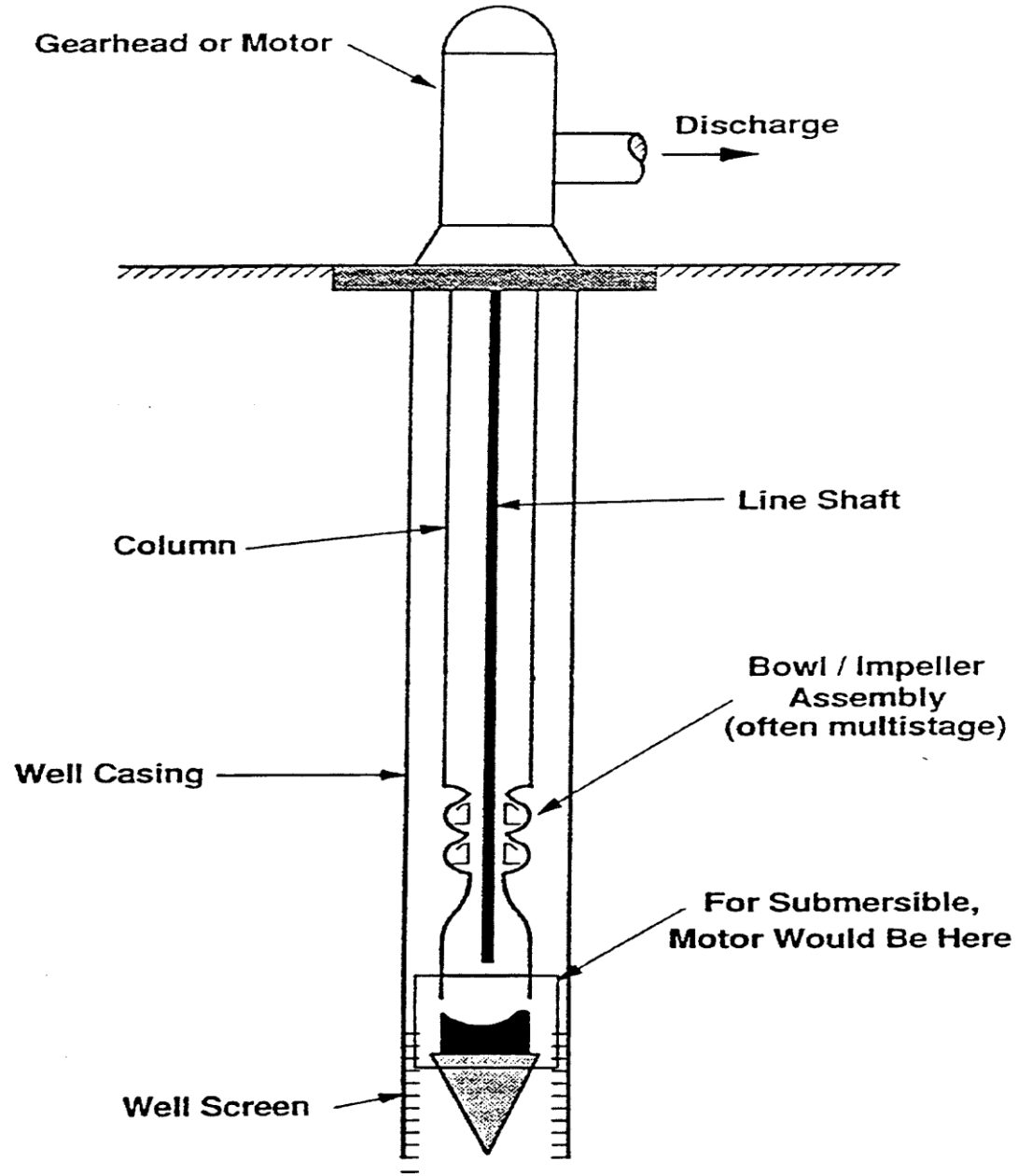


Transfer Valve Volume Operation





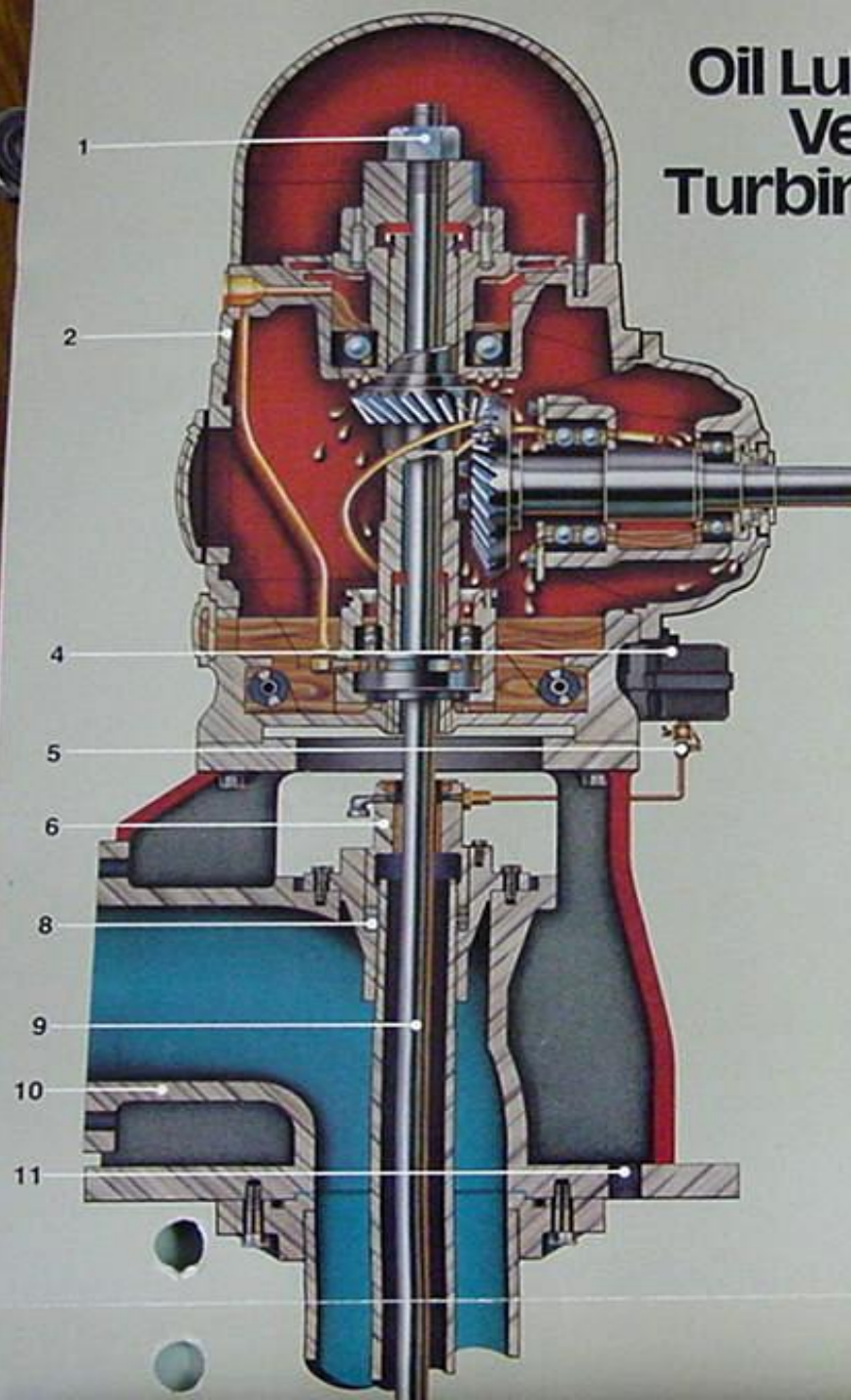
Kendinden emişli santrifüj pompa



Derin kuyu pompası



Oil Lubricated Vertical Turbine Pumps





Dalgıç Pompa

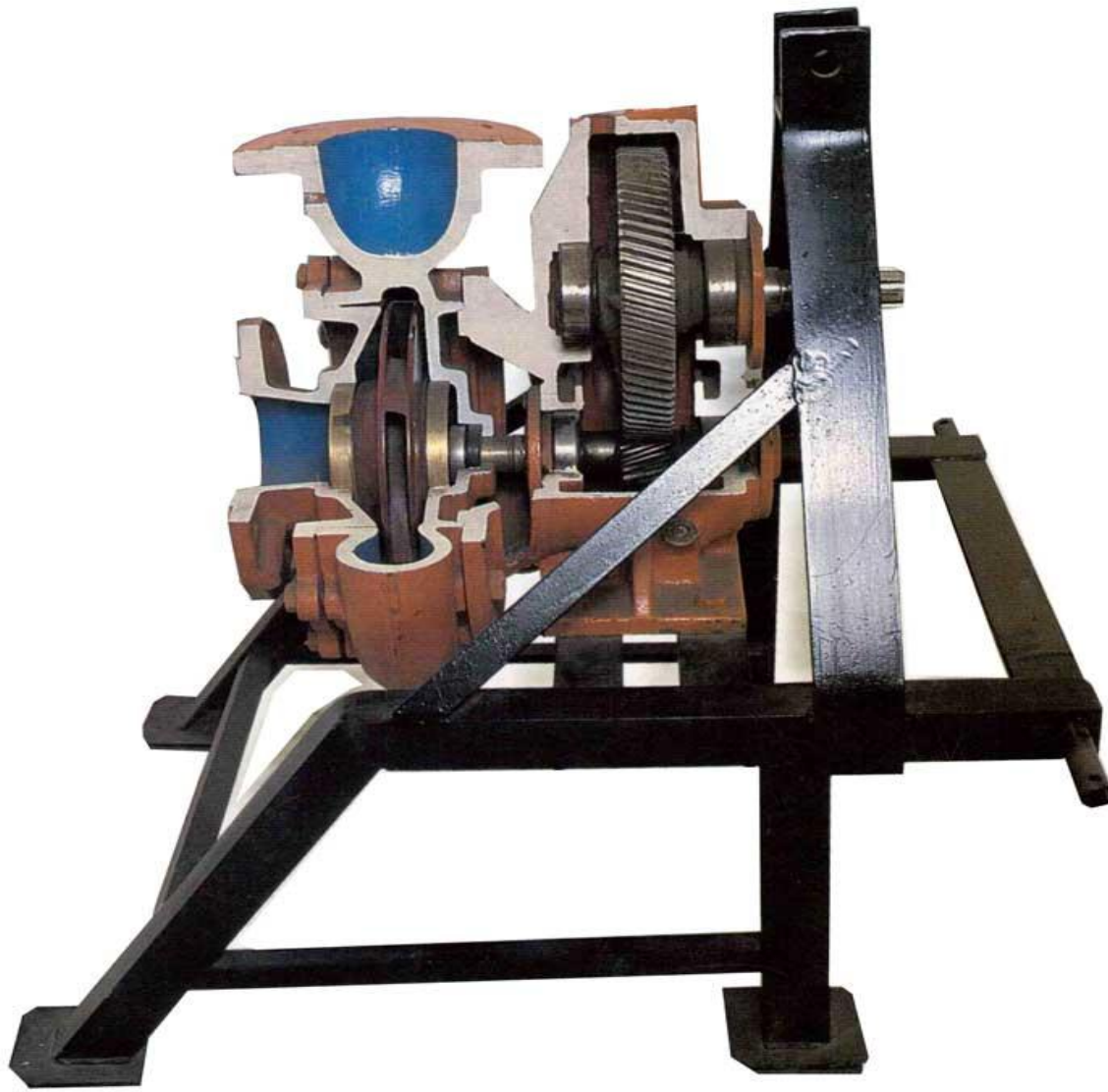


6 " Dalgıç pompalar





Traktör kuyruk mili ile tahrik edilen santrifüj pompa



Şanzuman ve pompa kesit resmi

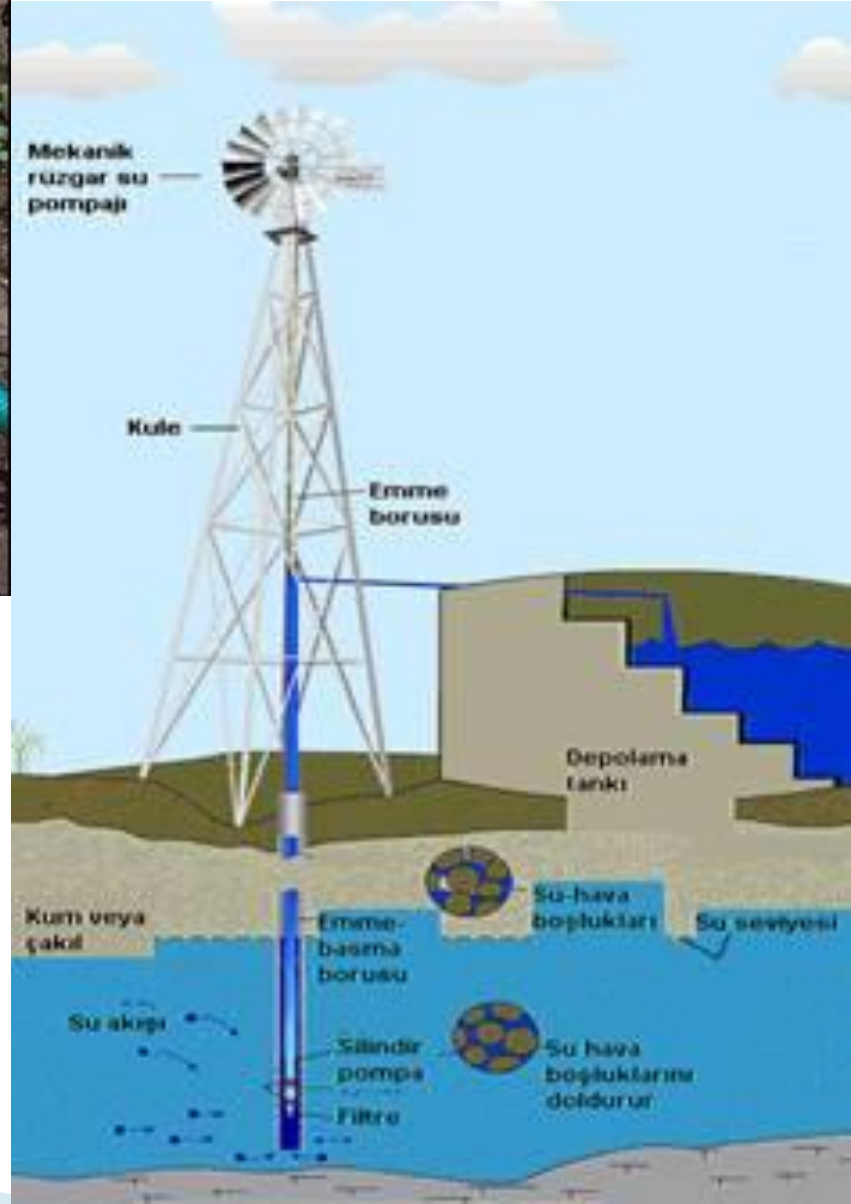
Web: <http://wftractor.com>
Weifang Zhongzan



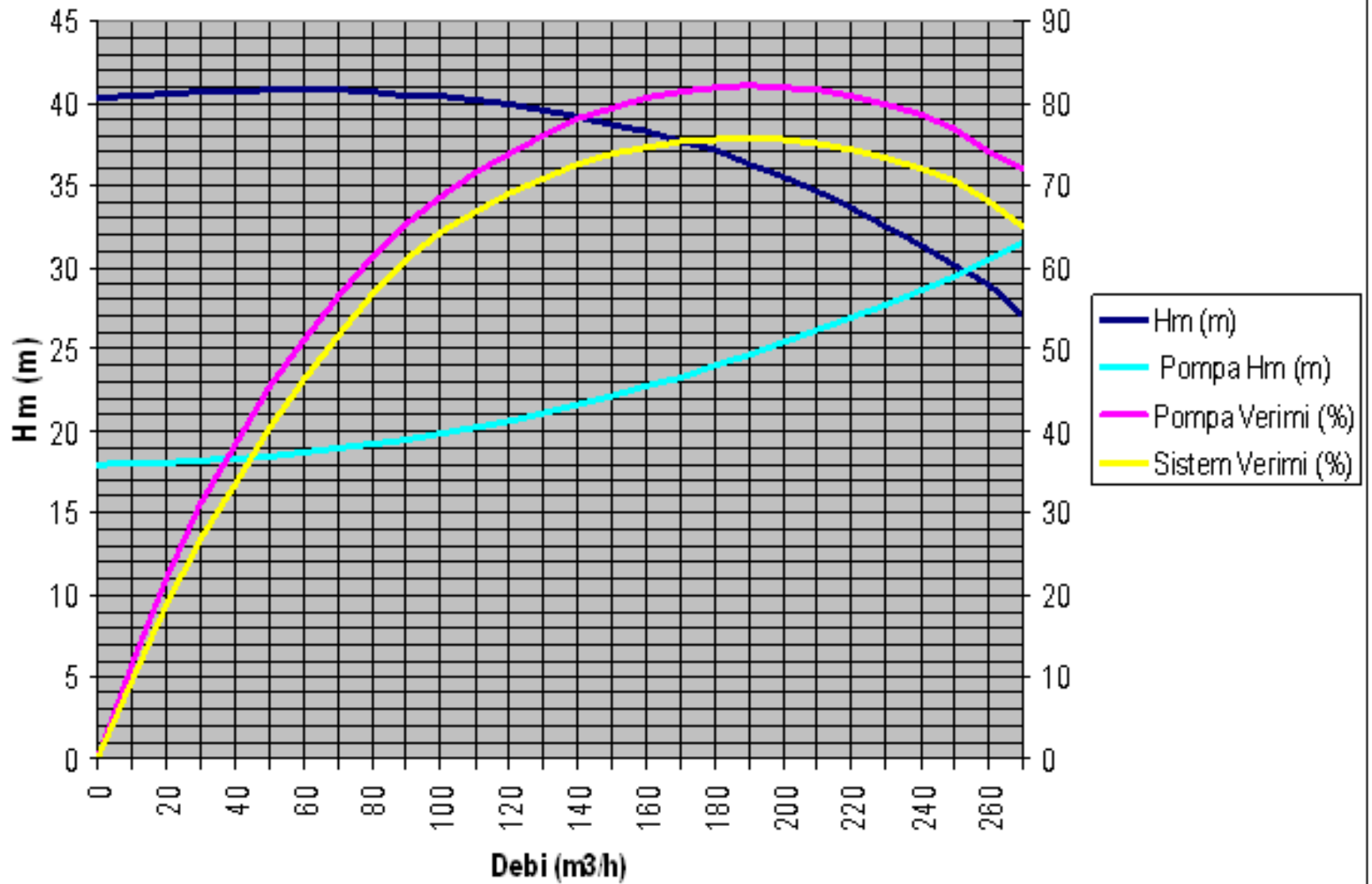
Kayıř kasnak mekanizması ile
tahrik edilen santrifüj pompalar



İçten yanmalı bir motor ile tahrik
edilen santrifüj pompalar

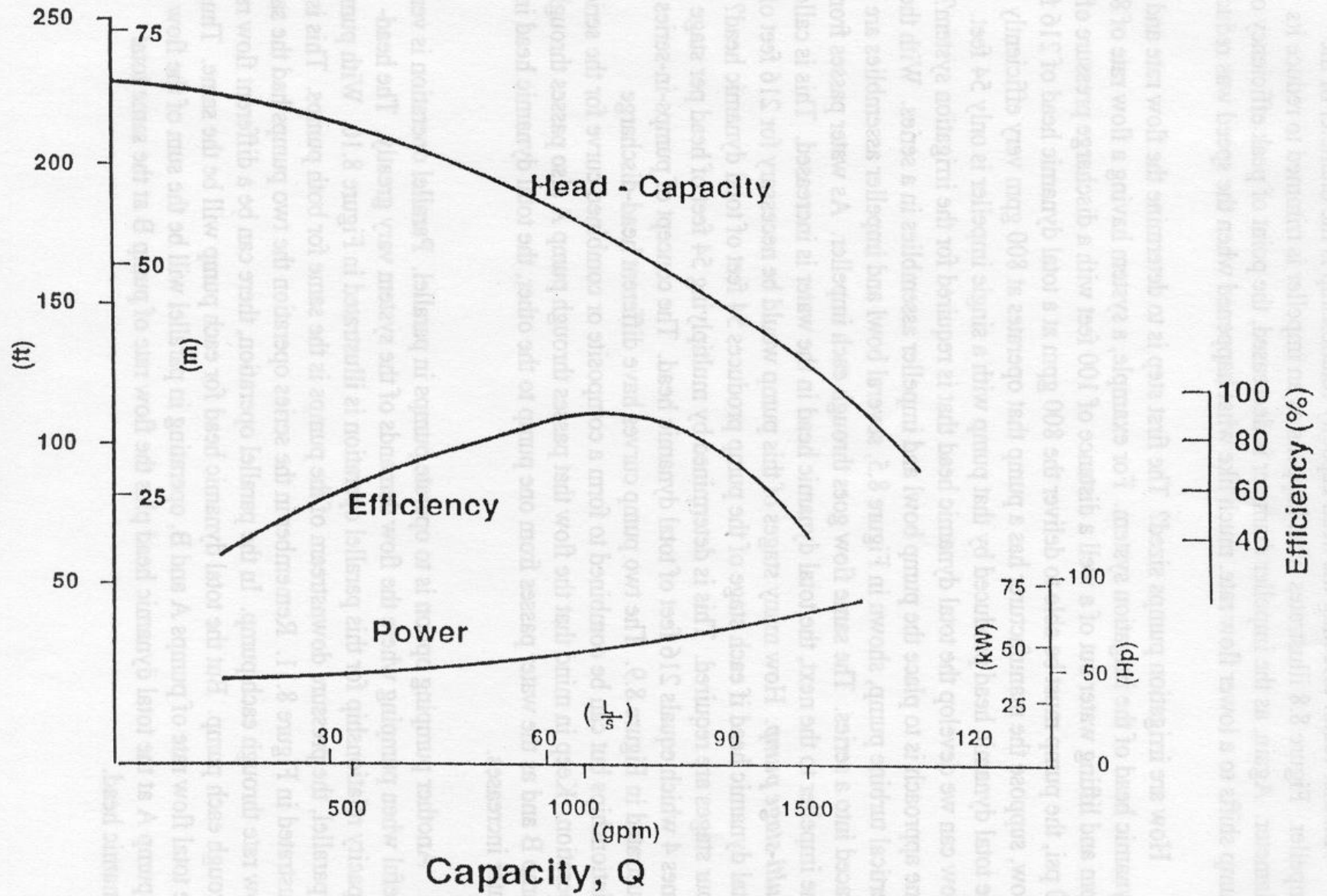


Güneş ve rüzgar enerjisi kullanılarak pompaların tahrik edilmesi



Pompa ve tesis karakteristik eğrileri

Total Dynamic Head





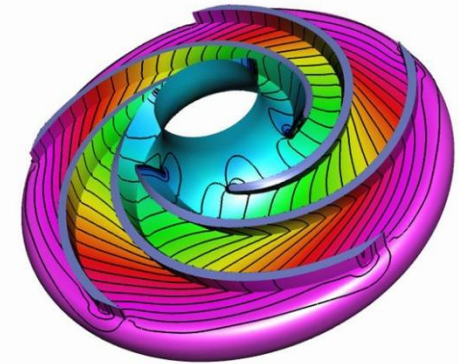
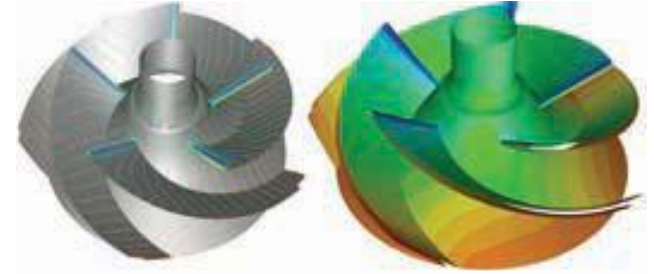
Kapalı tip



Yarı açık tip



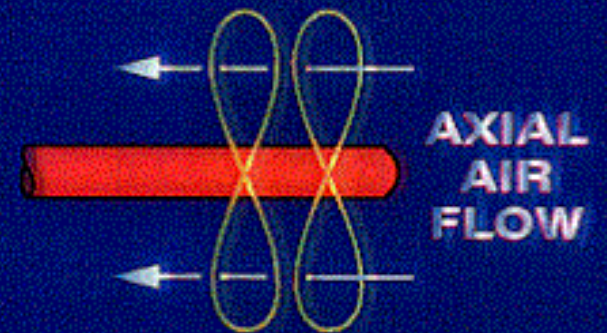
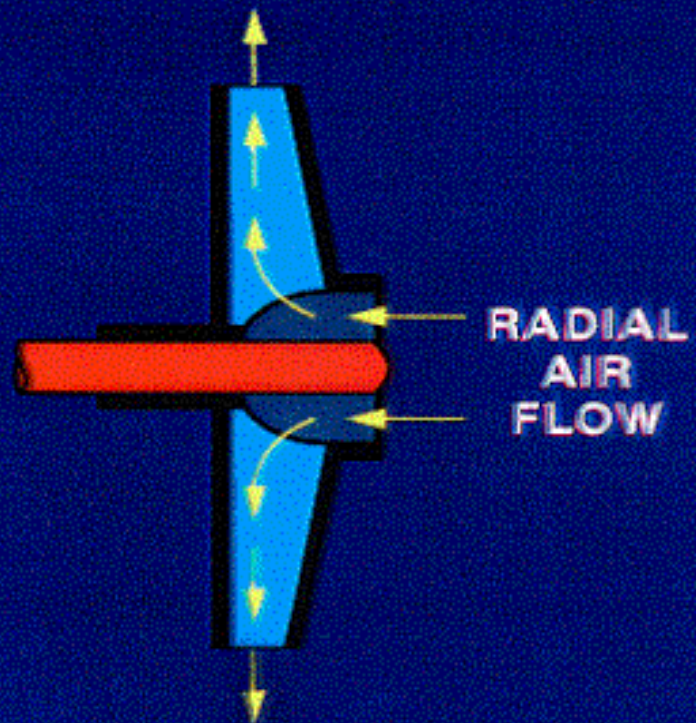
Açık tip



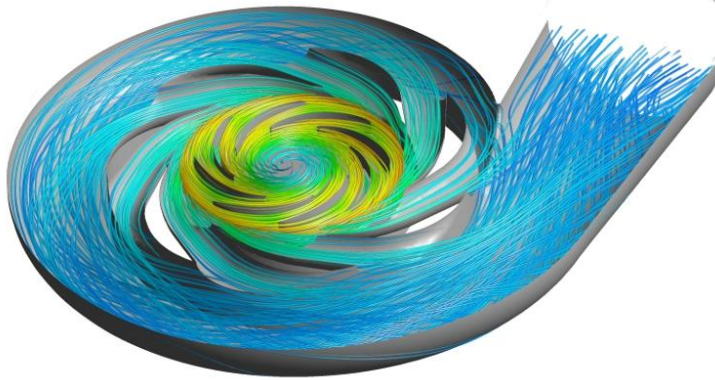
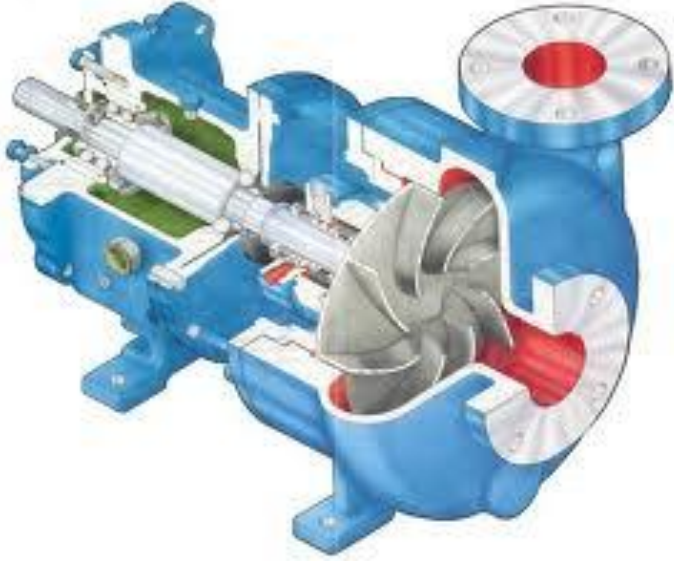
Yarı açık tip

Kapalı tip

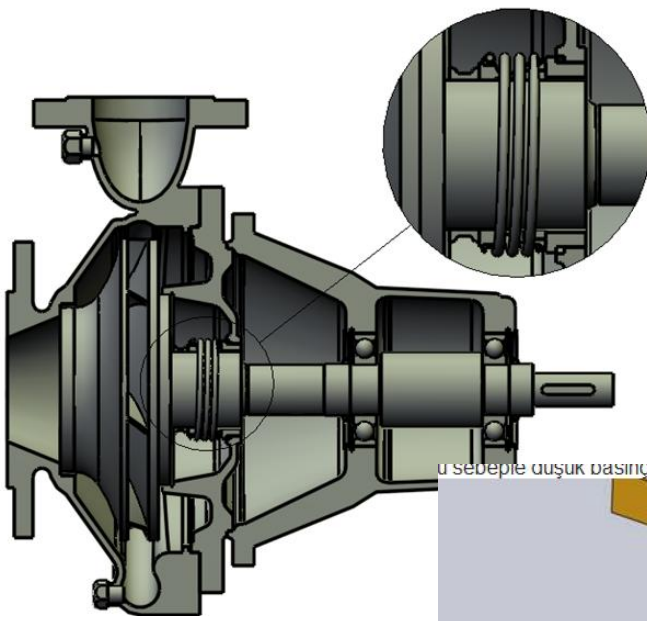
ÇARKLAR



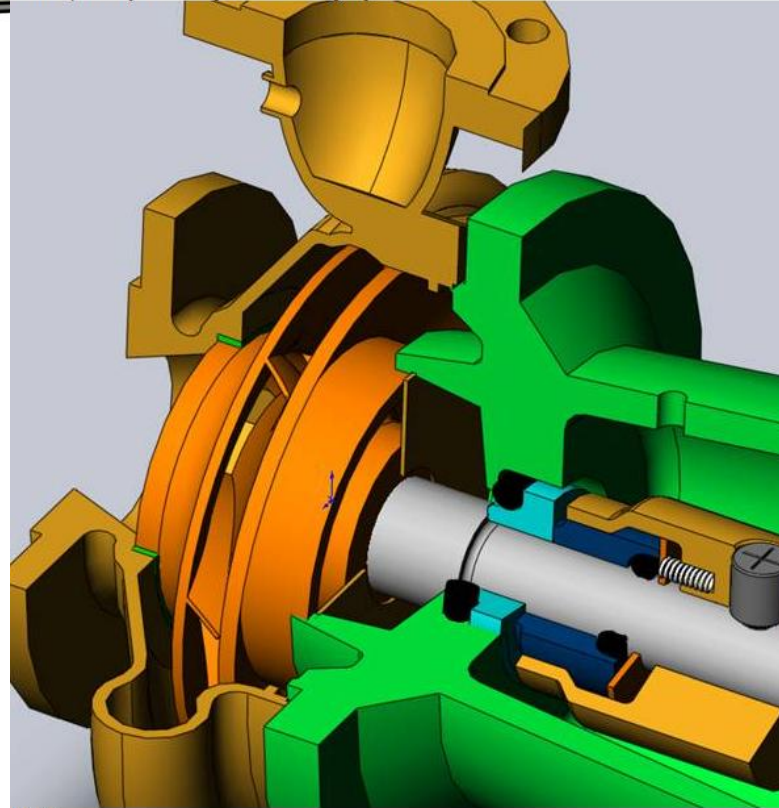
PROPELLER



ÇARKLAR



u sebeple düşük basınç limitlerinde çalışabilmektedir.

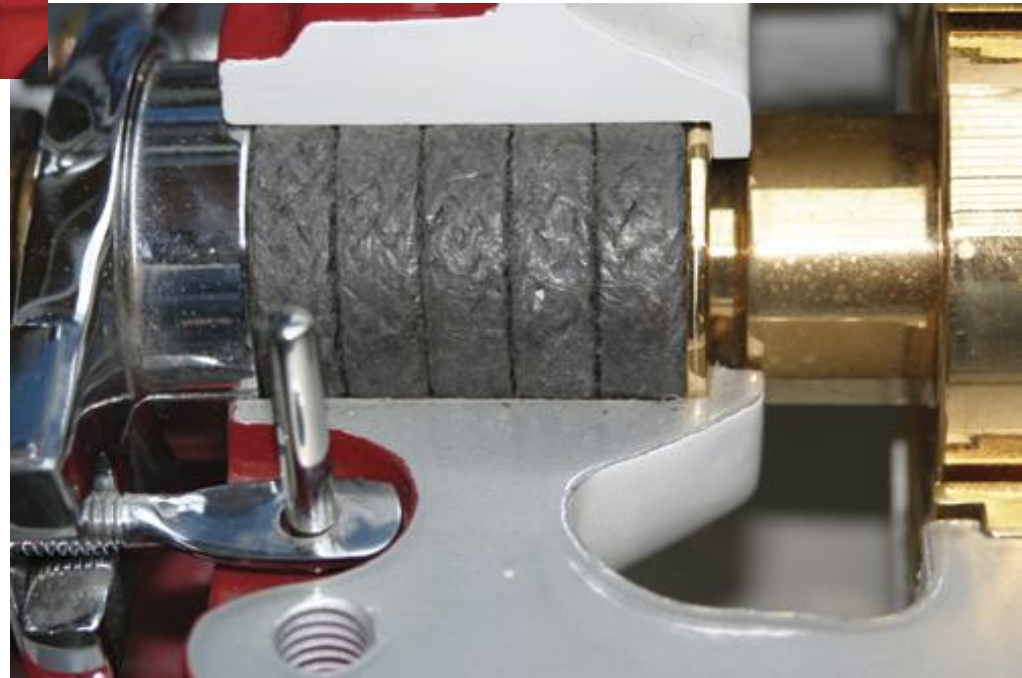


Şekil 2

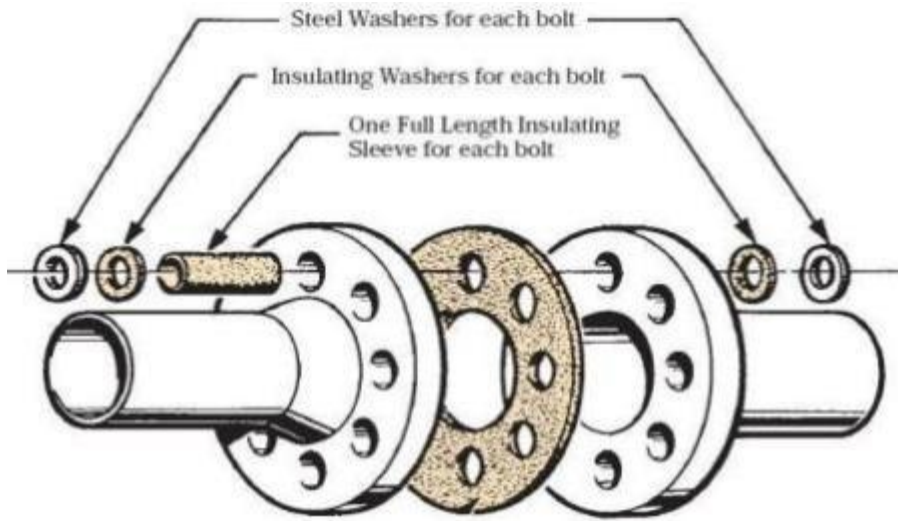
Şekil 2'de dıştan montaj bir mekanik salmastra görülmektedir. Şekilden de görüleceği gibi mekanik salmastranın pompalanan akışkanla temas eden tek parçası sabit arçasıdır. Mekanik salmastranın diğer bileşenleri küçük sızıntılar olduğu durumlar hariç pompalanan akışkanla hiçbir şekilde temas etmez ve aşındırıcı akışkanlarla çalışıldığında bu mekanik salmastranın ömrünü uzatır.



Salmastra kutusu



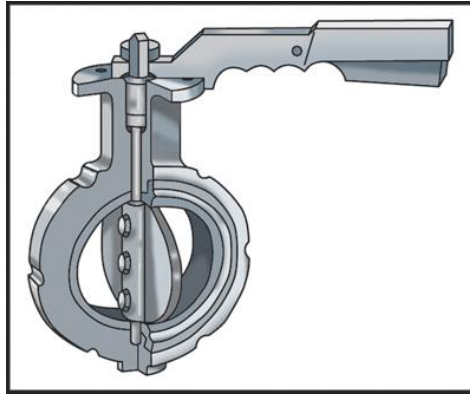
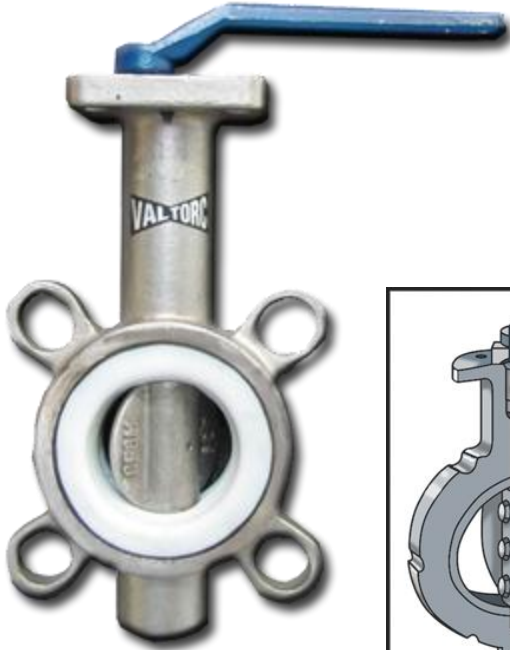
**Salmastra
kutusu**



FLANŞLAR



Sürgülü
vana



Tablalı
vana



Küresel
vana

VANALAR



Dip klapesi ve
süzgeç



Kelebek klape



KLAPELER