

MCHE 531 Pump technology

1. Introduction to pumps ,basic definitions of pumps pressure and head, static head and pump power
2. Classification of pumps
3. Pipe system curve application
4. General method for determining total head in a system with multiple inlets and outlets
5. Centrifugal pump theory- General Performance Characteristics -pump performance curves- operating point- discharge flow regulation
6. Impeller diameter selection
7. Pump similarity law -speed variation
8. Parallel and series operation of pumps- multi stage pumps.-axial thrust
9. Viscosity correction description
10. Pump cavitations and NPSH,
11. Pump specification
12. Program selection