

Birzeit University
Mechanical & Mechatronics Engineering Department
Thermal fluid engineering ENMC4411
Homework 5
Chapter 5 Pumps-Fans -Compressors

Instructors: Dr. Afif Akel

First semester 2021-2022

Assignment:

Select an actual installed pump, fan or compressor and for such system give the detailed information requested below.

Case study or system description:

Location, function, fluid, schematic of system, etc.

Technical information:

Brand, manufacturer, power, efficiency, pressures, flow rates, characteristic curves. Photos and pictures of the system and name plate, internet search about the product. Technical data sheet if possible. Cost information.

Report:

Cover page with course information and student name, case study description, technical information, references, appendices and supplementary information.

Hints:

- Some examples: water pumping stations, concrete pumping, air compressors and compressed air systems, heavy hydraulic machines, HVAC systems, air ventilation systems. Production processes involving such systems.
- Support material may include pictures, internet obtained data sheets, schematic diagrams.
- Internet case studies will be awarded the minimum grades, actual local case studies are the best.