

Obuda University

Bánki Donát Faculty of Mechanical and Safety Engineering

Institute of Mechatronics and Vehicle Engineering

Thermo- and Fluid-dynamical Engines

BGRRHGKTNC

1. **Air compressors:** Single-stage air compressor. Indicator diagram. Work done on the air.
2. **Air compressors:** Two-stage air Compressor. Indicator Diagram : Work done on the air. Ideal intercooler Pressure.
3. **Air compressors:** Effect of clearance on volumetric efficiency.
4. **Air compressors:** Actual indicator diagram of a single-stage air compressor.
5. **Internal combustion engines:** Otto cycle, efficiency, mean pressure.
6. **Internal combustion engines:** Diesel cycle, efficiency, mean pressure.
7. **Steam engines:** Hypothetical indicator diagram. Hypothetical mean effective pressure
8. **Steam engines** Hypothetical indicator diagram considering clearance and compression. Mean effective pressure.
9. **Refrigerators:** p - h diagrams. COP.
10. **Heat pumps:** COP.
11. **Gas-turbine:** Ideal Bryton cycle. p - v and T - s diagrams. Efficiency.
12. **Gas-turbine:** Real Bryton cycle. T - s diagram. Efficiency.

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