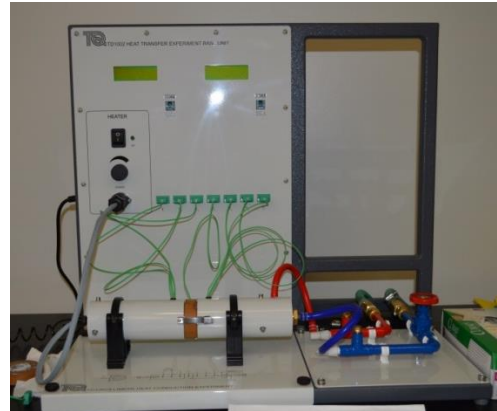


Thermo-fluids Lab – Garni 002



Refrigeration Cycle Training Bench

Demonstrates how a vapor-compression refrigeration cycle works.



Linear Heat Conduction Experiment

Measures temperature changes along different metallic specimens for heat conduction and thermal conductivity calculations.



TQ TD360 Heat Exchanger Service Module

Demonstrates how heat is transferred in a heat exchanger and evaluates heat exchanger performance.



TQ TD 1050 STEAM MOTOR and Energy Conversion

Heated water turns to steam and is fed into an engine which then produces energy. This process resembles a thermal power plant.



TQ TE19 Thermal Conductivity Experiment

Calculates the thermal conductivity of a material. The sample is heated up in a vacuum sealed environment.



TQ Centrifugal Pump Test

Calculates the power required in the process and pump efficiency depending on varying conditions.



TQ TD 1005 Free and Forced Convection

Demonstrates how different types of fin surface areas affect the dissipation of heat.



TQ Open Channel Flow

Simulates an open channel under various conditions. Can also demonstrate phenomenon such as the hydraulic jump that occurs in an open channel.



TQ Friction Loss in Pipe

Demonstrates the efficiency lost in a pipe due to friction of the flowing liquid.



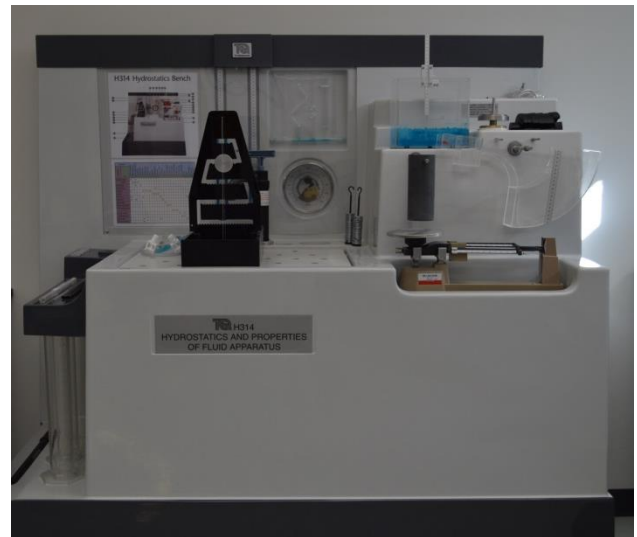
TQ Venturi Meter Apparatus

Demonstrates the varying pressure through a pipe when fluid is entering and existing.



H30 Pressure Measurement Bench

Demonstrates Bernoulli's theory that height is the only factor changes pressure.



Hydrostatic and Properties of Fluid Apparatus

This apparatus can determine fluid properties such as fluid density, specific gravity, surface tension and viscosity.



Wind Tunnel

Demonstrates how the pressure profile on an airfoil changes at different angles. It also demonstrates the aerodynamic properties that allow a plane to fly.

