* 1. Reconomizer
     1. General specifications
        1. Furnish and install the total energy recovery wheel (Acceptable manufacturers include: AiRotor, Innergytech inc., Novelaire, SGA, Thermotech).
        2. Section to incorporate energy recovery device in economizer section for compact configuration.
        3. Section to function in two modes: NORMAL operation and ECONOMIZER operation.
           1. NORMAL operation allows for minimum outside air to be drawn in and through the heat exchanger, mixing with a portion of return air to be recirculated into the supply airstream. The remaining return air will be put through the heat exchanger and exhausted out of the unit.
           2. ECONOMIZER operation allows for the outside air to bypass the wheel heat exchanger. No air will recirculate, and 100% outside air will be drawn in through the specific outside air economizer hood. All return air will go through an exhaust air economizer bypass damper and exit the unit through the hood which was used for minimum outside air during NORMAL operation.
  2. Energy Recovery Wheel
     1. General specifications
        1. Unit shall be supplied with a rotary heat exchanger capable of transferring sensible and/or latent energy
        2. The wheel exchanger shall be listed in the AHRI Certified Product Directory. The exchanger shall bear the AHRI Certified Product Seal.
        3. Performance data derived from laboratory testing or heat exchanger conditions shall be in accordance with ASHRE Standard 84. Performance shall be rated with AHRI Standard 1060 testing procedures.
        4. Sensible effectiveness, latent effectiveness, total effectiveness, pressure drop, exhaust air transfer ratio (EATR) and outside air correction factor (OACF) ratings shall be clearly documented with performance testing conducted in accordance with ASHRE Standard 84 and AHRI Standard 1060.
        5. Heat exchanger shall be provided with a maximum face velocity less than 1000 feet per minute. Face velocity calculations shall be based on the finned area of the exchanger.
        6. Fractional horsepower 3-phase drive motor.
        7. Optional VFD can be provided to modulate wheel speed.
  3. Filters
     1. Furnish 2-inch MERV 8 filters on entering return air and entering outside air faces of wheel heat exchanger.
     2. Filter media shall be UL 900 listed, Class I or Class II.
  4. Dampers
     1. The normal operation exhaust air damper shall be a combination louver/damper with drainable blade model.
        1. Greenheck EAC-401, or similar, to be acceptable.
     2. The outside air dampers, heat exchanger face damper, and recirculation air damper shall be controllable, low leakage dampers.
        1. Greenheck VCD series, Daikin Ultraseal Low Leak, Tamco 1500, or similar shall be acceptable.