

Explosion Proof Construction for a Water Treatment Plant

Waste Water Treatment Plants have special construction requirements. Standard materials and components are inappropriate for the corrosive and volatile environments found in these applications. XeteX has experience in this specialized area, and built this unit with a stainless steel heat exchanger, spark-proof aluminum blower, externally-mounted motor, all-copper hot water coil, and aluminum mesh filters with stainless steel filter racks. The unit was also

shipped with a stainless steel roof curb. This special construction allowed the facility owner to take advantage of energy recovery in a difficult environment. The result is a small load on the primary heating and cooling equipment and lower energy bills.

Performance Specification

Model:	XHS-50-60-RT-BP-HW-EX
Supply cfm:	9,000
Exhaust cfm:	9,000
Built:	November, 2009
Dimensions:	94" H, 222" L, 84" W
Weight:	18,500 lbs
Energy Recovered:	327 MBH (Winter) 104 MBH (Summer)
Design Conditions:	0 °F / 48% RH (Winter) 95 °F / 40% RH (Summer)



The unit, ready to be shipped.



The EA Blower and All-Copper HW Coil



Unit Features

- An XLT Type S Stainless Steel Flat Plate Exchanger operates at 67% effectiveness under Winter Design Conditions and at 63% effectiveness in Summer.
- The Double Wall cabinet accommodates the externally mounted blower and has an extra heavy duty 16 gauge Painted Galvanealed Steel Exterior, 22 gauge Galvanized Interior, and 1.5" thick Fiberglass Insulation. Frame is Welded Structural Steel and drain pans are all-welded 316 stainless steel.
- The 24" supply air Plenum Blower is has Airfoil Blades and is driven by a 7.5 hp TEFC motor. The 24" aluminum exhaust blower is Backwards Inclined, SWSI, and has Class 1/ Div. 2 Spark Proof construction. It is driven by a TEFC motor located out of the airstream.
- A HW Coil with a Stainless Steel frame and All Copper Fins and Tubes provides 370 MBH of heating capacity.
- Aluminum Mesh Filters in the exhaust airstream are held in place with Stainless Steel racks.
- The unit was shipped with a 14" Roof Curb constructed out of 316 Stainless Steel.