



Canton South High School

A new high school opens this month for students in Canton, Ohio. The 175,000SF facility, designed by Motter & Meadows Architects, features a 900 seat Auditorium, 2000 seat Gymnasium with Upper Level running/walking track, Auxiliary Gym, Locker Rooms, 2-story Academic Wing with central student work areas intended to reflect a “family room” atmosphere, wrestling & weight-lifting rooms and grand Event Atrium.

The HVAC system is housed within four (4) mechanical rooms and consists of twelve (12) indoor & outdoor air-handling units complete with hydronic heating and cooling coils, air-side economizer and energy recovery. A majority of the air-handling units utilize variable frequency drives for fan speed control to provide energy savings. The air distribution system consists of single duct VAV and fan-powered series VAV units with hydronic reheat coils for independent temperature control in each space.

Heating water is efficiently generated by (3) 2,500MBH gas-fired condensing boilers, and chilled water is produced by two (2) 275 ton roof mounted air-cooled packaged chillers. Both the heating and chilled water plants utilize variable speed pumping systems.

Specialty systems include hydronic radiant ceiling panels, Kitchen grease hood exhaust system with make-up air, duct-free mini splits for 24/7 operation in the technology labs and Science Lab fume hood exhaust systems.

