

Product Capacity:

Ethanol: 10 million gallons per year 95% alcohol: 700,000 gallons per year Wet Distiller's Grain: 48,000 – 53,600

tons per year

Syrup: 33,000 - 37,000 tons per year

Raw Material: Corn

History: Built 1996, Upgraded 2006,

Shut down 2015

Annual Material Consumption

Corn: 165,600,000 lbs Ammonia: 222,400 lbs Caustic: 1,038,166 lbs Sulfuric acid: 799,935 lbs

Utility Consumption

Natural Gas: 25,900 BTU / gal ethanol Electricity: 1 KW / gal ethanol

Major Equipment

- Centrifuge (2005)
- Beer Column (2006)
- Stripper Column (2006)
- Acid Reduction Column (2006)
- Rectifier Column (2006)
- Molecular Sieve Vessels (2006)
- Regeneration Receiver (2006)
- Hammer Mill A (2000) & B (2007)
- Condensate Separator (2006)
- CO2 Scrubber (2006)
- Liquefaction Tank A & B (1999)
- West Yeast Propagation Tank (2006)
- East Air Compressor (2014)
- Dilute Caustic Tank (2006)
- Liquefaction Tank (2006)
- Condensate Exchanger (2006)

For detailed plant information, contact Edward Zhang edz@phxequip.com

To discuss plants you are selling Jesse Spector jesse@phxequip.com

10 MM GPY Ethanol Plant







BRIEF PLANT DESCRIPTION

Phoenix Equipment currently has for sale a complete 10 MM gallons/year ethanol plant. The plant was originally commissioned in 1996, and upscaled around 2005 - 2006. Many equipment items have been replaced with new ones in the recent years. The new equipment is designed according to industrial standards for continuous operation (24 hours/day, 7 days/week). The plant includes all process areas: Grain Receiving and Storage, Corn Cleaning and Milling, Liquefaction and Cooking, Yeast Propagation and Fermentation, Distillation, Dehydration, Stillage Evaporation, Stillage Separation, WDG Storage and Shipping, Fuel Ethanol Storage and Loading, CIP System, and Chemical Storage. The plant yield is an average of 0.5 lb of anhydrous ethanol and 0.49 lb of WDG (wet cake) per lb of fermentable starch. Instrumentation is mainly Endress Hauser. Operation system is Siemens PCS7 installed in 2015.