

**ORIGINAL PRME GASIFIERS  
INSTALLED 1982-83  
PRODUCERS RICE MILL INC.  
STUTT GART, ARKANSAS**



**PRME NaturallyGas™ Fired Boiler**

The PRME Biomass Gasification Technology was originally developed to convert rice husks to a combustible gas for firing boilers and rice dryers. The syngas produced by the PRME gasifiers replaces natural gas, which has resulted in substantial savings to Producers Rice Mill, Inc.

The PRME Gasification System at Producers consists of two Model KC-12 gasifiers, each having an input capacity of 2.8 tons/hour on rice husks. One gasifier is close coupled to a conventional gas fired heat recovery steam generator to produce approximately 20,000 pph of process steam for Producer's rice parboiling facility. The boiler exhaust is directed to a vertical column rice dryer.

A second gasifier, also a Model KC-12, supplies approximately 26 million Btus/hour to large rotary parboiled rice dryer and three vertical column dryers.

Rice husks from the rice mill contain approximately 8 – 10% moisture and have a heating value of approximately 5,800 Btu/lb. The husks are conveyed pneumatically to a storage bin and then to the PRME system without any preparation.

Producers has been highly successful in marketing its production of rice husk ash to the steel industry in the US and Europe as an insulating topping for ladles and tundages. It is estimated that natural gas savings and revenues from rice husk ash have exceeded US\$65 million during the 32 years of operation from an initial investment of US\$2.0 million.

Producers employs one operator per shift to operate the two gasifiers and the boiler and perform preventive maintenance and testing of boiler water quality and ash quality.

The PRME gasification systems at Producers have operated around the clock for over 32 years with minimum maintenance and repairs.