

CPC's Bubbling Fluidized Bed Gasifier System

Community Power Corporation, with the assistance of T.R. Miles Technical Consultants and Iowa State University, designed and fabricated the bubbling fluidized bed gasifier shown below under a Phase II DOE SBIR for on-farm conversion of poultry litter to heat and power.



Nominally rated at 500,000 Btu, the system has also gasified other low bulk density materials such as sawdust and corn stover. The gas cleanup system features a moving bed granular filter for hot gas cleanup (Designed by ISU and manufactured by Energy Products of Idaho), and also a nickel catalyzed honeycomb monolith for tar cracking/reforming by partial oxidation. The system also includes a heat recuperator to boost gasification efficiency with air pre-heat