Praj Unveils Lignocellulose to Bioethanol Technology

According to a recent press release, Praj Matrix, the Innovation Center (a Division of Praj Industries Limited) has commenced operations of its lignocellulose to ethanol pilot plant located in Urawade about 20 kilometers west of Pune, India.

Initial trials at the pilot plant operations have demonstrated the feasibility of producing ethanol from sugarcane baggase. The pilot plant trials have validated the work done at the laboratory scale and have validated the scale up criteria used to design the pilot plant. Commencement of the pilot plant operations has enabled Praj to join an elite global group of lignocellulose to ethanol players.

The lignocellulose to ethanol pilot plant is capable of treating up to 2 metric tons per day of various feedstock such as sugarcane bagasse, and other agricultural residues like corn cob, stover grasses, etc. Over the next few months, Praj Matrix will work on optimizing the pilot plant operating parameters with sugarcane bagasse, and will develop the basic engineering package for a commercial demonstration plant.

Praj's lignocellulose to ethanol process is characterized by a unique catalyst and a unique pre-treatment process. The feedstock is processed in such a manner that the sugar containing fraction is separated from the lignin in a highly efficient manner. The sugar containing fraction is then converted to ethanol using Praj proprietary micro-organisms at high yields. The process will also employ Praj's proprietary energy reducing technologies as well as Praj's proprietary water reducing technologies. Praj Matrix is also pursuing technology programs to produce biochemicals from the same feedstock. In the future, these technologies will be integrated to form the foundation of Praj's Biorefinery technology.

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