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ShockWave Power Cavitation Reactor by Hydro Dynamics, Inc. Installed in Cellulosic Ethanol Pilot Plant in Italy

Hydro Dynamics, Inc. (HDI) of Rome, Georgia announced today that a ShockWave Power Reactor (SPR) has been purchased and installed in a commercial cellulosic pilot plant in Italy. The SPR was purchased after successful lab testing on extraction of cellulose from corn fiber and straw.

In cellulosic ethanol agricultural products containing cellulose are treated to extract the cellulose and convert it into fermentable sugars through acid hydrolysis or enzyme. The most typical cellulose sources discussed are inedible waste materials from food crops, fast-growing high yield grasses, wood waste or the fibrous material in a corn kernel itself from corn ethanol. The SPR uses the pressure fluctuations of cavitation in order to enhance extraction and increase yields of fermentable sugars.

This unit was sold through Three-Es of Milan, Italy (<http://www.miscelatori-omogeneizzatori.it/>), an HDI partner for distribution of the SPR for industrial applications in Europe. Three-Es has been an innovator, helping to launch and commercialize several SPR applications including biogas where similar cellulosic material is processed.

HDI has a long history in lignocellulosics through extensive work in pulp and paper industry. This, combined with its already existing corn ethanol program, expertly position HDI for cellulosic ethanol. “We have felt for years that cellulosic ethanol is a logical fit for the SPR technology”, said Doug Mancosky, VP of R&D for HDI. “We plan to release more information about the install in the coming months as well as performance data. Cellulosic ethanol adds to our already extensive portfolio of advanced biofuel applications for our cavitation technology.” More information about HDI’s biofuel applications can be found at <http://hydrodynamics.com/markets/alternative-energy/>.

About Hydro Dynamics

Hydro Dynamics is the developer of a patented cavitation process intensification technology called the ShockWave Power Reactor (SPR), enabling customers to solve critical mixing and heating problems. Reactors are operating on four continents with well-known customers in applications as diverse as increasing biogas yields, biodiesel transesterification, processing petroleum drilling fluids, chemical synthesis and homogenization/pasteurization of liquid eggs. The ShockWave Power Reactor allows customers to significantly decrease costs and increase profits, often with environmental and safety benefits. Learn more at <http://www.hydrodynamics.com>.