biofuels supplier news

Alvan Blanch unveils oilseed processing approach

Alvan Blanch Development, a UK crop processing systems manufacturer, has unveiled a new approach to oil seed processing.

The approach is a complete solution to the processing of oilseed rape, linseed and other oil-producing crops, for conversion into biodiesel and bio-friendly lubrication oils.

The process starts with the drying of the crops after harvest – using a unique drying system that reduces the moisture content in the seed to a safe level for long-term storage, without damaging oil yields.

At the start of the oil extraction stage, the seeds must be cleaned and prepared. At the heart of the system is the oil expeller. The company’s XP100 machine has been designed to meet the growing demand for on-farm production of vegetable oil for conversion to biodiesel in EU markets.

‘Alvan Blanch has worked to develop a highly efficient and automated oil extraction system that suits on-farm operation,’ Andrew Blanch, MD of Alvan Blanch explains. ‘We’ve achieved this by incorporating a number of new features such as a temperature adjustment chamber and an independently-driven screw feeder that can be set according to seed type and condition, which contributes to optimised oil extraction rates, and full system automation.’

Through the use of settling and filtration systems offered by the company, oil from the expeller can be clarified for further processing into biodiesel or for bottling as virgin culinary oil. The solid cake left behind after oil extraction can also be processed.

Using Alvan Blanch on-farm milling, mixing and pelleting equipment it can be processed into blended animal feed or can be processed into solid fuel pellets.

ShockWave Power Reactor ripples through the biodiesel industry

Hydro Dynamics, in collaboration with Advanced Biofuel Solutions, has announced that its technology is being selected for some of the largest biodiesel plants being designed and built, due to its high production capacity and small footprint.

One of the US’ largest biodiesel producers, Memphis Biofuels, located in Tennessee, is one company which has recently begun using the technology to produce all of its biodiesel.

Harnessing the power of cavitation, the company’s ShockWave Power Reactor drives the transesterification reaction to completion in seconds. Whether in a continuous or batch system, the ShockWave Power Reactor gives the biodiesel producer greater feedstock flexibility.

“We have been overwhelmed by the biodiesel industry’s response to the ShockWave Power Reactor, both in the US and internationally,” Thomas McGurk, president of Advanced Biofuel Solutions, says.

The ShockWave Power Reactor is manufactured by Hydro Dynamics, a company involved with process intensification and heating applications. Sales of the reactors for biodiesel production have reached more than 350 million gallons a year of capacity.