WASTE TO ENERGY

Hydrodynamic Cavitation Technology – *The Future of Food and Drinks Processing & Biogas From Food Waste*

CaviMax integrates the ROTCAV cavitation reactor into your process line to provide you with product better, faster and with less energy, maxing processes in the following sectors: food waste to biogas; food & drink production; brewing; distilling extractions; biomass disintegration; bioresources; nutraceuticals.

Process Intensification or do more with less. Hydrodynamic cavitation produces millions of cyclical high-pressure micro bubble collapse events in liquid mediums which disintegrates solids & amalgamates liquids/solids/gases subjected to the cavitation field in the spinning rotor-stator reactor chamber. Hydrodynamic cavitation forces are more powerful than mechanical or sonic sources, the cavitator manipulates high pressure fluid dynamics, the machine may be new tech, but the natural process is timeless. By the speeding up the rate of physical/ chemical/ biological reactions; energy, time and feedstocks are saved and yields increased.

Some cavitaion ideas for the food & drink industry:

- Biogas: Reduce particle sizes of food waste, even hard to digest lignocellulosic feedstocks
- Anaerobic digestion: Stabilise gas production
- Brewing & distilling: Increase flavour from hops and botanicals

- Nutraceuticals: Extract from expensive and rare feedstocks
- Valorise your food waste i.e. extracting carotenoids from tomato peels and seeds,
- Create biodiesel from waste oils
- Homogenise milk: breakdown fat globules
- Edible oils: extracted more efficiently
- Gas in liquid dispersion of microbubbles N2 and CO2 in beverages, mousses and yoghurts
- Solids in liquid mixing creating homogeneous suspensions or dispersions
- Liquid and liquid mixing of differing viscosities.

Are you looking to intensify and decarbonise your food or biogas production? Then CaviMax have a laboratory scale machine and range of industrial sized reactors available to suit your operation - commercialising research is CaviMax's forte.

For further information contact Emma Greenwood on Tel +44 (0)7912 210369 or visit www.cavimax.co.uk - food waste biogas plants; www.epic-srl.com/en/ - multi-sector food production. ❑