September 17, 2015

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## Hop Extraction Technology Using Hydro Dynamics Cavitation to be Presented at Master Brewers Association Conference

Hop extraction technology by Hydro Dynamics, Inc. (HDI) will be presented at the Master Brewers Association of the Americas (MBAA) Annual Meeting in Jacksonville, FL, October 8, 2015. Mr. Santiago Gomez, of strategic partner Apotek Solutions, LLC, will deliver a talked entitled, "Use of microscopic pressurized shockwaves generated by controlled cavitation as a non-shear method for increased extraction of alpha acids and oils from hops". The talk will detail the ability of the ShockWave Power Reactor Technology (SPR) to increase the amount of alpha acids extracted from hops, a common flavoring in beer. The talk will also briefly discuss increased sugar/starch extraction from grains as well as using cavitation to accelerate the aging of liquors like whisky.

The SPR technology that harnesses the normally destructive power of cavitation and controls it so its pressure fluctuations can be used for increased extraction. When this technology is applied to the different processes within the brew-house, combined with expertise in hop utilization, it allows brewing customers to produce bitter beers with 50% to 90% less bittering hops and 50% to 75% less aroma hops for dry hoping. HDI has partnered with Apotek to market our SPR technology to the hops industry.





Typical SPR for hops and hop pellets frequently used for brewing.