



# ShockWave Hops Extraction



**W**ith the proliferation of craft breweries, the demand for hops and prices have increased. When the ShockWave Xtractor™ cavitation technology is applied to the different brewing processes, combined with expertise in hop utilization, it allows brewers to produce beers with less hops and the same great flavors. The ShockWave Xtractor™ technology harnesses the normally destructive power of cavitation and controls it so its pressure fluctuations can be used for increased hop flavor extraction.

The ShockWave Xtractor™ technology is an easy retrofit for any brew and can be applied to more efficiently use bittering hops or aroma hops. The cavitation allows for greater extraction of the flavors without heavy shear that can destroy proteins or create fines that are difficult to separate. Using less hops also allows brewers to produce more beer

by throwing away less product in the form of beer soaked hops. Hopping speed can also be increased, especially in dry hopping. Brewers can also use the ShockWave Technology to impart other flavors including fruits, coffee, and chocolate. ShockWave Xtractor™ can also provide similar advantages in liquor, wine, and other products.

The ShockWave Xtractor™ cavitation technology is marketed by Xtractmor, Inc. of Rome, Georgia. The equipment uses the physical phenomenon of cavitation, normally known as a destructive force, and harnesses it to solve critical industrial extraction problems. The technology can now be found on four continents in applications ranging from biofuel production to hops extraction for beer. Learn more at [xtractmor.com](http://xtractmor.com).



50-90% less  
bittering hops

50%-75% less  
dry hopping

Impart other  
flavors

Increased  
hopping speed

Sell more  
finished beer  
with less beer  
soaked hop  
waste