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Cider Foam Reduction at Downeast Cider House

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This project analyzed the different factors that affected foam formation during the packaging process of Downeast cider. This was done by pouring Downeast cider at different flow rates under different conditions and measuring the amount of foam produced. Foam is formed by the CO\textsubscript{2} bubbles releasing from the cider. Turbulence in the liquid forces the gas bubbles to fall out of solution. Cider was placed in a sealed container and pressurized with CO\textsubscript{2} to push the cider out at a consistent flow rate. Our testing showed that slower flow rates and pouring down the side of the container reduces the amount of foam produced. The slower flow rates and pouring down the side result in less turbulence.

This MQP contains information deemed confidential to the business interest of the industrial sponsor. Please contact Stephen Kmiotek at sjkmiotek@wpi.edu for additional information.