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The Application of Forced Resonance in Conjunction with Standard Cryogenic Treatment of Metals AUSTIN EVANS, KYLE LEADLOVE, JAMES SEYFERT, CASEY WATSON, Millikin University, PETER PAULIN, 300 Below, Inc. — We explore modifications to the basic cryogenic procedures utilized by 300 Below Inc. to strengthen metal components. We consider the effects of adding forced resonance in our efforts to further optimize the cryogenic treatment – i.e., to augment the already improved tensile strength, shear strength, thermal and electrical conductivity, etc. resulting from 300 Below Inc.'s traditional cryogenic process. We report on the wear-test performance of resonance treated samples relative to standard cryogenically treated samples and control samples.

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