The Effects of DC Electromagnetic Stimuli in Conjunction with Standard Cryogenic Treatment of Metals

KYLE LEADLOVE LEADLOVE, AUSTIN EVANS, JAMES SEYFERT, CASEY R. 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 DC electromagnetic stimuli 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 DC magneto-cryogenic treated samples relative to standard cryogenically treated samples and control samples.

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