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**Electrochemical Dissolution of Nickel Produced by the Mond Method under
Alternating Temperatures and Nickel Carbonyl Gas Pressures.**

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Abstract

The dissolution mechanism of nickel grown using the carbonyl process was investigated using laboratory Ni samples. These samples were purposely engineered to form an alternating lamellar structure of Ni layers grown under two limiting conditions. Three layers formed from low nickel carbonyl gas concentrations (5%) at a decomposition temperature of 280 °C (LC/HT) were deposited between four layers formed from high nickel carbonyl gas concentrations (40%) at a decomposition temperature of 200 °C (HC/LT). These lamellar structures were used to simulate the two extremes found within an industrial decomposition chamber for nickel pellets grown using the Mond process. Cyclic voltammetry and fluctuations in the electrode potential

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