Iterative Learning Control (ILC) is a control method designed to exploit repetitiveness in various control situations. Its purpose is to enhance performance, using a mechanism of trial and error. Supposedly, the method would have considerable potential to effect this purpose. The aim of this thesis is to investigate whether this potential is really there, and if so, whether it is indeed being capitalized on. To that end, a comparison is drawn between ILC and conventional, noniterative methods, such as feedback control.