

**정확도 요구와 작업자 성격유형이
들기 작업 부담도에 미치는 영향**

**(The effects of personality types and precision demands
on the workload under varying repetitive lifting task conditions)**

이종주, 이성대, 김상호

금오공과대학교 산업시스템공학과

ABSTRACT

In this study, the electromyography(EMG) was measured at 8 body locations of 4 muscle types to investigate the effects of task conditions on muscle activity while the subjects were asked to move a box from the floor level to waist level height. The task conditions were given in the combination of workload weight (5kg, 10kg, 15kg), necessity of precision control (required or not) as physical work conditions, and personality types(A and B) as psychological perspective. After the subjects finished their work, they were asked to evaluate the psychological workload what weights they lifted.

As the results, the subjects showed statistical different level of psychological workload recognition for the same task weight depending on the type of precision requirement. Type A subjects showed higher EMG level of three arm muscles of Biceps brachii, Triceps, Deltoid than that of Type B subjects, while Type B subject showed higher EMG level of erector spine than that of Type A. In addition, the more precise control was required, the higher EMG level were showed. This indicate that the task including precise control should be lessened for the mass manual material handling task to prevent from musculoskeletal disorders.

Keyword : workload, personality types, precision