

Abstract

In this paper, we determine the norm of an elementary operator in a tensor product. More precisely, we investigate the bounds of the norm of a basic elementary operator in a tensor product. We employ the techniques of tensor products and finite rank operators to express the norm of an elementary operator in terms of its coefficient operators. We also show that the norm of a basic elementary operator on $B(H \otimes K)$ is expressible in terms of the norms of basic elementary operators on $B(H)$ and $B(K)$.