An intelligent drilling system can be commercially very profitable in terms of reduction in crude material and labor involvement. The use of fuzzy logic based controller in the intelligent cutting and drilling operations has become a popular practice in the ever growing manufacturing industry. In this paper, a fuzzy logic controller has been designed to select the cutting parameter more precisely for the drilling operation. Specifically, different input criterion of machining parameters are considered such as the tool and material hardness, the diameter of drilling hole and the flow rate of cutting fluid. Unlike the existing fuzzy logic based methods, which use only two input parameters, the proposed system utilizes more input parameters to provide spindle speed and feed rate information more precisely for the intelligent drilling operation.