With the fast-paced changing technologies in the power industry.while many alterations according to the core constructional characteristics, the cooling method, or the type of the magnetic material may be encountered, The aim of this project is to design a 3 phase, core type transformer which includes, design of magnetic loading, electric loading, estimation of core construction & emf per turn, estimation of core loss and core loss component of no load current and magnetizing current, Tank design, cooling, winding design, cu losses and efficiency etc.The transformer design demands reliable and vigorous solution methods.by using ANSI & IEEE standard