**International Academy of Science,
Engineering and Technology**
Connecting Researchers; Nurturing Innovations

IASET

MATLAB SIMULATION OF SINGLE TUNED PASSIVE FILTER TO PROVIDE REACTIVE POWER COMPENSATION AND TOMINIMIZE THD

Nilesh B. Mirajkar, Swapnil N Sawant & P Kolhe

Assistant Professor, Diploma in Fisheries Engineering, Ratnagiri,

Dr. Balasaheb Sawant Konkan Krishi Vidyapeeth, Dapoli, Ratnagiri, Maharashtra , India

ABSTRACT

This paper presents MATLAB simulation of the single tuned passive filter to provide reactive power compensation and to minimize THD in an industrial distribution system. The three-phase power system is designed by using the actual data collected from industry and single tuned passive filter is designed. This system is modeled and simulated in MATLAB. The resulted current and voltage waveforms before and after the filter are   turned on are shown.

KEYWORDS: *Passive Filter, MATLAB, THD, Single Tuned Passive Filter, Distribution System*