

## Designing steam power plant thermo cycle for ninety percent efficiency:

This proposal introduces a novel and new design named "MAPNA square turbine arrangement" for steam power plant thermo cycle for increasing power generation efficiency up to 90%.

This proposal with new and innovative turbine arrangement, which locates turbines in series and after each other, the power plant efficiency increases up to 90 percent. Also cooling system will omitted from power plant. Thus there would be half of fuel consumption compare to previous (current) design and no environmental warming.

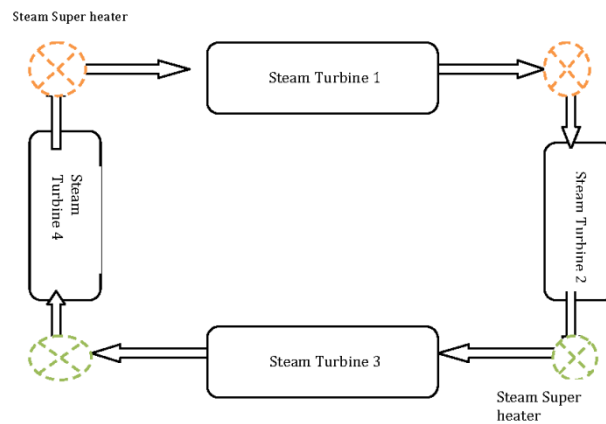
In order to achieve 90 percent of efficiency or more in steam power plant, four turbines shall be designed and installed afterward. Which the steam outlet from first turbine, enters to the second turbine, then the outlet steam from second turbine enters the third one and so on.

In Mapna Square turbine arrangement, the outlet steam from each turbine, heated in steam super heater before entering the next turbine. The heat added to steam, is exactly the same amount of the heat losses from steam in previous turbine.

In this steam power plant thermo cycle, there is no cooling system and thus there is no waste of energy to environment. The square turbine arrangement, result in much better efficiency of steam power plant. There is no waste of fuel and energy to the environment and no air pollution. Also, price of generated electricity is fairly lower than current price, because of reduction of fuel consumption to half.

In typical (previous) power plant design, the steam power plant efficiency is about 45% which is fairly low and result in wasting great amount of fuel also environmental warming and air pollution.

Fig1- The squar turbine arrangement



### Thanks:

Thanks to merciful creator, who help us to write this proposal. This technical proposal has many advantageous and reduces the cost of electricity generation and reduce fuel consumption.

I would wish you and all other engineer who will do the detail design of this plant great success in future projects and fair bonus from profit.

Best Regards  
Saviz Nekoufar