

Stiller, Bjoern; Preusker, Frank ; Banda, Marcus
Siemens Energy

Titel:

Turbogenerator TEWAC cooler analysis and projections with focus on relative costs by means of multi-dimensional optimization tool ANSYS optiSlang

Abstract:

TEWAC* coolers are the most often used types to remove the dissipated heat loads of large Turbogenerators while making up a s significant portion of the overall costs. An analysis shall return which combination of elements yields the most cost-effective solution at current design size. The basic question in that regard is on rather using two larger or four smaller elements which is studied based on hundreds of technical quotes. This database is fed into ANSYS optiSlang, a MoP is derived, and the new proposals are projected using the Excel Add-in. Only this multi-dimensional approach finally revealed the most cost-effective design taking the identified influence factors into account.