Eddy Current Losses

Transformer Eddy Current Losses on the other hand are caused by the flow of circulating currents induced into the steel caused by the flow of the magnetic flux around the core. These circulating currents are generated because to the magnetic flux the core is acting like a single loop of wire. Since the iron core is a good conductor, the eddy currents induced by a solid iron core will be large.

Eddy currents do not contribute anything towards the usefulness of the transformer but instead they oppose the flow of the induced current by acting like a negative force generating resistive heating and power loss within the core.