RESEARCH PROPOSAL

During any welding process tremendous amount of heat is generated. The heat generated in any welding technique can be simulated for research by using different heat equations. This is currently using worldwide for research purposes for simulation of welding and other heat using engineering techniques. This heat equation contains certain heat source parameters which indicate the shape of the welding area and position.

The value of these parameters had been developed with certain empirical relations. Currently assumed values are used for simulation. Latest researches had proved that, assumed values cannot give accurate results during simulation and can deviate from the actual weld conditions and will lead to inaccuracy of simulation. The heat source parameters can vary from material to material, input conditions, velocity of weld, area of weld etc. For improving the accuracy of simulation, precise parameters have to be used

In this research, I am focusing to find the exact heat source parameters for dissimilar metal welding process using different types of metals. To find the relation of heat source parameters with its material properties, size or thickness of the specimen, input voltage and current.

In this research proposing a hybrid welding method .The Welding method is the combination of metal inert gas welding and flux cored arc welding. The hybrid welding technique will give a good thermal efficiency, strength and position to the dissimilar metals depth to width ratio. This research will give a solution for overcome the thermal efficiency losses in the welding process by using the current methods.