

**DESIGN, SIMULATION & IMPLEMENTATION OF
EMBEDDED CONTROLLER FOR INDUCTION
MELTING MACHINE EMPLOYING OPTIMAL
RESONANT CONVERTER**



*A thesis submitted for the award of the
Degree of
DOCTOR OF PHILOSOPHY
in
Electrical Engineering*

By
Mr. Hiren M. Shah



ELECTRICAL ENGINEERING DEPARTMENT
FACULTY OF TECHNOLOGY & ENGINEERING
THE MAHARAJA SAYAJIRAO UNIVERSITY OF BARODA
VADODARA – 390 001
GUJARAT, INDIA

December 2012

**DESIGN, SIMULATION & IMPLEMENTATION OF
EMBEDDED CONTROLLER FOR INDUCTION
MELTING MACHINE EMPLOYING OPTIMAL
RESONANT CONVERTER**

*A thesis submitted for the award of the
Degree of*

***DOCTOR OF PHILOSOPHY
in
Electrical Engineering***

By

Mr. Hiren M. Shah



**ELECTRICAL ENGINEERING DEPARTMENT
FACULTY OF TECHNOLOGY & ENGINEERING
THE MAHARAJA SAYAJIRAO UNIVERSITY OF BARODA
VADODARA – 390 001
GUJARAT, INDIA**

December 2012