

TECHNICAL REPORTS (TR) 2011-12

Simplified and Cost Effective Method of Temperature Sensors Testing at 4.2K using Liquid Helium (LHe) Transport Dewar

DIPAK PATEL, A.N. SHARMA, PANKAJ VARMORA, UPENDRA PRASAD and S. PRADHAN
IPR/TR-174/2011 (MAY, 2011)

Development of Fast, Compact ~ 300kV, 1.8kJ Marx Generator for Directly Driving Virtual Cathode Oscillator Type High Power Microwave Device

BISWAJIT ADHIKARY, RAJESH KUMAR, R. SHUKLA, S.K. SHARMA, P.BANERJEE, P.DEB, T. PRABHAHARAN, R.DAS, B.K. DAS and A. SHYAM
IPR/TR-175/2011 (MAY, 2011)

Engineering Design of 750KW, 91.2 MHz Amplifier

RAJ SINGH
IPR/TR-176/2011 (JUNE, 2011)

Microstructural Studies of Electrospray Deposited Aluminide Coatings on Reduced Activation 9Cr Steels

NIRAV I. JAMNAPARA, STEFANO FRANGINI, DILIP AVTANI, VISHAL NAYAK, N.L. CHAUHAN, G.JHALA, S. MUKHERJEE, and A.S. KHANNA
IPR/TR-177/2011(JUNE, 2011)

In-House Facility for Maintenance and Repairing Experience of Vacuum Pumps, Problems and Solutions

RAJIV SHARMA, HIREN NIMAVAT, MANOJ SINGH, SUMAN KARKARI, V.L. TANNA and S. PRADHAN
IPR/TR-178/2011 (JUNE, 2011)

Engineering Design of Gas Discharge Hydrogen Cyanide Laser

ASHA ADHIYA, PABITRA KUMAR MISHRA and RAJWINDER KAUR
IPR/TR-179/2011 (JUNE, 2011)

Core-Ion Temperature Measurement of Aditya Tokamak using Passive Charge Exchange Neutral Particle Energy Analyzer

SANTOSH P. PANDYA, KUMAR AJAY, PRIYANKA MISHRA, RAJANI D. DHINGRA and J. GOVINDARAJAN
IPR/TR-180/2011 (AUGUST, 2011)

Two Series Ignitron Crowbar System for 82.6GHz Gyrotron for ECRH in SST-1

MAHESH KUSHWAH, B K SHUKLA, RAJAN BABU, ANURAG SHYAM, S LAXMIKANT RAO, JATIN PATEL, HARSHIDA PATEL, VIPAL RATHOD, RONAK SHAH, PRAGNESH DHORAJIYA, ANJALI SHARMA, SATISH D. PATEL and VISHAL BHAVSAR
IPR/TR-181/2011 (AUGUST, 2011)

High Power CW Test of 82.6GHz Gyrotron

B K SHUKLA, MAHESH KUSHWAH, RAJAN BABU, JATIN PATEL, K. SATHYANARAYANA, S LAXMIKANT RAO, PRAGNESH DHORAJIYA, HARSHIDA PATEL, SUNIL BELSARE, VIPAL RATHOD, SATISH D. PATEL, VISHAL BHAVSAR, PRIYANKA A SOLANKI, ANJALI SHARMA, RONAK SHAH, MIKHAIL SHMELEV, YURY BELOV and VLADIMIR BELOUSOV
IPR/TR-182/2011 (AUGUST, 2011)

High Power Test of CVD Diamond Window for ECRH System in SST-1

B K SHUKLA, RAJAN BABU, MAHESH KUSHWAH, K. SATHYANARAYANA, JATIN PATEL, S LAXMIKANT RAO, PRAGNESH DHORAJIYA, HARSHIDA PATEL, SUNIL BELSARE, VIPAL RATHOD, SATISH D. PATEL, VISHAL BHAVSAR, PRIYANKA A SOLANKI, ANJALI SHARMA, RONAK SHAH, MIKHAIL SHMELEV, YURY BELOV and VLADIMIR BELOUSOV
IPR/TR-183/2011 (AUGUST, 2011)

Testing of Bridge Type Joint for PF3 Repair in Current Lead Test Setup

A. N. SHARMA, U.PRASAD, S. PRADHAN, N.C. GUPTA, V.L. TANNA, P. VARMORA, D. PATEL
IPR/TR-184/2011 (AUGUST, 2011)

Analysis of N₂ Gas Heating and Supply System for SST-1 Vacuum Vessel and Plasma Facing Components Baking
YUVAKIRAN PARAVASTU, ZIAUDDIN KHAN, FIROZKHAN PATHAN, SIJU GEORGE, GATTU RAMESH,
SUBRATA PRADHAN and SST-1 VACUUM DIVISION
IPR/TR-185/2011 (AUGUST, 2011)

Programmable Pulse Generator for Aditya Gas Puffing System
NARENDRA PATEL, CHHAYA CHAVDA, S. B. BHATT, PRABAL CHATTOPADHYAY, and Y.C. SAXENA
IPR/TR-186/2011 (AUGUST, 2011)

SST-1 Vacuum Data Acquisition and Control System
KALPESH R. DHANANI, ZIAUDDIN KHAN and SST-1 VACUUM DIVISION
IPR/TR-187/2011 (SEPTEMBER, 2011)

Design and Development of CAMAC Based Eight Channel Delayed Pulse Generator
N C PATEL, CHHAYA CHAVDA, PRABAL CHATTOPADHYAY, Y.C. SAXENA
IPR/TR-188/2011 (OCTOBER, 2011)

70kV, 22A DC Power Supply for Testing of High Power RF and Microwave Tubes
YSS SRINIVAS, N RAJAN BABU, KM PARMAR, BHAVESH KADIA, CHETAN VIRANI, PRAGNESH
DHORAJIYA, JIGALRAJ VANSIA, SHEFALI DALAKOTI, DOSHI RAVIKUMAR, BRAHMBHATT TUSHAR,
PATIL GAJENDRA, ANIL VISHWAKARMA and SV KULKARNI
IPR/TR-189/2011 (OCTOBER, 2011)

Strap Joint Resistance Analysis for Second Generation YBCO Coated Conductor
ANANYA KUNDU, PIYUSH RAJ, SUBRATA PRADHAN
IPR/TR-190/2011 (OCTOBER, 2011)

High Heat Flux Tests of Divertor Macro Brush Type Mock-Ups
Y. PATIL, D. KRISHNAN, A. PATEL, S.S.KHIRWADKAR and PROTOTYPE DIVERTORS DIVISION OF IPR
IPR/TR-191/2011 (NOVEMBER, 2011)

Ultrasonic Diagnostic for Superconducting Magnets Winding Pack Joint Quality Control of SST-1
UPENDRA PRASAD, A.N.SHARMA, D.PATEL, MAGNET DIVISION and S.PRADHAN
IPR/TR-192/2011 (NOVEMBER, 2011)

Design, Fabrication, Testing and Integration of 1.5 kV, 1.5A Screen Grid Power Supply for 200 kW, 91.2 MHz
CWRF Amplifier
BHAVESH R KADIA, YSS SRINIVAS, SALMAN ANSARI, H.M. JADAV, S.V. KULKARNI and ICRH GROUP
IPR/TR-193/2011 (NOVEMBER, 2011)

The Electric Field Measurement using Indigenously Developed RF Modulated Dipole Probe
P. K. SRIVASTAVA, L. M. AWASTHI, G. RAVI, SUNIL KUMAR and S. K. MATTOO
IPR/TR-194/2011 (NOVEMBER, 2011)

Data Acquisition and Control System Software for 91.2 MHz 1.5 MW (ICRH) System for (SST1)
RAMESH JOSHI, H M JADAV, MANOJ PARIHAR, B R KADIA, K M PARMAR, A VARIA, K MISHRA, Y S
S SRINIVAS, R A YOGI, A GAYATRI, RAJ SINGH, SUNIL KUMAR and S.V. KULKARNI
IPR/TR-195/2011 (NOVEMBER, 2011)

High Availability of Servers
HEMANT JOSHI and SUTAPA RANJAN
IPR/TR-196/2011 (DECEMBER, 2011)

Commissioning of 11kV, 2MVA Voltage Variation System for High Power RF and Microwave Tubes
KIRIT PARMAR, Y.S.S. SRINIVAS, RAJAN BABU, S.V. KULKARNI and ICRH GROUP
IPR/TR-197/2012 (JANUARY, 2012)

Design of a Fast Scanning Langmuir Probe Drive for SST-1 Tokamak Divertor
PRABHAT KUMAR, RATNESHWAR JHA, M.V. GOPALAKRISHNA, KUMUDNI TAHILIANI
IPR/TR-198/2012 (JANUARY, 2012)

Stabilization of 25kW Plasma Torch (Graphite based) using IGBT Based Power Supply at FCIPT
C. PATIL, V. JAIN, B. PATEL, A. VISANI, V. CHAUHAN
IPR/TR-199/2012 (JANUARY, 2012)

Overview of Design and Thermal-hydraulic Analysis of Indian Solid Breeder Blanket Concept
PARITOSH CHAUDHURI, CHANDAN DANANI, VILAS CHAUDHURI, and E. RAJENDRA KUMAR
IPR/TR-200/2012 (JANUARY, 2012)

Purchase Information Collection Software (PICS)
PRIYANKA PATEL and S.S. KHIRWADKAR
IPR/TR-201/2012 (FEBRUARY, 2012)

A Design Report of Solar Panel Plasma Interaction Experiment (SPIX-II)
SURYAKANT B. GUPTA, KEENA KALARIA, NARESH VAGHELA, SUBROTO MUKHERJEE
IPR/TR-202/2012 (MARCH, 2012)

Development of Indigenous Glow Detector for Tokamak ADITYA
K.A. JADEJA, S.B. BHATT, B.N. DARJI and A.S. PRAJAPATI
IPR/TR-203/2012 (MARCH, 2012)

Technical Report on Development of Indoor High Voltage Switches for Moderate Currents
L.N. GUPTA, PARESH J. PATEL, N.P. SINGH, DIPAL THAKKAR, VISHNU PATEL, C.B. SUMOD, L.K. BANSAL, KARISHMA QURESHI, VIJAY VADHER and U.K. BARUAH
IPR/TR-204/2012 (MARCH, 2012)

Effect of Si on Hot Dip Aluminized 9Cr-1 Mo Steels and Subsequent Oxidation Studies
NIRAV I. JAMNAPARA, DILIP U. AVTANI, N. L. CHAUHAN, P.M. RAOLE, S. MUKHERJEE, A.S. KHANNA
IPR/TR-205/2012 (MARCH, 2012)