

Sand has been used for centuries as a moulding material in ferrous and non-ferrous metal casting industries because of its thermal conductivity. Foundries successfully recycle and reuse the sand many times in a foundry. When the sand can no longer be reused in the foundry, it is removed from the foundry and is termed as USED FOUNDRY SAND (UFS) or WASTE FOUNDRY SAND (WFS). This used foundry sand waste can be utilized for the preparation of concrete as partial replacement of sand. In order to explore the possibility of utilizing the used foundry sand as partial replacement to fine aggregate, an experimental investigation has been carried out. The strength properties such as Compressive, Split tensile and Flexural strengths of M25 grade concrete are studied with different percentage replacement of fine aggregate by used foundry sand for 0%, 10%, 20%, 30%, 40%, and 50%. The optimum percentage of used foundry sand in concrete corresponding to maximum strength will be identified.



Ravi Theja



A. Ravitheja is research scholar from Jawaharlal Nehru Technological University, Anantapur and obtained his Master's degree from G Pulla Reddy Engineering College, in the year of 20013- 2015.

Effect of foundry sand and mineral admixtures on mechanical properties



978-613-9-90274-3

 **LAMBERT**
Academic Publishing

The self healing capacity of cementitious composites employed for either new or repairing applications opens challenging perspectives for the use of construction materials intrinsically able to recover its pristine durability levels, thus their guaranteeing a longer service life of the designed applications and a performance less sensitive to environmental induced degradation. One possibility of achieving the aforementioned self healing capacity stands in the use of additives featuring a "crystalline" activity. Such cracks, if not repaired, act as hotspots from where the aggressive agents penetrate and further weaken the structure by adversely affecting the steel bar integrity. In order to approach the investigation, besides conventional concrete (with and without the aforementioned admixtures) the characterization of the self healing capacity of High strength concrete with steel fibers and combination with the natural ones was also studied, i.e. their capacity to completely reseal cracks, as a function of the material composition.



A Ravi Theja
C Sashidhar

Dr A. Ravitheja obtained his Doctor of Philosophy from Jawaharlal Nehru Technological University, Anantapur and obtained his Master's degree from G Pulla Reddy Engineering College.

Dr C. Sashidhar is a Professor in the civil engineering department of Jawaharlal Nehru Technological University, Anantapur, Anantapur, Andhra Pradesh, India.

Advanced Self healing Materials in Concrete Composites

Effect of Self healing Materials in Concrete



 **LAMBERT**
Academic Publishing

2022

HIGH VOLTAGE ENGINEERING

**Dr. Potluri Sankar Babu | G. Hussain Basha
K. Sudarshan Reddy | K. Meenendranath Reddy**

ABOUT THE AUTHORS



Dr. Potluri Sankar Babu, currently working as a professor and head of the department of EEE, SVR Engineering College, Nandyal, Andhra Pradesh. He completed M.Tech in Sreenidhi Institute of Science and Technology and doctoral degree from AM university. He published 74 international journals and 15 national conference, 4 patents journals and he completed UGC minor research project at worth of 2.6 Lakhs and he conducted and attended so many conferences and honoured as a judge also. His research interests are power electronics, Microgrid, HVDC and FACTS. He is a fellow of IEEE, ISTE AND IETE.



G. Hussain Basha, currently working as an Assistant Professor in the Dept. of Electrical and Electronics Engineering, K.S.R.M. College of Engineering (Autonomous), Kadapa, Andhra Pradesh, India. He has Completed his M.Tech from J.N.T. University Anantapur. He has published research papers in international journals and conferences. His research interest includes Control Systems and Power systems also, he is proficient in programming language python.



K. Sudarshan Reddy, currently working as an Assistant Professor in the Dept. of Electrical and Electronics Engineering, SVR Engineering college, Nandyal, Andhra Pradesh, India. He received the B.Tech. degree in Electrical and Electronics Engineering in 2007 from St John's college of Engineering and Technology, A.P, India and M.Tech in Electrical Engineering (Power electronics & drive) at RGM College of Engineering and Technology, A.P, India in 2011. He is currently pursuing Ph.D in Vel Tech Rangarajan Dr.Sagunthala R&D Institute of Science and Technology. His areas of interest in research are power electronics & drives, Multilevel inverters & power quality problems.



K. Meenendranath Reddy, currently working as an Assistant Professor in the Dept. of Electrical and Electronics Engineering, SVR Engineering college, Nandyal, Andhra Pradesh, India. He received the B.Tech. degree in Electrical and Electronics Engineering in 2010 from Madina Engineering College, Kadapa, A.P, India and M.Tech in Electrical Engineering (Electrical Power Systems) at Annamacharya institute of Technology & Science, Rajampet, A.P, India in 2012. He has published research papers in international journals and conferences. His areas of interest in research are Electrical Power systems, Microgrids & Smart Grids.

SA SOUTH ASIAN
ACADEMIC PUBLICATIONS

ISBN 939215348-1



9 789392 153488

ABOUT THE AUTHORS



K. MEENENDRANATH REDDY
Assistant Professor in the Dept. of Electrical & Electronics Engineering, SVR Engineering College, Nandyal, Andhra Pradesh, India.



S. MADDILETY
Assistant Professor in the Dept. of Electrical and Electronics Engineering, SVR Engineering College, Nandyal, Andhra Pradesh, India.



SYED RESHMA
Assistant Professor in the Dept. of Electrical and Electronics Engineering, SVR Engineering College, Nandyal, Andhra Pradesh, India.



G. HUSSAIN BASHA
Assistant Professor in the Department of Electrical and Electronics Engineering & Additional Controller of Examinations, K.S.R.M. College of Engineering (Autonomous), Kadapa, Andhra Pradesh, India.

K. Meenendranath Reddy, currently working as an Assistant Professor in the Dept. of Electrical and Electronics Engineering, SVR Engineering college, Nandyal, Andhra Pradesh, India. He received the B.Tech. degree in Electrical and Electronics Engineering in 2010 from Madina Engineering College, Kadapa, A.P, India and M.Tech in Electrical Engineering (Electrical Power Systems) at Annamacharya Institute of Technology & Science, Rajampet, A.P, India in 2012. He has published research papers in international journals and conferences. His areas of interest in research are Electrical Power systems, Microgrids & Smart Grids.

S.Maddilety, currently working as an Assistant Professor in the Dept. of Electrical and Electronics Engineering, SVR Engineering college, Nandyal, Andhra Pradesh, India. He received the B.Tech. degree in Electrical and Electronics Engineering in 2011 from AVR & SVR Engineering College, Nandyal, A.P, India and M.Tech in Electrical Engineering (Power & Industrial Drives) at AVR & SVR Engineering College, Kurnool, A.P, India in 2015. He has published research papers in international journals and conferences. His areas of interest in research are Power Electronics, Control Engineering, Microgrids & Smart Grids.

Syed Reshma, currently working as an Assistant Professor in the Dept. of Electrical and Electronics Engineering, SVR Engineering college, Nandyal, Andhra Pradesh, India. She received the B.Tech. degree in Electrical and Electronics Engineering in 2014 from AVR & SVR Engineering College, Nandyal, A.P, India and M.Tech in Electrical Engineering (Electrical Power Systems) at KVSR Institute of Technology, Kurnool, A.P, India in 2017. She has published research papers in international journals and conferences. Her areas of interest in research are Power systems, Network Analysis, Microgrids & Smart Grids.

G. Hussain Basha, currently working as an Assistant Professor in the department of Electrical and Electronics Engineering and Additional Controller of Examinations, K.S.R.M. College of Engineering (Autonomous), Kadapa, Andhra Pradesh, India. He has completed his M.Tech. from J.N.T. University Anantapur, Ananthipuramu. He has published research papers in International Journals and Conferences. His research interest includes Control Systems and Power Systems. Also he is proficient in Python Programming Language.

POWER QUALITY

POWER QUALITY



Editors

K. Meenendranath Reddy
S.Maddilety
Syed Reshma
G. Hussain Basha



GCS PUBLISHERS
INDIA



Design is defined as a creative physical realization of theoretical concepts. An electric machine is an electro-mechanical energy conversion device, which converts mechanical energy into electrical energy and vice versa. When the machine converts mechanical energy into electrical energy it is called a generator. When the machine converts electrical energy into mechanical energy it is called a motor. A part of the energy is converted to heat. This energy is lost and cannot be recovered. An electrical machine can be designed to operate either as a generator or as a motor. Faraday's law of electromagnetic induction states that e.m.f. induced in a closed electric circuit is equal to the rate of change flux linkages. There are different specific tasks to be performed by the electrical machines. The design of electrical machines/equipment for specific applications is based upon the application of theoretical scientific concepts, technology, and related inventions. The suitable design depends upon the proper adjustment of the iron portion, copper, air gap, insulation, ventilation, and cooling of the machine.



Meenendranath Reddy, currently working as an Assistant Professor at SVR Engineering College, Nandyal. Dr. Mahesh Mudavath, Presently working as Professor at Jayamuhki Institute of Technological Sciences (Autonomous), Narsampet, Warangal, Telangana state. Dr. N. Balavenkata Muni, Sri Venkateswara Institute of Science and Technology, Kadapa.

K. MEENENDRANATH REDDY
MAHESH MUDAVATH
N. BALAVENKATA MUNI

ELECTRICAL MACHINE DESIGN

Applications of Science and Technology



9 786204 750026

REDDY, MUDAVATH, MUNI

LAP
LAMBERT
Academic Publishing

ABOUT THE AUTHORS



Dr. Ram Prasad Reddy Sadi is an exceptionally awarded and Assistant Professor with a strong record in both teaching and administration. He has completed his Ph.D. in Computer Science and Engineering from JGU University Hyderabad, Andhra Pradesh. He is currently working as an Associate Professor in the Department of Information Technology of Andhra Pradesh State Institute of Technology and Sciences, Visakhapatnam. He has over 21 years of experience in teaching and 12 years of experiential Research. He has published an of publications in Scopus and ISI indexed journals. His research interest includes Artificial Intelligence and Machine Learning. He is the member of AI.



Dr. Velluri Raja is currently working as an Associate Professor in the Department of Computer Science and Engineering (Data Science) of NITAP, State Institute of Technology Hyderabad. He has completed Ph.D. in Computer Science and Engineering from JGU Hyderabad. He has published several International Journals, International Model of Technology in Computer Science and Engineering from JGU Hyderabad. He has published several International Journals. His research interest includes AI, Data Science, Artificial Intelligence and Machine Learning, Business Management Etc.



Mr. G. Saravanan has completed his B.E. degree from JGU Hyderabad State Engineering College, Nellore and M.E. degree from JGU College of Technology, Chittoor. He is currently working as Assistant Professor (S.O.) in the Department of Electrical and Electronic Engineering at JGU Institute of Engineering and Technology, Chittoor. He has completed Ph.D. in Information and Communication Engineering, Anna University, Chennai. He has 12 years of experience in teaching and 12 years of experience in industry. He has published several papers and books in the areas of Signal and Data Processing. His research interest includes AI, DMS, AI, Machine Learning, and Optimization Techniques. He is a life member of IEEE.



Dr. G. Rajesh Chandra is currently working as a Professor in Department of Computer Science and Engineering at JGU Engineering College, Huzur, Vizianagaram District, Andhra Pradesh. He has completed Ph.D. in Computer Science and Engineering from Acharya Nagarjuna University, Guntur, Andhra Pradesh. He has completed Master of Technology in CSE from JGU. He has published several research papers in Artificial Intelligence and Medical Image Mining.

AI APPLICATIONS

APPLICATIONS

Dr. Ram Prasad Reddy Sadi | Dr. Velluri Raja
Mr. G. Saravanan | Dr. G. Rajesh Chandra



GCS PUBLISHERS
INDIA

