VISVESVARAYA TECHNOLOGICAL UNIVERSITY
BELAGAVI – 590 018

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PROJECT REPORT

ON

"Machinability analysis of Al 8011 alloy and Nano Zirconium Oxide Composites"

Submitted in partial fulfillment of the requirements for the award of the degree of

BACHELOR OF ENGINEERING

IN

MECHANICAL ENGINEERING

Submitted by:

JAGADEESH G N (1SV15ME020)

MANAJUANATHA N (1SV15ME031)

Under the Guidance of:

PRINCIPAL
SIET., TUMAKURU

Mr J C Thippeswamy BE, M Tech,
Assistant Professor
Department of Mechanical Engineering
SIET, Tumkur

SHRIDEVI EDUCATION

ESTD: 2002

20 YEARS Academic Excellence

Department of Mechanical Engineering

Shridevi Institute of Engineering and Technology

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Sira Road, TUMAKURU – 572 106

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Sri Shridevi Charitable Trust (R.)
SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY
(Recognised by Govt. of Karnataka, Affiliated to VTU, Belagavi and Approved by AICTE, New Delhi)
Sira Road, Tumakuru - 572 106. Karnataka.
An ISO 9001:2015 Certified Institution
Phone: 0816-2212629 | Fax: 0816-2212628 | Email: info@shridevengineering.org | Web: http://www.shridevengineering.org

DEPARTMENT OF MECHANICAL ENGINEERING

CERTIFICATE

This is to certify that, the project entitled "MACHINABILITY OF AL8011 AND NANOZIRCONIUM OXIDE " has been successfully carried out by JAGADEESH G N (1SV15ME020), MANJUNATH N (1SV15ME031) in partial fulfillment for the award of Bachelor of **Engineering** in **Mechanical Engineering** of the **Visvesvaraya Technological University, Belagavi** during the academic year **2021-22.** It is certified that all the corrections/suggestions indicated for internal assessments have been incorporated in the report. The project report has been approved as it certifies the academic requirements in respect of **Project work-II** prescribed for the Bachelor of Engineering Degree.

Signature of Guide
Mr. J C Thippeswamy
Assistant Professor,
Dept. of mME,
SIET, Tumakuru.

Signature of H.O.D
BH Vasudevamurthy,
Associate Professor & HOD
Dept. of ME,
SIET, Tumakuru.

Signature of Principal

PRINCIPAL
SIET., TUMAKURU.

Dr.Narendra Viswanath M.E., Ph.D., MIE, MISTE, MIWS., FIV.,
Principal,
SIET, Tumakuru

Name of the Examiners

1. DR. NARENDRA VISWANATH

2. MR. B. H VASUDEVAMURTHY

Signature with date

25/7/2022

ABSTRACT

mposite materials are made from two or more constituents materials with significantly ferent physical or chemical properties. Composite materials are highly utilized in various ds like Aerospace structure, marine, Automobile, etc. The present study deals with estigation of effect of reinforcement Nano Zirconium oxide particulate on mechanical perties of A18011 alloy composites, fabricated by stir casting method, specimens were pared by varying weight fraction of the Zirconium as Owt%, 2wt% and 4wt% . by machining specimens we obtain good metal removal rate and good surface finish.

ywords: stir casting, A18011 alloy, nano zirconiumoxide

PRINCIPAL
SIET., TUMAKURU