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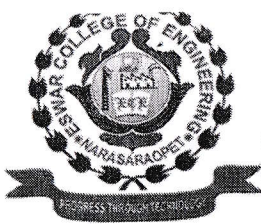


Number of research papers per teachers in the journals notified on UGC website in A.Y. 2021-22

S. No	Name of the author/s	Department of the teacher	Title of the paper	ISSN number	Link to article/paper/abstract of the article	Is it listed in UGC Care list/Scopus/Web of Science/other, mention
1	MUZEER	MBA	Empirical Economics Letters -ABDC Journal	1681-8997	http://www.eel.my100megs.com/volume-20-number-5-1-special-issue.htm	UGC
2	K.JHANSI RANI	MECH	A STUDY ON DESIGN AND STRESS STRAIN ANALYSIS OF COMPOSITE DIFFERENTIAL GEAR BOX	2455-3778	http://www.ijmtst.com/volume8/issue05/21.IJMTST0805041.pdf	UGC
3	SK.RESHMA BEGUM	MECH	A SUDY ON DESIGN AND ANALYSIS OF GOKART CHASSIS	2455-3778	http://www.ijmtst.com/volume8/issue05/22.IJMTST0805042.pdf	UGC
4	SK.RESHMA BEGUM	MECH	DESIGN AND ANALYSIS OF STEAM TURBINE BLADE USING DIFFERENT MATERIALS	2455-3778	http://www.ijmtst.com/volume8/issue05/26.IJMTST0805043.pdf	UGC
5	MUZEER	MBA	A Study on Job Stress among Employees of Software Industry in Hyderabad City, Telangana State	2455-3778	https://www.ijmtst.com/volume7/issue03/29.IJMTST0703086.pdf	UGC
6	SK.Chand basha subhani	MECH	DESIGN AND ANALYSIS OF STEAM TURBINE BLADE USING DIFFERENT MATERIALS	2455-3778	http://www.ijmtst.com/volume8/issue05/26.IJMTST0805043.pdf	UGC


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9	Dr.G. NAGAMALLESWARA RAO	MECH	FABRICATION AND TENSILE,COMPRESSIVE FLEXURAL MECHANICAL TESTING OF ALUMINIUM METAL MATRIX COMPOSITES REINFORCEMENT WITH TIO2	0974-5823	https://kalaharijournals.com/resources/301-320/IJME_Vol7.1_303.pdf	UGC
10	S.VANEELA	MECH	A STUDY ON DESIGN AND STRESS STRAIN ANALYSIS OF COMPOSITE DIFFERENTIAL GEAR BOX	2455-3778	http://www.ijmtst.com/volume8/issue05/21.IJMTST0805041.pdf	UGC
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Education is Empowerment: An Economic Analysis on Educational Status of Women Scheduled Tribes in Yelagiri Hills of Tamil Nadu, India

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Abstract: Women are playing a key role in family and in the society by contributing workforce and shaping the new world. Among various people living in India, tribal group established as weaker section of the society, even though tribes are very unique in nature. The vulnerability and noiselessness arrive at the point of their illiteracy and poverty. This study is conducted applying both quantitative and qualitative approach using both primary and secondary data sources. This research espouses the simple random sampling method to gather information from sample respondents. Results reveal the relationship among educational attainment with family income, dropout, school infrastructure, and awareness about the government schemes. Tribal girls became dropped out from school education due to poor economic condition as well as poor infrastructural and lack of toilet facilities. Non-availability of government schools would also be the reason for illiteracy. The average educational level attainment is recorded as pre-secondary level. On the whole, the scheduled tribes in the study area are ignored in the process of development. The development of the whole ethnic group can be uplifted through educational empowerment.

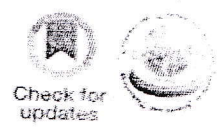
Keywords: Education, Women, Scheduled Tribes, Social Inclusion, Dropout and Gross Enrollment Ratio

JEL Classifications Number: I21, I22, I23, I24, I25 and I28

1. Introduction

Social inclusion can be possible, only when all people of society are included in the development process. The core objective of the higher education system in India is to

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A Study on Design and stress strain Analysis of Composite Differential Gear Box

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ABSTRACT

The main objective of this project is to developed parametric model of differential Gearbox by using CATIA-V5 under various design stages. It is observed that Glass filled polyamide composite material is selected as best material for differential gearbox and is found to suitable when apply moment 200 Nm under static loading conditions. Comparisons of various stress and deformation, shear stress results using ANSYS-14.5 with Glass filled polyamide composite and metallic material (grey cast iron) are also being performed and found to be lower for composite material.

Key Words: Gearbox Design, Assembly Analysis, Stress, deformation, shear stress, static Analysis

1. INTRODUCTION

A differential is a particular type of simple planetary gear train that has the property that the angular velocity of its carrier is the average of the angular velocities of its sun and annular gears. This is accomplished by packaging the gear train so it has a fixed carrier train ratio $R = -1$, which means the gears corresponding to the sun and annular gears are the same size. This can be done by engaging the planet gears of two identical and coaxial epicyclic gear trains to form a spur gear differential. Another approach is to use bevel gears for the sun and annular gears and a bevel gear as the planet, which is known as a bevel gear differential.

In automobiles and other wheeled vehicles, the differential allows the outer drive wheel to rotate faster than the inner drive wheel during a turn. This is necessary when the vehicle turns, making the wheel that is traveling around the outside of the turning curve roll

farther and faster than the other. The average of the rotational speed of the two driving wheels equals the input rotational speed of the drive shaft. An increase in the speed of one wheel is balanced by a decrease in the speed of the other.

When used in this way, a differential couples the input shaft (or prop shaft) to the pinion, which in turn runs on the crown wheel of the differential. This also works as reduction gearing to give the ratio. On rear wheel drive vehicles the differential may connect to half-shafts inside an axle casing or drive shafts that connect to the rear driving wheels. Front wheel drive vehicles tend to have the pinion on the end of the main-shaft of the gearbox and the differential is enclosed in the same casing as the gearbox. They have individual drive-shafts to each wheel. Older 4x4 vehicles and tractors usually have a solid front axle, the modern way

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A Go-Kart is a small four wheeled vehicles without suspension or differential. It is a light powered vehicle which is generally used for racing. This paper is aimed to model and perform the STATIC analysis of the go-kart chassis which is constructed with circular beams. Modeling and analysis are performed in CATIA and ANSYS respectively. The go-kart chassis is different from ordinary car chassis. Here two different materials are compared with Circular models. And finally concluded suitable material on these two materials AISI1018 and carbon fiber by using front, Side impact methods. The chassis is designed in such a way that it requires less materials and ability to withstand loads applied on it. Strength and light weight are the basic consideration for choosing the chassis material. Carbon fibre is the suitable material to be used for the go-kart chassis because of High Strength to weight ratio. Rigidity, Corrosion resistance, Electrical Conductivity, Fatigue Resistance. based on stresses and deformation values concluded the suitable material for gokart.

Keyword: Chassis, Go-Kart, AISI 1018, catia ANSYS 14.

1. INTRODUCTION

1.1 INTRODUCTION TO GO KARTS

Kart racing or karting is a variant of open-wheel motorsport with small, open, four-wheeled vehicles called karts, go-karts, or shifter karts depending on the design. They are usually raced on scaled-down circuits. Karting is commonly perceived as the stepping stone to the higher ranks of motorsports.

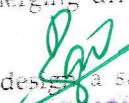
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Go-karting is a big craze to Americans and Europeans. It is initially created in United states in 1950's and used for recreational purpose. Gradually it became a good hobby and other countries followed it. In India go karting is getting ready to make waves. A racing track is ready in Nagpur for Go karting and chennai is also trying to make one.

Indian companies like MRF, Indus motors are also producing Go karts. Go karts help to unleash the budding talents of engineers and emerging drivers for formula one.

Our primary objective is to design a safe and functional vehicle based on a rigid and less on fuel


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Design and Analysis of Steam turbine blade using different materials

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ABSTRACT

A steam turbine is mechanical device which converts thermal energy in steam into mechanical work. The steam turbine gives the better thermodynamic efficiency by using multiple stages in the expansion of steam. The stages are characterized by the way of energy extraction from them is considered as impulse or reaction turbines. In this thesis the parameters of steam turbine blade varied and analysis is done for strength, life and heat transfer rates. The varied parameters are the ratio of X-axis distance of blade profile by chord length and ratio of maximum height of blade profile in Y-direction to the chord length. The 3D modelling is done by using catia software. The ANSYS software is used for static, thermal analysis, finally concluded the suitable design and material for steam turbine blade.

KEY WORDS: Steam Turbine, Thermal Energy, Impulse Turbine, Reaction Turbine, Static Analysis, Thermal Analysis

1. INTRODUCTION

1.1 INTRODUCTION

A turbine (from the Latin turbo, a vortex, related to the Greek $\tau\u00f9\rho\beta\eta$, tyrbē, meaning "turbulence") is a rotary mechanical device that extracts energy from a fluid flow and converts it into useful work. The work produced by a turbine can be used for generating electrical power when combined with a generator or producing thrust, as in the case of jet engines. A turbine is a turbo machine with at least one moving part called a rotor assembly, which is a shaft or drum with blades attached. Moving fluid acts on the blades so that they move and impart rotational energy to the rotor. Early turbine examples are windmills and waterwheels.

Gas, steam, and water turbines have a casing around the blades that contains and controls the working

fluid. Credit for invention of the steam turbine is given both to British engineer Sir Charles Parsons (1854–1931) for invention of the reaction turbine, and to Swedish engineer Gustaf de Laval (1845–1913) for invention of the impulse turbine. Modern steam turbines frequently employ both reaction and impulse in the same unit, typically varying the degree of reaction and impulse from the blade root to its periphery.

The word "turbine" was coined in 1822 by the French mining engineer Claude Burdin from the Latin turbo, or vortex, in a memo, "Des turbines hydrauliques ou machines rotatoires à grande vitesse", which he submitted to the Académie royale des sciences in Paris. Benoit Fourneyron, a former student of Claude Burdin, built the first practical water turbine

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A Study on Job Stress among Employees of Software Industry in Hyderabad City, Telangana State

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ABSTRACT

In the present scenario software industry has become one of the fastest growing industries in India. The reason for choosing particularly software industry and employees is that the level of stress these employees face is comparatively higher than other employees. Any kind of a job has targets and an employee becomes stressed when he or she is allotted with unachievable targets and are unable to manage the given situation. Thus, the main aim of this article is to bring to lime light the level of stress with software employees in Hyderabad and the total sample size for the study is 100 chosen by random sampling method in Hyderabad city.

KEYWORDS: Stress, Hyderabad, software industry, grievances, work culture.

I. INTRODUCTION

Stress is one of the problems faced by human beings. It has both positive and negative impact on individual. The positive stress called eustress is required to certain level to help an individual to perform their work without which the individual will not work properly. The negative stress called distress has negative impact on the individual which restricts them in performing their work. The ancient philosophical and religious texts provide information about stress which has two approaches: the first approach begins with the nature of human existence and moves systematically to its dysfunction (i.e.) stress is generated under certain circumstances, the second approach identifies the problem and the principles of dealing with it are woven around the problem

and its resolution. Experience of occupational stress is inevitably involved in the execution of any type of work. Stress has an adaptive value. It motivates the individual to attend to the task and get rid of the tension or demand the unattended task produced.

The Indian Software industry has grown at a compounded annual growth rate (CAGR) of 28 % during the last 5 years. The key segments that have contributed significantly to the industry's exports include – software services - BPO sector is playing vital role in the growth of our country's economy. Due to liberalization of Indian economic policy, the growth of software industry is in commendable position. Due to cost advantage, availability of

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Indian companies like MRF, Indus motors are also producing Go karts. Go karts help to unleash the budding talents of engineers and emerging drivers for formula one.

Our primary objective is to design a safe and functional vehicle based on a rigid and torsion-free

Fabrication and Tensile, Compressive, Flexural Mechanical Testing of Aluminium Metal Matrix Composites Reinforcement with TiO₂

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ABSTRACT:

To enhance the mechanical properties of aluminium alloy we prepared the aluminium metal matrix composite with varying weight percentages of 0%, 3%, 6% and 9% of titanium dioxide and testing their strength limits with all combinations. This work includes the fabrication of pure aluminium with three different weight percentages of titanium dioxide preparing four samples of each weighing 1000gms by using the stir casting process. From each sample three combinations of tensile, compression, flexural, impact, hardness and wear testing specimens were prepared. In this section, this work restricted to tensile, compression and flexural testing to check the mechanical properties of prepared specimens. This work found favourable results of these Al-TiO₂ composites compared with the pure aluminium composite specimens. **Keywords:** Aluminium, Titanium dioxide (TiO₂), Mechanical Properties, Tensile Strength, Compression Strength, Flexural Strength.

I. INTRODUCTION:

The increasing demands on innovative light in weight designs in transportation promote the marketplace of personalized components such as complex and also multi-phase products. An appealing product combo is actually aluminium and also titanium. While titanium alloys present high mechanical durability and good deterioration protection, aluminium alloys provide lesser density, and subsequently, greater possibility for weight discounts [1] The current job is actually an attempt to study the mechanical behaviour of Aluminium and Titanium compounds made utilizing the rouse casting method [2].

Aluminium matrix composites have formed tremendous rate of interest in assorted applications featuring aerospace and also car elements due to their light-weight, higher strength to body weight ratio, higher rigidity, affordable as well as higher perspective security [4, 6, 9, 11-14].

New developed aluminium based alloys, specifically with titanium, are obtaining even more level of popularity as a result of their excellent homes. The combination of light in weight as well as high strength makes Ti-based alloys really eye-catching for aerospace and also motor vehicle fields [5]. The planning of metal matrix composites fabricated is actually by the stir casting procedure. Stir substance does not produce a poor make-up in the metallie matrix support. Stir fabricated composites which are reduced in price through quick and easy for construction [7].

Composites deliver the adaptability in opting for the constituent materials as per the expense and also the need associated with processing the same [8] The developing demands on stylish lightweight styles in transit advertise the marketplace of individualized materials, like composites as well as material products. For the last one attractive product combo constitutes aluminium as well as titanium. While aluminium alloys supply a higher specific bending over rigidity, titanium alloys show higher flexible durability combined with a superior rust protection [10].

Aluminium alloys premium physical and mechanical residential properties like lower density, reduced weight, and also low coefficient of thermal expansion, superb corrosion resistance, superior tensile stamina, high hardness, significant firmness as well as use protection contrasted to the other alloys as well as metals [15].

II. FABRICATION:

Fig.1 shows a stir casting setup, casting the aluminium alloy in four different sessions and each session requires 1000 grams of pure Aluminium powder with variable weight percentages of titanium dioxide. Fig.2. shows the stir casting process, we did the casting process in four sessions, in the first session 1000 grams of pure aluminium powder fed into the clay-graphitic crucible of stir furnace and heating the metal matrix composite material. around 650°C-700°C aluminium reached to melting state.



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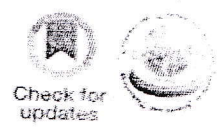
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A differential is a particular type of simple planetary gear train that has the property that the angular velocity of its carrier is the average of the angular velocities of its sun and annular gears. This is accomplished by packaging the gear train so it has a fixed carrier train ratio $R = -1$, which means the gears corresponding to the sun and annular gears are the same size. This can be done by engaging the planet gears of two identical and coaxial epicyclic gear trains to form a spur gear differential. Another approach is to use bevel gears for the sun and annular gears and a bevel gear as the planet, which is known as a bevel gear differential.

In automobiles and other wheeled vehicles, the differential allows the outer drive wheel to rotate faster than the inner drive wheel during a turn. This is necessary when the vehicle turns, making the wheel that is traveling around the outside of the turning curve roll

farther and faster than the other. The average of the rotational speed of the two driving wheels equals the input rotational speed of the drive shaft. An increase in the speed of one wheel is balanced by a decrease in the speed of the other.

When used in this way, a differential couples the input shaft (or prop shaft) to the pinion, which in turn runs on the crown wheel of the differential. This also works as reduction gearing to give the ratio. On rear wheel drive vehicles the differential may connect to half-shafts inside an axle casing or drive shafts that connect to the rear driving wheels. Front wheel drive vehicles tend to have the pinion on the end of the main-shaft of the gearbox and the differential is enclosed in the same casing as the gearbox. They have individual drive-shafts to each wheel. Older 4x4 vehicles and tractors usually have a solid front axle, the modern way



A Study on Design and stress strain Analysis of Composite Differential Gear Box

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ABSTRACT

The main objective of this project is to develop parametric model of differential Gearbox by using CATIA-V5 under various design stages. It is observed that Glass filled polyamide composite material is selected as best material for differential gearbox and is found to suitable when apply moment 200 Nm under static loading conditions. Comparisons of various stress and deformation, shear stress results using ANSYS-14.5 with Glass filled polyamide composite and metallic material (grey cast iron) are also being performed and found to be lower for composite material.

Key Words: Gearbox Design, Assembly Analysis, Stress, deformation, shear stress, static Analysis

1. INTRODUCTION

A differential is a particular type of simple planetary gear train that has the property that the angular velocity of its carrier is the average of the angular velocities of its sun and annular gears. This is accomplished by packaging the gear train so it has a fixed carrier train ratio $R = -1$, which means the gears corresponding to the sun and annular gears are the same size. This can be done by engaging the planet gears of two identical and coaxial epicyclic gear trains to form a spur gear differential. Another approach is to use bevel gears for the sun and annular gears and a bevel gear as the planet, which is known as a bevel gear differential.

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A Study on Design and Analysis of Gokart chassis

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ABSTRACT

A Go-Kart is a small four wheeled vehicles without suspension or differential. It is a light powered vehicle which is generally used for racing. This paper is aimed to model and perform the STATIC analysis of the go-kart chassis which is constructed with circular beams. Modeling and analysis are performed in CATIA and ANSYS respectively. The go-kart chassis is different from ordinary car chassis. Here two different materials are compared with Circular models. And finally concluded suitable material on these two materials AISI1018 and carbon fiber by using front, Side impact methods. The chassis is designed in such a way that it requires less materials and ability to withstand loads applied on it. Strength and light weight are the basic consideration for choosing the chassis material. Carbon fibre is the suitable material to be used for the go-kart chassis because of High Strength to weight ratio. Rigidity, Corrosion resistance, Electrical Conductivity, Fatigue Resistance. based on stresses and deformation values concluded the suitable material for gokart.

Keyword: Chassis, Go-Kart, AISI 1018, catia ANSYS 14.

1. INTRODUCTION

1.1 INTRODUCTION TO GO KARTS

Kart racing or karting is a variant of open-wheel motorsport with small, open, four-wheeled vehicles called karts, go-karts, or shifter karts depending on the design. They are usually raced on scaled-down circuits. Karting is commonly perceived as the stepping stone to the higher ranks of motorsports.

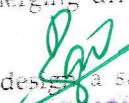
The Go-Kart is a small powered single/double occupancy racing vehicle, having a similar functioning as of a F1 vehicle but specifically meant for low powered engines. The Go-kart tracks are smaller when compared to F1 tracks but the door to F1 opens after being part of International Go-Kart Championships. The Go Kart is very volatile as similar to F1 car chassis

first go-kart was made in 1956 by the man named Art Ingels also called the father of go-karts. It was made from scrap metal and a lawn mower engine.

Go-karting is a big craze to Americans and Europeans. It is initially created in United states in 1950's and used for recreational purpose. Gradually it became a good hobby and other countries followed it. In India go karting is getting ready to make waves. A racing track is ready in Nagpur for Go karting and chennai is also trying to make one.

Indian companies like MRF, Indus motors are also producing Go karts. Go karts help to unleash the budding talents of engineers and emerging drivers for formula one.

Our primary objective is to design a safe and functional vehicle based on a rigid and less on fuel


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