

I N T E R N S H I P

장기현장실습 최종보고서

영어영문학과
20120310
장서강

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01

Company introduction

울산테크노파크 자동차부품기술연구소 회사소개

산업통상자원부와 울산광역시의 지원으로 설립된 비영리 기관으로, 자동차관련 산학연 네트워크를 토대로 R&D지원을 통해 자동차 부품업체의 국제경쟁력 강화를 목적으로 각종 사업을 추진

자동차부품기술연구소 추진사업

- 자동차 분야 기술지원 및 정부기술 과제 참여로 부품업체 R&D역량강화
- 첨단장비를 이용한 기업지원으로 부품업체 경쟁력 강화
- 부품업체, 연구기관 간 연계활동 지원 및 신기술 교류 네트워크 구축
- 기업체 연구소 유치 및 집적회로 공동기술연구 활성화



Department

자동차기술지원단

- 차세대기술센터
- 안전시험센터
- 시험평가센터
- 제조혁신센터





02

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01 기본업무

문서작업

복사, 스캔 뿐만 아니라 설문조사
취합, 홍보기업 정보 취합 등 여러
가지 문서 작업

스케줄 업로드

매월 카카오톡과 구글캘린더
에 팀원과 원장님 스케줄 공유

자체 청소& 방역

매주 수요일 5시마다
자체 청소 및 방역 실시



02 평가회 보조

기본 서류 준비 작업

평가기업 관련서류 준비,
복사, 스캔, 메일 등 문서
작업

평가회장 준비

평가회장 섭외, 컴퓨터,
회의실, 다과, 자료, 사진
촬영 등 모든 것을 준비

마무리 정리

평가회가 끝난 후, 평가회장
정리 뿐만 아니라 서류들을
정리해서 파일화



03 논문번역

Study on Electro spinning Voltage and Strength Characteristics Using Agitation Solution(SWCNT0.1

In this study, this author CNT0.1%-PAN3%-DMF17% the agitation the solute and solvent correlate acc based on Scanning Electron Micro electrospinning voltage of 5-40kV, failec of spinning quantity and was confirme 1.76µm at 25 kV. Additionally, after fal SK Chemical's prepreg electrospinning tensile test, the result of tensile test is 5% of result.

1. Introduction

Recently, on aircraft as well as th many studies on high strength and liq materials have been conducted. In cor fiber technology that was satisfied wit has been outlined. Especially, in the air and hydraulic system from the proble and safety of the aircraft besides the to reduce the weight of other basic str

The method of manufacturing Nano lightweight composite materials, is mainly using the method for producing by melting or eletrospinning of polymer solution in a solvent, obtaining by carbonizing after fabricate polymers composite fibers with different degree of carbonization,

Variation of the Agitation Condition for Ultrasonic Agitation of CNT(IT-20A

ustry, aircraft lightweight ma field of transp iminum alloys, rial that can c r composite n

re superior to and in the cas mability and s usable temp act strength is carbon nanotu in other mater n be applied to

method which by adding a ly studied. In grown directly on silicon carbide fibers by chemical vapor deposition to improve the mechanical strength of the fibers. However, generally carbon nanotubes have a cohesive shape as shown in Fig.1 by interacting the strong van der Waals between the tubes. Since the coagulation phenomenon, when manufacturing the composite material, interferes with the uniform network structure of the carbon nanotubes in the composite material. So it

1. Introduction

III. Equipment Construction Present Condition by Center

Equipment Construction-Reliability Test Center

Scale: 11types 14,000 million

No	NAME
1	Road Simulator
2	Multi Axial Simulation Table(MAST)
3	Hydraulic Endurance Tester (25/5/10/25ton)
4	2 Axes Fatigue Tester (50ton)
6	Combination Environment Vibration Tester (10ton)
6	Vibration Tester (3.8ton)
7	Combination Environment Chamber
8	Noise Measurement System
9	Vibration Measurement System
10	X-RAY Nondestructive Inspection Equipment
11	Electron Probe X-ray Microanalyzer (EPMA)



Road Simulator



Multi Axial Simulation Table



Combination Environment Vibration Tester(10ton)



Combination Environment Chamber

the necessity of lightening gas emissions and carbon e vehicles such as electric the vehicle is expected to abustion engine vehicles. In the component is needed. y of automobile parts ngth lightweight materials e applied to body parts. igh is a representative that can replace existing ion-rigidity compared to

ts is largely divided into ind compression forming. anufactured by injection matrix, and compression old. On the other hand, RTM method of placing x into the inside. It is up prepreg is cured in a er, RTM and autoclave ts such as body parts mplicated manufacturing

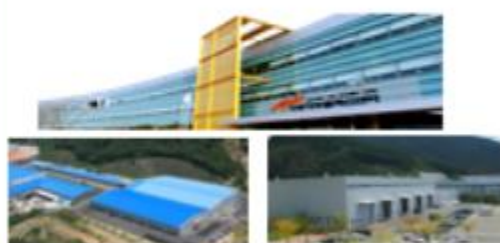
Recently, prepreg compression forming(PCF) has been researched to apply the prepreg to a compression forming method used in the autoclave method to secure both productivity and product quality. There are three major manufacturing processes for CFRP products using PCF method. First is the process of laminating a prepreg impregnated with epoxy resin on a woven fiber in a uniform

I. Automotive Parts Institute Center General Present Condition

Infra Summary

Total Setting Fee : 88,500million
(Construction Fee 35,800million, Equipment-Constuction Fee 52,600million)

- SCALE : Sate 66,612 m²
Total Floor Soace 31,868 m², 8 Buildings
- FUNCTION : Supporting Automotive of R&D Field
- Main Duties
 - Equipment-used Enterorise Support Project
 - Corporate Joint Collaborative R&D Project
 - Business Incubator Technology Support



- Equipment-Construction Field
- Consturction Scale : 27types 526,000 million
- Main Equipment
 - Electric Vehicle Test Part(6types 6,400 million)
 - Charge & Discharge regulator, Thermal Shock Tester, etc.
 - Safety Test Part (3types 19,000 million)
 - Crush Test, SLED Test, Pedestrian-protection Test, etc.
 - Reliability Test Part (11types 14,000 million)
 - Multi Axial Simulation Table, Combination Environment chamber, etc.
 - Development Parts & Surface treatment (7types 10,800 million)
 - 5 Axes High-speed Machining Center, Electrical Discharge Machine, Ion Nitriding Facilities, etc.
 - Supporting Research Equipment & Other common Equipment (2,600 million)
 - Computation Equipment, Crane, Air Compressor, etc.

03

Contents 03

느낀점

"자신을 내 보여라. 그러면
재능이 드러날 것이다."





Q & A

Thank you!

감사합니다.

끝까지 함께해 주셔서 감사합니다.

