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*Ahmad Yunus Nasution, S.T., M.T dilahirkan di Padangsidempuan pada tanggal 06 April 1986. Saat ini, beliau menjabat sebagai dosen Teknik Mesin di Universitas Sumatera Utara. Beliau menyelesaikan pendidikan terakhirnya yakni Magister Rekayasa Manufaktur di Universitas Pancasila pada tahun 2016.*

## Publications

2025

Jurnal internasional bereputasi

### **Bio-Inspired Thin-Walled Straight and Tapered Tubes with Variable Designs Subjected to Multiple Impact Angles for Building Constructions**

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Jurnal nasional terakreditasi

### **Power optimisation of centrifugal pumps in a 4-storey building**

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### **ANALISA DESAIN KOMPOR BIOMASSA BERBAHAN BAKAR TEMPURUNG KELAPA MENGGUNAKAN ANSYS**

AHMAD YUNUS NASUTION

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### **Efficiency Unleashed: Lean Manufacturing Strategies in Analyzing the Plastic Packaging Production Process**

AHMAD YUNUS NASUTION , RIKI EFFENDI , DIDIN WAHYU PRATAMA , ADIL BAYU SAPUTRA

2024

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### **Investigation of the Impact Strength of MC Blue Material Due to Temperature Variations**

FAISAL AMRI , M. YUSUF RAHMANSYAH SIAHAAN , RAKHMAD ARIEF SIREGAR , AHMAD YUNUS NASUTION

2020

Jurnal nasional

### **Design of stem separator tool with Cyclea Barbata (Cincau) plant leaves to increase business productivity of Sunter Jaya Residents of Jakarta Utara**

PRIAN GAGANI CHAMDARENO , AHMAD YUNUS NASUTION , IKA KURNIATY , FATMA SARI , MERI PRASETYAWATI

2021

Jurnal nasional

**DESAIN DAN ANALISA DRONE PENYEMPROT PESTISIDA DENGAN KAPASITAPENYEMPROTAN 0,5 LITER/MENIT**  
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ST.,MT.Â<sup>1\*</sup> Azmi Muhammad<sup>2</sup>Departemen Teknik Mesin,Fakultas Teknik  
Universitas Sumatera UtaraÂ<sup>1</sup>Jurusan Teknik Mesin,Falkultas Teknik  
Universitas Muhammadiyah JakartaÂ<sup>2</sup>\*Email:

**ahmadjunusa@usu.ac.id** **ABSTRAK** Pada perkembangan zaman ini, kemajuan teknologi berkembang dengan pesat sehingga persaingan didalam dunia industri sendiri menuntut agar adanya peningkatan inovasi guna

AHMAD YUNUS NASUTION

2026

Jurnal internasional bereputasi

**Effect of Ti Contents on the Microstructure and Mechanical Properties of Ni<sup>727</sup>; Al<sup>727</sup>; Ti System**

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2025

Prosiding seminar internasional

**Effect of Adding a Trigger Hole and Cross-Section Foam on the Crash Box in Energy Absorption**

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Jurnal nasional terakreditasi

**Analysis of The Frame Design of Cracker Sheet Printing and Cutting Machine Using Finite Element Method Simulation**

AHMAD YUNUS NASUTION , MUNZIR QADRI , RIKI EFFENDI , RIKARDO PRATAMA

2021

Monograf

**Design optimization of passenger SUV<sup>€</sup>'s crash box and bumper beam by using finite element method**

AHMAD YUNUS NASUTION

2023

Jurnal nasional

**Design and training of rice thresher machines for the farming group communities in Besar Village II Terjun**

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**RANCANGBANGUN KONTROL MOTOR 3 AXIS MENGGUNAKAN ARDUINO MEGA PADA UNIT MESIN CNC MILLING**

AHMAD YUNUS NASUTION

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**Effect of Forging Process on Impact Strength in Brass Materials**

AHMAD YUNUS NASUTION , M. YUSUF RAHMANSYAH SIAHAAN , RAKHMAD ARIEF SIREGAR , AMRU SIREGAR

2019

Monograf

**Pembuatan Mesin Pengcopy Camchaft Racing Sepeda Motor 4 Tak dengan Kapasitas 1 Pcs/30Menit**

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**Analysis of redesigning 3 axis motor control using arduino mega on a CNC milling machine unit**

AHMAD YUNUS NASUTION , TULUS BURHANUDDIN SITORUS

2018

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**PERANCANGAN ALAT PENGUPAS KULIT KOPI BASAH DENGAN KAPASITAS 120 KG/JAM**

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## **Numerical modeling of composite spherical-roof contoured core (SRCC) sandwich panels subjected to blast loading**

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### **Effect of number of triggers and shape of crash box on energy absorption during experimental collision**

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### **Investigation of the Impact Strength of MC Blue Material Due to Temperature Variations**

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### **IMPLEMENTASI METODE QUALITY CONTROL CIRCLE UNTUK PENINGKATAN KAPASITAS PRODUKSI PROPELLER SHAFT DI PT XYZ**

SULIS YULIANTO , AHMAD YUNUS NASUTION

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### **Utilization of a Coffee Peeler Machine for Coffee Farmer Groups in Gunung Tua Village Mandailing Natal**

TULUS BURHANUDDIN SITORUS , ALFIAN HAMSI , AHMAD YUNUS NASUTION

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### **Desain Dan Analisa Drone Penyemprot Pestisida Dengan Kapasitas Penyemprotan 0, 5 Liter/Menit: Design and Analysis Of Pesticide Spraying Drone With 0.5 Liter/Min Spray Capacity**

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### **Utilization of a Coffee Peeler Machine for Coffee Farmer Groups in Gunung Tua Village Mandailing Natal: Coffee Peeler Machine**

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### **Effect of Intake Valve Gap Adjustment Variation on Fuel Consumption in Daewoo 4dwy-30 Diesel Motorcycle**

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## **Numerical modeling of composite spherical-roof contoured core (SRCC) sandwich panels subjected to blast loading**

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## **DEVELOPMENT OF KNIFE EYES ON THE MAKING PROCESS OF ORGANIC BURNING PROCESS OF 7 LITERS FOR UMKM**

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## **Analisis Kalor Pada Alat Pengolah Sampah Plastik Dengan Metode Pyrolisis Dengan Perbandingan Tipe Sampah Plastik**

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## **Impact behaviour of spherical-roof contoured-core (SRCC) sandwich panel under the low-velocity impact (LVI): A numerical investigation**

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## **Analysis of redesigning 3 axis motor control using arduino mega on a CNC milling machine unit**

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### **Effect of Forging Process on Impact Strength in Brass Materials**

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### **Analysis Of River Cleaning Ship Design With The Trasher Boat Concept By Using MAXSURF:-**

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### **Combination of frustra shapes with cross sections and trigger circles for crash box design to absorb energy**

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### **RANCANG BANGUN ALAT PENGADUK ADONAN BUBUR ORGANIK KAPASITAS 7 LITER UNTUK INDUSTRI UMKM**

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### **USULAN PERBAIKAN METODE KERJA MUSCULOSKEL ETAL DISORDERSDENGAN METODE RAPID UPPER LIMB ASSESSMENT (RULA) UNTUK MENGURANGI RISIKO MUSCULOSKEL ETAL DISORDERS**

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### **PLANNING AND MANUFACTURING OF TRANSMISSION OF CORN COB COUNTING EQUIPMENT USING 1 HP ELECTRIC MOTOR WITH A CAPACITY OF 2 KG PER 5 MINUTES**

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### **PENGUJIAN MESIN PRESS MEKANIK SEMI OTOMATIS DENGAN PENGGERAK MOTOR LISTRIK 0.5 HP**

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### **Bio-Inspired Thin-Walled Straight and Tapered Tubes with Variable Designs Subjected to Multiple Impact Angles for Building Constructions. Buildings 2025, 15, 620**

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### **Quasi-static crushing response of square hybrid carbon/aramid tube for automotive crash box application**

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### **Rancang Bangun Kontrol Motor 3 Axis Menggunakan Arduino Mega Pada Unit Mesin Cnc Milling**

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### **Analysis Of River Cleaning Ship Design With The Trasher Boat Concept By Using MAXSURF**

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### **PEMBUATAN ALAT BANTU UNTUK PROSES Bleeding Air Pada Brake System DI UNIT Dump Truck HD465-7R**

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## **Researches**

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### **Investigation of the Impact Strength of MC Blue Material Due to Temperature Variations**

FAISAL AMRI , AHMAD YUNUS NASUTION , M. YUSUF RAHMANSYAH SIAHAAN , RAKHMAD ARIEF SIREGAR

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Riset Andalan Perguruan Tinggi dan Industri

### **Pengolahan Limbah Pabrik Kelapa Sawit dengan "Zero Waste" melalui Teknologi Pirolisis dan Pemanfaatan Sludge Menjadi Pupuk NPK Organik**

AHMAD YUNUS NASUTION , MARIANI BR SEMBIRING , RULIANDA PURNOMO WIBOWO , TAUFIQ BIN NUR , KSU Karya Bangsa

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AHMAD YUNUS NASUTION , TULUS BURHANUDDIN SITORUS , ALFIAN HAMSI

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2020

Ipteks Bagi Masyarakat

## **Penyuluhan dan Pelatihan Alat Packing Tusuk Gigi Kelurahan Penggilingan Cakung Jakarta Timur**

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## **Training for Plantation Sector Cooperative Business Empowerment in The Financial Sector in Labuhanbatu Regency in 2021**

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2022

## **Pengolahan Limbah Pabrik Kelapa Sawit dengan "Zero Waste" melalui Teknologi Pirolisis dan Pemanfaatan Slude menjadi Pupuk NPK Organik**

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