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Ahmad Yunus Nasution, S.T., M.T was born in Padangsidempuan on April 06, 1986. Currently, he is a Mechanical Engineering lecturer at the Universitas Sumatera Utara. He completed his master's degree in Manufacturing Engineering at Pancasila University in 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

AHMAD YUNUS NASUTION

2025

Jurnal nasional terakreditasi

Power optimisation of centrifugal pumps in a 4-storey building

AHMAD YUNUS NASUTION

2022

Jurnal nasional

ANALISA DESAIN KOMPOR BIOMASSA BERBAHAN BAKAR TEMPURUNG KELAPA MENGGUNAKAN ANSYS

AHMAD YUNUS NASUTION

2023

Jurnal nasional terakreditasi

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

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

2024

Jurnal nasional terakreditasi

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/MENITAhmad Yunus Nasution ST.,MT.Â^{1*} Azmi Muhammad²Departemen Teknik Mesin,Fakultas Teknik Universitas Sumatera UtaraÂ¹Jurusan Teknik Mesin,Falkultas Teknik Universitas Muhammadiyah JakartaÂ²*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

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Jurnal internasional bereputasi

Effect of Ti Contents on the Microstructure and Mechanical Properties of Ni˗ Al˗ 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

AHMAD YUNUS NASUTION

2024

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™s crash box and bumper beam by using finite element method

AHMAD YUNUS NASUTION

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Jurnal nasional

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Jurnal nasional terakreditasi

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

AHMAD YUNUS NASUTION

2023

Jurnal nasional terakreditasi

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

AHMAD YUNUS NASUTION

2025

Jurnal internasional bereputasi

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

AHMAD YUNUS NASUTION , TULUS BURHANUDDIN SITORUS

2018

Jurnal nasional

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

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2024

Jurnal internasional bereputasi

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

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

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2018

Monograf

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

SULIS YULIANTO , AHMAD YUNUS NASUTION

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Jurnal nasional terakreditasi

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Jurnal nasional

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Jurnal nasional

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Monograf

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Jurnal nasional terakreditasi

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2025

Jurnal nasional

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2019

Monograf

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AHMAD YUNUS NASUTION

2020
Monograf

Effect of ti contents on the microstructure and mechanical properties of ni-al-ti system

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2025
Jurnal internasional bereputasi

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

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2018
Monograf

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

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2020
Jurnal nasional

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

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2023
Jurnal nasional

Numerical Analysis of Angular Dissimilarity of Static Loads in Honeycomb Structures Substantial Flexural Strength

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2022
Jurnal nasional

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Jurnal nasional

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Jurnal internasional bereputasi

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

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2025
Prosiding seminar internasional

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

AHMAD YUNUS NASUTION , M. SABRI , TULUS BURHANUDDIN SITORUS , MUHAMMAD IBRAHIM SYAH , Nurcholis

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Jurnal nasional terakreditasi

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Jurnal nasional

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

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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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2021
Jurnal nasional

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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2016
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PENGUJIAN MESIN PRESS MEKANIK SEMI OTOMATIS DENGAN PENGGERAK MOTOR LISTRIK 0.5 HP

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2025

Prosiding seminar internasional

Analysis of Energy Consumption Used In Fish Storage Using Solar Panels (Photovoltaic) As An Energy Source

MUHAMMAD IBRAHIM SYAH , Nurcholis , AHMAD YUNUS NASUTION

2025

Jurnal internasional bereputasi

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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2020

Monograf

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

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Researches

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2020

Ipteks Bagi Masyarakat

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

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2022

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2022

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

AHMAD YUNUS NASUTION , MARIANI BR SEMBIRING , RULIANDA PURNOMO WIBOWO
