

## PAPER NAME

**27.Colloquium of professional engineer  
program(book of abstracts.pdf**

---

## WORD COUNT

**362 Words**

## CHARACTER COUNT

**2083 Characters**

## PAGE COUNT

**1 Page**

## FILE SIZE

**360.2KB**

## SUBMISSION DATE

**May 2, 2023 6:14 AM GMT+8**

## REPORT DATE

**May 2, 2023 6:15 AM GMT+8**

---

● **6% Overall Similarity**

The combined total of all matches, including overlapping sources, for each database.

- 6% Internet database
- 3% Publications database
- Crossref database
- Crossref Posted Content database
- 3% Submitted Works database

● **Excluded from Similarity Report**

- Bibliographic material
- Quoted material
- Cited material
- Small Matches (Less than 10 words)
- Manually excluded sources

# PERBEDAAN ARUS PENGELASAN TERHADAP KEKUATAN LENGKUNG (BENDING) LAS SMAW MENGGUNAKAN ELEKTRODA E6013 DENGAN POSISI TEGAK PADA BAJA ST 42

Badaruddin Anwar

Program Profesi Insinyur <sup>1</sup> Universitas Muslim Indonesia

Jl. Urip Sumihardjo km.5, Makassar, Indonesia 90231

Email : [badaruddinanwar<sup>2</sup>@yahoo.co.id](mailto:badaruddinanwar@yahoo.co.id)

## ABSTRAK

Penelitian ini bertujuan untuk mengetahui perbedaan kekuatan lengkung (*Bending*) Akibat penggunaan Arus Pada Las SMAW Menggunakan Elektroda E6013 Dengan Posisi Tegak Pada Baja ST 42. Objek penelitian ini adalah Keseluruhan Sampel Penelitian. Teknik pengumpulan data yang digunakan yaitu eksperimental. Data penelitian uji *bending* diperoleh dari printout hasil uji bending pada alat Universal Test Machine (UTM) dengan sampel yang terdiri dari tiga kelompok sampel variasi arus (80A, 85A, 90A) dan satu kelompok sampel normal. kemudian rata-rata dari hasil setiap kelompok sampel yang diperoleh disubstitusikan ke dalam rumus kekuatan *bending* (*three point bending*). Hasil penelitian menunjukkan bahwa: (1). Nilai kekuatan bending kelompok variasi arus 80 ampere paling rendah dibandingkan dengan kelompok variasi arus 85 ampere dan 90 ampere, serta kelompok sampel normal. (2). Nilai kekuatan *bending* kelompok arus 90 Ampere paling tinggi dibandingkan antara kelompok variasi arus 85 ampere dan 80 ampere.

Kata Kunci: Pengelasan, Kekuatan Lengkung (*Bending*), Baja ST 42

## ABSTRACT

*This research aims to determine difference Curved Strength (Bending) As a result of the use Current In SMAW welding using electrodes E6013 with vertical position on steel ST 42. The object of this research is overall study sample. Data collection techniques used were experimental. The research data bending test is obtained from the printout of the results of bending test on the device Universal Test Machine (UTM) with a sample consisting of the groups of samples of current variation (80A, 85A, 90A) and a group of normal sample, then the average of the results for each a group of samples obtained is substituted into the formula bending strength (three point bending). the results showed that: (1). Bending strength values of 80 ampere current variation group the lowest compared with current variation of values 85 ampere, 90 ampere, and normal sample groups. (2) . Bending strength values of 90 ampere current group higher than most current variation pf values 85 ampere, 80 ampere between groups.*

*Keywords: Welding, Strength Arch (Bending), Steel ST 42*

## ● 6% Overall Similarity

Top sources found in the following databases:

- 6% Internet database
- 3% Publications database
- Crossref database
- Crossref Posted Content database
- 3% Submitted Works database

---

### TOP SOURCES

The sources with the highest number of matches within the submission. Overlapping sources will not be displayed.

<b>1</b>	<b>media.neliti.com</b> Internet	<b>3%</b>
<b>2</b>	<b>123dok.com</b> Internet	<b>3%</b>

## ● Excluded from Similarity Report

- Bibliographic material
- Cited material
- Manually excluded sources
- Quoted material
- Small Matches (Less than 10 words)

---

### EXCLUDED SOURCES

**researchgate.net**

Internet

**3%**