



Dashboard



Abstracts



My File



Log Out

[Create new abstract](#)[Sample Of Abstract](#) Abstracts ABS-339[Edit](#)[Delete](#)

Presenter name : Helmy Purwanto

The full name which will be printed in certificate, one person only

[Abstract ID: ABS-339]

The Effect of Tempering Temperature on Medium Carbon Steel Plate of Surface Hardening Result Using Induction Heating as Ballistic Resistant Material Study

Helmy Purwanto(1), Muhammad Dzulfikar(1), Mohammad Tauviqirrahman(2), Rifky Ismail(2), Nyoto Lestari(1)

(1)Department of Mechanical Engineering, Engineering Faculty, Universitas Wahid Hasyim, Semarang – Indonesia

(2)Department of Mechanical Engineering, Engineering Faculty, Universitas Diponegoro, Semarang – Indonesia

Abstract

Steel that has been heat treatment using quenching is hard but brittle. Tempering was done to remove the agility caused by the residual stress. The objective of this paper writing is to know and analyze the effect of tempering temperature on the mechanic property of steel plate of the surface hardening result. Steel plate with thickness of 8 mm of surface hardening result quenched by oil media was tempered at temperature of 100, 200, 300 and 400oC. Simulation based on finite element method was conducted to know the ballistic resistance. Experiment result showed that heating through induction and quenching on oil resulted in surface hardening. Tempering treatment decreased the hardness but at low temperature, the tensile strength increases. The simulation result showed that quenching and tempering

material at temperature of 100oC was more able to resist the ballistic rate compared to other various temperatures.

Keywords: quench temper, hardness, armor, simulation, ballistic resistance

Topic: Materials Engineering & Metallurgy

Type: Oral Presentation

Created: Wednesday, 18 September 2019 - 12:52:53

Last update: Wednesday, 18 September 2019 - 12:52:53

ISAIME

Email : isaime.snttm.2019@trisakti.ac.id

2019 © <http://isaime2019.snttm.trisakti.ac.id>.



Dashboard



Abstracts



My File



Log Out

My File

[[ABS-339 FULL-PAPER](#)] The Effect of Tempering Temperature on Medium Carbon Steel Plate of Surface Hardening Result Using Induction Heating as Ballistic Resistant Material Study
Helmy Purwanto(1), Muhammad Dzulfikar(1), Mohammad Tauviqirrahman(2), Rifky Ismail(2), Nyoto Lestari(1)

Server time : *Thursday, 19 September 2019 15:20:48*

File : [full-paper](#) (docx : 299.633 kb)

Topic : Materials Engineering & Metallurgy

Info :

[[ABS-339 PAYMENT-PROOF](#)] The Effect of Tempering Temperature on Medium Carbon Steel Plate of Surface Hardening Result Using Induction Heating as Ballistic Resistant Material Study
Helmy Purwanto(1), Muhammad Dzulfikar(1), Mohammad Tauviqirrahman(2), Rifky Ismail(2), Nyoto Lestari(1)

Server time : *Wednesday, 25 September 2019 13:44:33*

File : [payment-proof](#) (pdf : 189.69 kb)

Topic : Materials Engineering & Metallurgy

Info :

[ABS-339 PAYMENT-PROOF] File Submitted to ISAIME

1 pesan

isaime.snttm.2019@trisakti.ac.id <isaime.snttm.2019@trisakti.ac.id>

25 September 2019 13.44

Balas Ke: isaime.snttm.2019@trisakti.ac.id

Kepada: helmypurwanto@unwahas.ac.id

Do not reply this automail.

Please always send your email to isaime.snttm.2019@trisakti.ac.id

Dear Helmy Purwanto,

We have received the submission of your file:

Abstract ID:

ABS-339

Title:

The Effect of Tempering Temperature on Medium Carbon Steel Plate of Surface Hardening Result Using Induction Heating as Ballistic Resistant Material Study

Authors:

Helmy Purwanto(1), Muhammad Dzulfikar(1), Mohammad Tauviquirrahman(2), Rifky Ismail(2), Nyoto Lestari(1)

Type:

payment-proof

Topic:

Materials Engineering & Metallurgy

Presenter:

Helmy Purwanto

Thank you.

Best regards,

ISAIME Organizing Committee

Homepage : <http://isaime2019.snttm.trisakti.ac.id>Email : isaime.snttm.2019@trisakti.ac.id

Automated Conference System**UNIVERSITAS TRISAKTI***"Is a one stop learning for sustainable development"*

Kampus A, Jl. Kyai Tapa No.1, Grogol

Jakarta Barat 11440

(t) +62-21.566 3232, (f) +62-21.567 3001

[ISAIME] Final Revised Paper

3 pesan

Isaime Snttm Usakti <isaime.snttm.2019@trisakti.ac.id>

29 Oktober 2019 11.03

Kepada: Dedik Romahadi <dedik.romahadi@mercubuana.ac.id>, yoga uta nugraha <uta.utu@gmail.com>, Helmy Purwanto <helmypurwanto@unwahas.ac.id>, Indra Herlamba Siregar <indrasiregar@unesa.ac.id>, Ardiyansyah Yatim <ardiyansyah@eng.ui.ac.id>, Paryanto Dwi Setyawan <sugiman73@gmail.com>, "DR. I Komang Astana Widi, ST. MT" <aswidi@yahoo.com>, Dwiki Prasetyo <dwikiprasetyo@gmail.com>, Titin Nuryawati <ti2n_nuryawati@yahoo.com>, Yehezkiel Davian Raditya <yosuaazaryaharjandi@gmail.com>, Ferry Budhi Susetyo <fbudhi@unj.ac.id>, victoria.henniwuriyama@ui.ac.id, Kosim Abdurohman <qosimabdurrohman@gmail.com>, Riki Ardiansyah <ardiansyah_riki@yahoo.com>, Garimahdi Astaghfari <corolla.truenolevin@gmail.com>, Roni Hadi Wijaya <erhawe_wijaya@yahoo.com>, fadli.nur@sci.ui.ac.id, Zuldesmi mansjur <zuldesmi@unima.ac.id>, Mastuki <mastuki@untag-sby.ac.id>, Daniel Eka Perkasa <daniel.eka@sci.ui.ac.id>, aliya.qonita@sci.ui.ac.id, Claudya Ruth Fransisca <claudya.ruth@sci.ui.ac.id>, R Priyoko Prayitnoadi <priyokoprayitnoadi@gmail.com>, masyhur.hakim@yahoo.com, Adina Aji Setiady <adina.aji@sci.ui.ac.id>, Diki Ismail Permana <dicky91permana@itenas.ac.id>, Arya Octavian <arya.octavian@sci.ui.ac.id>, Mochamad Syamsiro <syamsiro@janabadra.ac.id>, Syifa Luthfiyah <syifa.luthfiyah@sci.ui.ac.id>, Norman Iskandar <norman.undip@gmail.com>, Mohamad Arif Andira <arifandira0209@gmail.com>, Achdianto <achdianto@gmail.com>, Agus Mukhlisin <agus.mukhlisin09@yahoo.com>, Ahmad Suudi <jamiatulakmal@gmail.com>, Ainul Ghurri <a_ghurri@unud.ac.id>, "Benny Lokombanua Maluegha, ST, MSc" <benny_maluegha@unsrat.ac.id>, Dedi Lazuardi <dedi.lazuardi@unpas.ac.id>, "Fergyanto E. Gunawan" <fgunawan@binus.edu>, Muchamad Panji <thermalsunray@gmail.com>, Muhammad Farrell Hidayat <hidayat.farrell@gmail.com>, Nazaruddin <nazaruddinyok@gmail.com>, Retno Wulandari <retno.wulandari.ft@um.ac.id>, Riesta Anggarani <riesta.anggarani@gmail.com>, Suyitno <suyitno@gmail.com>, Zulkifli Amin <zul270171amin@gmail.com>

Cc: daisman.aji@trisakti.ac.id

Dear Authors of ISAIME 2019,

Please send your final revised paper in office word file type.

The reviewer comments for your paper are available in your ISAIME web account.

Make sure your paper format is exactly the same format as IOP requires.

The format for IOP paper template and guide are available at http://isaime2019.snttm.trisakti.ac.id/?page_id=201.

Inappropriate format of your paper would make your paper be rejected by IOP Publisher or delayed for publication.

Please send your revised paper by 30 October 2019.

Thank you very much for your participation in ISAIME 2019 9-10 October 2019.

Best regards,

Daisman P.B. Aji
Chairman of ISAIME 2019**UNIVERSITAS TRISAKTI***"Is a one stop learning for sustainable development"*

Kampus A, Jl. Kyai Tapa No.1, Grogol

Jakarta Barat 11440

(t) +62-21.566 3232, (f) +62-21.567 3001

Helmy Purwanto <helmypurwanto@unwahas.ac.id>

29 Oktober 2019 16.57

Kepada: Isaime Snttm Usakti <isaime.snttm.2019@trisakti.ac.id>

Here we send the revised paper via this email, because <http://submission.isaime.trisakti.ac.id> is not active "
Paper Review Result Decision Status: Accept "

thanks
Best Regards

Helmy Purwanto
[Kutipan teks disembunyikan]

 **ISAIME_helmy_revisi1.docx**
333K

Isaime Snttm Usakti <isaime.snttm.2019@trisakti.ac.id>
Kepada: Helmy Purwanto <helmypurwanto@unwahas.ac.id>

30 Oktober 2019 08.09

Terima kasih atas revisi papernya,
Daisman
[Kutipan teks disembunyikan]

--
Hormat Kami,
Panitia SNTTM, ISAIME, LNTRBM IX - 2019
Program Studi Teknik Mesin
Fakultas Teknologi Industri
Universitas Trisakti

Sekretariat : 021-5663232 Ext. 8434
[Kutipan teks disembunyikan]