

PAPER • OPEN ACCESS

Improvement of environment and work posture through ergonomic approach to increase productivity of balinese kepeng coin workers in Kamasan village Klungkung Bali

I K G J Suarbawa¹, M Arsawan¹, M Yusuf¹ and I M Anom Santiana²

Published under licence by IOP Publishing Ltd

Journal of Physics: Conference Series, Volume 953, The 2nd International Joint Conference on Science and Technology (IJCST) 2017 27–28 September 2017, Bali, Indonesia

Citation I K G J Suarbawa *et al* 2018 *J. Phys.: Conf. Ser.* **953** 012105

DOI 10.1088/1742-6596/953/1/012105

suarbawa110766@gmail.com

¹ Mechanical Engineering Department, Politechnic State of Bali, Badung, Bali, Indonesia

² Civil Engineering Department Politeknik Negeri Bali, Jalan Kampus Bukit Jimbaran, Kuta Selatan, Badung 80364, Bali, Indonesia

Buy this article in print

 Journal RSS

Sign up for new issue notifications

Create citation alert

PDF

Help

Abstract

Balinese coins (*Pis Bolong*) have become part of Balinese life as *yadnya* material or religious ceremony. To meet a variety of purposes, *balinese coint* today many produced by the community Kamasan village of Bali, in addition to religious purposes are also used as souvenirs. *Pis bolong* (*kepeng* coin) manufactured by molding techniques and molding metal in a simple manner of raw materials in a furnace smelting subsequently printed and refining process. *Kepeng* coins (*Balinese coin*) to produce quality 20,000 in a day with more than 50 artisans. Use of a furnace with open



flame and work posture and ways of working are not naturally able to increase the workload, subjective disorders of artisans, and decrease productivity. To overcome these problems, the improvement of environment and work posture by ergonomic approach. This research used by design "pre and post test group design" to 8 crafters of the melting process. Productivity calculated from the number of kepeng coin produced per work pulse of workers. The results showed that there were significant difference in productivity between treatment 1 (using old way) with treatment 2 (using improvement of environment and work posture) in kepeng coin workers. Work productivity increase by 33.9%. It can be concluded that the improvement of environment and work posture through ergonomic approach increase productivity of kepeng coin workers.

Export citation and abstract

BibTeX

RIS

◀ **Previous** article in issue

Next article in issue ▶



Content from this work may be used under the terms of the Creative Commons Attribution 3.0 licence. Any further distribution of this work must maintain attribution to the author(s) and the title of the work, journal citation and DOI.

physicsworld
WEBINAR

A micro-to-nano zoom through a real-world t

Live webinar at 6 p.m. BST/1 p.m. EDT on 17 May :

PDF

Help

You may also like

JOURNAL ARTICLES

Balinese character recognition on mobile application based on tesseract open source OCR engine

Development of Non-QWERTY Balinese Script Keyboard Through Tamiang Keyboard Optimization With Letter Frequency Concept

Designing the balinese script-to-speech synthesis system using noto serif balinese font

A model for posttransliteration suggestion for balinese palm leaf manuscript with text generation and lstm model

This site uses cookies. By continuing to use this site you agree to our use of cookies. To find out more, see our [Privacy and Cookies policy](#).
The spatial and settlement pattern in Mabi Hamlet, Belantih Village, Kintamani: conservation of tangible and intangible of Balinese traditional architecture in Bali Aga villages



PDF

Help

