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ANFIS Domestic Water Consumption Model Before and During Covid19 Pandemic in Tangerang Indonesia
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[a] Department of Manufacturing and Material Engineering, Kulliyyah of Engineering (KOE), International Islamic University Malaysia (IIUM), Selangor, Kuala Lumpur, 53100, Malaysia
[b] Department of Engineering, Faculty of Industrial Engineering, Universitas Muhammadiyah Tangerang, Banten, 15118, Indonesia
[c] Department of Industrial Engineering Safety and Health, Faculty of Engineering, Universitas Indo Global Mandiri (UIGM), Palembang, 30129, Indonesia

Abstract
WHO has declared Covid-19 disease as a pandemic on a global scale. The Indonesian government had announced a physical distancing & movement control order (PSBB) to combat Covid-19 transmission. The effect of PSBB caused many factories to stop operating and forced workers to work from home. This event had resulted in the increase in domestic water consumption. In this paper, we analyze the increased domestic water consumption using ANFIS mathematical model. The model shows the increase in domestic water consumption three months before and the first three months of the Covid-19 pandemic, due to PSBB, Moslem religious rituals such as fasting in Ramadhan, and the ban of Homecoming in Eid Fitr. We can see the model shows significant increases in domestic water consumption from 3 constant variables such as: A from 1,243,000 to 1,288,000, B from 1,303,000 to 1,410,000, and C from 1,279,000 to 1,340,000. © 2023, The Author(s), under exclusive license to Springer Nature Singapore Pte Ltd.

Author Keywords
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Index Keywords
ANFIS, Consumption modeling, Covid-19, Domestic water, Global scale, Indonesia, Modeling, Movement control, PSBB, Water consumption; Fuzzy inference

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Correspondence Address
Septiyana D.; Department of Manufacturing and Material Engineering, Selangor, Malaysia; email: dee.septie@gmail.com

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