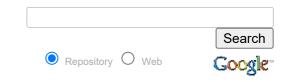


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# Steel Industry Energy Consumption Dataset Data Set

Download: Data Folder, Data Set Description

Abstract: The data is collected from a smart small-scale steel industry in South Korea.

Data Set Characteristics:	Multivariate	Number of Instances:	35040	Area:	Computer
Attribute Characteristics:	N/A	Number of Attributes:	11	Date Donated	2021-03- 30
Associated Tasks:	Regression	Missing Values?	N/A	Number of Web Hits:	22133

#### Source:

Sathishkumar V E, Department of Information and Communication Engineering, Sunchon National University, Suncheon. Republic of Korea.

Email: <u>srisathishkumarve</u> '@' gmail.com

## **Data Set Information:**

The information gathered is from the DAEWOO Steel Co. Ltd in Gwangyang, South Korea. It produces several types of coils, steel plates, and iron plates. The information on electricity consumption is held in a cloud-based system. The information on energy consumption of the industry is stored on the website of the Korea Electric Power Corporation (pccs.kepco.go.kr), and the perspectives on daily, monthly, and annual data are calculated and shown.

### **Attribute Information:**

Data Variables Type Measurement
Industry Energy Consumption Continuous kWh
Lagging Current reactive power Continuous kVarh
Leading Current reactive power Continuous kVarh
tCO2(CO2) Continuous ppm
Lagging Current power factor Continuous %
Leading Current Power factor Continuous %
Number of Seconds from midnight Continuous S
Week status Categorical (Weekend (0) or a Weekday(1))
Day of week Categorical Sunday, Monday …. Saturday
Load Type Categorical Light Load, Medium Load, Maximum Load

## **Relevant Papers:**

- 1. Sathishkumar V E, Changsun Shin, Youngyun Cho, "Efficient energy consumption prediction model for a data analytic-enabled industry building in a smart city†, Building Research & Information, Vol. 49. no. 1, pp. 127-143, 2021.
- 2. Sathishkumar V E, Myeongbae Lee, Jonghyun Lim, Yubin Kim, Changsun Shin, Jangwoo Park, Yongyun Cho, "An Energy Consumption Prediction Model for Smart Factory using Data Mining Algorithms†KIPS Transactions on Software and Data Engineering, Vol. 9, no. 5, pp. 153-160, 2020.

  Transactions on Software and Data Engineering, Vol. 9, no. 5, pp. 153-160, 2020.
- 3. Sathishkumar V E, Jonghyun Lim, Myeongbae Lee, Yongyun Cho, Jangwoo Park, Changsun Shin, and Yongyun Cho, "Industry Energy Consumption Prediction Using Data Mining Techniquesâ€, International Journal of Energy Information and Communications, Vol. 11, no. 1, pp. 7-14, 2020.

## **Citation Request:**

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