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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.

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

### Source:

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### 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](http://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, Yongyun 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.
3. Sathishkumar V E, Jonghyun Lim, Myeongbae Lee, Yongyun Cho, Jangwoo Park, Changsun Shin, and Yongyun Cho, "Industry Energy Consumption Prediction Using Data Mining Techniques", International Journal of Energy Information and Communications, Vol. 11, no. 1, pp. 7-14, 2020.

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