



[Center for Machine Learning and Intelligent Systems](#)

[About](#) [Citation Policy](#) [Donate a Data Set](#) [Contact](#)

☒ Repository ☐ Web



[View ALL Data Sets](#)

Steel Plates Faults Data Set

Download: [Data Folder](#), [Data Set Description](#)

Abstract: A dataset of steel plates' faults, classified into 7 different types. The goal was to train machine learning for automatic pattern recognition.

Data Set Characteristics:	Multivariate	Number of Instances:	1941	Area:	Physical
Attribute Characteristics:	Integer, Real	Number of Attributes:	27	Date Donated	2010-10-26
Associated Tasks:	Classification	Missing Values?	N/A	Number of Web Hits:	76278

Source:

Semeion, Research Center of Sciences of Communication, Via Sersale 117, 00128, Rome, Italy.
www.semeion.it

Data Set Information:

Type of dependent variables (7 Types of Steel Plates Faults):

- 1.Pastry
- 2.Z_Scratch
- 3.K_Scratch
- 4.Stains
- 5.Dirtiness
- 6.Bumps
- 7.Other_Faults

Attribute Information:

27 independent variables:

X_Minimum
 X_Maximum
 Y_Minimum
 Y_Maximum
 Pixels_Areas
 X_Perimeter
 Y_Perimeter
 Sum_of_Luminosity
 Minimum_of_Luminosity
 Maximum_of_Luminosity
 Length_of_Conveyer
 TypeOfSteel_A300
 TypeOfSteel_A400

Steel_Plate_Thickness
Edges_Index
Empty_Index
Square_Index
Outside_X_Index
Edges_X_Index
Edges_Y_Index
Outside_Global_Index
LogOfAreas
Log_X_Index
Log_Y_Index
Orientation_Index
Luminosity_Index
SigmoidOfAreas

Relevant Papers:

- 1.M Buscema, S Terzi, W Tastle, A New Meta-Classifer,in NAFIPS 2010, Toronto (CANADA),26-28 July 2010, 978-1-4244-7858-6/10 ©2010 IEEE
- 2.M Buscema, MetaNet: The Theory of Independent Judges, in Substance Use & Misuse, 33(2), 439-461,1998

Citation Request:

dataset provided by Semeion, Research Center of Sciences of Communication, Via Sersale 117, 00128, Rome, Italy.
www.semeion.it

Supported By:



In Collaboration With:



[About](#) || [Citation Policy](#) || [Donation Policy](#) || [Contact](#) || [CML](#)