	ис сахуальнут от от еле они для по се	A - Process Design B - Process Management C - Optimization of Routing and Scheduling D - Predictive Process Control					Complete	ely fits					
		E - Self Learning Machines and Assets Machines & Assets G - Predictive Maintenance					Regurla	ly fits					
		Product					Does n	ot fit					
Use-Case	Description	Donate Date	Learning Task	Number of Instances	Number of Attributes	Minor Class	А	вс	D	E	F	G	н
3D Printer	parameters in 3d printers affect the print quality, accuracy and strenght. Where there are nine setting parameters and three measured output parameters.	22.09.2018	Regression	50	12	25	\bigcirc	•					
Mercedes-Benz Greener Manufacturing	In this competition, Damier is challenging kagglers to tackie the curse of dimensionality and reduce the time that cars spend on the test bench. This dataset contains an anonymized set of variables, each representing a custom feature in a Mercedes car.	2016	Regression	4,210	378	23	\bigcirc	•					
APS Failure at Scania Trucks	Data from heavy Scania trucks in daily usage. The system in focus is the Air Pressure system (APS) which generates pressurized air used in various functions, such as braking and gear shifting.	01.02.2018	Classification	60,000	171	1,000	\bigcirc	• •			\bigcirc		
SECOM	Data from a semi-conductor manufacturing process. It represents selection of such features where each example represents a single production entity with associated measured features.	19.11.2008	Classification	1,567	591	104	•	• •					
Cylinder Bands	Process delays known as cylinder banding in rotogravure printing were substantially mitigated using control rules discovered by decision tree induction. ML show promise for knowledge acquisition.	01.08.1995	Classification	512	40	200		•					
Bosch Production Line Performance	The data for this competition represents measurements of parts as they move through Bosch's production lines. Each part has a unique ID. The goal is to predict which parts will fail quality control.	2016	Classification	1,183,747	2		\bigcirc	•			\bigcirc		
Quality Prediction Mining Process	Data from a mining plant - the goal is to predict how much impurity is in the ore concentrate that is measured every hour.	2017	Regression	734,000	24	12,269		• •					
Energy Optimization	This data was collected from a demonstrator of a high storage system, which transported one package between two spots. The high storage system consists of 4 short conveyor belts and 2 rails.	01.07.2018	Classification, Regression	4 files; à 20,000	20	10,200		• •					
Production Plant Data for Condition Monitoring	Data for 8 run-to-failure experiments were provided and 8 features related to the component were selected. Training and prediction data were selected using the leave-one-out method: data under test were colored as the target for the provider the provider of the provi	01.09.2018	ClassificationR egression	8 files; à 20,000 inst.	26	15,800		•			\bigcirc	igodot	
CNC Mill Tool Wear	Machining data was collected from a CNC machine for variations of tool condition, feed rate, and clamping pressure.	01.04.2018	Classification	18 files; à 500 inst.	48	2,304		•				igodot	
Bolts	Data from an experiment on the affects of machine adjustments on the time to count bolts. Bolts are dumped into a large metal dish. A plate that forms the bottom of the dish rotates counterclockwise.	04.10.2014	Classification, Regression	40	8	14					\bigcirc		
Milling	Experiments on a milling machine for different speeds, feeds, and depth of cut. There is also data acquired of the wear of the milling process.	2007	Regression	167	13	59		•					
Li-ion Battery Aging	This data set has been collected from a custom built battery prognostics testbed at the NASA Ames Prognostics Center of Excellence (PCoE). The aim is to be able to manage this uncertainty of actual uses and make oraliable norediristicns of Bomainion Likeful	01.10.2008	Regression	2,167	12	636		•					
Airfoil Self-Noise	The NASA data set comprises different size NACA 0012 airfoils at various wind tunnel geeds and angles of attack. The goal is to predict sound pressure levels.	04.03.2014	Regression	1,503	6	36		• •					
CFRP Composites	Run-to-failure experiments were run on CFRP panels with periodic measurements to capture internal damage growth under tension tension fatigue.	2008	Classification	3 files; à 4 Layouts; à 150 inst.	7	316		•					\bigcirc
Mechanical Analysis	Fault diagnosis problem of electromechanical devices. Each instance contains many components, each of which has 8 attributes. Different instances in this database have different numbers of components.	01.06.1990	Classification	209	8			• •					
Versatile Production	Data taken of the Versatile Production System (VPS) for a wide variety of tasks, including model learning, anomaly detection, and alarm management.	01.09.2018	Classification	8 files; à 10,000	6	65		• •					
Steel Plates Faults	A data set of steel plates faults, classified into 7 different types. The goal was to train machine learning for automatic pattern recognition.	01.11.2017	Classification	1,941	34	55		• •					
Bearing	Four bearings were installed on a shaft. The rotation speed was kept constant at 2000 RPM by an AC motor coupled to the shaft via rub belts. Three data sets are included in the data packet. Each data set describes a test-to-failure experiment.	2007	Regression	3 files; à 2,156 / 984 / 4,448 inst.	8/4/4	984		• •			\bigcirc		
Plant Fault Detection	PHM Data Challenge 2015: Fault detection and prognostics, a common problem in industrial plant monitoring. The final aim is the abality to detect plant faults.	05.06.2015	Regression	70 files; à 127,691 inst.	10	700						\bigcirc	
Robot Execution Failures	This dataset contains force and torque measurements on a robot after failure detection. All features are numeric although they are integer valued only.	23.04.1999	Classification	5 files; à 88 / 47 / 47 / 117 / 164 inst.	90	3		•		●		igodot	
Turbofan Engine Degradation Simulation	The data is from an engine which is operating normally at the start of each time series, and develops a fault. The objective of the competition is to predict the number of remaining operational cycles before failure.	22.09.2010	Regression	4 files; à 20,000 inst.	26	76		•				igodot	
Gearbox Fault Detection	PHM Data Challenge 2009: Fault detection and magnitude estimation for a generic gearbox using accelerometer data and information about bearing geometry.	02.11.2017	Regression	560 files; à 133,000 inst.	3	65,000		• •				igodot	
Anemometer Fault Detection	PHM Data Challenge 2011: Anemometer fault detection, a critical problem for the wind power industry, strongly affecting among other things the financing of a potential site.	03.05.2011	Regression	420 files; à 720 inst.	16	63,000		•					
Maintenance Action Recommendatio n	PHM Data Challenge 2013: Maintenance action recommendation, a common problem in industrial remote monitoring and diagnostics.	2013	Regression	1,200,000	32	10,461		• •					
Asset Health Condition	PHM Data Challenge 2014: Asset health calculation, a common problem in industrial remote monitoring and diagnostics.	05.10.2014	Regression	270,831	4	9,200		• •				igodot	
Genesis Demonstrator	The Genesis Demonstrator is a portable pick-and-place demonstrator which uses an air tank to supply gripping and storage units. The data from the whole process is acquired.	01.07.2018	Regression	5 files; à (3x) 7,500 inst. (2x) 16,000 inst.	24	424		•		ullet			
Maintenance of Naval Propulsion Plants	Data have been generated from a sophisticated simulator of a Gas Turbines (GT), mounted on a Frigate characterized by a Combined Diesel Electric and Gas (CODLAG) propulsion plant.	11.09.2014	Regression	11,934	18	460		•		ullet	•		
Azure Blob	Each machine includes a device which stores data such as warnings, problems and errors generated by the machine over time. The dataset gather all together	13.06.2017	Classification	2,000,000	172	159,150		•			•		
Predictive Maintenance	The dataset is in kind of time series, consisting of log message and failure record of 984 days. The goal is to predict machine failure in advance.	01.09.2018	Classification, Regression	984	2	98				ullet	•		
Semiconductor CMP	The data set addresses the condition assessment of a hydraulic test rig based on multi-sensor data. Four fault types are superimposed with several severity grades impeding selective quantification.	2018	Classification Regression	2 folders; à 184 files; à 1300 inst.	26	815		•					

Condition monitoring hydraulic systems ZeMA	The data set addresses the condition assessment of a hydraulic test rig based on multi sensor data. Four fault types are superimposed with several severity grades impeding selective quantification.	26.04.2018	Classification Regression	2,205	43,680	360	•		\bigcirc		\bigcirc	•	
Software for ground data	NASA Metrics Data Program defect data sets: Data from software for storage management for receiving and processing ground data.	06.10.2014	Classification	2,109	22	326		ightarrow	ullet				
Flight Software for Earth Orbiting Satellite (1)	NASA Metrics Data Program defect data sets: Data from flight software for earth orbiting satellite.	06.10.2014	Classification	5,589	37	23		ullet	ullet			•	
UNKNOWN 1	NASA Metrics Data Program defect data sets: The specific type of software is unknown.	06.10.2014	Classification	9,466	39	68		ullet	ullet				
UNKNOWN 2	One of the NASA Metrics Data Program defect data sets. The specific type of software is unknown.	06.10.2014	Classification	161	40	52			ullet			ullet	
Flight Software for Earth Orbiting Satellite	One of the NASA Metrics Data Program defect data sets. Data from flight software for earth orbiting satellite.	06.10.2014	Classification	1,109	22	77			ullet			\bullet	
One year industrial component degradation	Show the degradation of the component over the course of the year. Has the component been replaced at some point? If the wear can be predicted accurately, a remaining useful life prediction can be made in order to determine maintenance windows (predictive maintenance).	31.01.2019	Clustering Regression	1,062,912	9		ullet	ullet	•		•		
Pulsar Star	A data set consisting of pulsar candidates collected during the High Time Resolution Universe Survey	01.05.2018	Classification	17,898	8	1,639				igodot	\bigcirc		



