

Software Batch-PMS

Batch Process Management System



() Benefits

- Simple and modular operating concept including multi-user operation
- Easy integration into existing network and system infrastructures
- Outstanding connectivity
- High data safety including integrated backup functionality

The PC-based software Batch-PMS enables the operation, monitoring and control of batch-oriented and recipe-based production processes. The integrated control system makes it easy to automate weighing and process batch applications.

For automated and reliable batch processes in your production

- The modular software Batch-PMS performance spectrum covers both simple and complex batching processes with all the basic functions of current process control technology and multi-user operation.
- Batch-PMS guarantees a seamless integration into your network and system infrastructures. The integrated process visualisation allows quick status overviews and easy operation.
- ① The Batch-PMS structure allows flexible connection to external systems, both in the area of process control (PLC) and to higher-level ERP and database systems.
- ① Due to its **integrated backup** functionality the software ensures the safety of your data.

The right solution for all of these applications:



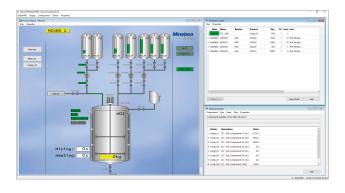
Technical specifications

Software Batch-PMS – Data Management

R Republicly - Republic to 11								A headstareade - 12 (M1								
<<	Reci Text for	pe_02		Tal- Ta 000 0.00	- Pris P 2 1 1	A bo	Reference Weig Selpoint tel Leut updote: Dipention		KK Recpe: Product: Reactor: Best: Babli		ine State 1 Name Set	e > paint Actival com com	Tat- F		900.800 900.800 98.12.20 18 11 29 98.12 20 18 11 29 900.800 18 End Info 701 701	Operators
		comp.gg discovarse	17 100.000 0	.000 0.30		CO : Two Component EZ (AC)										
Andria	PS Notations Silters	DSD44858 Oxfett	Frint Properties			co : test component EI (AC)	Store	0.00 A	Maple R Marshal File Pope			ttop Production		BER MO	IIIII firvari	01010
1/200404	PS References a Silver 4 Queentity	Discovering Christer Read Print y 18 12 2020 18	Print Progenties +22:45	(si		CG 1964 Component El (MC)	Stee		R Marsha File: Pape 1 2	ntes Date 13.7 (20.15 (22.00	Smap	Name TPRODUCT.		Text Of : high level : Tank 10	4	
Antic	PS Notes to the second	Discovering Content Frank Print y 18 12 2020 18	Prist Proportion 122143	i si bodi		CO : trat component is (sic)	Son		R Marshal Fdis: Prope 1 2 2 2	ntins Data 13.7 1.30 15:02:00 15.7 1.30 15:02:00		Name 1910001.04 1910001.04	high land ck	Text D1 : high level : Tank 70 D1 : high level : Tank 70	:	01010
Andra porter approximation Antick Carry	PS References Concept	Discounded Defens Read Print y 18-12-2820-34 Digitics Test Componen	Print Progenties (22)-45 4 00 (34C) -52	kock			Sav		M. Marvini Fdm. Proper 1 2 3 2 3	dan Date 13.71.20 15.02.00 13.71.20 15.02.00 13.71.20 14.71.26		Name T210001,M., T210001,M., T210001,M.,	high level ok ok	Test Or: high level : Task 70 Or: high level : Task 70 Or: high level : Task 70		01010
Antan Antan Antah Camp	PS Addution Shot Control CO CO CO CO CO CO CO CO CO CO	Discounted Defens Read Print y 18-12-2820-38 Digitics Test Component Test Component	Print Properties (22)45 4 00 (JaC) - 52 4 02 (JaC) - 52	kock mild		00 : trat component at (LC)	5au		M. Marvini Fdm. Proper 1 2 3 2 3	ntins Data 13.7 1.30 15:02:00 15.7 1.30 15:02:00		Name 1910001.04 1910001.04	high level ok ok	Text D1 : high level : Tank 70 D1 : high level : Tank 70		01010
Anthia Anthia Carry, Carry, Carry,	PS Addutes She (Quentit (Quentit) (Quentit (Quentit) (Quentit)	Discounded Colors Read Print y 18-12-2020-38 Test Componen Test Componen Test Componen	Print Properties (22:45 4.07 (JaC) - 75 4.02 (JaC) - 75 4.03 (JaC) - 75	kock 100,0		00 : freit Component al (LC)	Sov		M. Marvini Fdm. Proper 1 2 3 2 3	dan Date 13.71.20 15.02.00 13.71.20 15.02.00 13.71.20 14.71.26		Name T210001,M., T210001,M., T210001,M.,	high level ok ok	Test Or: high level : Task 70 Or: high level : Task 70 Or: high level : Task 70		01010
Article Article Camp Camp Camp	PS Million Siles (Question (DisDoukse Ovins Root Print y 18.12.2020 18 Tell Componen Yot Componen Yot Componen Yot Componen Yot Componen	Print Properties (22:45) (22:4	Book 175.4 102.5 0.0		00 : trat component at (LC)	Sav		M. Marvini Fdm. Proper 1 2 3 2 3	dan Date 13.71.20 15.02.00 13.71.20 15.02.00 13.71.20 14.71.26		Name T210001,M., T210001,M., T210001,M.,	high level ok ok	Test Or: high level : Task 70 Or: high level : Task 70 Or: high level : Task 70		01010
Andro Manual Manual Manual Comp. Comp. Comp. Comp.	PS Advance Sites (Quentity) (Quentity (Quentity) (Quen	DisDeaMail Delete Raad Paint y 18.12.2020.10 Delete Test Composen Test Composen Test Composen Test Composen Test Composen	Pripeties 22:45 4 00 (44) -52 6 00 (44) -52 6 00 (44) -52 6 04 (44) -52 6 05 (44) -52 6 0	Bock 100.8 0.8 0.8 0.8			584		M. Marvini Fdm. Proper 1 2 3 2 3	dan Date 13.71.20 15.02.00 13.71.20 15.02.00 13.71.20 14.71.26		Name T210001,M., T210001,M., T210001,M.,	high level ok ok	Test Or: high level : Task 70 Or: high level : Task 70 Or: high level : Task 70		01010
Anthe Manual Article Comp. Comp. Comp. Comp. Comp. Comp.	PS Site Site Constitution	DisDeaMSE Delete Read Print y 18 12 2000 18 Delete Test Composen Test Composen Test Composen Test Composen Test Composen Test Composen Test Composen	Properties Properties +22:45 4 00 (pic) -52 4 0 (pic) -52 4	800k 100.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0			Sav		M. Marvini Fdm. Proper 1 2 3 2 3	dan Date 13.71.20 15.02.00 13.71.20 15.02.00 13.71.20 14.71.26		Name T210001,M., T210001,M., T210001,M.,	high level ok ok	Test Or: high level : Task 70 Or: high level : Task 70 Or: high level : Task 70		01010
Action reported Article Comp. Comp. Comp. Comp. Comp. Comp. Comp. Comp. Comp. Comp.	PS Ministry Sheri Control	DisDeaMail Delete Raad Paint y 18.12.2020.10 Delete Test Composen Test Composen Test Composen Test Composen Test Composen	Print Properties 122:45 4 01 (JuC) -12 4 02 (JuC) -12 6 02 (JuC) -12 6 03 (JuC) 4 05 (JuC) 4 05 (JuC) 4 05 (JuC)	kock 175.4 102.5 103.5 100.5 100.5 100.5 100.5 100.5 100.5 100.5 100.5 100.5 100.5 100.5 1			Saw		M. Marvini Fdm. Proper 1 2 3 2 3	dan Date 13.71.20 15.02.00 13.71.20 15.02.00 13.71.20 14.71.26		Name T210001,M., T210001,M., T210001,M.,	high level ok ok	Test Or: high level : Task 70 Or: high level : Task 70 Or: high level : Task 70		01010

- Material management including leading components and adjustment components
- Silo management
- Recipe management (including recipes with sub-recipes and frame/formulation)
- Production, consumption and batch reports
- Material and recipe tracking
- Error and alarm logging
- User management with password policies
- Management of language and terminologies

Process Control and Production Management



- Manual/automatic and multi-component/level batching
- Automation of process steps with prioritization (heating, mixing etc.)
- Production order management and -plan management
- Automatic recalculation of component set points according to recipe totall
- Production line independent recipes
- Tank management with level control and calculation of consumption (stock control)
- Trend display
- Alarm system

Backup functionality

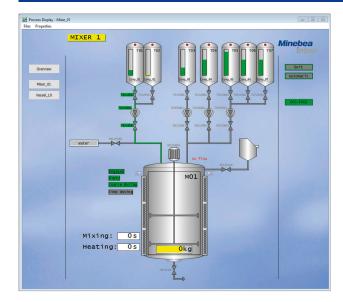
- High data safety due to integrated backup functionality
- Main system periodically copies all batch related data to defined network folders or to Batch-PMS client and remote systems
- Increase of production performance and decrease production downtime costs as client and remote systems can take over the complete operation in emergency cases

Software Batch-PMS – Connectivity



- Scales and weighing points
- Weighing devices of 3rd party manufacturers
- Radar and level sensors
- Overfill protection sensors
- Temperature sensors
- Flow meters
- Actuators, such as valves and pumps
- And further process I/Os

Process visualization



- Tanks, process vessels and mixers
- Scales and weighing points
- Other sensors (e.g. for level, overfill protection, temperature)
- Actuators, such as valves and pumps
- Mechanical constructions such as pipes
- Process steps and recipes
- Batching processes
- Warnings and alarms
 (e.g. High/High-High Level Alarm)
- Error messages (e.g. communication error)
- Customer and project specific configuration
- Multiple process screens, no restrictions in number
- Process display similar to a P&ID diagram showing tanks, reactors, scales

Software Batch-PMS – Field Operating and HMI

- Operation on several external devices in the field (touch PCs, tablet, industrial HMI panels)
- All Minebea Intec Maxxis weight controller can be configured for use as an auxiliary indicator
- Configurable operator guidance on a wide range of devices/panels

Operating Examples

Maxxis 4

- Application with terminal software
- Display recipe lines
- Operator guidance
- Start/Stop and confirmation of process steps



HMI Field Panels

- Integration of industrial touch panels
- Implementation of industrial operator stations in Ex-zones



Industrial Field-PCs

- Implementation of PC touch panels
- Integration of mobile tablet PCs
- with full operation or
- with functionalities adapted to the operator



Software Batch-PMS – Easy extension

- Easy integration of client and remote systems with full system functionality at any time
- No limitations in the number of client and remote systems
- Easy integration of application specific process steps
- Flexibility and easy software updates and modifications

Engineering

- Central engineering system included, providing all the tools required to configure a complete process control system:
 - Picture editor
 - Mask editor
 - Plant editor
 - Sequence control editor
- Process display similar to a P&ID diagram showing tanks, reactors, scales
- Measurement point definition and configuration (digital I/O, analogue I/O)
- Function plan programming of PLC program (graphical programming)
- Configurable user levels using passwords
- Data export and exchange with ERP Systems, e.g. SAP

Software languages

- Operating dialogue existing in different languages incl. language switch in real time
- Currently available languages: German, English, Polish
- Easy integration of additional languages
- Integration of additional languages via remote connection

Software Batch-PMS – System requirements

Weighing devices

- Weight transmitters, such as PR 5230 and PR 5220
- Weight indicators, such as X3
- Weight controllers, such as Maxxis 4
- Ethernet, Modbus TCP/IP, Profinet and/or Profibus

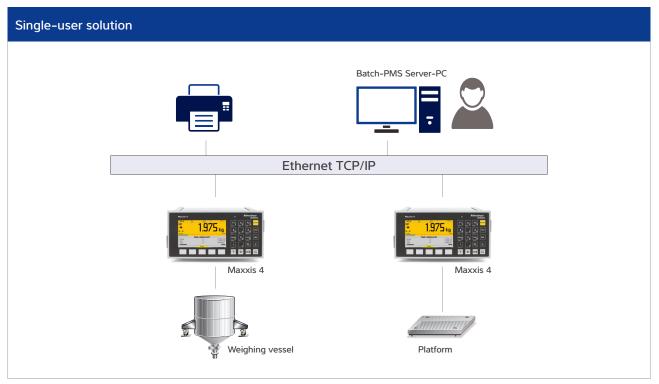
PC Hardware for engineering and operating

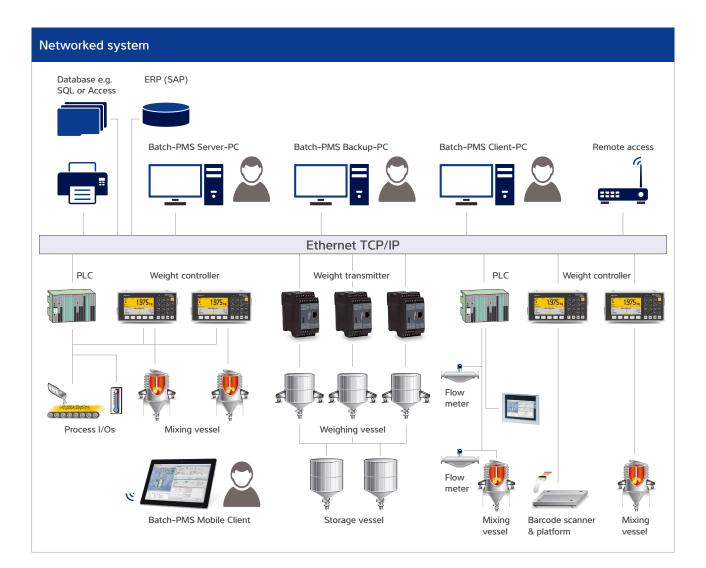
- Standard PC with MS Windows 10 Professional (64 bit version)
- Up-to-date performance data

Reference industries

- Food and beverages
- Pet food
- Chemicals
- Petrochemicals
- Cosmetics
- Building materials
- Glass
- Iron and steel

System architecture of Batch-PMS





Ordering information

Software Batch-PMS – Licenses						
Host system/Server	Basic License					
	Update License					
Remote and client system,	Basic License					
1 st system	Update License					
Remote and client system,	Basic License					
further systems	Update License					
Process visualization module	Basic License					
	Update License					
Production plan module	Basic License					
	Update License					
Database interface module	Basic License					
(e.g. MS SQL, MS Access)	Update License					
ERP/MES data interface module	Basic License					
(e.g. SAP)	Update License					
Terminal application software	Basic License					
for weighing devices	Update License					
Software module for manual	Basic License					
pre-weighing	Update License					
Application software for mobile	Basic License					
devices (e.g. tablet PCs)	Update License					

Project specific configuration and system layout on request. For further details please contact the Minebea Intec Global Solutions Department via globalsolutions@minebea-intec.com. Phone +49.40.67960.555

The products and solutions presented in this data sheet make major contributions in the following sectors:



The technical data given serves as a product description only and should not be understood as guaranteed properties in the legal sense.

Specifications subject to change without notice. Rev. 03/2021 Minebea Intec GmbH Meiendorfer Straße 205 A 22145 Hamburg, Germany Phone +49.40.67960.303 sales.hh@minebea-intec.com www.minebea-intec.com