

# BATCHXPERT SYSTEM COMPARISON

## General system

	<b>BATCHXPERT</b>	<b>BRAUMAT</b>	<b>BOTEC</b>
<b>OPERATING STATION REQUIREMENTS</b>	Medium performance computers	Low and medium performance computers	Medium performance computers
<b>REDUNDANCY</b>	Each Operation station is a server for the entire plant. Up to 8 redundant servers possible.	Two Servers per Process Area, the rest are clients	Two Servers per PLC, but it has a central server, which is not redundant. If this fails, the entire plant fails.
<b>CONFIGURATION TOOLS</b>	Very extensive and modern tools, with many comfortable functions	Extensive tools, not very modern	Extensive tools, not very modern
<b>ENGINEERING TOOLS</b>	Yes, with many Import and export functions to various formats	No, Limited functions for import and export.	Yes, Optional, with very limited import and export functions.
<b>DATABASE</b>	Microsoft SQL Express or better	Owner	Microsoft SQL Standard only
<b>NUMBER OF RECIPES</b>	Unlimited	Unlimited	Unlimited
<b>RECIPES ADJUSTABLE BY END USER</b>	Yes, completely	Yes, completely	Nominal Values Only
<b>LICENSE</b>	1 license per Plant + 1 license per HMI. Freely obtainable licenses.	1 license per Server + 1 Licenses per Clients. Freely obtainable licenses	Unknown, only through Kronos. No sale of licenses to third parties.
<b>OS</b>	Windows 11, Windows 10, Windows 8 and Windows 7	Windows 7 only	Windows 7 and Windows 10 only
<b>ANTIVIRUS SUPPORT</b>	Yeah	Yeah	No
<b>FIREWALL SUPPORT</b>	Yeah	Yeah	No
<b>WINDOWS UAC SUPPORT</b>	Yeah	Yeah	No
<b>ENGINEERING TIME</b>	Generally short, due to the engineering tools and the simplicity of the system	Generally short, due to the simplicity of the system	Generally long, due to the lack of tools and the complexity of modifications to the system

## Display

	<b>BATCHXPRT</b>	<b>BRAUMAT</b>	<b>BOTEC</b>
<b>VISUALIZATION</b>	VisXpert 9. Supports very complex animations and visualizations. Open and well known.	Integrated, very limited. Only supports images and objects. Complex animations not possible. Open and well known.	Ist Ittis. Supports very complex animations and visualizations. Closed, service only through Kronos.
<b>OBJECT LIBRARY</b>	Yes, expandable as needed	Yes, not expandable	Yes, expandable as needed
<b>NUMBER OF IMAGES OR TAG</b>	Unlimited	Unlimited	Limited by License.
<b>SUPPORT FOR TOUCH SCREENS</b>	Yes, Based on Movicon SCADA system or WinCC Flexible, WinCC Basic or WinCC Confort	No	No
<b>VIEWING AND MANAGING HYGENE STATUS</b>	Yes, for each unit	No	No

## Reports

	<b>BATCHXPRT</b>	<b>BRAUMAT</b>	<b>BOTEC</b>
<b>REPORTS</b>	Reports Adjustable by the end user. Reports in Word, Excel and an integrated viewer.	Fixed reports, not modifiable through an integrated viewer.	Fixed reports, not modifiable in Excel. Batch Report Only
<b>LOT TRACEABILITY</b>	Yes, included in the license	No	Yes, optional
<b>REPORTS BY WEB BROWSER</b>	Yes, Batch Reports, Manual Operations and Batch Summary	Yes, only Batch reports	No
<b>EXCEL REPORTS</b>	Yes, adjustable by the end user	No	Yes, optional
<b>RECORDS ALL MANUAL INTERVENTIONS</b>	Yeah	Yeah	No
<b>ALARMS</b>	Yes, saved in SQL server	Yes, in a proprietary format with export options	limited in a proprietary format with no export option
<b>TRENDS</b>	Yes, saved in SQL server	Yes, in a proprietary format with export options	limited in a proprietary format with no export option

## PLC and IO Quantity

	<b>BATCHXPRT</b>	<b>BRAUMAT</b>	<b>BOTEC</b>
<b>PLC REQUIREMENTS</b>	All S7s from 512kB of memory. Supports S7-300, S7-400 and Vipa S7	S7 from 2 MB memory, only S7-400 from Siemens	S7 from 2 MB memory, only S7-400 from Siemens
<b>UNITS PER PLC</b>	200	128	99
<b>PLC ACTUATORS (VALVES, MOTORS)</b>	1600	1000	Until memory is full, typically around 1500
<b>ANALOG VALUES BY PLC</b>	480	512	Until memory is full, typically around 300
<b>NUMBER OF STEPS</b>	200 Units x 255 Steps each	1000	100 Units x 255 Steps each
<b>FIELD BUS</b>	Profibus, Profinet, Modbus	Profibus, Profinet	Profibus
<b>AUTOMATIC BACKUP</b>	Yes, all Blocks + Hardware Configuration	Yes, all Blocks + Hardware Configuration	data only, without Blocks or Hardware Configuration