

BatchMaker® Feature Matrix



Functional range of BatchMaker® Express in comparison to BatchMaker® Suite

General	Express	Suite
Convenient graphical user interface	yes	yes
Compatible with all versions of Windows 2000, XP and Vista	yes	yes
Data storage in the open XML format	yes	yes
Automatic checking of all input	yes	yes
Report generation in HTML format	yes	yes
User-defined report stylesheets (XSL)		yes
Online help and comprehensive example files		yes
Master Data	Express	Suite
Definition of an arbitrary number of raw materials and cullet types	yes	yes
Differentiation between raw materials, foreign and factory cullet		yes
Administration and assignment of factories, furnaces and glass types		yes
Multilingual names for master data (raw material names, etc.)		yes
User-defined unique identifiers (IDs)		yes
Definition of redox factor for raw materials and cullet		yes
Definition of nominal and limiting values for chemical analyses		yes
Entry of raw material related evaporation factors		yes
List of chemical components can be edited and extended		yes
Combination of oxides with similar effect upon the glass	only R ₂ O	yes
Analyses & Prices	Express	Suite
Entry of the chemical composition for each ingredient	yes	yes
Definition of analysis date, humidity and price		yes
Factory-related analyses with copy function		yes
Input of analyses with sum > 100% possible		yes
Checking if analysis sum equals 100% possible		yes
Storage of master data and analyses in separate files possible		yes
File Manager	Express	Suite*
Hierarchically ordered tree view of all BatchMaker files		yes
Opening, renaming and deletion of files and directories		yes
Easy switching between different data folders		yes
Integrated window manager for quick window activation		yes
Glass Recipe	Express	Suite*
Definition of nominal values for chemical components	yes	yes
Automatic nominal value adjustment during the batch calculation	only SiO ₂	yes
Automatic calculation of the raw material weights based on an amount of glass	yes	yes
Calculation based on a given mixer capacity or based on a selectable ingredient		yes
Definition of nominal values without assignment of a carrier raw material possible		yes
Definition of tolerances with checking during the calculation		yes
Recipe-related evaporation factors and saturation limits		yes
Multiple carrier raw materials per component with definition of the mixing ratio		yes
Fixed additives in kg (e.g. for refining or reducing agents)	yes	yes
Variable additives as glass percentages (e.g. for fixed cullet percentages)		yes
Variable additives relative to other ingredients or chemical components		yes
Entry of the average load and calculation of the daily batch number		yes
Optional notification when empty weights have been calculated		yes
Multiple glass recipe windows can be open at the same time		yes

* Function in BatchMaker® Suite available only if license includes the corresponding module

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Batch Recipe	Express	Suite*
Manual entry of raw material weights	yes	yes
Calculation of the theoretical glass composition (synthesis)	yes	yes
Calculation of the deviation between nominal analysis and synthesis	yes	yes
Calculation of the molar glass composition		yes
Calculation of the average chemical batch composition		yes
Calculation of the consumption and melting loss per chemical component		yes
Calculation of the batch redox number		yes
Calculation of raw material melting losses (absolute in kg and relative in %)	yes	yes
Calculation of resulting glass amounts and glass percentages	yes	yes
Calculation of batch costs and glass price		yes
Recalculation based on updated analyses (correction test)		yes
Subsequent alteration of weights with recalculation		yes
Alteration of the validity date		yes
Configurable report and export function		yes
Glass Properties	Express	Suite*
Prediction of important glass properties based on the glass composition	yes	yes
Calculation of the viscosity curve and standard viscosity fixed points	yes	yes
Graphical presentation of the viscosity curve with cursor and zoom function	yes	yes
Calculation of the thermal expansion, density, refr. index, dispersion, Abbe number	yes	yes
Calculation of the thermoshock resistance		yes
Calculation of the chemical resistance and hydrolytic class		yes
Calculation of Young's, shear and bulk modulus and Poisson's ratio		yes
Calculation of the molar and specific heat capacity at 20 °C and 800 °C		yes
Calculation of the surface tension at 1300 °C		yes
Calculation of the liquidus temperature		yes
Calculation of the electrical conductivity between 1000 °C and 1400 °C		yes
Calculation of import processing parameters for container glass		yes
Additional calculation according to literature models (Appen, etc.)		yes
User-defined fixed points for viscosity and electrical conductivity		yes
Calculation and output of error intervals		yes
Checking of validity limits with highlighting	yes	yes
Detailed output of exceeded validity limits		yes
Deactivation of unused properties and alteration of the display order		yes
Glass Property Calculator	Express	Suite*
Entry and comparison of multiple chemical glass compositions in wt%	up to 3	up to 20
Optional input in mol% with automatic conversion		yes
Automatic 100% adjustment for a selectable chemical component	only SiO ₂	yes
Load and save functions for glass compositions	yes	yes
Storage of multiple glass compositions in a single file		yes
Direct tabular comparison of the resulting glass properties	yes	yes
Direct graphical comparison of the viscosity curves with cursor and zoom function	yes	yes
Detailed output of exceeded validity limits		yes
Custom Glass Properties	Express	Suite*
Seamless integration of user-defined calculations in BatchMaker		yes
Development with Microsoft Visual C# or Microsoft Visual Basic		yes
Protection of intellectual property via custom license registers possible		yes
Raw Material Usage Calculator	Express	Suite*
Definition of daily tonnage and period for an arbitrary number of batch recipes		yes
Calculation of the resulting demand for raw materials and cullet		yes
Calculation of the batch costs		yes
Copy to Clipboard function for further processing in e.g. Excel		yes

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