

Technical Data - Betalyzer

Standard methods	
ICUMSA GS6-7, ICUMSA GS6-5	
Analysis time	30 s/sample
Sample throughput	120 samples/hour
MCP 5300 Sucromat automatic saccharimeter for determination of the sugar content (Pol, °Z)	
Methods	ICUMSA Method GS6-1 ICUMSA Method GS6-3
Measuring range	±259 °Z, International Sugar Scale
Accuracy	±0.01 °Z
Repeatability	±0.01 °Z
Wavelength	589 nm
Light source	LED light source, average lifetime of 100,000 hours
FP-5 flame photometer for determination of the potassium (K) and sodium (Na) content	
Principle of operation	Flame emission measurement of potassium (K) at 768 nm and sodium (Na) at 589 nm by comparison with internal lithium standard at 671 nm
Method	ICUMSA Method GS6-7
Measuring ranges	0 mmol/kg beet to 199.9 mmol/kg beet (K and Na)
Sensitivity	0.1 mmol/kg beet (K and Na)
Accuracy	1.5 % or 0.5 mmol/kg beet, whichever is greater
Data ports	RS232 serial interface port
Fuel	Propane or propane/butane gas, 50 mbar to 16 bar (0.72 psi to 232 psi)
Compressed air	Dust- and oil-free, 2 bar to -4 bar (20 psi to -58 psi)
Testamin 5 double-beam photometer for determination of α-amino nitrogen by the “Blue Number Method”, capable of analyzing lead-clarified and aluminum-clarified sugar beet extracts	
Principle of operation	Double-beam filter photometer with automatic compensation of sample color by measuring the difference of relative transmittance at 610 nm in the measuring and reference channel

Technical Data - Betalyzer

Standard methods	
ICUMSA GS6-7, ICUMSA GS6-5	
Method	Method GS6-5, Blue Number Method
Light source	LED lamp Average lifetime: 100,000 hours
Measuring range	0 mmol to 100.0 mmol α -amino nitrogen/kg beet
Sensitivity	0.1 mmol α -amino nitrogen/kg beet
Accuracy	± 0.5 mmol α -amino nitrogen/kg beet
Data port	RS232 serial interfaceport
Sample cells	Two flow-through type cells made of stainless steel Length: 40 mm One cell in the measuring channel, the other cell in the reference channel
Data processing and control	
Hardware specifications	Upon request
Software	BeetLab standard operating program for Betalyser with the choice of three menu-selectable methods for computing sugar beet quality data: <ul style="list-style-type: none"> - New Braunschweig Method - Method by Wieninger & Kubadinow - Method by Reinefeld & Winner - One customer-definable method Customized versions of the BeetLab program are available on request.