

3550 InfraCana™

Automated NIR Analysis of Sugar Cane



The 3550 InfraCana™ Sugar Analyzer for automated NIR analysis of sugar cane

Features and benefits

- Versatile: designed for the direct analysis of sugar cane in whole stalk, core sampled or billet format
- Accurate and easy to operate with substantial cost savings and fast payback
- Fast: less than 2 min total for accurate analysis for multiple parameters
- More representative analysis: sample size is very much larger than with traditional laboratory methods
- Peace of mind at the factory gate: open design where sample analysis can be seen from start to finish
- Better factory and payment control through increased sampling rates
- Environmentally friendly: no chemicals or reagents required
- Easy to install: the self-contained system can be located right next to the sampling point
- Quick, easy data access with comprehensive communications for local factory network, maintenance and remote diagnostics
- Easy fault tracing with the help of comprehensive diagnostics
- Reduced maintenance time and costs with thanks to carefully thought-out design, stainless steel and polypropylene construction

System description

The InfraCana™ is a completely automated system designed for the direct analysis of sugar cane in whole stalk, core sampled or billet format. This unique system provides simultaneous multiple constituent analysis of sugar cane including for example Brix, pol, fiber, moisture, trash and alcohols. Semi-skilled operators with minimum training can process a 10 kg sugar cane sample in less than 2 min.

The InfraCana combines a newly-developed version of the JEFFCO™ Cutter Grinder (designed to provide very high preparation index) with the patented Automated Sample Analysis System (ASAS). This unique mechanism presents a consistent layer of material to a FOSS Direct Light Near Infrared Spectrophotometer. A sophisticated custom-built microprocessor system controls all the mechanical components whilst a high speed industrial computer performs all spectral computations and network interfacing. Designed for easy operation, the InfraCana is cost effective, fast and accurate. Stainless steel and polypropylene materials ensure a long service life with minimum maintenance.

FOSS

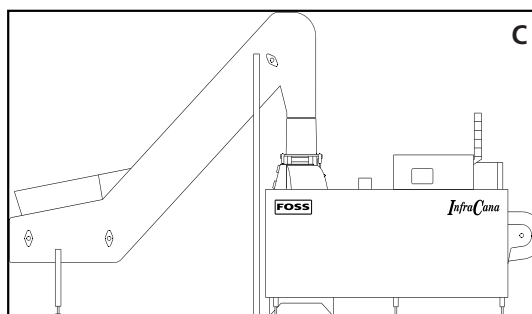
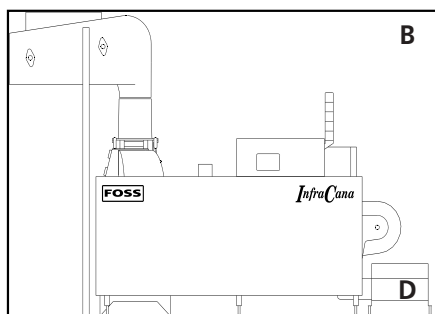
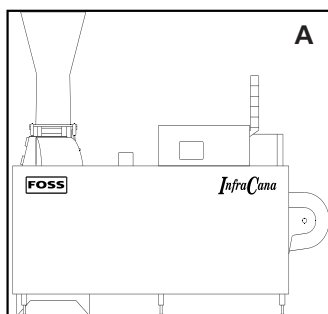
Ordering information:

The InfraCana can be ordered in three configurations depending on the cane feed system selected.

- A. InfraCana Silver with direct feed hopper 3550-020
- B. InfraCana Gold with standard feed conveyor 3550-030
- C. InfraCana Platinum with low level feed conveyor 3550-040

Available options:

- 35500120 Disposal Conveyor (D)
- IS-1480 WINISI III Calibration development software

**Specifications:**

Analysis principle:	Near Infrared Reflectance Spectroscopy	Fibrator:	Modified JEFFCO™ CG03 Cutter Grinder
Analysis time:	Approximately 2 min for 10 kg sample of sugar cane from core sampler	Dimensions (with standard feed conveyor):	H × W × D: 2 220 × 3 130 × 1 400 mm
Cabinet:	Stainless steel construction. Air conditioned with Vortex backup cooler	Weight (with standard feed conveyor):	1 019 kg
Conveyor belts:	Long life, food-grade polypropylene driven by direct-coupled motor/gear box		
Control system:	Custom-built designed controller for operation and mechanical control. Microcontroller with Flash RAM backup, back lit LCD display, industrial PC, 10/100 ethernet ports, strip printer		

Installation requirements:**Electrical:**

Voltage: 380-460 V	Frequency - 50-60 Hz, 24,4 A
Supply: 35 A rating required	Phases - triple wire plus earth
Power demand (rated) - 2,5 kW	Power demand (max) - 13,5 kW

Air:

Pressure (rated) - 700 KPa	Quality - Dry, filtered
Volume (rated) - 0,1 l/s	Volume (Vortex cooling) - 17 l/s

Water:

~100 l/day for cleaning

Operational temperature range:

- 10°- 40°C (continuous)
- 10°- 45°C (intermittent)

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