AUTONOMA
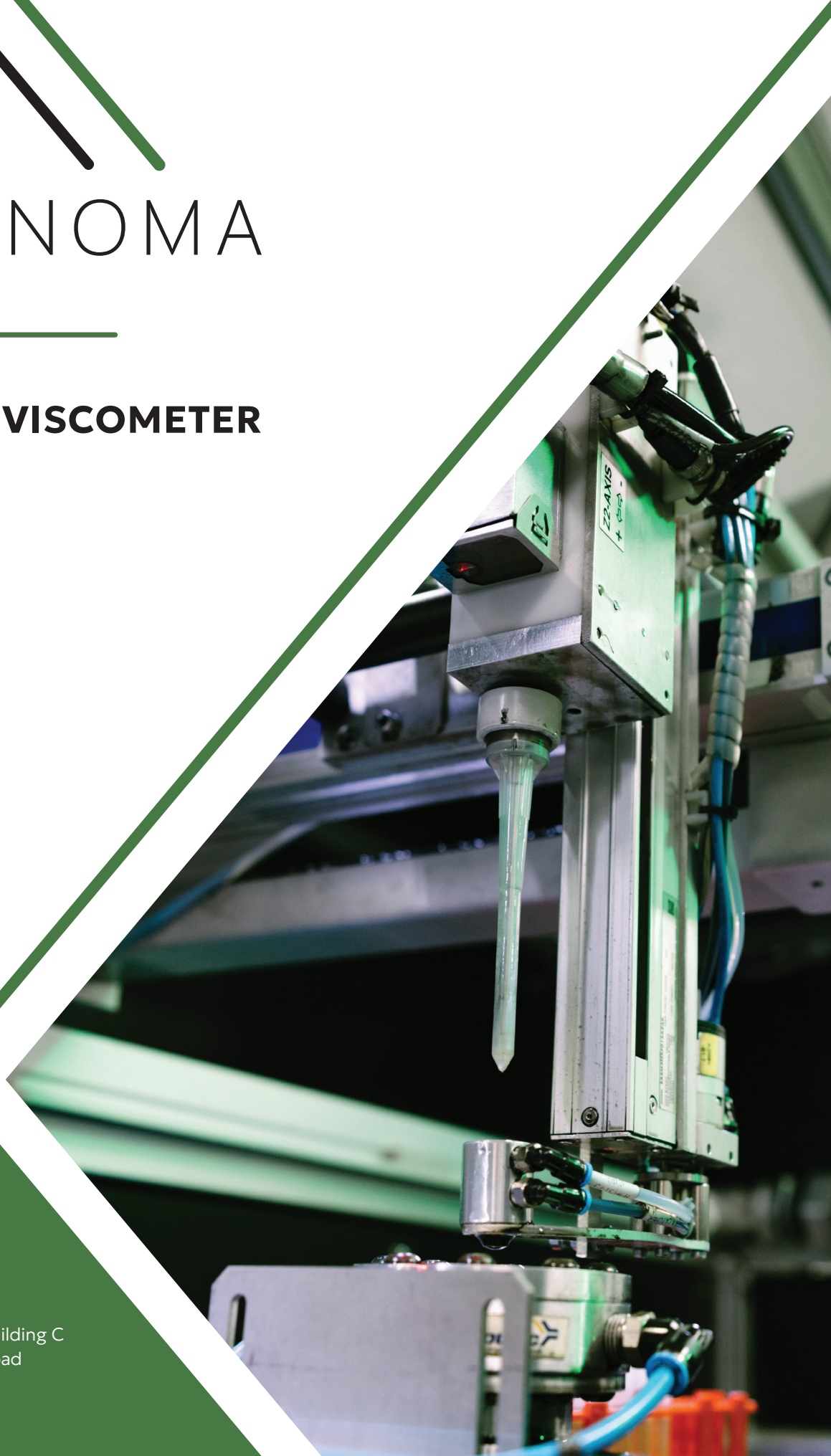
LIGHTNING VISCOMETER

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AUTOMATED LIGHTNING VISCOMETER SOLUTIONS

AUTONOMA's Automated Viscometer solution incorporates a high speed XYZ robot to deliver samples to your choice of viscometer. It is highly customisable and designed to interface with a wide range of viscometers from popular manufacturers such as Dare Instruments, PAC/ISL, Spectro Scientific, Omnitek, and Cannon.

It features several drawers for racks full of sample test tubes and/or bottles. If bottles are used, they can be loaded with the cap on, with an optional decapper removing it prior to aliquoting. Drawers are hot swappable, with one tray of samples able to be removed and replaced while the other trays are being processed.

SPECIFICATIONS

Sample capacity	Customisable depending on the rack type/s
Dimensions	~2520mm (L) x 880mm (W) x 1700mm (H)
Mass	~500kg
Electrical requirements	~1 kVA at 230 V, 1 Φ, 50/60 Hz (excluding viscometers) *(can be modified upon request)*
Pneumatic requirements	6 - 10 bar
Interface	Ethernet
Accessories	Computer and monitor

The exact surface height of the oil is determined before the positive displacement pipette suctions an accurate and precise amount of sample. This ensures that only the tip of the pipette contacts the sample, minimising cross contamination and dripping. A drip catcher swings underneath the pipette while the robot is moving, to catch any stray drops from falling into unwanted areas. Blind sample dosing is also possible, where the pipette doses the blind sample into the drip catcher before taking the actual sample for analysis.
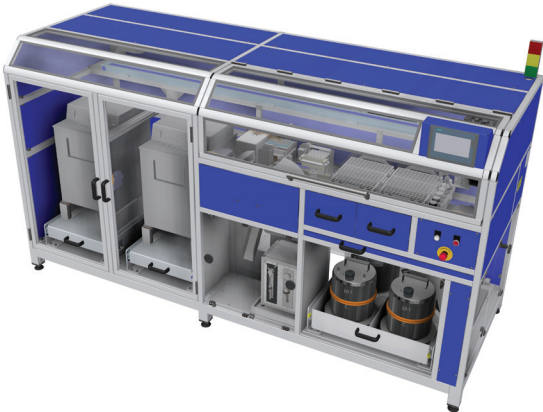
After dispensing the sample into the instrument, the pipette moves to the cleaning station where it is sprayed from all sides with a cleaning solvent. It is then rapidly dried with compressed air. The duration and number of solvent spraying and drying cycles is fully adjustable.

Control of the viscometer's operation is via a standalone PC, or a server based virtual machine running AUTONOMA's AVANTICA software.

It provides full integration with other AUTONOMA automation and can easily communicate with all popular LIMS platforms. Results are exported by default in CSV, XLS, or TXT formats, with the parameter layouts being simply configured.

The modular design allows simple expansion and interfacing with AUTONOMA's full range of NextGen laboratory automation in the future. AUTONOMA's Lightning Viscometer can also be easily customised to include other analytical methods and sample preparation steps. This includes but is not limited to:

- FTIR
- Sample aliquoting and dilution for ICP
- Aliquoting to make up duplicates
- Bottle decapping
- Colour Analysis
- Automated Crackle Test

COMPATIBLE WITH ALL MAJOR VISCOMETER BRANDS

SPECTRO VISCOMETER AUTOMATION

TRIVISC VISCOMETER AUTOMATION (INCLUDING FTIR ANALYSIS & DILUTION FOR ICP)

CANNON VISCOMETER AUTOMATION

KEY FEATURES

- Compatible with all major viscometers (TriVisc, Spectro, Cannon, Omnitek etc)
- 15-20 second cycle time between samples (excluding cleaning)
- Customisable for any rack configuration/layout (e.g. 5 x 12 test tube racks)
- Drip catcher below pipette avoids cross-contamination while moving over other samples
- Sample surface height measurement minimises the contact area with the pipette tip
- Comprehensive cleaning cycle eliminates cross-contamination
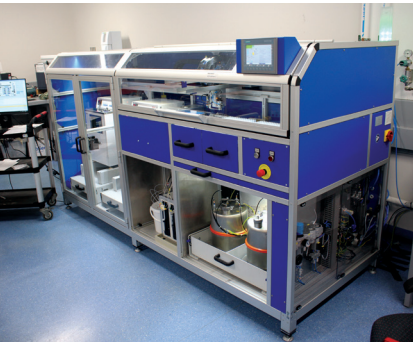- Automatic repeats – samples that time out are automatically re-run

Contact AUTONOMA today to learn more about our advanced solutions, and experience industrial grade automation that's made to measure.

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