RUDOLPH RESEARCH ANALYTICAL

TECHNICAL BULLETIN 937

AutoFlex R837

Automatic Sample Handler

- Flexible bottle size; Test Tubes, Boston Rounds, 1 OZ, ½ OZ, virtually any size.
- 5 Flexible Racks configurations – 2 heated 3 unheated.
- Flexible Method Selection – Suction, Pressure.

United States of America
National Institute of Standards and Technology

NVLAP LAB CODE: 200898-0
Accreditation to ISO/IEC 17025:2005

QUALITY **INNOVATION** **INTEGRITY**

Smart Sample loading technology

- Automatically adjusts the pump speed for both thin and viscous samples without any changes in parameters, allowing bubble free flawless sample loading.
- An optional heated interface handles highly viscous samples for refineries and petroleum testing labs.
- Standard Methods – Define measurement configuration, sample load configuration (Vacuum or Gas Displacement), solvent choices, and drying time. Which all can be determined by the rack position.

Flexible Rack configurations for your application.

Rudolph Research can provide a sample rack configured to the bottles used in your laboratory so there is no decanting.

Flexibility Unmatched

Sample methods allow the flexibility to interrupt a routine with an urgent sample. If you need to quickly find and measure a sample that is already in the rack, auto-find feature will automatically search and measure the sample for you.

Automate Data collection.

Test Tubes and bottles can be automatically identified by the system with flexible bar code reading capability.

- Use any format of Bar codes, PDF 417, 2D Matrix, UPC, or any bar code your lab chooses.
- The bar code is recorded as the Sample ID, measurements taken, and all data is now available for export to USB, Network Server, LIMS system or to any other data storage method your lab may utilize.
- Labeling sample bottles and test tubes is simplified as each sample container's bar code may be placed at any rotation as the sample container is rotated as it passes the bar code reader.

Laboratory Automation, Engineered to work better and built to last

The Rudolph R837 Automatic Sampler is rugged and specifically designed to stand-up in harsh laboratory or industrial applications.

- Superior Material Construction: Inert metal – free, PTFE and PEEK materials liquid flow path materials decreases sample contamination risk and prolongs the life of the instrument.
- Sealed electronic chassis protects against the harshest of chemical environments.
- Motor Torque – Powerful theta and tilt and Z axis movement resists the effects of residual sample buildup.
- Never miss piercing a sample vial with precision engineered probe arm and sample racks that virtually eliminate misalignment errors.
- Safety guard protects hands, and automated needle detects no-sample condition.
- Modular design reduces combined footprint.

Eliminate sample cross contamination with full needle cleaning.

- Self-cleaning needle eliminates cross contamination by washing both inside and outside of the needle between each sample. Most commercially available automation systems only flush the inside of the sample needle and neglect to clean the outside of the needle thereby carrying over the prior sample into new samples.
- The R837 rinses the entire sample probe with your choice of solvents between each sample.
- Low solvent level sensing – The 3 solvent bottles have non-contact low level sensor which will prompt the user with a low solvent level message.
- Sample return feature – Allow the return of 95% of the original sample back to the sample vial.

Applications: Perfect for high throughput laboratories looking to increase productivity and ruduce operator time. The R837 is used in combination with Rudolph Research laboratory instruments in the Petroleum, Chemical, Flavor, Fragrance, Pharmaceutical, and Toxicology Industries.