SampleJet

High Throughput and Open Access Sample Changer

The SampleJet is the only robot for NMR automation which works with NMR tubes in 96-well format and is compatible with standard liquid-handling lab-automation devices. The SampleJet allows a continuous automation workflow in the microwell-plate format, from sample preparation through the NMR measurement and subsequent sample processing.

Features

- Five positions for NMR tube racks in 96-well format andles batches of up to 480 sample tubes
- Spinner-free open access: SampleJet provides 96 positions for tubes without spinners (plus 3 positions for tubes with spinners)
- The SampleJet can handle the most common sample tube diameters such as 5 mm (550 ul), 3 mm (170 ul), 1.7 mm (37 ul) and 1 mm (8 ul)
- Tube diameters are automatically recognized by a bar-code reader and the appropriate spinner is chosen
- Automatic tube and rack bar code identification
- Compatible with most Bruker magnets and spectrometer lines
- Control software TopSpin™ and IconNMR™
- Optionally, individual temperature control between 4 and 44 °C for each 96-well rack is available, allowing many different applications in parallel
The SampleJet holds up to 480 NMR samples in five 96-well racks. In the cooled version, each rack can be set to an individual temperature between 4 and 44 °C for simultaneous measurement of chilled biological samples in aqueous buffer and compounds dissolved in DMSO.

- QC of DMSO stock solution
- QC and reference 1D in buffer
- Protein containing screening samples

In addition to batch mode operation, the SampleJet is also designed for sequential single tube submission for open-access routine NMR. There are 96 open shop positions for 4 and 7 inch tubes without spinners and three positions for 7 inch tubes with spinners. This allows a total of 579 samples to be loaded in the robot.

The space requirement for the SampleJet is in full compliance with the ceiling height requirements for the NMR magnet.

**Additional features:**
- Return of samples from open shop to a waste rack after measurement
- Preheating station with eight positions for tempering samples at measurement temperature and removing condensed water. This reduces pre-tempering of samples in the probe head and subsequently increases throughput.