## **CyBio Automation** Passionate People. Trusted Lab Integration.





## **Lab Automation Solutions**

### Breadth of Integration Concepts

We are ready to listen to your needs. Depending on your application and degree of automation, we are happy to consult with you to choose the most appropriate format from a range of different integration concepts.

#### Fully Automated Systems

- Adapted to individual workflows and throughputs
- Grows with your demands
- Customized to detail

#### Personnel & Product Protection

- Standard housings or automated system within biosafety environment
- Full air conditioned and HEPA filtration available

Scara 4 axis robotic arm PreciseFlex standard and extended reach Scara 4 axis robotic arm PreciseFlex with rail movement (different rail lengths available) Small Scale Benchtop Workstations CyBio Carry integrations Different rail lenght availabe True collaborative • Full offline accessibility of all integrated systems

### Lab Robotic Arms

 For maximum flexibility and a variety of conceptions

> Full collaborative 2 axis linear robotic arm CyBio Carry with different rail lengths from 800 to 1200 mm

## **CyBio Automation** Tailored to Your Needs

## Take Advantage of more than 30 Years Experience in Lab Automation

No matter if your research is still mainly manual or you are an experienced automation user, our solutions can help to increase your pace of discovery.

Analytik Jena is a global life sciences enterprise with its headquarters in Jena, Germany, and offices around the world. Being the inventor of multichannel pipettors, we are known for our excellent liquid handling instruments.

Our Automation group combines this expertise with personalized service, powerful software and proven third party products to create fully integrated systems.

Our goal is to help you meet the increasing demands of your research with high quality, high-throughput solutions that boost productivity and enable true walk-away automation. In the pharmaceutical and life science industries, our products enjoy the highest reputation for precision, reliability and simplicity. We seek to maintain and further develop a close relationship with our clients, as we perceive this dialogue as an excellent opportunity to continuously improve the quality of our products and services and to develop new technologies and applications. Originally established by CyBio AG, the products extend the portfolio of Analytik Jena since 2009.

#### **On-Demand Lab Automation**

- CyBio Liquid Handlers and expertise in automated liquid handling as key elements
- Individual solutions in hardware and software
- Broad catalog of accessories in addition to third-party integrations
- All from one source: tables, racks, mobile carts, housings, and electrical systems
- Software solutions for control, scripting, and scheduling
- Consulting, project management, application know-how, and comprehensive after-sales support

## **Instruments & Components**

Superior quality and reliability. Analytik Jena manufactures a range of precision liquid handling and plate storage instruments with a comprehensive set of functional modules that form the base of fully automated integrations covering all discovery applications.

Tailored Solutions for diverse needs: from varied applications to unique requirements, every single component plays a crucial role, and that's where our expertise shines. We integrate only the highest-quality products into CyBio Automation Workstations.



### Third Party Integrations

Analytik Jena Automation supports the integration of a variety of third party components such as incubators, washers, centrifuges, shakers, readers, cytomats, microscopes and a lot more.

- CyBio Composer and CyBio Scheduler support already more then 150 instruments
- Open driver interface
- On-demand development of plug ins for new 3rd party products





#### Keypiece:

### Automated Liquid Handlers (ALHs)

- Highly flexible CyBio FeliX and CyBio Well vario
- Single channel up to 1536 well parallel pipetting
- 100 nL up to 1 mL

### PCR & qPCR

### qTOWER<sup>3</sup> auto and

- Biometra TRobot II integration
  Individual racksystem with
  - easy to access slide out tray

#### **3rd Party Integrations**

- > 150 drivers available
- Individual driver development
- Integration of Lab Equipment e.g. Incubators, Centrifues, Reader, Sealer, Peeler, Cytomats, Heating, Shaking, Cooling ...

#### Lab Robotic Arms

- Collaborative 2 axis or Scara Robot
- CyBio Carry or PreciseFlex
- Different rail lenghts available

#### Customized products

- System specific developments to optimize workflows
- Clever feature add-ons
- e.g. turn station or lid handling

## Smart Waste ManagementWaste Container under

- deck or integrated on deck
- Waste sorting options
- Individual solutions
- available
  - Space saving instrument management
    - Example shows integration of 3rd Party Sealer & Peeler

Individual Racksystems with

slide out trays

• Slide out tray for easy instrument access e.g. for maintenance tasks

#### Mobile Docking Carts

- Available in 2 basic designs either with connection using a crank handle or by using pneumatic setup
- Easy access, serviceability and re-arrangement of single units
- Sizes are specifically adapted to the instruments footprint

### System Control

- PC control attached to the automated system
- Scripting Studio based on CyBio Composer Software
- CyBio Scheduler for optimal capacity utilization

### Electrical Cabinet

- Arrangement and management of electrical requirements
- Included in installation and setup

Scara Robot ex ailable

#### Storage systems

- Flexible random access hotels
- QuadStack with smallest footprint
- Flexible storage racks

#### Plate Labelling

- CyBio QuadPrint on smallest footprint
- Different storage options

IN

 Automatic plate labelling by using PrintStudio Software

## **Professional Project Management**

### Tailor-made solutions on schedule

Investing in laboratory automation is a significant decision, and at Analytik Jena, we understand the importance of having a trusted partner. Our automation experts are dedicated to developing innovative and competitive solutions. From initial consultation to system implementation and final testing, a dedicated project manager will guide you through every step. With professional planning, clearly defined responsibilities, and milestones, we ensure our tailor-made solutions are delivered on schedule.

#### **Precision Perfected:**

Our application experts listen attentively, refining your requirements for the desired automation solution. We leave no detail unexplored until we've crafted a tailored solution that matches your workflow seamlessly.

### Consulting & Conception

#### **Tailored Excellence:**

We conceptualize and refine variations in collaboration with our clients, ensuring no detail is overlooked. Our priority is maximizing value, ensuring that we provide only what's truly essential.

#### What we do:

- Application
- Throughput
- Hardware requirements

On-site conditions

 Data handling and IT integration

## Solution Proposal

#### Attention to Detail:

Documentation is an integral part of our process. We provide precise descriptions of what we deliver. Transparency in performance features is just as important as cost transparency.

#### What we do:

- System layout in 2D & 3D
- Detailed specifications
- Project plan
- Process simulation (on request)
- Development and installation schedule

## Setup & FAT

#### Streamlined Time Efficiency:

We understand that time is a valuable asset, and efficient workflows demand careful planning. Our aim is to achieve 95% operational readiness during the Factory Acceptance Test (FAT), minimizing our presence in your

lab.

- What we do:
- Coordination of necessary activities
- Milestone control and supervision
- Change management and cost control
- Factory Acceptance Test (FAT) as negotiated

## **Application Expertise**

Unlock the Future of Laboratory Automation with Our Expertise: Our extensive application experience sets us apart in the pharma and life sciences sectors. We understand the characteristics of workflows typical in drug discovery, screening, cell applications, proteomics, or genomics. Our project management team is composed of scientifically trained professionals, supported by application specialists. This unique combination allows us to communicate with our customers on a deeper level, unlike others who approach projects purely from a technical standpoint. We also know the tricks and troubles that come with automation and plan for them from the outset. By partnering

with us, you gain a significant advantage. Our familiarity with

your processes means you don't have to think of everything we've got it covered. Experience the difference with Analytik Jena's CyBio Automation and streamline your laboratory operations with confidence.

#### What we cover:

- Hands-on training
- Proof of concepts
- Application & automation consulting
- Support for transitioning from manual to automated workflows



Drug discovery

Compound handling

Hit picking

Sample pooling

Serial dilution

Reformatting

Replication



### Cells

- ADME/Tox
  - Media exchange
  - Cell seeding
  - Transfection
  - Cell-based screening
  - PROTAC

### What we do:

- Assembly
- Testing

- Site Acceptance Test (SAT) as our clients. negotiated User Training on hardware

## Installation & SAT

#### **Reliable Performance:**

Experience seamless integration with our delivered workstations. Our team ensures swift setup and functionality, validated through rigorous Site Acceptance Testing

- Setup and fine tuning
- and software

## Service & Support

### Our Services. Our Priority.

Our commitment to customers extends beyond installation. We provide ongoing support, tailored training sessions, technical assistance, regular maintenance, and the capability to swiftly address any repairs or calibrations. We prioritize reliability, recognizing that every minute of downtime translates to tangible financial losses for

Genomics

- DNA/RNA extraction
- PCR and gPCR set-up
- NGS sample preparation
- Gene assembly
- Mag bead clean-up
- Normalization
- RNAi



Proteomics

- HTRF<sup>®</sup>
- ELISA
- FRET
- FP

## **Software**

In the pursuit of efficient, reliable, and flexible laboratory automation, an overarching software concept is essential. Just as in a symphony, where each instrument plays a crucial role, the choice of software solutions orchestrates success.

We have everything needed to compose the ideal solution at our disposal. Our powerful and scalable software packages allow for detailed control of a broad range of hardware modules and easy handling of complex scheduling tasks.

#### CyBio Composer

The CyBio Composer is a powerful editor that allows you to write scripts and gain comprehensive control over devices from Analytik Jena and other providers. It supports numerous thirdparty devices with dedicated drivers and offers specific error management for each instrument. Its versatile batch processing functions make it ideal for small workstations.

Experience precision and efficiency with the CyBio Composer and gain advanced control over your devices at the script level.

#### **CyBio Scheduler**

CyBio Scheduler provides you with the flexibility and precision needed to run your automation system. Regardless of the complexity of your assays, CyBio Scheduler ensures reproducible and uniform conditions and assay results for each individual plate:

- Easy drag & drop workflow creation
- Powerful assay optimization and precise simulation
- Scheduled processing including online visualization
- Multi-faceted interfaces with your LIMS, network and database
- Versatile error recovery and message services
- Easy data import and export

The CyBio Scheduler not only orchestrates the workflows within the system but also manages optimal utilization. All process times, automatically determined via time measurement, can be manually adjusted for device or transfer times as needed.

- Automatic process optimization (timing)
- Cycle and assay interleaving
- Tracking of all relevant sub-processes
  - Identification and status of all microplates in the process
- Automatic synchronization

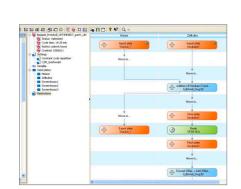
And CyBio Scheduler offers even more. Its latest update includes enhanced features that simplify usage:

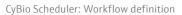
- Start preselection: Start the system process based on a time specification (process start in x hours)
- Attach pre- and post-processes to the main process
- Automated pre- and postpreparation of devices according to the main process requirements (e.g., priming, rinsing, and cleaning routines or inserting balance weights into a centrifuge)
- Inventory of labware storage

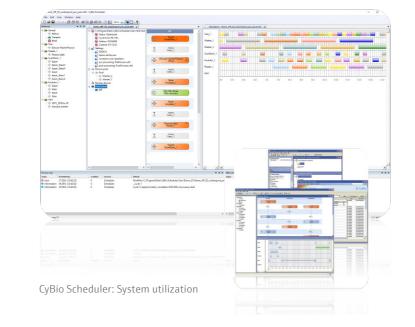
Moreover, CyBio Scheduler is a trendsetter. Constantly changing application and workflow requirements also affect automation systems. It's not enough to design the system layout and integrated devices flexibly; scheduling must also adapt. With extensive device topologies and profiles, CyBio Scheduler provides the necessary solution for users:

- Devices not needed in the process remain inactive and can be used standalone parallel to ongoing processes
- System splitting with more than one independent transport system









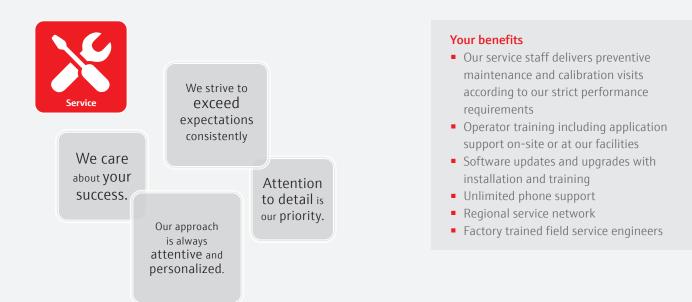
CyBio Composer: Scripting environment

- Mobile carts: Dynamic adjustment of the location of devices associated with mobile carts
- Easy software adaptation for system modifications or expansions
- Pooling function: Easily add more devices to a pool for quick throughput increase
- Backup function: Automatic switch to a backup device (e.g., when the foil in the sealer is used up)

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# **Analytik Jena Services**

Your reliable and competent partner



### Just call our service team

Service hotline and contact

- Maintenance & technical support:
  - +49 3641 77 7407 | service@analytik-jena.com
- Product inquiries & orders:
  - +49 3641 77 7444 | sales@analytik-jena.com

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