Transforming microbiology. Improving laboratory outcomes.

BD Kiestra™ ReadA and Imaging applications. Standardise incubation, imaging and result interpretation.

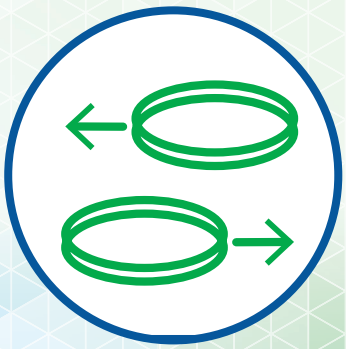
Closed door incubation and high throughput imaging delivers results efficiently and in a timely manner.

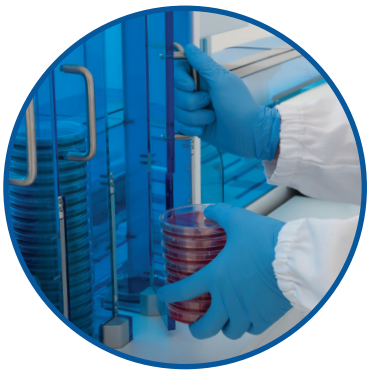
BD

Improve operational efficiency by automating routine plate management tasks

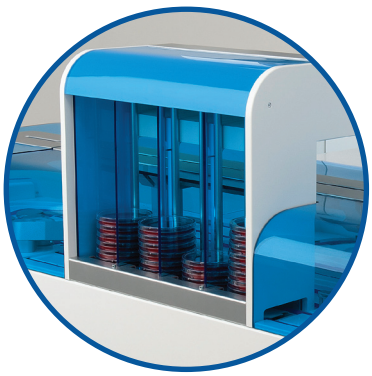
Plates are automatically delivered to the appropriate incubator to begin the incubation and imaging protocol. When ready, plates are sorted to waste or dedicated, user-defined locations.

- Streamlines workflow by reducing the time spent sorting plates.
- Improves quality through reliable plate tracing and standardised, protocol-driven incubation times.
- Images and digitises externally incubated plates in an efficient manner.

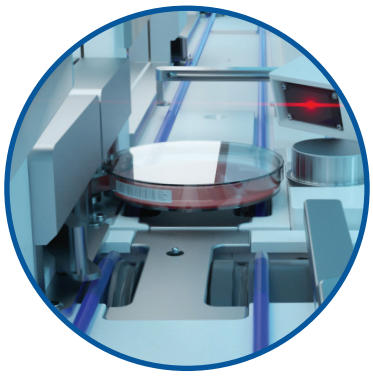




- Four input stackers to manually load plates
- Load stacks of inoculated plates
- Connect to track solution to automatically move plates to and from the incubator



- Each incubator comes with four output stackers
- Each stacker can be configured to specific tasks, such as:
  - Waste handling
  - Follow-up work
  - External incubation



- Barcoded for full traceability
- The plate protocol will direct:
  - Incubation condition
  - Incubation duration
  - Image times

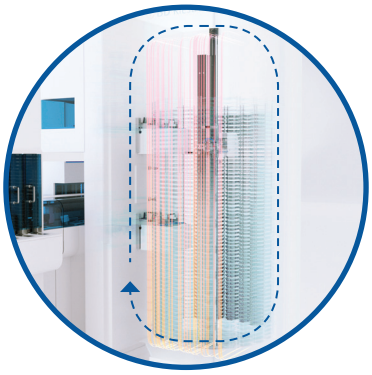
Enhance bacterial growth by standardising incubation times and conditions

BD Kiestra™ ReadA may increase bacterial isolation by up to 31% compared to traditional microbiology[1,*]

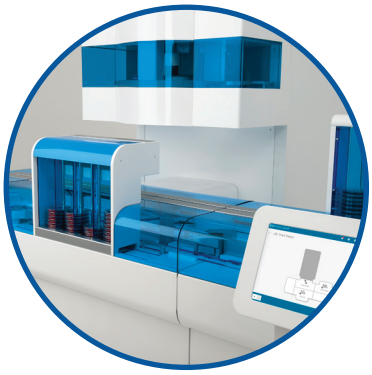
- Helps to enhance operational efficiency through time to result.
- Provides constant incubation conditions, using a closed environment, which enhances the growth of all bacteria including rarely isolated organisms.[1]
- Provides the flexibility to set-up incubation protocols according to your Standard Operating Procedures.

UP TO 31% MORE BACTERIAL ISOLATION[1*]

- All plates are stored individually and are easily accessible
- Dedicated and single purpose lanes for plate infeed, outfeed and imaging to prevent bottle necks
- Rapid plate delivery or imaging upon user request



- Closed door incubation enables constant temperature and stable O_2 or CO_2 levels
- Laminar air flow to help prevent plate dehydration
- Removable plate racks for easy cleaning



- User safety through closed lid incubation and transportation
- HEPA filtered camera area to reduce risk of (cross) contamination
- High throughput imaging (up to 300 plates per hour)

*Based on studies of urine cultures with selected organisms.

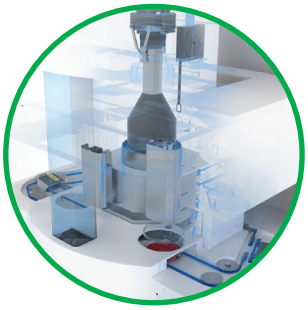
Deliver accuracy through standardised image acquisition

The BD Kiestra™ ReadA is designed to capture images in a standardised manner to reduce variability and improve the consistency of the result.

- Determine follow-up work in a timely and efficient manner using accurate plate images.
- Detect and identify colonies earlier and enable faster results through shorter imaging cycles.
- Minimises image variation and instrument variability to ensure compatibility with future upgrades and applications.

Combine high-speed performance and standardised image acquisition to enable diagnostic imaging

See details invisible to the human eye



BD Kiestra™ ReadA contains a 25-megapixel camera with a telecentric lens and ensures plates are oriented for consistency of images over time.

Improve colony detection and reduce image variability

BD Kiestra™ Optis technology acquires up to 22 images of each plate and determines the optimal value for each pixel using three light sources: top, bottom and side.

Provide access to the right information anywhere, anytime

Powered by
BD Synapsys™ microbiology informatics solution

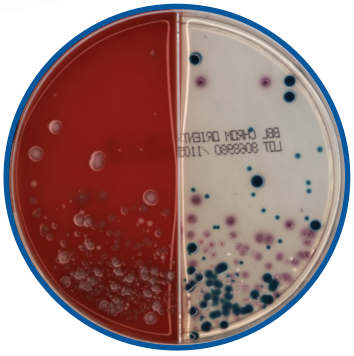
BD Synapsys™ microbiology informatics solution provides a patient summary overview to optimise culture interpretation for lab staff.

In addition, multiple BD Kiestra™ imaging applications can assist you with accurate plate interpretation, increasing efficiency and providing more reliable and timely results.

- Increase staff effectiveness through assisted decision making and flexible work lists
- Enhance patient care through growth notification and a complete culture overview
- Personalise informatics to control laboratory processes and staff specific tasks

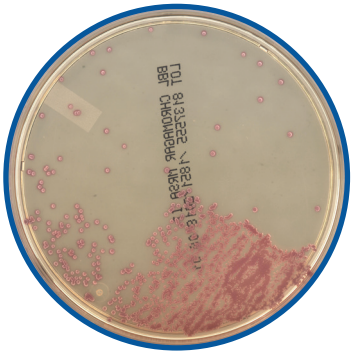
BD Synapsys™ informatics solution single user interface performs culture reading to provide lab staff with key information.

- Anywhere anytime access
- On demand actionable insights
- Secure instrument connectivity
- Integrated workflows



BD Kiestra™ urine culture app

- Allows for auto* / batch reporting of no growth or non-significant results
- Quantitates growth in five different CFU/mL ranges
- Indicates early growth
- Groups growth in Pure, Predominant and Mixed growth categories

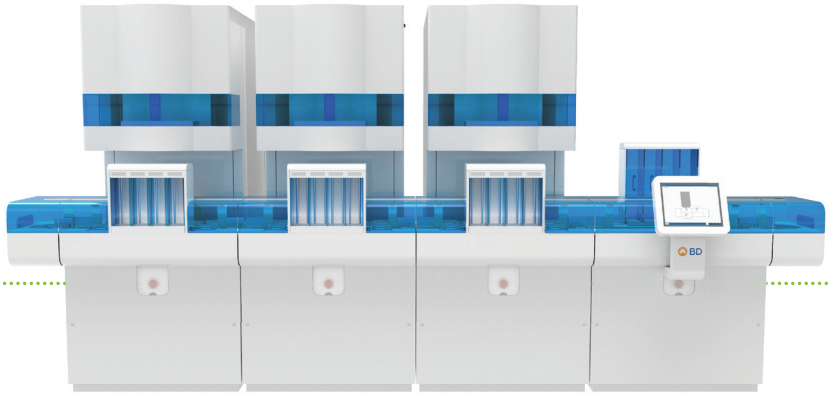


BD Kiestra™ CHROMagar® Surveillance Applications

- Growth / no growth analysis
- Allows batch reporting of results

BD Kiestra™
Standalone Solutions automate your laboratory's most challenging processes and expand your automated solution as your needs evolve.

Connect up to three incubators in one configuration



BD Kiestra™ ReadA

1

Imaging station

- 25 MP camera
- Telecentric lens
- HEPA filtered area
- 300 images / hour
- Three light sources; side, top and bottom
- Two different backgrounds; black and white

2

Plate track

- Transports plates from the infeed stacker to the incubator and output stackers

3

Outfeed stackers

- Four individual outfeed stackers per incubator
- Can be configured to support your workflow

4

Infeed stackers

- Continuous plate loading
- Random and unsorted plate loading

5

Incubation unit

- Holds 1,152 plates
- O_2 or CO_2 capabilities
- Temperature range 30°C–40°C ± 1°C
- Connect up to three incubators in one configuration

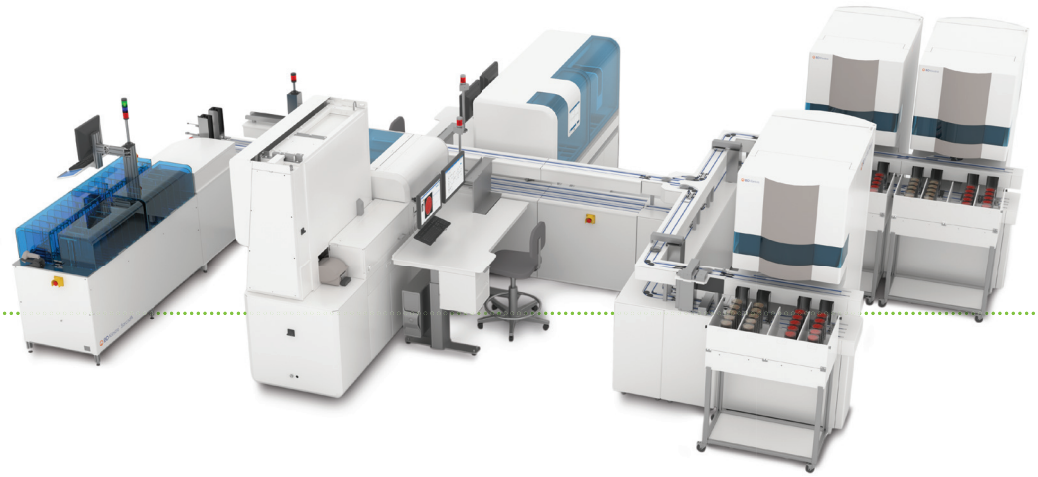
6

Operator screen

- Ergonomic, easy access instrument control panel

BD Kiestra™

Total Laboratory Automation provides you with a scalable solution to automate either the entire process or only the tasks you select.

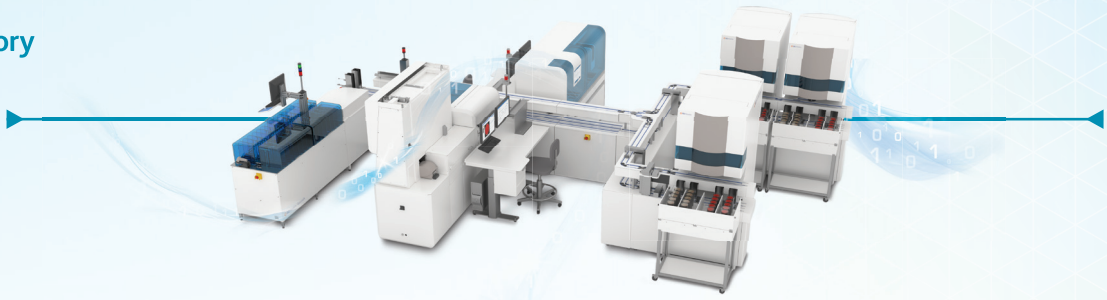


Advance your laboratory through scalable, customised automation

BD Kiestra™ Standalone solutions

Barcoding	Inoculation	Incubation and Imaging	Plate Interpretation and Workflow Management	MALDI-TOF Preparation	BD Phoenix™ AST Preparation	Report Results
BD Kiestra™ BarcodA	BD Kiestra™ InoqulA	BD Kiestra™ ReadA	BD Synapsys™ informatics solution BD Kiestra™ Urine Culture App BD Kiestra™ CHROMagar® Surveillance App	BD Kiestra™ IdentifA	BD Kiestra™ SusceptA	BD Synapsys™ microbiology informatics solution

BD Kiestra™ Total Laboratory Automation



BD Kiestra™ Laboratory Automation Solutions

- **Enhance laboratory operations**
- **Maximise financial efficiencies**
- **Advance laboratory outcomes**

References: 1. Klein et all, Significant increase in cultication of Gardernerella vaginalis, Alloscarovia omnicolens, Actinotigunum schallii, and Actinomyces spp. in urine samples with total laboratory automation, *European Jornal of Clinical Microbiology & Infectious Diseases* (2018) 37:1305-1311.

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Products are not yet available for sale. Products will be CE-marked in compliance with the European In Vitro Diagnostic Medical Device Directive 98/79/EC upon launch, except for BD Synapsys.
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