



# BD FACSDuet™ Sample Preparation System

Optimize your sample preparation with flexible automation that fuels consistency, maximizes lab resources and minimizes errors





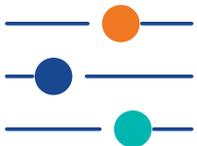
## Driving efficiency

- Reduces hands-on time and optimize your lab's resources
- Automates cocktailing and sample transfer to the physically integrated BD FACSLytic™ Flow Cytometer
- The BD FACSDuet™ Premium Sample Preparation System is equipped with on-board centrifugation and washing to further drive efficiency



## Minimizing error

- Preprogrammed preparation methods
- Traceability of specimens, reagents, worklists, antibody cocktails and samples



## Delivering flexibility

- Creation of user-defined preparation methods
- Modular and upgradeable design to adapt to evolving laboratory needs
- Automated on-board cocktail preparation
- Compatibility with a wide range of reagent vial sizes and manufacturers



## BD FACSDuet™ Sample Preparation System

**Drive efficiency and reduce the risk of error with a flexible sample-to-answer automated solution**

Automate more. Get more done. The BD FACSDuet™ Sample Preparation System drive standardization and reduce hands-on time\* as part of a complete walkaway workflow solution with automatic sample transfer to a fully integrated flow cytometer.

Explore the BD FACSDuet™ Sample Preparation System in augmented reality at [bdbiosciences.com/duet](https://bdbiosciences.com/duet)

\*Batches of 20 samples were stained with BD Multitest™ CD3/CD8/CD45/CD4 in BD Trucount™ tubes; 11 batches were run on BD FACSS™ Sample Prep Assistant III and BD FACSCanto™ II Flow Cytometer (semi-automated) and 3 batches on BD FACSDuet™ Sample Preparation System and BD FACSLyric™ Flow Cytometer. 61.4% reduction in hands on time was measured.

Results are applicable to Ampath Laboratories, South Africa for LNW; data were presented at ESCCA 2019 as Industrial partner presentation. Results obtained in other laboratory and experimental settings may vary.

# Instrument comparison



Features	BD FACSDuet™ Sample Preparation System (Base)	 BD FACSDuet™ Premium Sample Preparation System
Automated sample transfer to a physically integrated BD FACSLyric™ Flow Cytometer	✓	✓
Automated cocktailing with up to 45 reagents	✓	✓
Accommodates up to 46 multi-vendor reagent vials	✓	✓
Maximum of 40 specimen loading with 10 continuous loading specimen racks		✓
96-well plates for Lyse-no-Wash assays	✓	✓
On-board washer	-	✓
On-board centrifuge (tubes)	-	✓ 16 positions
Cytometer powered by middleware (bidirectional LIS compatibility)	✓	✓
Traceability of specimens, reagents vials worklists and reagent cocktails	✓	✓
Support labs to be compliant with 21 CFR Part 11	✓	✓
Bulk drawer	1 tank of 1,000 mL	5 tanks (2 of 250 mL and 3 of 600 mL each) with ultrasonic sensor for real-time volume detection



## Enhance efficiency

Reduce hands-on time and optimize your lab's resources with one easy-to-use platform that automates your workflow from sample to answer.

### **Increases workflow consistency and reduces the time to results**

- Handles up to 3 carriers and worklists simultaneously\* to increase specimen throughput
- Reduces hands-on time so your team is free to focus on other laboratory testing demands
- Physically integrated with the BD FACSLyric™ Flow Cytometer for automated transfer of ready-to-acquire samples providing a true walkaway solution for both Lyse-No-Wash and Lyse-Wash assays
- Intuitive touchscreen interface minimizes user training



### **The BD FACSDuet™ Premium Sample Preparation System further advances efficiency with onboard centrifugation and washing**

#### **Centrifuge**

- 16 tube positions
- Automated balance tube

#### **Washer**

- Supernatant aspirator probe
- Rotor with 5 tube positions, each with vortex
- Real-time ultrasonic level-sensing in bulk tanks



\*parallel processing not possible for all combinations of assays and prep methods



# Minimize error

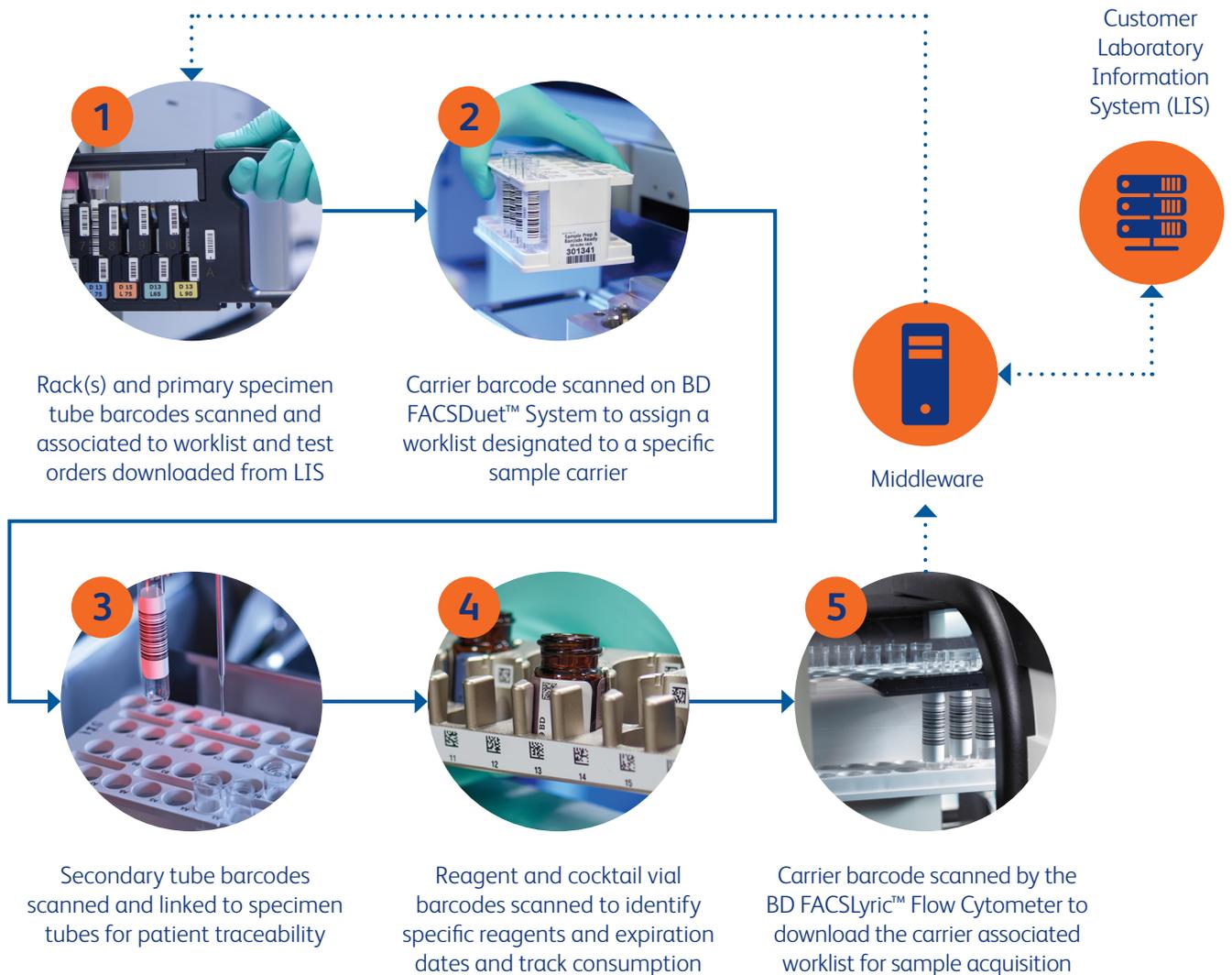
Consistently achieve reproducible results by enabling reduced user-to-user variability, full traceability with easy access digital reports, and sample preparation standardization with predefined methods.

## Enables consistent workflows

- Complete traceability of specimens, samples, reagents, cocktails and worklists throughout the entire workflow
- Standardized preparation methods reduce variability and opportunities for errors
- Automated cocktailing functionality eliminates manual steps, ensuring consistent and error-free creation of multicolor antibody cocktails

## Improves standardization and minimizes manual inputs

- Standardized protocols and automated specimen and reagent pipetting reduce variability in sample preparation, eliminating critical error-prone steps and leading to more consistent results
- Bidirectional communication with the laboratory information system (LIS) automates worklist preparation and eliminates the risk of errors when manually transcribing data
- Smart barcode reading enables automated worklist tracking





## Leverage flexibility

Seamlessly automate sample preparation for both IVD and user-defined assays with the freedom to use a variety of specimen tubes and vials from multiple vendors.

### **Designed to meet your lab's needs**

- Allows users to create their own preparation methods
- Accommodates 20 different specimen tube types from different vendors
- Accommodates various reagent vial sizes for a total of 46 reagents on-board from a wide range of manufacturers
- Enables reagent cocktail creation with up to 45 unique reagents
- Delivers an upgradable and modular design to adapt to the evolving needs of each laboratory

# What our users have to say

**“What’s the potential impact of the BD FACSDuet™ Sample Preparation System? It removes our manual processes, increases our efficiency and throughput, and gives us control in standardization of processes. It’s a controlled environment.”**

**Mr. David Bloxham**, Principal Biomedical Scientist, Haematology-Oncology Diagnostic Service (HODS), Cambridge University Hospital NHS Trust, Cambridge, U.K.

**“At last, a fully integrated end-to-end walkaway solution, which is going to make our lives significantly easier. It reduces errors...leading to increased productivity and efficiency...provides a comprehensive fully auditable account of the whole process...creates capacity to allow us to meet our key performance indicators.”**

**Dr. Timothy Farren**, Head of Immunophenotyping (Specialist Integrated Haematological Malignancy Diagnostic Service, SIHMDS), Barts Health NHS Trust, U.K.

**“I require all the monoclonal antibodies used, the ancillary reagents, tubes, the QC materials to be linked to an exact patient...this is an essential laboratory process but it’s also mandatory in order to maintain ISO15189 accreditation.”**

**Mr. Chris Scott**, Lead Biomedical Scientist, Immunology Department, Barts Health NHS Trust, U.K.

The BD FACSDuet™ Sample Preparation System, BD FACSDuet™ Premium Sample Preparation System and BD Flow Cytometers are Class 1 Laser Products.

 BD FACSDuet™ Sample Preparation System, BD FACSDuet™ Premium Sample Preparation System, BD FACSLytic™ Flow Cytometer with the BD FACSuite™ Clinical and BD FACSuite™ Application are in vitro diagnostic medical devices bearing a CE mark.

 BD Multitest™ CD3FITC/ CD8PE/ CD45PerCP/ CD4APC, with and without BD Trucount™ tubes are in vitro diagnostic medical devices bearing a CE mark and are CE certified by BSI Group The Netherlands B.V. (Notified Body Number = 2797).

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