BR-9536A

BECKMAN COULTER

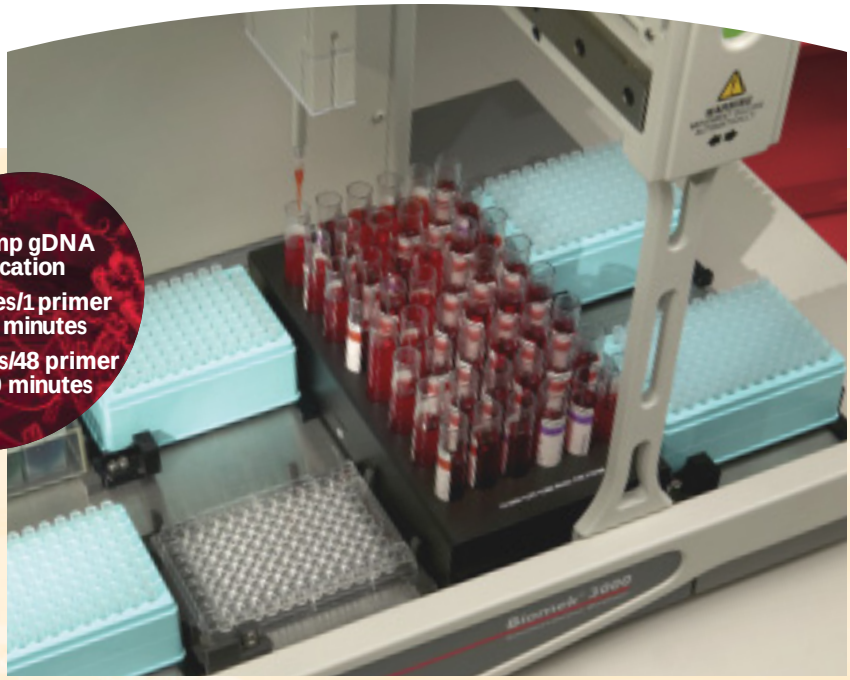
Works the way you think.
Thinks the way you work.

BIOMEK® 3000

LABORATORY AUTOMATION WORKSTATION

Your applications. Your way.

As the world of discovery races ever faster, you need a partner who can put you on the fast track. So our constant focus is on providing tools and solutions to help accelerate your research. That's why our new Biomek® 3000 Laboratory Automation Workstation offers a liquid handling platform that's as advanced as it is flexible. And it's the reason our dedicated applications experts customize automated solutions for a wide variety of commercially available kits. With Biomek Software, it's easy to configure any application to meet your specific needs. And eLabNotebook™ offers a wide assortment of online automated solutions. All to get you up and running faster than you ever thought possible.



Xtra Amp gDNA purification

96 samples/1 primer pair/75 minutes

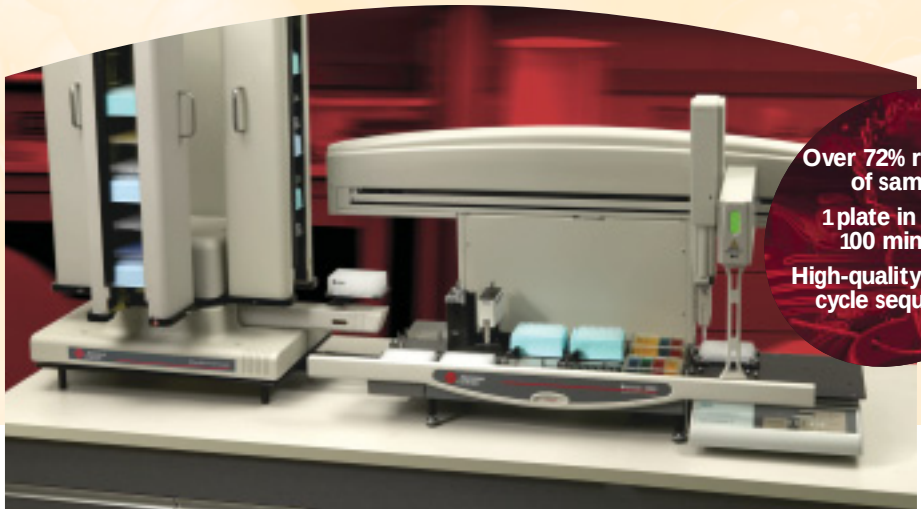
48 samples/48 primer pairs/90 minutes

Genomic DNA purification from whole blood.

Ideally suited for applications such as SNP genotyping and linkage analysis, the Biomek 3000 is capable of processing hundreds of extractions per day. With off-the-shelf kits such as Xtrana's Xtra Amp* gDNA purification kits, you can purify and amplify your samples in one easy step. And as part of the GenomeLab™ suite of solutions, you can go from raw sample to SNP analysis in a matter of hours.

PCR and sequencing reaction cleanup.*

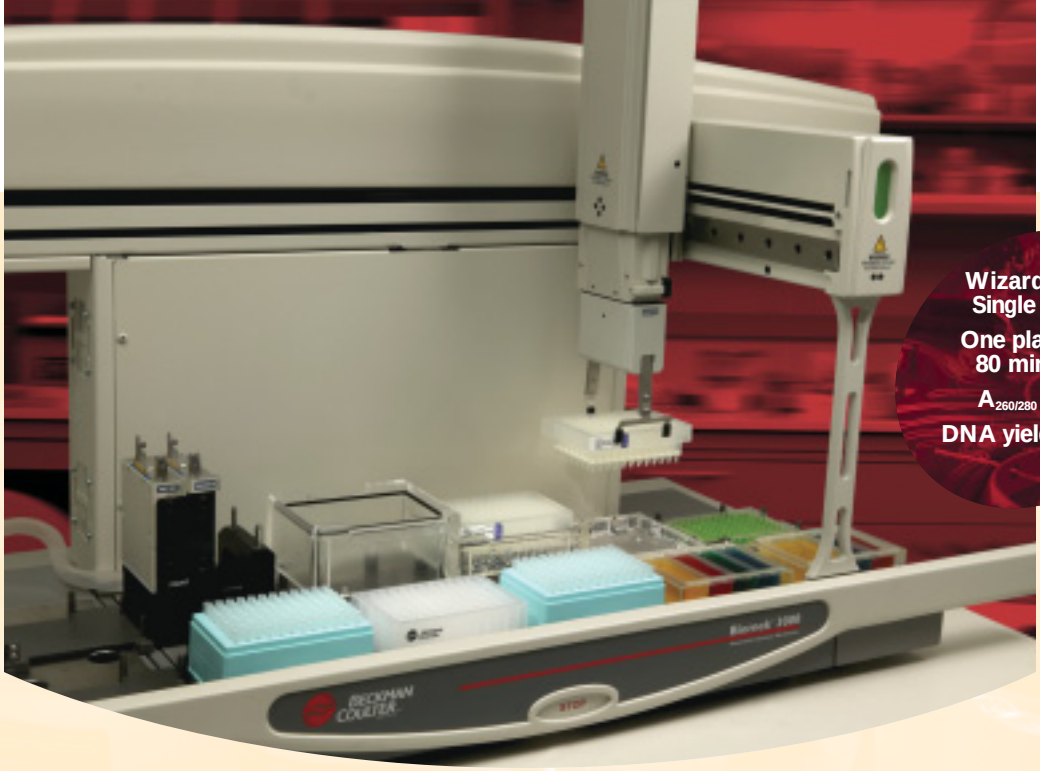
As a scalable, low-cost alternative to filtration methods, this robust system purifies PCR products from reaction contaminants using Promega's MagneSil* Paramagnetic Particles (PMPs), which act as a "mobile solid phase." It uses integrated shaking for consistent results, saves time by avoiding pipetting-based mixing, and exhibits virtually no primer-dimer contamination. Purified PCR products are ready to use in downstream applications, demonstrated by microarraying and fluorescent DNA sequencing.



Over 72% recovery of sample

1 plate in about 100 minutes

High-quality yield for cycle sequencing



Wizard SV96 Single Plate
One plate per 80 minutes
$A_{260/280}$ is 1.8
DNA yield 8-10 µg

Plasmid purification.

The Promega Wizard* SV 96 is a complete system designed for the fully automated, rapid purification of plasmid DNA samples. It works with the Biomek 3000 to provide excellent recovery of highly pure plasmid DNA suitable for automated fluorescent sequencing, restriction enzyme digestion and other molecular biology applications. Many high-throughput applications are available, and the wash tool can be used for even faster processing.

Automated detection assays.

Intended for the quantification of human Interleukin 8, the Immunotech™ Cytokine IL-8 assay only measures human, natural, or recombinant IL-8, which is captured by a monoclonal antibody bound to the wells of a standard titer plate. A biotinylated antibody is then added, which binds to the solid phase antibody-antigen complex. The IL-8 concentration is read with a standard 450 nm absorbance plate reader.

Process 3 plates in under 4 hours
8pg/mL sensitivity
Greater than 82% recovery

PCR and sequencing applications
1 µL transfers
Reaction setup in under 30 minutes

Automated PCR and sequencing reaction setup.

With its reliable and repeatable pipetting, and tube-to-plate capability, the Biomek 3000 delivers the ideal automation solution for this important but routine laboratory task. Additionally, the Biomek 3000 is an affordable instrument that's just the right size to function as a dedicated system for pre- and post-reaction needs.

Sample tracking.

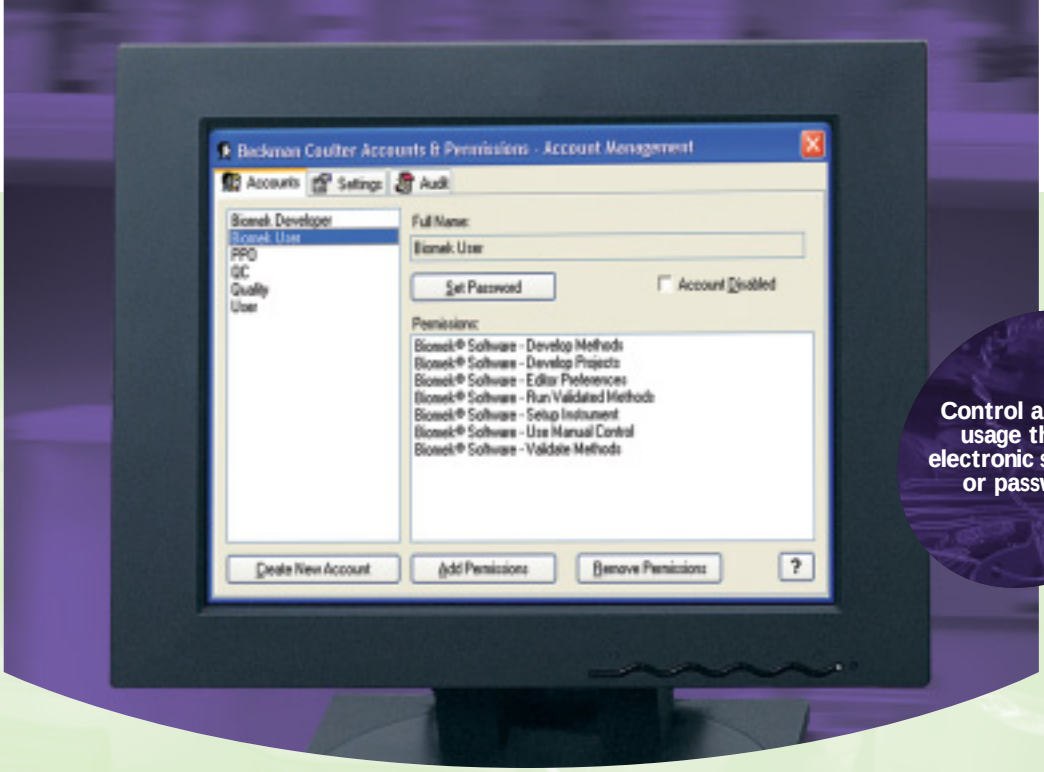
To provide complete tracking of all samples throughout an automated assay, Biomek Software collects information as the method progresses, and allows sample tracking reporting at any time during the run. This information can be used for on-the-fly reformatting and hit picking.

Icon-based software. For human-based work styles.

Whether you're a first-time user of automated liquid handling or a seasoned expert, the intuitive point-and-click simplicity of our powerful Biomek Software makes it easy to set up, edit and run even the most demanding applications. After guiding you through graphic screens that configure methods to your requirements, it automatically selects the best settings to speed up the programming process, then lets you customize those settings to further suit your needs. By combining functions that follow the same logic – such as aspirating and dispensing steps – into a single step, programming time is greatly reduced. And with a new consolidated user interface driving all Biomek Laboratory Automation Workstations, laboratory workflow is easier than ever to manage.

Unified software platform.

Thanks to a single, consolidated user interface for all Biomek instruments, users only need to learn one application. And methods can be ported to other Biomek platforms with ease.



Control and track usage through electronic signatures or passwords.

21 CFR Part 11.

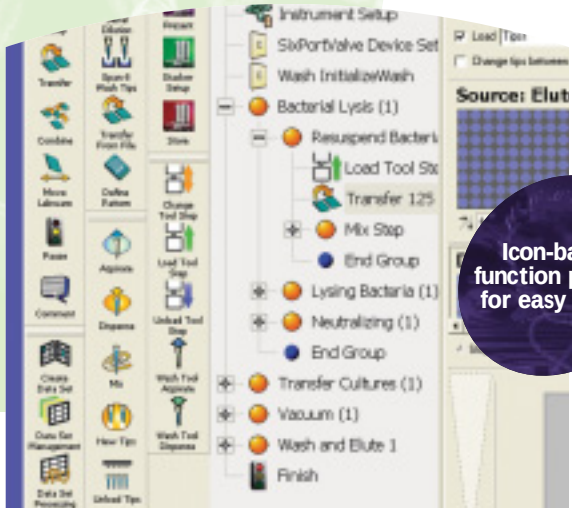
To help achieve regulatory compliance with 21 CFR Part 11 – and perform validation assays in a regulated environment – Biomek Software delivers the ability to set different user accounts and permissions, track revision control, and enable electronic signatures. It also requires users to register any change to methods, and stores all versions.

Intuitive interface.

The unprecedented flexibility built into Biomek Software lets users import and export methods to share with others, use icon-driven Step Palettes to create and configure methods with drag-and-drop ease, define new deck layouts and labware to make changing configurations fast and easy, and much more. All of which makes switching between applications such as MALDI spotting and gDNA purification from whole blood fast and easy.

Point-and-click method development.

If you can use a mouse, then our graphical approach makes method development easy. Choose alternatives like pipetting techniques, liquid types, and deck layouts from drop-down lists. Configure a step by simply choosing an icon, and navigate easily through many different options. Methods can be set up using variables, worklists and logicals, so that runs can be varied without reprogramming. And existing methods development can be easily customized to new needs. For applications such as plasmid purification, this can save months of learning time – and get you up and running quickly.



Icon-based function palette for easy setup.

Multichannel pipetting
Single- and multi-tip pipetting
High-density replication tool
Single- and 8-channel wash tools
Gripper tool

Biomek 3000 workstation.

By integrating all aspects of liquid handling into a single, automated system, Biomek 3000 delivers unparalleled flexibility, expandability and performance. Options like side modules for increased capacity and interchangeable tools ensure that all your assay needs are efficiently handled. And a small footprint lets it fit inside laminar flow hoods. Plus, our ongoing applications development – including eLabNotebook online – offers pre-programmed automated solutions for a wide variety of applications.

Our hardware adapts as your needs change.

Staying ahead in today's discovery world requires the ability to be nimble – to adapt quickly and efficiently. That's why we build flexibility into everything we make. From standalone and partially integrated workstations to the fully-integrated SAGIAN™ Core system, our liquid handling solutions excel at all your throughput and assay configuration needs. And our modular approach to instrument design gives you the ability to adapt to future needs, with accessories that can be added or removed at any time. All to help you handle today's applications with ease, and tomorrow's with confidence.

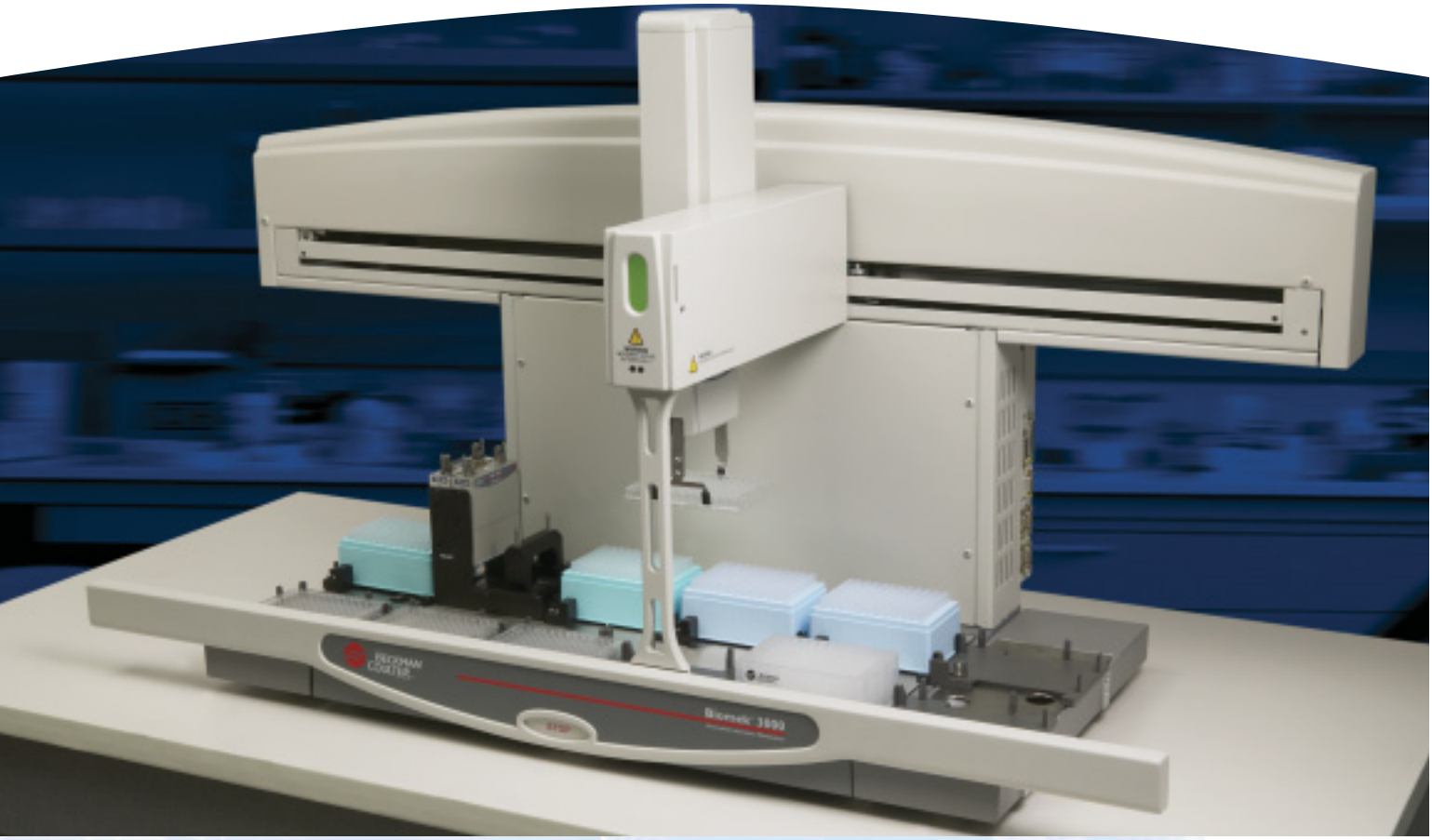
Change tools on the fly.

The Biomek 3000's ability to perform easy system modifications is just another way our flexible system design helps you meet expanding research requirements. For example, applications like DNA purification from whole blood benefit by going from single-channel tube pipetting to multichannel plate pipetting within the same automated method.

Stacker
DPC Shaker
Plate Readers

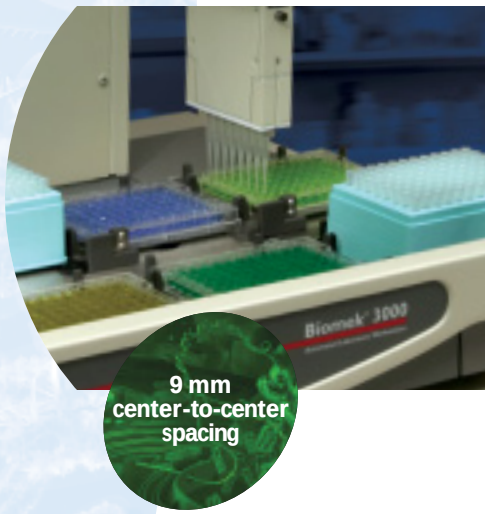
Easy integration with additional devices.

Choose from a variety of add-ons to customize your liquid handling application needs, and integrate them easily with Biomek Software. For applications like PCR purification, you can increase throughput by adding a stacker carousel, or enhance functionality with a DPC Micromix shaker. Special requirements? Our custom engineering group can create a particular solution for you.



Increased system functionality.

With true 9 mm center-to-center spacing, our multichannel tools can be used with SBS/ANSI standard labware. Single- and multi-tip tools accurately transfer volumes down to 1 µL, so you can miniaturize your assay and save on reagent costs. And our P200L and P1000L tools include liquid level sensing technology that sonically detects the liquid level inside the well.



Standardized tips.

Since all our Biomek liquid handlers can use a single type of tip, ordering and storage issues are dramatically simplified. And our wide range of tip offerings include sterile, barrier, and certified RNase, DNA and DNase free.

Biomek® 3000 Laboratory Automation Workstation

Specifications

Workstation

Weight	80 lb. (36 kg)
Height	26.5 in. (67 cm)
Width	48 in. (122 cm)
Depth	19.5 in. (50 cm)
Power Requirements	50/60 Hz, 100-240V

Biomek 3000 Controller

Pentium-based Windows* XP Controller or better

Communication Ports

Seven Ports	Four open; three reserved

Interchangeable Tools

Pipette Tools	Nom. Volume Range	Specifications (% CV)
P20 Single-Tip Tool	1-20 µL	1 ul ≤ 5%
P200L Single-Tip Tool	5-200 µL	5 ul ≤ 5%
P1000L Single-Tip Tool	50-1000 µL	50 ul ≤ 2%
MP20 Eight-Tip Tool	1-20 µL	1 ul ≤ 5%
MP200 Eight-Tip Tool	5-200 µL	5 ul ≤ 5%

Wash Tools	Volume Range	Max. Reach
Wash-1 Single-Channel Tool	1 x 50 µL to 1 x 150 mL	40 mm
Wash-8 Eight-Channel Tool	8 x 50 µL to 8 x 18.75 mL	40 mm

HDR Tool	Pin Diameter	Nom. Sample Density
96/384-Pin HDRT	0.015/0.045 in.	3,456/1,536

Gripper Tool

Used to move labware and devices around the Biomek worksurface to fully automate filtration-based processes such as nucleic acid purification, and provide access to integrated plate readers.

Other Biomek Accessories

Stacker Carousel

Provides external supply and storage of labware, thereby increasing capacity and walk-away operation of the Biomek 3000 for all applications.

96-Filtration Systems

Filtration manifold system includes a vacuum manifold with interchangeable collars for fully-automated filtration processes on the Biomek workstation.

Thermal Exchange Unit (TEU)

Heats or cools (0°-50°C) reservoirs, plates, or other standard labware. Refrigerated or heated liquids are circulated through the TEU by an external user-supplied circulator bath.

Shaker

Shaker utilized for resuspension of MagneSil* paramagnetic beads and assays requiring plate agitation.

Our eLabNotebook™ provides an on-line application resource that helps you solve a wide variety of important issues quickly and effectively.

The Biomek 3000 is an important part of a broad continuum of Beckman Coulter products, including automated liquid handling, capillary electrophoresis, centrifugation, ultracentrifugation, DNA sequencing, electrochemistry, flow cytometry, fragment analysis, HPLC, integrated core systems, microarrays, particle characterization, scintillation counting, and spectrophotometry.

For information about our comprehensive line of Laboratory Automation Workstations, please contact your local Beckman Coulter representative or visit our web site at

www.beckmancoulter.com

BECKMAN COULTER®

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Innovate Automate SIMPLIFY

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