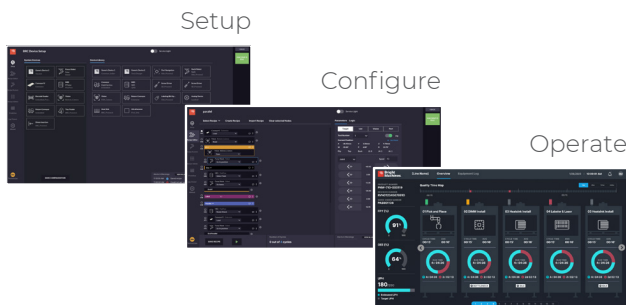


Bright Machines helps companies manufacture more products, at a higher-quality and lower cost. Our software and robotic cells intelligently automate product assembly and inspection, helping solve the capacity needs and labor challenges of modern factories.

Bright Machines Microfactory

Software-driven



Modular, flexible system



Increase capacity with predictable output by quickly automating error prone repetitive assembly and inspection tasks on your production line. With no programming required, Bright Machines Microfactories can be configured using a graphical user interface to automate product assembly and inspection.

Use skills that are factory-ready



Assembling



Fastening



Welding



Dispensing



Pressing



Labeling



Vision



Testing



and more

Manufacture a variety of products



Smart meter



Networking
equipment



Building
security system



Battery
module



Automotive
control unit



Medical
devices



Home
appliances

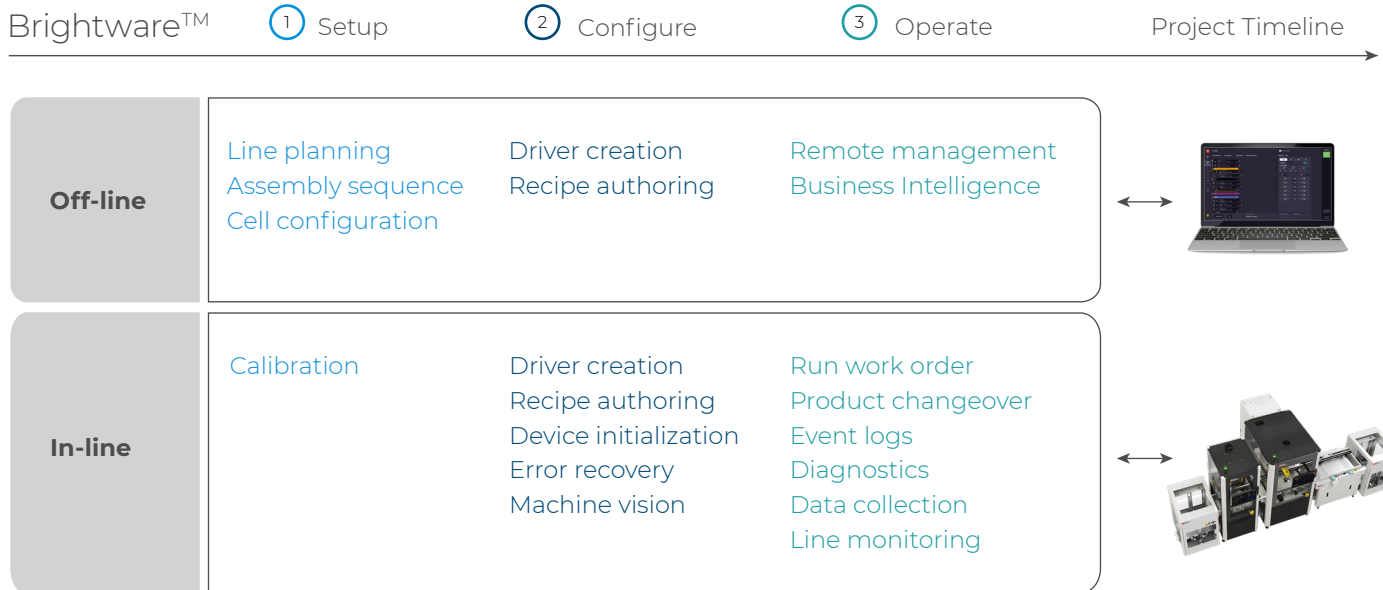


Power tools



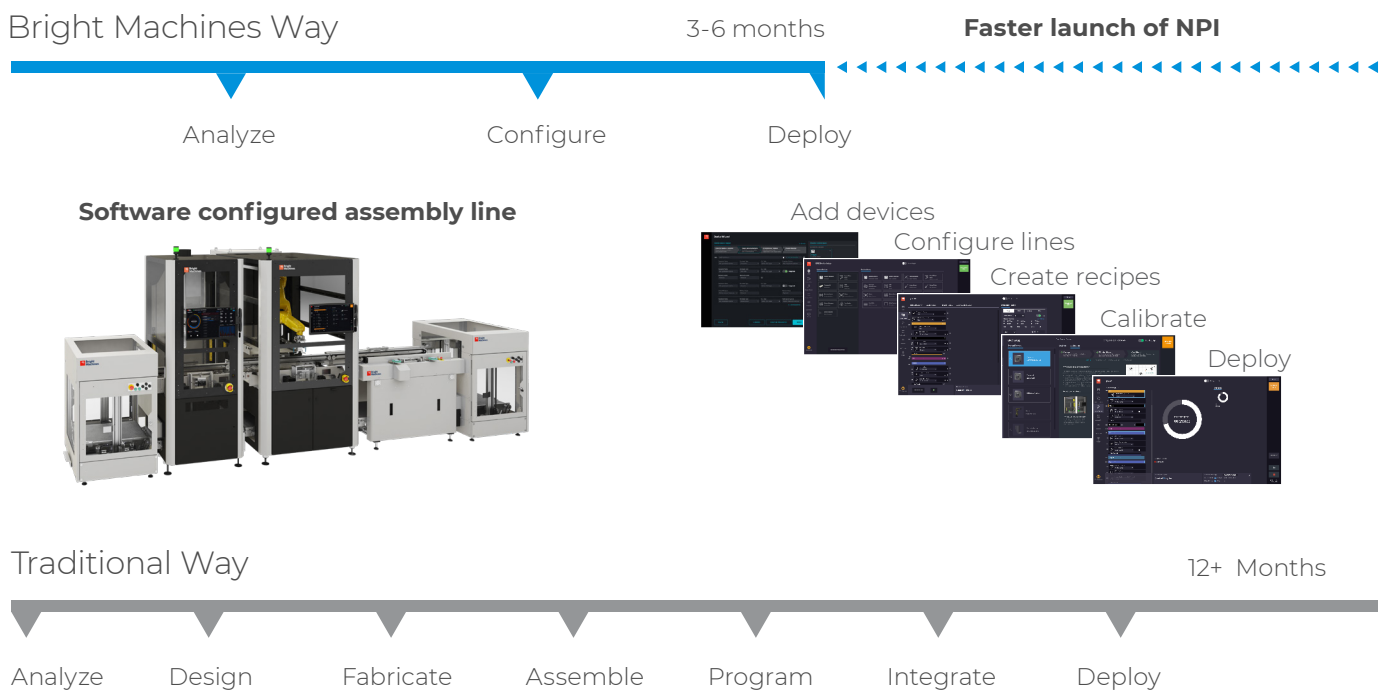
and more

Software-Defined Manufacturing



Brightware gets you to market faster. With streamlined user flows for setup and configuration, assembly lines can be deployed in half the time traditionally required. Brightware also operates the assembly line while in production using manufacturing data to drive operational excellence.

Deploy assembly lines faster



Modular automation

Feeding system

Tray feeder
Bowl feeder

End of arm tools

Grippers
Screwdriving
Heat sink assembly
DIMM insertion
Dispensing
Soldering
Labeling
Functional testing
Bar code reading
Inspection
Tool changer
And more...



Bright Robotic Cells

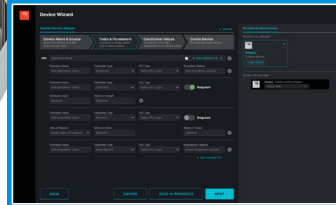
BRC70
BRC35

Transport system

Embedded conveyor
Return conveyor
Pallet elevator
Extension conveyor

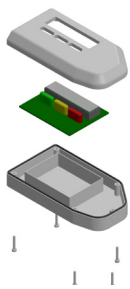
Bright Machines Device Wizard

Open framework makes it easy to add third party automation devices.



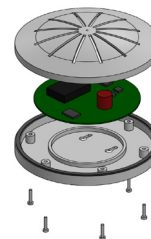
Bright Machines Microfactories are a modular, flexible system. Automation components, whether they are designed by Bright Machines or come from a third party, can be quickly added using the Bright Machines Device Wizard to setup the driver for it in Brightware. And when it comes time to wind down the production on a line, the automation components can be repurposed to build the next product.

Repurpose assembly lines faster



Original line

Assembling Product A



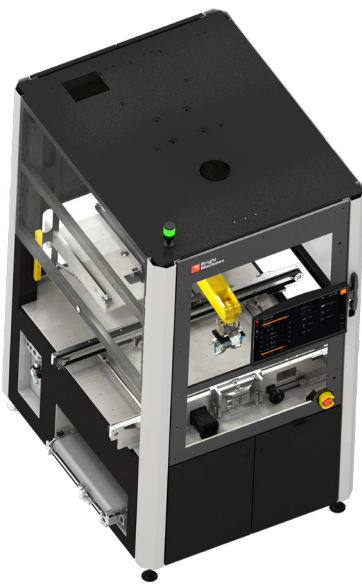
New line

Assembling Product B

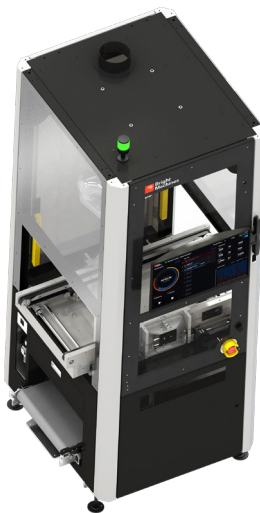


Software configured robotic cells

Bright Machines Microfactories use one or more Bright Robotic Cells (BRCs) to form an automated assembly line. There are two sizes of cells available, the **BRC70** and **BRC35**, and they can be used together on the same line. Each BRC has a standard configuration which includes the chassis, electrical cabinet, robot arm, power supply, and touch screen display.



BRC70



BRC35

Standard Configuration

	BRC70	BRC35
Internal volume of chassis (excluding electrical cabinet)	70 cubic feet	35 cubic feet
External dimensions of chassis	1206 x 1505 x 2202 mm	850 x 1000 x 2200 mm
Floor footprint with service area	1206 x 2855 mm	850 x 2350 mm
Weight	900 kg	450 kg
Maximum pallet size	700 x 560 mm	700 x 450 mm
Maximum height of product assembled	250 mm	250 mm
Maximum payload (including pallet)	15 kg	15 kg
Robot arm	Fanuc LR Mate 200iD/7L 6-axis, 7 kg payload	Nachi EZ03 4-axis, 3 kg payload
Power supply	200-230 VAC, 50/60 Hz, 5kW	200-230 VAC, 50/60 Hz, 5kW
Touch screen display	21" monitor on adjustable arm	21" monitor on adjustable arm

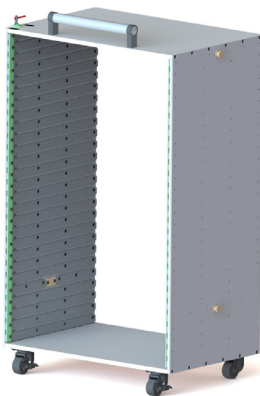
Automated material feeding

Bright Machines Microfactories support automated material feeding enabling the assembly line to run for extended periods of time without requiring human operators to load materials into it.

The **Tray Feeder 600** is available in a standard configuration which is compatible with the BRC70 fitting onto the back side of the cell. Other line specific options for tray and bulk feeding are also available.



Tray Feeder 600



Parts cart

Standard Configuration

Tray Feeder 600	
External dimensions of chassis	1355.5 x 780 x 2246 mm
Floor footprint with service area	2090 x 780 mm
Weight	530 kg (no cart) 680 kg (cart with max payload)
Maximum payload	6 kg per tray 150 kg per cart
Maximum number of trays	25
Maximum part size	560 x 380 x 200 mm
Cycle time (switch tray)	6 seconds

Automated material transport

Bright Machines Microfactories support conveyance. Embedded conveyors move pallets from cell to cell for processing a sequence of operations. Return conveyors bring pallets back to the start of the line.

Pallet elevators are used in the line to transport pallets vertically between the embedded conveyor and return conveyor. **Extension conveyors** can be placed in the line where needed to accommodate human operator run stations or automated stations which don't require a cell.



Pallet elevator

External dimensions of chassis

Floor footprint with service area

Weight

Maximum payload

Standard Configuration

Pallet elevator	
External dimensions of chassis	1119 x 921.5 x 1274 mm
Floor footprint with service area	2679 x 1500 mm
Weight	220 kg
Maximum payload	15 kg

Standard Configuration

External dimensions of chassis

Floor footprint with service area

Weight

Maximum payload

Extension conveyor	
External dimensions of chassis	1070 x 1400 x 1040 mm
Floor footprint with service area	3770 x 1400 mm
Weight	130 kg
Maximum payload	15 kg (embedded conveyor) 10 kg (return conveyor)



Extension conveyor