

MDAutoinjectorF160 and MDAutoinjectorF320

FINAL ASSEMBLY OF ANY COMMON 3-PIECE AUTOINJECTOR FOR MEDIUM OR HIGH-VOLUME OUTPUT

The right end-to-end automation solution for your YpsoMate®-style autoinjector assembly. Consistent, reliable core processes based on proven ATS technologies. Pre-engineered and tested for shorter delivery times, optimized footprint, and lowered power/air usage.

Proven ATS Technologies - Mid (20 to 160 PPM) to High Volume (160 to 320+ PPM)

ATS is an integrator of life science solutions to some of the world's largest companies. Over more than 45 years we have developed both standardized platforms and customized options to meet demanding product, process and production needs. Our innovations drive your success.



MDAutoinjectorF320

Illuminate™

- Capture real-time OEE intelligence across lines, machines and locations
- Data-to-decision in minutes
- Identify production trends
- Facilitate visual machine learning on parts and product quality control inspection

SuperTrak™

- Multiple configurations to maximize floor space
- Easily deploy and re-deploy your automation system as business demands change
- Save significant engineering and integration time to get to production faster

Symphoni™

- Exceptionally versatile
- Clinical production @ 2 PPM to commercialization @ 320+ PPM
- High flexibility of pallets & robots
- Ultra-precise motion control with a delicate touch
- End-to-end digital awareness, mapped out in 1-millisecond intervals, verified 200 times per second by self-diagnostics

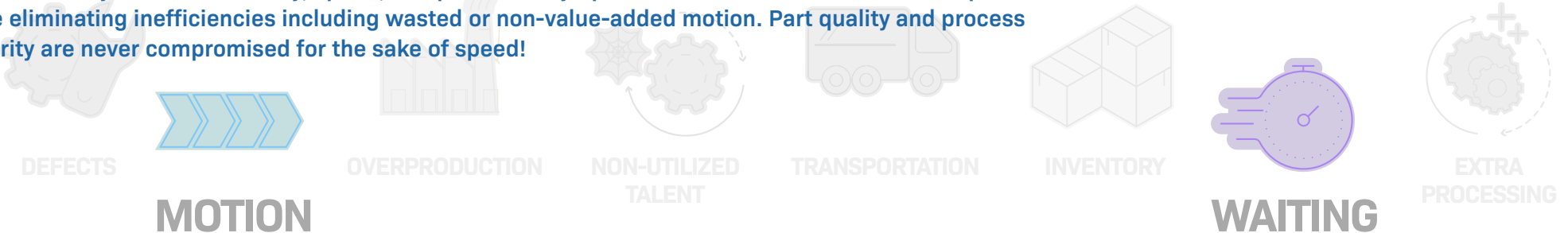
Dynamics™

- Central machine layout to access all PLCs (up to 19)
- Device-based setup & configuration
- Automated design error-checking
- Position Cam configuration (real-time graphs)
- Output Cam setup

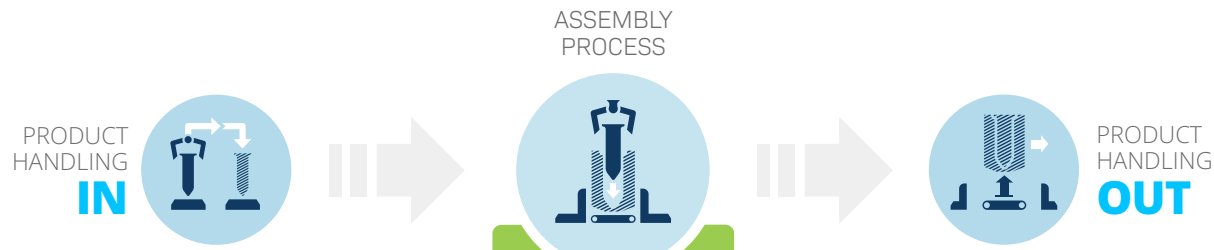


The Symphoni™ Assembly Difference

A digital assembly platform that is pre-engineered, highly standardized and modular, it surpasses conventional systems in flexibility, speed, and precision. Symphoni focuses on core value-added processes while eliminating inefficiencies including wasted or non-value-added motion. Part quality and process integrity are never compromised for the sake of speed!

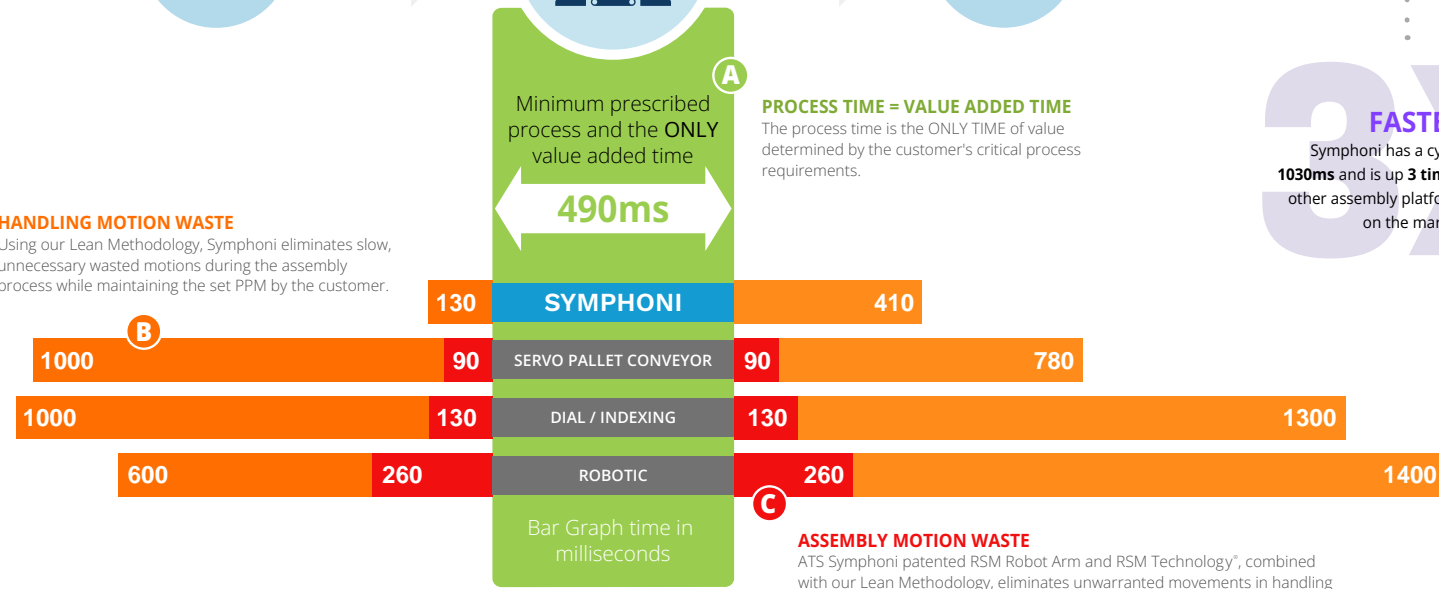


SYMPHONI™
A BRILLIANT COMBINATION OF SPEED & EFFICIENCY



MORE EFFICIENT
Without compromising critical motion processes. Where **LESS is MORE** and **SPEED surpasses** the competition.

HANDLING MOTION WASTE
Using our Lean Methodology, Symphoni eliminates slow, unnecessary wasted motions during the assembly process while maintaining the set PPM by the customer.



PROCESS TIME = VALUE ADDED TIME
The process time is the **ONLY TIME** of value determined by the customer's critical process requirements.

FASTER
Symphoni has a cycle time of **1030ms** and is up **3 times faster** than other assembly platforms currently on the market.

ASSEMBLY MOTION WASTE
ATS Symphoni patented RSM Robot Arm and RSM Technology®, combined with our Lean Methodology, eliminates unwarranted movements in handling parts throughout the assembly process.

Configurable solutions for a broad range of outputs

As the demand for tools for the self-administration of drugs increases, so does the need for manufacturing systems that are safe, reliable, compliant, time-efficient and customizable. Our final assembly solutions are suitable for the assembly of any common three-piece autoinjector; pre-engineered and tested for shorter delivery times, optimized footprint, and lowered power/air usage.

/// Features

- Perfect for manufacturing either medium or high volumes of items, and for both semi- and fully-automated assembly
- Configured for lower design costs and faster delivery
- Accommodates both round and cut flange syringes
- Quick retooling of stations to accommodate new products or variants, and introduction of new stations/modules
- 1 person required to run Symphoni™
- Various component loading options available from manual to fully automated





/// What we can deliver

- Rapid time to market
- A wide variety of customization options such as manual workstations, feeder units or tray handling can be added. Process technologies and testing systems can be integrated, such as vision systems
- The Symphoni™ platform's patented assembly technology that eliminates non-value-added delays while carefully respecting essential process time
- Drug delivery device assembly systems delivered worldwide



YpsoMate® autoinjectors shown actual size

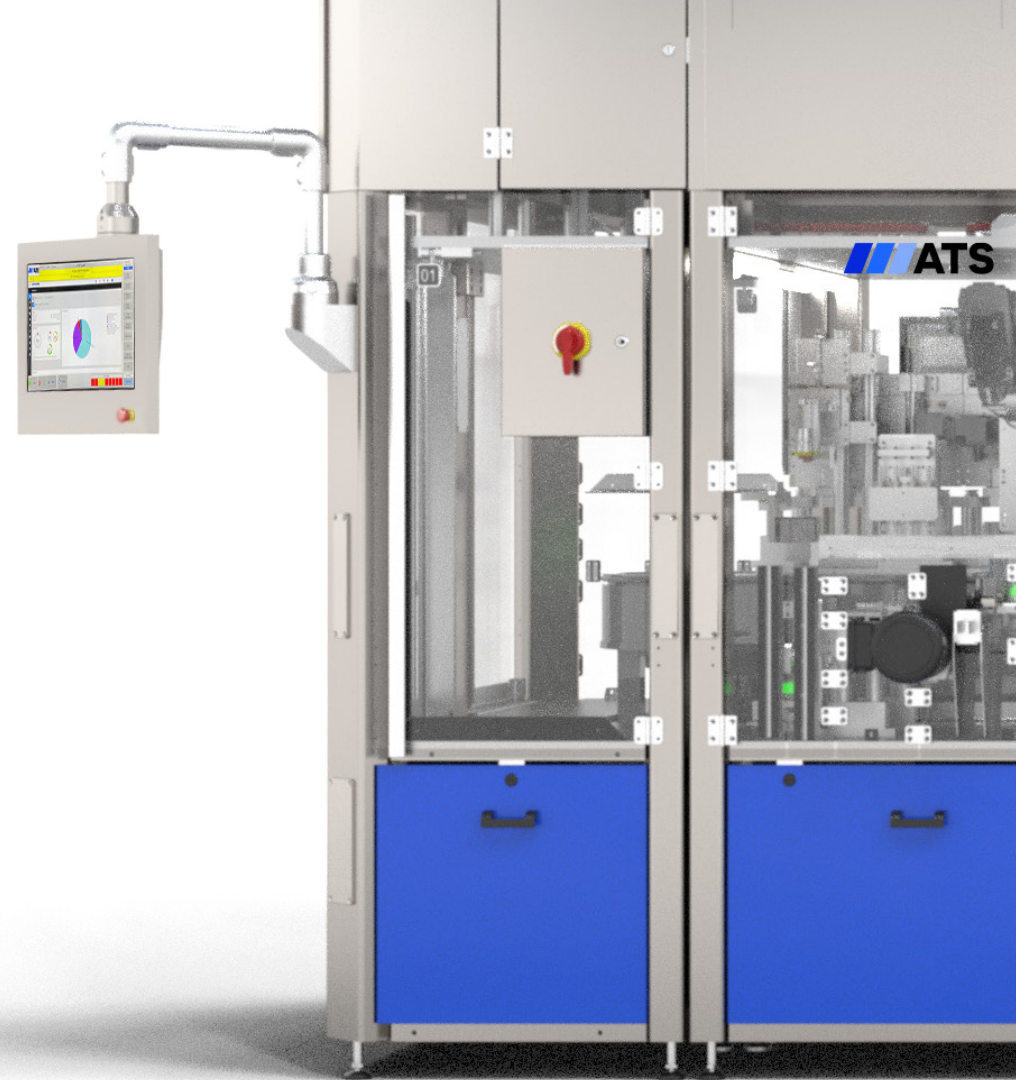
Solution Type	Output	Platform
MDAutoinjectorF160	Medium volume 20 - 160 PPM	SuperTrak™
MDAutoinjectorF320	High volume 160 - 320+ PPM	Symphoni™

Standard Inspections Offered	
	Tray full/empty (FSA/LSA) 3D tray scan – robot EOAT positioning (FSA/LSA)
	SKU identification (FSA/LSA)
	Measure force vs Displacement PFS --> FSA & RSA --> FSA
	Other position & orientation checks as needed

FSA – Front Sub Assembly, RSA – Rear Sub Assembly, PFS – Pre-Filled Syringe, EOAT – End of Arm Tooling

One (1) F320 Machine	Multiple Autoinjector Assembly
Off-the-shelf	Standard and proven station designs Standard Spare parts > 70%
Electronic CAM software	CAMs are digital, as opposed to physical plates and shafts
*Future variants	Add new component nest in the shuttle Change EOAT (end-of-arm-tooling) Just configure existing program
Tooling changeover	Fully automated, recipe driven
70 - 90% tooling reduction	4-up @ 320 PPM on Symphoni™ vs 20-up @ 320 PPM on traditional platforms
High speed	Up to 120 strokes per minute; cycle time as low as 800 ms
High throughput	Up to 95% machine OEE
Rate change	Touch & Go (HMI)
Component range	3, or custom

*Different variants (SKUs) within a product family, with different form-factors but the same assembly sequence, can be configured to run on the same system



Leading life sciences companies trust us to solve their production needs. Let's discuss how
ATS automated autoinjector assembly equipment can deliver for you.



Contact us at lifesciences@atsautomation.com

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