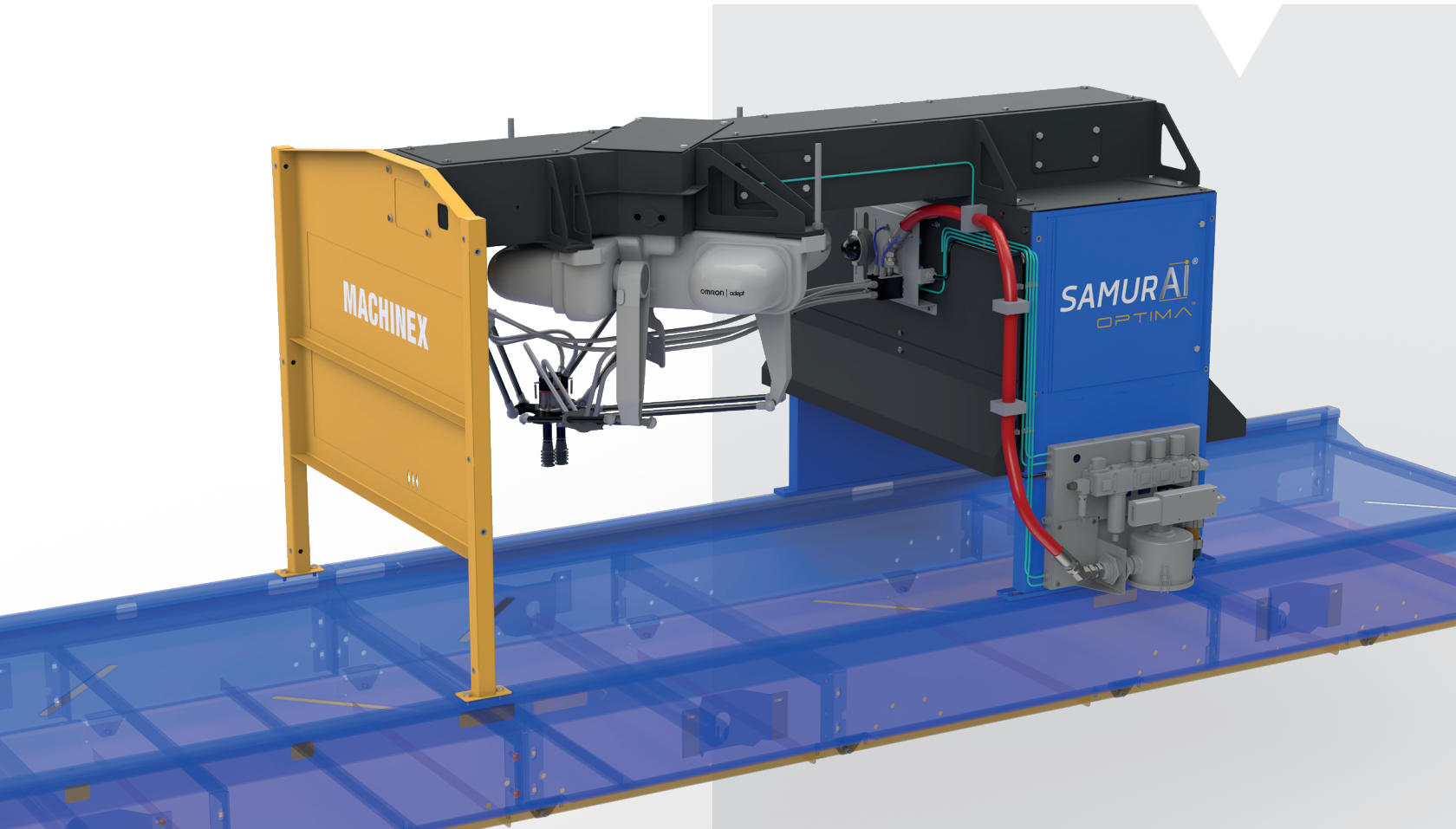


**SAMURAI<sup>®</sup>** OPTIMA

## Compact Sorting Robot

**M**  
**MACHINEX**

*Experience Results*



The SamurAI<sup>®</sup> Optima<sup>™</sup> is the latest innovation in sorting technology. This compact and cost-effective robot retains the advanced artificial intelligence capabilities of the original SamurAI<sup>®</sup>, accurately identifying and sorting materials to ensure optimal recovery and improved quality control. With its space-efficient design, the SamurAI<sup>®</sup> Optima<sup>™</sup> can be integrated into a wider range of buildings and environments, reducing reliance on manual labor and enhancing overall operational efficiency.

### BENEFITS OF THE SAMURAI<sup>®</sup> OPTIMA<sup>™</sup>

- ▶ Compatible with ceiling heights as low as 8 feet (2.44 m), based on standard sorting conveyor height
- ▶ Performs up to 70 picks per minute<sup>1</sup>, well above the human average of 30 to 40 picks per minute
- ▶ Reduces labor needs, helping offset HR-related costs and staffing challenges
- ▶ Enhances sorting availability, performance, and safety with fast installation

**M**  
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# MAIN COMPONENTS

MODEL					
	Width	Length	Height	Working Envelope	Conveyor Width Possibilities
Samurai® Optima™	Adapt to the width of the conveyor*	7'10" (2.39 m)	4' 77" (1.4 m)	51" (1.3 m)	24" - 60" (0.6 - 1.5 m)*

\*42-60" will require two single robot cells in staggered position

## FEATURES OF THE SAMURAI® OPTIMA™

- ▶ **Material Handling:** Recovered products are discharged through fixed sorting chutes or portable bins
- ▶ **Ergonomic Design:** Easy access for preventive maintenance
- ▶ **Installation:** Designed to fit seamlessly into existing sorting processes, ideal for retrofitting operational facilities

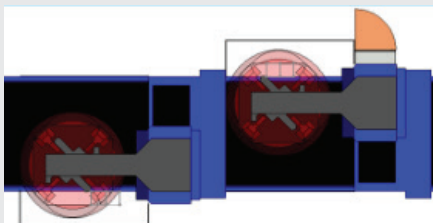
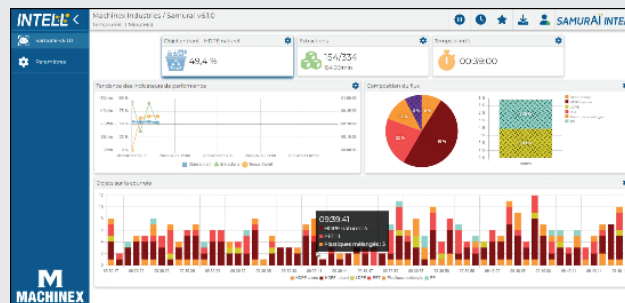
## ARTIFICIAL INTELLIGENCE

The Samurai® Optima™ is powered by artificial intelligence

- ▶ Identifies distinguishing features in the same way as the human eye
- ▶ Recognizes material in dirty, commingled and constantly changing conditions including the introduction of new packaging & designs
- ▶ Improvements are possible through updates that ensure maximum recognition efficiency
- ▶ Maximizes financial return
- ▶ Assisted learning mode enables detection of specific products within a material stream

## MACH INTELL™

- ▶ An essential tool to visually present the performance of the sorting robot for analysis and detailed report generation
- ▶ Generates key data on the perceived composition and evolution of the material stream



Single Robotic Cells in Offset Positions

## HARDWARE

The Samurai® Optima™ is a sorting robot that:

- ▶ Targets designated products to capture, handle, and deposit them into chutes
- ▶ Is equipped with a Venturi suction system to generate vacuum, combined with straight suction cups

<sup>1</sup> The Samurai® Optima™ performances could vary depending upon the variations of tonnage & material composition, the quantity of targeted products, the material spread at the