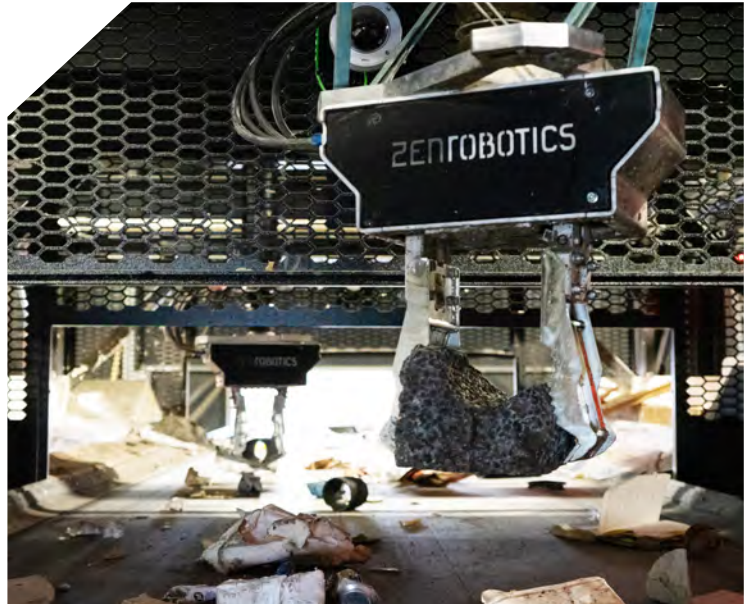


# ZENROBOTICS®

## HEAVY PICKER

ZenRobotics Heavy Picker is the world's first robotic waste sorting solution designed exclusively for waste sorting. It is a strong multipurpose robot for large and bulky waste that can sort several high-purity fractions simultaneously with the help of heavy-duty arms, various sensors and artificial intelligence. The Heavy Picker is a fully autonomous sorting line that can be retrofitted to existing capacity or set up as a standalone sorting station that only requires space on site.



## BENEFITS

Increase Recovery Rates

Improve Sorting Quality

Uninterrupted Sorting

Enable 24 / 7 Operations

Minimize Pre-shredding

Reduce Human Risk

## KEY FACTS

1 - 3 robotic arms

Trainable to recognize unlimited fractions

Online reporting tool for analysis of waste

RGB-, VIS- and hyperspectral cameras, 3D sensor system and metal detection

Feed Rate Control with signals and sensors to control upstream feeding and sorting equipment (optional)

## SORTING TASKS

The Heavy Picker can sort construction and demolition waste (C&D), commercial and industrial waste (C&I) as well as plastics, metals, wood, inert, plastic bags and more. Heavy Picker minimizes the need for pre-shredding waste or pre-sorting the waste with an excavator.

CONSTRUCTION & DEMOLITION	COMMERCIAL & INDUSTRIAL	RIGID PLASTICS	INERT	SCRAP METALS
<ul style="list-style-type: none"><li>■ Wood by grade (A/B/C/D-wood)</li><li>■ Inert mixed and by type: bricks, concrete, stones, etc.</li><li>■ Rigid plastics mixed or by polymer</li><li>■ Metals</li></ul>	<ul style="list-style-type: none"><li>■ Rigid plastics mixed or by type</li><li>■ OCC</li><li>■ Wood mixed or by type</li><li>■ Metals</li></ul>	<ul style="list-style-type: none"><li>■ Plastics from mixed waste</li><li>■ Plastics by polymer: PP, PE, PVC, PET, etc.</li><li>■ Plastics by shape, size and/or color</li></ul>	<ul style="list-style-type: none"><li>■ Stones</li><li>■ Bricks</li><li>■ Asphalt</li><li>■ Gypsum</li><li>■ Concrete, etc.</li></ul>	<ul style="list-style-type: none"><li>■ Metals by shape/color, brass, aluminum, zinc, copper, stainless steel, etc.</li><li>■ Metals by type: iron scrap, copper wires, "meatballs"</li><li>■ Contaminants</li></ul>



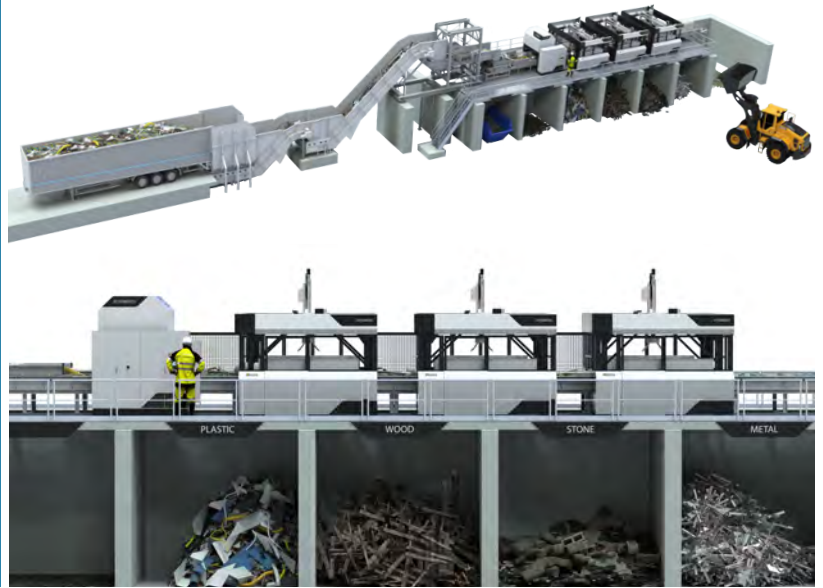
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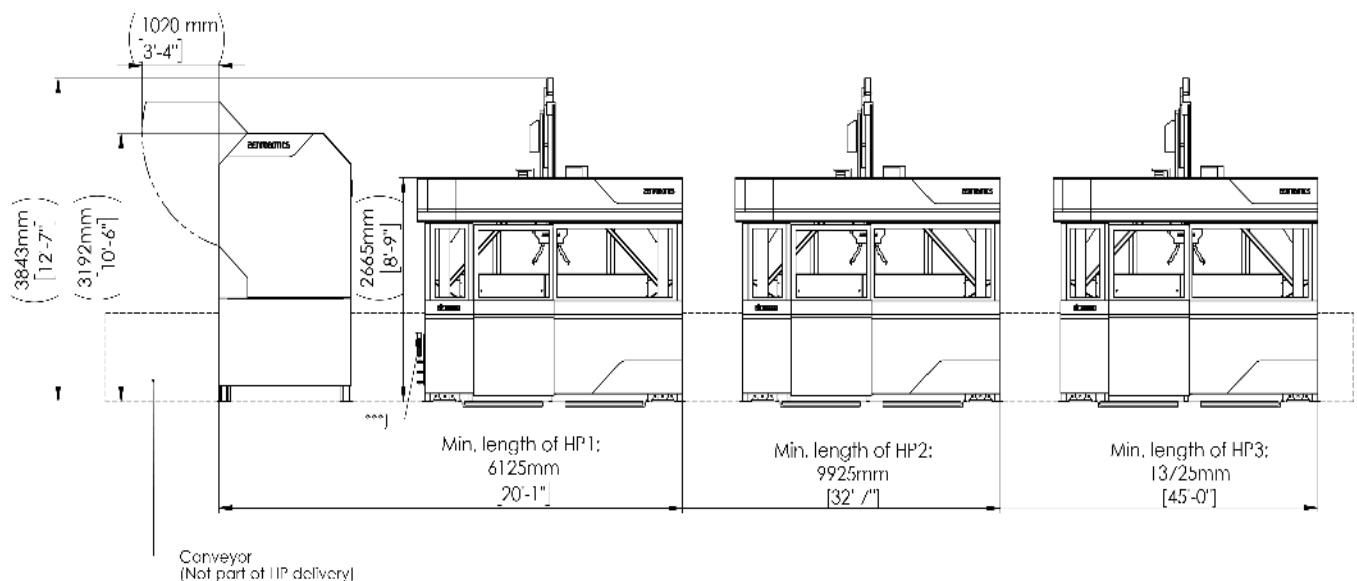
## INSTALLATION OPTIONS

- **RETROFITTED** to complement existing facility infrastructure
- Set up as a **STANDALONE SORTING STATION** requiring no modifications to existing facility infrastructure
- Set up as the **MAIN SORTING STATION** for a fully robotized greenfield installation



## TECHNICAL SPECIFICATIONS

Robot arms	<b>1, 2 or 3</b>	Maximum object weight	<b>30 kg, 66 lb</b>
Sensor units	<b>1</b>	Maximum object size	<b>L 1500mm, W 500mm</b>
Gripper type	<b>Mechanical Gripper</b>		<b>L 60", W 20"</b>
Maximum speed per arm	<b>2300 picks/h*</b>	No. of recognized fractions	<b>Unlimited</b>
Sorting belt speed	<b>0,1-0,6 m/s, 20-118fpm</b>	Installed power (1 robot)	<b>10 kW, 13.4 hp</b>
Unit length	<b>6125mm x 13725mm, 20' 1"x 45'</b>	Air consumption	<b>120 l/min/gripper at 6 bar</b>
Unit weight	<b>4700kg - 11300kg</b>		<b>4.2 cfm at 87 pis</b>
	<b>10400lb - 25000 lb</b>	Noise level	<b>&lt;80 bB(A)</b>
Working area (1 robot)	<b>2700mm x 2000mm, 8' 10"-6'</b>	Technical specification subject to change. * Actual picking speed depends on feed	
Discharge chutes	<b>Up to 6 / arm</b>		



The delivery of a complete Heavy Picker system includes a sensor unit, a control system, 1-3 robot arms, chute collars and a safety cage.