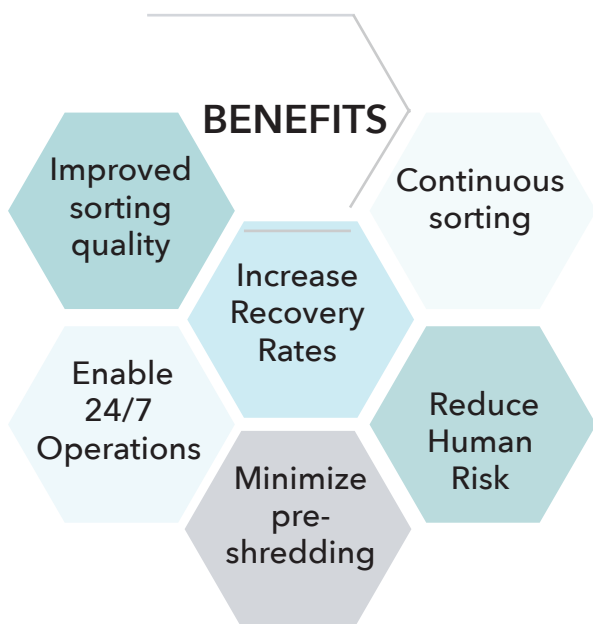


HEAVY PICKER






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



PRODUCT FEATURES

-  1-3 robotic arms
-  RGB-, VIS- and hyperspectral cameras, 3D sensor system and metal detection
-  Trainable to recognize unlimited fractions
-  Online reporting tool for analysis of waste
-  Feed Rate Control with signals and sensors to control upstream feeding and sorind equipment (optional)

SORTING TASKS

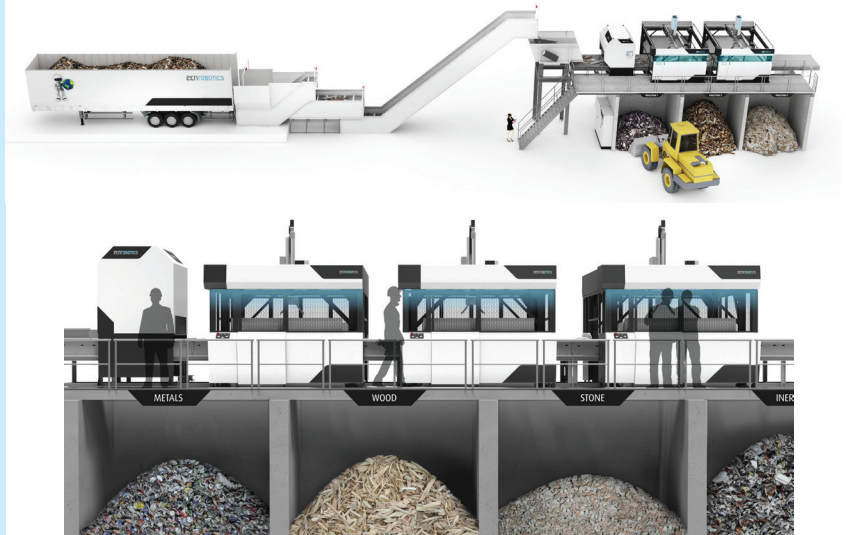
The Heavy Picker can sort construction and demolition waste (C&D), commercial and industrial waste (C&I) as well as plastics, metals, wood, inert, plastic bags and more. Heavy Picker minimizes the need for pre-shredding waste or pre-sorting the waste with an excavator.

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

INSTALLATION OPTIONS

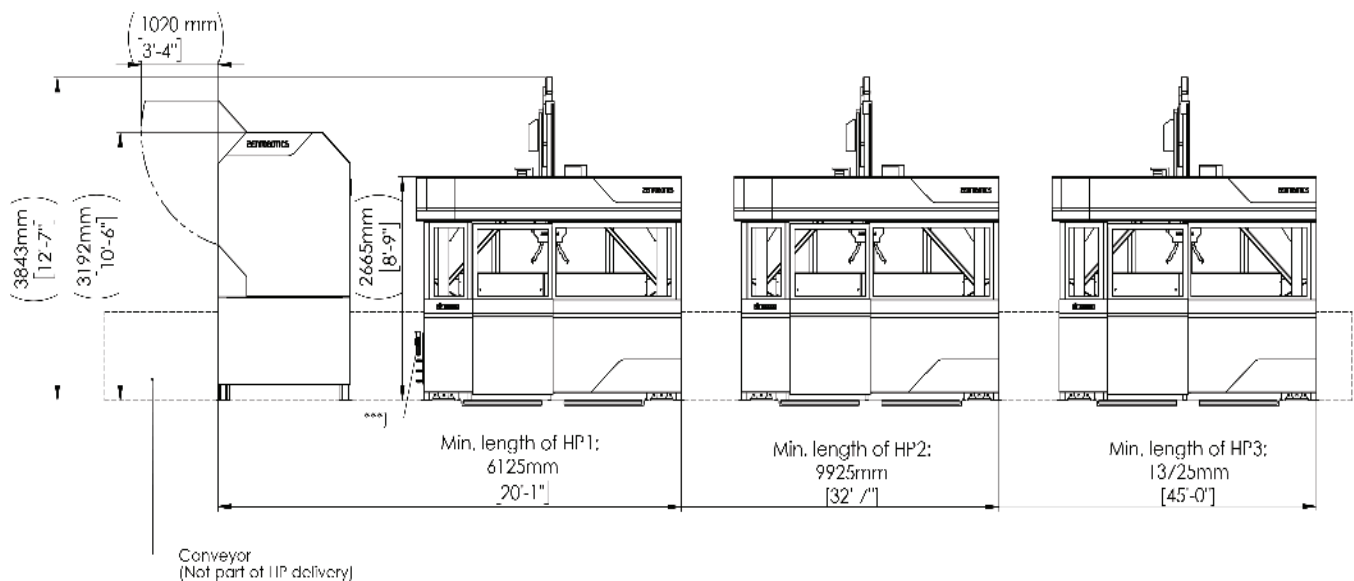
The Heavy Picker is suitable for both brownfield and greenfield installations. The sorting system can be installed in three ways:

- **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	1, 2 or 3	Maximum object weight	30 kg, 66 lb
Sensor units	1	Maximum object size	L 1500mm, W 500mm L 60", W 20"
Gripper type	Mechanical Gripper	No. of recognized fractions	Unlimited
Maximum speed per arm	2000 picks/h*	Installed power (1 robot)	10 kW, 13.4 hp
Sorting belt speed	0,1-0,6 m/s, 20-118fpm	Air consumption	120 l/min/gripper at 6 bar 4.2 cfm at 87 pis
Unit length	6125mm x 13725mm, 20' 1"x 45'	Noise level	<80 bB(A)
Unit weight	4700kg - 11300kg 10400lb - 25000 lb	Warranty	1 year or 3000 h
Working area (1 robot)	2700mm x 2000mm, 8' 10" - 6'	Technical specification subject to change. * Actual picking speed depends on feed	
Discharge chutes	Up to 6 / arm		



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