

aetech

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COLLABORATION: FAST SUCTION GRIPPER AND PRECISE FINGER GRIPPER



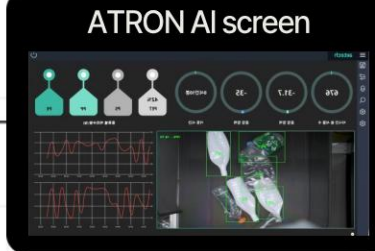
Structure and Performance of ATRON

The core technology of ATRON, an AI-based material sorting robot, revolutionizes sorting practices by automating the material cycle value chain, departing from manual sorting methods.

Converting part | Item selection and data filtering

Analyzing part | Analyzing types and features of wastes

Sorting part | Execution of sorting command

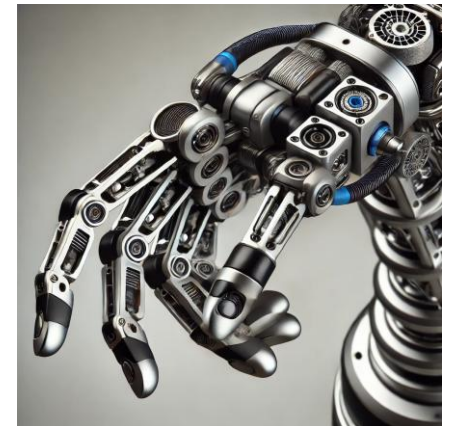


Recognition part | Realtime item detection and data collection

Surveillance part | Realtime monitoring

Hand sorting era

instead of people A robot solution which sorts waste



COLLABORATION: AUTOMATION OF RECYCLING SORTING FACILITIES



Problems :

Human-labor Based Sorting System

- **Inefficient waste sorting processes**
→ Manual labor-dependent, costly, inefficient
- **Regulatory and sustainability challenges**
→ Strict regulations demand automated solutions

- **AI-driven real-time waste classification**
→ Cutting-edge technology enhance accuracy.
- **Data-driven waste analysis system**
→ AI learning improves recognition and efficiency.



Key Innovations in Waste Management



Solution :

Creating New Recycling Value Chain

- **AI-powered waste classification automation**
→ ATRON enable precise, automated sorting
- **Cost reduction and operational efficiency**
→ Automation cuts cost and reduces labor

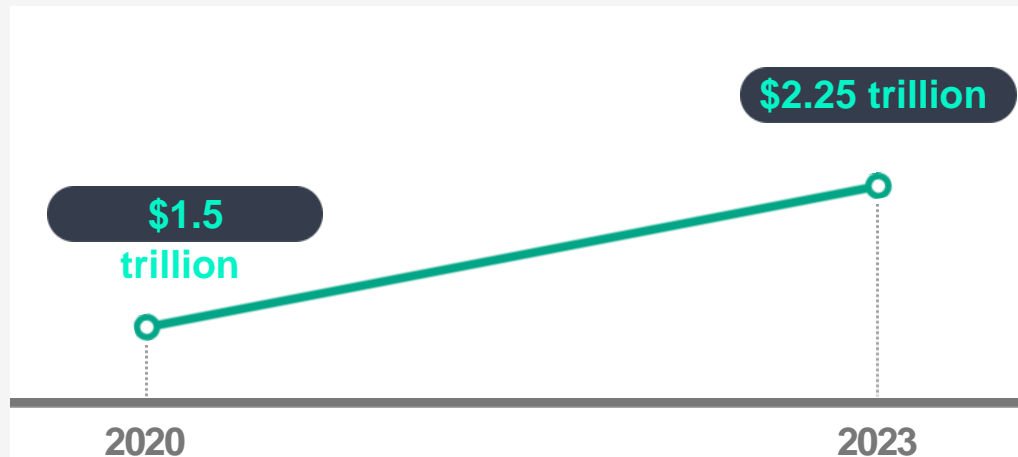
POTENTIAL MARKET OF AETECH



Waste Management Market

Global Waste Treatment Market Size

- Rise from 2.02 billion tons in 2016 to 2.6 billion tons by 2030
- Grow from \$612 billion in 2020 to \$248 trillion by 2030



Source: Allied Market Research

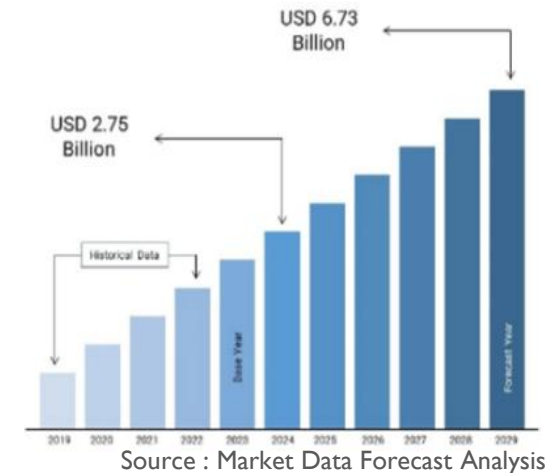
Waste Sorting Robot Market

Global Waste Sorting Robots Market Size

- Annual growth rate of 19.6% is expected from 2024 to 2029
- Expected to grow from \$2.75 billion in 2024 to \$6.73 billion in 2029

19.6%

Global market CAGR
2024 - 2029



Source : Market Data Forecast Analysis

SALES STATUS AND PATENT



Domestic Sale Status



Songpa
2 units



Namyangju
3 units



Seongnam
2 units



Songdo
2 units



Incheon
3 units



Cheongdo
3 units



Namwon
1 unit



Ulsan
4 units

Patent and Certification



**WIPO Global Awards
Winner 2024**

**AETECH's
Patents**

- 15 domestic patent registrations
- 16 domestic patent applications
- 9 overseas PCT applications
- 11 trademark registrations