

VISION SPACE

Physical AI · Factory / Warehouse Robot RL Simulation

TESSERACT

장비 정보



Auto Dual-Aisle
Mission : Loaded Deleverd : 1/4 1/4

SID	rtv-sid-1
OP 모드	Auto Mode
현재 위치	28,773
화물 감지	Detected
작업	
에러	
에러 코드	0
서브 코드	0
에러 내용	Need DataBind

장비 현황

9EA 작동 중

RTV	1	SRM	1
EMS	1	CNV	6
전체	9	에러	0

명령	159:21:56
주행	80:26:20
피드	00:00:00

SRM-01 ONLINE

- 명령: 00:04:08
- 주행: 00:03:29
- 리프트: 00:04:13
- 포크: 00:02:22

EMS-01 ONLINE

- 명령: 45:18:20
- 주행: 41:32:40
- 로더: 00:22:18
- 그리퍼: 00:11:18

CNV-01 ONLINE

CNV-02 ONLINE

CNV-03 ONLINE

INDEX

VISION SPACE

Problem & Paradigm Shift

Core Solution | TESSERACT

The Future | Physical AI & Data Flywheel

Proven Track Record

Company Overview

Goal



[VISIONSPACE YouTube](#)



visionspace.co.kr

Knowledge gap = Automation delay

"Why can't legacy sims keep up with the floor?"

Low Accessibility | Lack of know-how & experience

Trouble Issues | Total dependence on experts

Data Reliability | Doubt over simulation results



"We need to automate now, but we have no idea where to start..."

Legacy simulators are stuck as 'one-shot validation tools'—.

TESSERACT connects Simulation → Data → AI training → Operations into one **End-to-End Automation Operating OS**.

Legacy simulators are 'one-shot validation tools' — TESSERACT is SaaS infrastructure owning the entire automation lifecycle

[시스템 개요 | SYSTEM OVERVIEW]

활성 임무: 팔레트 포장 [AGV-05 | 로봇 암-2]

시간: 14:32:01 | 효율: 94.2% | 알람: 0



--- [AGV 상태 | AGV STATUS] ---
 ID: AGV-05 [OMRON]
 위치: A3 RACK
 배터리: 88%
 작업: 상자 입고
 속도: 0.8 m/s

--- [로봇 암 상태 | ARM STATUS] ---
 ID: ARM-2
 작업: 상자 집기
 다음 목표: CONVEYOR 4
 사이클 타임: 4.5초

--- [컨베이어 네트워크 | CONVEYOR NETWORK] ---

 박스 유량: 24 BOX/MIN



Image reference : OMRON client

Paradigm Shift

Simulate without install.

Data + AI auto-design

Virtual ↔ Real data flywheel



Close the gap between virtual & real

Customer deployment example

One web link connects the floor. The next-gen web-native Physical AI platform — awakening robot intelligence



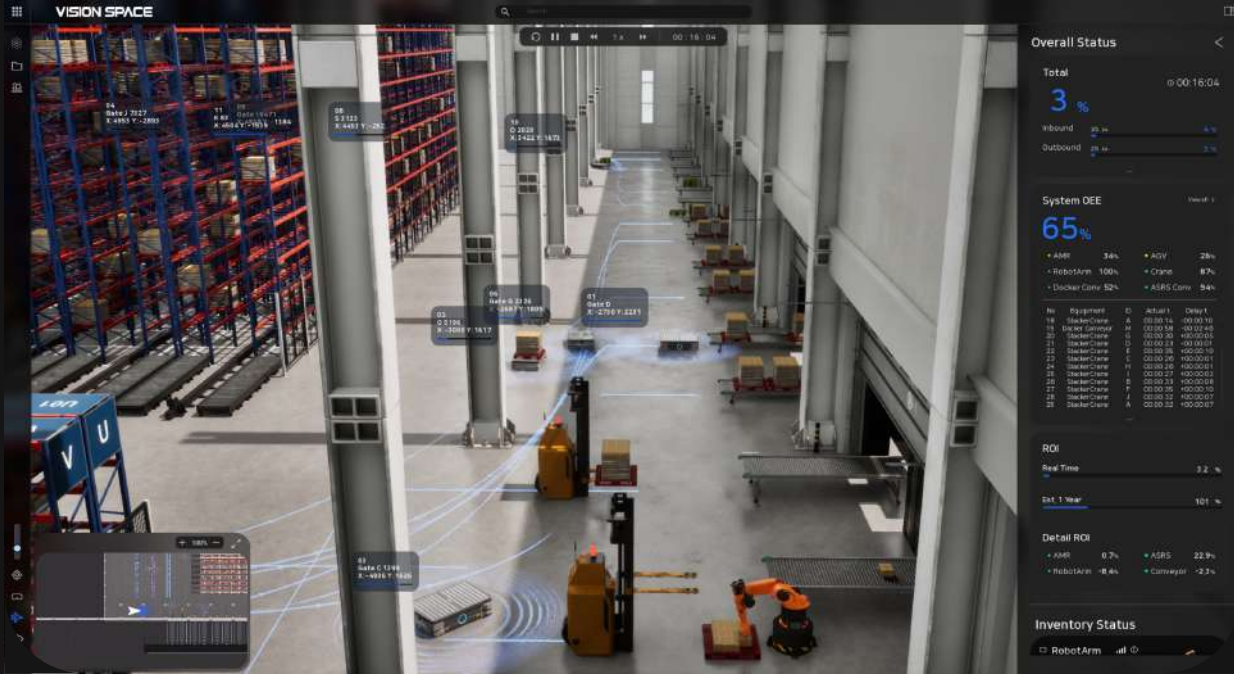
3 Core Values

WEB | Frictionless access

AI | Custom intelligence

SaaS | Infinite scalability

Customer deployment example



Customer deployment example

Paradigm shift — a self-evolving solution

One link. Simulate, then self-learn, **VLA-powered** autonomous intelligence

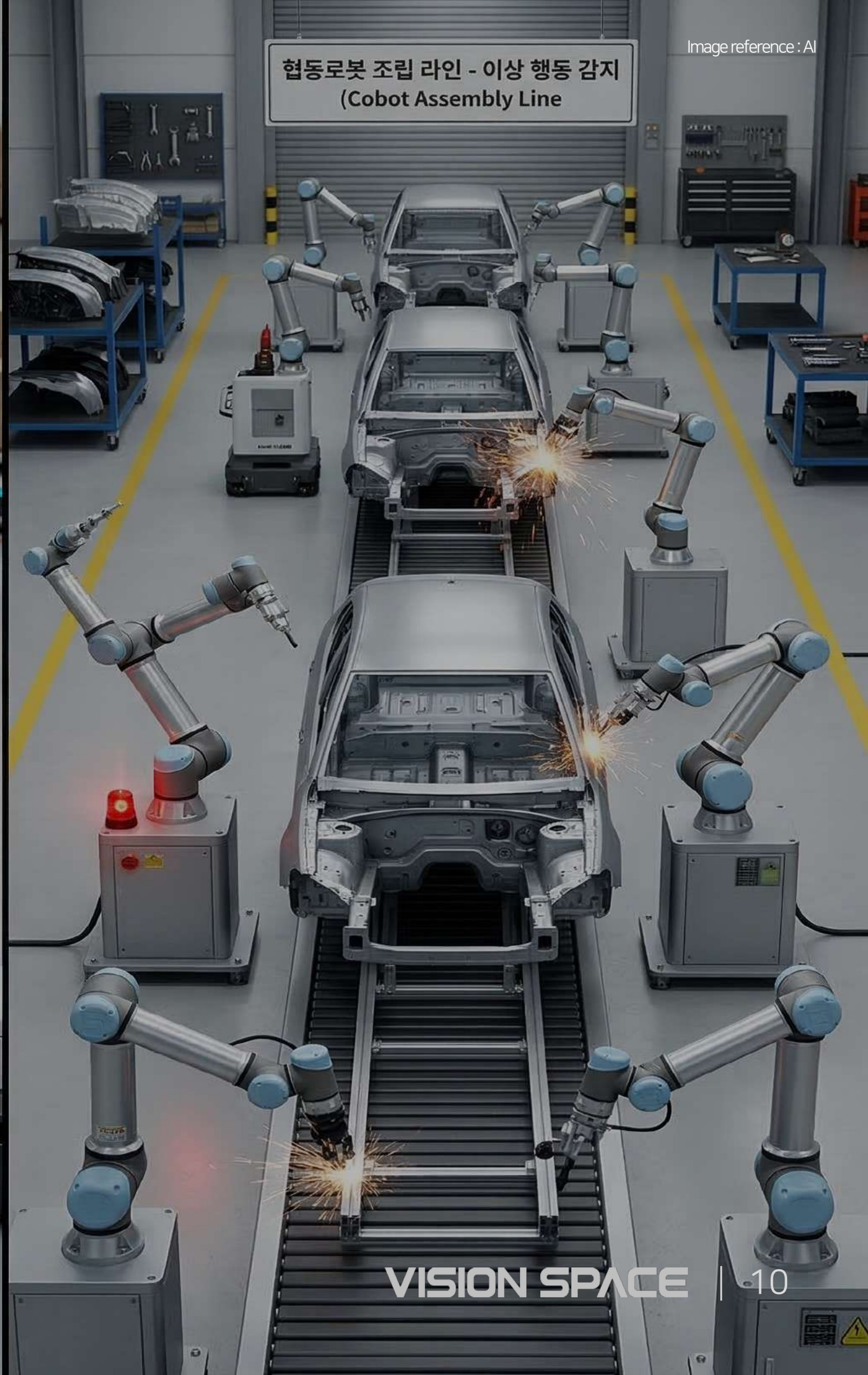
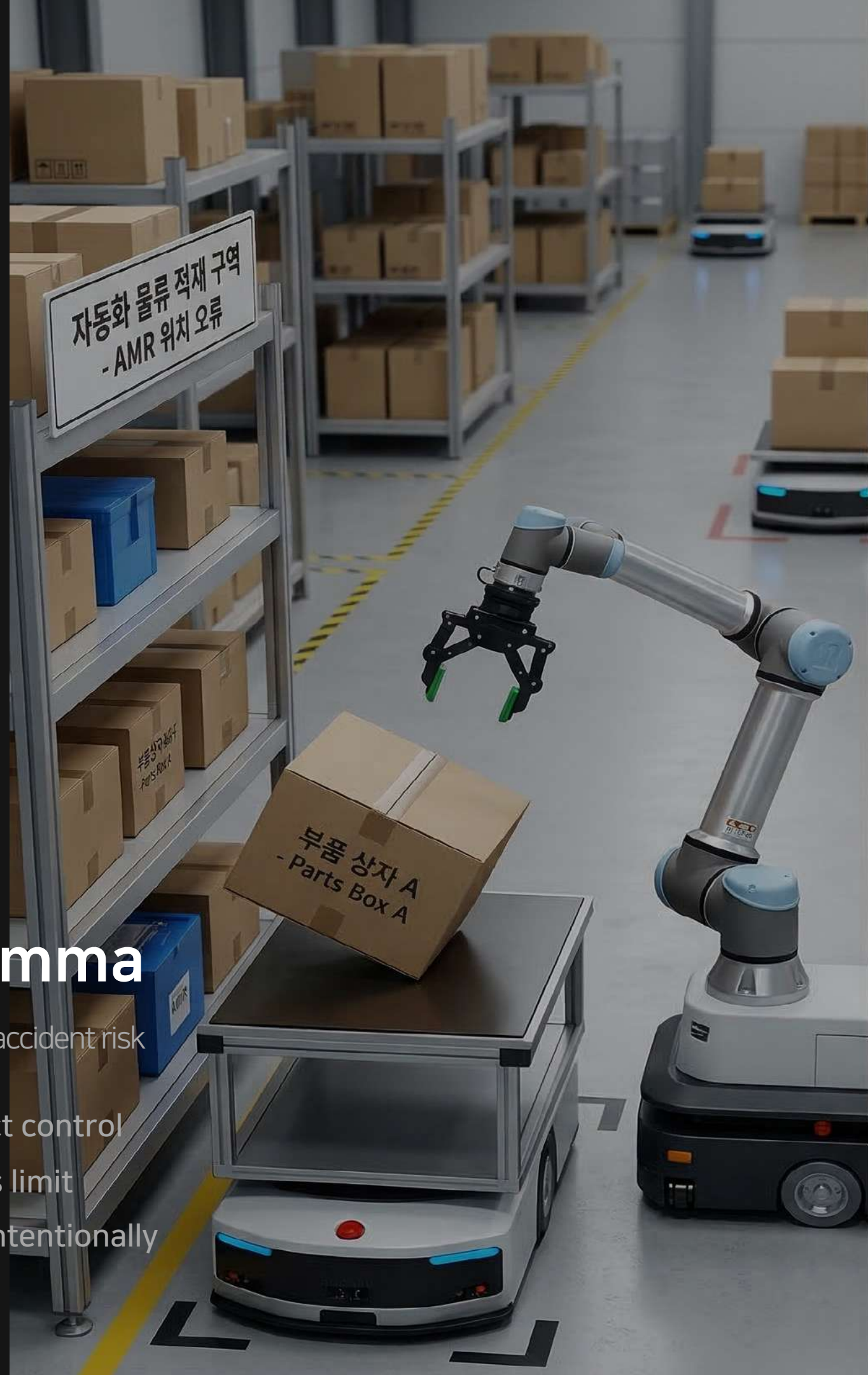
PROBLEM & PARADIGM SHIFT

The Automation Paradox More robots, lower system efficiency

Fragmented systems, disconnected data, no central control —
factory floors remain unable to deliver real-time integrated control.
Collisions, idle time, bottlenecks, manual rework — automation efficiency actually falls.

Automation must be redefined around data and software — not hardware.

VISIONSPACE unifies fragmented systems and disconnected data,
turning physical environments into controllable data — a new automation paradigm.



AI Adoption Dilemma

Corner cases you can't capture due to accident risk

Data | The prerequisite for perfect control

Learning only normal cases | AI's limit

Reality | Can't trigger accidents intentionally



Customer deployment example

CORE SOLUTION TESSERACT

Virtual & real, perfectly in sync

VISIONSPACE's automation platform is built on a Closed-Loop synthesis of two core solutions(Closed-Loop).
 A virtual testbed that allows no failure meets a real-world control tower — solving industry's hardest problems.
 We replicate complex physical environments with 0.1mm precision in virtual space.
 Infinite 3D simulation pre-validates robot paths and algorithms — minimizing failure cost.

PLATFORM ECOSYSTEM · TESSERACT

Simulation | Pre-check bottlenecks & collisions

Integrated Control | Real-time factory/warehouse & robot orchestration

Edge to Cloud | Data ingestion & upstream integration

Digital Twin | Real-time sync | Virtual process build-out

Generator | AI training | Edge-case data





Customer deployment example

TESSERACT

Operational Twin Multi-vendor orchestration

Ultra-low latency (200~500ms)
Real-time data sync
High-perf web streaming

Standardized hub
Event-Bus-Hub
Multi-Protocol
MQTT, ROS 1/2, HTTP, TCP/IP, Modbus, WS

TESSERACT

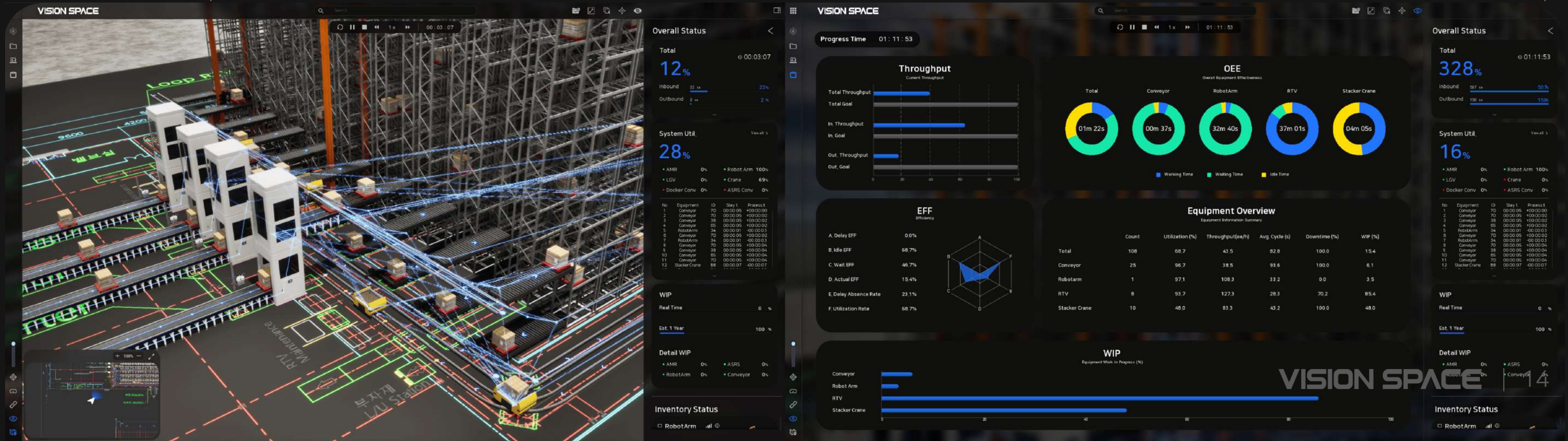
AI + Digital Twin · strategic design Zero-defect scenarios

From language to space
No complex coding —
Digital Twin

Customer deployment
example



Customer deployment
example

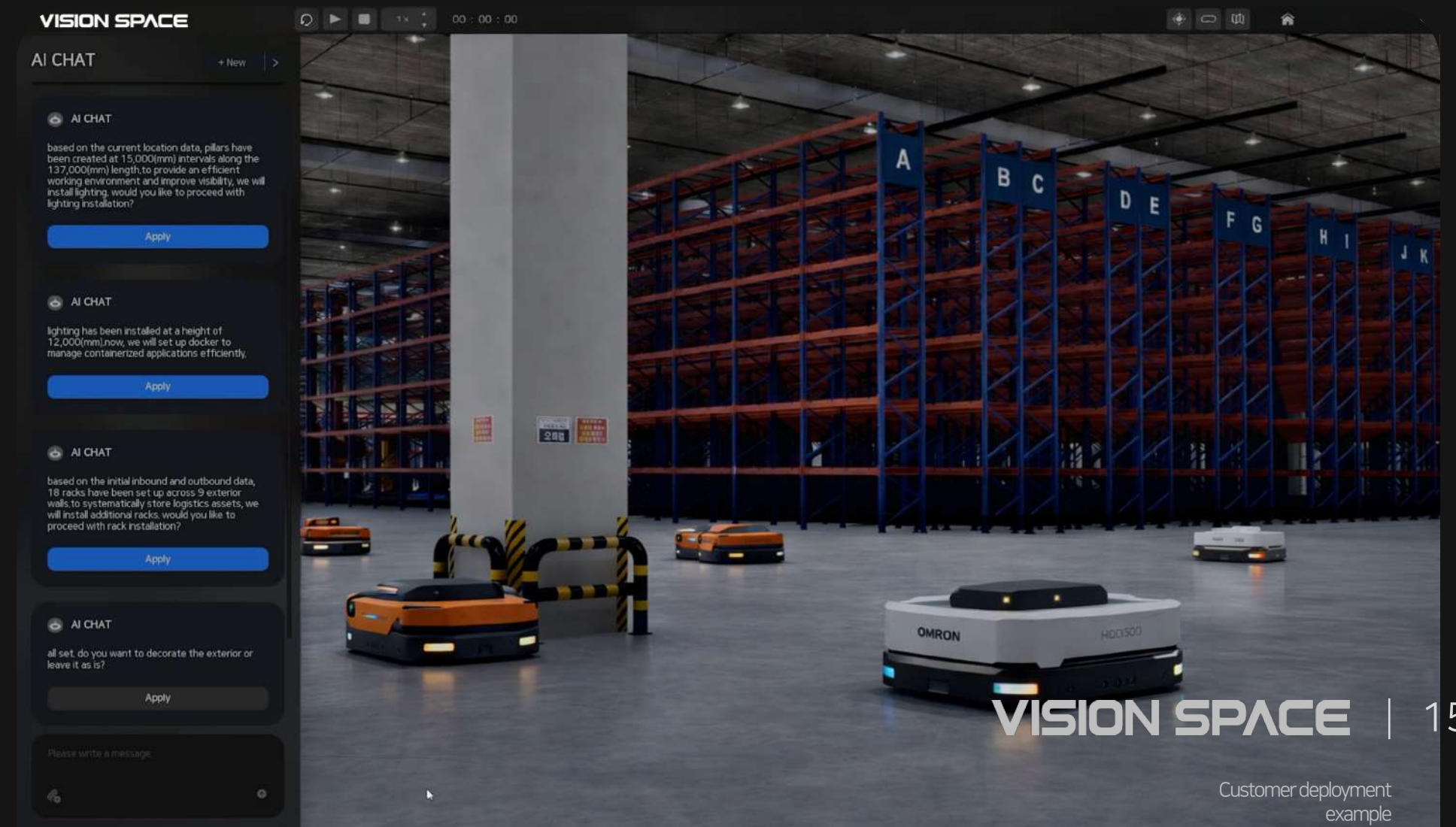
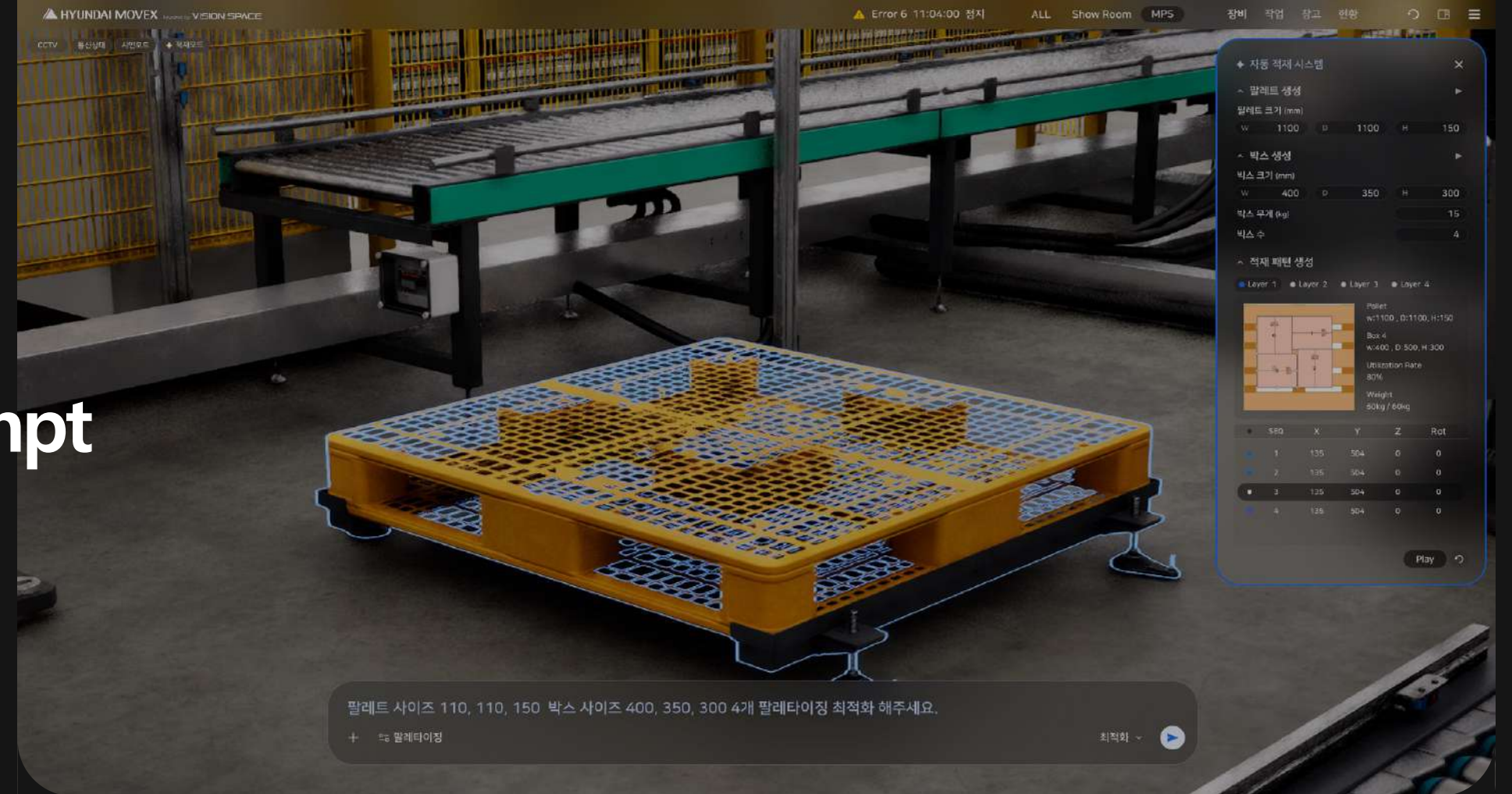


TESSERACT

Text-to-Simulation Simulation that starts with a prompt

From language to space

Built by AI — no complex coding



TESSERACT

Synthetic Data High-fidelity synthetic data

Capture / incident & failure data

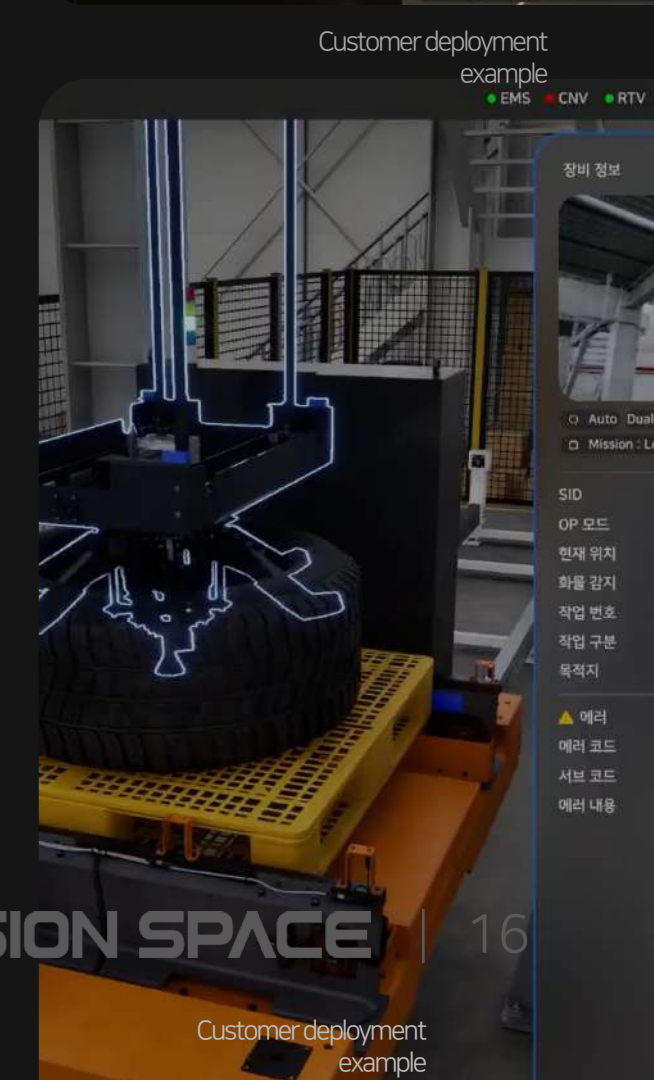
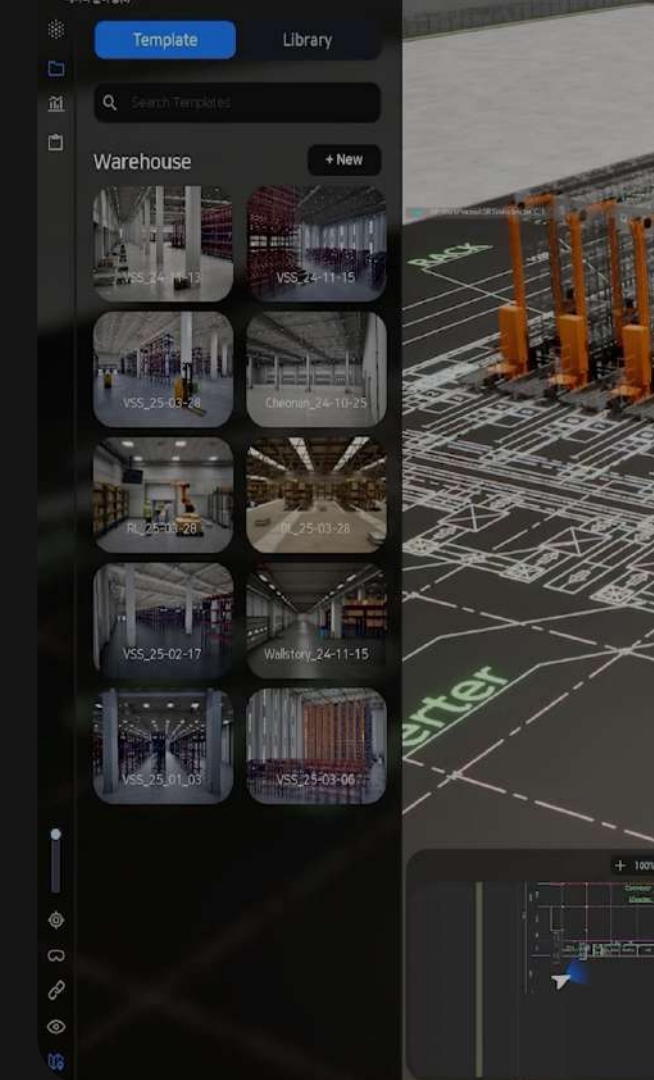
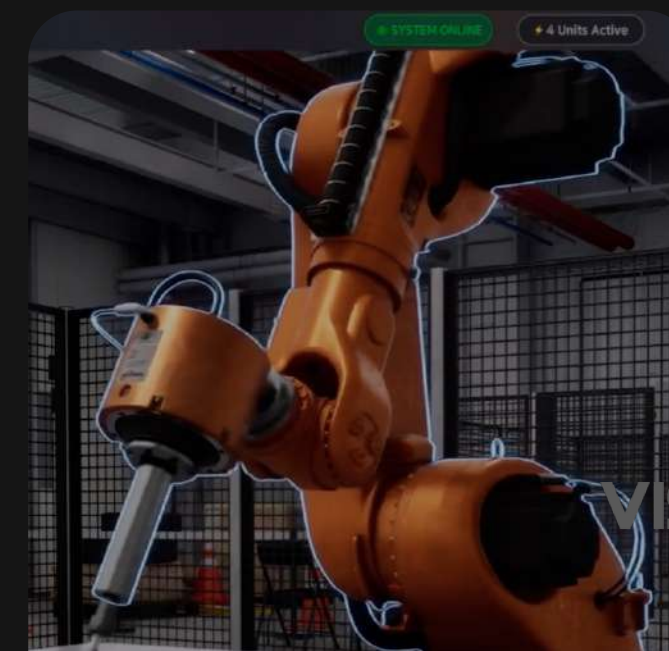
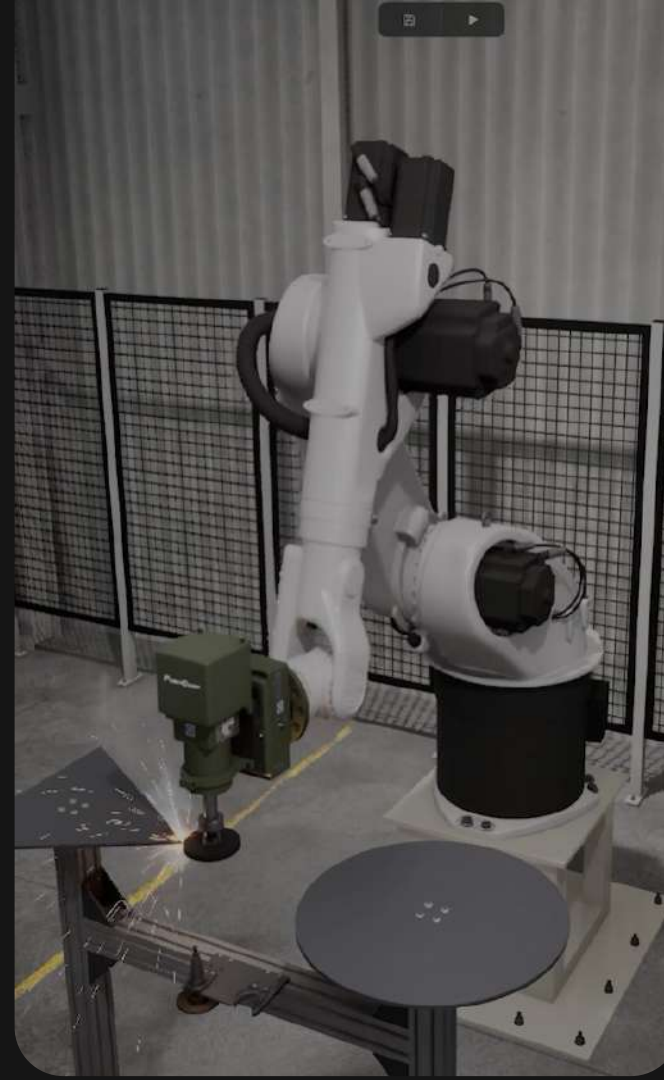
Build readiness/for extreme & edge cases

Autolabeling / data flywheel

Sim2Real gap removal

Safe testing environment

Maximum efficiency



TESSERACT

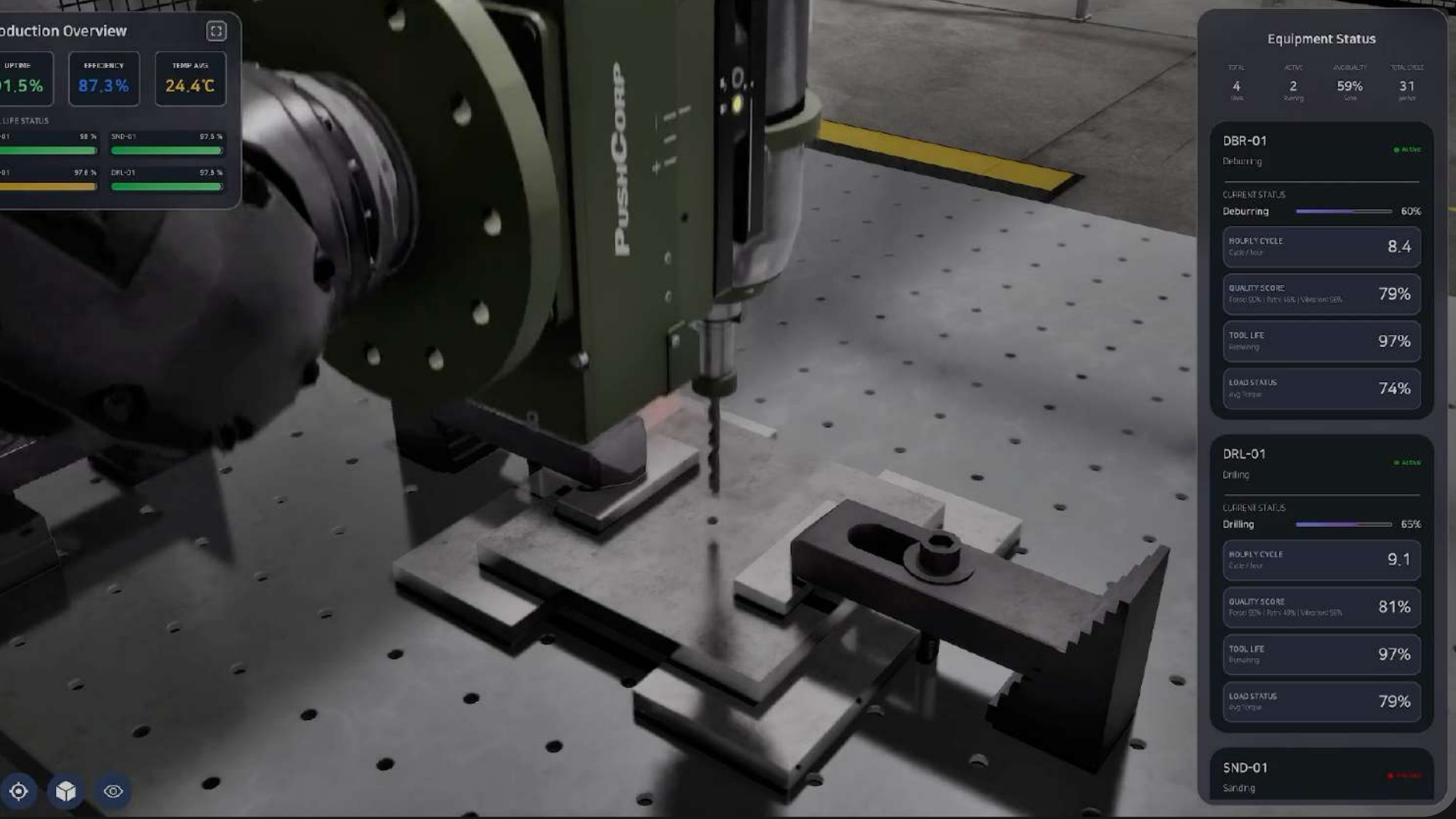
Synthetic Data Physics-based

Sim2Real gap removal

Safe testing environment

Maximum efficiency

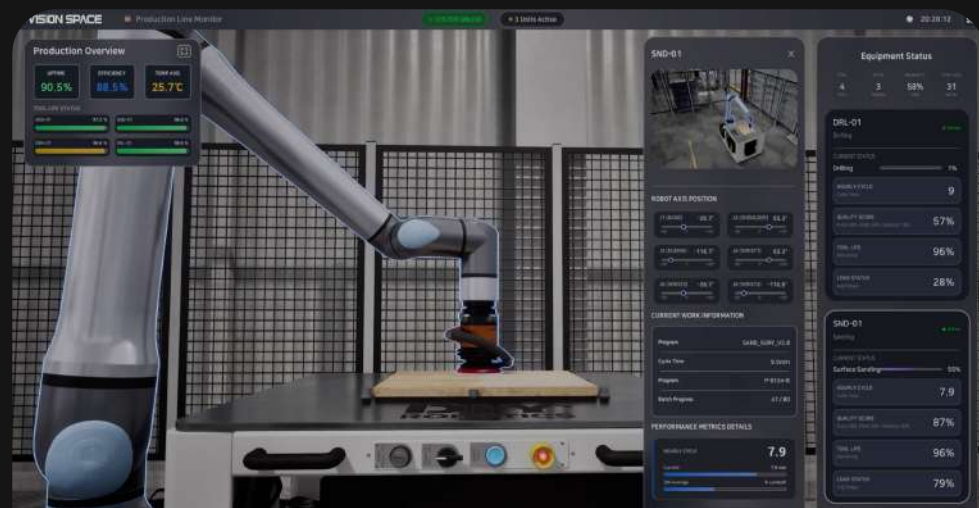
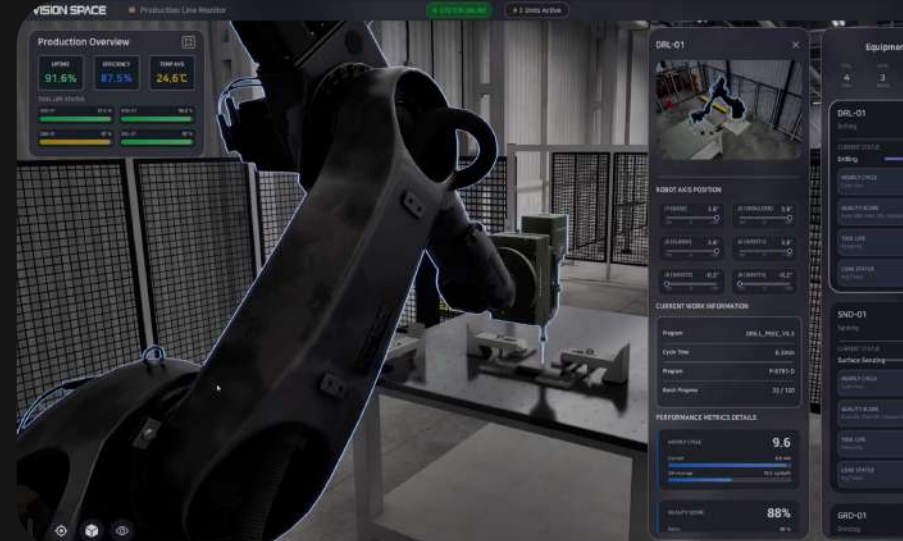




Sense | Think | Act

Realizing Autonomous Automation

- Ultra-fast environment perception
- Intelligent decision
- Precision execution

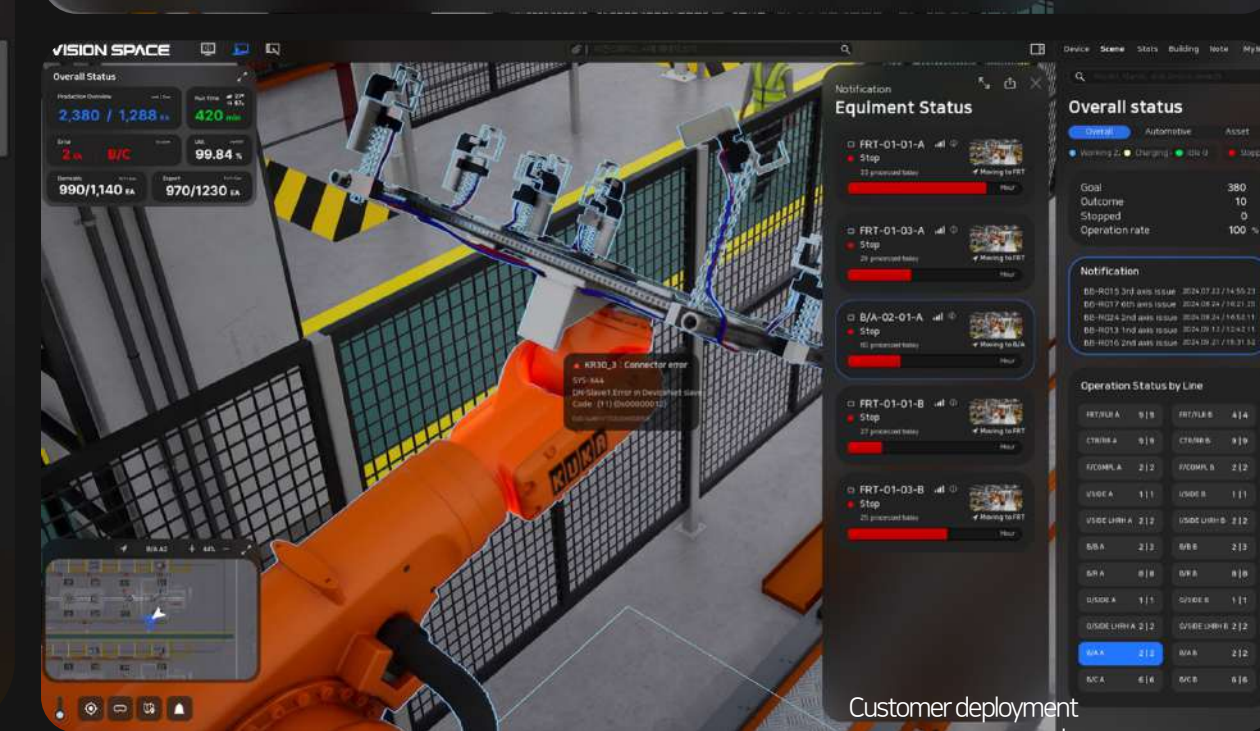
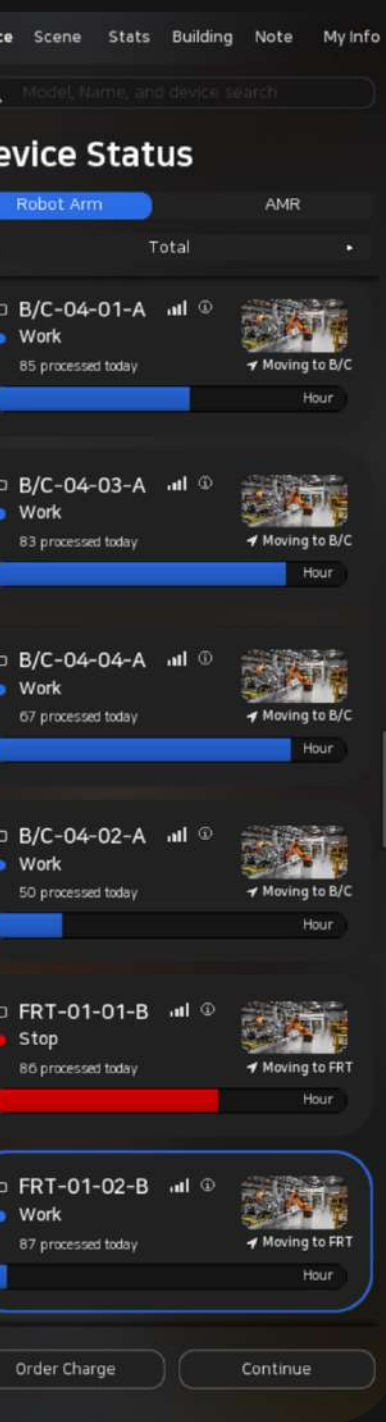
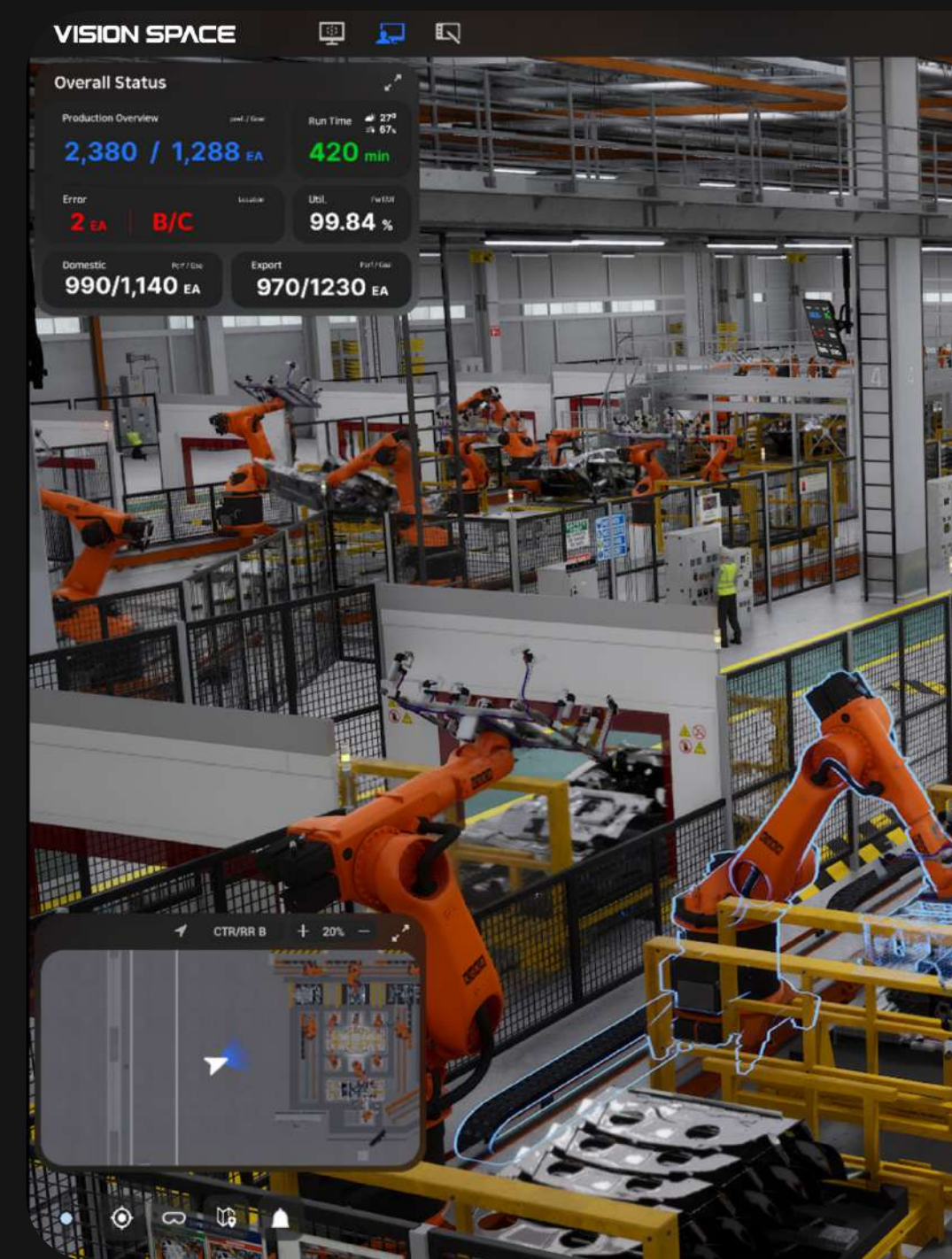
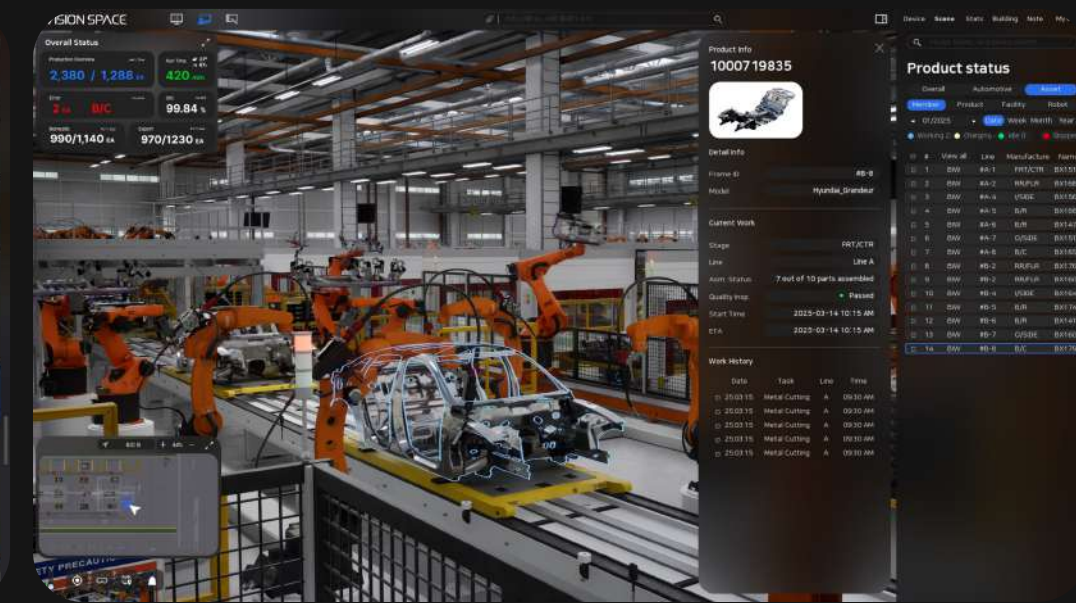


Customer deployment example

HYUNDAI MOTOR

Asan Car Body Plant

Poc | Automated Manufacturing · Real-time Orchestration



Customer deployment example

Samsung Welstory

Siheung Non-Automated Logistics Center

Simulation For Optimal Automation

VISION SPACE

Overall Status

Total **3%** @ 00:16:04

Inbound 35.5k
Outbound 33.5k

System OEE **65%**

- AMR 34%
- RobotArm 100%
- Docker Conv 52%
- AGV 26%
- Crane 87%
- ASRS Conv 94%

No	Equipment	ID	Actual t.	Delay t.
18	StackerCrane	A	00:00:14	-00:00:10
19	Docker Conveyor	M	00:00:58	-00:02:45
20	StackerCrane	Q	00:00:30	+00:00:05
21	StackerCrane	D	00:00:23	-00:00:01
22	StackerCrane	E	00:00:35	+00:00:10
23	StackerCrane	C	00:00:20	+00:00:01
24	StackerCrane	H	00:00:20	+00:00:01
25	StackerCrane	I	00:00:27	+00:00:02
26	StackerCrane	B	00:00:33	+00:00:08
27	StackerCrane	F	00:00:35	+00:00:10
28	StackerCrane	J	00:00:32	+00:00:07
29	StackerCrane	A	00:00:32	+00:00:07

ROI

Real Time 3.2%

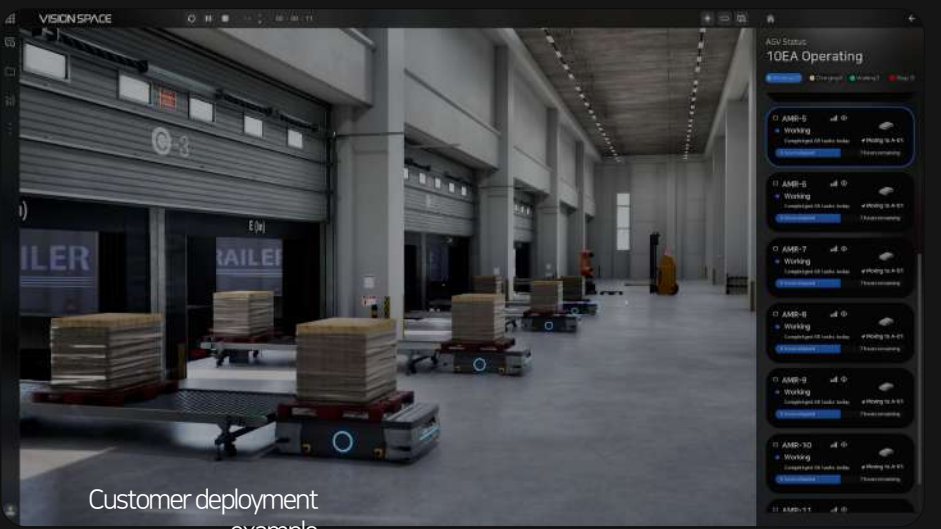
Est. 1 Year 101%

Detail ROI

- AMR 0.7%
- RobotArm -8.4%
- ASRS 22.9%
- Conveyor -2.3%

Inventory Status

RobotArm



VISION SPACE

Warehouse

Throughput **57** (Target: 57.5%)

Waiting Time **23** (Target: 23)

Load Time

Robot Status

Efficiency **69** (Target: 69)

Energy **53** (Target: 53)

Smart Data Summary

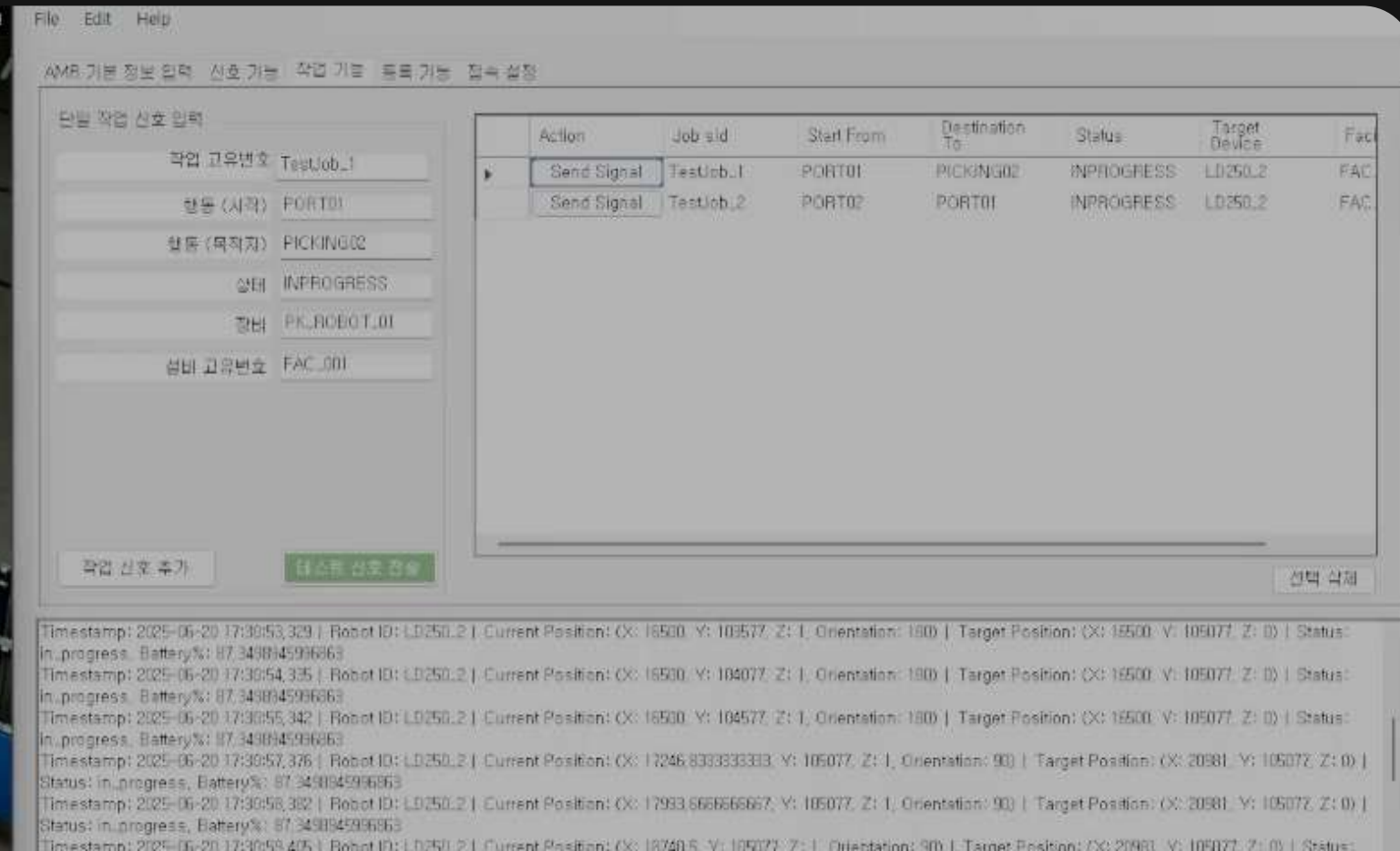
Analysis shows a noticeable increase in ROI, indicating improved operational efficiency. Key areas remain consistently high, reflecting stable performance. However, Power LFP has plateaued, suggesting room for optimization in power management. Power LFP has plateaued, suggesting room for optimization in power management.



CJ Logistics

Icheon Automated Logistics Center

Poc | Automated Robot Real-time Orchestration System · Delivered



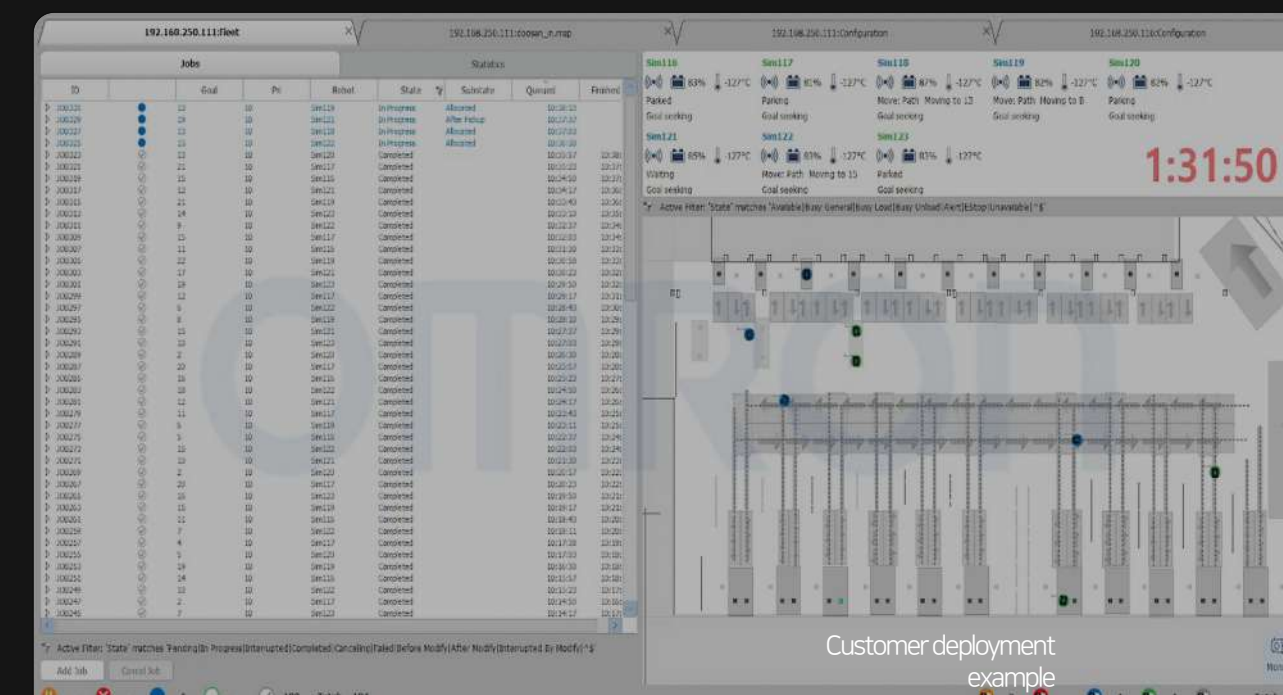
Customer deployment example

OMRON

Robot Simulation

PoC | MPS TESSERACT × Robot HW Partnership

Official OMRON MOU Signed (Jan 2025)



Customer deployment example

Top-Tier Partnership with VISIONSPACE

Trusted Service — Validated By Traditional Manufacturing's Rigorous Standards

CLIENTS



PARTNERS & SUPPORTER



BACKED BY

500

COMPANY OVERVIEW

Company Timeline

2023

VISIONSPACE founded
Automation·robot simulation business launched
LG Energy Solution & Mintech Co., Ltd. GyeongbukTP logistics simulation contract
Major government·institutional startup competition awards & tech validation
(2× Minister Awards, ₩200M cumulative prize)

2024

Advanced Digital Twin & Physical AI simulation tech
EV battery process simulator & other industrial projects
Multiple AI & simulation patents filed
500 Global Seed round closed
DeepTech TIPS selected
KT, Sizzle, InnoSimulation, IT Space — partnerships with major enterprises
Nov. 2 US patents / 5 tech patents / 3 trademarks

2025

Samsung Welstory open innovation agreement
Hyundai Movex Incheon Cheongna · simulation & orchestration (2 contracts)
OMRON-CJ Logistics Icheon · simulation & orchestration contract
42dot simulation & orchestration project
LX Korea Land Info Corp. Digital Twin contract
Amazon Japan NDA signed

2026

Official OMRON Korea MOU signed
Web-based TESSERACT platform service launch
MyDepot MOU signed
Global partnership-driven expansion & overseas rollout
Physical AI automation platform advancement



Onboarding Training

Customer Training Site

AI simulation — custom training for companies adopting it.
VISIONSPACE automation experts deliver hands-on training — from AI fundamentals to simulation creation & deployment
Available as seminars on request.



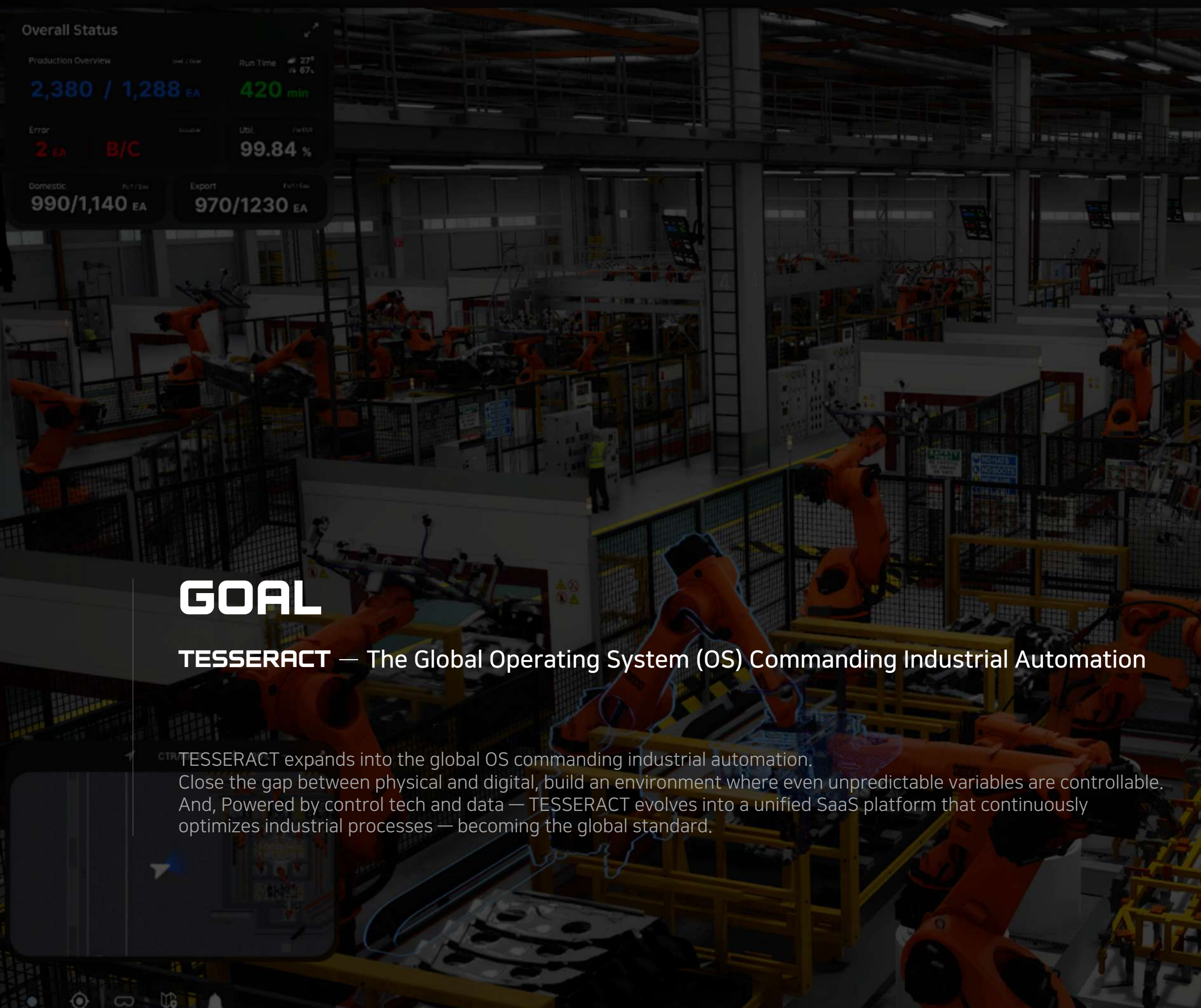


VISIONSPACE Finds Answers On The Floor

Domestic & International Exhibitions & Seminars

VISIONSPACE's strength is execution, listening to customer Pain Points and Needs on-site and solving them directly. We understand the essentials of the automation shift customers need, demonstrating the right-fit service in person.





Overall Status

Production Overview
 2,380 / 1,288 EA
 Run Time 420 min
 Error 2 EA B/C
 Util 99.84 %
 Domestic 990/1,140 EA
 Export 970/1230 EA

Job Description
Robot Arm01

2024 09 | Date | Week | Month | Quarter

SID	Model	Work Time
<input type="checkbox"/> A8FLH1918	AXLE IRS	00:00:04
<input type="checkbox"/> A8FLH1919	AXLE IFS-Tube	00:00:04
<input type="checkbox"/> A8FLH1920	HAV AT 8-speed	00:00:04
<input type="checkbox"/> A8FLH1921	4WD PTU 2-axis	00:00:04
<input type="checkbox"/> A8FLH1922	MT FF 6-speed	00:00:04
<input type="checkbox"/> A8FLH1923	AT FR 5-speed	00:00:04
<input type="checkbox"/> A8FLH1924	AXLE IRS	00:00:04
<input type="checkbox"/> A8FLH1925	AT FR 5-speed	00:00:04
<input type="checkbox"/> A8FLH1926	HEV AT 8-speed	00:00:04
<input type="checkbox"/> A8FLH1927	4WD PTU 2-axis	00:00:04
<input type="checkbox"/> A8FLH1927	AXLE IRS	00:00:04
<input type="checkbox"/> A8FLH1927	4WD PTU 1-axis	00:00:04
<input type="checkbox"/> A8FLH1927	MT FF 6-speed	00:00:04
<input type="checkbox"/> A8FLH1927	AXLE IFS-Tube	00:00:04

Preview Location | Save

Device Status

Robot Arm | AMR

Total

- B/C-04-01-A | Work | 85 processed today | Moving to B/C
- B/C-04-03-A | Work | 83 processed today | Moving to B/C
- B/C-04-04-A | Work | 67 processed today | Moving to B/C
- B/C-04-02-A | Work | 50 processed today | Moving to B/C
- FRT-01-01-B | Stop | 87 processed today | Moving to FRT

VISIONSPACE YouTube | visionspace.co.kr

Order Charge | Continue

GOAL

TESSERACT — The Global Operating System (OS) Commanding Industrial Automation

TESSERACT expands into the global OS commanding industrial automation. Close the gap between physical and digital, build an environment where even unpredictable variables are controllable. And, Powered by control tech and data — TESSERACT evolves into a unified SaaS platform that continuously optimizes industrial processes — becoming the global standard.

VISION SPACE

'A new standard for robot autonomy, VISIONSPACE'

장비 현황 ✕

70EA 작동 중 ALL 70 ERROR 0

RTV	1	EMS	1	SRM	1
CNV-STD	6	SHUTTLE	4	LIFT	2
CNV-MPS	11	CNV-ORM	11	CNV-ETC	31
MIPLT	1	KUKA	1		

MIPLT ONLINE

- ⌚ 명령 12:01:02
- ⌚ 주행 14:00:22
- ⌚ 로더 20:00:14
- ⌚ 그리퍼 12:20:10

RTV-01 ONLINE

- ⌚ 명령 12:01:02
- ⌚ 주행 14:00:22
- ⌚ 로더 20:00:14
- ⌚ 그리퍼 12:20:10

SRM-01 ONLINE

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- ⌚ 로더 20:00:14
- ⌚ 그리퍼 12:20:10

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- ⌚ 로더 20:00:14
- ⌚ 그리퍼 12:20:10

CNV-01 ONLINE