



ORDAS
奥卡机器人

Ultra-Flat Floor Construction Robot

10M+ m² ground — Industry No. 1

A Massive Market, Outdated Productivity — Smart Construction Is the Answer

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The global construction industry is worth nearly **\$17 trillion**, with growth shifting toward new-energy infrastructure, data centers and overseas projects. Labor shortages, rising costs, low efficiency and safety risks make traditional methods unsustainable — smart construction and construction robots are the answer.

Strong overseas demand is accelerating the global rollout of construction robots.



专栏 2 智能建造创新发展工程

1. 培育智能建造产业集群。构建以标准部品部件为基础的专业化、模数化、数字化生产体系。支持传统建筑企业智能化、数字化转型，建设建筑产业互联网平台，促进设计、生产、施工、运维全产业链高效协同。
2. 创新智能建造技术。研发基于人工智能的工程建设相关软件。加强安全可靠建筑信息模型（BIM）等技术在工程建造全过程集成创新和应用示范，**打造一批标志性应用场景。**
3. 研发应用智能建造装备。推动自动化施工机械、**建筑机器人**、施工作业集成平台等研制和应用。



各地级以上住房和城乡建设局，广州、佛山、惠州、东莞市交通运输局，广州、深圳、佛山、东莞市水务局，广州、佛山、东莞城市管理和综合执法局，广州市林业和园林局，佛山市轨道交通局，横琴粤澳深度合作区城市规划和建设局：

为落实《广东省推动人工智能与机器人产业创新发展若干政策措施》（粤府办〔2025〕6号）和《广东省住房和城乡建设厅等部门关于推动智能建造与建筑工业化协同发展的实施意见》（粤建市〔2021〕234号）等文件精神，推动建筑工业化、数字化、智能化升级，推进建筑机器人创新发展和应用赋能，现向全省公开征集建筑机器人应用场景需求。有关事项通知如下：

一、征集范围

（一）需要应用建筑机器人替代人工作业的场景，聚焦建筑机器人重点应用领域，包括但不限于：

Rising Demand for Ultra-Flat Floors, Robots Are Taking Over

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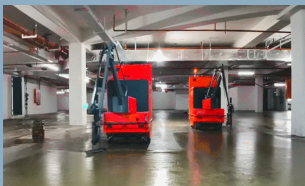
Traditional Method

Floor construction still relies on manual labor — inefficient, costly, hazardous, and dependent on an aging workforce.



Smart Construction

Automated construction minimizes the human impact on efficiency and quality, cutting both timelines and costs.



Industry Trends:

- Demand for **traditional infrastructure** (airports, schools, high-speed rail) and **new infrastructure** (data centers, chip fabs, new-energy plants) keeps rising.
- As **humanoid & wheeled robots** enter more human



Market Opportunity:

- 2025 China construction output: RMB 30.38T
- Global construction output: RMB 100T
- Floor construction alone: **a RMB 100B+ market**



Polished Concrete Replaces Tiled Floors— Accelerating the Floor Machinery Market

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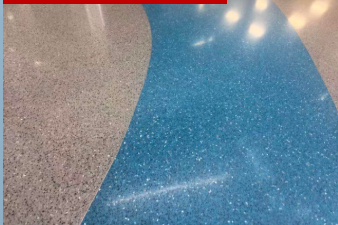
Concrete to Mirror Finish



Stanford Lab Building



Hoover Dam Museum



Las Vegas Conv. Ctr



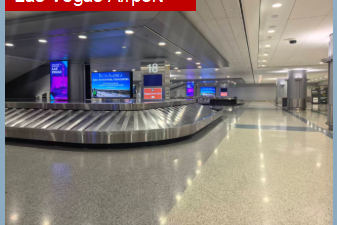
Google HQ Cafeteria



Walmart



Las Vegas Airport



Team: Serial Entrepreneurs from Industry Leaders—a Battle-Tested Full Team

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"Making floor robots as globally deployable as construction machinery"

Global Pioneer of Floor Robots

Tech Lead on Dozens of Robot Projects

Led a 270+ Team of All-Round Talent

China's 1st Robot Subcontracting GM

Cary Zhou

Founder, CEO & CTO



- Former **Director of the Research Institute at SANY Group**
- Former **Dean of Research at Bright Dream Robotics, Country Garden's smart-construction arm**; lead drafter of 3 CECS robot standards; led a 130+ R&D team covering **10+ robot categories**.
- Also **GM of Bote Robotics** — built the company from scratch, led 140+ people, delivered 130+ projects across 65 cities (3M+ m²), and in year one **hit RMB 100M+ revenue and turned profitable**.
- Holds **52 granted patents**; AI Expert, China Construction Industry Association; Senior Engineer; B.S. & M.S., Nanchang University



Zuo Ying — Co-Founder & CFO

Former **Deputy GM, Country Garden Finance Center**; former **VP & CFO, Bright Dream Robotics**; B.S. & M.S., **Tsinghua University**.



Fan Yong — COO

Former Operations Head at **Bote (Bright Dream Robotics)**; led organizations across 60+ cities.



Hongchang — Domestic Sales

10 years in product sales; strong channel development & management; 6 years leading sales teams.



Jack Huang — Overseas Sales

10 years in overseas sales; 5 years in sales management; tens of millions RMB in annual sales; shipped to 30+ countries.

Dreams Drive the World

Core Products: A Floor-Grinding Line That Sets the Industry Benchmark

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Gen 1: Unmanned — Launched 2025



Gen 2: Serialized — Q2 2026



Gen 3: Embodied Robot — Q4 2026

英雄900
地坪研磨机器人

- **Features:** Auto + dust collection + auto cable retract
- **Target:** Overseas & domestic GC market

先锋960
地坪研磨机器人

- **Features:** Auto + stepless grinding pressure
- **Target:** Domestic subcontract market

标兵960
地坪研磨机器人

- **Features:** Auto + dust collection + stepless pressure
- **Target:** Mid-to-high-end market

班长960
地坪研磨机器人

- **Features:** Auto
- **Target:** Value market

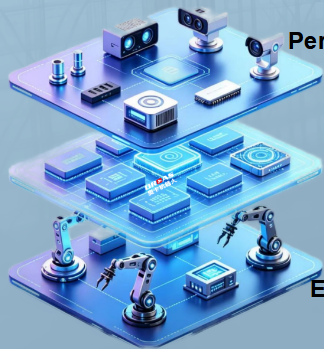
Embodied Construction Robot

- **On-device multimodal LLM**
- **2mm/2m ultra-flat accuracy**
- **Target:** global high-end market

Dreams Drive the World

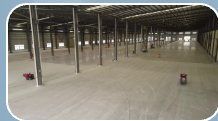
Moat: Proprietary Tech + Industry Know-How+ Data Feedback Loop

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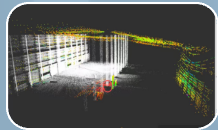
Perception

- Modeling complex, ever-changing indoor sites
- Real-time point clouds + site recognition



Decision

- Anti-tangling auto path planning
- Adaptive process-parameter optimization



Execution

- World-first digital stepless grinding pressure
- Highly consistent output
Gen-2 ultra-flat grinding: 2mm/2m



7 years in the industry, hundreds of millions in R&D,
and 100+ projects of hands-on experience — the
know-how money can't buy.

10M+ m² of construction data fuels continuous
system upgrades

Overall efficiency: 200%-400% ↑ Cost down: 53% ↓ Faster payback

Cost & Efficiency

	Robot	Traditional
Efficiency (m ² /8h)	200	100
Workers needed	1 operator	2 skilled workers
Labor involvement	10%	100%
Payback volume (10k m ²)	1.89	3.52



On schedule and cost, robots deliver clear advantages for floor work.

Operations

Robot	Traditional
Cleaner environment	Dust & toxic fumes
Consistent quality	Inconsistent results
Handles ultra-flat projects	Needs highly skilled crews
No turnover risk	High staff turnover



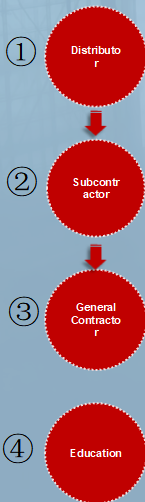
Robots maximize construction quality and worker safety.

Business Model & End Clients

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98.5% sales



Factory Owners

BYD

CATL
宁德时代

环球易购
Globalegrow E-Commerce

JT
捷特
HUMAN RESOURCE

Industrial Parks

法拉电子
FARATRONIC

J&T 极兔速递

Public Buildings

国家电网
STATE GRID

联东U谷
LIANDOU VALLEY

Real Estate Developers

中核集团
CNNC

江苏国泰

保利地产

REPT
瑞浦兰钧

ORCAS upgrades every player in the value chain — smarter, cheaper, faster.

Dreams Drive the World

 **Progress: No.1 in Cumulative Area —10M+ m² Worldwide**

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Deployed across North America, Europe, the Middle East, Southeast Asia

Hong Kong, Taiwan & mainland China



10M
+
M²

Cumulative
floor area

40.5
%

Overseas
sales share

50%

Domestic sub
repurchase

Note: 2025 figures — first year after launch

Singapore · Chip
Plant



Hong Kong · Park
Court Refurb.



Gansu · Nuclear Plant



Zhejiang · REPT
Battery Plant



Dreams Drive the World

One of Huawei's 16 Global Embodied-Intelligence Partners



Two Products Supported by Hong Kong's CITF Fund



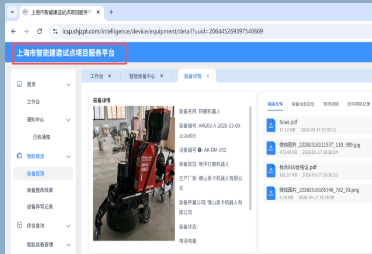
Hero 900 Covered by SG & HK Mainstream Media



Guangdong Housing Dept. Director Praises ORCA's Smart-Construction Results



Data Integrated with Shanghai Housing Authority Platform



Co-Author of City Robot Selection Guidelines

成都市建筑机器人选用导则 (2025 版)

成都市住房和城乡建设局
2025 年 10 月

Industry Landscape: Next-Gen AI Robots Replace Legacy Equipment — ORCAS Leads the Pack

ORCAS
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Husqvarna

博智林机器人
Bright Dream Robotics

ORCAS
奥卡机器人

Swedish listed maker of
traditional push / remote-
controlled equipment

Wholly owned by Country
Garden; grinding robots first
built by ORCAS's founder,
mainly for internal use.

End-to-End Design · HW/SW Architecture · Core Algorithms
Featured at 2026 Las Vegas Expo
The Only Sellable Floor-Grinding Robot Brand



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Roadmap: Floor → Wall → Ceiling — Building the Embodied-Intelligence Backbone of Construction

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Floor



Floor Robots

Phase 1 · Category Expansion



Wall



Wall Robots

Phase 2 · Industry Expansion



Ceiling



Ceiling Robots

Phase 3 · E.I. Infrastructure

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- **Point validation: take robots from lab to real sites worldwide**
- **Full layout: build the embodied-robot product matrix & infrastructure**

Key: Infrastructure

2029

Key: Coordinated Construction

2028

- No longer dependent on skilled labor
- Robot capabilities replicated systematically
- ORCAS becomes a default for high-spec projects

Key: Capability Transfer

2027

- Multi-robot, multi-trade collaboration
- Dynamic decisions & task scheduling
- High-spec markets: data centers & industrial plants

Key: System Takes Over

2026

- Floor work as the proving ground
- Core sensing, control & scheduling migrate to adjacent trades
- Tackle the industry's hardest floor challenges

Key: Closing the Loop

2025

- Complete 7×24 continuous on-site validation

- Floor robots enter scaled delivery
- Quality & efficiency driven by the system
- Data feeds back to optimize paths & parameters

- Prove robots reliably replace manual work on site

- Systems — not people — decide construction quality

- From product substitution to quality leadership

- Validate generalization in complex construction sites

- Become construction-grade embodied-intelligence infrastructure for global building

Phase 1

Phase 2

Phase 3

Phase 4

 **Pre-A Round: RMB 20M** **Use of Funds**

30%: Product & tech R&D; **40%:** Global marketing; **30%:** Supply-chain optimization & capacity

 **Angel Investors**

南慧创投
Nanhui Capital



浔商创投

ORCAS
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