

SURFACE ASSIST 8

REACH EVERYTHING OVERHEAD

- Drilling and anchoring to ±2 mm (±0.08 in): ceilings up to 26 ft (8 m), walls from floor level to 23 ft (7 m)
- Cleaning, sanding, inspection and painting with the same robot, interchangeable tools
- 100% of the work done from the ground: zero lift hours for the crew
- Automatic job report: coverage map, photos, positions

SIMPLE TO DEPLOY

- Fits through a standard door; set up in 30 min by a single operator, no scaffolding
- Forkliftable or trailer transport: 2,650 lb (1,200 kg), 78 in (1.98 m) stowed
- 100% electric: 8 h on battery, 24/7 on mains power
- PL d safety: 360° laser scanners, tilt sensor, emergency stop; Builder Assist remote assistance
- Robot as a Service: financing, maintenance, training and remote assistance included

26 ft / 23 ft CEILINGS / WALLS (8 M / 7 M)	**± 2 mm** DRILLING ACCURACY (±0.08 IN)
2,650 lb TOTAL WEIGHT (1,200 KG)	**43 in** OVERALL WIDTH (31.5 IN WITHOUT LIDARS)

BUILDER ASSIST
ROBOTICS FOR CONSTRUCTION

SURFACE ASSIST 8

MULTI-TASK ROBOT ON VERTICAL MAST LIFT

TECHNICAL **DATA**

SURFACE ASSIST 8

PERFORMANCE	
Arm mounting positions	**mast head / cabinet**
Working height, arm on mast (ceilings)	**up to 26 ft (8 m)**
Working height, arm on cabinet (walls)	**0 – 23 ft (0 – 7 m)**
Cabinet floor height, mast extended	**19 ft 6 in (5.95 m)**
Max. outreach (side / longitudinal)	**47 / 55 in (1.2 / 1.4 m)**
Arm reach (radius)	**53 in (1.35 m)**
Arm payload (tool included)	**66 lb (30 kg)**
Drilling accuracy	**± 0.08 in (± 2 mm)**
Mast axis to wall, working	**31 – 53 in (0.8 – 1.35 m)**
Recommended operating zone	**footprint + 6.5 ft (2 m)**
DIMENSIONS	
A Length — without / with lidars	**55 / 64 in (1.40 / 1.62 m)**
B Width — without / with lidars	**31.5 / 43 in (0.80 / 1.10 m)**
C Stowed height (transport position)	**78 in (1.98 m)**
Wheelbase / track	**42 / 27 in (1.06 / 0.68 m)**
Ground clearance	**2.4 in (6 cm)**
MOBILITY	
Drive speed	**0.3 – 2.8 mph (0.5 – 4.5 km/h)**
Outside turning radius	**5 ft 7 in (1.7 m)**
Gradeability (mast stowed)	**25%**
Allowable tilt (alarm / cut-out)	**0.5° (1.5° / 3°)**
Driving	**mast stowed only**
Tires — non-marking	**12.5 x 4.25 in (318 x 108 mm)**
WEIGHT AND GROUND LOADS	
Total operating weight	**2,650 lb (1,200 kg)**
Max. wheel load	**1,325 lb (600 kg)**
Max. ground pressure	**128 psi (9 daN/cm²)**
SAFETY AND ENVIRONMENT	
Functional safety	**PL d (ISO 13849-1)**
Max. tool force / speed (configured)	**67 lbf / 10 in/s (300 N / 250 mm/s)**
Battery / charging	**24 V / 230 V – 16 A**
Runtime	**8 h on battery · 24/7 on mains**
Noise level, idle / concrete drilling	**< 65 / 90 dB(A)**
Temperature / environment	**32 – 113 °F, indoor or sheltered**

STANDARD **EQUIPMENT**

ROBOTICS

- 6-axis collaborative arm, 66 lb (30 kg) payload, IP65 — 2 mounting positions (mast head / cabinet)
- Tool changer and on-board tool rack; configured force and speed limits
- On-board electronics cabinet: PC, robot controller, power supplies, 4G / 5G and Wi-Fi link

PERCEPTION AND AI

- Perception head: 3D camera, RGB camera, laser rangefinders, IMU
- On-board AI computer, automatic path generation
- 6 teleoperation cameras, LED work lights, Builder Assist remote assistance
- Automatic job report: coverage map, photos, positions

SAFETY

- 2 PL d safety laser scanners on opposite chassis corners (360°)
- Safety tilt sensor: lift interlock, alarm, cut-out
- Emergency stop on chassis panel and remote control, enabling foot pedal, arm stop on intrusion
- Operator's manual, CE declaration

LIFT BASE

- 24 V battery with on-board smart charger, brushless asynchronous motors
- 2 front steering wheels, 2 rear drive wheels, non-marking tires
- Fork pockets, tie-down rings, manual emergency lowering and brake release
- Chassis control panel and drive remote control

OPTIONS **AND ACCESSORIES**

APPLICATIONS

- **DRILL ASSIST** — drilling and anchoring: Ø 3/16–3/4 in (5–20 mm) standard drilling (MEP, fixings), Ø 13/16–1 9/16 in (21–40 mm) structural / civil works, depth up to 39 in (1,000 mm), flush anchors or wedge anchors; dust extraction at source, HEPA class H vacuum, anchor magazine, rebar detection, marking
- **CLEAN ASSIST** — pressure washing, sandblasting, laser stripping
- **INSPECT ASSIST** — thermal camera, 3D scanning, defect detection
- **PAINT ASSIST** — roller / spray painting
- **SAND ASSIST** — concrete grinding, render removal

ACCESSORIES AND SERVICES

- Total station for ±1 mm registration on the BIM model · beacon and audible alarm · weather protection cover
- Robot as a Service contract (financing, maintenance, remote assistance) · operator training



Forklift transport, 2,650 lb



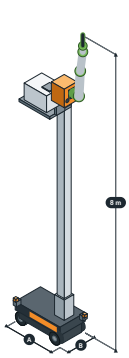
Drill Assist — drilling



Paint Assist — painting

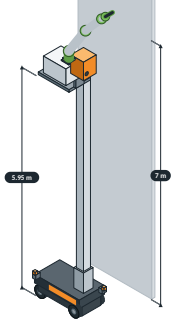
ARM ON MAST HEAD

Horizontal surfaces: ceilings, soffits — arm mounted on the front face of the mast head (horizontal base), standing vertically, tool toward the ceiling. Working height up to 26 ft (8 m).



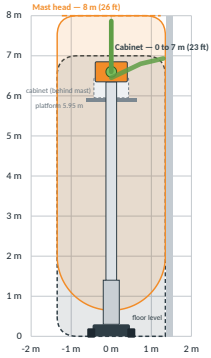
ARM ON CABINET

Vertical surfaces: walls, facades — arm mounted on top of the cabinet sitting on the platform, which rises with the mast to 19.5 ft (5.95 m); horizontal reach to the wall. Working height from floor level up to 23 ft (7 m).



WORKING ENVELOPE

Front view — tool position (m) relative to the mast axis, for both arm positions.



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