

# Modular Robotics Procurement Matrix v3

## With Master Plan v2 Section Integration (April 2026)

Integrated Sources:

1. Vendor Procurement Matrix v1
2. Robotic Construction Equipment Guide 2026
3. Modular Robotics Master Plan v2 (newly added)

## Section Added: Master Plan Contributions

### ***What the Master Plan Added***

- Full reconciled combined matrix including status labels:
- Both – Validated
- Matrix – Validated
- Guide – Add to Matrix
- Guide – Emerging
- Added vendors/models explicitly into procurement framework:
- AUAR, COBOD, Apis Cor, Promise Robotics, Reframe, Reko
- RIDGID, ABB pipe welding, Lincoln Electric, Kranendonk
- WIREBOT, Hardhat Robotics
- Boston Dynamics Spot
- Reinforced capex/deployment assumptions for new entries.

### ***Key Gaps Confirmed by Master Plan***

- 1) Plumbing robotics missing in earlier matrix
- 2) Electrical wiring robotics still pre-commercial (pilot/watch status)
- 3) HP SitePrint + Hilti Jaibot should be Stage 1 immediate deployment
- 4) 3D printing path needs explicit architecture decision gate
- 5) Humanoid pilots need KPI-gated trigger, not timeline-only trigger

## Updated Stage-Based Procurement Path (Consolidated)

### ***STAGE 1 — Buy Now (0–3 months)***

- HP SitePrint
- Hilti Jaibot
- Boston Dynamics Spot (inspection/monitoring where justified)

### ***STAGE 2 — Core Production Line (3–12 months)***

- WEINMANN WALLTEQ or Randek ZeroLabor (primary line choice)
- House of Design/KUKA/ABB/FANUC cells where line architecture requires
- Plumbing automation layer (RIDGID/Lincoln/ABB/Kranendonk as needed)

### ***STAGE 3 — Architecture Decision Branch***

- Branch A: Conventional framing dominant (Randek/WEINMANN path)
- Branch B: 3D print dominant (COBOD/Apis Cor/AUAR path)

### ***STAGE 4 — Emerging / Pilot Gated (12+ months)***

- WIREBOT / Hardhat (electrical automation pilots)
- Humanoid pilots (Apptronik/Agility/Figure) only after KPI gates are met

### **KPI Gates Required Before Humanoid Pilot**

- Framing/assembly throughput at or above target for 8 consecutive weeks
- Layout error rate below threshold for 6 consecutive weeks
- Rework rate below threshold for 6 consecutive weeks
- Safety incidents at critical level = zero
- Exception MTTR in automation stack within target

If gates are not met, humanoid pilot is deferred.

### **Updated Vendor Status Snapshot**

#### ***Procurement-Ready (Near-Term)***

- Randek, WEINMANN, HP SitePrint, Hilti Jaibot, ABB, Lincoln, RIDGID, KUKA/FANUC/Kawasaki via integrator

#### ***Pilot-Gated***

- House of Design, Reko, AUAR, COBOD, Apis Cor, Kranendonk, Boston Dynamics Spot (depending on scope)

#### ***Emerging / Watchlist***

- Promise Robotics (program-dependent)
- WIREBOT (commercialization phase)
- Hardhat Robotics (project-led)
- Humanoid platforms (Apptronik/Agility/Figure) for constrained zones only

### **Procurement Documentation to Add Next (to close remaining holes)**

1. 3D Print vs Conventional Factory Architecture Decision Memo
2. Plumbing Robotics Integration Spec (line-level)

3. Electrical Automation Watchlist + Pilot Protocol
4. Stage 1 ROI Measurement Plan (SitePrint + Jaibot)
5. Humanoid Pilot KPI Gate Policy
6. Integrator Pre-Qualification Template
7. FAT/SAT scorecard by workstream

## **Executive Summary**

The new Master Plan improves strategic clarity and confirms a practical deployment order:

- deploy fast, low-risk wins first,
- lock core line architecture second,
- run emerging technologies only through KPI-gated pilots.

This version is now aligned for decision-making, RFP sequencing, and controlled rollout execution.