



ENGINEERING TOMORROW, TODAY



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Introduction

EdNex Automation is a Dubai-headquartered industrial-robotics specialist that positions itself “at the forefront of industrial robotics, delivering cutting-edge automation solutions that enhance efficiency, safety, and productivity for modern enterprises.” From its base in the UAE, the company engineers and integrates autonomous systems that tackle some of the region’s most demanding tasks - plant-room inspections, heavy-duty material handling, 24/7 site security, and rapid fire-safety response using a portfolio of rugged robots built for hostile, hard-to-reach, or labour-intensive environments. Every solution is designed to remove frontline risk, compress operating costs, and give managers real-time data to drive smarter, faster decisions.

At the core of EdNex Automation’s value proposition is its **Smart Automation Consulting** methodology. The team begins by analysing a client’s current workflows, mapping pain-points, and modelling return-on-investment before recommending a tailored blend of hardware, software, and AI. This consult-to-deploy approach is reinforced by a roster of tier-one technology partners including **Unitree, KUKA, Kinova, Fairino, EVS Robotics, AgileX** and more enabling EdNex to select the right platform for each use case, whether that is a high-torque collaborative arm for precision welding or a ruggedised autonomous mobile robot for outdoor logistics. By coupling best-in-class hardware with in-house systems integration, EdNex delivers turnkey installations that slot seamlessly into existing production lines and IT ecosystems.

Coupled with EdNex’s thought-leadership content such as its insights on “*How AI and Robotics Are Transforming Modern Industries*” clients gain both the technology and the strategic guidance required to future-proof their operations. In short, EdNex Automation stands as a single-source partner that fuses global robotics innovation with regional know-how, bridging today’s automation gaps and empowering organisations to compete in an increasingly data-driven, autonomous world.



About EdNex Automation

EdNex Automation specialises in industrial robotics and smart-factory integration. Guided by the credo “**Transforming industries with advanced robotics,**” we design and deploy automation solutions that raise efficiency, strengthen safety, and deliver millimetre-level precision across mission-critical operations.

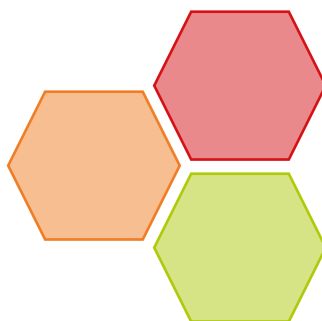
As an **authorised partner of Unitree, Kinova, FARINO, NEREO, and AgileX**, EdNex curates a best-in-class portfolio that spans agile quadruped robots, collaborative six-axis arms, heavy-payload mobile platforms, and specialised fire-response units. Our line-up includes inspection robots for continuous asset monitoring, autonomous mobile robots for material handling, fire-extinguisher bots for high-risk environments, and cobots engineered to work safely alongside people on the factory floor.

Every engagement follows a proven, three-pillar methodology:

1. **Autonomous Robotic Solutions** - rugged platforms for inspection, security, logistics, and fire-safety tasks.
2. **Collaborative Robotics Integration** - flexible cobot cells that boost throughput while minimising human exposure to risk.
3. **Industrial Automation Consulting & Deployment** - end-to-end services covering feasibility studies, custom engineering, on-site commissioning, operator training, and lifecycle support.

This consult-to-deploy approach empowers clients in **logistics, oil & gas, manufacturing, public safety, healthcare, and heavy industry** to modernise rapidly without disrupting day-to-day operations. Whether optimising glass-factory handling lines, automating sub-station patrols, or enabling rapid emergency response, EdNex solutions are built to withstand the Gulf’s harsh environments while delivering the data insights managers need to make faster, smarter decisions.

Backed by regional spare-parts inventory, 24/7 remote diagnostics, and on-the-ground technical teams, EdNex Automation stands as the single-source partner for organisations that see intelligent robotics not as a future aspiration but as today’s competitive advantage.



Our Key Offerings

1. **Smart Automation Consulting**

We start every engagement with a data-driven feasibility study and ROI model that maps your current workflow, pinpoints risk or cost bottlenecks, and prescribes the optimal blend of hardware, software, and AI. This structured methodology—outlined in our *Smart Automation Consulting* framework—guides clients from first concept to fully costed roadmap in weeks, not months.

2. **Autonomous Mobile & Quadruped Robots**

As Unitree's authorised GCC partner, EdNex supplies and integrates the full Go- and B-series quadrupeds—plus wheeled variants—delivering agile, all-terrain inspection, patrol, and logistics capabilities that remove personnel from hazardous zones and cut routine operating costs.

3. **Humanoid & Heavy-Payload Platforms**

For advanced industrial maintenance, public-safety demos, and AI research, we deploy Unitree's G1 and H1/H1-2 humanoids alongside the heavy-lift B2 class—each equipped for dexterous manipulation, 360° perception, and over-the-air (OTA) software upgrades to keep performance future-proof.

4. **Collaborative Robots (Cobots) & Precision Arms**

Through partnerships with KUKA, Kinova, FAIRINO, and EVS, we design turnkey cobot cells for welding, machine tending, and high-mix assembly. Integrated safety sensors, rapid tool-change, and intuitive programming slash change-over time while boosting throughput on existing lines.

5. **End-to-End Integration & Digital Transformation**

Beyond the robot itself, EdNex engineers PLC, SCADA, vision, and AI layers that tie into MES/ERP systems—delivering real-time KPI dashboards and predictive-maintenance insights. Our local team handles mechanical design, controls engineering, on-site commissioning, and IT security hardening so clients gain a single accountable partner from concept to Go-Live.

6. **Training, Lifecycle Support & Spare-Parts Logistics**

Every installation is backed by operator certification programs. This commitment to post-sale service ensures maximum uptime and rapid mean-time-to-repair across the GCC's demanding industrial environments.

EdNex Automation goes beyond stand-alone robots and cobots—our value lies in building complete, interconnected **digital ecosystems** that turn fragmented operations into data-rich, self-optimising workflows.

Integrated Technology Stack

- **Autonomous Robotic Solutions** form the hardware backbone, performing on-site inspection, material handling, security patrol, and fire-safety tasks while streaming real-time telemetry to the cloud.
- **Collaborative Robotics Integration** adds flexible six-axis arms that share work zones with people, enabling lights-out production cells or high-mix assembly without costly retooling.
- **Industrial Automation Consulting & Deployment** stitches these elements together with PLCs, SCADA, MES/ERP connectors, and edge-AI gateways—creating a single source of truth for operators and decision-makers.

Unified Data Layer

All EdNex systems publish standardised APIs and OPC-UA tags that flow into a secure analytics platform. Here, machine-learning models transform raw sensor data into actionable insights—predictive maintenance alerts, heat-map visualisations, and digital-twin simulations—driving continuous improvement across safety, throughput, and energy consumption.

Human-Centric UX

Operators interact through intuitive dashboards, AR overlays, and mobile apps that visualise robot status, job queues, and KPI trends at a glance. Built-in remote-support tools allow EdNex engineers to diagnose issues 24/7 and push OTA firmware updates without disrupting production.

Scalable & Future-Ready

Whether a single Go2 patrol robot or a multi-facility fleet of B2 quadrupeds, KUKA welding cobots, and AgileX AMRs, every deployment uses common micro-service architecture and edge-computing nodes—so clients can scale capabilities by simply plugging in new devices or AI skills.

Ecosystem Outcomes

- **Higher Uptime:** predictive algorithms flag anomalies before failures occur.
- **Data-Driven Decisions:** unified dashboards turn siloed metrics into enterprise-wide KPIs.
- **Workforce Empowerment:** operators move from repetitive tasks to high-value supervision and optimisation.

PROFESSIONAL SERVICES

In an era where Industry 4.0 is redefining every facet of operations—from asset inspection to warehouse logistics—businesses need a partner with both visionary insight and hands-on expertise to navigate their digital-transformation journey. EdNex Automation fills that role, delivering comprehensive professional services that cover every stage of an automation project: from early-stage strategy through seamless integration and lifelong support.

Our multidisciplinary team—comprising certified robotics engineers, controls specialists, and AI architects—has implemented complex automation ecosystems across the GCC's most demanding sectors, including oil & gas, manufacturing, utilities, and public safety. We work side-by-side with your stakeholders to map precise requirements, select optimum technologies, and ensure each deployment meets safety standards, operational KPIs, and long-term ROI targets.

Beyond technical know-how, we pride ourselves on a customer-centric approach: collaborating closely with in-house engineers, providing transparent project governance, and transferring knowledge so your team can operate and expand the solution confidently. Post-deployment, our 24/7 remote diagnostics, on-site response crews, and Dubai-based spare-parts hub protect your investment and maximise uptime.

Our professional services span:

- **Consultancy** – Business-case analysis, site surveys, ROI modelling, and roadmap creation.
- **Implementation** – End-to-end project management, hardware installation, and commissioning.
- **Integration** – PLC/SCADA connections, MES/ERP data pipelines, vision & AI software layers.
- **Customization** – Payload engineering, gripper design, sensor fusion, and workflow tailoring.
- **Training & Support** – Operator certification, preventative-maintenance programs, and round-the-clock technical assistance.

With **EdNex Automation** as your partner, you gain more than cutting-edge robots—you gain a trusted advisor committed to the success, scalability, and sustainability of your entire automation ecosystem.

EdNex Automation stands ready to guide your organization into a safer, smarter, and more productive future—one intelligent robot at a time. By uniting world-class technology with regional expertise and unwavering customer support, we transform ambition into measurable outcomes and position your operations at the vanguard of Industry 4.0.

“EdNex Automation — Engineering Tomorrow, Today”

