

Product features

What ElèveVisión VITA is and does: the iPad app that accompanies the machine throughout its service life, and the web platform from which the manufacturer manages the content of every app delivered to its customers.

1. What is ElèveVisión VITA

ElèveVisión VITA is the integral platform that concentrates the entire technical and commercial life of an industrial machine into a single digital asset: its interactive 3D replica, its documentation, its maintenance plan, staff training and its commercial presentation. The product consists of **two components that work together**:

- **The app (iPad).** The one the end customer uses at the machine, in the technical office or at the trade fair. Built on the manufacturer's real design (CAD), it lets users operate the machine with a finger, consult and share its documentation, plan maintenance, learn through tutorials and present it commercially. It works **without an internet connection**.
- **The management web.** The hub from which the manufacturer administers the content of **each of the apps/machines sold to its customers**: documentation, 3D models, tutorials, videos and catalog, published in a versioned, secure way so that shop-floor apps update with one tap.

A single asset performs on three fronts: **sell** (the customer operates the machine before it is built), **train** (shorter commissioning and fewer operator errors) and **maintain and comply** (organized documentation, planned maintenance and alignment with Machinery Regulation 2023/1230).

2. Product architecture: one app, one web

- **Offline-first.** All essential app functions work without internet; the network is only used to update content and send emails.
- **Web repository per customer and per machine.** Content lives on the management web; access is protected and each customer only sees and downloads its own content, encrypted in transit.
- **Update flow.** The manufacturer publishes on the web; the administrator taps **"Update content"** in the app, which checks the server, downloads only what has changed —manuals, 3D models, tutorials, videos and catalog— and makes it available offline, with a block-by-block progress sheet.
- **Versioned publishing.** Every content package is recorded; the previous version can always be recovered. Shop-floor documentation stays alive without publishing a new app version on the App Store.
- **Interface organized into three collapsible menus** —Client (Client, Share, Docs, QR Reader), View (HMI, +Views, Pin, View3D) and Action (Changeover, ShowPad, Catalog, Actions, Operations)— plus the **Notes** and **Help&Go!** pills, to work full-screen over the 3D.

3. Interactive 3D replica

A faithful three-dimensional reproduction of the machine, generated from the manufacturer's CAD and optimized for tablet. It is the core of the experience: every other module connects to it.

- **Free manipulation** with touch gestures: fluid rotation, zoom and panning, with a pan button and an activatable camera-view cube.
- **Multi-machine.** The app hosts several 3D models; the active machine is chosen from the catalog and remembered between sessions. The scene can show the model on startup or start empty until a machine is chosen.
- **Element search** by name or reference from the header magnifier: the located element is selected and highlighted on the model.
- **One-tap capture.** The camera button photographs only the model on a white background (with a shutter sound) and the image "flies" into +Views, the capture gallery: full-screen pinch zoom, sharing through the native iOS sheet, and deletion.

- **Performance as a requirement:** a hardware-accelerated 3D viewer and optimized models for fluid interaction throughout the session, kiosk format included.

4. Part explorer and 3D tools

Floating, non-modal panels —the model stays live underneath while you work— designed to inspect the inside of the machine and prepare demonstrations.

- **Part explorer:** an expandable tree with the model's full hierarchy, in the style of a CAD outliner. Selecting a group acts on the whole set.
- **Per-part actions:** transparency (100% ↔ 50%), hide/show and move the part with a gizmo to open the machine and see inside, with return to its original position. T / D / E keyboard shortcuts with a Bluetooth keyboard.
- **Part renaming** directly in the tree: custom names are saved per model without altering the original 3D.
- **Lighting panel:** scene presets, five adjustable lights, a tonemapping “look” and metallic finish (reflections and polish) so that metal looks like metal; the configuration is preserved.
- **“Pin” markers:** annotation markers on the model in eight colors; create, rename, select (highlights the point in the 3D) and delete from their own panel.
- **Recordable 3D motions:** with recording active, part movements are registered and the take is saved with a name; it then plays back in a smooth loop and can be launched from the virtual HMI test screen, so the machine “moves” when the console is pressed.

5. Docs: the machine's technical documentation

A classified document library with search, linked to the rest of the app (calendar, tutorials and QR reader).

- **Six document categories:** manuals (operation, user, maintenance, cleaning, troubleshooting, assembly, quick guide), drawings (assembly, layout, arrangement, dimensions, foundations, installation), diagrams (electrical, pneumatic, hydraulic, wiring, P&ID, control), certificates (CE, quality, materials, calibration, safety), declarations (conformity, CE, incorporation, RoHS, warranty) and datasheets (PLC, HMI, motor, sensor, valve, machine).
- **Built-in viewer** with printing through the native iOS panel and download/save to Files — a key requirement of electronic documentation.
- **Send by email:** document selection and multi-selection of customer contacts with search and chips, with the email notice sent from within the app.
- **Offline availability** of the documentation loaded on the device, updated from the management web.

6. QR reader on the machine

- **A real scanner** using the iPad camera (Apple vision technology), built into the app and reachable in one tap from the Client menu.
- **Contextual access:** each code physically placed on the machine directly opens the document or tutorial linked to that zone or component; after scanning, the user chooses to view the document or open the step-by-step tutorial.
- **Regulatory signposting:** the on-machine QR embodies the documentation access point required by Regulation 2023/1230, with the linked content also available offline.
- ElèveVisión generates the **QR code sets and the labeling plan** per zone/component during implementation.

7. Operations: tutorials and changeover

- **Step-by-step tutorial library** in a grid, built on the customer's real machine: cleaning the connection area, reel change, horizontal sealer removal, door opening, guide change, guillotine height, filling detector, vertical sealer opening or film tension, among others; expandable from the management web.
- Each step combines a **detail image or video**, an **assistant-style explainer video**, descriptive text and a **pro tip**, with playback controls.
- **Changeover:** a specific guided process, one tap away in the bottom menu, that walks through the complete intervention sequence on the machine.
- **Integrated with the rest of the app:** tutorials open from the Actions calendar (“Support” button) and from the QR reader; all content is multi-language and works offline.

8. Actions: maintenance calendar

The machine's preventive-maintenance planner, with interventions linked to their procedure and their assignee.

- **Monthly calendar** with interventions per day, color-coded by type: cleaning, inspection, calibration, replacement and general overhaul.
- **Complete intervention record:** machine zone, priority (high/medium/low), estimated duration, frequency (weekly, fortnightly, monthly, quarterly, yearly or one-off) and assigned person.
- **Checklists** per intervention, with progress persisting between sessions and overdue-intervention control.
- **Email notice:** notification to the assignee 24 h before the intervention, with a selectable recipient per intervention and a default maintenance manager configurable in Preferences.
- **Custom events:** create, edit and delete your own events (title, date, type, duration and notes) alongside the factory plan.
- **"Support" button** on each intervention: opens the corresponding step-by-step tutorial with no extra searching.

9. Virtual HMI

An interactive replica of the machine's real HMI console, to train operators without occupying the machine or stopping production.

- **Realistic startup sequence:** screen off, system initialization and the operating screen with the active user and a live clock.
- **Real touch zones** on the screen (home, exit, tests and programs), just like the physical console.
- **Test screen connected to the 3D:** its buttons launch the recorded motion takes on the replica — the trainee presses the console and watches the machine move.
- **Multi-lane program table** with the selection persisting through the session.
- **Floating help video** and a handy console: double-tap to enlarge, drag it around the screen, and park it to free the 3D model behind.

10. Electronics: guided PLC-terminal wiring

An interactive wiring tutorial built on the customer's real electrical diagram.

- **Drag wiring:** a PLC card with its outputs and inputs on one side, a terminal strip on the other; dragging from a node to a terminal draws a live curved cable that stays connected on release.
- **Activatable aids:** error highlighting, labels and references, drag animation and info chips for every element.
- **Tutorial mode:** "Start tutorial" wires the suggested sequence with animation and "Preview" plays it without committing anything, with auto-step, repeat, full screen and a simplified view.
- **Help video** available from the header while the module is open.

11. ShowPad: trade fair and showroom mode

A full-screen presentation designed for the booth, the showroom or an external monitor connected to the iPad.

- **Configurable sections:** a live rotating 3D model, a product image carousel, key features, a promotional video and a QR card to capture interested contacts.
- **Playback behavior:** automatic loop, attract mode when idle, full screen without the app interface, hidden controls and simplified navigation suitable for visitors.
- **Design and branding:** three layouts (hero, split and carousel), language rotation with configurable seconds per cycle, the manufacturer's logo front and center and a customizable booth message.
- **External-monitor ready:** audio preconfigured for screens connected via USB-C/HDMI and full operation without relying on the venue's network.

12. Catalog and sales tools

- **Machine catalog:** the manufacturer's range as framed cards that slide like a shelf; tapping a machine loads its 3D replica into the scene.
- **View3D:** a carousel gallery of product images, expandable to full screen and shareable by email with subject and message.

- **Share:** a live capture of the 3D model's current state —exactly as the salesperson left it: open parts, transparencies, framing— ready to send to one or several contacts, with a personalized message and an optional LinkedIn mention.

13. Notes, Help&Go! and contact management

- **Notes:** a note sheet always at hand in its bottom pill, persistent and shareable by email with the customer's contacts.
- **Help&Go!:** a drag-and-drop container for documents from Docs, captures from +Views, written notes, voice notes recorded in the app and 3D clips of the model in motion. Everything is arranged on a corkboard-style panel and emailed to a contact with its subject, with an animated send confirmation: ideal for preparing a support query or a sales follow-up in seconds.
- **Customer management:** create, search, edit and delete contacts (name, phone, email and notes), used by all of the app's sending flows.

14. Users, languages and preferences

- **Optional, activatable sign-up and login:** users with name and password, new-user registration from the same screen and password-protected user switching.
- **Four interface and content languages** —Spanish, English, French and Italian— switchable instantly from the header or from Preferences.
- **Operating preferences:** sounds, 12/24-h time format, entry animation, startup video window, 3D model on launch, part explorer, view cube, pan button, editable version text and default maintenance manager.
- **"Update content":** the button that connects the app to the management web and downloads the latest versions of manuals, 3D models, tutorials, videos and catalog.
- **Clean screen:** informative header pills (language, user and clock) and menus that hide and return with one tap to present only the 3D.

15. The content management web

The product's second component: the hub from which the manufacturer keeps alive every app it has delivered.

- **Per-machine, per-customer management:** each customer has its own space; access is protected and nobody sees or downloads anyone else's content.
- **Manageable content:** classified documentation, 3D models, tutorials, videos, the sales catalog and each machine's maintenance plans.
- **Versioned publishing with rollback:** every package is recorded and recoverable; the apps download only the changes.
- **Individual credentials,** two-step verification for administrators and editors, and role-based permissions under the least-privilege principle.
- **Secure document delivery:** files are never exposed through public URLs; every view or download passes an identity and permission check before being served.
- **Traceability and protection:** an audit log of accesses, changes and downloads; validated uploads (real file type, size and antivirus scan) and encrypted storage at rest.
- **Flexible hosting:** managed by ElèveVisión on European infrastructure, or deployed on the customer's own infrastructure if their IT department prefers it.

16. Security and regulatory compliance

- **Application security** aligned with the OWASP standard and the defense-in-depth principle: token-based authentication with expiry, object-level authorization on every request and a minimum-exposure API between web and app.
- **On-device security:** credentials in the iOS secure keychain, certificate pinning on the server connection, obfuscated code and zero secrets bundled in the app.
- **Perimeter and infrastructure:** enforced HTTPS with HSTS, a web application firewall (WAF) and protection against automated attacks, a private single-tenant server in the European Union and periodic, verified backups.
- **GDPR:** EU hosting, a data-processing agreement, access traceability and mechanisms to honor user rights.

- **Machinery Regulation 2023/1230** (applicable from January 2027): the platform natively satisfies the requirements for electronic instructions — documentation accessible throughout the machine's service life, downloadable and printable by the user, with access signposted on the machine itself via QR and available even if the machine, the power or the internet fail.

17. Technology, requirements and delivery

- **Open technology:** an app built with Flutter (Google's open-source framework), free of third-party proprietary licenses; a hardware-accelerated 3D viewer with optimized GLB models (Draco compression and WebP textures) generated from the manufacturer's CAD.
- **Shop-floor requirements:** an iPad with iPadOS 16 or later (iPad Pro with M1 chip or later recommended), landscape-only use, a camera for the QR reader and Wi-Fi only to update content and send email notices.
- **Tailored distribution:** private through Apple Business Manager (recommended, with no public exposure), the public App Store, or TestFlight for pilots; centralized MDM deployment if the customer has it.
- **Per-manufacturer personalization:** logo, app icon, texts, catalog, languages and all proprietary content in every implementation; ShowPad mode puts the brand front and center.
- **Ownership and continuity:** the content (documentation, 3D models, videos and brand) is and remains the customer's property; an optional source-code escrow is available and, in the event of service discontinuation, the installed app keeps working with its latest content and the customer receives a copy of their materials.

18. How it is implemented

ElèveVisión delivers the implementation with its own nine-phase method and end-to-end support; for one machine with complete materials, the usual lead time is **6 to 8 weeks** from the kick-off meeting to the app installed on the shop floor:

- **Phase 0 — Kick-off and assessment:** scope, calendar, points of contact and an audit of the source materials.
- **Phase 1 — Material handover:** the manufacturer delivers its source content through a secure channel.
- **Phase 2 — Digitization:** CAD conversion, documentation layout, tutorials, videos and the maintenance plan.
- **Phases 3 and 4 — Personalization and infrastructure:** manufacturer branding, users, the content server and the distribution accounts.
- **Phase 5 — Pilot:** validation with the customer's real users before publishing.
- **Phase 6 — Publication and installation** on the shop-floor devices.
- **Phases 7 and 8 — Training and ongoing service:** role-based training and recurring maintenance.

What the manufacturer provides. The machine's 3D CAD, manuals, drawings and diagrams, the maintenance plan, HMI screens, videos or photos and the brand identity. ElèveVisión audits the material in phase 0, proposes alternatives for anything missing (on-site filming, modeling, translation) and **signs a non-disclosure agreement (NDA) before receiving a single file.**

19. Training and mentoring

Training is organized by role, with take-away material that remains with the customer:

- **Operators:** day-to-day use of the 3D, the documentation, the QR codes, the tutorials and Help&Go!.
- **Maintenance technicians:** the Actions calendar, notices and checklists, the virtual HMI and the Electronics module, at the machine.
- **Administrators:** user and contact management, preferences, ShowPad and the content update flow.
- **Sales team (optional):** trade-fair mode setup, lead capture and demoing with Help&Go!.

After go-live, mentoring accompanies the first months with periodic follow-up sessions, and a train-the-trainer option enables the customer to onboard new hires internally.

20. Ongoing support and maintenance

VITA ships with a recurring service available in **three tiers (Basic, Standard and Premium)** with committed response times, covering three fronts:

- **Corrective:** app bug fixing, with top priority for incidents that prevent use on the shop floor.

- **Adaptive:** compatibility with each year's new iPadOS versions and renewal of the Apple developer account, certificates and profiles.
- **Content:** assisted publications of the updates the manufacturer sends, plus a bank of hours for small functional improvements.

Implementation includes a **3-month warranty** from publication for defects attributable to ElèveVisión, at no cost. The full implementation model, service levels, terms and pricing are set out in the customer-provider framework document, available on request at info@elevavision.com.