



MOBILE UNIT · HEALTHCARE · BLOOD BANK

DONOR MAX: The Blood Bank That Comes to the Donors

NINOX designs and builds a mobile blood donation unit for Higuera Escalante that transforms community blood collection in Norte de Santander

CLIENT

Higuera Escalante · Blood Bank

LOCATION

Norte de Santander, Colombia

YEAR

March 2018

Higuera Escalante - Blood Bank

BLOOD-BANK

DONATION

HEALTHCARE

MOBILE

HIGUERA-ESCALANTE

NORTE-DE-SANTANDER

In the heart of northeastern Colombia, where geographic distances and access barriers suppress blood donation rates, Higuera Escalante made a radical bet: take the blood bank to the people. The result was DONOR MAX, a fully equipped mobile blood collection unit designed and built entirely by NINOX Corporation. Since March 2018 it has been rolling through the streets, plazas, and community spaces of Norte de Santander — turning every stop into an opportunity to save lives.

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When Distance Costs Lives

Traditional blood banks rely on a model decades old and rarely questioned: patients go to the hospital, voluntary donors seek out the health center, and the system waits. In regions like Norte de Santander — where geographic dispersion and socioeconomic dynamics restrict mobility for large segments of the population — that model produces chronic shortfalls. Emergencies do not wait. Operating theaters do not either. Every unit of blood that fails to arrive in time can be the difference between life and death for a neighbor, a parent, a student.

Higuera Escalante, the leading clinical diagnostics institution in northeastern Colombia operating under the motto 'Damos Resultados' ('We Deliver Results'), recognized this systemic failure early. The answer was not to build more fixed facilities — expensive and out of reach for millions — but to invert the entire flow: bring the donation capability directly to the communities, schools, businesses, and mass events where people already gather. It was a decisive commitment to community-level medicine with immediate, measurable impact.

The challenge was formidable. Replicating, outside a hospital setting, the full clinical infrastructure required for safe blood collection — controlled temperature conditions, certified extraction equipment, approved storage, standardized donor care protocols — inside a vehicle that could park in any town square or corporate parking lot. To make that vision real, Higuera Escalante needed a partner who understood both precision engineering and medical requirements equally. They found that partner in NINOX Corporation.

The NINOX Challenge: A Hospital on Wheels

When NINOX Corporation received the commission, its engineering and design team faced a blank canvas loaded with precise clinical requirements. The vehicle had to meet current Colombian regulations for mobile blood banks — maintaining ambient temperatures between 18 and 24 degrees Celsius throughout the collection area, providing surfaces that could be easily cleaned and disinfected, and offering ergonomic access for donors with varied physical conditions. Working from a proven-duty International truck chassis, NINOX began building DONOR MAX's integral coachwork from scratch, calculating every centimeter of interior livability.

The interior was conceived as an elite donation suite. NINOX installed four reclinable ergonomic chairs of biomedical design — finished in a deep red, the very color of the mission — mounted on low consoles that integrate clinical storage compartments, electrical outlets, and electronic position controls. Each station has individual lighting, direct ventilation, and access to a running-water handwash basin. Two LG split-type air conditioning units ensure clinical temperature in any weather condition, while ambient red LED strip lighting creates an atmosphere that, far from intimidating, invites calm and trust.

The energy solution was equally forward-thinking: DONOR MAX incorporates capacity to operate as an ECO Solar Mobile Unit under the ethos 'Salvemos Vidas, Salvemos el Planeta' ('Save Lives, Save the Planet'), enabling autonomous operation in areas without grid electricity. An integrated entertainment system — a flat-screen television and stereo audio — accompanies the donor throughout the process, transforming a medical procedure into a comfortable, almost social experience. On the exterior, a full-body high-resolution vinyl wrap launches the international #BeThe1Donor campaign, positioning Higuera Escalante as the regional champion of this global voluntary donation movement.



DONOR MAX interior: four donation stations, dual LG climate control, integrated audiovisual system with red ambient lighting

DONOR MAX in Action: Donation Goes to the Community

When DONOR MAX first hit the road in March 2018, Norte de Santander became a national pioneer in mobile blood donation meeting full hospital-grade standards. The unit can simultaneously serve up to four donors at its fully equipped stations, with processing times ranging from 45 to 60 minutes per person. During high-intensity campaigns — at companies, universities, schools, or public events — the unit's collection capacity easily surpasses that of many fixed donation points across the region.

The donor experience aboard DONOR MAX was deliberately engineered by NINOX to dismantle the most common psychological barriers to giving blood: the cold clinical environment, the uncertain wait, the sense of impersonality. Warm ambient lighting, an active television screen, a chair that adjusts precisely to each body, and close, attentive medical staff transform donation into a conscious, dignified act. Higuera Escalante's team operates the unit under the same rigorous protocol as their fixed facilities — but in a format that meets people where they already are: in their neighborhood, at their workplace, inside their daily routine.

DONOR MAX's impact was measured quickly in units collected, but its deeper value lies in the cultural shift it fosters. Every time the vehicle appears in a plaza or a corporate campus, it generates visibility, conversation, and a direct invitation to act. The #BeThe1Donor campaign, carried physically into communities through the vehicle, connects the people of Norte de Santander to a global movement of solidarity. DONOR MAX is not merely a medical vehicle — it is a rolling ambassador for voluntary donation culture and a constant reminder that saving a life can begin with 45 minutes of generosity.



Panoramic view of the donation stations: ergonomic biomedical chairs on both sides of the central corridor



Close-up of a donation chair with electronic position controls, clinical compartments, and operator panel

A Project That Sets a New Standard

DONOR MAX stands as one of the most comprehensive projects NINOX Corporation has delivered in the healthcare sector: the integration of precision coachwork engineering, clinical interior design, sustainable energy systems, and high-impact visual communication in a single functional vehicle. The project proved that full hospital-grade standards can be replicated on mobile platforms without compromising any dimension of quality, safety, or user experience. Every component was selected and installed with the same rigor applied in a permanent hospital suite.

For Higuera Escalante, DONOR MAX cemented its reputation as the most innovative institution in northeastern Colombia's healthcare system. The ability to reach distant communities, to launch mass donation campaigns in partnership with businesses and educational institutions, and to do so aboard a vehicle that simultaneously projects professional authority and human warmth, set Higuera Escalante's blood bank program apart from every other regional operator. The vehicle is today a visible symbol of the institution's commitment to life.

The NINOX–Higuera Escalante partnership on DONOR MAX reaffirmed a guiding principle at the core of NINOX's work: specialized mobile units are not a diminished version of fixed services. When designed with rigor and long-term vision, they are a superior way to bring essential services to those who need them most, at precisely the right moment and in exactly the right place. A life should not depend on whether a person can travel to the hospital. With DONOR MAX, the hospital travels to the person.



“DONOR MAX is proof that engineering applied to healthcare can transform lives in ways that go far beyond steel and fiberglass. Every unit of blood collected by this vehicle represents a chain of solidarity beginning in the community — in a plaza, a corporate parking lot, a schoolyard — and ending in an operating room where someone was waiting for exactly that. NINOX built the vehicle. Higuera Escalante brought the vision. The donors of Norte de Santander brought the heart.

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