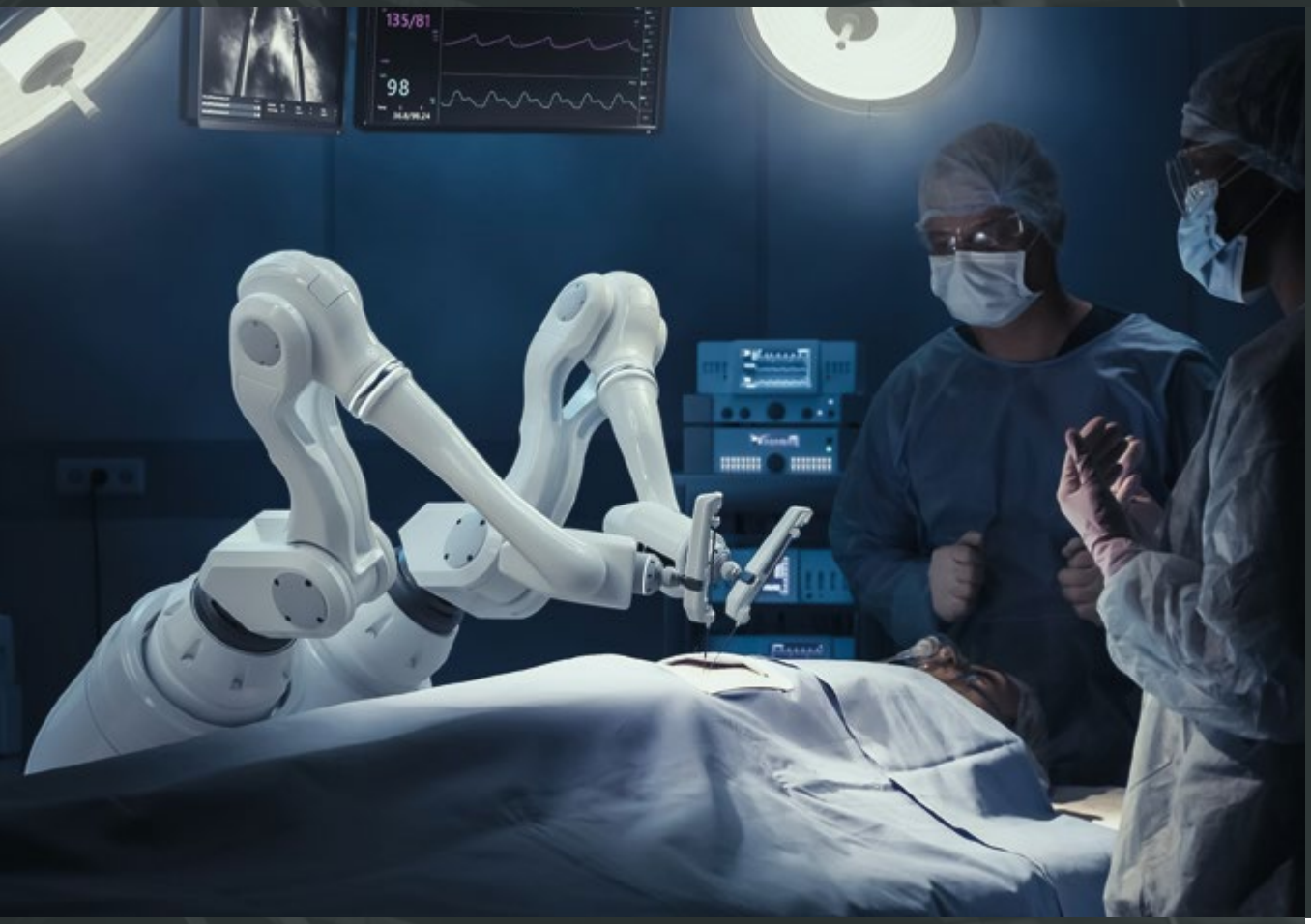
Lisconn

Advanced Connectivity & System Integration for Medical Innovation



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Engineering Reliability Into Every Connection

Lisconn is a globally integrated manufacturer of cable assemblies, PCB assemblies, electromechanical systems, and complete box builds, purpose-built for the demands of mission-critical medical applications.

With over 30 years of manufacturing experience and 900+ engineers operating across nine global facilities, Lisconn delivers end-to-end capability from initial concept through to high-volume production. Our vertically integrated model means cable, electronics, and full system assembly are engineered and built under one quality-controlled roof, eliminating the supplier fragmentation that introduces risk into complex medical programmes.

We work at the intersection of precision materials science, high-reliability electronics, and regulatory compliance. Our facilities operate to ISO 13485 and MedAccred standards, with FDA-registered production and Class 100 cleanroom environments, ensuring every product meets the exacting requirements of medical device OEMs, from prototype stage to sustained global supply.

Lisconn supports the full medical device lifecycle: rapid NPI and prototyping, design for manufacture and test, scalable production transfer, and long-term obsolescence management. Whether you are developing a next-generation wearable monitoring platform, a surgical robotic system, or an implantable audio device, Lisconn provides the engineering depth and manufacturing scale to bring it to market with confidence.

Lisconn

- **30+ Years Manufacturing Experience**
- **900+ Engineers Globally**
- **9 Global Manufacturing Facilities**
- **250+ OEM Customers Served**
- **ISO 13485 & MedAccred Certified Manufacturing**

Why Leading Medical OEMs Choose Lisconn

When the stakes are highest, engineering excellence and manufacturing reliability cannot be compromised. Lisconn delivers both, combining deep technical expertise, vertically integrated capabilities, and a proven global footprint to support medical device programmes from first prototype through to sustained high-volume supply.

1 True End-to-End Integration

Lisconn consolidates cable assembly, PCB assembly, electromechanical integration, and full box build under a single, quality-controlled operation. This vertical integration reduces supplier complexity, compresses development timelines, and delivers a level of cross-discipline quality control that fragmented supply chains simply cannot match.

2 Engineering-Led Collaboration

With over 900 engineers operating globally, Lisconn engages at the earliest stages of product development, not just as a manufacturer, but as a co-development partner. Our teams bring DFM, DFA, and DFT expertise to every programme, identifying and resolving design risk before it reaches production. Rapid prototyping and structured validation keep development on schedule.

3 Scalable Global Manufacturing

From rapid NPI builds through to high-volume production, Lisconn's multi-site global manufacturing network is structured for seamless programme scale-up. Right-shoring strategies ensure cost efficiency without compromising quality or regulatory compliance, wherever in the world your product needs to be built.

4 Advanced Medical Materials Expertise

Lisconn's cable materials engineering capability spans TPU, TPE, silicone, and PTFE insulation systems, all selected and validated for compatibility with medical-grade sterilization processes including ETO, gamma, and autoclave. Our high-flex and miniaturized cable designs address the most demanding spatial and mechanical requirements in modern medical devices.

5 Integrated Electronics & System Build

Beyond interconnects, Lisconn delivers high-reliability PCBA, full system integration, and complete box build capability. Our engineers design and assemble at the system level, incorporating firmware loading, calibration, and final product configuration, so your device arrives ready for deployment, not just assembly.

6 Comprehensive Testing & Validation

Every product leaving a Lisconn facility is subject to rigorous electrical, mechanical, and environmental validation. Testing protocols operate at cable, PCBA, and system level, covering signal integrity, mechanical stress, environmental resistance, and full functional verification, ensuring uncompromised quality at every stage.

7 Supply Chain & Lifecycle Management

Lisconn takes a long-term view of every programme. Our global sourcing teams provide full component traceability and compliance management, while our obsolescence and lifecycle practice monitors component availability, plans last-time-buy strategies, and delivers redesign and sustaining engineering support, protecting your investment well beyond initial launch.

LISCONN: DELIVERING MANUFACTURING EXCELLENCE

EMS

With our cutting-edge technology and expertise in EMS manufacturing, we deliver high-quality, customized electronics solutions that meet the most demanding industry standards, ensuring reliability, scalability, and rapid time-to-market.

BOX BUILD

Our comprehensive box build services provide seamless integration of components, from design to final assembly, delivering fully tested, high-quality turnkey solutions that streamline production, reduce costs, and ensure faster time-to-market.

COMPONENT & PRODUCT DESIGN

Our engineers offer end-to-end component and product design services, turning concepts into high-performance, market-ready solutions with innovative designs, rigorous testing, and a focus on quality, efficiency, and cost-effectiveness costs, and ensure faster time-to-market.

CLEAN ROOM

Our clean room manufacturing services ensure the highest levels of contamination control, delivering precision-built products that meet stringent quality and safety standards for industries requiring ultra-clean environments, such as medical, aerospace sectors.

ENGINEERING SOLUTIONS

Our engineering solutions provide tailored, cutting-edge expertise to tackle complex challenges, optimizing performance, enhancing efficiency, and ensuring seamless integration for innovative, high-quality products that meet your specific needs.

PCBA

Our state-of-the-art PCBA production services deliver precision, reliability, and scalability, ensuring high-quality, cost-effective assemblies that meet rigorous industry standards and accelerate your product's time-to-market.

Precision Engineering Across the Full Spectrum of Medical Technology

Lisconn supports medical device OEMs across a broad range of therapeutic and diagnostic categories, delivering the interconnect, electronics, and integrated systems that power both established platforms and the next generation of life-enhancing medical technology.

ESTABLISHED APPLICATIONS

Diagnostic & Imaging Systems

High-performance cable assemblies and electronics for MRI, CT, PET, X-ray, and ultrasound platforms, engineered for signal integrity, EMI shielding, and the mechanical demands of high-cycle clinical environments.

Surgical & Robotic Platforms

Precision interconnect and system integration for robotic-assisted surgical systems, instrumentation, and control units, where reliability, miniaturization, and sterilization compatibility are non-negotiable.

Patient Monitoring & Life-Support Systems

High-reliability cable and electronic assemblies for ventilators, patient monitors, infusion systems, and critical care devices, built to perform without failure in the most demanding clinical settings.

SPECIALIST GROWTH SEGMENTS

Cochlear & Implantable Hearing Systems

The development of cochlear implants and implantable audio devices demands a level of precision, miniaturization, and biocompatibility that few manufacturers can deliver. Lisconn's expertise in ultra-fine wire assemblies, micro-coax construction, and hermetic sealing compatibility makes us a trusted partner for hearing device OEMs. Every component is engineered for long-term implant durability, high-reliability signal transmission, and compliance with the strictest biocompatibility standards, because for patients who depend on these devices, performance is permanent.

Wearable Health Monitoring Devices

The rapid growth of connected healthcare is driving demand for wearable monitoring devices that are smaller, smarter, and more resilient than ever. Lisconn supports OEMs developing ECG monitors, SpO_2 sensors, remote patient monitoring systems, and wellness devices with ultra-flexible cable assemblies, miniaturized PCBAs, low-power electronics integration, and wireless module support. Our designs account for the unique challenges of continuous wear, comfort, ergonomic form factor, moisture resistance, and the durability required for devices that never come off.

Cochlear & Hearing Device Connectivity

Precision, Miniaturization, and Long-Term Reliability for Implantable Audio Systems

Cochlear implants and implantable hearing devices represent some of the most technically demanding products in medical electronics. The interconnect components at the heart of these systems must perform flawlessly in the most challenging environment possible, the human body, for decades. Lisconn brings the materials expertise, manufacturing precision, and quality infrastructure required to meet those demands, supporting OEMs from early-stage development through to validated, high-volume production.

KEY ENGINEERING REQUIREMENTS

Biocompatibility & Implant Safety

All materials used in implantable and body-contact assemblies must comply with ISO 10993 biocompatibility standards. Lisconn's medical materials programme covers conductor selection, insulation systems, overmoulding compounds, and adhesives, each validated for long-term tissue compatibility and freedom from cytotoxic, sensitizing, or irritant properties.

Ultra-Miniaturization

The spatial constraints of cochlear implants and in-ear devices demand conductor gauges, connector profiles, and assembly geometries that push the boundaries of conventional cable manufacturing. Lisconn's engineering teams work at the micro-scale, producing ultra-fine wire assemblies and high-density interconnect solutions within the tightest dimensional envelopes.

Signal Integrity & Transmission Reliability

Hearing device performance is directly dependent on the fidelity of electrical signal transmission between processor, implant, and electrode array. Lisconn engineers interconnect solutions that maintain consistent signal quality across the full operational range of the device, accounting for impedance, shielding, and long-term conductor stability.

Long Lifecycle Durability

Implantable components must maintain mechanical and electrical integrity over a service life measured in decades. Lisconn's qualification and validation protocols assess fatigue resistance, flex endurance, and long-term material stability, ensuring performance is not just achieved at launch, but sustained throughout the product's clinical life.

CAPABILITIES

Lisconn delivers the full range of interconnect and assembly capabilities required for cochlear and hearing device programmes:

Micro-coax and ultra-fine wire assembly construction, producing reliable signal paths within severely constrained form factors. High-density connector integration, supporting complex multi-channel electrode arrays and processor interfaces. Flexible and lightweight cable design, minimising mechanical loading on both implanted and external components. Hermetic sealing compatibility, with assembly processes engineered to support hermetically sealed implant housings. Overmoulded assemblies using biocompatible compounds, providing environmental protection without compromising flexibility or dimensional control.

APPLICATIONS

Cochlear implant systems, internal receiver-stimulator assemblies and electrode arrays. Behind-the-ear and in-ear hearing devices, external processor cables and interconnect. External sound processors and control units, flexible, durable cable assemblies for daily-wear components. Auditory brainstem implants and other implantable audio platforms.

Wearable Health Monitoring Devices

Enabling Continuous, Connected Healthcare Through Precision Electronics

The wearable medical device market is one of the fastest-growing segments in healthcare technology. As OEMs push the boundaries of miniaturization, battery life, and continuous monitoring capability, the interconnect and electronics at the core of these devices must deliver exceptional reliability in conditions that conventional medical electronics never face, constant movement, perspiration, environmental exposure, and the ergonomic demands of uninterrupted wear. Lisconn provides the engineering and manufacturing capability to meet these challenges at every stage of development.

KEY ENGINEERING REQUIREMENTS

Miniaturization & Form Factor

Wearable devices demand the smallest possible PCBAs, cable assemblies, and connector solutions without any compromise to electrical performance. Lisconn's engineering teams optimise designs for compact form factors, working closely with OEM development teams to achieve aggressive size and weight targets.

Flexibility & Mechanical Durability

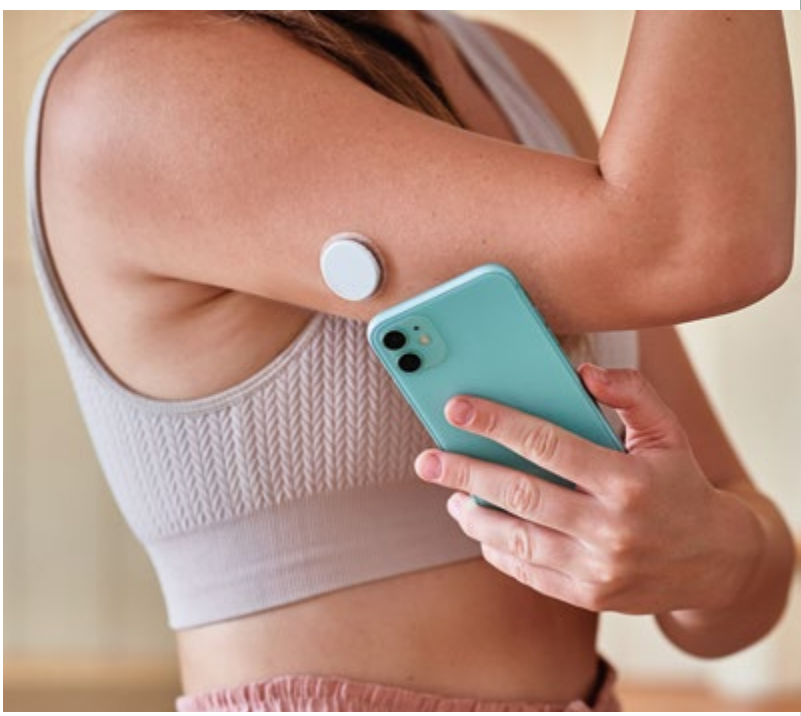
Assemblies must withstand millions of flex cycles across the full range of user movement. Lisconn's ultra-flexible cable constructions and robust connector termination methods are validated for the mechanical fatigue demands of continuous-wear applications.

Environmental & Moisture Resistance

Exposure to sweat, humidity, and variable temperature is a baseline condition for wearable medical devices. Lisconn specifies and validates materials and sealing solutions that maintain electrical integrity and structural reliability throughout the rated service life of the device.

Low-Power Electronics Integration

Battery longevity is a critical design parameter for wearable platforms. Lisconn's PCBA and electronics integration capability supports low-power design strategies, including power management circuitry and wireless module integration for Bluetooth, ANT+, and other short-range protocols.



CAPABILITIES

Ultra-flexible, lightweight cable assemblies engineered for continuous-wear durability. Miniaturized rigid, flex, and rigid-flex PCBAs for compact device architectures. Low-power electronics and wireless module integration. Sensor interface and signal conditioning assembly. Environmental sealing and moisture protection solutions.

APPLICATIONS

ECG and cardiac monitoring devices. Blood oxygen (SpO_2) and respiratory monitoring. Remote patient monitoring and telehealth platforms. Continuous glucose monitoring support systems. Fitness and clinical wellness tracking devices.

From Cable to Complete System

Lisconn's vertically integrated manufacturing capability covers every layer of a medical device, from the finest wire assemblies to fully configured, tested system builds, under one quality-controlled operation.

Advanced Medical Cable Assemblies

Where precision materials science meets manufacturing discipline. Lisconn engineers and produces cable assemblies for the most demanding medical applications, combining deep knowledge of medical-grade insulation systems with the production controls required for regulatory compliance.

- TPU, TPE, silicone, and PTFE insulation systems, selected and validated for each application
- Sterilization-resistant constructions compatible with ETO, gamma, and autoclave processes
- High-flex and miniaturized cable designs for space-constrained and continuous-wear applications
- EMI/RFI shielding and high-speed signal capability for imaging and diagnostic platforms
- Overmoulded assemblies and connectors using biocompatible compounds
- Micro-coax and ultra-fine wire construction for implantable and hearing device applications

PCB Assembly (PCBA) Manufacturing

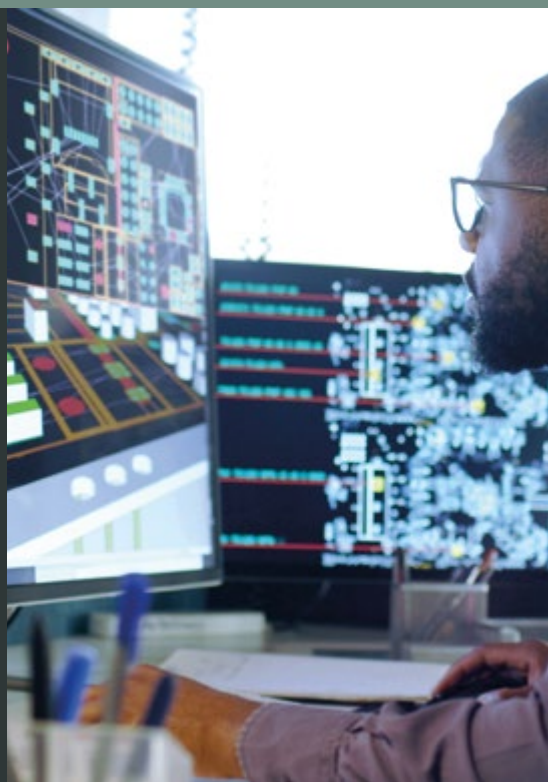
High-reliability electronics production built to medical industry standards. Lisconn's PCBA capability spans the full range of modern medical electronics, from compact rigid boards to complex rigid-flex architectures, with the process controls and inspection infrastructure that mission-critical applications demand.

- SMT and through-hole assembly across high-density, fine-pitch designs
- Rigid, flex, and rigid-flex PCB solutions for compact and wearable device platforms
- Automated optical inspection (AOI), X-ray, in-circuit test (ICT), and functional testing
- Cleanroom assembly environments for bio-burden sensitive applications
- Low-power and wireless electronics integration for portable and wearable devices

Electromechanical Integration & Box Build

Complete system assembly from subsystem to finished product. Lisconn integrates cable assemblies, PCBAs, mechanical enclosures, and firmware into fully configured, validated medical devices, ready for clinical deployment.

- Full box build and system integration across complex, multi-subsystem architectures
- Cable, PCB, and enclosure assembly within a single controlled operation
- Firmware loading, calibration, and final product configuration
- Prototype and NPI builds with rapid iteration and design optimisation
- Scalable production from low-volume pilot through to high-volume global supply



Validated, Supported, and Built to Last

Manufacturing capability alone is not enough. Lisconn's testing, supply chain, and lifecycle management programmes ensure that every product performs to specification at launch, and continues to do so throughout its entire commercial life.

Comprehensive Testing & Validation

Uncompromised quality verification at every level of assembly. Lisconn's testing capability operates across cable, PCBA, and complete system builds, providing the electrical, mechanical, and environmental evidence that medical OEMs and regulatory bodies require.

- Electrical and signal integrity testing across cable and PCBA assemblies
- Mechanical validation including flex endurance, tensile strength, and connector retention
- Environmental testing covering temperature cycling, humidity, and moisture ingress
- Bio-burden and sterilization resistance validation for implantable and sterile-field products
- System-level functional testing and configuration verification
- Full test documentation and traceability records for regulatory submission support

Supply Chain Management

Global sourcing infrastructure built for medical-grade compliance and resilience. Lisconn's supply chain teams manage component qualification, procurement, and logistics across a global supplier network, with the traceability and risk management disciplines that medical programmes demand.

- Global sourcing across qualified, compliant supplier networks
- Full component traceability from raw material to finished assembly
- Regulatory compliance management across multiple international frameworks
- Risk mitigation strategies to protect against supply disruption and single-source dependency
- Demand planning and inventory management for sustained production programmes

Obsolescence & Lifecycle Management

Long-term programme support beyond initial production. Medical devices have long commercial lives, and the components inside them do not always keep pace. Lisconn's lifecycle management practice protects OEM programmes against the disruption and cost of unmanaged obsolescence.

- Continuous component lifecycle monitoring and end-of-life notification
- Last-time-buy planning and strategic inventory management
- Redesign and re-qualification support where component substitution is required
- Sustaining engineering resource to maintain programme compliance over time
- Long-term partnership model aligned with the extended lifecycles of medical device programmes

One Partner. Total Solution. Zero Compromise.

For medical device OEMs, the cost of supplier failure is measured in more than money. Lisconn exists to eliminate that risk, delivering the engineering depth, manufacturing precision, and long-term support that mission-critical programmes demand.

We go deeper than most manufacturers will.

From ultra-fine wire assemblies for cochlear implants to fully integrated box builds for surgical platforms, Lisconn operates at the technical frontier of medical device manufacturing. Our 900+ engineers engage at concept stage, not just production stage, bringing DFM, DFA, and DFT expertise that protects your programme from the risks that surface late and cost most.

We cover more ground under one roof.

Cable. PCBA. Electromechanical integration. System build. Testing. Lifecycle support. Lisconn's vertically integrated operation removes the handoffs between suppliers where quality risk accumulates and timelines slip. One partner accountable for the complete solution, from first prototype to sustained global supply.

We are built for programmes that cannot fail.

ISO 13485 and MedAccred-certified manufacturing. FDA-registered facilities. Class 100 cleanroom environments. Rigorous validation at cable, board, and system level. When your device reaches a patient, it needs to work. Our quality infrastructure exists to make certain it does.

We scale with you.

Whether you are in early NPI, preparing for regulatory submission, or ramping to high-volume global production, Lisconn's multi-site manufacturing network and right-shoring capability flex to meet you, without disruption to quality, compliance, or supply continuity.

Talk to Lisconn.

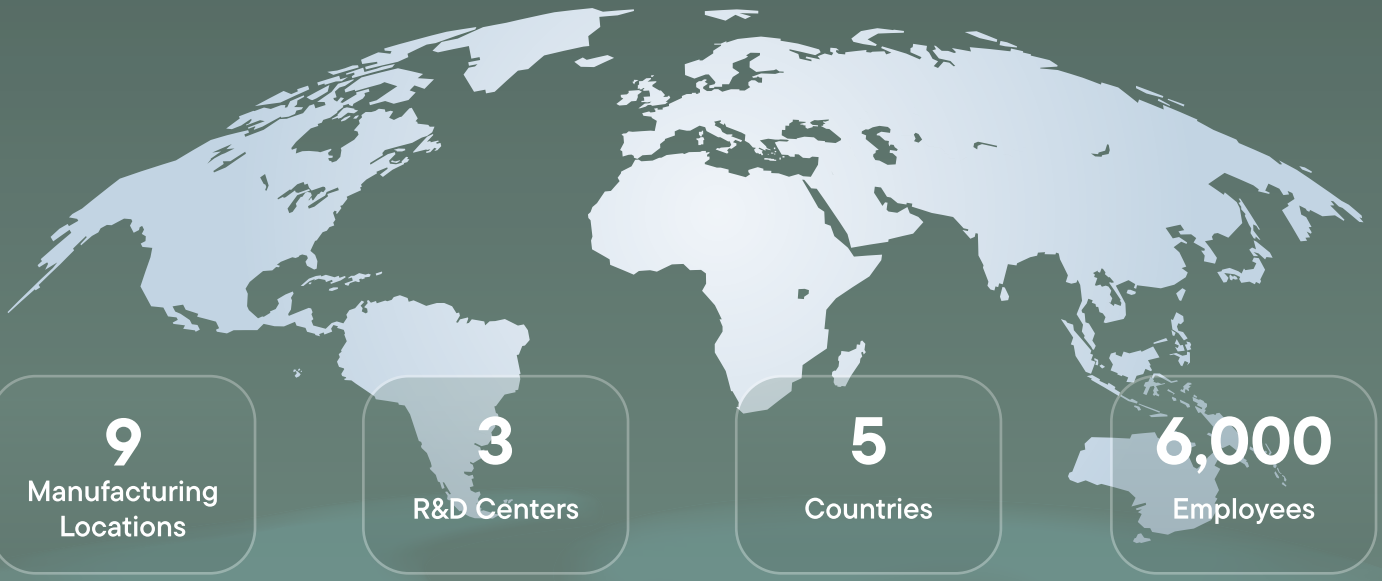
Whether you are developing a new medical platform or looking for a more capable manufacturing partner for an existing programme, we would welcome the conversation.

VISIT: WWW.LISCONN.COM

lisconn

Lisconn

Global Reach, Local Expertise.



9
Manufacturing Locations

3
R&D Centers

5
Countries

6,000
Employees

Lisconn: Creating Solutions Where You Sell

Lisconn's global presence enables us to streamline supply chains, optimize costs, and offer the flexibility needed for fast turnarounds and efficient product delivery. Our scalable solutions grow alongside our customers' success, ensuring long-term partnership and adaptability.

With a team of experts, we provide technical excellence, comprehensive global regulatory support, and dependable supply, serving customers across the globe with precision and reliability.

Boston Manufacturing
Manufacturing Facility & Advanced Technology Center

Dongguan Manufacturing
Manufacturing Facility

Hangzhou Manufacturing
Manufacturing Facility

Hong Kong Operations Center
Operations Center

India Manufacturing
Manufacturing Facility

Jiangxi Manufacturing
Manufacturing Facility

Penang Manufacturing
Manufacturing Facility

Shenzhen Manufacturing
Manufacturing Facility

Shenzhen Technology Center
Advanced Technology Center

Tapei Operations Center
Operations Center

Tijuana Manufacturing
Manufacturing Facility

Xiamen Manufacturing
Manufacturing Facility

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For more information visit **lisconn.com**