CLIENT SUCCESS STORY

Establishment of an IV Cannulas Manufacturing Unit

for

M/s. Nureca Limited, Chandigarh

"Transforming Investment Vision into Profitable Industrial Reality"

Industry: Healthcare Manufacturing | Location: Chandigarh, India

Consultancy Type: Techno-Economic Feasibility Study & Strategic Advisory

ABOUT NPCS

Niir Project Consultancy Services (NPCS) is one of India's most trusted industrial consultancy and knowledge services firms. With over three decades of expertise, NPCS has guided thousands of entrepreneurs, MSMEs, startups, and large-scale investors toward technically feasible and commercially viable manufacturing ventures.

NPCS is part of Asia's leading industrial knowledge ecosystem with thousands of project profiles and global consulting expertise.

Core Services

- Detailed Project Reports (DPR)
- Techno-Economic Feasibility Studies
- Market Research & Demand Analysis
- Engineering Advisory & Process Design
- Financial Modeling & Viability Evaluation
- Manufacturing Opportunity Identification

OUR TRACK RECORD

30,000+ Detailed Project Reports Published	**50+** Countries with Active Clients	**30+** Years of Industrial Expertise
250,000+ Industrial Projects Delivered	**500+** Industry Sectors Covered	**100%** Client-Centric Approach

PROJECT SNAPSHOT

Client Name	M/s. Nureca Limited
Location	Chandigarh, India
Industry	Healthcare Manufacturing — Medical Devices & Disposables

Project Recommended	IV Cannulas Manufacturing Unit
Consultancy Scope	Techno-Economic Feasibility Study, Market Assessment, Financial Viability Evaluation, DPR Inputs, Strategic Advisory
Implementation Status	Client Confirmed — Proceeding with Project Implementation

CLIENT BACKGROUND & INVESTMENT OBJECTIVE

M/s. Nureca Limited, based in Chandigarh, approached NPCS with the strategic objective of investing in a new large-scale manufacturing venture. The client sought a project capable of offering long-term profitability, strong market demand, and sustainable operational performance within a growth-oriented sector.

Client's Core Investment Criteria

- Long-term business profitability and sustainable operational performance
- Strong and recurring market demand potential
- Viable resource and supply-chain feasibility
- Scalable manufacturing opportunities with room for expansion
- Strategic alignment with future healthcare sector growth

NPCS was entrusted with conducting a detailed techno-economic evaluation to recommend an investment-worthy manufacturing opportunity precisely aligned with these objectives.

CHALLENGES & PROBLEM STATEMENT

Entering the healthcare manufacturing space presents a complex array of challenges that require expert navigation. M/s. Nureca Limited faced several key decision-making hurdles:

- Market Gap Identification: Pinpointing the right sub-sector with sustainable demand amid a crowded medical device landscape.
- Technical Feasibility Uncertainty: Evaluating manufacturing complexity, machinery requirements, and production scalability without prior DPR guidance.
- Financial Risk Assessment: Determining capital requirements, return timelines, and break-even horizons in a capital-intensive sector.
- Supply Chain Viability: Assessing raw material availability and continuity of supply for uninterrupted production.
- Regulatory Complexity: Understanding compliance requirements for medical-grade manufacturing and quality standards.
- Strategic Alignment: Ensuring the chosen project aligned with long-term business goals, available resources, and investor expectations.

OUR APPROACH & METHODOLOGY

NPCS deployed its proven five-phase industrial consultancy methodology to systematically evaluate and recommend the most suitable manufacturing opportunity for the client:

Phase 1	**Project Identification**	Systematic analysis of industrial opportunities across healthcare sub-sectors. Cross-referencing with client investment profile, risk appetite, and sector growth data.
Phase 2	**Market Analysis**	In-depth demand forecasting, competitive landscape mapping, import-export trend analysis, and institutional consumption assessment for IV cannulas.
Phase 3	**Technical Feasibility**	Evaluation of manufacturing processes, plant layout, machinery requirements, raw material sourcing, quality standards, and production parameters.
Phase 4	**Financial Modeling**	Project cost estimation, revenue projections, ROI analysis, payback period calculation, break-even assessment, and working capital requirements.
Phase 5	**Implementation Strategy**	Structured implementation roadmap covering project setup milestones, compliance planning, operational ramp-up, and strategic advisory support.

SCOPE OF SERVICES DELIVERED

NPCS provided comprehensive end-to-end consultancy to M/s. Nureca Limited covering:

Manufacturing Opportunity ID	Identification and shortlisting of investment-worthy projects aligned with client goals
Market Potential Assessment	Demand analysis, growth projections, institutional consumption mapping
Raw Material Availability	Sourcing feasibility study for key manufacturing inputs
Technical Feasibility	Process analysis, plant specifications, machinery selection guidance
Project Cost Estimation	Structured capital investment overview and infrastructure requirements
Financial Viability Report	Revenue potential, profitability assessment, long-term sustainability evaluation
Implementation Planning	Phased project setup roadmap with key milestones and timelines
Strategic Advisory	Expert guidance for confident, well-informed investment decision-making

BUSINESS OPPORTUNITY: IV CANNULAS MANUFACTURING

Following rigorous techno-economic feasibility assessment, NPCS recommended establishing an IV Cannulas Manufacturing Unit as the most strategically attractive and commercially viable opportunity for M/s. Nureca Limited.

Why IV Cannulas?

IV cannulas (intravenous cannulas) are fundamental single-use medical consumables used for intravenous access and fluid administration across virtually all healthcare settings. Their essential, recurring nature creates a predictable demand base:

- Hospitals, nursing homes, and multi-specialty healthcare institutions
- Emergency care facilities and intensive care units (ICUs)
- Diagnostic centers and surgical suites
- Clinics and out-patient treatment centers
- Government-run public health facilities and dispensaries

MARKET OPPORTUNITY & DEMAND OUTLOOK

The market outlook for IV cannulas is highly favorable, driven by multiple converging macro and sector-level growth drivers identified by NPCS:

Healthcare Infrastructure Growth	Rapid expansion of hospitals, specialty clinics, and diagnostic networks across India and emerging markets is creating sustained, scalable demand for medical disposables.
Medical Disposable Adoption	Rising focus on infection control, patient safety, and single-use sterile products is accelerating institutional procurement of IV cannulas.
Government Health Initiatives	National health schemes, expanded public hospital capacities, and increased healthcare budgets are amplifying institutional purchasing volumes.
Import Substitution Opportunity	Significant share of medical consumables in India is still imported. Domestic manufacturing provides a competitive cost advantage and policy support tailwinds.
Export Market Potential	Quality-certified Indian manufacturers are increasingly competitive in export markets across Southeast Asia, Africa, and the Middle East.
Recurring Institutional Demand	IV cannulas are consumables with zero reuse — ensuring continuous, predictable, and volume-scalable institutional procurement cycles.

Based on NPCS's comprehensive market intelligence, the IV Cannulas segment demonstrates favorable long-term commercial viability and demand sustainability — making it an ideal investment for a large-scale manufacturing venture.

TECHNICAL INSIGHTS: MANUFACTURING PROCESS

The manufacturing process for IV cannulas involves precision engineering and quality-controlled production under sterile conditions. Key process stages include:

Step 1	**Raw Material Procurement**	Medical-grade polymers (PP/PE), stainless steel needle wire, flash-back chambers, and other sterile components are procured from certified suppliers.
Step 2	**Component Manufacture**	Precision cannula tubes are manufactured via extrusion and grinding. Needle components undergo precision forming and tip sharpening.
Step 3	**Assembly**	Automated assembly of needle, cannula, flashback chamber, plug, and wings under clean-room conditions to maintain sterility standards.
Step 4	**Quality Inspection**	Each unit undergoes dimensional verification, tip sharpness, flow rate, and sterility testing per ISO 10555 and IS 10258 standards.
Step 5	**Sterilization**	Ethylene oxide (EO) or gamma radiation sterilization is applied to ensure medical-grade sterility compliance.
Step 6	**Packaging & Labeling**	Individual sterile blister packs with lot coding, expiry dating, and regulatory labeling are applied prior to dispatch.

Key Machinery & Technologies

- Precision extrusion lines for polymer tubing
- CNC needle grinding and sharpening machines
- High-speed automated assembly stations (clean-room environment)
- Vision-based optical inspection systems
- EO sterilization chambers or Gamma radiation units
- Automated blister packing and labeling lines

FINANCIAL & INVESTMENT OVERVIEW

NPCS conducted a structured financial viability evaluation to determine the investment attractiveness of the IV Cannulas Manufacturing Unit. The assessment covered all critical financial parameters:

Project Scale	Large-scale industrial manufacturing unit
Capital Investment	Evaluated across land & building, plant & machinery, and pre-operative expenses
Working Capital	Assessed for raw materials, WIP inventory, finished goods, and receivables cycle
Revenue Projection	Based on installed capacity utilization, product pricing, and institutional demand volumes
Profitability Outlook	Strong gross and net margins expected given low per-unit raw material cost and high demand volumes
Payback Period	Favorable payback horizon identified through financial modeling
ROI / IRR	Project demonstrated commercially attractive returns commensurate with large-scale investment
Break-even Analysis	Break-even output level determined to be achievable within initial production ramp-up phase

The project was assessed as economically viable, commercially sustainable, and strategically aligned with the client's large-scale investment mandate — subject to efficient project execution and operational planning.

RESULTS & KEY OUTCOMES

Through NPCS's structured consultancy engagement, M/s. Nureca Limited achieved the following tangible outcomes:

- ✓ Entry into a high-growth healthcare manufacturing sector with long-term commercial prospects
- ✓ Expert validation of investment decision through rigorous techno-economic analysis
- ✓ Clear market demand visibility backed by data-driven institutional demand assessment
- ✓ Reduced investment risk through structured feasibility analysis and financial modeling
- ✓ Comprehensive understanding of manufacturing process, technical requirements, and quality standards
- ✓ Confidence to commit capital with a well-defined implementation roadmap and milestone plan
- ✓ Strategic positioning in the fast-growing medical disposables segment
- ✓ Access to NPCS's global industrial knowledge network for ongoing advisory support

CLIENT TESTIMONIAL

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> *NPCS provided us with valuable techno-economic insights and strategic guidance that enabled us to evaluate a promising healthcare manufacturing opportunity with clarity and confidence. Their structured feasibility approach and professional support played an important role in our investment planning process.*
>
> **— M/s. Nureca Limited, Chandigarh**

WHY CHOOSE NPCS

NPCS stands apart in the industrial consultancy landscape through a combination of deep domain expertise, data-driven methodology, and unwavering commitment to client success:

Proven Industrial Expertise	30+ years and 30,000+ DPRs across every major manufacturing sector — delivering bankable insights grounded in real-world project data.
Global Market Intelligence	Clients across 50+ countries trust NPCS for market intelligence that reflects both local dynamics and international demand trends.
Data-Driven Feasibility	Every recommendation is backed by rigorous quantitative analysis — market sizing, financial modeling, and supply-chain assessment.
End-to-End Project Support	From opportunity identification and feasibility study through to DPR delivery, NPCS provides comprehensive support at every stage.
Risk Mitigation Approach	NPCS proactively identifies technical, financial, and operational risks — enabling clients to make investment decisions with full visibility.
Sector-Agnostic Coverage	Expertise spanning healthcare, agro-processing, chemicals, plastics, textiles, food, energy, and more — enabling cross-sector opportunity comparison.

CONCLUSION

Investing in a manufacturing business requires far more than recognizing market opportunity — it demands technical validation, financial feasibility analysis, and a structured implementation strategy.

Through its structured consultancy methodology, Niir Project Consultancy Services (NPCS) empowered M/s. Nureca Limited to identify a commercially viable, technically feasible, and strategically aligned healthcare manufacturing opportunity — the IV Cannulas Manufacturing Unit — with full confidence in its long-term potential.

This engagement is a testament to NPCS's ability to transform investment vision into well-defined, bankable industrial projects. By delivering rigorous market intelligence, technical clarity, and financial

modeling, NPCS enabled the client to commit capital with confidence and proceed with a clear path to profitable implementation.