Siddharth Pal

I. Personal Information

Name: Siddharth Pal Date of Birth: 22-10-1985 Current Position & Domain: Deputy Director, Industrial Engineering Office Location: National Productivity Council, New Delhi Languages: Hindi, English, Punjabi Contact: Email: <u>Siddharth.pal@npcindia.gov.in</u>; Mob: +91-9910366514

II. <u>Professional Summary</u>

Results-driven Industrial Engineer & Trainer with 15+ years of experience in productivity enhancement, process optimization, and lean manufacturing. Proven expertise in delivering cost savings, efficiency gains, and capacity improvements across industries. Committed to driving operational excellence and sustainable growth through innovative solutions and strategic leadership.

III. Areas of Expertise

Primary Domains	Specialized Skills	Industry Focus
 Productivity Enhancement Process Optimization Lean Manufacturing Manpower Optimization 5 'S' Implementation 	 Data Analysis and Benchmarking Capacity Building and Training Project Management Operational Excellence 	 Automotive & Manufacturing Process Industry Service Sector Public Sector Undertakings (PSUs) Government Sector

IV. <u>Professional Experience</u>

Current Position: Deputy Director, Industrial Engineering	
Organisation: National Productivity Council (NPC), New Delhi	
Duration: [Oct'2015 - Present]	
Key Responsibilities:	
 Developing and implementing industrial engineering strategies to improve productivity, optimize resources, reduce costs, and enhance operational efficiency. Providing expert consultation in industrial engineering and process optimization. Designing and implementing process improvements to increase throughput, reduce waste, and improve product quality. 	
 Conducting time and motion studies to analyze workflows and identify opportunities for reducing cycle time and improving efficiency. 	

- Leading cross-functional teams to deliver high-impact projects and Govt. Schemes.
- Driving capacity-building programs for industry professionals.



Previous Position: Executive - Purchase

Organisation: Honda Motorcycle & Scooter India Private Limited, Manesar

Duration: [Oct'2012 – Oct'2015]

Key Responsibilities:

- Developed and implemented procurement strategies to meet the company's production and operational needs.
- Identified and developed new supplier relationships, including vendor evaluation and selection based on cost, quality, and reliability.
- Collaborated with other departments (e.g., production, R&D, quality control) to understand material requirements and timelines.
- Forecasted demand for raw materials, components, and services to ensure uninterrupted production.
- Ensured that all purchased materials and components meet HMSI's quality standards and specifications.
- Worked closely with the quality control team to address any issues related to supplier materials.
- Implemented corrective actions with suppliers in case of quality deviations.
- Prepared reports on procurement activities, supplier performance, and cost analysis.
- Maintained strong relationships with suppliers and conducted regular performance reviews to ensure compliance with HMSI's standards.

Previous Position: Production Control Officer (CKD)]

Organisation: Nissan Trading India Private Limited, Chennai

Duration: [May'2011 – Oct'2012]

Key Responsibilities:

- Developed and implemented key performance indicators (KPIs) to monitor and track production performance, leading to a 15% increase in overall equipment effectiveness (OEE).
- Successfully implemented a comprehensive production control system, optimizing workflow and resource utilization, resulting in a 20% increase in production efficiency.
- Led the development and execution of robust production schedules and plans, ensuring on-time delivery of products and reducing lead times by 15%.
- Implemented effective inventory management strategies, reducing excess inventory levels by 25% and achieving significant cost savings.
- Managed a 3PL team of 120+ staff, achieving 97% on-time delivery (OTD).

Previous Position: Relationship Officer

Organisation: American Express India Private Limited

Duration: [Dec'2010 – Feb'2011]

Key Responsibilities:

- Built and maintained strong, long-term relationships with key clients.
- Acted as the primary point of contact for clients, addressing their needs, concerns, and inquiries.
- Understood clients' financial goals, business needs, and spending patterns to provide tailored solutions.
- Provided expert advice on how clients can optimize their use of American Express products to meet their financial and business objectives.
- Educated clients on the benefits of Amex products, such as cashback, travel rewards, or expense management tools.

V. Major Project Experience in NPC

Project Title: Mannower Ontimisation Study
Client Name: Trannek Silox Industry Private Limited Guiarat Tyne: Private Sector: Chemical
Role: Team Member
Duration: April'18 to Dec'18
Problem Definition:
To suggest ontimized mannower requirement as per industrial engineering studies
 To provide suggestions for productivity improvement wherever evident during the course of
conducting manpower ontimisation study
Recommendations Made: Mannower was ontimized by reducing 71 workers across plants. Process
improvements included installing SO2 gas sensors enhancing ventilation and providing safety training
Automation such as roller conveyors and electric forklifts reduced manual handling and emissions. Efficiency
gains saw hagging time cut from 18.7 to 12.6 seconds with better material handling systems. These changes
led to cost savings through ontimized resources reduced emissions, and improved productivity by 15% while
minimizing accidents with better safety protocols.
Ouantifiable results achieved:
 Manpower Reduction:
 SO2 Plant: Reduced 9 operators.
 SHS Plant: Reduced 36 workers.
 Old Hydro Plant: Reduced 6 helpers.
 Packaging Area: Reduced 20 helpers.
Process improvements achieved:
• Safety Enhancements:
• Introduction of SO2 gas detection sensors and safety training for better PPE
adherence.
 Improved ventilation and dust control measures in the packaging area to ensure
better air quality and work environment.
 Automation & Ergonomics:
 Installed roller conveyors to reduce manual handling of drums.
 Introduced electric forklifts to replace diesel forklifts, reducing carbon monoxide
levels.
Process Efficiency Gains:
• Reduced the average time per bag from 18.7 seconds to 12.6 seconds by using portable
telescopic conveyors.
• Manual handling reduced significantly by installing hopper weighing systems and roller
conveyors, enhancing overall efficiency.
Cost Reduction:
• Contract manpower reduction and reallocation of tasks led to better utilization of resources.
\circ The use of electric forklifts helped in reducing emissions, leading to potential long-term
savings on health-related costs upto INR 11 lakhs.
Material Handling Optimization:
 Reorganized layout and installed roller conveyors, improving productivity by 15%.
• By reducing manual labour and improving safety protocols, accident rates and associated
costs can be minimized.

- Capacity building outcomes:
- Safety Enhancements:
 - Introduction of SO2 gas detection sensors and safety training for better PPE adherence.
 - Improved ventilation and dust control measures in the packaging area to ensure better air quality and work environment.
- > Automation & Ergonomics:
 - Installed roller conveyors to reduce manual handling of drums.
 - Introduced electric forklifts to replace diesel forklifts, reducing carbon monoxide levels.

Project Title: Production Norms Study

Client Name: BIC-Cello Type: Private Sector: Manufacturing

Role: Team Member

Duration: April'18 to Dec'18

Problem Definition:

- To suggest optimized production norms for BIC-Cello, Daman.
- Production inefficiencies due to low output, poorly maintained machines, and line imbalance issues at Bic-Cello's CSPL Unit in Daman.

Recommendations Made: Improvements in machine maintenance, automation, and ergonomic redesigns. The line balancing resulted in 50-52% increased output across operations, with a manpower reduction of 38 workers. Cost reductions were achieved through minimized rework and improved material handling. Capacity building focuses on training and motivation through performance-linked incentives.

- Quantifiable results achieved:
 - Improved production targets for most operations (e.g., 22% improvement in rotary machine output).
 - Enhanced output in moulding, extrusion, and assembly sections by up to 52% in some cases (e.g., Linear Gel Refill Machine).
 - Reduction in manpower for some sections, achieving an overall reduction of 38 workers.

• Process improvements achieved:

- Production Norms: Established improved norms for various machines, including the introduction of continuous workflows without interruptions.
- Line Balancing: Balanced workstations to reduce forced idleness, particularly in the assembly lines.
- Reduced Changeover Time: Applied techniques like SMED to minimize machine changeover times.

Process Efficiency Gains:

- 22% increase in output for the rotary machine.
- 52% increase in refill machine output.
- 23% increase in foiling production.
- Significant reduction in changeover times on various machines.

• Cost Reduction:

- Reduced manpower costs by optimizing workforce requirements, leading to a net reduction of 38 operators.
- Minimized rework and reject rates through machine improvements and preventative maintenance resulted in overall savings of INR 20.5 Lakhs.

• Material Handling Optimization:

- Introduced standardized material handling bins and material handling equipment to reduce manual handling, improving operator safety and reducing non-value-adding activities.
- Improved workstations and ergonomic redesigns to streamline material flow and reduce operator strain.

Capacity building outcomes:	
 Increased operator awareness and efficiency through training on SOPs and control plans. 	
 Introduced incentive schemes that focus on both productivity and quality, motivatin 	
workers to achieve higher performance levels.	
Project Title: Exhaustive Time Study for WAG-9 Locomotive	
Client Name: Chittaranian Locomotive Works (CLW) Type: Government Sector: Bailway Loco Manufacturin	
Role: Team Member	
Duration: Oct'22 to May'23	
Problem Definition:	
To suggest ontimized manpower requirement as per industrial engineering studies	
 To provide suggestions for productivity improvement wherever evident during the course of 	
 To provide suggestions for productivity improvement wherever evident during the course of conducting mannower optimisation study. 	
Percentrations Made: Eliminate redundant energitions, like unnecessary milling in bagic fabrication, an	
Recommendations Made: Eliminate redundant operations, like unnecessary mining in bogie fabrication, and	
Quantifiable results achieved: Deductions in Evenes Operations, Several redundant and duplicated exerctions was	
 Reduction in Excess Operations: Several redundant and duplicated operations wer identified across share, particularly in energians involving Dagis Frame Machining leadin 	
to the removal of uppecessory tacks like excess material milling and subsequent grinding	
to the removal of unnecessary tasks like excess material mining and subsequent grinning.	
- Optimization of Allowed Time (AT): The study provided an updated Allowed Time (AT) to	
in a more streamlined process that could enhance worker efficiency	
in a more streamlined process that could enhance worker efficiency.	
Process improvements achieved:	
 Update of Process Documents: The study revealed discrepancies between the actual 	
production process and the documentation (e.g., Route Sheets), with key operations eithe	
missing or redundant. Recommendations included updating the Route Sheets and Wor	
Instructions to match the current production processImproved ventilation and dust contro	
measures in the packaging area to ensure better air quality and work environment.	
Sequencing and Accounting of Operations: The study highlighted improper sequencing of Operations.	
operations, leading to inefficient use of resources. Recommendations focused on bette	
alignment of operations to avoid redundant processes and better accounting for tasks	
Process Efficiency Gains:	
 Reduction in Double Counting of AT: The study identified instances where AT for the sam 	
operation was counted multiple times under different C&Ds, reducing overall process clarity	
Streamlining the calculation of AT by properly grouping operations is expected to enhanc	
efficiency.	
Improved Resource Management: Through the rationalization of operations and processes	
the need for redundant use of materials such as welding gas, electricity, and additiona	
manhours was reduced.	
Cost Reduction:	
Elimination of Redundant Material Handling: Recommendations included avoidin	
unnecessary milling and grinding in bogie frame machining operations, leading to	
reduction in man-hours and material consumption such as welding gas.	
 Reduction of Idle Time: By suggesting proper gang size rationalization and reducing the tim 	
lost to inaccurate operations (like measurement errors), the study recommends cuttin	
down non-productive work leads to cost reduction of INR 11.5 lakhs.	

• Material Handling Optimization:

 Suggestions for ergonomic improvement by introduction of conveyor systems and mechanical lifters for reducing the manual effort and speed up the operations, such as moving materials during the assembly.

• . Capacity building outcomes:

 The study highlighted the need for cross-functional teams comprising Design, Production, and Quality teams to regularly update and review production documents, ensuring workers are trained in the latest processes.

VI. Educational Background

Post Graduation Degree/Diploma:

- Degree: Post Graduate Diploma in Business Management (PGDBM)
- Institution: Welingkar Institute of Management, Mumbai Type: Hybrid Mode
- Year: 2019; Specialization: Operations Management
- Diploma: Postgraduate Certificate in Industrial Engineering
- Institution: Ambedkar Institute of Productivity (AIP), Chennai Type: Full Time
- Year: 2010; Specialization: Industrial Engineering (IE)

Graduation:

- Degree: Bachelor of Technology (B. Tech)
- Institution: Guru Gobind Singh Indraprastha University (GGSIPU), New Delhi
- Type: Full Time Year: 2009; Specialization: Mechanical & Automation Engineering (MAE)

Additional Professional Qualifications:

- Certified Six Sigma Black Belt (CSSBB) from Ministry of MSME, Gol.
- Certified Six Sigma Green Belt (CSSGB) from Ministry of MSME, Gol.
- Certified in Project Management (CPIM) from i2P2M
- Certified Machine Tool Technologist (MTT) from NSIC, Sponsored by Dept. of Science & Technology, Gol.
- Certified Productivity Specialist (CPS) from Asian Productivity Organization (APO), Japan.
- Proficient in MS Office Suite
- Proficient in Minitab, Power BI & Canva

VII. <u>Research and Publications</u>

Recent Publications:

 "Toyota Production System (TPS) – Applications & Benefits for Indian Pump & Motor Manufacturing Industry A Case Study" Published online in International Journal of Research in Engineering, Science and Management (IJERSM). <u>https://www.ijresm.com/Vol.2 2019/Vol2 Iss9 September19/IJRESM V2 I9 56.pdf</u>

Speaking Engagements:

- Resource Speaker for Workplace management through 5 'S' for Rajya Sabha, New Delhi
- Resource Speaker for Workplace management through 5 'S' for National Capital Regional Transport Corporation (NCTRC), New Delhi
- Resource Speaker for Lean tools for Hamdard India Private Limited, Manesar
- Esteemed Jury member for GMR Delhi International Airport Limited (DIAL) 5 'S' Competition.
- Guest Speaker for the Operations Confab for SRM University, Chennai
- Guest Speaker for Various State Government Programmes for Lean & MCLS for MP, UP and Gujarat States.

Awards and Recognition

- Best Kaizen Award for reducing rejections of ACG Assembly and Starter Motor in Honda Motorcycle and Scooter India Private Limited.
- Received letter of appreciation from GM-CLW, Chittranjan for timely completion of Time study.
- Received first prize for various quiz competitions organized in APO CPS training programme organized by Malaysia Productivity Corporation (MPC), Malaysia.

Certification:

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes myself, my qualifications, and my experience. I understand that I shall be responsible for any willful misstatement described herein.

Date: 10.02.2025

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Place: New Delhi

Siddharth Pal