

RESUME

Name : DR. INDERPREET SINGH AHUJA
Designation : PROFESSOR
Department : Department of Mechanical Engineering
Address for Correspondence: DR. INDERPREET SINGH AHUJA
Professor,
Department of Mechanical Engg,
Punjabi University, Patiala – 147002
(Punjab) INDIA

Mobile: 9501533113 (M)

E-mail: ahujaips@gmail.com,
ahujaips@yahoo.co.in,
ipsahuja@pbi.ac.in



ACADEMIC QUALIFICATIONS:

Course/ Degree	Stream	University / Institution	Year	CGPA (%age)	Division
Ph.D.	Mechanical Engineering	Department of Mechanical Engineering, Punjabi University, Patiala	2008		
M.Tech.	Industrial Engineering	Thapar Institute of Engineering & Technology, Patiala	1998	CGPA- 9.27 (83.43%)	1 st with Distinction
Bachelor of Engineering (B.E.)	Mechanical Engineering	Thapar Institute of Engineering & Technology, Patiala	1993	CGPA- 9.65 (86.85%)	1 st with Distinction Gold Medallist

AREA OF SPECIALIZATION:

- **PH.D. TOPIC:** Strategic Implementation of Total Productive Maintenance in Indian Manufacturing Industry for enhanced Competitiveness (Completed December 2008)
- **PRIMARY RESEARCH AREA:** Production & Industrial Engineering, Total Productive Maintenance, Lean Manufacturing, Total Quality Management, ISO 9000, 5S, Technology Management
- **SECONDARY RESEARCH AREA:** Hard Turning, 3D Printing, Rapid Prototyping.

SUBJECTS TAUGHT:

- Industrial Engineering
- Plant Layout & Materials Handling
- Facilities Layout & Design
- Manufacturing Processes
- Manufacturing Technology
- Non-Traditional Machining Processes
- Refrigeration & Air Conditioning
- Operations Research
- Thermodynamics
- Engineering Drawing
- Machine Drawing

EMPLOYMENT HISTORY:

- Lecturer at Thapar Institute of Engineering & Technology, Patiala from August 1993 – January 1995.
- Scientific Officer-C at Centre for Advanced Technology, Department of Atomic Energy, Indore from January 1995 – November 1996.
- Lecturer at Thapar Institute of Engineering & Technology, Patiala from December 1996 – July 2005.
- Reader at University College of Engineering, Punjabi University, Patiala from July 2005 – July 2008.
- Associate Professor at University College of Engineering, Punjabi University, Patiala from July 2008 – July 2011
- Professor Mechanical Engineering at University College of Engineering, Punjabi University, Patiala from July 2011 – September, 2013.
- Professor at Department of Mechanical Engineering, Punjabi University, Patiala since September, 2013.

MEMBERSHIP OF PROFESSIONAL BODIES/ORGANISATIONS

- Life Member, Indian Society of Heating Refrigeration and Air Conditioning (ISHRAE)
- Life Member, Indian Society of Technical Education, (ISTE)

MEDALS/AWARDS/HONOURS/RECEIVED

- Received Institute Gold Medal from Thapar Institute of Engineering & Technology, Patiala for securing 1st position in B.Tech. (Mechanical Engineering) for batch 1989-1993
- Received HMT Gold Medal from Thapar Institute of Engineering & Technology, Patiala for securing 1st position in B.Tech. (Mechanical Engineering) for batch 1989-1993

ADMINISTRATIVE RESPONSIBILITIES

- In charge, Department of Mechanical Engineering, Punjabi University, Patiala from September, 2008 to May, 2011
- Head, Department of Mechanical Engineering, Punjabi University, Patiala from 16 September, 2016 to 15 September, 2019
- Chairman, Administrative Committee of Department, Department of Mechanical Engineering, Punjabi University, Patiala from September, 2016 to September, 2019
- Member, Administrative Committee of Department, Department of Mechanical Engineering, Punjabi University, Patiala from September, 2009-10, 2013-18, 2020-21, 2022-23
- Dean, Multi-Disciplinary Five Year Integrated Programme (FYIP) since 05.07.2024

ACADEMIC RESPONSIBILITIES

- Member, Board of Studies, Department of Mechanical Engineering, Punjabi University, Patiala from September, April, 2006 to July, 2024
- Chairman, Board of Studies, Department of Mechanical Engineering, Punjabi University, Patiala from September, 2016 to September, 2019
- Member, Faculty of Engineering, Department of Mechanical Engineering, Punjabi University, Patiala from September from December, 2010 to December, 2024
- Member, Board of Post Graduate Studies and Research, Department of Mechanical Engineering, Punjabi University, Patiala from September, 2011 to September, 2025
- Member, Ph.D. Coursework Committee, Department of Mechanical Engineering, Punjabi University, Patiala from September, 2010 to 2022
- Member, Administrative Committee of Department, Department of Mechanical Engineering, Punjabi University, Patiala from 2009-10, 2013-18, 2020-21, 2022-23
- Expert, Faculty of Engineering & Technology, Sri Guru Granth Sahib World University, Fatehgarh Sahib, Punjab from July 2022 to July 2024
- Expert, Undergraduate Board of Studies, Automobile Engineering (Vocational), Khalsa College, Punjab from 2018 to 2024
- Expert, Board of Studies, Department of Mechanical Engineering, Desh Bhagat University, Mandi Gobindgarh, Punjab from 2022 to 2023
- Expert, Board of Studies, Department of Mechanical Engineering, RIMT University, Mandi Gobindgarh, Punjab from 2017 to 2021

RESEARCH PROFILE

➤ Publications in International Journals	:	201
➤ Publications in National Journals	:	07
➤ Patents Accepted/Published	:	01
➤ Consultancy Projects Handled	:	04
➤ Publications in International Conferences	:	24
➤ Publications in National Conferences	:	25
➤ Books Published	:	07
➤ Chapters in Books	:	45
➤ AICTE Course Material Published	:	01
➤ Ph.D. Guidance	:	17, 02 (Registered)
➤ M.Tech. Thesis Guided	:	19
➤ Invited Lectures and Chairmanships at National or International Conferences/Seminars/Faculty Development Programs	:	55

GOOGLE SCHOLAR PROFILE:

<https://scholar.google.com/citations?user=6sCtdsEAAAAJ&hl=en>

LINKEDIN PROFILE

<https://www.linkedin.com/in/ahujaips/>

ORCID ID

<https://orcid.org/0000-0002-7055-1428>

SCOPUS ID

<https://www.scopus.com/authid/detail.uri?authorId=22133366300>

YOU TUBE CHANNEL

Lecture Series on Engineering Graphics by DR. I.P.S. AHUJA

<https://youtube.com/@inderpreetsinghahuja4011?feature=shared>

Includes more than 130 illustrative sessions.





Ahuja, I. P.S.

[Punjabi University, Patiala, India](#) [22133366300](#) <https://orcid.org/0000-0002-7055-1428> [View more](#)

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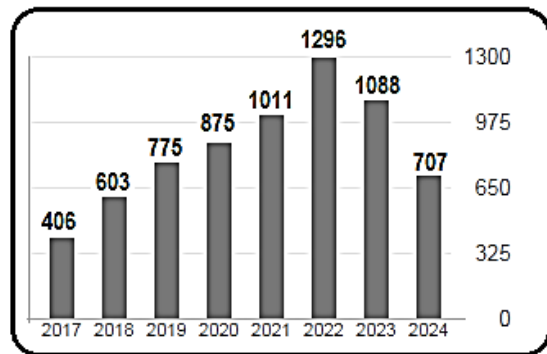
Inderpreet Singh Ahuja

Professor in Mechanical Engineering

Verified email at pbi.ac.in

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Cited by	VIEW ALL	
	All	Since 2019
Citations	8374	5763
h-index	41	35
i10-index	126	109



TOP CITED RESEARCH PAPERS

TITLE	CITED BY	YEAR
<p>Recycling of plastic solid waste: A state of art review and future applications N Singh, D Hui, R Singh, IPS Ahuja, L Feo, F Fraternali Composites Part B: Engineering 115, 409-422</p>	1217	2017
<p>Total productive maintenance: literature review and directions IPS Ahuja, JS Khamba International journal of quality & reliability management 25 (7), 709-756</p>	1155	2008
<p>5S—a quality improvement tool for sustainable performance: literature review and directions JS Randhawa, IS Ahuja International Journal of Quality & Reliability Management 34 (3), 334-361</p>	334	2017
<p>Strategies and success factors for overcoming challenges in TPM implementation in Indian manufacturing industry IPS Ahuja, JS Khamba Journal of Quality in Maintenance Engineering 14 (2), 123-147</p>	246	2008
<p>An evaluation of TPM implementation initiatives in an Indian manufacturing enterprise IPS Ahuja, JS Khamba Journal of quality in maintenance engineering 13 (4), 338-352</p>	229	2007
<p>An evaluation of TPM initiatives in Indian industry for enhanced manufacturing performance IPS Ahuja, JS Khamba International Journal of Quality & Reliability Management 25 (2), 147-172</p>	201	2008
<p>An empirical investigation of dynamic capabilities in managing strategic flexibility in manufacturing organizations D Singh, J Singh Oberoi, I Singh Ahuja Management Decision 51 (7), 1442-1461</p>	175	2013
<p>An evaluation of the synergic implementation of TQM and TPM paradigms on business performance M Kaur, K Singh, I Singh Ahuja International Journal of Productivity and Performance Management 62 (1), 66-84</p>	145	2012
<p>A case study of total productive maintenance implementation at precision tube mills IPS Ahuja, P Kumar Journal of Quality in Maintenance Engineering 15 (3), 241-258</p>	139	2009
<p>Weldability of thermoplastic materials for friction stir welding-A state of art review and future applications R Kumar, R Singh, IPS Ahuja, R Penna, L Feo Composites Part B: Engineering 137, 1-15</p>	138	2018
<p>Assessment of contributions of successful TPM initiatives towards competitive manufacturing IPS Ahuja, JS Khamba Journal of Quality in Maintenance Engineering 14 (4), 356-374</p>	129	2008
<p>Influence of cutting parameters on tool wear and surface roughness in hard turning of AISI H11 tool steel using ceramic tools S Saini, IS Ahuja, VS Sharma International Journal of Precision Engineering and Manufacturing 13, 1295-1302</p>	108	2012
<p>Application of fusion deposition modelling for rapid investment casting—a review P Kumar, IPS Ahuja, R Singh International Journal of Materials Engineering Innovation 3 (3-4), 204-227</p>	104	2012
<p>Residual stresses, surface roughness, and tool wear in hard turning: a comprehensive review S Saini, IS Ahuja, VS Sharma Materials and Manufacturing Processes 27 (6), 583-598</p>	103	2012
<p>Evaluating impact of 5S implementation on business performance JS Randhawa, IS Ahuja International Journal of Productivity and Performance Management 66 (7), 948-978</p>	102	2017

RESEARCH PUBLICATIONS

PUBLICATIONS IN REFEREED INTERNATIONAL JOURNALS (201)

1. Ahuja, I.P.S. and Khamba, J.S. (2007), “An Evaluation of TPM Implementation Initiatives in an Indian Manufacturing Enterprise”, *Journal of Quality in Maintenance Engineering (JQME)*, Vol. 13, No. 4, pp. 338 – 352. (ISSN: 1355-2511) SCOPUS (**EMERALD 2023 IF: 1.8**)
2. Ahuja, I.P.S. and Khamba, J.S. (2008), “An Evaluation of TPM Initiatives in Indian Industry for Enhanced Manufacturing Performance”, *International Journal of Quality & Reliability Management (IJQRM)*, Vol. 25, No. 2, pp. 147 – 172. (ISSN: 0265-671X) (**EMERALD 2023 IF: 2.7**), SCOPUS
3. Ahuja, I.P.S. and Khamba, J.S. (2008), “Total Productive Maintenance Implementation in a Manufacturing Organization”, *International Journal of Productivity and Quality Management (IJPQM)*, Vol. 3, No. 3, pp. 360 – 381. (ISSN-Online: 1746-6482, ISSN-Print: 1746-6474) *INDERSCIENCE*, SCOPUS
4. Ahuja, I.P.S. and Khamba, J.S. (2008), “An Assessment of Maintenance Management Initiatives in the Indian Manufacturing Industry”, *International Journal of Technology, Policy, Management (IJTPM)*, Vol. 8, No. 3, pp. 250 – 278. (ISSN-Online: 1741-5292, ISSN-Print: 1468-4322) *INDERSCIENCE*, SCOPUS
5. Ahuja, I.P.S. and Khamba, J.S. (2008), “Strategies and Success factors for overcoming Challenges in TPM Implementation in Indian Manufacturing Industry”, *Journal of Quality in Maintenance Engineering (JQME)*, Vol. 14, No. 2, pp. 123 – 147. (ISSN: 1355-2511) SCOPUS (**EMERALD 2023 IF: 1.8**)
6. Ahuja, I.P.S. and Khamba, J.S. (2008), “Justification of Total Productive Maintenance Initiatives in Indian Manufacturing Industry for achieving Core Competitiveness”, *Journal of Manufacturing Technology Management (JMTM)*, Vol. 19, No. 5, pp. 645 – 669. (ISSN: 1741-038X) (**EMERALD 2023 IF: 7.3**), SCOPUS
7. Ahuja, I.P.S. and Khamba, J.S. (2008), “Total Productive Maintenance – Literature Review and Directions”, *International Journal of Quality & Reliability Management (IJQRM)*, Vol. 25, No. 7, pp. 709 – 756. (ISSN: 0265-671X) (**EMERALD 2023 IF: 2.7**), SCOPUS
8. Ahuja, I.P.S. and Khamba, J.S. (2008), “Assessment of contributions of successful TPM Initiatives towards Competitive Manufacturing”, *Journal of Quality in Maintenance Engineering (JQME)*, Vol. 14, No. 4, pp. 356 – 374. (ISSN: 1355-2511), SCOPUS (**EMERALD 2023 IF: 1.8**)
9. Ahuja, I.P.S. and Khamba, J.S. (2009), “Evolving the indigenous TPM Methodology for the Indian Manufacturing Industry”, *International Journal of Technology, Policy and Management (IJTPM)*, Vol. 9, No. 1, pp. 29 – 73. (ISSN-Online: 1741-5292, ISSN-Print: 1468-4322) *INDERSCIENCE*, SCOPUS
10. Ahuja, I.P.S. and Khamba, J.S. (2009), “Investigation of Manufacturing Performance Achievements through Strategic Total Productive Maintenance Initiatives”, *International Journal of Productivity and Quality Management (IJPQM)*, Vol. 4, No. 2, pp. 129 – 152. (ISSN-Online: 1746-6482, ISSN-Print: 1746-6474) *INDERSCIENCE*, SCOPUS
11. Ahuja, I.P.S. and Kumar, P. (2009), “A case study of total productive maintenance implementation at Precision Tube Mills”, *Journal of Quality in Maintenance Engineering (JQME)*, Vol. 15, No. 3, pp. 241 – 258. (ISSN: 1355-2511) (**EMERALD 2023 IF: 1.8**)

12. Ahuja, I.P.S. (2011), "Managing Research and Development for Core Competence Building in an Organization", *Journal of Technology Management and Innovation (JOTMI)*, Vol. 6, No. 1, pp. 58 – 65. (ISSN-0718-2724)
13. Ahuja, I.P.S. (2011), "Quality assurance in technical education system through TQM paradigm", *International Journal of Business Continuity and Risk Management (IJBCRM)*, Vol. 2, No. 1, pp. 42 – 55. (ISSN-Online: 1758-2172, ISSN-Print: 1758-2164) (INDERSCIENCE)
14. Ahuja, I.P.S. (2011), "Manufacturing excellence through total productive maintenance paradigm", *International Journal of Technology, Policy and Management (IJTPM)*, Vol. 11, No. 1, pp. 1 – 10. (ISSN-Online: 1741-5292, ISSN-Print: 1468-4322) (INDERSCIENCE)
15. Ahuja, I.P.S. (2011), "Total productive maintenance practices in manufacturing organisations: literature review", *International Journal of Technology, Policy and Management (IJTPM)*, Vol. 11, No. 2, pp. 117 – 138. (ISSN-Online: 1741-5292, ISSN-Print: 1468-4322) (INDERSCIENCE)
16. Amandeep Singh, R. Kumar and I.P.S. Ahuja (2011), "Examination for shell wall thickness of Magnesium alloy using Three Dimensional Printing", *International Journal of Science, Technology & Management*, Vol. 2, No. 1, pp. 61 – 68. (ISSN: 0976-2140)
17. Doordarshi Singh, Jaspreet Singh Oberoi and Inderpreet Singh Ahuja (2011), "A Survey of Literature of Conceptual Frameworks Assessing Supply Chain Flexibility", *International Journal of Applied Engineering Research*, Vol. 2, No. 1, pp. 172 – 182. (ISSN-Online: 0976-4259)
18. Rupinder Singh, I.P.S. Ahuja and Jasbirpal Singh (2011) "Investigating the machining characteristics of HCHCr with Electric Discharge Machining", *International Journal of Materials Science and Engineering*, Vol. 2, Nos. 1-2, pp. 29 – 31. (ISSN No. 0976-6243)
19. Sanjeev Saini, I.P.S. Ahuja and Vishal S. Sharma (2012), "The effect of cutting parameters on surface integrity in hard turning", *Applied Mechanics and Materials: Mechanical and Aerospace Engineering*, Vol. 110-116, pp. 751 – 757. (ISSN: 1662-7482, Trans Tech Publications).
20. Ahuja, I.S. (2012), "Total quality management implementation for reducing percent process defects in a manufacturing organization", *International Journal of Business Performance Management*, Vol. 13, No. 1, pp. 1 – 17. (ISSN-Online: 1741-5039, ISSN-Print: 1368-4892). (INDERSCIENCE)
21. Ahuja, I.P.S. and Pragat Singh (2012), "Application of Analytical Hierarchy Process for Justification of TPM Implementation in Manufacturing Organizations", *International Journal of Technology, Policy and Management (IJTPM)*, Vol. 12, No. 1, pp. 37 – 47. (ISSN-Online: 1741-5292, ISSN-Print: 1468-4322). (INDERSCIENCE)
22. Gurinder Singh and Inderpreet Singh Ahuja (2012), "Just-In-Time Manufacturing: Literature Review and Directions", *International Journal of Business Continuity and Risk Management (IJICBM)*, Vol. 3, No. 1, pp. 57 – 98. (ISSN-Online: 1758-2172, ISSN-Print: 1758-2164) (INDERSCIENCE)
23. Kanwarpreet Singh and Inderpreet Singh Ahuja (2012), "Justifying TQM-TPM Implementation in Manufacturing Organizations using AHP: A Decision Making Approach under Uncertainty", *International Journal of Productivity and Quality Management (IJPQM)*, Vol. 10, No. 01, pp. 69 – 84. (ISSN-Online: 1746-6482, ISSN-Print: 1746-6474) (INDERSCIENCE)
24. Sanjeev Saini, I.P.S. Ahuja and Vishal S. Sharma (2012), "Residual Stresses, Surface Roughness and Tool Wear in Hard Turning: A Comprehensive Review",

- Materials and Manufacturing Processes, Vol. 27, No. 6, pp. 583 – 598. (ISSN-Online): 1532-2475, ISSN-Print: 1042-6914). (**Taylor & Francis 2023 IF: 4.1**)
25. Ahuja, I.P.S. (2012), “Realizing Quality Assurance in Indian Technical Education”, International Journal of Indian Culture and Business Management (IJICBM), Vol. 05, No. 04, pp. 472 – 488. (ISSN-Online: 1753-0814, ISSN-Print: 1753-0806). (INDERSCIENCE)
 26. Ahuja, I.S. (2012), “Exploring the impact of effectiveness of Total Productive Maintenance strategies in Manufacturing Enterprise”, International Journal of Productivity and Quality Management (IJPQM), Vol. 9, No. 4, pp. 486 – 501. (ISSN-Online: 1746-6482, ISSN-Print: 1746-6474) (INDERSCIENCE)
 27. Sanjeev Saini, Inderpreet Singh Ahuja and Vishal S. Sharma (2012), “Influence of cutting parameters on tool wear and surface roughness in hard turning of AISI H11 tool steel using ceramic tools”, International Journal of Precision Engineering and Manufacturing, Vol. 13, No. 8, pp. 1295 – 1302. (ISSN-Online): 2005-4602, ISSN-Print: 2234-7593). (**SPRINGER 2023 IF: 2.6**)
 28. Parlad Kumar, I.P.S. Ahuja and Rupinder Singh (2012), “Application of Fusion Deposition Modelling for Rapid Investment Casting - A Review”, International Journal of Materials Engineering Innovation (IJMATEI), Vol. 3, No. 3/4, pp. 204 – 227. (ISSN-Online: 1757-2762, ISSN-Print: 1757-2754) (INDERSCIENCE)
 29. Sanjiv Kumar Jain and Inderpreet Singh Ahuja (2012), “An evaluation of ISO 9000 initiatives in Indian industry for enhanced manufacturing performance”, International Journal of Productivity and Performance Management, Vol. 61, No. 7, pp. 778 – 804. (ISSN-Online: 1741-0401) (**EMERALD 2023 IF: 5.9**)
 30. Sanjeev Saini, Inderpreet Singh Ahuja and Vishal S. Sharma (2012), “Modeling, Optimisation and Experimental Validation of Cutting Parameters to achieve minimum Tool Wear and Surface Roughness in Hard Turning of AISI H11 Tool Steel”, International Journal of Materials Engineering Innovation (IJMatEI), Vol. 3, No. 3/4, pp. 295 – 315. (ISSN-Online: 1757-2762, ISSN-Print: 1757-2754) (INDERSCIENCE)
 31. Kanwarpreet Singh and I.P.S. Ahuja (2012), “Transfusion of Total Quality Management and Total Productive Maintenance: A Literature Review”, International Journal of Technology, Policy and Management (IJTPM), Vol. 12, No. 4, pp. 275 – 311. (ISSN-Online: 1741-5292, ISSN-Print: 1468-4322) (INDERSCIENCE)
 32. Sanjiv Kumar Jain and Inderpreet Singh (2012), “ISO 9000 Quality Management System: Literature Review and Directions”, International Journal of Technology, Policy and Management (IJTPM), Vol. 12, No. 4, pp. 312 – 343. (ISSN-Online: 1741-5292, ISSN-Print: 1468-4322) (INDERSCIENCE)
 33. Doordarshi Singh, Jaspreet Singh Oberoi and Inderpreet Singh Ahuja (2012), “Assessing strategic flexibility of manufacturing organisations using AHP”, International Journal of Agile Systems and Management, Vol. 5, No. 4, pp. 319 – 329. (ISSN-Online: 1741-9182, ISSN-Print: 1741-9174) (INDERSCIENCE)
 34. Doordarshi Singh, Jaspreet Singh Oberoi and Inderpreet Singh Ahuja (2012), “A conceptual examination of impact of dynamic capabilities in managing strategic flexibility in manufacturing sector”, International Journal of Business Continuity and Risk Management (IJBCRM), Vol. 3, No. 3, pp. 187 – 205. (ISSN-Online: 1758-2172, ISSN-Print: 1758-2164) (INDERSCIENCE)
 35. Sanjiv Kumar Jain and Inderpreet Singh Ahuja (2012), “Application of analytical hierarchy process for justification of ISO 9000 implementation in manufacturing organisations”, International Journal of Business Continuity and Risk Management (IJBCRM), Vol. 3, No. 3, pp. 221 – 233. (ISSN-Online: 1758-2172, ISSN-Print: 1758-2164) (INDERSCIENCE)

36. Mandeep Kaur, Kanwarpreet Singh and Inderpreet Singh Ahuja (2013), "An evaluation of the synergic implementation of TQM and TPM Paradigms on Business Performance", *International Journal of Productivity and Performance Management (IJPPM)*, Vol. 62, No. 1, pp. 66 – 84. (ISSN-Online: 1741-0401) (**EMERALD 2023 IF: 5.9**)
37. Gurinder Singh and Inderpreet Singh Ahuja (2013), "Strategies and Success Factors for overcoming challenges in JIT implementation in Indian Manufacturing Industry", *International Journal of Technology, Policy and Management (IJTPM)*, Vol. 13, No. 1, pp. 15 – 33. (ISSN-Online: 1741-5292, ISSN-Print: 1468-4322) (INDERSCIENCE)
38. Rajesh Kumar, Rupinder Singh and I.P.S. Ahuja (2013), "Execution of Rapid Prototyping Technology - An Indian Manufacturing Industry's Perspective", *International Journal of Indian Culture and Business Management (IJICBM)*, Vol. 6, No. 2, pp. 162 – 184. (ISSN-Online: 1753-0814, ISSN-Print: 1753-0806). (INDERSCIENCE)
39. Sanjeev Saini, Inderpreet Singh Ahuja and Vishal S. Sharma (2013), "Modelling the effects of cutting parameters on residual stresses in hard turning of AISI H11 tool steel", *International Journal of Advanced Manufacturing Technology*, Vol. 65, No. 5-8, pp. 667 – 678. (ISSN-(Online): 1433-3015, ISSN-Print: 0268-3768). (**Springer 2023 IF: 2.9**)
40. Inderpreet Singh Ahuja and Pragat Singh (2013), "Total Productive Maintenance – A Tool for envisaging manufacturing competence", *International Journal of Technology, Policy and Management*, Vol. 13, No. 2, pp. 107 – 120. (ISSN-Online: 1741-5292, ISSN-Print: 1468-4322) (INDERSCIENCE)
41. Kanwarpreet Singh and I.P.S. Ahuja (2013), "Synergistic suitability of Transfusion of TQM-TPM for Indian Manufacturing Industries using Fuzzy Based Model Simulation", *International Journal of Business Continuity and Risk Management (IJBCRM)*, Vol. 4, No. 1, pp. 36 – 53. (ISSN-Online: 1758-2172, ISSN-Print: 1758-2164) (INDERSCIENCE)
42. Sanjiv Kumar Jain and Inderpreet Singh Ahuja (2013), "Strategies and Success Factors for overcoming challenges in ISO 9000 implementation in Indian Manufacturing Industry", *International Journal of Technology, Policy and Management (IJTPM)*, Vol. 13, No. 2, pp. 121 – 139. (ISSN-Online: 1741-5292, ISSN-Print: 1468-4322) (INDERSCIENCE)
43. Kanwarpreet Singh and I.P.S. Ahuja (2013), "Implementing TQM and TPM paradigms in Indian Context: Critical success factors and barriers", *International Journal of Technology, Policy and Management (IJTPM)*, Vol. 13, No. 3, pp. 226 – 244. (ISSN-Online: 1741-5292, ISSN-Print: 1468-4322) (INDERSCIENCE)
44. Doordarshi Singh, Jaspreet Singh Oberoi and Inderpreet Singh Ahuja (2013), "An empirical examination of barriers to strategic flexibility in Indian manufacturing industries using analytical hierarchy process", *International Journal of Technology, Policy and Management (IJTPM)*, Vol. 13, No. 4, pp. 313 – 327. (ISSN-Online: 1741-5292, ISSN-Print: 1468-4322) (INDERSCIENCE)
45. Sanjiv Kumar Jain and Inderpreet Singh (2013), "Evaluation of ISO 9000 implementation aptness for Indian Manufacturing Industries using Fuzzy Simulation", *International Journal of Business Continuity and Risk Management (IJBCRM)*, Vol. 4, No. 2, pp. 139 – 154. (ISSN-Online: 1758-2172, ISSN-Print: 1758-2164) (INDERSCIENCE)
46. Doordarshi Singh, Jaspreet Singh Oberoi and Inderpreet Singh Ahuja (2013), "An empirical investigation of dynamic capabilities in managing strategic flexibility in manufacturing organizations", *Management Decision*, Vol. 51, No. 7, pp. 1442 – 1461. (ISSN-Online: 0025-1747) (**EMERALD 2023 IF: 4.1**)

47. Kumar, Parlad, Singh, Rupinder and Ahuja, IPS (2013), "A Framework for Developing a Hybrid Investment Casting Process", *Asian Review of Mechanical Engineering*, Vol. 2, No. 2, pp. 49 – 55. (ISSN 2249 – 6289) (Publisher – The Research Publication)
48. Kanwarpreet Singh and Inderpreet Singh Ahuja (2014), "Assessing the Business Performance Measurements for Transfusion of TQM and TPM initiatives in the Indian manufacturing industry", *International Journal of Technology, Policy and Management (IJTPM)*, Vol. 14, No. 1, pp. 44 – 82. (INDERSCIENCE) (ISSN-Online: 1741-5292, ISSN-Print: 1468-4322) (INDERSCIENCE)
49. Inderpreet Singh Ahuja (2014), "An Evaluation of Impact of Technology Upgradations on Manufacturing Performance", *International Journal of Indian Culture and Business Management (IJICBM)*, Vol. 09, No. 02, pp. 229 – 247. (ISSN-Online: 1753-0814, ISSN-Print: 1753-0806). (INDERSCIENCE)
50. Gurinder Singh and Inderpreet Singh Ahuja (2014), "An Evaluation of Just-in-Time (JIT) implementation on manufacturing performance in Indian Industry", *Journal of Asia Business Studies*, Vol. 8, No. 3, pp. 278 – 294. (**EMERALD 2023 IF: 2.3**) (ISSN: 1558-7894).
51. Kanwarpreet Singh and Inderpreet Singh Ahuja (2014), "Effectiveness of TPM implementation with and without integration with TQM in Indian manufacturing industries", *Journal of Quality in Maintenance Engineering*, Vol. 20, No. 4 pp. 415 – 435. (**EMERALD 2023 IF: 1.8**) (ISSN- 1355-2511).
52. Rajesh Kumar, I.P.S. Ahuja and Rupinder Singh (2014), "Experimental and Analytical Analysis of Light Alloy Shell Castings Using Three Dimensional Printing", *International Journal of Advance Research and Innovation (IJARI)*, Vol. 2, No. 3, pp. 650 – 662. (ISSN 2347 - 3258).
53. Doordarshi Singh, Jaspreet Singh Oberoi and Inderpreet Singh Ahuja (2014), "A rule-based fuzzy-logic approach for evaluating the strategic flexibility in manufacturing organizations", *International Journal of Strategic Change Management (IJSCM)*, Vol. 5, No. 4, pp. 281 – 296. (INDERSCIENCE) (ISSN online: 1740-2867; ISSN print: 1740-2859).
54. Arashdeep Singh and Inderpreet Singh Ahuja (2014) "Evaluating the impact of 5S methodology on manufacturing performance", *International Journal of Business Continuity and Risk Management*, Vol. 5, No. 4, pp. 272 – 305 (ISSN-Online: 1758-2172, ISSN-Print: 1758-2164) (INDERSCIENCE)
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PATENTS ACCEPTED/PUBLISHED (01)

1. DESIGN PATENT APPLICATION DETAILS

TITLE : U-BOLT TURNING MACHINE
APPLICATION NUMBER : 344857-001
CBR NO. : 204376
CBR DATE : 17.06.2021
Class : 15-09

Patent and Design Journal

Journal No. 31/2021, dated 30.07.2021, Part-3 Designs

<https://search.ipindia.gov.in/IPOJournal/Journal/Patent>

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Design Application Details		
Application Number:	344857-001	
Cbr Number:	204376	
Cbr Date:	6/17/2021 2:09:05 PM	
Applicant Name:	1. Guru Nanak Dev Engineering College, 2. Jagmeet Singh, 3. Harkirat Singh Ryait, 4. Dr. Harwinder Singh, 5. Dr. Amandeep Singh, 6. Dr. Inderpreet Singh Ahuja,	
Design Application Status		
Application Status:	Application Accepted, Certificate of Design Generated.	
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23	32/2021	06/08/2021	06/08/2021	Part-3_Designs Part-2 Part-1
24	31/2021	30/07/2021	30/07/2021	Part-1 Part-2 Part-3_Designs
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Patent and Design Journal, Journal No. 31/2021, dated 30.07.2021, Part-3 Designs

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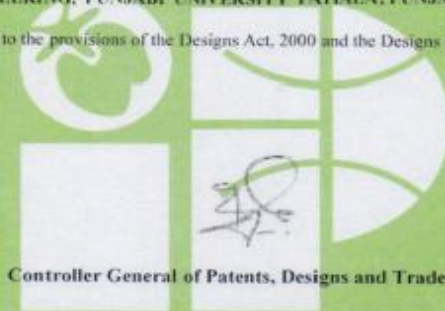
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THE PATENT OFFICE

CERTIFICATE OF REGISTRATION OF DESIGN

Design No. 344857-001
Date 17/06/2021 14:09:05
Reciprocity Date*
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Certified that the design of which a copy is annexed hereto has been registered as of the number and date given above in class 15-09 in respect of the application of such design to U-BOLT TURNING MACHINE in the name of 1. GURU NANAK DEV ENGINEERING COLLEGE, GILL PARK, GILL ROAD, LUDHIANA, PUNJAB- 141006, INDIA. 2. JAGMEET SINGH, DEPARTMENT OF MECHANICAL ENGINEERING, GURU NANAK DEV ENGINEERING COLLEGE, GILL PARK, GILL ROAD, LUDHIANA, PUNJAB-141006, INDIA. 3. HARKIRAT SINGH RYAIT, G.S. AUTO INTERNATIONAL LTD., GS ESTATE, GRAND TRUNK RD, LUDHIANA, PUNJAB-141010, INDIA. 4. DR. HARWINDER SINGH, DEPARTMENT OF MECHANICAL ENGINEERING, GURU NANAK DEV ENGINEERING COLLEGE, GILL PARK, GILL ROAD, LUDHIANA, PUNJAB-141006, INDIA. , DR. INDERPREET SINGH AHUJA, DEPARTMENT OF MECHANICAL ENGINEERING, PUNJABI UNIVERSITY PATIALA, PUNJAB-147002, INDIA.

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CONSULTANCY PROJECTS HANDLED (03)

1. Design and Development of Smart Manufacturing System in the Conventional Machine Tool Unit, Machtech International, Ludhiana, Rs 6.25 Lacs, Project Completed: 21.10.2021

- ❖ The objectives of current research project included: 1) Investigation of the factors impacting the existing machine tool performance; 2) Design and simulation of smart machine health monitoring system with the aim to improve machine tool efficiency; and 3) Development and implementation of smart machine health monitoring system in existing unit.

2. Implementation of Autonomous Quality Monitoring System in Automotive Manufacturing Unit, GS Engitech. Pvt. Ltd., Ludhiana, Rs 7.20 Lacs, Project Completed: 19.11.2021

- ❖ This research project aimed at: a) Assessment of traditional quality measurement system; b) Design and implementation of autonomous quality monitoring system; and c) PPM (part per million) comparison between traditional and implemented quality monitoring system.

3. Implementation of I 4.0 on the conventional machine tool unit under the manufacturing organization's smart factory concept, Machtech International, Ludhiana, Rs 2.75 Lacs, Project Completed: 23.11.2021

- ❖ Implementation of I 4.0 on the conventional machine tool unit.

4. Design and Development of cold forging machine tool monitoring System in the forging section". G.H.R.S, New Janta Nagar, Ludhiana-141003, Rs. 5.76 Lacs, Project Completed: 17.09.2022

- ❖ Developed cold forging machine tool monitoring system.

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2. J.S. Khamba, I.P.S. Ahuja, T.P. Singh (1999), "Implementation of Total Productive Maintenance in an Engineering Organization", Int. Conference on Operations Management for Global Economy: Challenges & Prospects (POMS-99) I.I.T., New Delhi, 21-24th Dec. 1999, pp. 685 – 691.
3. I.P.S. Ahuja, T.P. Singh, J.S. Khamba (2000), "Technology Adoption & Adaptation – Key Issues", Global Conference: New Business Paradigm: Global, Virtual & Flexible, I.I.T., New Delhi, 17th -20th Dec., 2000, pp 425 – 431.
4. I.P.S. Ahuja (2003), "Quality Improvement in Technical Education", Int. Conference in "Quality Improvement in Educational Systems", Bharathidasan University, Tiruchirappalli, 22-23 Feb., 2003.
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 13. Doordarshi Singh, Jaspreet Singh Oberoi and Inderpreet Singh Ahuja (2013), “An Empirical Examination of Supply Chain Flexibility in Manufacturing Organizations”, VI IBA International Conference on the theme ‘Situating New Management Philosophy: Nature Mind and Technology’ (SNMPNMT’13) at Indus Business Academy, Bangalore, Feb 20-22 2013 (Paper 83), pp. 1-9.
 14. Parlad Kumar, Rupinder Singh and Ahuja, I.P.S. (2013), “A Framework for Developing a Hybrid Investment Casting Process”, International Conference on ‘Advancements and Futuristic Trends in Mechanical and Materials Engineering’ (AFTMME’13), October 3-6, 2013, Punjab Technical University, Jalandhar, pp. 515-521.
 15. Raminder Kaur and Ahuja, I.S. (2013), “Evaluating the contributions of Just-in-Time Manufacturing on Manufacturing Performance in Indian Manufacturing Industry”, Proceedings of International Conference on Research and Innovations in Mechanical Engineering (ICRIME 2013), October 24-26, 2013, Guru Nanak Dev Engineering College, Ludhiana, Springer, Lecture Notes in Mechanical Engineering, Edited by Khangura, S.S., Singh, P., Singh, H., Brar, G.S., 2014, ISBN: 978-81-322-1858-6), pp. 639-646.
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 17. Kuldeep Singh, Jaspreet Singh Oberoi and Inderpreet Singh Ahuja (2015), “Developing Supply Chain Agility through Dynamic Capabilities and Supplier Integration Capabilities in Manufacturing Organisations: A Conceptual Perspective”, Fifteenth Global Conference on Flexible Systems Management, Theme: Flexibility for Manufacturing Excellence and Resource Management, October 23 – 25, 2015, Symbiosis Institute of Technology, Symbiosis International University, Pune, India, pp. 609 – 626.
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5. I.P.S. Ahuja and J.S. Khamba (2007), “An Assessment of contributions of TPM Implementation in Indian Manufacturing Enterprises”, National Conference on Futuristic Trends in Mechanical Engineering, Shaheed Udham Singh College of Engineering & Technology, Tangori, Sept. 13 – 14, 2007, pp. 229 – 234.
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19. Sanjiv Kumar Jain and Inderpreet Singh Ahuja (2015), “Analysis of ISO 9000 and Business Performance Relationship through Structural Equation Modeling in Indian Manufacturing Industry”, National Conference on Advances in Mechanical, Industrial & Materials Engineering, Baba Banda Singh Bahadur Engineering College, Fatehgarh Sahib, Punjab – 140407, November 06-07, 2015, Enriched Publications Pvt. Ltd., New Delhi (ISBN: 978-194417156-8), pp. 69-90.
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21. Tejinder Pal Singh and Inderpreet Singh Ahuja (2015), “Evaluating the exploits of Total Productive Maintenance implementation in a Food Processing Industry”, National Conference on Advances in Mechanical, Industrial & Materials Engineering, Baba Banda Singh Bahadur Engineering College, Fatehgarh Sahib, Punjab – 140407, November 06-07, 2015, Enriched Publications Pvt. Ltd., New Delhi (ISBN: 978-194417156-8), pp. 131-142.
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4. Gurinder Singh and Inderpreet Singh Ahuja, “Evaluating Just in Time Implications in Indian Manufacturing Industry”, LAP LAMBERT Academic Publishing, Germany. (ISSN NO.: 978-3-659-69970-2), pp. 249. July 2015.
5. Inderpreet Singh Ahuja, Jaspreet Singh and Gurinder Singh (2016), “Evaluating Impact of Lean Manufacturing Initiatives in Indian Industry”, LAP LAMBERT Academic Publishing, Germany. (ISSN NO.: 978-3-659-97930-9), pp. 101. October 31 2016.
6. Kanwal Jeet Singh, Inderpreet Singh Ahuja and Jatinder Kapoor, “Ultrasonic Machining of Glass: Finite Element Analysis & Optimization of process Parameters involved in Ultrasonic machining of glass work material”, LAP LAMBERT Academic Publishing, Germany. (ISSN NO.: 978-3-659-94579-3), pp. 132. March 19 2017
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AICTE COURSE MATERIAL PUBLISHED (01)

- Published 01 Course Material under AICTE Continuing Education Programme:
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PH.D. THESIS GUIDED (17)

S.NO.	CANDIDATE NAME	RESEARCH TOPIC	DATE OF COMPLETION
1.	Sanjeev Saini	Residual Stress Modeling for Hard Turning	22.08.2012
2.	Kanwarpreet Singh	Manufacturing Performance Enhancement through Total Quality Management and Total Productive Maintenance Paradigms	12.10.2013
3.	Doordarshi Singh	Impact of Dynamic Capabilities in managing Strategic flexibility in Manufacturing Industry	12.10.2013
4.	Sanjiv Kumar Jain	An Investigation of relationship between ISO 9000 Quality System and Business Performance in Indian Manufacturing Industry	07.03.2014
5.	Gurinder Singh	Evaluation of Just in Time Practices and its Implications in Indian Manufacturing Industry	22.08.2014
6.	Rajesh Kumar	Investigation for Optimizing Shell wall thickness in Three Dimensional Printing for Light Alloy Casting	02.12.2015
7.	Parlad Garg	Investigating the Mechanical and Metallurgical Properties of Hybrid Investment Casting	14.07.2016
8.	Kanwal Jeet Singh	Experimental Investigation into Ultrasonic Machining of Polycarbonate Bullet Proof Glass and Acrylic Heat Resistant Glass	06.02.2018
9.	Jugraj Singh Randhawa	Evaluation of 5S implementation in Indian Manufacturing Industry: Contextual factors and impact on Business Performance	13.03.2018
10.	Anuj Singla	Transitions Between Technology-Push And Demand-Pull Strategies For Sustainable Development In Manufacturing Industry	07.08.2018
11.	Narinder Singh	Investigations for Metal Matrix Composite prepared by using Waste Polymer based Sacrificial Rapid Pattern in Investment Casting	02.01.2019
12.	Piyush Bedi	Investigations for Rapid Tooling prepared with waste polymer based Hybrid Filament	22.01.2019
13.	Ranvijay Kumar	Welding of dissimilar plastic based materials by using Hybrid Filament of Fused Deposition Modelling	30.01.2020
14.	Nishant Ranjan	Investigation and Development of Poly Lactic Acid, Hydroxyapatite and Chitosan based functional prototypes for Biomedical Applications	21.06.2021
15.	Vinay Kumar	Investigations on debris reinforced Thermoplastic based 3D customized solution for Maintenance and Repair of Heritage Structures	26.05.2022
16.	Simranjit Singh Sidhu	Investigating the contributions of Maintenance Practices towards enhancing Manufacturing Performance of Small and Medium Enterprises in Northern India	27.03.2023
17.	Jagmeet Singh	Design, Development, and implementation of smart manufacturing in an Automotive Manufacturing Organization	12.02.2024

M.TECH THESIS GUIDED (19)

S. No.	Name of the Student	Title of Thesis
1.	Bharat Bhushan (26/95)	TQM Tools Application for reducing the Percent Process Defects
2.	Jatinder Kumar (8007103)	Total Productive Maintenance in an Engineering Organization
3.	Amandeep Singh (10913002)	Examination for shell wall thickness of Magnesium Alloy using Three Dimensional Printing
4.	Jasbir Pal Singh (10913007)	Investigating the machining characteristics of HCHCr material with Electric Discharge Machining
5.	Pragat Singh (10913011)	Achieving Manufacturing Excellence Through Total Productive Maintenance Implementation
6.	Mandeep Kaur (11093010)	To analyze the synergic effect of TQM - TPM Paradigms on Business Performance
7.	Gurvinder Pal Singh (11093009)	The Evaluation of Contributions of Strategic Implementation of ISO Quality Systems in Manufacturing Organisations
8.	Raminderpal Kaur (11193034)	Evaluating the contributions of Just-in-Time Manufacturing on Manufacturing Performance in Indian Manufacturing Industry
9.	Jageet Singh (11193016)	'Comparative study of hard turning with coated and uncoated carbide tools on AISI H13 die steel
10.	Manpreet Singh (11173003)	Scrap Reduction of Piston Manufacturing through Six Sigma
11.	Arashdeep Singh (11293034)	Evaluating the impact of 5S Methodology on Manufacturing Performance
12.	Upkar Singh (11173001)	Evaluating the contributions of Total Productive Maintenance on Manufacturing Performance
13.	Fatehbir Singh (11293004)	To study the effect of maintenance practices in small and medium scale industries in northern region of country
14.	Tejinder Pal Singh (11393041)	Evaluating the exploits of Total Productive Maintenance Implementation in a food manufacturing industry
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17.	Jaspreet Singh (11373009)	Evaluating Just in Time Implementation implications in an Indian Manufacturing Industry
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19.	Rohit Pathak (11673001)	Optimization and characterization of Biodiesel production from waste Soybean Oil and Milk Sludge