

BRIJESH M. GARALA

701-sheffire Tower
Sun-city Apartment
Sadhu Vasvani Road, University Road
Rajkot 360005, Gujarat, India

Experience – 19 Years

Shilpan Steelcast Pvt. Ltd. Rajkot

February 2019 – till date

Designation: Sr Manager – Other process out sourcing & Project management

Job profile:

Head of department, manage departments, define Job description and skill matrix, drawing study, process feasibility study, jig & fixture design, new product development, quotation finalize, negotiation with customer & vendor, vendor audit, product development time plan, other process components like forging, sand casting, aluminum pressure die casting etc development, special machineries purchase, etc.

Some special projects completed:

- 1) Development of impregnation system for leakage prevention
- 2) Design & development of bell type vertical heat treatment furnace with inert gas atmosphere facilities.
- 3) Introduce Y hanger type shot blasting machine and production setup for maintaining surface roughness in as cast surface.
- 4) Development of tumble type vibratory machine for maintaining surface roughness.
- 5) Development of special machine for gate cutting.
- 6) Introduce laser welding for finish machined components.
- 7) Introduce Millipore facility as per customer requirement.
- 8) Introduce ultrasonic cleaning facility as per customer requirement.
- 9) Design acid pickling plant as per production requirement
- 10) Introduce chemical Deburring process for customer specific requirement
- 11) Process change (IC to forging) for many casting components
- 12) Introduce 3D scanning for casting comparison during die development.
- 13) Planning of material movement
- 14) Customer communication for customer complain and provide 8D
- 15) Development and trial for special material in IC along with galvanizing of IC.
- 16) Interface between CMM and equator for inspection during mass production.

Om Institute of Engineering & Technology, Junagadh

April 2017 – January 2019

Designation: Principal and Centre in charge of Om Centre for Research & Innovation

Job profile:

Overall College Management, Skill Development Centre management, coordination with NSDC & CED for skill development project, Management of 1st Business accelerator & start cell at college, Research projects patenting, Industry Consultancy, New product Development,

Research Projects Funding, Dealing with various incubators for students startups, Patenting of projects, organizing various events and workshops for benefit of students.

Om engineering college, Junagadh

July 2013 – March 2017

Designation: Associate Professor and Head of Mechanical engineering department

Job profile:

Teaching undergraduate students, management of mechanical department, Skill development of students according to industry requirements, Project Guidance, Research projects patenting, Industry Consultancy, New product Development, Research Projects Funding, Overall Management, Dealing with government for students startups, Patenting of projects, organizing various events and workshops for benefit of students.

Industrial Automation Services, Rajkot

February 2012 - continue

Designation: Co-Founder

Job Profile:

Industrial automation services mainly deal with new development of special purpose machines. My role is to develop machine as per customer requirements according to customer needs, develop finalize the design of machine, development of components from vendor as per requirement, procurement of materials, planning of machine development etc.

Faculty of Engineering Marwadi Foundation Group of Institution, Rajkot.

June 2010 – January 2012

Designation: Asst. Professor

Job profile:

Teaching undergraduate students, project guidance, industry interaction, industrial visits, class coordinator, GTU exam coordinator, Time Table committee head

Arihant Industries Rajkot

August 2002 – May 2010

Designation: Production Manager

Job Profile:

Arihant industries had machining facility and machine various types of gears blanks, shafts, clutch plate hubs and many more automobile components approximately 125 Ton/month. My role is to make proper planning of each component (PPC), conform quality (QC) of all components make reports and charts for them, reduce production time, new development of parts and jig and fixtures for part (NPD), develop vendors for specific work etc. Some of Clients are as below

Mahindra Gears & Transmissions Pvt. Ltd.

Setco Clutch Ltd.

Power Build Ltd. (Group of Elecon Engineering companies)

Comet Tools Pvt. Ltd.

Kalaria Forge Pvt. Ltd.

Kadvani Forge Ltd.

Amul Industries Ltd. Many more

Educational Qualifications

Sr. No.	Degree	Stream / Branch	Percentage	Year of Passing	Name of College & University / Board
1	SSC	General	79.57	1995	Gujarat Board
2	HSC	Science	75.38	1997	Gujarat Board
3	B.E	Mechanical engineering	6.81 CPI	2001	B.V. M. Engg college, S P University
4	M.E.	Mechanical Engineering (CAD/CAM)	68.75	2003	L. D. Engg. College, Gujarat University
5	Ph.D	Mechanical Engineering		2018	Rai University

Research work done as student for U.G./ Master/Doctorate Degree

Degree	Topic	Period		Institution/ University	Name of Guide
B.E.	Computer Aided Tolerance Charting	Jan-2001	June - 2001	BVM Engg College, S.P. University	Prof. Vinay Patel
M.E.	Solid modeling design and analysis of 500 MW nuclear power plant	July 2002	Jan - 2003	L.D. College of engineering Gujarat University	Prof. V. R. Iyer
Ph.D.	Design, Analysis & Optimization of Head stock for VMC	July 2014	Jan 2019	Rai University	Dr. Vikas Patel

Training programs after graduation / post-graduation

Name of program	Period		details of place/institutions
Metallurgical aspects of tribology	30/11/09	4/12/2009	SVNIT, Surat
Advances in mechanical engineering	6/6/2011	8/6/2011	SVNIT, Surat
Mission 10X by ISTE and Wipro	27/6/11	1/7/2011	Marwadi Foundation Group of Institution, Rajkot
AutoCAD 2011 certified associate	28/7/11	28/7/11	B H Gardi engineering college Rajkot
Importance of CAD/CAM	8/11/13	22/11/13	L D College of engineering , Ahmadabad

Seminars Attended

Name of Seminar	Date	Organization	Place / Institutions
5th International Leadership Excellence Summit	12-9-2015	Gujarat Technological University (GTU)	GTU Gandhinagar
QS Seminar on Rankings, Ratings & External Strategies	06-11-2015	GTU & Ganpat University	La Meredian Hotel Ahmedabad
Software Awareness Seminar on instrumentation	04-12-2015	National Instruments	Hotel Fernn Ahmedabad

Paper presented in conferences / seminars etc.

1	“Determine the relation between deflection occurred due to axial force and radial force with total deflection” presented at International Conference on Innovative Science & Engineering Technology organized by V V P Engineering college Rajkot during 8th & 9th April ,2011
2	“An analytical approach to design, analysis and optimization of headstock for VMC” published at International journal computer applications in engineering, technology and sciences (IJ-CA-ETS) ISSN : 0974 3596
3	“Optimization of machining cost and development of control plan by proper selection of machining process” Presented at International Conference- 5th International Conference on Advances in Mechanical Engineering (ICAME-2011), SVNIT Surat during 6th – 8th June 2011
4	“Optimization of machining cost and development of control plan by proper selection of machining process” published at International Journal of Manufacturing Technology and Industrial Engineering (IJMTIE) ISSN 0976-6251
5	“Mathematical Modeling & Optimization of Robot Manipulator System using Inverse Kinematics” presented at 2nd National Conference ENACT-2011 at Sathyabhama University during 14th-15th September 2011
6	“Design of hydraulic power pack for SPM (Multi spindle drilling)” published at Indian journal of applied research (IJAR) June 2013 issue. ISSN 2249-555X impact factor 2.1652
7	"Design of feed drive system of special purpose CNC turning machine" published at Journal of Mechanical and Production Engineering Research and Development ;ISSN (Print): 2249-6890;E-ISSN:2249-8001;Impact Factor(JCC): 5.2189
8	"Review of selection of mechanism of food packaging" published at International journal for research in technological studies; ISSN (online): 2348-6890;E-ISSN:2249-1439
9	“Review of wear mechanism of Aluminum Silicon composite material” presented at International Conference on Contemporary Issues in Engineering & Technology (ICCIET-2014) held from 19-21 March 2014 in Mehsana, Gujarat, India organized by Merchant Engineering College – Basna and Sardar Patel Institute of Technology – Piludara at Merchant Education Campus Run by Shri Merchant Charitable Trust
10	POWER GENERATION WITH MINI WIND MILL AND SOLAR PANEL “A FUTURE ENERGY SOLUTION FOR DOMESTIC POWER REQUIREMENT” published at Journal of Mechanical & Civil Engineering (IJDRO) VOL 2 ISSUE 5 MAY 2015 Paper 21, ISSN-3855-0154

11	“A Research Paper on Design and Analysis of Fixture for The Pump Casing” published at International Journal of Futuristic Trends in Engineering and Technology (IJFTET): ISSN : 2348-5264 Vol-I ,Issue-IV , May-2014
12	“Experimental setup to increase the efficiency of solar panel by using the water circulation” published at Global Journal for Research Analysis : ISSN : 2277-8160 Vol-IV ,Issue-VIII , August 2015
13	“2-D Mathematical Modeling for Two Link Robot Manipulator System” published and presented during 1st international conference on automation in industries (ICAI-2016) at Om Engineering College Junagadh During 5-6 April 2016

Computer proficiency

- Pro E / Creo
- Solid works (Design, Assembly, Static, Thermal, CFD, Analysis)
- MATLAB – 9
- Auto CAD
- Siemens 802-D (CNC Lathe programming)

Personal projects completed

Development of Aluminum casting for impeller & bowl as a replacement of stainless steel material

Development of solar farm

Development of single axis tracker, dual axis tracker for MW solar projects

Development of vertical axis wind turbine

Development of Process sheet & control plan for Eacort motors.

Development of high tensile nut bolt as per ASME A193 class 2

Key skills

- Design & Optimization of Mechanical components considering all manufacturing aspects
- Team management and communication skills
- Procurement of components, vendor development, vendor audit
- Costing and optimization of process & process parameters
- Machining aspects and jig fixture designing for higher productivity
- Metallurgical aspects for different materials
- Robotics & Automation
- Finite Element Analysis, both static and dynamic analysis.

Achievements

- Get excellent faculty award by ARK techno solutions and HELIOS IIT Bombay for giving contribution in providing robotics educational awareness at zonal level
- Life time membership of space society of mechanical engineers -SAC-ISRO
- Chairperson to organize one day work shop on Rapid prototyping techniques jointly organized by om engineering college and space society of mechanical engineers (SSME- SAC-ISRO)
- Main in charge of mechanical exhibition MANIFEST 14 (3 days technical exhibition)

- Organizer ----- number of national level seminars and FDP at college
- Convener to organize 3 day national seminar on Entrepreneurship awareness camp jointly organized by om engineering college and CED (Center for entrepreneurship development – A Government of Gujarat organization)
- Chairperson to organize one day work shop on Applications of non-contact measurement techniques in space engineering jointly organized by om engineering college and space society of mechanical engineers (SSME- SAC-ISRO)
- Conducting GTU interview as a subject expert for assistant professor in mechanical engineering.
- Conducting carrier guidance counseling seminars for 12th science students with their parents and final year degree engineering students at various places
- Editorial Board member in many reputed national/international journals
- Chairman of 1st International Conference on Automation in Industries organized by Om Engineering College & Space Society of Mechanical Engineers (SSME-ISRO) sponsored by Institution of Engineers-India (IEI), Gujarat council on science & technology (GUJCOST), World Federation for Engineering Organization (WFEO) and many other industries dated 5-6 April 2016
- Project Leader to develop 1st Business startup & accelerator Cell in Gujarat in association with The Centre for Entrepreneurship Development (CED Govt. of Gujarat Gandhinagar)
- Project Leader to establish Skill Up-gradation Centre and received grant of (1,00,00,000) One Crore Rs form The Centre for Entrepreneurship Development (CED Govt. of Gujarat Gandhinagar)
- Organizing Chairperson for conducting 3 day workshop on Entrepreneurship Awareness Camp in association with The Centre for Entrepreneurship Development (CED Govt. of Gujarat Gandhinagar)
- Organizing Chair Person for conducting 2 days Boot Camp on Idea Generation and Execution in association with Pandit Din Dayal Petroleum University (PDPU)
- One project (VAWT) selected by Department of Science and Technology (DST) under NIDHI PRAYAS SCHEME at ICREATE center dholera.
- Filed provisional patent for Vertical Axis Wind Turbine (VAWT)
- Petron during 5 days STTP on Research Methodology and Technical Communication organized by Om Engineering College in Association with GTU and BKNMU sponsored by DST & ISTE during 5-9March 2018 at Junagadh
- Awarded by GTU in May 2018 for "Developing an Eco-system for Entrepreneurship and Startup in institute"
- Awarded by GTU in May 2018 implementing "Innovative Project fair"
- Many projects Guided and documented for SSIP funding for final year engineering students.
- 2 Projects Guided and documented for NI funding for final year engineering students
- Organizing Mega placement drives at college campus with more than 30 industries and 500 degree / diploma engineering students.

Personal details

Languages known : English, Hindi, and Gujarati
Date of Birth : June 21, 1979
Nature : Down to earth, can mix with others, ambitious
Subject of interest : Research & Development, optimization, costing, purchase
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References:

Shri A C Mathur : Ex - Group Director, SAC-ISRO Ahmadabad

Dr. Chandan Chettrjee : Ex -Director, The Center for Entrepreneurship Development (CED), Professor Entrepreneurship Development Institute of India Ahmedabad

Dr. Ramnath Prasad : Director, CED Gandhinagar

Mr Jayant Jamuar : President, American Society for Metals (ASM) -India

Mr. Ragesh Baterivala : President, ASM –Gujarat Chapter

Mr. Vijaysinh Zala : Head (Design , R & D), Jyoti CNC Automation Ltd. Rajkot

Prof. V R Iyer : Ex-Director, Center for Continue Education (CCE), Nirma University, Professor in mechanical Engineering Department Ahmadabad University