


Name	M.Sivagurunathan	
Designation	Senior Product design Engineer	
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Date of Birth	29-05-1988	
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Profile summary

- Over 11+ years of experience in Industrial pumps-centrifugal & PD pump & skid packages, Water treatment plant, Loading arms(Piping) & Coordinate measuring machine.
- Calculation, Engineering, design and drawing of technical installations and plans.
- CAD software design concepts, drafts, sketches, specs, FEA analysis, P&ID.
- Knowledge of design, engineering, new product development, reverse engineering & prototypes.
- Familiar with Industrial mechanical standards and codes like ASME 31.3/Y14.5, API 610/682 & DIN.
- Project management & Lead a team of engineers technically and/or hierarchically
- Awarded for 3D printed pump house prototype in Corporate Family day, Best community Award.

Skills

Drawing software	AutoCAD, Autodesk Inventor, SolidWorks, CATIA V5 / PLM / Adept / Team center
Method	Design, Engineering, CAD, NPD, Reverse Engineering, Prototypes, Lean-Single piece flow
Process	Design & development, Engineering, site fabrication & installation
Standards	API: 610, 682, ASME 31.3, DIN, ASME GD & T Y14.5

Education

Education	Specialization	University/College	City	Year
Bachelor	Mechanical engineering	Anna university / Panimalar Engineering college	chennai	2010

Certification

Certificate	Specialization	City	Year
Awarded by Ruhrpumpen, chennai	Design and development of 3D printed Demo Fire Pump House (For Global Exhibitions)	Chennai	2020
IIT, Madras	Product Design and optimization	Chennai	2012
NIOT, chennai	Finite element crack growth analysis	Chennai	2010

Employer details

Organization	Role	Level of responsibility	Tenure
Ruhrpumpen India Private Ltd, chennai	Senior Product design engineer	Team management and individual contribution	Dec 18 – till date
Sri Bhuvaneshwari Engineering services, chennai	Senior design engineer	Team management and individual contribution	Ju17 – Nov 18
Tata consultancy services, siruseri, chennai	Systems engineer	Individual contributor	Aug 14 – Jun 17
Dover India Private Limited	Design engineer	Individual contributor	Jun 11 – Jun 14

Project details

Company		Ruhrpumpen India Private Ltd,chennai
Project title		Design and Engineering
Customer		Ruhrpumpen – Witten Engineering CFF Team
Duration		Dec 18 – Till date
Technologies used		AutoCAD, Inventor – Part / Assembly modeling, Surface, weldment, sheetmetal,drawings
Domain		Industrial Centrifugal Pumps,General Arrangement,Baseplate & skids.
	Roles	Senior Product design Engineer – Reporting to Engg. Manager,witten,Germany.
	Responsibilities	<ul style="list-style-type: none"> • Lead Design and development of Pump skid packages-General arrangement, Baseplate,Barepump,Casing ,pump components & cross sectional drawings. • Analyse and execute the project-mechanical design,Equipments,Instruments,Pressure vessels,API manufacturing specifications,Regulatory requirements.(API 610,API 682) • Prepare detail design calculation,sizing,validation,BOM,weight calculation. • Interface withPiping,Plant Layout,Process,Civil,Structural,Electrical &Instrumentatiion • Creation of Pump 3D models-Volute casings,Impeller,Bearing housing,shaft,other pump components / drawings. • Product enhancements, new product development, and live order development • Strong ability to define and detail mechanical designs from concept to finished product, develop models and assemblies to applicable regulatory standards, including validation and verification procedures. • Experience in 3D Modeling of Volute casings (OH1,OH2 & BB1) • Implement & support Lifecycle Engineering Changes • Developed pump house prototype project using ABS filament material for international exhibitions. • Coordinated and liaised between production, manufacturing and purchasing personnel with all necessary documents • Implement standard procedures for design of pump casing and components • Prepare 3D modeling & drawings -Part / Assembly / Tubing / Routing / Surface • Standardization of fittings & models • Generate,review & validate general arrangement drawing & skid packages. • Trained in Lean techniques for eliminating waste & improving efficiency. • Generate and validate the drawings for baseplate, centrifugal pumps,Motor & Impellers, Seal plans / Volute casing,casing cover,bearing housing & bearing cover & cable trays. • Maintain Project deliverables with good quality,on time delivery,minimum Product & project cost • Competent with 3D,2D parametric CAD using Solidworks / Autodesk Inventor • Project management / Knowledge transfer / collaborate with other teams • Familiar with Industria mechanical codes including ASME Y14.5,API,ANSI,ASTM,DIN • Identified and resolved technical product design,test,manufacturing and field issues. • Apply methods like DFMA,Root cause analysis,Lean techniques • Multi tasking,Quick learner,Highly target driven & Solution oriented. <p>Projects Handled SCE (OH2) 4X3X7.5(A) SCE 2x1x9.25 – Worley Projects GmbH HVN (BB2) 20X30(B) -ExxonMobil (Huizhou) ,china AB (BB5) 4X2X8.5 (A) – Borealis Agrolinz Melamine GmbH SCE 4X3X11(A) OMV Downstream GmbH,Austria</p>

Company	Sri Bhuvaneshwari Engineering services,chennai
Project title	Engineering & fabrication
Customer	Greensol Power Systems Pvt Ltd, Amin Construction
Duration	Jun 17 – Nov 18
Technologies used	Solid Works
Domain	Pumps & skids
Description	Designed pump skids and developed detail engineering drawings
Roles	Senior design engineer
Responsibilities	<ul style="list-style-type: none"> • Drafted and detailed all drawings for tender, fabrication, assembly and erection/installation • Performed necessary drawing conversions like pdf files, tiff, jpeg and dwg file • Prepared plant layout drawings to help sales design systems. • Testing of parts to assure certification testing - static pressure, vacuum, leak down • Quality check & review • Preparation of technical specification of all the mechanical components.

Company	Tata consultancy services,siruseri,chennai
Project title	Design & Engineering
Customer	GE Water technologies
Duration	Aug 14 – Jun 17
Technologies used	SolidWorks, AutoCAD 2D, 3D, EPDM, SAP
Domain	water treatment
Description	Design and detailed engineering of water and waste water treatment plants,ECN
Roles	Design engineer
Responsibilities	<p>Designed the water installation of Pro-series RO skids, Electrodialysis reversal,mobile flow trailer WTP</p> <ul style="list-style-type: none"> • Standardization of Components,Equipment,pipes/ fittings • Generate & validate the 3D models & drawings • BOM preparation • Prepared drawings of all mechanical components, valves-equipment data sheets • Make Engineering change note from site PR • Quality check and review • Pipes and material selection • Prepared detailed mechanical GA drawing, piping isometric, pipe supports. • Attend design and progress meetings – Project management team

Company	Dover India Private Limited
Project title	Design & Engineering
Customer	(OPW) - Chemtrols, Indian Oil Corporation Limited, IOT
Duration	Oct 13 - Jun 14
Domain	Oil & gas
Description	Design of OPW Top, SS Top Loading Arms and POL Bottom Loading Arms as per Indian Oil Corporation Limited Tender
Responsibilities	<ul style="list-style-type: none"> • Created manufacturing drawings for piping, bracket, fittings, pipe supports • Generated 3D Model and automated detailed drawings for loading arms with Linear spring using SolidWorks, AutoCAD • Involved in product and support design of loading arms • Prepare & Standardized the BOM for POL loading arms specifications, data sheets • Feasibility study of the product and alternate method of designing the product • Improved the design, performance and efficiency of existing products • Equipment test and hydro test

Company	Dover India Private Limited
Project title	Design & Development
Customer	Mouvex, France
Duration	Jun 11 – Sep 13
Domain	Industrial Pumps
Description	The project involves updating the design and drawing for industrial pumps,ECN
Responsibilities	<ul style="list-style-type: none"> • Creation of 3D Model and drawings of Pump & components • BOM preparation • Validate the model and drawings to verify completeness, clarity, and accuracy • Engineering changes • 2D to 3D conversion from handmade drawings, PDF,Tiff & JPEG files • Exploded and configured assembly drawings

Languages

Language	Read	Write	Speak
English	Fluent	Fluent	Fluent
Tamil	Native	Native	Native

Personal interests

Hobbies	Gardening,Musical keyboard,Drums & Rhytham pad
Marital status / Children	Married / Daughter
Memberships	Actively participating in Seminars & Cultural Events

Certifications:

INDIAN INSTITUTE OF TECHNOLOGY, MADRAS
Department of Mechanical Engineering



Certificate

This is to certify that, Mr. Sivagurunathan M.
has attended the SolidWorks Academy Workshop on Product Design and Optimization organized by Department of Mechanical Engineering, IIT Madras and Dassault Systemes SolidWorks Corp. during 27 – 28, July 2012.

Prof. N. Sri Prasad
Workshop Coordinator,
Department of Mechanical Engineering,
Indian Institute of Technology, Madras

SOLIDWORKS ACADEMY
Dassault Systemes SolidWorks Corp.

