

Professional Profile

Lead Instrument Designer | SP3D & AutoCAD Administrator

Krishnaprasad Jyotinagar Rajashekar (KP)

Mobile: +971-56 7447 950 +91-9535 737 394 and +91-9845 383 051 and Skype ID: RNKP2001

E-Mail ID: rnkp2001@yahoo.com and LinkedIn: <https://ae.linkedin.com/in/krishnaprasadjr>

Career Summary

- Twenty-nine years of career experience with EPC, design engineering consultancies, contractors, and onshore & offshore, oil & gas companies as a Senior Instrument / Lead Instrument Designer, Instrument Checker, SPI, SP3D & AutoCAD user/administrator and a PDMS user to grow with the esteemed organisation and to exhibit as well as incur my quality and knowledge respectively.
- Twenty-five years of oil & gas experience in Instrumentation and Control system engineering and design draughting deliverables, managing the E & I discipline design team of 3D modellers & 2D drafters on assigned or phase of assigned project. And also, assisting the E & I construction team.
- Instrumentation/Automation/FGS/SCADA-Telecoms/Electrical cable trays and equipment/devices installation construction deliverable packages are prepared to meet HSE requirements & standards.
- Continues learning for better engineering practices and knowledge in design tools; SPI, SP3D & AutoCAD User/Admin, CAXperts, MS Office, PDMS, PDS, MicroStation, NAVISWORKS and PDF.
- Employed with OIL companies; BANOCO-Bahrain, WOC-Libya and EPC companies; Black Cat Engineering-Qatar, WoodGroup-CCC-Oman and DeltaAfrik-WorleyParsons-Nigeria, Fortune-Dubai.
- Performed tasks for FEED and DED projects; Well Manifolds, Gas-Oil-Water Separators, Gas Dehydration Units, Oil & Gas network pipelines and Wellhead, Production Platforms and, FPSOs.
- Performed aforesaid tasks for projects; DED for FPSO Cyrus, Chevron FGP-Offshore & Onshore FEED concepts, DED for EGINA FPSO, ADDAX Antan, QP Gas Turbines and PDO Bahaja fields.
- Performed instrumentation engineering, design and draughting tasks for oil companies; Waha Oil Company and BANOCO's Oil & Gas onshore Brownfield and Greenfields field facilities.
- Performing project discipline administrative tasks including; developing, monitoring manpower and schedule requirements, able to conduct field survey and willingness to travel for field assignments.
- Ensuring instrumentation deliverables for technical quality, accuracy and compliance with various design tools, procedures and codes-regulations-specifications-standards-recommended practices.
- Maintaining design draughting data and preparing work share packages, checking work assigned to Designers and CAD Technicians for technical quality and compliance with customer and standards.
- Managing the design drafting team for the aforementioned tasks with oil & gas operating companies; WOC-Libya and EPC companies BlackCAT-Qatar, DeltaAfrik-Nigeria and Fortune Energy-Dubai.
- Prepared DED instrumentation deliverables for Brownfield onshore oil & gas field facilities modifications/upgrade; conduit routings, cable trays/tube trays sizing & routings, termination diagrams, cable diagrams, cable schedules & junction box schedules, MTO/BOQ/RFQ's, etc.
- Prepared FEED instrumentation deliverables for Greenfield offshore gas field facilities for Chevron's Funiwa Gas Project-Well head, Production and Living quarters platforms; Fire and Gas layouts, Fusible loop layouts, LP's escape way layouts and block diagrams MCT layouts, etc.
- Prepared DED instrumentation deliverables for Brownfield offshore oil & gas field facilities modifications/upgrade for ADDAX Antan project; Fire and Gas & fusible loop layouts, remote I/O termination details, FOC routing layouts, loop diagrams, hook-ups, MTO/BOQ's, etc.
- Prepared DED E&I deliverables for Greenfield offshore Egina FPSO; PCS/ESD/FGS cable block diagrams & HVAC E&I interface cable block diagrams for all technical and control rooms and assisted 3D modellers and SPI users, etc.
- Prepared DED E&I deliverables for FPSO Cyrus; PCS/ESD cable block diagrams, installation drawings, hook-ups, cable tray sizing, earthing & location layouts, cables/glands/junction boxes/cable & tube trays/tubes & fittings/installation structure materials/consumables MTO/BOQ/RFQ's and assisted 3D modellers, etc.

Knowledge

- Applying basic engineering and design draughting concepts, scheduling/reviewing/resolving 3D model interferences/clashes for Instruments-FGS-PAGA equipment's, supports and cable trays.
- Attending project meetings and various review sessions like Model Review, HAZAOP & SSFA Review, Lessons Learned and etc. Conducted "Cause and Effect Review Workshop".
- Ability to prepare various Instrumentation deliverables; legends, symbols and CADD standards, engineering guidelines and standards, loss prevention deliverables, demolition drawings and etc.
- Ability to prepare Instrument project deliverables; Instrument system architecture diagrams, instrument standard drawings, Instruments-FGS-PAGA indices, I/O list and layouts and etc.
- Ability to prepare FFB deliverables, cable block diagrams, safe charts, cause & effect charts, logic diagrams, MTOs, BOMs, RFQs & Work Packages for construction and etc.
- Ability to prepare various E & I support structure fabrication design and detail drawings with complete Material Take Off (MTO) deliverables as per project specification.
- Ability to discover issues and recommend solutions to business problems uncovered during course of performing assignments.
- Ability to prepare MDR (Master Document Register) based on the project scope of work and basis of design.
- Ability to prepare DSC (Design Scope Change) based on the project scope of work and basis of design.
- Ability to maintain DED & As-Built documentation within the company specification, industry standards, etc.

Attitude

- Providing design sketches/technical guidance utilizing theoretical and practical design knowledge for drawing/model preparation by Designers and CAD Technicians.
- Providing training, weekend classes and mentoring of young CAD Technicians, Designers and Engineers. Providing input to performance appraisals of lower level personnel.
- Effective use of computer and internet knowledge – comfortable working in a technology savvy environment.
- Using interpersonal skills and working effectively in multi-cultural environments. Also possess interpretive, written and oral communication skills.

Key Qualifications

- Continuous learning for better engineering practices to stay abreast of on-going developments by studying new instrument standards, techniques, magazines & catalogues. Participation in meetings, presentations, various design tool forums and other networking opportunities to remain viable.

Educational Qualifications

- 1982-1984 Mechanical Draughtsman course; 1987-1988 Electrical Draughtsman course; 1988-1989 Piping Draughtsman course

Affiliations

- Member of Computer Society of India (CSI) – Life Membership Number: 00103106; Member of Instrument Society of America (ISA) – Senior Membership Number: 32911311

Professional Training and Courses

- Underwent various design tools 2D and 3D Plant Design CAD concepts trainings; SPI 2013 (INtools) Advanced User/Admin and SP3D 2014 Equipment Modelling/Setup & Administration and SPI 2007 and PDMS 11.6, PDS 07.01.00.10 and CADWorx P&ID Professional 2005.
- Underwent extensive training in H2S/Breathing Apparatus in Qatar and PDO HSE Training Passport in Oman (HSE, H2S and IFR & DHR).
- Underwent extensive one year training from June 1987 to May 1988 in Instrumentation Design and Draughting at Fair Service Organisation-Instrumentation engineering consultants in Mumbai, India.

Skills

- Verifiable extensive AutoCAD, SPI-User level/Admin, MS Office, CADWorx P&ID and PDF. Experience with windows operating system architecture and other applicable hardware and software to perform duties. Familiar with PDMS, PDS, MicroStation, NAVISWORKS, SP3D Equipment Modelling/Setup & Administration, SmartPlant Foundation and SmartPlant Cloud.

Engineering Management

- Estimation, project schedule and MDR, Instrumentation; design draughting and CADD team mentoring, specifications and standards, self-check, check-print and IDC, redline mark-ups and as-built, control system, hazardous area and intrinsic safety, HSE and QA/QC and PTW and tool box talk. Managing Design Scope Change (DSC) and Work Packages for construction.

Design Draughting

- Legends, symbols and CADD standards, engineering guidelines, industry codes and standards, design tool setup, customization of symbols, templates and layouts, instrument project & FFB, loss prevention-F&G deliverables, safe charts, cause & effect charts, FGS cause & effect charts, logic diagrams, MTOs, BOMs & RFQs and deleted / demolition deliverables and site visits.

CADD & Design Tools Skills and Abilities

- **SmartPlant Instrumentation-SPI (INtools) – Enhanced Report / SmartSketch / AutoCAD / MicroStation / Excel / PDF:** Instrument index module, wiring module, hook-up module, loop diagrams module, browser module, customization of symbols and document binder.
- **SmartPlant Instrumentation-SPI (INtools) Setup & Administration:** Oracle database installation, setup & initialisation, customization of symbols, templates and title block, document binder tasks.
- **SP3D (SMART 3D/SmartPlant 3D) – SmartSketch / MicroStation / AutoCAD:** Modelling of instruments, FGS & PA/GA equipment, stands, racks, junction boxes with support frames and etc., interference checking and MTOs.
- **SP3D Setup & Administration:** Oracle & MS SQL server database and SP3D installation, project setup, model area management, permission groups & user access control, catalogue & specification creation and bulk loading, drawing extraction and etc.
- **PDS 3D and EE Raceway – SmartSketch / MicroStation / AutoCAD / PD_Report:** Modelling of instrument/loss prevention/telecoms cable trays on pipe rack, branch cable trays, underground cable trenches & duct banks showing in strip, local panels with access volumes, junction boxes with support frames & access volumes, instrument-offline, all model databases and etc., interference checking, extracted instrument-JB location-cable routing layouts and MTOs.
- **PDMS – AutoCAD / MicroStation / PDF:** Modelling of instrument/loss prevention/telecoms cable trays, cable design-cableways, off-line instruments & JB's structure/stands/racks and escape routes, clash detection, extracted instrument-JB location-cable routing layouts and MTOs.
- **AutoCAD – PDF:** P&IDs, overall system architecture diagrams, wellhead control system schematics, instrument equipment, technical & control room, RTU room, telecoms room, UPS & battery room space requirement layouts, instrument cable block & instrument wiring diagrams, logic diagrams, FCS/DCS configuration diagrams, instrument-JB location-cable tray routing & coaming layouts, MCT layouts, hook-ups, installation drawings, heat tracing drawings & FGS and PA/GA equipment location layouts, LP escape route layouts, telecom network conceptual diagrams, demolition-destruction drawings, and etc. CADD standard check.
- **MS Access, Excel and Word – PDF:** Instrument index/list, instrument I/O list, cable schedule, cable tray sizing calculations, safe charts, cause & effect matrix, FGS cause & effect matrix, MTO/BOQ/RFQ and various specifications and memos.
- **XBCC:** Managing all the MTO, communication and correspondence activities – BLACK CAT document management and control system.
- **VBC:** Visual Byblos Cyberspace – WoodGroup-CCC document & drawings management and control system.
- **SPF:** SmartPlant Foundation – DeltaAfrik-WorleyParsons document & drawings management and control system.
- **Safety-in-Designs:** Various types of cable trays and instrument/equipment installation construction deliverable packages are produced in accordance with SID, HSE requirements and standards.

Experience

- **Fortune Engineering & Energy Services, Dubai, UAE**
Senior Instrument Designer, October 2015 – To present. EPC Company for oil & gas field facilities.
Projects: Avantgarde Shipping's FPSO Cyrus – E&I detailed design, material RFQ's and support structure fabrication for topside six modules for skid/loose supply equipment. Managing the project E&I team of 3D modellers & 2D drafters for project FPSO Cyrus. And also, assisting the E & I construction team.
- **DeltaAfrik Engineering Limited - WorleyParsons Lagos, Nigeria**
Lead Instrument Designer, June 2012 – July 2015. EPC Company for oil & gas field facilities.
Projects: FEED task for Chevron's Funiwa Gas Project-onshore & offshore concept, DED task for Total's EGINA FPSO and DED task for ADDAX's Antan-offshore. Managing the project instrumentation discipline team of 3D modellers & 2D drafters and DED task for ADDAX's Ofrima Udele-offshore project; prepared MDR for four platforms.
- **WoodGroup-CCC Ltd., (Oman Branch), Muscat, Oman – PDO**
Senior Designer-Control & Automation, January 2012 – April 2012. Engineering and Maintenance Contract for PDO's oil and gas field facilities.
Projects: Performed instrumentation as-built task for PDO's Bahja oil and gas field facilities.
- **Black Cat Engineering & Construction Co. W.L.L., Doha, Qatar**
Senior Instrument Designer, July 2011 – January 2012. EPC Company for oil & gas field facilities.
Projects: Performed instrumentation as-built, demolition and DED task for QP's gas turbines. Managing the project instrumentation discipline team of 2D drafters.
- **Waha Oil Company (WOC), Tripoli, Libya – Teknica/Taknia Libya Engineering Company**
Senior Instrument Designer, March 1998 – February 2011. Seconded to the engineering department, design & draughting section of Waha Oil Company.
Projects: Performed instrumentation, automation, loss prevention and telecoms as-Built, demolition, facility upgrade, FEED and DED project tasks for following areas; well flow lines, well manifolds, oil plants, gas plants, gas turbines & compressors (Solar & GE), power plants, metering systems, oil transmission network, oil terminal & new projects like SCADA system upgrade and etc. Managing the E&I team of 2D drafters.
- **The Bahrain National Oil Company (BANOCO), Awali, Bahrain – Comsip Al A' Ali Cegelec**
Instrument Designer and Draughtsman, September 1990 – January 1998. Seconded to the projects department, design & draughting section of BANOCO.
Projects: Managed aforesaid deliverables for oil and gas field facilities and HIDD Pipelines project.
- **Eurrestra Industries Limited, Mumbai, India**
Instrumentation Draughtsman, June 1989 – September 1990. Turnkey engineering contractor for agricultural and chemical based plants.
Projects: Performed instrumentation deliverables for Agricultural and Chemical based projects.
- **Fair Service Organisation, Mumbai, India**
Instrumentation Draughtsman, June 1987 – May 1989. Instrumentation engineering service consultancy for various major EPC companies and industries.
Projects: Managed instrumentation deliverables for NPC, DAVY, DALAL, EIL and various consultants & industries in Mumbai, India.