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Australia

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Ivan Mlacak

Objective

To provide a professional and effective engineering documentation service with the vast experienced I have gained over many years of service over different disciplines. Including project lifecycles from concept and right through to decommissioning.

Personal IT Equipment

Current Engineering Software Includes

- Autodesk Plant Design Suite Ultimate 2013 (Network License)
- Autodesk Product Design Suite Ultimate 2013 (Network License)
- Autodesk Publisher 2013 (Network License)
- Autodesk Vault Professional
- Microsoft Office 365 Business and Project

Hardware equipment includes

- Dell T7500 workstation
- Dell T3500 workstation
- Dell R310 server (Microsoft Small Business Server 2011)

Experience

2018 – current Kilic Engineering

Mechanical Designer

Working with the company Kilic Engineering, using Autodesk Product Design Suite. Developing various conveyor and process plants. Duties include Mechanical, Structural detail documentation.

Engineering Duties include:

- System design/system modifications
- Detail Design Specific Tasks (eg compartment arrangement alterations)
- Studies (Integration/Research and Development/Scoping)
- Obsolescence assessment
- Preparation of Detail and Design Check Packs etc.
- Hazard analysis requirements and support
- Design Verification of Detail Design Activities
- Design Review of System Designs
- Document Control and Management

2016 – 2018 Lucas TCS/SnO Group

South Road Darlington Upgrade/ RAH Project

Civil installation packages to a value of \$150k project scope include:- Demolition excavation, formwork, reinforcement steel fixing, concrete, structural steel

Engineering Duties include:

- Engineering Work Method Statements
- Site lifting Plans and management
- Survey confirmation
- WHS Management
- Hold Point and Check Point management
- Material control

2015 – 2016

Sarah Constructions / Adelaide University

Commercial Fitout / Project Lead

Commercial Fit out / Heritage Build Structural and Remedial Works

Engineering Duties include:

- Building preparations / 1st Fixing and Remedial works
- Concrete Installations and Remedial Works
- WHS Management
- Hold Point and Check Point management
- Material control

2013 – 2015

DigiT Landscapes/Variou local Councils

Civil Construction / Project

Rain Gardens / Civil and Concrete Installations

Engineering Duties include:

- Earthwork preparation
- Survey confirmation
- WHS Management
- Hold Point and Check Point management
- Material control

2013 – 2013

Quarry Mining and Manufacturer (QMM)

Contract Designer

Working with the company QMM, using Autodesk Product Design Suite. Developing various conveyor and process plants. Duties include Mechanical, Structural detail documentation.

Engineering Duties include:

- System design/system modifications
- Detail Design Specific Tasks (eg compartment arrangement alterations)
- Studies (Integration/Research and Development/Scoping)
- Obsolescence assessment
- Preparation of Detail and Design Check Packs etc.
- Hazard analysis requirements and support
- Design Verification of Detail Design Activities
- Design Review of System Designs
- Document Control and Management

2012 – 2013

ID FABRICATION / YORK CIVIL

Designer / Project Engineer

Working with the company ID Fabrication, using software including Inventor Professional / Microsoft Project and Office. Major project included the completion of a \$6m and 600ton multiple reefer tower structure for York Civil and DP World in Brisbane

Engineering Duties include:

- System and Fabrication design
- Quotations, Project Costing and Planning
- QA Company and Project Set-up
- Preparation of Detail and Design Check Packs etc.
- Hazard analysis requirements and support
- Design Verification of Detail Design Activities
- Design Review of new and upgraded System Designs
- Documentation Control and Management
- New equipment maintenance procedures and HAZOP reports
- Job pack and fabrication drawing production
- P&ID development and management
- Prototype assembly and testing

2011 – 2012

Kopex Waratah

Designer Engineer (Edwards and Holmes)

Working with the company Kopex Waratah, using software including Inventor Professional / Vault Professional. Developing and upgrading underground mining, conveying and process vehicles. Duties include Mechanical, Hydraulic, Electrical and Instrument Control documentation, managing data through the engineering change process of the vaulting system. Heavy vehicles work with include Roadheaders, Feeder Breakers and Shuttle cars

Engineering Duties include:

- System design/system modification
- Detail Design Specific Tasks (eg compartment arrangement alterations)
- Studies (Integration/Research and Development/Scoping)
- Obsolescence assessment
- Preparation of Detail and Design Check Packs etc.
- Hazard analysis requirements and support
- Design Verification of Detail Design Activities
- Design Review of new and upgraded System Designs
- Documentation Control and Management
- FOPS and ROPS design and certification
- Operator and machine visibility reports and studies
- New equipment maintenance procedures and HAZOP reports
- Job pack and fabrication drawing production
- P&ID development and management
- Prototype assembly and testing

2010 - 2011

Pall Corporation

Contract Designer (Blyss Personnel)

Working with the company Pall Corporation, using Inventor and developing HDPE, PVC, ABS and Stainless Steel Pipe systems in operation for Pallet size package, highly compact plant desalination projects ranging in size from 40,000 litres to 400,000 litres daily water production. Duties include Mechanical, Electrical and Instrument Control documentation

Engineering Duties include:

- System design/system modifications
- Detail Design Specific Tasks (eg compartment arrangement alterations)
- Studies (Integration/Research and Development/Scoping)
- Obsolescence assessment
- Preparation of Detail and Design Check Packs etc.
- Hazard analysis requirements and support
- Design Verification of Detail Design Activities
- Design Review of System Designs
- Document Control and Management

Software use, majority with Inventor for 3D Modelling and BOM management 2D preparation of detail drawings etc. Also Autocad when required and for P&ID's and Electrical Design

2009 – 2010 CADgile / Osmoflo

Contract Designer (CADgile)

Working with the company Osmoflo and water filtration systems, using Inventor and developing HDPE, PVC, ABS and Stainless Steel Pipe systems in operation for container size package plant desalination projects

Engineering Duties include:

- System design/system modifications
- Detail Design Specific Tasks (eg compartment arrangement alterations)
- Studies (Integration/Research and Development/Scoping)
- Obsolescence assessment
- Preparation of Detail and Design Check Packs etc.
- Hazard analysis requirements and support
- Design Verification of Detail Design Activities
- Design Review of System Designs
- Document Control and Management

Software use, majority with Inventor for 3D Modelling and BOM management 2D preparation of detail drawings etc. Also Autocad when required and for P&ID's and Electrical Design

2008 – 2009

CADgile / United Water

Contract Designer (CADgile)

Working with-in an alliance team between United Water, SA Water and KBR. Currently working on the Christie's Beach Upgraded Project. Which is to increase the capacity of the waste water treatment plant by 50% and reuse 25% of the plants effluent for delivery to new developments in the southern suburbs for domestic use in gardens and toilets. My role is mainly with the mechanical and piping side of the project using base 2D Autocad

2007 – 2008

Connell Wagner

Technical Officer / Designer

Major projects currently working with are the Common User Facility for ASC Shipbuilding and the Hardened Network Army Base in Edinburgh. Working on the consultancy side developing various engineering documentation involving Autodesk, Inventor and AutoCAD. Also producing engineering reporting for the resolution of various engineering problems.

2004 – Current

Regency Institute of Tafe

Lecturer – Inventor 3D Modelling

Conducting a 13 week course (On Call Basis), Training in the use of Autodesk Inventor 3D Modelling Software. Course objective is to teach the intermediate use and understanding the methodology of the creation of Parts, Assemblies and of Drawings with Annotations, Parts Lists. Prerequisite skill levels range various for students.

2004 – 2007

Australian Submarine Corp.

Designer

The company is solely involved in the manufacture of the Collins Class Submarines, Though the company has completed its order for six submarines, it has begun its progress in the through life support. This involves improvements in motion, use and safety.

Engineering Duties include:

- Creation of PDR (Problem Deviation Reports) & Assessment
- System design/system modifications
- Detail Design Specific Tasks (eg compartment arrangement alterations)
- Studies (Integration/Research and Development/Scoping)
- Obsolescence assessment
- ILS Tasks (MAP's/DAP's etc)
- Preparation of Check Packs which included preliminary detail design and system design etc.
- Hazard analysis requirements and support
- Design Verification of Detail Design Activities
- Design Review of System Designs
- Creation of formal DDN (Document Delivery Notes)

Involvement in all processes in its infancy.

Software use, majority with AutoCAD Mechanical for 2D preparation of detail drawings etc. AutoDesk Inventor and Mechanical Desktop used when required for COG calculations and mass property estimates.

2001 – 2004

Pacific Marine Batteries

Design & IT Coordinator

The company is solely involved in the manufacture of lead acid batteries and its auxiliaries for the Collins Class Submarines. The Company has a development drive towards creating an export market. With current tenders occurring within the Asian region.

My main involvement here at this moment is to develop the Redesign of the Current Product from a High power Output battery to a High Endurance battery with the vision of creating up to two

alternate products in a direction that will be developed in a minimum time. This development will be used to create a possibility of the production of a new product within in customer requirements.

To appreciate the size of the project it takes one year for a company of 45 employees to make one battery (one product).

Engineering Duties include:

- Maintain the company's project management within the companies ISO9000 guidelines and accreditation.
- Develop and Prepare new project test plans for the verification of designs
- Review and advise for quality requirements of current and new product suppliers and there performance.
- Prepare and review, process and production requirements for new products and changes to existing products
- Develop and complete the Collins Class design redevelopment towards a high endurance battery
- Maintenance and upkeep of the engineering review process
- Help and Guide towards the maintenance of the company's document management system.
- Preparations of GA drawings and detailed manufacturing drawing for new plant equipment die and jig manufacture.

IT Duties Include:

- Maintain and develop the companies manufacturing database base on Microsoft Access and SQL.
- Maintain and develop the companies General Administration systems that include the finance sector as well as the document control and management system.
- User access and administration (security management)
- Maintain and develop the companies complete computer network and infrastructure this include a server (Windows 2000 Server OS) approximately 25 Workstations, Virus and Malicious Attack and Management, Firewall Maintenance include VPN access, Disaster Recovery Development and implementation.

2000-2001 Adelaide Conveyor Co.

Project Management / Engineer

A general engineering company, which specializes in material handling. Majority of which involves the Automotive Industries and Abattoir industry.

My involvement here was from the quote and project preparation stage. Through to the workshop requirement, preparation and management and then finally to the installation and commissioning of a project.

- Quote and Project plan preparation for the completion in a required time scale as specified
- Design and drawing preparation for both customer and workshop. Both assembly and detail.
- Follow guidelines of required Australian standards.
- Workshop management of designated projects (Purchasing and Manufacturing)
- Site Management of project installations
- Preparation of documentation and database systems for the installation of ISO 9000 quality system.
- Perform engineering calculations as required (Stress, bending moments, deflection etc.)

1998-2000 Pacific Marine Batteries

CAD Draftsperson / Engineer

Company is solely involved in the manufacture of lead-acid batteries for the Collins Class

Submarines.

Please note at this stage most drawing was done in 2D and any 3D work was done for technical documentation

- Drawing update and modification for the improvements and modifications in the company's production processes.
- Maintain and upkeep of electronic and hardcopy drawings of plant and equipment.
- Preparation of GA drawings and detailed manufacturing drawing for proposed new battery, plant, die and jig manufacture.
- Document control of drawings and technical documents
- Perform and report on warranty claims of cell failures.
- Perform and report on tests with the objective to improve the production process of battery plate manufacture.
- Preparation of inspection and test plans as required
- Involved in the upkeep of the companies design plan process. (ISO 9000)
- Note required to comply within Australian and Defense Standards for drawing, procedures and document management.

1995-1998

Hydroil Pty Ltd.

Southridge, SC

CAD Draftsperson / Engineer

Company is solely involved in the manufacture of Hydraulic and Pneumatic Cylinders.

Duties included:

- General Arrangement drawing for customer approval in conjunction with a prepared quote, required before proceeding with detailed workshop drawings for manufacture.
- Produce workshop detail drawings on approval, must be functional and created in the shortest time possible to allow maximum manufacturing time.
- Update, improve and rework drawing databases and tools in between jobs when possible
- Supply technical and engineering information as required by customer.
- Fully conversant with main feature of AutoCAD (ie X-ref, attributes, Paper Space and Model Space, view ports and customization.)
- Check engineering on specialized jobs as required.

Education

2010

PDS Design Solutions ATC (Kuala Lumpur, Malaysia)

- Autodesk Revit MEP Essentials Training (Certificate No. 191WGXRZ6)
- Autodesk Revit Architectural Essentials Training (Certificate No. 191WGXRZ6)

2010

AVEVA (Kuala Lumpur, Malaysia)

- AVEVA Basic PDMS Design

1996-1997

Adelaide University

- Currently Deferred Mechanical Engineering Degree (two years full time study may complete).

1991-1993

Regency College of TAFE

- Associate Diploma in Mechanical Engineering.

Interests

Educating and gaining experience in engineering, CAD and computing. Keeping fit, playing social sports including golf, tennis and volleyball. In general keeping socially active.

Referees

Available on request.