



COMPANY

ProForma is an engineering consulting firm serving the Energy – Utilities – Mining and Manufacturing sectors, both locally and internationally. Since 2007, ProForma’s team ensures they understand the clients’ needs in providing an efficient engineering solution in compliance with the rules – Regulatory Acts, Applicable Codes, Jurisdictional Requirements and Industrial Standards.

EXPERTISE

1. Pressure Equipment Design – Piping Systems – Power Piping
 - a. Isolation tools for the isolation, testing, and intervention for refinery, distribution, and transmission pipe systems.
 - b. Design registrations of pressure equipment with the various Pressure Equipment Regulators in Canada (OFC, TSASK, ABSA etc.).
 - c. Gas system and burner management in accordance with the CSA 149 codes.
 - d. Fuel handling system design, storage, management, and piping in accordance with CSA & NFPA codes.
 - e. Compressed Air, Cooling Tower and Fire Water upgrades as it relates to mining operations.

- f. Generation of design calculations, specifications, and drawings in accordance with CSA B51, API 650, 620, etc and ASME BPVC.
 - g. As Built information and design for existing oil battery installations.
 - h. Detailed reports for ASME Div 2 part 5 Design within ASME BPVC codes. Design by analysis is a pressure vessel code approach to FEA analysis of highly loaded systems and geometries not covered in “design by rule”.
 - i. Repair procedures for pressure equipment in accordance with ASME PCC codes (bolting, repairs, damage mechanism definition and risk based assessment) as well as NB-23 (National Board).
2. Cranes and Mobile lifting equipment
 - a. Inspections (partnership with AXIS Inspection) in accordance with applicable codes for lifting equipment and platforms. ProForma supervises the inspection in accordance with these standards and issues paperwork for the owner.
 - b. Engineered Weld Repair Procedures for requisite repairs on mobile equipment.
 3. Lifting and Heavy Transport
 - a. Approved Engineered Lift plans for critical lifts and complex coordinated rigging procedures.
 - b. Design of complex or critical lifting equipment including spreader bars, lift beams, load balancing equipment and load monitoring.
 - c. Transportation plans and trailer design reviews for permit application of heavy loads. Super-elevation, roll stability and routing checks.



- d. Outrigger and rig mat design based on ground pressure requirements.
- 4. Metallurgical Engineering – As part of ProForma’s pressure vessel and welding work we have full time PhD metallurgist on staff.
- 5. Accident investigation – working on behalf of either the owner or the jurisdictional authority – ProForma Engineering has been involved in accident investigations on rigging and lifting accidents and pipeline incidents.
- 6. Welding Engineering – ProForma has three full time welding engineers certified to;
 - a. CSA W47.1 (steel) and W47.2 (aluminum) for structural welding standards. (CWB Approved Professional Engineer)
 - b. ProForma also has extensive experience in the development of ASME IX welding code fabrication procedures, repair procedures, and complex in-service welding procedures.
 - c. The US and Canadian pipeline code variants. ProForma has worked with pipeline operators for welding in accordance with CSA Z662, CFR-49, and applicable API codes.

large compressed air systems and automated fuel delivery systems.

- 2. Project Management and Controls – The ProForma project management team are members of the Project Management Institute (PMI).
- 3. Estimating and Quantity Surveying – ProForma has a highly experienced project controls and estimating team managed by a Cost Professional certified by AACE (Association for Advancement in Cost Engineering USA). ProForma staff members belong to the cost control committee for Manitoba and maintain membership in CIQS (Canadian Institute of Quantity Surveyors).

PROJECT SUPPORT

ProForma has partner firms for multi-disciplinary services including Electrical and Structural aspects of projects. Other services:

- 1. Feasibility Studies – ProForma has prepared feasibility studies considering the cost vs benefit for the installation of

PRINCIPAL ENGINEERS

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