

MACHINING

Academy Petroleum Industries was started over 25 years ago as a subcontract machine shop for oilfield OEM's and this is still the cornerstone of our business today.

Through the years we have gained experience in machining and manufacturing complex parts and kept current with the most up to date methods and machines. We specialize in quick delivery of small run parts but also maintain the capability to do large production runs using our CNC machining department.



Academy Petroleum Industries exists in a 57,000 square foot facility on a 4 Acre sight in Edmonton, Alberta, Canada. We have an overhead lifting capacity of up to 10 Tons and can swing up to a 75" diameter part on our Vertical Turret Lathes. Our state of the art CNC controlled Vertical and Horizontal Machining Centres have five axis capabilities to handle the most complex geometry. We also have a dozen conversationally controlled CNC lathes that have up to a 48" swing. In addition, Academy still maintains Manual Lathes which have a 30" swing and manual drill presses. In order to aid with rush delivers we have our own inventory of commonly used barstock and forgings in a variety of material types and sizes and our saws can cut barstock up to 32" in diameter.

We specialize in **quick delivery** of **small run parts** but also maintain the capability to do **large production runs** using our CNC machining department.

WELDING

Academy Petroleum Industries has extensive welding capabilities in order to meet our customer demands.

We employ numerous Journeyman Welders, several of which have their Pressure 'B' Certification, and can weld almost any material thanks to our catalog of over 5 dozen Welding Procedures. We are also capable of welding using almost any process such as SMAW (Stick/MIG), GTAW (TIG); SAW (Sub-Arc) and FCAW (Flux Core).

Our welding machines include state of the art Hot-Wire TIG Welding systems which are capable of cladding bores and ring grooves with Inconels & Stainless Steels with amazing quality and disposition rates. To improve customer deliveries, Academy uses two furnaces to provide in-house Post Weld Heat Treatment services.



We have **extensive welding capabilities** in order to meet our customer demands.

ENGINEERING & DESIGN

Academy Petroleum Industries has extensive in house engineering and design capabilities. With over 15 years of experience in the design of products for the oil & gas industry Academy can assist you in taking your product from concept to reality. Academy Petroleum maintains a Permit to Practice engineering through APEGGA as well as being ISO 9001:2008 registered for design.

We have multiple 3D CAD Modeling & Design Software including SolidWorks® and Inventor®. We also have 2D Drafting capabilities through the use of AutoCAD®. Academy also has cutting edge Computational Software to aid in design analysis such as SolidWorks® Simulation Finite Element Analysis and Mathcad®.

Once designed and manufactured, Academy can also assist you with prototype testing and design validation using our in house Pressure Test Facilities combined with our state of the art Quality Control and Measurement Capabilities. All are equipment fully calibrated and certified as per ISO requirements which include our Portable Coordinate Measurement Machine (CMM) and Rockwell Hardness Tester.



We have extensive **in house engineering** and **design** capabilities, prototype and validation testing.