EQUINOX®
Engineering Ltd

NATURAL GAS

Facilities & Pipelines

Gas Gathering & Processing

EQUINOX Engineering Ltd

Equinox Engineering Ltd. is a world class provider of EPCM services to the global oil and gas marketplace.

Equinox has industry leading expertise in natural gas processing, with a specialization in sour gas treating.

Founded in 1997, Equinox has successfully executed over 5,000 significant projects around the world.

Equinox has a worldwide presence with offices in Calgary (Canada), Brisbane (Australia) and Pune (India).

We provide complete EPCM services for facilities and pipeline design and installation. This includes Conceptual and Front End Engineering Design (FEED), Detailed Engineering Design, Procurement, Construction Management through to Start-Up and Commissioning.

GLACIER SOUR GAS PLANT EXPANSION

Equinox executed the FEED and Detail Design for the brownfield sour gas plant expansion to 250 MMscfd capacity. Newly installed facilities include refrigeration, condensate stabilization, compression, vapour recovery unit, power generation as well as an upgraded amine sweetening plant.

Gas Processing Expertise

Amine Sweetening Facility (200 MMscfd)

SOUR GAS

Equinox has unrivalled experience in sour gas processing and evaluation of acid gas treating technologies. We specialize in processing facility design and construction projects that deal with treatment of acid gas, with varying levels of CO_2 and H_2S up to 40% concentration.

Equinox expertise in sour gas includes (but is not limited to) Sour Gas Processing Facilities, Field Facilities, Pipelines; Amine sweetening; CO_2 Membranes (single and two-stage); H_2S Scavengers; Sulphur Recovery and H_2S Disposal; Acid Gas compression and injection.

POWER GENERATION

Equinox has significant experience with power generation facilities. Equinox expertise includes natural gas fired, reciprocating engine generators (gensets); combined cycle Gas Turbine Generators (GTG); Cogeneration; Single or Dual fuel for the power plant feedstocks as well as Steam Turbines.

COMPRESSION

Equinox has successfully executed hundreds of compression projects. Our extensive gas compression experience includes centrifugal, reciprocating, rotary screw and vane type compressors for all sweet and sour gas applications, as well as gas turbine, natural gas engine, steam turbine and electric drivers.

WELL SITE & FIELD FACILITIES

Equinox has designed and completed thousands of well site tie-ins as well as gathering systems, trunk and group lines. We have industry leading expertise in unconventional, multi-well wellpad design.

LIQUIDS RECOVERY

Equinox has significant experience with liquids recovery from natural gas streams. We have executed numerous projects utilizing refrigeration, hydrocarbon dew point control and liquid recovery plants including propane refrigeration, mixed refrigerant plants, Joule Thompson (J-T) refrigeration, turbo-expanders, de-ethanizers, depropanizers and de-butanizer facilities.

Selected Projects

KAKWA RIVER SOUR GAS COMPLEX
250 MMscfd capacity facility

KAKWA RIVER (PHASE I)

FEED, Detail Design and installation of 50 MMscfd single train gas plant. Facility includes inlet separation, condensate stabilization, inlet compression, sales compression, refrigeration, de-ethanizer, vapour recovery unit, power generation, recycle system, storage for produced water, condensate and NGL.

KAKWA RIVER (PHASE II)

FEED, Detail Design and installation of additional 200 MMscfd capacity processing train. Major equipment includes inlet separation, inlet compression (14,200 hp), condensate stabilization (5900 bbl), dehydration, turbo expander (17,700 bbl C2+), centrifugal sales compression (26,440 hp), amine sweetening and gas turbine power generation (11.21 MW).

Selected Projects

POUCE COUPE SOUR GAS PLANT

FEED, Detail Design and installation of 60 MMscfd dual train, sour gas plant. Processing trains (2 x 30 MMscfd) include inlet separation, inlet/sales compression, amine sweetening, refrigeration, liquid fractionation and stabilization, acid gas compression, vapour recovery, recycle system, storage for produced water, condensate and NGL.

PLACID SOUR COMPRESSOR

FEED, Detail Design and installation for 60 MMscfd sour processing facility with 16,000 bpd of liquids. Fast tracked (9 month) schedule including engineering through to commissioning and start-up. Equipment includes inlet module for multiphase gathering lines, inlet separation, compression, dehydration, emulsion pump package, instrument air, fuel gas, MCC building, power generation, LP and HP flare, office / control building.

SIMONETTE GAS PLANT

FEED, Detail Design and installation for the brownfield sweet gas plant expansion to 75 MMscfd capacity. Newly installed facilities include slug catcher, liquids/liquids separator, inlet separation, condensate stabilization, inlet/sales compression, refrigeration, measurement, produced water injection, storage for produced water and condensate. Facilities provide incremental LPG production of 2,700 bpd and stabilized condensate production of 9,000 bpd.

Selected Projects

WEST DOE SOUR GAS PLANT

FEED and Detail Design for a sour gas plant with three process trains totaling 100 MMscfd with process gas conditions of 2.6% H_2S and 3.0% CO_2 from the Montney.

TOOGA SOUR GAS PLANT

FEED, Detail Design and installation of 55 MMscfd dual train, sour gas plant in remote NBC. Processing trains (30 + 25 MMscfd) include inlet separation, inlet/sales compression, amine sweetening, refrigeration, power generation, storage for produced water and NGL.

POUCE COUPE SOUR GAS PLANT

FEED, Detail Design and installation of 60 MMscfd sour gas plant. Facilities include inlet separation, inlet/sales compression, amine sweetening, refrigeration, liquid fractionation and stabilization, acid gas compression, vapour recovery, recycle system, storage for produced water, condensate and NGL.

MOOSE MOUNTAIN SOUR GAS & OIL BATTERY

FEED, Detail Design and installation for the brownfield gas battery expansion to tie-in new production in mountainous, logistically challenging terrain (over 2000 metres of elevation drop to production pads). Facility handles highly sour gas (to 25% H2S) and sour oil (to 45% H2S).

WASKADA LIQUIDS RECOVERY PLANT

FEED, Detail Design and installation for the brownfield oil battery expansion to handle rich, sour associated gas. Facilities include inlet separation, inlet/sales compression, amine sweetening, refrigeration (to recover 1,400 bpd of NGL), NGL storage, flare, incineration, MCC/PLC.

Equinox delivers focused and experienced

Premium Teams

customized with the best

Technical Expertise

to align with

Client Culture

to ensure repeatable and

Successful Projects

EQUINOX Engineering

Canada | USA | Australia | India

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