

NGx

CANADA'S FIRST NATURAL GAS RECIPROCATING ENGINE FOR 100% GAS-POWERED FRACTURING OPERATIONS

NGx Next-Generation Technology: A New Era of Efficiency

With a focus on lowering operational costs, natural gas stands out as the most economical fuel source available today. NGx, STEP's 100% natural gas-powered pump, delivers industry-leading savings and efficiency.

As the first of its kind in Canada, this 3,600 HP internal combustion engine is engineered with STEP's proprietary ancillary systems and automation platform. Designed by industry experts, it is a best-in-class pumping solution that maximizes performance and cost-efficiencies for operators.

NO.1

Canada's first natural gas reciprocating engine for 100% gas powered fracturing operations

~78%

Potential savings in fuel versus Tier 4 dual-fuel

2:1 HHP

Pumping hydraulic horsepower (HHP) capacity outperforms conventional dual-fuel/diesel pumps during optimized operation

Application

- Hydraulic fracturing

Key Benefits

- Lowest fuel cost to operate
- First-in-class engine efficiency
- Twice as much pumping capacity as a conventional fracturing pump
- Seamlessly integrates with STEP's Tier 2 and Tier 4 dual-fuel pumping assets for hybrid completions
- Reduces maintenance needs, extends service intervals, and maximizes uptime
- OEM supported and trusted

Operational Parameters

- Rate: 0.6 to 3 m³/min
- Pressure: 0 to 15,000 psi (103 mPa)
- Pump rated to: 3,300 HHP
- Engine rated to: 3,600 HP
- Max gas supply: 424 scfm

Features

- CSA Certified Gas Train meeting the highest safety standards
- Full on-board integrated fire suppression system
- Proprietary system heating design
- Hydraulic-less design minimizing maintenance and environmental risks
- Trailer design meets spring road bans ensuring year-round accessibility
- STEP Pump Control (SPC) automation platform

The Cost Advantage of Next-Generation Fracturing

- Job scope: 4-well pad, 12/m³/min, 70 mPa
- CNG: \$0.40/scm
- Sales gas: \$0.14/scm
- Diesel: \$1.40/L

Fuel Savings - Various STEP Frac Fleet Configurations Compared to Conventional Diesel

