

Power Generation Equipment

- **Rig Safe Generators**
- **Zone 2 / Class 1, Div 2 Hazardous Area Generators**
- **Project Specific Generators**

**SIMMONDS
EQUIPMENT**

Simmonds Equipment offers a turnkey service for Power Generation Equipment including:

- Design
- Project management
- Fabrication
- Integration to client systems
- Full automation
- Factory acceptance testing
- Third party approval
- Site installation
- Commissioning
- Gas – diesel – bi fuel product ranges
- Service support
- Spares support



Rig Safe Generators

Rig Safe Options:

- Exhaust spark arrestor
 - Engine air intake shut off valve
 - Double skinned and braided fuel pipes
 - Fire and gas detection systems
 - Fire extinguishing systems
 - Increased IP protection levels
 - Extended service intervals
 - Third party approval for offshore use.
 - Platform remote emergency shutdown system
- "Rig safe" is for operation in a safe area only.





Zone 2 Hazardous Area Generators

Simmonds Equipment will undertake an assessment of your Hazardous Area requirement; we can then advise which of our product ranges will be correct for the provision of power suitable for use in a Zone 2 / Class 1, Div 2 Hazardous Area. Referencing the appropriate legislative and regulatory standards we offer products which meet the requirements of ATEX Directive 94/9/EC, NEC & CSA for equipment and protective systems intended for use in potentially explosive atmospheres. Generators designed specifically for operation within a Zone 2 / Class 1, Div 2 Hazardous area, providing safe shutdown and removal of all ignition sources, in the event of a platform confirmed combustible gas release including but not limited to:

- Hazardous area - Engine flame protection package
- Hazardous area - Air intake shut off valve, including integral flame arrestor.
- Hazardous area - Exhaust outlet spark arrestor
- Hazardous area exhaust flame arrestor
- Zone 2 / Class 1, Div 2 - Exhaust spark arrestor
- Zone 2 / Class 1, Div 2 - Ex n alternator
- Zone 2 / Class 1, Div 2 - Ex d control panel
- Zone 2 / Class 1, Div 2 - Ex e hard wire or socket terminal outlets
- Start system options of
 - Spring inertia
 - Electric
 - Hydraulic
 - Pneumatic
- Zone 2 / Class 1, Div 2 - Ex p – pressurization, fire and gas detection control

Project Specific Generators

The offshore operator's environment requires a varied range and standard of power generation solutions. Simmonds Equipment offers Project Specific power generation packages designed for client specific applications. Designed for operation in a Safe or Hazardous area onshore, offshore or petrochemical environment.

Generators Designed to consider:

- Cooling medium - Air or water cooled engine.
- Duty cycle - Standby or continuous
- Location - Hazardous or safe area
- Ingress protection - IP 23 to IP 56
- Control function - Synchronizing, load sharing, local or remote
- Application - Emergency / standby / black start / motor starting
- Service requirements - 500 – 2000 hour service intervals
- Lifespan - Mild steel or stainless steel enclosures
- Noise attenuation levels - Standard 83dBA @ 1 m, specific to 70 dBA @ 1 m
- Fire Rating - A0, A60
- Detection systems - Heat, gas, smoke, IR, UV
- Fire Extinguishing - CO2, Inergen, water mist
- Starting method - Pneumatic, hydraulic, electric, kinetic
- Certification - Lloyds, ABS, DNV