Johnson Matthey has a product in its emissions control toolbox to keep you fully compliant with the latest EPA and state limits and the current RICE NESHAP for your stationary engines. We help you control the gamut of dangerous pollutants—particulate matter (PM), the source of visible smoke and odor, nitrogen oxides (NOx), carbon monoxide (CO), hydrocarbons (HC), non-methane hydrocarbons (NMHCs) and hazardous air pollutants (HAPs).

Our toolbox is filled with high performance, leading-edge products for new or retrofit applications. Johnson Matthey’s emission control products are durable, easily accessible for maintenance and are of the highest quality.

**Modulex™ B (Single or Multi-Element Catalytic Converter)**
For rich or lean burn engines (250-2000 hp). When equipped with NSCR 3-way catalyst, they can reduce NOx, CO and HC emissions to comply with the most stringent regulations.
If equipped with Oxidation catalyst, they reduce VOC and CO emissions.

**Modulex™ C (Single or Multi-Element Catalytic Converter)**
For rich or lean burn engines (50-500 hp). When equipped with NSCR 3-way catalyst, they can reduce NOx, CO and HC emissions to comply with the most stringent regulations.
If equipped with Oxidation catalyst, they reduce VOC and CO emissions.

**DualOx® (Pre-Engineered or Custom Catalytic Converter)**
For large engines, count on our pre-engineered or custom designed DualOx® converters.

**Modulex™ Q (Integrated Converter Silencer)**
Looking for quieter running? Choose our Modulex™ Q Integrated Converter Silencer with critical and hospital-grade silencing combined with 3-Way NSCR or 2-Way Oxidation catalyst.

Simply put—if you have a gas engine pollution problem, call us now. We can and will bring you the best solution to efficiently and economically control engine emissions. And keep you operating!
# Gas Engine Emissions Control

No catalytic technology helps you comply with emissions standards better than Johnson Matthey.

## Emissions Control Products for Stationary Gas Engines

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<th>Type of Engine</th>
<th>Pollutant</th>
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| Rich Burn      | NOx, CO and HC (3-Way) | Modulex™ B or C with 3-Way Catalyst or Oxidation Catalyst | Modulex™ B or C is a modular converter housing with direct access to catalyst element. | > 95%  
- NOx-(0.07 g/hp-hr)  
- CO-(0.5 g/hp-hr)  
- HC-(0.5 g/hp-hr) | Low |
| Rich Burn      | NOx, CO and HC (3-Way) with Silencing | Modulex™ QB or QC | Catalytic converter with integrated silencer. | > 95%  
- NOx-(0.07 g/hp-hr)  
- CO-(0.5 g/hp-hr)  
- HC-(0.5 g/hp-hr) | Low |
| Rich Burn      | CO and/or HC | Modulex™ B or C or DualOx with Oxidation Catalyst | Modular converter housing with direct access to catalyst element or DualOx, which comprises a large converter housing with metal monolith catalyst blocks and access hatch. | > 95%  
- CO-(0.5 g/hp-hr)  
- HC-(0.5 g/hp-hr) | Low |
| Rich Burn      | Formaldehyde (and other HAPs) | Modulex™ B or C or DualOx with Oxidation Catalyst | Modular converter housing with direct access to catalyst element or DualOx, which comprises a large converter housing with metal monolith catalyst blocks and access hatch. | > 80% | Low to Moderate |
| Lean Burn      | NOx | SCR | The SCR (Selective Catalytic Reduction) catalyst system includes SCR catalyst reactor, urea dosing pumps, urea control system and urea storage tanks. | > 90% NOx | Moderate to High |
| Lean Burn      | CO | Modulex™ B or C or DualOx with Oxidation Catalyst | Modular converter housing with direct access to catalyst element or DualOx, which comprises a large converter housing with metal monolith catalyst blocks and access hatch. | > 95% | Moderate to High |
| Lean Burn      | HC | Modulex™ B or C or DualOx with Oxidation Catalyst | Modular converter housing with direct access to catalyst element or DualOx, which comprises a large converter housing with metal monolith catalyst blocks and access hatch. | > 80% | Low to Moderate |
| Lean Burn      | Formaldehyde (and other HAPs) | Modulex™ B or C or DualOx with Oxidation Catalyst | Modular converter housing with direct access to catalyst element or DualOx, which comprises a large converter housing with metal monolith catalyst blocks and access hatch. | > 80% | Low to Moderate |