

## ES3006 RB211 high inert gas fuel burner kit

Increased fuel flow recovers power lost to high inert content



### Engineered solution purpose

This engineered solution modification enables power to be recovered in applications where the fuel gas contains a high degree of inert components or where the fuel gas supply pressure has decreased.

### Applicability

All RB211 gas generators not employing Dry Low Emissions combustion technology.

### Technical description

For any gas turbine driven package, a reduction in the fuel gas supply pressure will compromise available power. Where high levels of inert gases are present in the fuel gas, the British Thermal Unit rating of the fuel is significantly reduced producing a similar adverse effect on performance.

The high inert gas fuel burner kit utilises a high flow burner design enabling an increased fuel flow into the combustor thereby recovering the lost power.

### Benefits

The potential to operate at full power is recovered for projects where the fuel supply is far from ideal. Prior to the introduction of the high inert gas fuel burner kit, the installation of expensive gas compressor packages was the only way to recover the lost power.

The full extent of power recovery will be assessed on a case by case basis through a detailed engineering study.

### Experience

The high inert gas fuel burner kit has currently been retrofitted to 2 engines and a further 2 new engines are being retrofit with the burner kit.

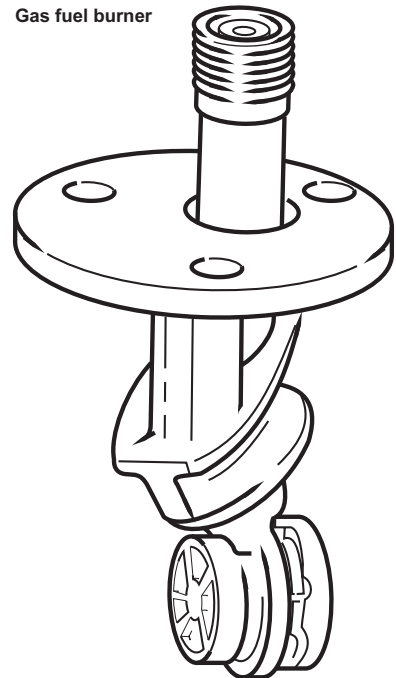
Customers include:

British Gas  
Carigali-Triton Operating Co  
Bayu Undan.

### Scope of work

Fit new burners  
New fuel manifold and associated piping (if required)  
Control system modifications

Gas fuel burner



### Bill of materials

New burners and associated piping (Mod 1502)

Alternatively, burners and HP Nozzle Guide Vanes (Mod 1340, 1341)

### Undertaken

At site

### Bundling opportunities

Controls upgrade [ES6006]

Instrumentation upgrade [ES6007]