

- Capital parts
- Combustion components
- Consumables

## New Parts Manufacturing Equivalent to GE MS9001E

Sulzer provides design and manufacturing of new gas turbine components in both hot and cold sections. We focus on lifetime extension and performance improvement of your equipment. By using the latest available design and repair technology, we are able to supply components of highest quality and often with improvements over the original. We provide better components at lower cost.

### New parts manufacturing

The manufacture of new parts equivalent to GE MS9001E components suitable for installation into PG9171E gas turbines can be divided into three main areas:

- Capital parts
- Combustion components
- Consumables

### Capital parts

The capital parts have always been regarded as the highest risk components to manufacture. At Sulzer, the whole design and manufacturing process is reviewed with our customers to supply tailor-made components to meet and suit customer specific requirements.

The capital parts supplied for GE MS9001E gas turbines are:

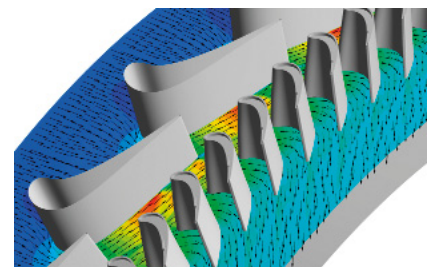
- Compressor blades
- Compressor vanes
- Inlet guide vanes
- Turbine diaphragms
- Turbine shroud blocks
- Turbine buckets
- Turbine nozzles

### Combustion components

Combustion components are mainly fabricated from either thin or thick sheet metal. The production process is highly specialized and complex due to the critical fitting tolerances. The ability to manufacture to the required quality is vital if the component is to fit with no on-site modifications. The use of fitting jigs and pre-forms is integral to the manufacturing process.

The new combustion components supplied for GE MS9001E gas turbines are:

- Combustion liners
- Cross fire tubes
- Cross fire tube retainers
- Transition pieces
- Fuel nozzles
- Flow sleeves
- Bull horns



### Consumables

For the maintenance of any turbine, the fitting of consumables is equally important as the high-value capital parts like buckets and nozzles. At Sulzer, we therefore devote the same level of care and attention to these components as to the manufacture of any other parts.

## New Parts Manufacturing

### GE equivalent

	Buckets	Nozzles	Shrouds	Combustion	Remarks
MS9001E					Firing temperature up to 1,124°C (2,055°F)

#### Services:

- Component refurbishment
- Lifetime extension
- Field service
- New parts manufacturing
- Training programs
- Rotor overhaul and refurbishment
- Long term service agreements
- Condition monitoring
- Turbine controls
- Engineering support

#### About Sulzer

Sulzer provides cutting-edge services and solutions for rotating equipment dedicated to improving customers' processes and business performances. When pumps, turbines, compressors, generators, and motors are essential to operations, customers need a service partner they can trust. With our technically advanced and innovative solutions, we give our customers the assurance they need to focus on their operations. Customized solutions help to reduce maintenance time and cost. Our partners' business demands are ever increasing and changing but they can rely on our experts to provide the optimal solution to improve operational efficiency and reliability. We provide high-quality services at competitive prices and delivery times.



#### Sulzer Turbo Services Venlo B.V.

Spikweien 36  
NL-5943 AD Lomm, The Netherlands  
Phone: +31 (0)77 47386 66  
Fax: +31 (0)77 47327 85  
E-mail: [sulzertsvenlo@sulzer.com](mailto:sulzertsvenlo@sulzer.com)  
Internet: [www.sulzer.com](http://www.sulzer.com)