SULZER

- 1st stage vane
- 2nd stage vane
- 3rd stage vane
- 4th stage vane

Vanes Equivalent to Siemens V94.2 / SGT5-2000E and V84.2 / SGT6-2000E

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. We have unique insight into designing a high quality product that is compatible and interchangeable with the original equipment. All vane kits include installation hardware suitable for installation in Siemens V94.2 / SGT5-2000E and V84.2 / SGT6-2000E gas turbines.

1st stage vane

The first stage vane is manufactured through an investment casting process using the nickel-based super alloy Inconel 738LC. The first stage vane features trailing edge cooling and internal impingement cooling. Depending on the component version (3, 4, 5, or 6), different coatings and coating systems are applied. The first stage vane is coated with a MCrAlY coating to protect the base material against oxidation and corrosion. In addition, Thermal Barrier Coating (TBC) is applied to prevent the base material from overheating and to reduce thermal gradients along the hot gas path. This effect produces a lifetime extension resulting in improved durability.

2nd stage vane

The second stage vane is also manufactured through an investment casting process using the nickel-based super alloy Inconel 738LC. The second stage vane features trailing edge cooling and internal impingement cooling . Depending on the component version (3, 4, 5, or 6), different coatings and coating systems are applied. The second stage vane is coated with a MCrAlY coating to protect the base material against oxidation and corrosion. In addition, TBC is applied to prevent the base material from overheating and to reduce thermal gradients along the hot gas path.

3rd stage vane

The third stage vane is also manufactured through investment casting using the nickel-based super alloy Inconel 738LC. The alloy has superior creep properties compared to the original alloy Inconel 939. As a result, deflection of the shrouds is minimized during operation. The third stage vane is internally cooled. Depending on the version, the third stage vane is supplied with a MCrAlY coating to protect the base material against corrosion.

4th stage vane

The fourth stage vane is also manufactured through investment casting using the nickel-based super alloy Inconel 738LC to minimize deflection of the shrouds during operation.

Vane stage 1	
Firing temp.	Up to 1,075°C (1,967°F)
Design	Version 3, 4, 5, 6, and 7
Cooling	Trailing edge Internal impingement cooling
Material	Inconel 738LC
Coating	External MCrAlY coating External Thermal Barrier Coating
Sealing	Seal wires and strips
Auxiliaries	Locking hardware included

Vane stage 2	
Firing temp.	Up to 1,075°C (1,967°F)
Design	Version 3, 4, 5, 6, and 7
Cooling	Trailing edge Internal impingement cooling
Material	Inconel 738LC
Coating	External MCrAlY coating External Thermal Barrier Coating optional
Sealing	Seal wires and strips
Auxiliaries	Locking hardware included

Vane stage 3	
Firing temp.	Up to 1,075°C (1,967°F)
Design	Version 3, 4, 5, 6, and 7
Cooling	Internal cooling
Material	Inconel 738LC
Coating	MCrAlY coating
Sealing	Seal wires and strips
Auxiliaries	Locking hardware included

Vane stage 4	
Firing temp.	Up to 1,075°C (1,967°F)
Design	Version 3, 4, 5, 6, and 7
Material	Inconel 738LC
Sealing	Seal wires and strips
Auxiliaries	Locking hardware included

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.

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