

Combustion components 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 combustion components include installation hardware suitable for installation in Siemens V94.2 / SGT5-2000E and V84.2 / SGT6-2000E gas turbines.

Hot gas casing

The hot gas casing is manufactured by forming hot rolled solid-solution-strengthened super alloy Inconel 617TM. The alloy has an exceptional combination of high-temperature strength and resistance against oxidation and corrosion. In addition, it is readily formed and welded by conventional techniques.

Depending on the version, the inner hub is coated with a Thermal Barrier Coating (TBC) to allow firing temperatures up to 1'075°C (1'967°F) or maintenance intervals up to 41'000 EOH.

Mixing chambers

The mixing chambers are also manufactured by forming hot rolled solid-solution-strengthened super alloy Inconel 617TM.

The mixing chambers are supplied with cooling rings that possess 144 cooling channels for optimal cooling to allow firing temperatures up to 1'075°C (1'967°F) or maintenance intervals up to 41'000 EOH.

Optionally, the castellation rings and cooling rings are coated with a hard face coating to minimize damage caused by fretting.



Flame tubes

The flame tubes are manufactured by forming hot rolled low alloy steel 16Mo3. The steel has excellent heat resistance and corrosion resistant characteristics. The flame tubes include tile support rings and the inner surface is mounted with tile holders.

The design of the flame tubes allows operation at 1'075°C (1'967°F) or maintenance intervals up to 41'000 EOH. Optionally, the flame tubes can be supplied with ceramic tiles.

Hot gas casing

Firing temperature	Up to 1'075°C (1'967°F)
Airfoil / design	Version 3, 4, 5, 6 and 7
Cooling	Modified inner hub for improved thermal mechanical fatigue resistance
Material	Inconel 6171M
Coating	Thermal barrier coating at the external surface of the inner hub
Sealing	Compressor heat shields fixed with preloaded Belleville spring washers
Auxiliaries	Locking hardware included

Mixing chambers

Firing temperature	Up to 1'075°C (1'967°F)
Airfoil / design	Version 3, 4, 5, 6 and 7
Cooling	144 cooling channels in cooling ring
Material	Inconel 6171M
Coating	Optionally, hard face coating on castellation rings and cooling rings
Auxiliaries	Locking hardware included

Flame tubes

Firing temperature	Up to 1'075°C (1'967°F)
Airfoil / design	Version 3, 4, 5, 6 and 7
Cooling	Optionally ceramic tiles are mounted
Material	16Mo3
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

