

- 1st stage shroud block
- 2nd stage shroud block
- 3rd stage shroud block

Shroud Blocks 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. We have unique insight into designing a high quality product that is compatible and interchangeable with the original equipment. All shroud blocks include installation hardware suitable for installation in PG9171E gas turbines.

1st stage shroud block

The first stage shroud block is manufactured through an investment casting process using the solid-solution-strengthened heat resistant alloy Haynes® HR-120™. The alloy provides improved low-cycle fatigue resistance and allows firing temperatures up to 1,124°C.

The first stage shroud block features the u-shaped design, which is coated on the gas path side using an abradable coating. This coating allows for improved airflow control in combination with tighter clearances between the shroud block and the bucket squealer tip leading to an efficiency improvement. The abradable coating is designed to wear during rubbing of the tip.

2nd stage shroud block

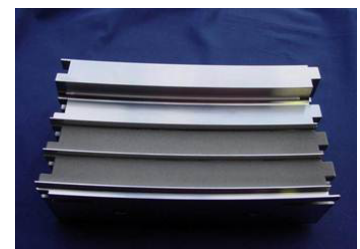
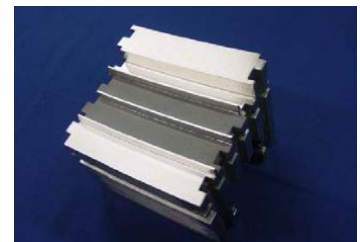
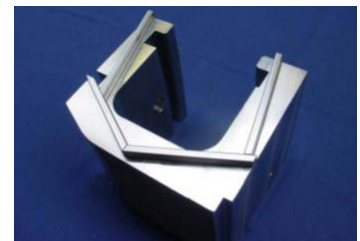
The second stage shroud block is manufactured through an investment casting process using the austenitic stainless steel AISI-310. The alloy exhibits a good resistance against cyclic temperature conditions and has a good resistance against hot corrosion.

The second stage shroud blocks are provided with honeycombs to optimize the sealing in conjunction with cutter teeth on the knife edges of the second stage bucket. The honeycomb seals are applied to reduce leakages of hot gases at the second stage bucket tip. Optionally, the pre-honeycomb version using a hard face coating can be supplied.

3rd stage shroud block

The third stage shroud block is manufactured through an investment casting process using the martensitic stainless steel AISI-410. The alloy exhibits a good wear resistance and a good resistance against hot corrosion.

The third stage shroud blocks are provided with honeycombs to optimize sealing in conjunction with cutter teeth on the knife edges of the third stage bucket. The honeycomb seals are applied to reduce leakages of hot gases at the third stage bucket tip. Optionally, the pre-honeycomb version using a hard face coating can be supplied.



Shroud block stage 1	
Firing temp.	Up to 1,124°C (2,055°F)
Design	U-shaped shroud block
Cooling	Cooled
Material	Haynes® HR-120™
Coating	Abradable coating
Sealing	Abradable
Auxiliaries	Locking hardware included

Shroud block stage 2	
Firing temp.	Up to 1,124°C (2,055°F)
Design	Honeycomb shroud block
Cooling	
Material	AISI-310
Coating	
Sealing	Honeycomb, hardface version optionally
Auxiliaries	Locking hardware included

Shroud block stage 3	
Firing temp.	Up to 1,124°C (2,055°F)
Design	Honeycomb shroud block
Cooling	
Material	AISI-410
Coating	
Sealing	Honeycomb, optional hard face version
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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