



- First stage blade
- Second stage blade
- Third stage blade

## Blades Equivalent to Siemens V64.3A / SGT-1000 and Ansaldo AE64.3A

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 with the original equipment. All blade kits include installation hardware suitable for installation in Siemens V64.3A / SGT-1000F and Ansaldo AE64.3A gas turbines.

### First stage blade

The first stage blade is manufactured through an investment casting process using a nickel-based super alloy. The casting structure is directionally solidified for increased durability and reparability. The blade is internally cooled and

covered with (fan shape) film cooling holes for superior surface cooling. Thermal Barrier Coating (TBC) is applied on the airfoil surface as well as an internal aluminum diffusion coating. TBC has superior heat, oxidation and

corrosion resistance for base load as well as peak load applications. The internal surface has an aluminum diffusion coating to improve resistance against intergranular attack.

First stage blade	
Design	3D airfoil design with tip pocket
Cooling	Internal serpentine cooling passages and (fan shape) airfoil cooling holes
Material	Directionally solidified nickel-based super alloy
Coating	External 100% TBC coverage and internal aluminum diffusion coating
Auxiliaries	All installation hardware included



### Second stage blade

The second stage blade is also manufactured through investment casting process using an advanced directionally solidified nickel-based super alloy. The blade will be cooled by a combination of as-cast serpentine cooling passages and airfoil film cooling holes.

Just like the first stage blade an internal aluminum diffusion coating and an external TBC for extended durability is applied.

Second stage blade	
<b>Design</b>	3D airfoil design with tip pocket
<b>Cooling</b>	Internal serpentine cooling passages and airfoil cooling holes
<b>Material</b>	Directionally solidified nickel-based super alloy
<b>Coating</b>	External 100% TBC coverage and internal aluminum diffusion coating
<b>Auxiliaries</b>	All installation hardware included



### Third stage blade

The third stage blade is manufactured through investment casting using an enhanced nickel-based super alloy.

The airfoil surface will be coated with a MCrAlY coating and internal aluminum diffusion coating to optimize corrosion and oxidation resistance.

The blade has 15 radial cooling holes created by electro-chemical drilling.

Third stage blade	
<b>Design</b>	Conventional airfoil shape
<b>Cooling</b>	15 radial cooling holes
<b>Material</b>	Nickel-based super alloy
<b>Coating</b>	External MCrAlY and internal aluminum diffusion coating
<b>Auxiliaries</b>	All installation hardware included



### About Sulzer

Sulzer provides cutting-edge services and solutions for rotating equipment dedicated to improving customers' processes and business performance. 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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