



- First stage vane
- Second stage vane
- Third stage vane

Vanes Equivalent to Siemens V64.3A / SGT-1000F 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 vane kits include installation hardware suitable for installation in Siemens V64.3A / SGT-1000F and Ansaldo AE64.3A gas turbines.

First stage vane

The first stage vane is manufactured through an investment casting process using a cobalt-based super alloy for maximum durability. The first stage vane features fan shape film cooling holes, leading edge shower head cooling, trail-

ing edge cooling and internal impingement cooling. Sulzer applies Thermal Barrier Coating (TBC) to protect the base material from oxidation and corrosion. In addition, TBC will prevent the base material from overheating and

reduces thermal gradients along the hot gas path. This effect produces a lifetime extension resulting in improved durability. Internally, an aluminum diffusion coating is applied for protection against intergranular attack.

| First stage vane | |
|------------------|--|
| Design | Single vane piece |
| Cooling | Internal impingement cooling, leading edge shower head cooling and airfoil fan shape cooling holes |
| Material | Cobalt-based super alloy |
| Coating | External 100% coverage TBC and internal aluminum diffusion coating |
| Auxiliaries | All installation hardware included |



Second stage vane

The second stage vane is also manufactured through an investment casting process using nickel-based super alloy. The second stage vane features an internal serpentine cooling passage, trailing edge cooling, airfoil film cooling

holes and leading edge shower head cooling. The second stage vane is protected with TBC and an internal aluminum diffusion coating against oxidation, corrosion and thermal gradients.

| Second stage vane | |
|-------------------|---|
| Design | Single vane piece |
| Cooling | Internal serpentine cooling passage, leading edge shower head cooling and impingement cooled outer shroud |
| Material | Nickel-based super alloy |
| Coating | External 100% coverage with TBC and internal aluminum diffusion coating |
| Auxiliaries | All installation hardware included |



Third stage vane

The third stage vane is also manufactured through investment casting using a nickel-based super alloy. The vane is internally cooled by impingement cool-

ing. The third stage vane is externally coated with a MCrAlY coating and internally with an aluminum diffusion coating.

| Third stage vane | |
|------------------|---|
| Design | Single vane piece |
| Cooling | Internal impingement cooling and trailing edge cooling holes |
| Material | Nickel-based super alloy |
| Coating | External MCrAlY coating and internal aluminum diffusion coating |
| Auxiliaries | 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.



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: sulzertsvleno@sulzer.com
 Internet: www.sulzer.com