

# Nozzles equivalent to GE MS6001FA+e

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 nozzle kits include installation hardware suitable for installation in PG6101FA (6FA/6FA.01) and PG6111FA (6FA+e/6FA.03) gas turbines.



### 1st stage nozzle

The first stage nozzle is manufactured through an investment casting process using the advanced cobalt-based super alloy FSX-414. The first stage nozzle features fan shape and cylindrical cooling holes, side wall cooling and internal impingement cooling. The nozzle is coated with a Thermal Barrier Coating (TBC) system to prevent the base material from overheating and to reduce thermal gradients along the hot gas path. This coating will further reduce effects of thermal cycle fatigue and produces a lifetime extension resulting in improved durability.

Nozzle stage 1	
Firing temperature	Up to 1'327°C (2'420°F)
Design	Two-vane segment
Cooling	Airfoil film cooling holes Side-wall cooling Internal impingement cooling
Material	FSX-414
Coating	TBC system
Sealing	Cloth seals
Auxiliaries	Locking hardware included



# 2nd stage nozzle

The second stage nozzle is manufactured through an investment casting process using the advanced nickel-based super alloy EEQ-220, which has similar mechanical properties to GTD-222TM. The second stage nozzle features optimized trailing edge cooling holes and internal impingement cooling. The external surface is coated with an aluminum diffusion coating for optimal oxidation protection.

## 3rd stage nozzle

The third stage nozzle is manufactured through an investment casting process using the advanced nickel-based super alloy EEQ-220, which has similar mechanical properties to GTD-222TM. The third stage nozzle is supplied without protective coatings.



Nozzle stage 2	
Firing temperature	Up to 1'327°C (2'420°F)
Design	Two-vane segment
Cooling	Trailing edge cooling hole Internal impingement cooling
Material	EEQ-220
Coating	Aluminum diffusion coating
Sealing	Cloth seals
Auxiliaries	Locking hardware included



Up to 1'327°C (2'420°F)
Three-vane segment
Convective cavity cooling Shroud impingement cooling
EEQ-220
Cloth seals
Locking hardware included



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