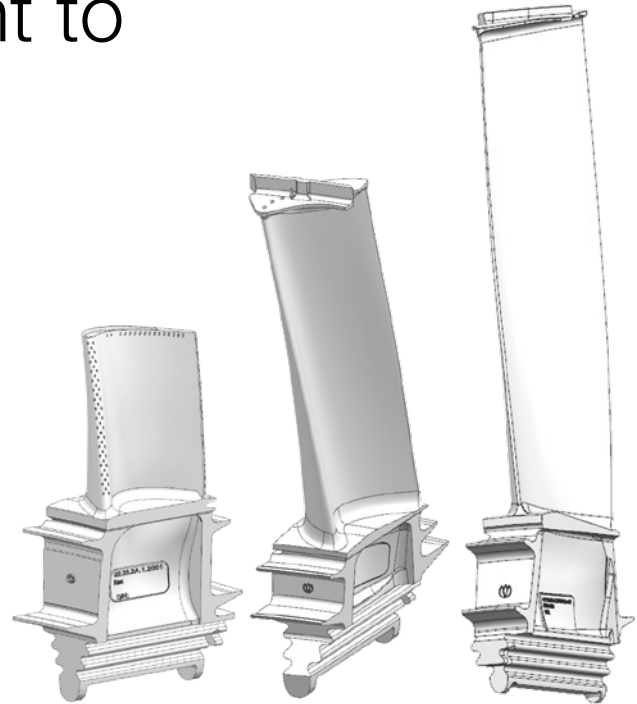


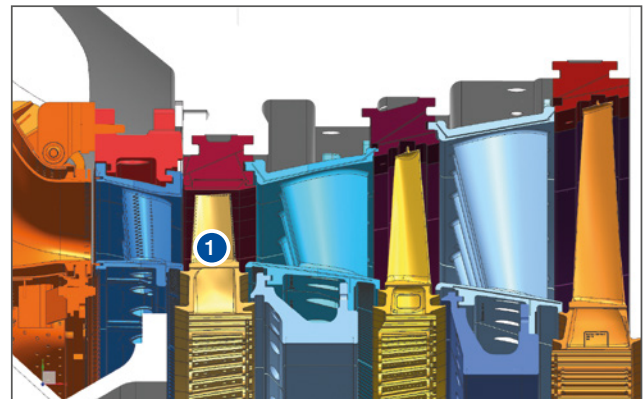
# Buckets equivalent to GE MS6001FA+e

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



## 1st stage bucket

Manufactured through an investment casting process using an advanced directionally solidified nickel-based super alloy EEQ-110 DS which is equivalent to the original DS GTD 111TM. The first stage bucket features a Sulzer aero airfoil design with optimized aerodynamic performance and an internal serpentine cooling scheme and leading edge and concave side tip cooling holes to maximize airfoil cooling. Sulzer applies a MCrAlY and Thermal Barrier Coating (TBC) to the airfoil. This coating system has superior oxidation and corrosion resistance for base load as well as peak load applications. The application of a Thermal Barrier Coating on the airfoil surface produces a life extension, resulting in improved durability. Internally the bucket has an aluminum diffusion coating to improve resistance against intergranular attack.

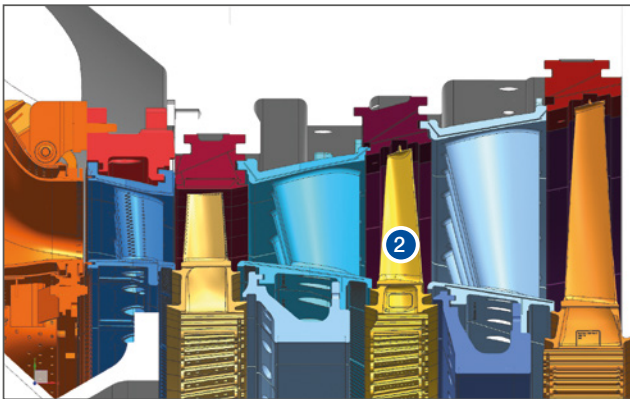


### Bucket stage 1

<b>Firing temperature</b>	Up to 1'327°C (2'420°F)
<b>Design</b>	Sulzer aero design
<b>Cooling</b>	Serpentine core and leading edge and tip film cooling holes
<b>Material</b>	EEQ-110 DS
<b>Coating</b>	Internal aluminum coating External MCrAlY and TBC
<b>Sealing</b>	Aluminum seal strip on fir tree
<b>Auxiliaries</b>	Locking hardware included
<b>Interchangeability</b>	PG6101FA (6FA/6FA.01) and PG6111FA (6FA+e/6FA.03)

## 2nd stage bucket

The second stage bucket is manufactured through investment casting. The base material is equiaxed EEQ-111. The second stage bucket features 10 turbulated cooling holes to enhance heat transfer in the high temperature areas. Externally, a MCrAlY and Thermal Barrier Coating is applied to provide good corrosion and oxidation resistance and reduce metal temperatures. The radial cooling holes are internally coated with an aluminum diffusion coating to improve resistance against intergranular attack. The bucket has central cutter teeth to optimize blade balance. The cutter teeth are used in conjunction with the honeycomb of the second stage shroud block. This limits material transfer between knife edges and honeycomb in the shroud blocks during operation.

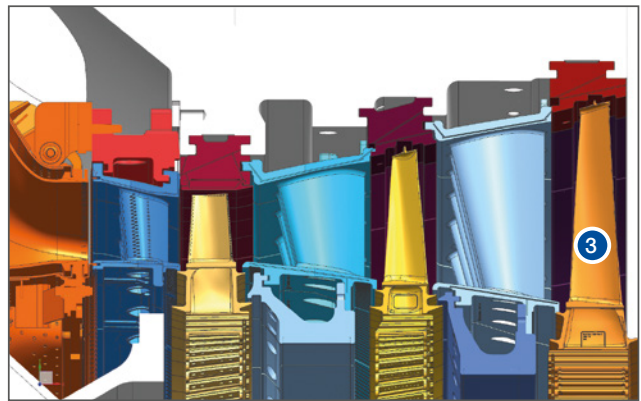


### Bucket stage 2

<b>Firing temperature</b>	Up to 1'327°C (2'420°F)
<b>Design</b>	With cutter teeth
<b>Cooling</b>	Turbulated radial cooling holes
<b>Material</b>	EEQ-111
<b>Coating</b>	Internal aluminum coating External MCrAlY and TBC
<b>Sealing</b>	Aluminum seal strip on fir tree
<b>Auxiliaries</b>	Locking hardware included
<b>Interchangeability</b>	PG6101FA (6FA/6FA.01) and PG6111FA (6FA+e/6FA.03)

## 3rd stage bucket

The third stage bucket is manufactured through investment casting. The base material is the EEQ-110. Similar to the second stage bucket, the knife edges of the third stage bucket will be supplied with cutter teeth to prevent material transfer between knife edges and honeycomb in the shroud block during operation.



### Bucket stage 3

<b>Firing temperature</b>	Up to 1'327°C (2'420°F)
<b>Design</b>	With cutter teeth
<b>Material</b>	EEQ-110
<b>Coating</b>	Chrome optional
<b>Auxiliaries</b>	Locking hardware included
<b>Interchangeability</b>	PG6101FA (6FA/6FA.01) and PG6111FA (6FA+e/6FA.03)



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