TECHNICAL PRODUCT SHEET
6B Second Stage Bucket
Powerful Solutions for Gas Turbines

With over a century of experience on all aspects of heavy-duty gas turbine technology, Ansaldo Thomassen continues to meet the demand for clean, efficient and reliable power in an environmentally responsible manner.

As Original Service Provider (OSP™) we offer a one-stop-shop to serve the owners of industrial gas turbine systems worldwide. Within OSP™, our mission at Ansaldo Thomassen is to provide full service solutions that optimize unit availability, minimize maintenance and component costs, and increase operational safety for GE heavy-duty gas turbines.

As specialist on GE type heavy-duty gas turbines, Ansaldo Thomassen provides high quality gas turbine components. The development and production of these parts is based on our extensive expertise on gas turbine manufacturing, service, repair and design.

6B SECOND STAGE BUCKET

PART CHARACTERISTICS
Ansaldo Thomassen P/N: 76BXT250-G003
Interchangeable with GE P/N: 314B7163G021

Kit includes:
- 91x standard buckets
- 1x locking bucket
- Installation hardware

Base alloy:
- IN738LC

Coating:
- Optional

Firing temperatures:
- Up to 1140°C (2084°F)

Inspection intervals:
- 24,000 EOH

COMPONENT HIGHLIGHTS

Operating conditions
Due to the specific design the Ansaldo Thomassen 6B second stage buckets are suitable for:
- Firing temperatures up to 1140°C (2084°F)
- Rotor speeds of 5163 rpm (PG6581)
- All gas turbine fuels

Design
The buckets are fabricated with the investment casting process and are made of the nickel base superalloy IN738LC.

The buckets are designed with 6 STEM drilled cooling holes along the airfoil center. Turbulated cooling holes enhance the cooling capabilities and make this part suitable for turbine upgrades to higher firing temperatures.

The scalloped tip shroud of the second stage bucket is designed with a specific feature to reduce weight and so to reduce tip shroud deflection during service. The two knife edge seals are equipped with cutter teeth. Cobalt base hardface material is laser welded on both sides into the Z-notches.

An aluminium seal coating is applied on the root serrations to minimize air leakage. In the standard configuration, the gas path is not coated. Ansaldo Thomassen can advice on coating solutions for specific operating conditions. Typical coating options are a silicon modified aluminate diffusion or a chromide diffusion coating applied to the gas path. The aluminium compound in the coating increases the oxidation resistance, while the purpose of the silicon or chromium is to enhance the protection against hot corrosion.

The delivery includes 91 standard buckets and 1 locking bucket. The complete set of parts is balanced and sequenced for assembly. The results of the moment weight inspection are included in the shipment. The delivery also includes applicable installation hardware.

The buckets are fully interchangeable with GE P/N 314B7163G021, without any modification to the gas turbine.

DESIGN LIFE
The estimated life is 72,000 EOH based on Ansaldo Thomassen recommendations and after standard inspection and repair intervals.

CONTACT INFORMATION
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