

# \_THERMAL SPRAY

## a-MET Abradable Coatings

### Purpose of Coatings

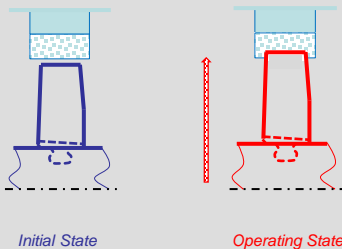
Abradable coatings are used to create a defined clearance on mating surfaces during running-in

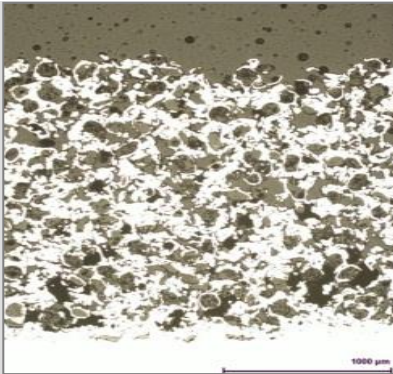
### Applications

- Labyrinth seals for shafts in steam and gas turbines
- Abradable coatings for turbine blades
- Compressors in aircraft engines

### Features

- Technologies: Powder flame spraying, Plasma spraying
- Coating materials: Ni with graphite or ceramic content, also on basis Al, Co, Cu, ceramic
- Base body materials: Steel, cast iron, Al alloys, high-temperature alloys, plastics
- Coating thickness: up to ~ 1 mm
- Working temperatures (Ni-graphite): < 480 °C  
(Ni-bentonite): < 650 °C  
(Ni-boron nitride): < 815 °C  
(Ceramic basis): < 1150 °C





## Benefits

- Minimal clearance of fast rotating components is adjusted during running-in autonomously
- Fuel consumption and noise emission will be reduced
- Coating material composition prevents fretting of the rubbing parts
- High temperature and thermal shock resistance, basically due to microporous structure of thermally sprayed coating

## Our Service Offering

- Consultancy service, design improvements, selection of coating materials and technologies
- Production of test samples and prototypes including fixture construction
- Development of specifications for serial coating processes
- Pre-treatment and coating of customer parts, post-treatment respectively finish-machining
- Measuring, inspection, testing, packaging according pre-agreed specifications



## Who we are

With more than 100 years of experience, GfE is one of the world's leading manufacturers and suppliers of high-performance metals and materials. Based on our comprehensive materials science know-how, we develop high-quality tailor-made solutions for a wide range of industrial applications. We offer our customers fast service and qualified technical advice.



Certification in accordance with DIN EN ISO 9001, DIN EN ISO 14001, DIN EN ISO 50001, DIN ISO 45001 and DIN EN ISO/IEC 17025 support our claim to the highest quality and safety. We can thus guarantee products that meet the specific requirements of our customers. Your trust and satisfaction are the cornerstone of our business.

GfE is a subsidiary of AMG Advanced Metallurgical Group N.V., Netherlands, a global leader in the production of specialty metals and metallurgical vacuum furnace systems.

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