

Drastic Production Increase Pursued for Silicon Carbide Continuous Fiber

- Responding to extraordinary aircraft engine orders -

NGS Advanced Fibers, the joint venture of Nippon Carbon, GE, and Safran, decided to establish the second fiber factory for approximately 6 billion JPY on the lot (approximately.11,000 square meters) adjacent to the existing factory. Commercial operation is scheduled to begin at the end of 2016. While adapting the latest technologies, capacity will be expanded through production lines that process from raw material to spinning, and from curing (electron beam irradiation) to pyrolysis. The new factory will increase ten-fold the production capacity of high performance grade products "Hi-Nicalon" and "Hi-Nicalon Type-S."

Silicon carbide continuous fiber "Nicalon" is a ceramic fiber featuring heat-resistant even at very extreme atmospheric temperatures and oxidation resistant properties. NGS supplies this advanced fiber used in ceramic matrix composite (CMC) to the best-selling LEAP aircraft engine being developed by CFM International, a 50-50 joint company between GE and Safran, as well as the GE9X engine under development by GE. CMC is an innovative engine component that is light-weight, durable, and heat resistant and contributes significantly to the improved fuel efficiency of aircraft. The LEAP engine will be the world's first commercial aircraft engine to use CMC components. It is scheduled to be installed in a demonstration craft in 2016.

As demand in the global aircraft engine market is expected to grow for middle to long term periods, we aim to enhance our global scale production system by proactively investing in new plants and equipment.

Outline of the new factory plan

Address	1-1 Takauchi, Toyama	Commercial	End of 2016 (scheduled)	
	City, Toyama Prefecture	operation		
Production	10 tons per year	Invested amount	Approx. 6 billion JPY	
capacity				
Site area	Approx. 11,000 square	Building area	Approx. 6,000 square	
	meters	(Newly	meters	
		established part)		
Key introduced	Electron Beam Radiation Apparatus, Pyrolysis Equipment, etc			
equipment				



NGS Advanced Fibers corporate profile

Company name	NGS Advanced Fibers Co., Ltd.			
Address	1-1 Takauchi, Toyama City, Toyama Prefecture			
Established	April 2012	Capital	1.15 billion JPY	
Shareholders	Nippon Carbon Company (50%), GE (25%), Safran (25%)			
Representative	Michio Takeda	Number of employees	30	

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