



Improving energy efficiency using shark skin technology

Riblet Processing

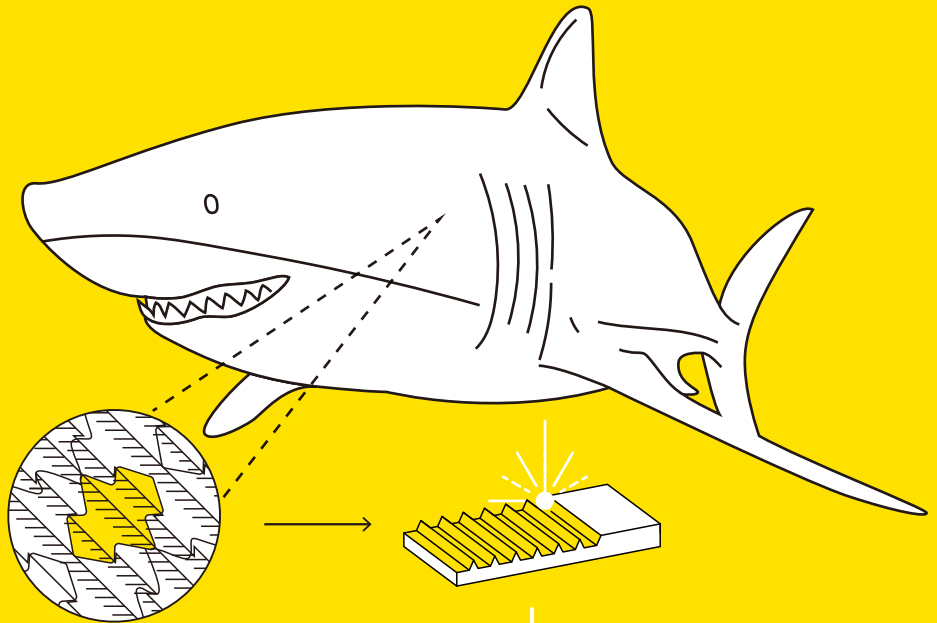
Reduces surface friction with laser-generated micropatterns

Decreased fuel costs

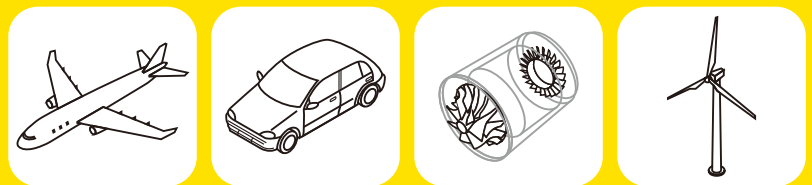
Reduced power consumption

Increased power output

“Riblet processing” inspired by shark skin results in lower frictional resistance of fluids.



* This image is for illustrative purposes only.



Features

Enables flexible selection of processing materials

Supports application over large areas

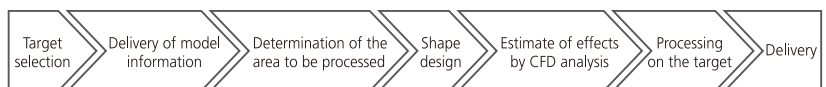
Enables processing of complex curved surfaces, such as pump impellers

Provides solutions from design and analysis, to processing and application phases

Key Benefits

- Turbulent viscous resistance can be reduced up to 8%
- Fuel economy can be improved up to 2% when riblet processing is applied to 80% of an airframe's surface

Process flow



We simulate and design the optimal riblet shape for each of your products and applications. Based on the outcome of our analysis, we utilize our laser processing technology to apply the riblet pattern to your product.

Specific examples of riblet processing applications

- Airframes and wings
- Wind turbine blades
- Jet engine blades and nacelles
- Body surfaces of trains, automobiles, and race cars
- Pump impellers

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