

COMPARE TUF-LITE® AND TUF-LITE II® FAN BLADES

TUF-LITE ®

Design:

TUF-LITE® blades are very efficient with total efficiency of 75% to 83% typical.

On 3000B series, maximum of 6 blades per hub.

TUF-LITE® is a one piece blade.

TUF-LITE II ®

TUF-LITE II® efficiencies are generally within 1-2% of TUF-LITE® for all sizes.

On 3000H, maximum of 8 blades per hub. Allows working at higher pressure or lower RPM's for less noise.

TUF-LITE II® is two pieces joined with aerospace epoxy adhesive. Two pieces make Q.C. easier and provides higher quality laminates.

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TUF-LITE ®

TUF-LITE II ®

Design:

TUF-LITE® is made from Epoxy.
Temperature limits: 250°F
continuous, 300°F at start-up.

TUF-LITE II® uses Dow
Derakane vinyl-ester for
increased toughness and
faster processing. Strengths
are equal. Temperature limits:
220°F continuous and 250° at
start-up.

TUF-LITE® blades are moment
blades are balanced on a simple fixture.

TUF-LITE II®
balanced on a highly
sophisticated computer
controlled fixture. Label is
generated which supplies
five pieces of vital
information for traceability.

COMPARE TUF-LITE® AND TUF-LITE II® FAN BLADES

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TUF-LITE II ®

Design:

TUF-LITE® have no leading edge protection. An external leading edge boot may be installed.

Blades are hollow and do not have a solid trailing edge.

TUF-LITE II® blades are manufactured with a patented leading edge called TUF-EDGE®.

Blades are hollow with a solid trailing edge.

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TUF-LITE II ®

Design:

Ultra-violet degradation occurs on upper surfaces of blades exposed to sun light. No Ultra-Violet coating.

On 3000B series, blade attachment to the fan hub with retainer ring is a major cause of improper installation.

Blades painted with high solids urethane have much better appearance and resist UV for many years.

TUF-LITE II® uses a much simpler, design of the blade attachment to the fan hub.

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Quality:

Resin rich cracking in neck areas is leading cause of concern even though most are only cosmetic defects.

Resin-rich cracks virtually eliminated.

Wrinkles in surface are present in many blades. Unavoidable due to manufacturing process.

Wrinkles have been eliminated.

Cost:

TUF-LITE ® costs approximately 15% more than TUF-LITE II ® .

TUF-LITE II ® utilizes an advanced resin transfer molding technique which results in lower cost by increasing productivity.