LiteBrake
www.litebrake.com

Lighter, Cooler, Better and Greener Brake

Steel Clad Aluminum Brake Rotor

Only Aluminum Based Rotor Suitable for Front Brake Applications with Better Braking Performance, Higher Gas Mileage, and Ultra Long Life

Advantages:

- 30% to 50% weight reduction
- Less brake pad drag
- Increase gas mileage about 3% on average
- Faster heat dissipation and lower braking temperatures
- Greater corrosion resistance
- No heat dissipation degradation due to rusting
- Approximately 30% less wear on brake pads
- Lasts over 10 years or 100,000 miles
- Shorter stopping distance
- Faster car acceleration
- More precise steering due to un-sprung weight reduction

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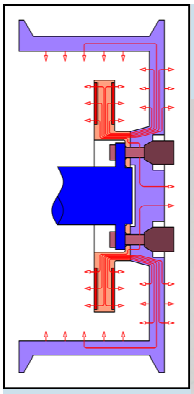
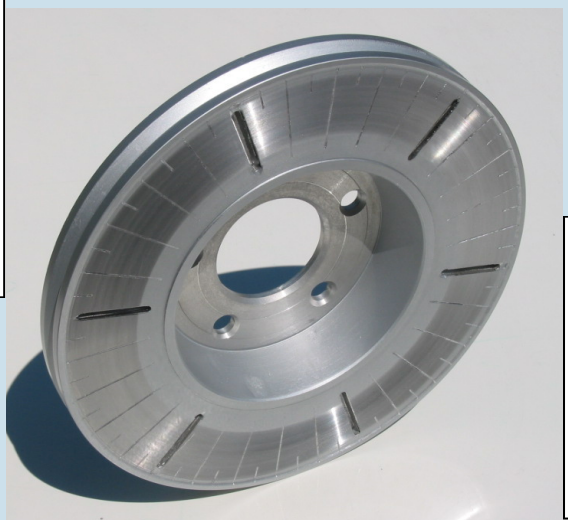
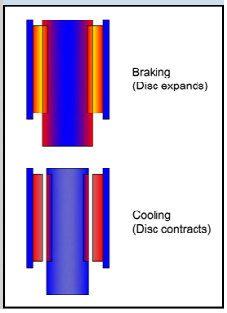


Uses connected aluminum rim as the brake heat sink and radiator to lower brake temperatures.

Incorporates a better steel with dozens of slots to increase the braking friction.



Utilizes the greater thermal expansion coefficient of aluminum to create a "force free pad return" -reducing pad drag and increasing gas mileage.



By intelligently using the aluminum rim as the major brake heat sink and radiator as well as the usage of robust steel cladding, the SCA rotor is the only aluminum based rotor currently suitable for auto front brake applications. The utilization of aluminum's greater thermal expansion to reduce pad drag in combination with the lighter weight increases gas mileage remarkably. See reverse side for more inf.

Currently Available Rotors for:

- Ford Escape
- Chevrolet Equinox
- Saturn VUE
- Hyundai Elantra
- Toyota Camry
- Toyota Prius
- Toyota Corolla
- Toyota Sienna
- Toyota Solara
- Toyota Avalon
- Lexus ES300
- Honda Accord
- Honda Civic
- Honda CR-V
- Honda Element
- Dodge Caravan

More coming soon!

Check www.litebrake.com for update information

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The SCA brake rotor has passed the FMVSS -135 certification test. The installation of four such rotors will reduce the unsprung rotation weight of a passenger car by 20 to 50 pounds. Combined with the intrinsic pad drag reduction, the SCA brake rotor increases the driving distance of a passenger car by 15-30 miles with a full tank of gas when compared to the use of regular cast iron rotors.

The SCA brake rotor has a solid body and replaces the traditional convective cooling of ventilation surfaces of a vented rotor with conductive cooling to a connected aluminum wheel. This design is based on the fact that most passenger cars use aluminum wheels nowadays and aluminum is of high thermal conductivity. Much lower temperatures result with the aluminum wheel acting as a great heat sink due to its large volume as well as a great heat radiator due to its large surface area. If the brake surface temperature of a cast iron rotor connected to a steel wheel reaches 1400°F, the SCA rotor surface temperature may be just around 800°F. The steel cladding further increases the capability of the SCA rotor to stand higher surface temperatures. The steel cladding functions as a kind of thermal barrier to the underneath aluminum. The combined features make SCA rotors much more suitable for front brake applications, which bears ~70% of an entire vehicle's braking duty.

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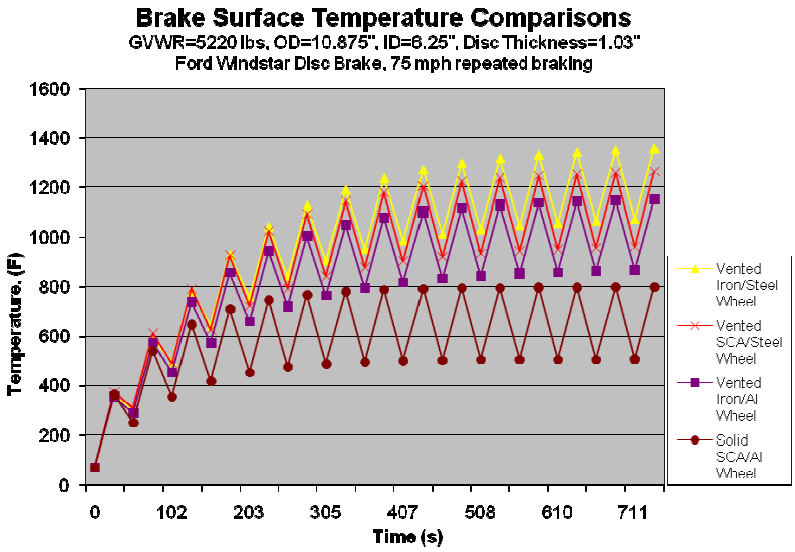

Pad Wear Comparison*

Pads	Original Thickness**	Final Average Thickness	Wear	Wear Reduction
Outboard against cast iron rotor	0.416"	0.09"	0.326"	0
Inboard against cast iron rotor	0.416"	0.05"	0.366"	0
Outboard against SCA rotor	0.416"	0.17"	0.246"	24.5%
Inboard against SCA rotor	0.416"	0.18"	0.236"	35.5%

* After driving 42,800 miles; ** excluding 0.252" thick steel backing plate.

Braking Friction Coefficient Comparison*

Rubbing Surface	Average Friction Coefficient	Increase
Cast iron rotor	0.378	0
SCA rotor with type #2 steel cladding	0.433	14.5%

* Dyno test results with identical pads

Rotor Wear Comparison*

Rotor Type	Original Thickness	Final Thickness	Wear	Wear Reduction
Cast iron	1.030"	1.014"	0.016"	0
SCA	1.014"	1.003"	0.011"	31.3%

* After driving 42,800 miles

Gas Mileage Tests*

Front Brakes	Test MPG	EPA MPG
2 cast iron rotors	21.0	22
2 SCA rotors	23.4	

* highway gas mileage, driven with full tanks of fuel to empty on a 2008 Ford Escape 4WD, 6 cyl, 3.0 L

Wear comparison: the top pad was worn against the SCA rotor and the bottom pad was worn against a cast iron rotor simultaneously on different sides of a 1998 Ford Windstar van.