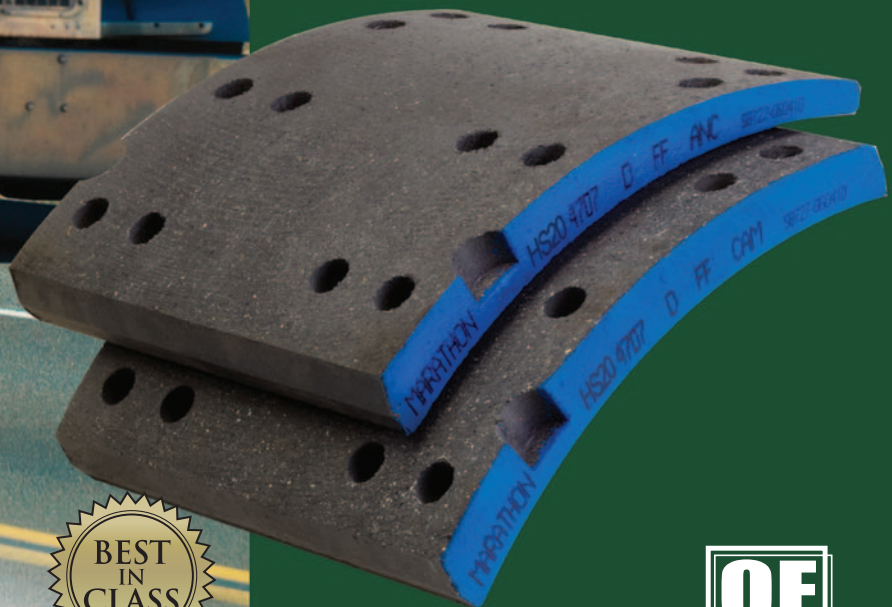


HS20 HEATSTAR

A versatile high performance
premium brake lining
designed for a wide range
of over-the-road hauling



Marathon

BRAKE SYSTEMS





Dependable. Tough. Proven.

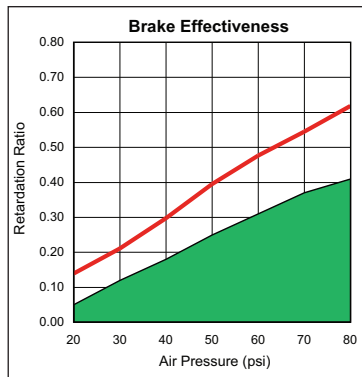
The other member of our flagship Heat Star family is HS20, a premium, OE approved, long life friction material that will lower your cost per mile and reduce overall brake maintenance costs. HS20 is a versatile and high performance lining ideal for a variety of over-the-road hauling applications and for school buses. This proven formulation easily meets Federal regulations for brake effectiveness, fade and recovery in accordance with FMVSS 121 test procedure and is rated for 20,000 lb axle loads.

Heat Star linings feature the Hi-Density Marathon formulation (detailed at right) that will improve your bottom line through better performance and fewer maintenance headaches.

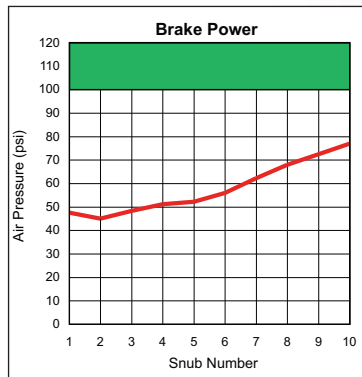
HEATSTAR HS20 Delivers

- The longest service life of any brake lining in its class
- Hi-Density formulation for excellent heat dissipation
- Dependable stopping performance
- Excellent brake fade and recovery characteristics
- Extremely drum friendly

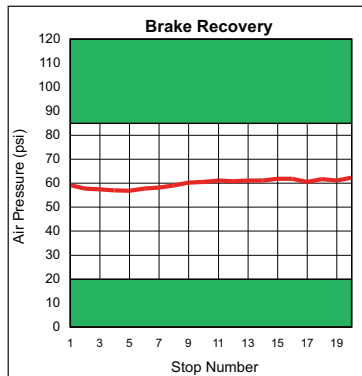
FMVSS 121 Test Results



Retardation



Fade



Recovery

Testing conducted in accordance with FMVSS 121 criteria @ 20,000 lb axle load: 16 1/2 x 7 inch S-cam air brake; type 30 air chamber and 5.5 inch slack adjuster; and a 19.6 inch tire rolling radius. Shaded area indicates non-compliance.



ISO 9001
ISO 14001



Hi-Density Friction

One of the most significant design characteristics of any heavy duty brake lining is its density. When higher quality and heavier raw materials are used in a lining's formulation, it creates a higher mass in the block or stated another way, higher density. Truck brakes are designed to convert the energy of a moving vehicle into heat energy. A higher density increases the lining's ability to efficiently handle heat, and is the most critical component in a friction material's fade, recovery and wear.

- Higher density friction materials have the ability to hold more heat energy and therefore more efficiently dissipate the heat
- Higher density friction materials have stronger structural integrity, making them less likely to crack in service, while riveting or due to rust jacking
- Higher density linings exhibit significantly better wear characteristics, especially at higher temperatures
- Higher density friction materials are more resistant to brake fade and water fade



**See the difference...
higher density
Marathon linings
tip the scale vs.
leading competitor**

The Marathon Advantage... Feel the Difference



Marathon
BRAKE SYSTEMS

