



A premium versatile friction material designed for heavy loads & tough terrain – yet excellent for over-the-road hauling



# Marathon

BRAKE SYSTEMS



## Dependable. Tough. Proven.

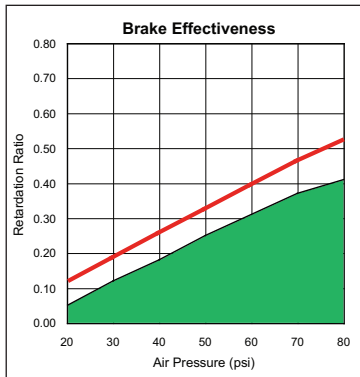
Heat Star is a proven, premium lining formulation designed to provide fleets with a brake lining delivering excellent service life in a variety of demanding vocational environments. Heat Star is rated for 23,000 lb axle loads, making it ideal for the unique stopping requirements of tough applications like liquid tanker, grain, cement or standard duty refuse, as well as over-the-road hauling.

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.

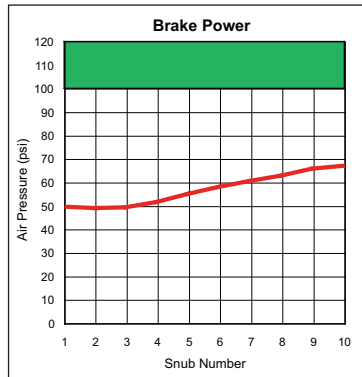
## HEATSTAR™ Delivers

- Works on a broad range of applications from severe duty to normal over-the-road hauling applications
- Hi-Density formulation for excellent heat dissipation
- The longest service life of any brake lining in its class
- Dependable stopping performance
- Excellent brake fade and recovery characteristics
- Extremely drum friendly

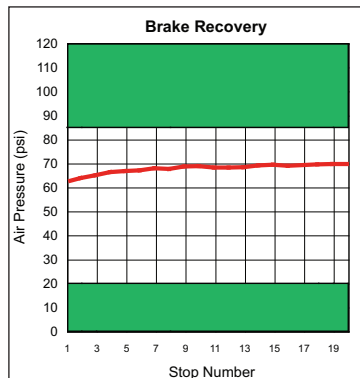
## FMVSS 121 Test Results



**Retardation**



**Fade**



**Recovery**

Testing conducted in accordance with FMVSS 121 criteria @ 23,000 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.

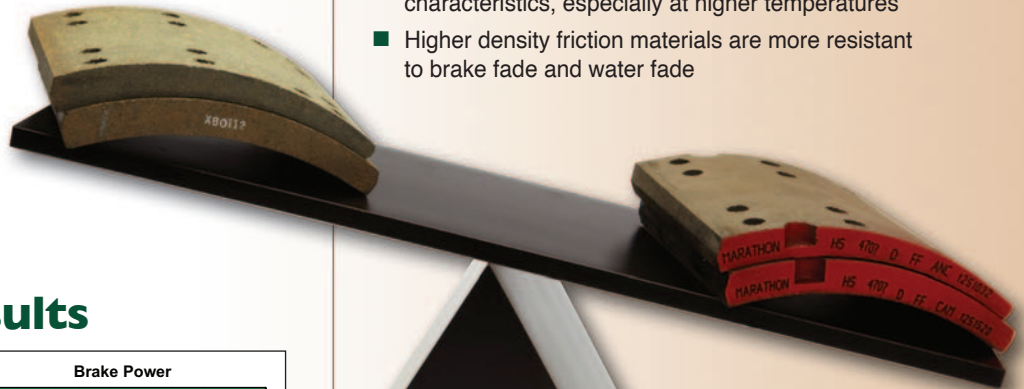
**RSD**  
APPROVED PER RP628C  
**ISO 9001**  
CERTIFIED  
**ISO 14001**  
CERTIFIED



## 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

