

# MATRIX NEOCAST™

## WORLD'S FIRST LIGHTWEIGHT CAST IRON SHOE

### WHY MATRIX NEOCAST? LASTING TORQUE POWER.

When pressed-steel shoes first hit the market, they were designed as single-use cores. The idea was to scrap them with the spent linings each time. But at the time, the trade off was saving on fuel with the lighter shoes.

Only the savings went toward new shoes every time. So you can imagine how well that went over in the marketplace. It wasn't long before the first reman brake shop was born. Or, the way we like to put it, the day foundation brake performance made a wrong turn.

You see, time, temperature and torque are unkind to a pressed-steel shoe. Each relining weakens its structural integrity more. Table flex and web stretch occur more readily. Eventually welds break and tables wear completely through before one is finally scrapped.

Meanwhile, maximum torque was lost after the first relining, and it never stops softening. *But Matrix NeoCast changes all of that.* Its revolutionary no-give, one-piece construction sustains maximum torque for life – *a big win for safety.*

### WHAT MAKES MATRIX NEOCAST UNIQUE? WEIGHS LIKE PRESSED-STEEL.

Thanks to its proprietary high-carbon ductile cast iron design, the Matrix NeoCast shoe weighs comparably to pressed-steel counterparts. But the similarities end there.

Pressed steel can't dissipate heat like cast iron. Nor can it resist rust for as long. It simply cannot compete with long list of advantages that only the world's first lightweight cast iron shoe can offer:

- Weighs comparable to pressed-steel
- Sustains maximum torque
- Eliminates coining from relining
- Ensures flush lining-to-drum contact
- Doubles lining life
- Extends life of drums & wheel-end parts
- Resists rust 2-3x longer than pressed-steel



## THEY WANTED SHORTER STOPPING DISTANCES. WE WENT FURTHER.

When Reduced Stopping Distance (RSD) mandates went into effect, changes affected new vehicles, leaving countless trucks and trailers on the road with existing brakes. But if roadway safety matters, it matters for everyone. So when the idea hit us for a lighter cast shoe, we knew it we had a potential game-changer.

A simple swap out of shoes is all it takes to dramatically improve stopping power. New and used trucks and trailers will benefit immediately from Matrix NeoCast's superior heat dissipation, even and consistent lining wear and maximum torque that never gives in. *This is the breakthrough no one saw coming.*

## NO DOUBT PRESSED-STEEL SHOES ARE SHAKING IN THEIR BOOTS.

- Innovative high-carbon ductile cast iron matrix for a game-changing lightweight cast iron shoe that weighs similar to pressed-steel cores.
- Lasting rigidity solves table flex, web stretch and broken welds, delivering maximum torque and flush lining-to-drum contact for life.
- No coining is required during relinings, thanks to its robust one-piece construction.
- Ductile cast iron dissipates heat superior to pressed steel, reducing frictional heat's impact on lining, drum and wheel-end component for longer life.
- Advanced metal formulation resists rust up to 2-3 times longer than pressed-steel cores; E-coated for added corrosion protection.
- Proprietary core design prevents linings from cracking and CSA brake-related problems.



- Uses up to half the air pressure to engage brakes, reducing stress on system components.
- Anchor hardness (HRC) of 50+ compared to pressed steel at only 40+.
- Improves drum brake stopping power in all 4707Q applications without gimmicks.
- No modern S-cam brake system has had this kind of sustained maximum torque power before now.
- Integrated supports for reinforced strength.
- CNC machined and rotary drilled for tighter countersink depth tolerances, providing problem-free riveting and snug lining fit.
- Roller-side slot and anchor end are broached and induction hardened to specification.
- Mechanical properties exceed SAE J434 D4512 standard.

### ARE YOU MATRIX MATERIAL?



Remember when quality parts felt strong and invincible? Pressed steel was never going to maintain its structural integrity. Not between frictional heat, torque and multiple relinings. That's what cast iron's job. Luckily we found a way to make a cast shoe light like pressed-steel. No excuse not to help improve roadway safety now. Call 1-888-411-9916 or go to [Neobrake.com](https://www.Neobrake.com).