

# TruTurn™ Brake Drums



**The precision balanced brake drum.**

**CON**  **MET**®  
*Pointing the Way™*

# TruTurn™ features precision-machined surfaces inside and out for improved performance.

## TruTurn™ Brake Drums

“Turned to Balance” for uniform wall thickness.

### TruTurn fully balanced brake drums offer some real advantages:

- ▲ Uniform wall thickness throughout
- ▲ Better thermal expansion to reduce brake pulsing
- ▲ Improved heat transfer for cooler drums and linings
- ▲ More evenly distributed braking force
- ▲ Minimized brake “judder” and vibration
- ▲ Lower temperature rises on each stop

### Machined inside and out.

Unlike normal cast brake drums that are only machined on the inside, ConMet TruTurn Brake Drums are precision-machined over 95% of their surface area. This improves the dimensional consistency of the brake drums for more uniform thermal expansion meaning cooler drums and linings during crucial stops.

### Painted to resist rust.

It is not enough just to be strong, brake drums also need to last. The exterior of TruTurn Brake Drums is machined and painted to reduce rust generation. This means these brake drums look good going on your truck, resist corrosion, and keep looking good far longer than conventional cast drums.

### Turned-to-balance improves performance.

ConMet's turned-to-balance process improves drum strength by eliminating the need for weld-on weights and balance cuts.

### True turned for ensured precision.

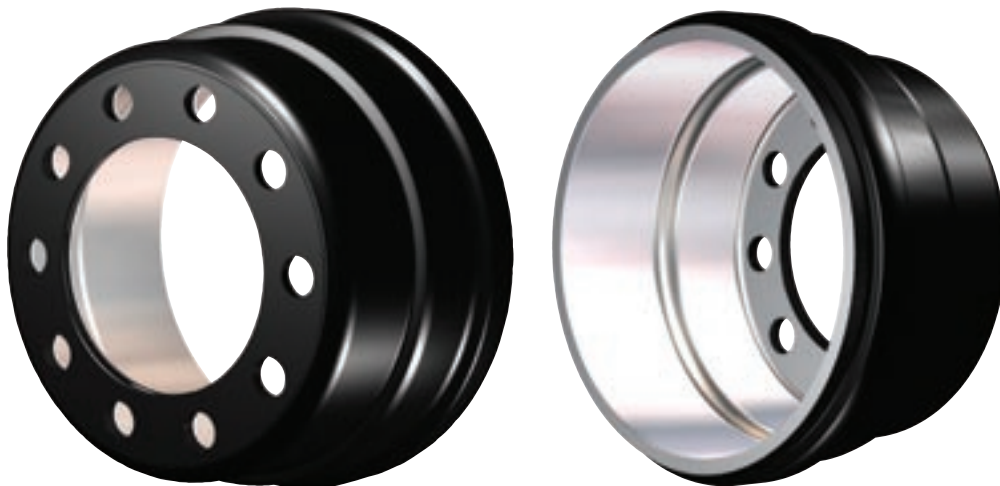
Unlike traditional cast drum designs, TruTurn's precision machining process produces drums that retain their uniformity, translating into more consistent stopping power and less risk of potential drum cracking from 'hot spots' and uneven heat distribution.

### Tested and proven to be better.

TruTurn Brake Drums have been fully tested in the lab and in actual on-highway applications. With the increase in dimensional precision, they out-perform traditional cast drum designs in many applications.

### Leader by design.

Utilizing the latest engineering and manufacturing techniques, TruTurn Brake Drums exceed customer expectations for performance and quality at an affordable price.



TruTurn Brake Drums are fully interchangeable with any other brake drum.

**Rounder surface improves performance.**

More evenly distributed temperature reduces the potential for drum cracking.

**"Turned to balance".**

Improves strength by eliminating weld-on weights and balance cuts.

**Machining inside and out.**

95% of the drum surface area is precision machined for uniformity.

**Lower drum temperatures.**

Fully machined surface eliminates hot spots due to wall variation.

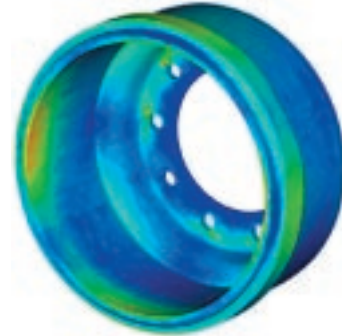
**Consistent wall thickness.**

Provides more uniform thermal expansion - minimizing brake "judder" and vibration.

# ConMet's turned-to-balance process means TruTurn matches or exceeds a standard cast drum's strength and performance.

## Optimizing synergy between ideas and technology.

An idea is only as good as the power to successfully execute it. ConMet put the expertise of its engineers and the power of computer modeling to work to develop TruTurn. Computer-aided design (CAD), finite element analysis (FEA), solidification modeling and rapid prototypes were all used in TruTurn's development process. Prototyping, static strength, and fatigue testing were just a few of the testing procedures used to guarantee success. ConMet's proven manufacturing technology will give you and your drivers the confidence to stop consistently and quickly, no matter what kind of terrain is ahead.



Finite Element Analysis ensures stress levels are reduced and the drum is optimized for less weight, higher strength and uniform heat distribution.

## When a brake drum is cast...



There can be deviations in wall thickness that would cause it to be unbalanced...



To make a drum true it must be machined on both interior and exterior walls...



Machining removes the deviations without effecting the drum's strength...



The final result is a truly balanced drum that is ready to install from the factory.



Aluminum  
**PreSet®**  
Hub Assemblies



Ductile Iron  
**PreSet®**  
Hub Assemblies



**PreSet®**  
Hub and Rotor  
Assemblies



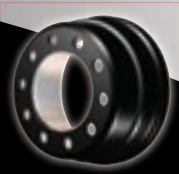
Aluminum  
**Standard**  
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**CastLite®**  
Brake Drums



**TruTurn™**  
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