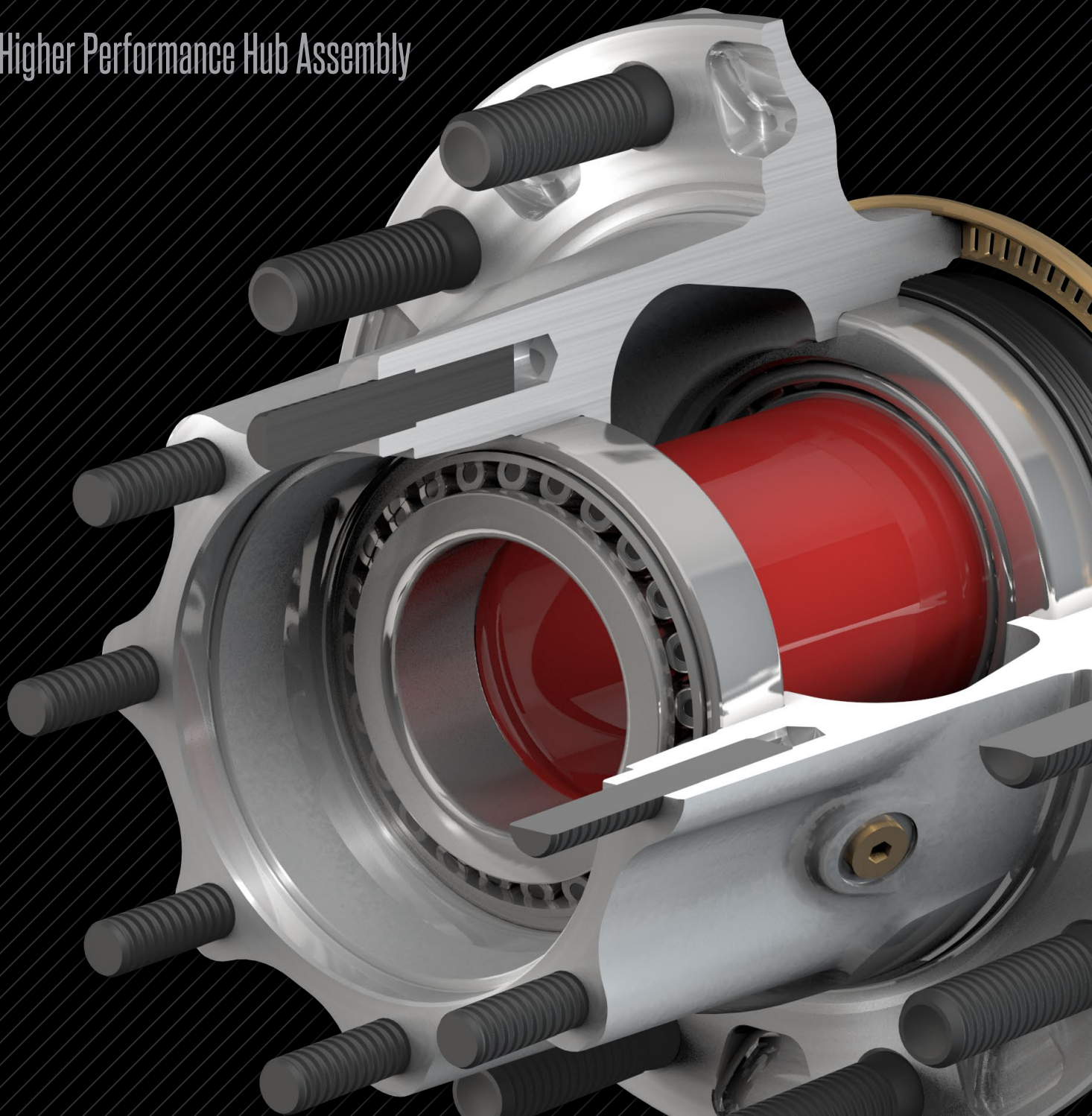
CONMET®

PreSet® Hub Assemblies

The Higher Performance Hub Assembly

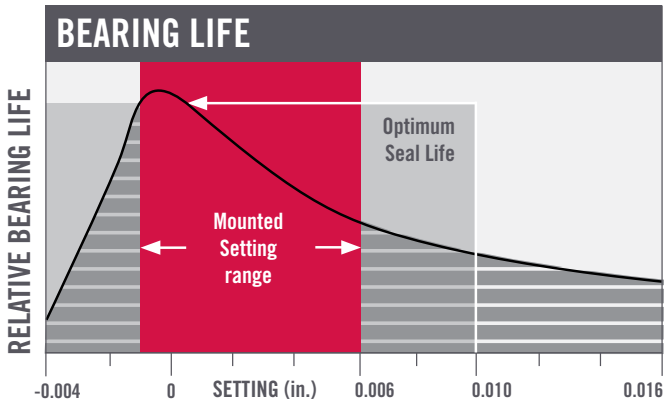


PreSet Hub Assemblies. The Smarter Choice.

Our Patented PreSet® Hub Technology has become the industry standard for a reason, *it works*.

PreSet hubs are completely assembled at the factory.
We manufacture and assemble PreSet hubs inside our own factories, where quality control is monitored every single step of the way. Using state of the art machines and technology we achieve the very highest levels of precision. PreSet technology offers superior hubs that are completely assembled and ready for installation from the factory.

Conventional hubs leave room for error.
Conventional hubs require assembly and installation of many individual components, including bearings and seals, using imprecise hand tools. These additional steps require checking, adjusting and rechecking of tolerances, which add a considerable amount of time to the installation process. Incorrect installation can not only damage individual hub components, but even the hub itself, greatly affecting the lifespan and safety of the hub.



Precisely set bearing tolerances yield maximum bearing life.

Our hubs use pre-adjusted bearings.
PreSet hub assemblies use pre-adjusted bearing technology developed and perfected by our own engineers. Pre-adjusted bearings are set with greater precision than conventional bearings because we have full control over the assembly process. We carefully control all critical tolerances of the bearings in the hub with the use of a precision engineered spacer and proper calibration. This produces a ready-to-install hub with maximum life expectancy.

Conventional bearing settings are less precise.
Conventional bearings are set in shops by hand, using manual adjustments with far less accuracy. This can lead to an increased likelihood of miscalibration and misalignment in the hub assembly. As you can see in the chart (left), precise bearing settings have a direct correlation to the life of the bearing itself, and are essential for maximum service life.

PreSet hubs are simple to install and maintain.
With PreSet hubs, installation is incredibly easy. Operators simply slide the self-piloting, pre-assembled hub onto the spindle, torque the retaining nut and add lubricant. Not only do you save installation time with our hubs, but you can also service them in the field using conventional, readily available parts. No special tools, equipment or procedures are required, and complete service kits are available at your local dealer.

Our hubcaps offer greater protection.
PreSet hubcaps use a stronger and more resilient gasket than conventional hubcaps, and they incorporate venting technology that is proven to shield hubs against moisture and other contaminants. Our hubcaps deliver additional protection you can feel confident about.

Choose the better hub assembly.
With proper lubrication, maintenance and regular inspections, PreSet hubs can keep your vehicle on the road, safely and efficiently, for miles and miles. For complete PreSet installation procedures and training manuals, go to our website at www.conmet.com.

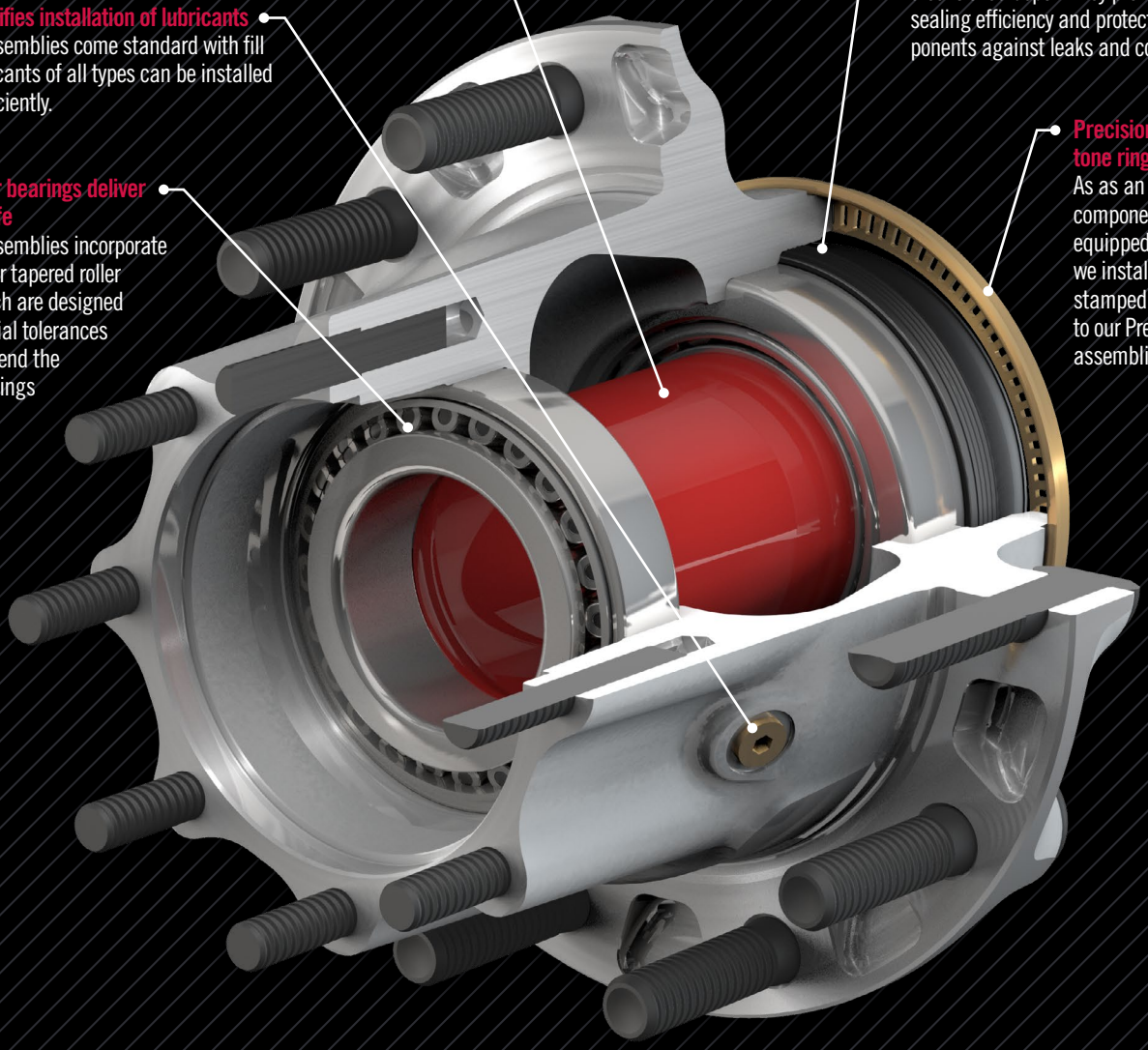
PreSet Spacer provides a fixed, dimensional bearing adjustment
Our precision-ground spacers provide fixed, dimensional bearing adjustments, which are more precise than conventional hubs.

Fill hole simplifies installation of lubricants
PreSet hub assemblies come standard with fill holes, so lubricants of all types can be installed easily and efficiently.

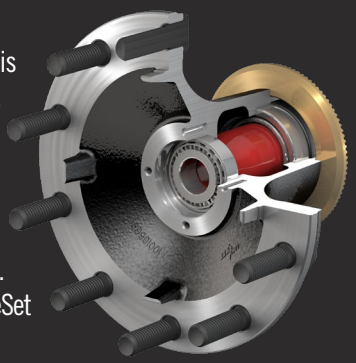
Tapered roller bearings deliver exceptional life
PreSet hub assemblies incorporate inner and outer tapered roller bearings, which are designed with very special tolerances selected to extend the life of the bearings inside.

Extended-life wheel seal protects internal components
Our hubs include extended-life wheel seals, which are installed in our own factories to a controlled depth. They provide maximum sealing efficiency and protect internal components against leaks and contamination.

Precision-stamped tone ring (optional)
As as an integral component for ABS-equipped vehicles, we install precision-stamped tone rings to our PreSet hub assemblies.



PreSet Aluminum Hub Assemblies are lightweight with less maintenance.
Our precision-machined, aluminum alloy hubs reduce weight and increase payload capacity. Maintenance is reduced with the superior dependability and performance of PreSet technology, saving you time and money. This combination of weight savings and lower maintenance improves overall vehicle performance and increases your profitability. PreSet Aluminum Hubs are available for steer, drive and trailer axles.



PreSet Ductile Iron Hub Assemblies cost less and require less maintenance.
PreSet Ductile Iron Hub Assemblies offer a cost benefit for applications in which weight is less of a concern. These hub assemblies provide the low maintenance, superior performance and greater dependability of PreSet technology, at a ductile iron price.

CON MET®

Online Resources

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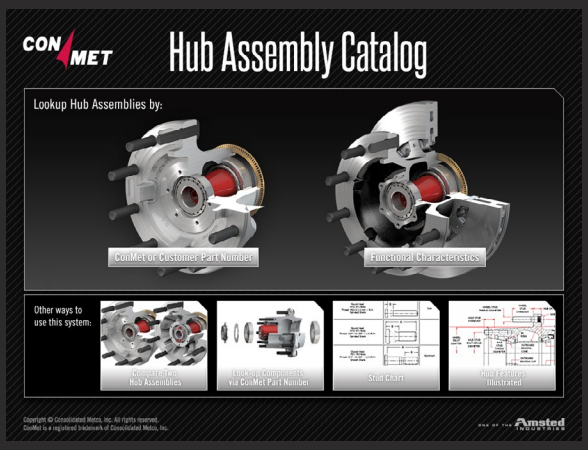

Hub Installation & Service Training
Take our interactive training course and get certified. Watch, listen and learn, answer a few questions and download a personalized certificate. Take it yourself or train your team.

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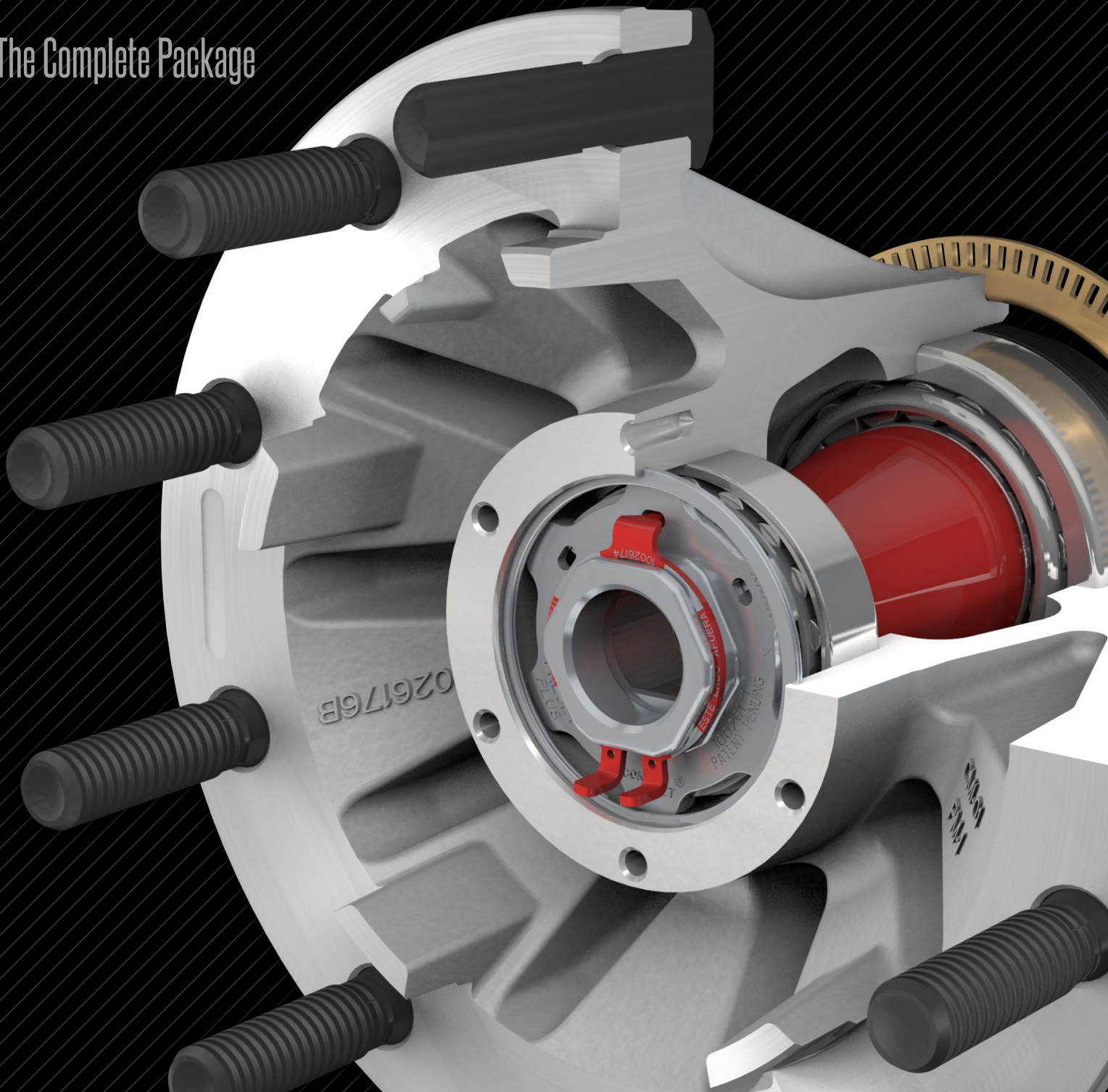
PreSet Plus™ Hub Assemblies

The Complete Package



PreSet Plus™ - the most advanced wheel hub in t

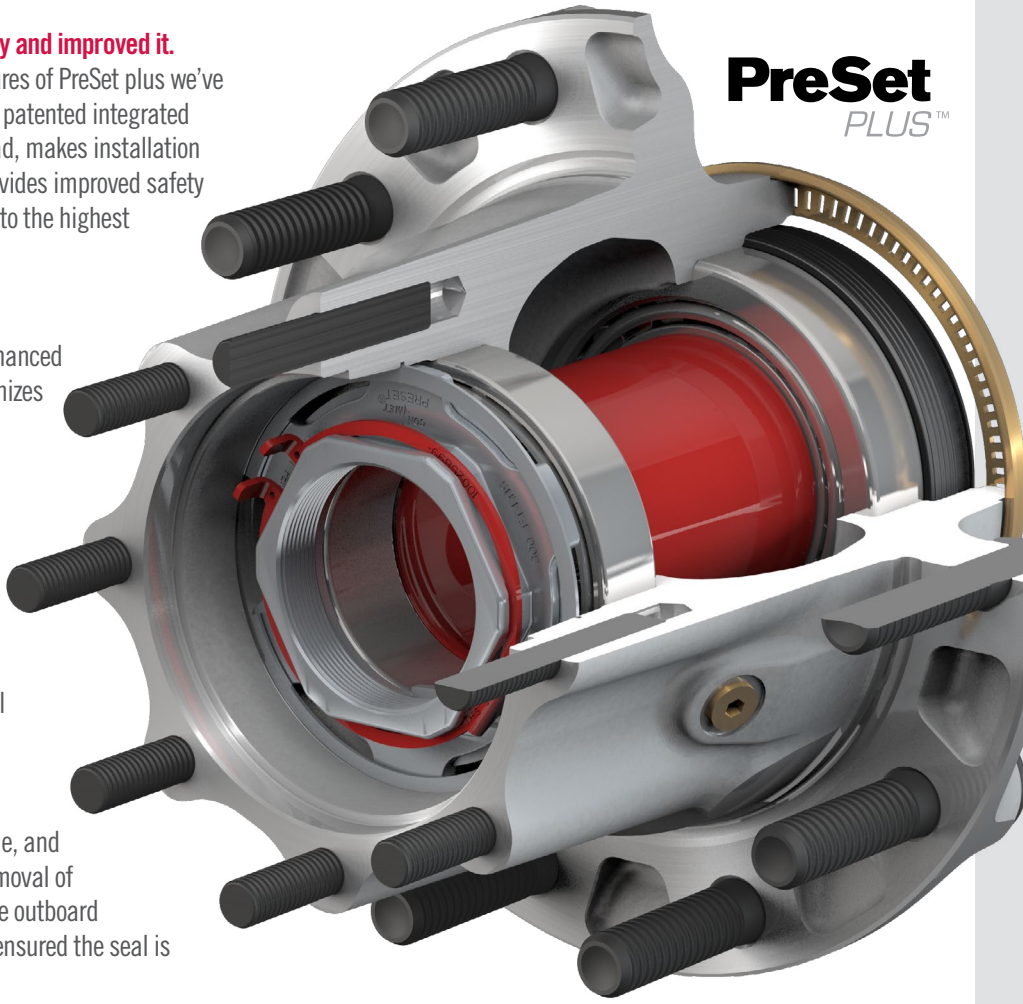
With state-of-the-art design, superior components and low maintenance features, PreSet Plus is the complete package.

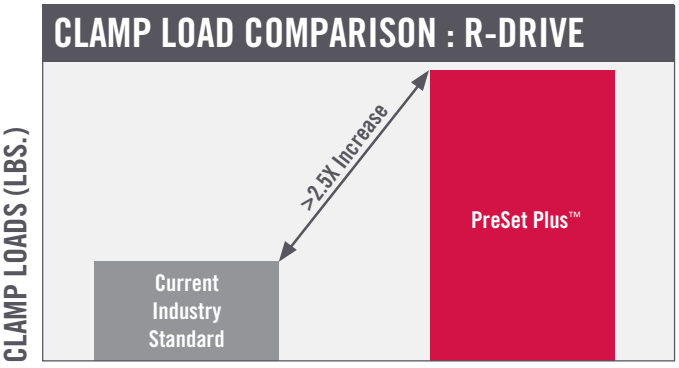
We took our industry leading PreSet® hub technology and improved it.
PreSet Plus™ hub assemblies have all the great features of PreSet plus we've incorporated our fully integrated spindle nut. ConMet's patented integrated nut system significantly improves wheel end clamp load, makes installation easier, aids in removal of the hub for servicing and provides improved safety features. The PreSet Plus spindle nut is manufactured to the highest quality standards in the industry.

PreSet Plus hubs have an optimized bearing spacer.
For PreSet Plus hub assemblies, we have added an enhanced bearing spacer which optimizes clamp load and maximizes performance and durability.

We added features the industry asked for.
PreSet Plus hubs incorporate our own spindle nut system, an optimized bearing spacer, and available ConMet Premium Bearings. They come standard with a magnetic fill plug and a premium "Best in Class" seal and is available with ConMet Premium Bearings. They are completely pre-assembled and ready to install eliminating the need for bearing adjustment.

Save money on maintenance with PreSet Plus.
All components of PreSet Plus hubs are field serviceable, and our specially designed spindle nuts make for easier removal of the complete assembly for servicing. We've retained the outboard bearing cone to prevent damage during removal, and ensured the seal is protected during installation.

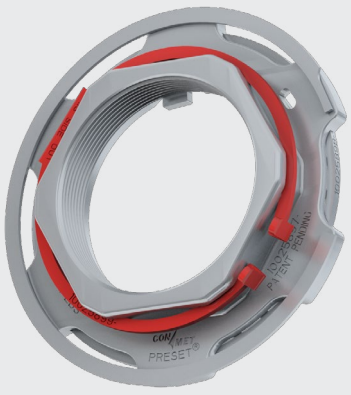




Clamp Load Increases 2.5x
Standard vs. ConMet

PreSet Plus Spindle Nut System

ConMet's patented integrated nut system significantly improves wheel end clamp load, makes installation easier, aids in removal of the hub and provides improved safety features.



Now Available with ConMet Premium Bearings, designed to extend life even in the most extreme trucking applications.

Introducing premium wheel end bearings for commercial vehicle applications.
Commercial Vehicle operators in North America continue to demand more reliable, longer-life components at a price that offers better value. Utilizing innovations in both design and manufacturing, ConMet has developed its own line of premium wheel end bearings to meet this market demand. ConMet Bearings are engineered to extend service life and help prevent field issues in the most demanding applications in the industry, including wide-based single wheels and misalignment due to spindle wear and disc brakes.

Features of ConMet Bearings:

- Extended life over standard bearings
- Optimized contact and reduced stress concentration
- Improved rolling contact and reduced friction
- Lower operating temperature and improved lubrication
- More effectively withstands heavy cornering and misalignment

Improved Bearing Life

ConMet bearings offer longer life over standard bearing designs in applications where the duty cycle, operating environment and road conditions are unpredictable and in some cases more severe.

Surface Finish

The highly-controlled honed surface finish provides a 40% improvement over current industry standards. The surface finish improvements result in superior rolling contact and reduced friction leading to lower operating temperatures and increased lubrication.

Manufacturing Process

Internal geometry is rigorously controlled by state-of-the-art equipment. Each bearing must pass a fully automated inspection before it leaves the factory. Tighter control over geometry and inspection procedures results in a smoother operating and more efficient bearing.

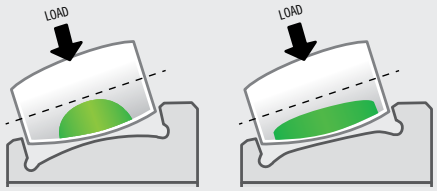
Profiles

Precisely engineered profiles minimize bearing raceway and roller stresses under heavy loads and better utilize the roller length under light loads. The reduction of stresses at the roller ends reduces the sensitivity of the bearing to heavy cornering and misalignment.

Warranty

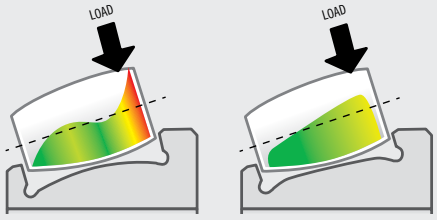
When combining ConMet Premium Bearings in PreSet Plus™ hub assemblies your wheel end is backed by an industry leading extended warranty.

Bearing stress under NORMAL conditions



Standard Bearings | **ConMet Premium Bearings**

Bearing stress under EXTREME conditions



Standard Bearings | **ConMet Premium Bearings**

Online Resources

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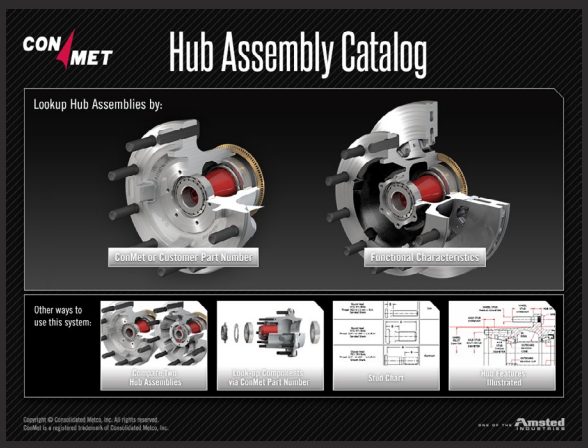

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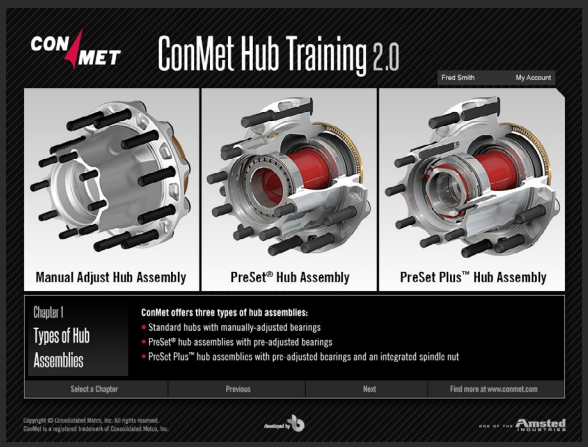

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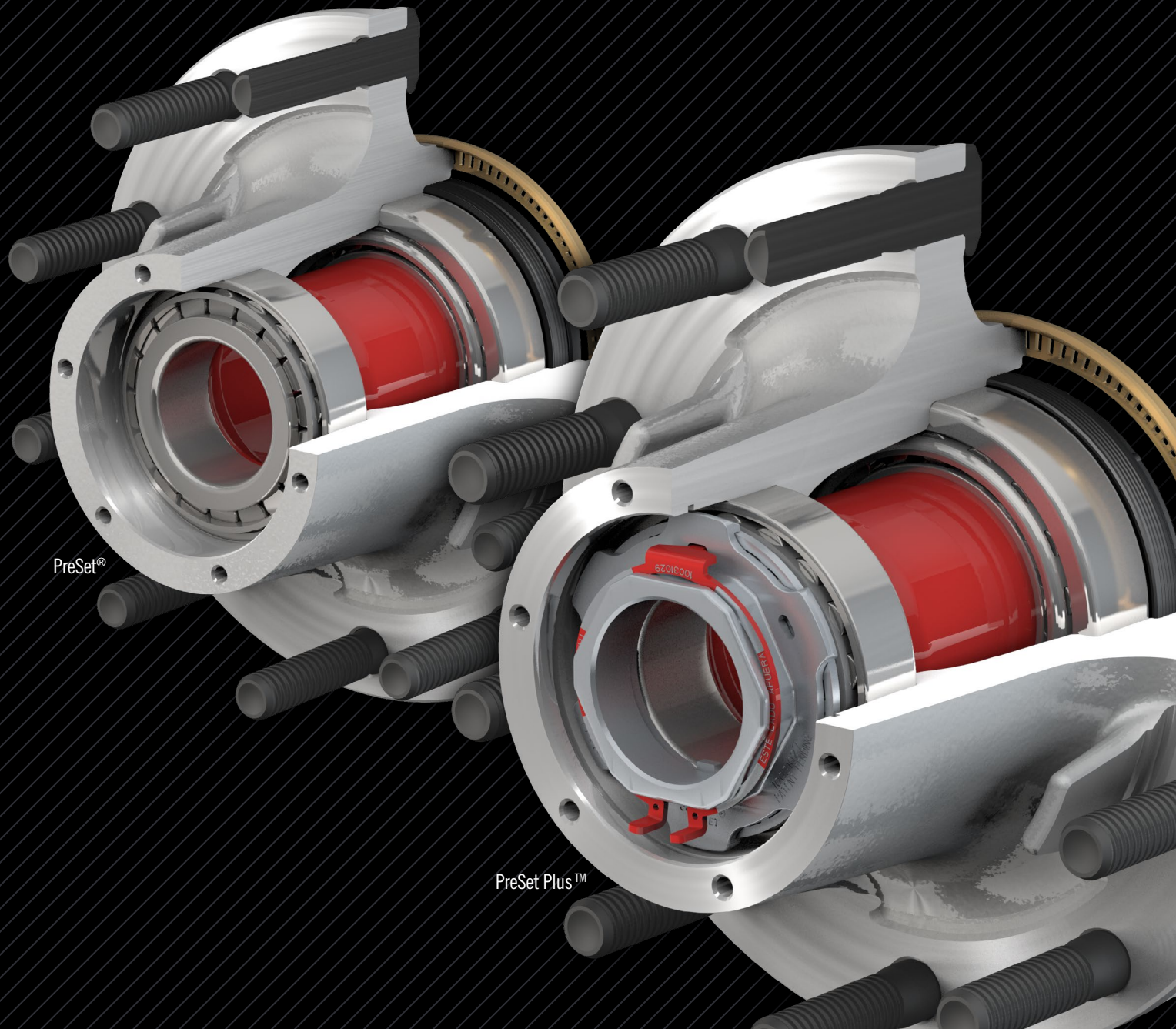
CONMET®

Trailer Hub Assemblies

Available as PreSet® or PreSet Plus™ in either Aluminum or Iron



PreSet®

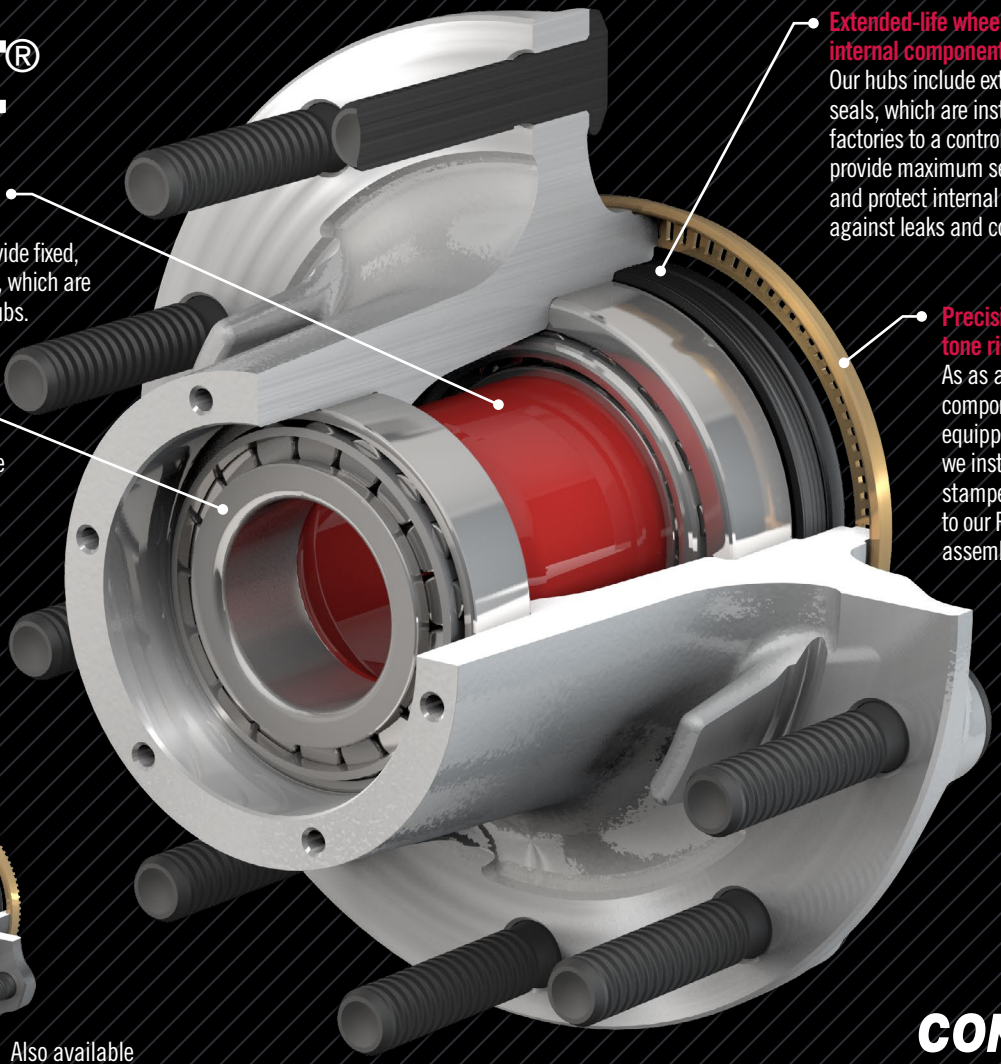
PreSet Plus™

Improved performance and lower maintenance costs comp

PreSet®

PreSet Spacer provides a fixed, dimensional bearing adjustment
Our precision-ground spacers provide fixed, dimensional bearing adjustments, which are more precise than conventional hubs.

Tapered roller bearings deliver exceptional life
PreSet hub assemblies incorporate inner and outer tapered roller bearings, which are designed with very special tolerances selected to extend the life of the bearings inside.



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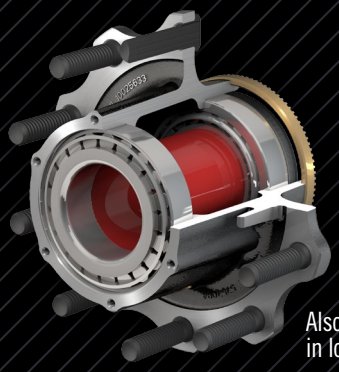

Also available in low cost iron

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Conventional hubs leave room for error.
Conventional hubs require assembly and installation of many individual components, including bearings and seals, using imprecise hand tools. These additional steps require checking, adjusting and rechecking of tolerances, which add a considerable amount of time to the installation process. Incorrect installation can not only damage individual hub components, but even the hub itself, greatly affecting the lifespan and safety of the hub.

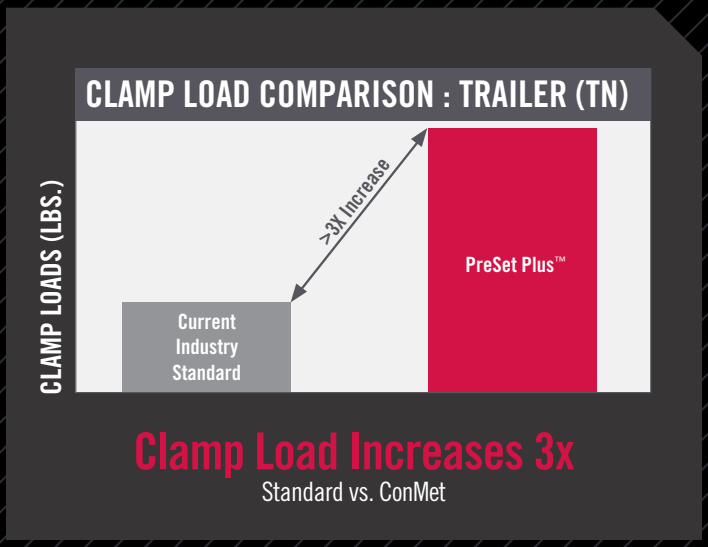
Choose the better hub assembly.
With proper lubrication, maintenance and inspections, PreSet hubs can keep your vehicle on the road, safely and efficiently, for miles and miles. For installation procedures and manuals, go to www.conmet.com.

pared with manual adjust hubs

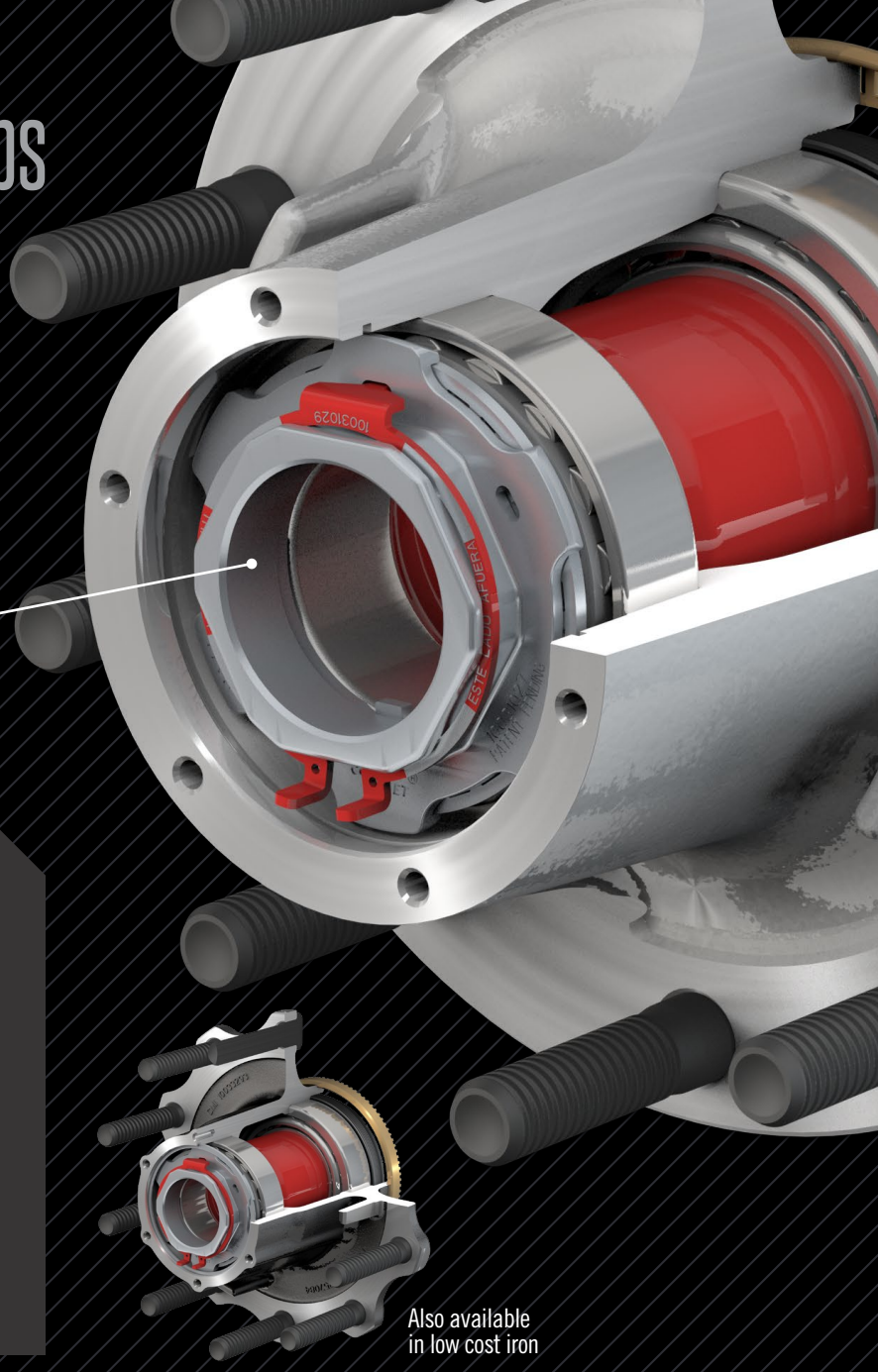
PreSet Plus™

All of the features of ConMet's PreSet® hub assemblies plus we've incorporated a unique axle nut retaining system combined with an optimized bearing spacer to increase clamp load up two and a half times that of a standard hub.

The PreSet Plus fully integrated four piece axle nut system
ConMet's patented integrated nut system significantly improves wheel end clamp load, makes installation easier, aids in removal of the hub and provides improved safety features.



Clamp Load Increases 3x
Standard vs. ConMet



Also available in low cost iron

With state-of-the-art design, superior components and low maintenance features, PreSet Plus is the complete package.

We took our industry leading PreSet® hub technology and improved it.
PreSet Plus hub assemblies have all the great features of PreSet, plus we've incorporated our fully integrated spindle nut. ConMet's patented integrated nut system significantly improves wheel end clamp load, makes installation easier, aids in removal of the hub for servicing and provides improved safety features. The PreSet Plus Spindle Nut is manufactured by ConMet to ensure the very best quality and performance in the industry.

PreSet Plus hubs have an optimized bearing spacer.
For PreSet Plus hub assemblies, we have added an enhanced bearing spacer which optimizes clamp load and maximizes performance and durability.

We added features the industry asked for.
PreSet Plus hubs incorporate our own spindle nut system and an optimized bearing spacer. They come standard with a magnetic fill plug, a premium "Best in Class" seal and tapered roller bearings. They are completely pre-assembled and ready to install, eliminating the need for bearing adjustment.

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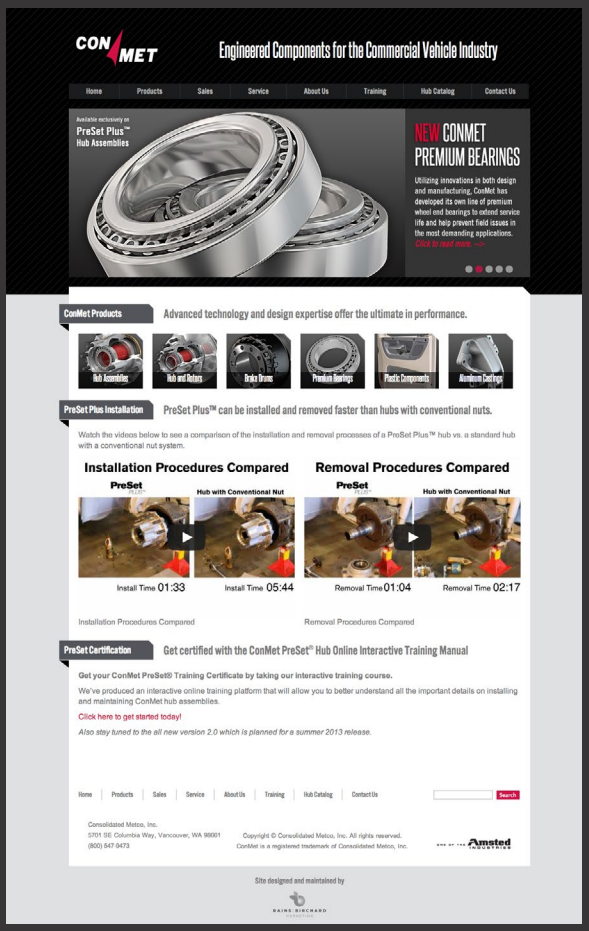

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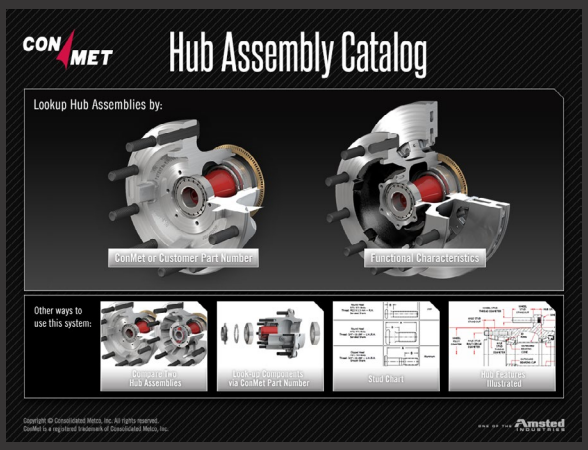

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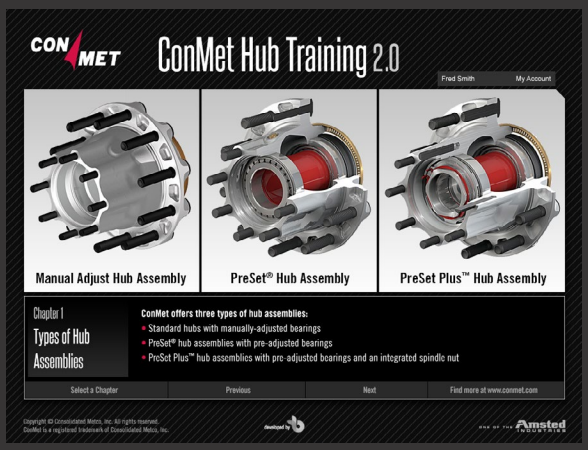

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Rebuild or Replace?

Guide to All Commercial Wheel Hub Assemblies

Option 1: Rebuild Your Hub

Removal, disassembly, clean and prep, reassembly, and reinstallation.

Tools Required

- Screwdriver
- Hammer
- Mild Steel Punch
- Seal Puller
- Hub Puller
- Parts Washer
- Breaker Bar
- Torque Wrench
- Welder
- Seal Installation Tool
- Spindle Nut Socket
- Metered dispenser
- Oven
- Freezer

Parts Required

- Bearing Cups (A)
- Bearing Cones (B)
- Seal (C)
- Spindle Nut (D)
- Bearing Spacer - *Optional* (E)

Steps Required

1. Remove tire, wheel assembly and brake drum.
2. Loosen and remove spindle nut system and capture the lubricant.
3. Slide the hub off the spindle (hub removal tool may be required).
4. Remove and discard seal, inner bearing retainer (if present) and bearing spacer (if present).
5. Inspect, clean and dry components and replace as needed.
6. Remove old cups by welding a bead around the bearing surface.
7. Install new cups by first heating the hub in either boiling water or in an oven and cooling the bearing in a freezer.
8. Remove any damaged wheel studs by using a press and then install new ones using a press.
9. Remove a damaged ABS ring with a new one.
10. Install a new bearing spacer (if needed).
11. Lubricate the inner bearing cone and install it into the inner bearing cup.
12. Install a new seal (use a seal installation tool if required).
13. Lubricate the outer bearing cone and install it into the hub assembly.
14. Clean and lubricate the bearing journals on the spindle and slide the rebuilt hub onto the spindle.
15. Install the spindle nut and torque to recommended settings.
16. Fill with recommended amount of lubricant.
17. Reinstall brake drum and wheel.

True Costs to Rebuild

Labor: 3 hours x $100 per hour = $300.00
Downtime: 3 hours x $75 per hour = $225.00
Parts: Cost of Parts = $166.67

Total Estimated Cost = $691.67

Option 2: Replace Your Hub

Removal, clean and prep, and reinstallation.

Find your conclusion, use the worksheet on the back cover.

Tools Required

- Screwdriver
- Hammer
- Mild Steel Punch
- Seal Puller
- Hub Puller
- Metered dispenser
- Spindle Nut Socket
- Torque Wrench

Steps Required

1. Remove tire, wheel assembly and brake drum.
2. Loosen and remove spindle nut system and capture the lubricant.
3. Slide the hub off the spindle (hub removal tool may be required).
4. Clean and lubricate the bearing journals on the spindle and slide the new hub onto the spindle.
5. Install the spindle nut and torque to recommended settings.
6. Fill with recommended amount of lubricant.
7. Reinstall brake drum and wheel.

Parts Required

- Hub Assembly

True Costs to Replace

Labor: 1.3 hours x $100 per hour = $130.00
Downtime: 1.3 hours x $75 per hour = $97.50
Parts: Cost of Parts = $303.02

Total Estimated Cost = $530.52

Rationale to Rebuild or Replace

Weigh the risks and rewards, then decide for yourself.

Rebuilding

Risks

- Possibility of reusing damaged components
- Susceptible to mistakes in rebuild process
- Possibility of using mismatched components
- More labor cost
- Higher level of technician training required

Rewards

- Rebuild components are often in stock
- Less expensive total part costs

Replacing

Risks

- Replacement hub may not be in stock
- More expensive total part cost

Rewards

- Less susceptible to technician mistakes
- Lower labor cost
- Simplified process
- New components with longer life

You Decide - Use the Worksheet Below to Weigh Your Options

	Cost of Tools Needed	Cost of Parts Needed	Cost of Labor	Cost of Downtime	Total Cost
Rebuild					
Replace					

Need help in your own decision to rebuild or replace? Call us at 800-547-9473.

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