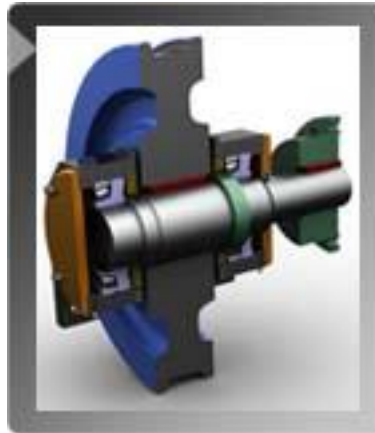


Xtek Is The Right Choice.

Xtek is an International manufacturer of custom machined and heat-treated parts and component assemblies for heavy-duty industrial applications. We provide **engineering** and metallurgical expertise, combined with state-of-the-art machining capabilities, to solve the toughest power transmission and material handling equipment problems faced by our customers throughout the world in **steel mills, aluminum mills, power generation, pulp & paper, mineral processing**, and other **industries** throughout the world.



We welcome the opportunity

to be considered for your next requirement.

Xtek was established in 1909, and since that time we've built our reputation by improving the metallurgical properties of steel, and providing high quality, durable products to industry. Our engineers developed the **Tool Steel Process (TSP)**, a special heat-treating process that significantly improves the strength and durability of machined components. We use this TSP process, and other forms of heat treatment, to produce critical components such as **brake wheels, track or crane wheels, overhead crane parts, and sheave wheels; gear couplings and u-joints; mill gearing and mill pinions and custom gears; pinch rolls, forged work rolls** and other **special purpose processing rolls**.

<http://www.xtek.com/resources/videos.php>

Watch our video to learn more about Xtek - providing heavy industry solutions including industrial wheels, overhead crane parts, gear couplings, custom gears, roll products, and below the hook lifting equipment.

<http://www.xtek.com/>

Overview of Xtek's track wheels, crane wheels, sheave wheels, brake wheels and wheel assembly products

<http://www.xtek.com/pdf/xtek-wheel-products-brochure.pdf>

--- 3 to 8 times the service life ---



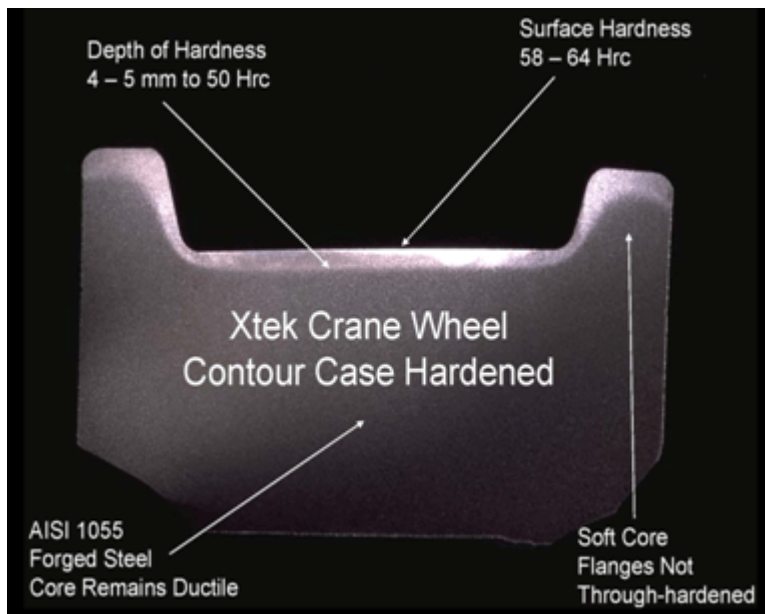
American Gear Manufacturers Association



Crane Wheels

Crane wheels are replaced because of flange wear, flange breakage, and mechanical overloads characterized by pitting and spalling. Each of these in-service factors must be carefully considered before the combination of wheel design, material selection, hardness pattern and heat treating technology is selected.

That's why every Xtek hardened steel crane wheel is specially designed and heat treated to maximize its resistance to the damaging forces at work in heavy industrial applications.



Xtek Crane Wheels are:

- Manufactured from fine grain, fully killed, vacuum degassed forged medium carbon steel
- Heat treated using our in house processes to provide a uniform contour hardness in the tread and inner flange wear surfaces, while maintaining a ductile core to resist shock loads
- Resistant to flange fracture or wear
- Designed to resist pitting and spalling



Advantages of Xtek forged Crane Wheels:

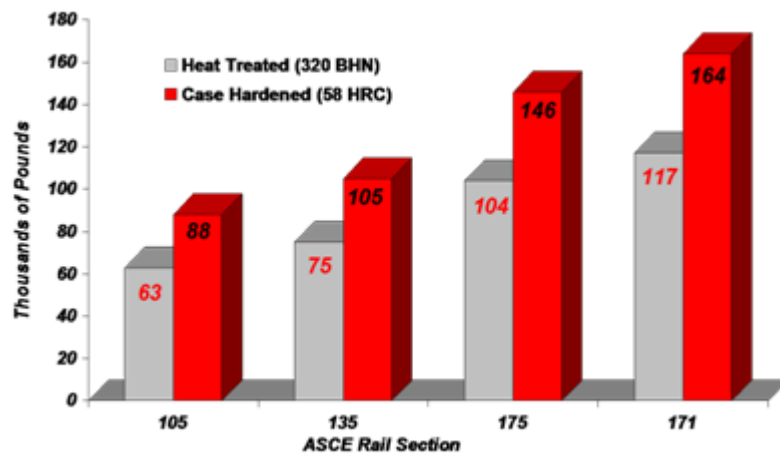
- Reduce maintenance cost of your wheels and wheel assemblies
- Improve the life of your rail
- Provide an additional 40% load carrying capability over rim toughened wheels
- Delivery in 6-8 weeks, less when required

Applications:

- Overhead cranes
- Gantry and portal cranes
- Transfer cars

Crane Wheels: Crane Wheel Loading

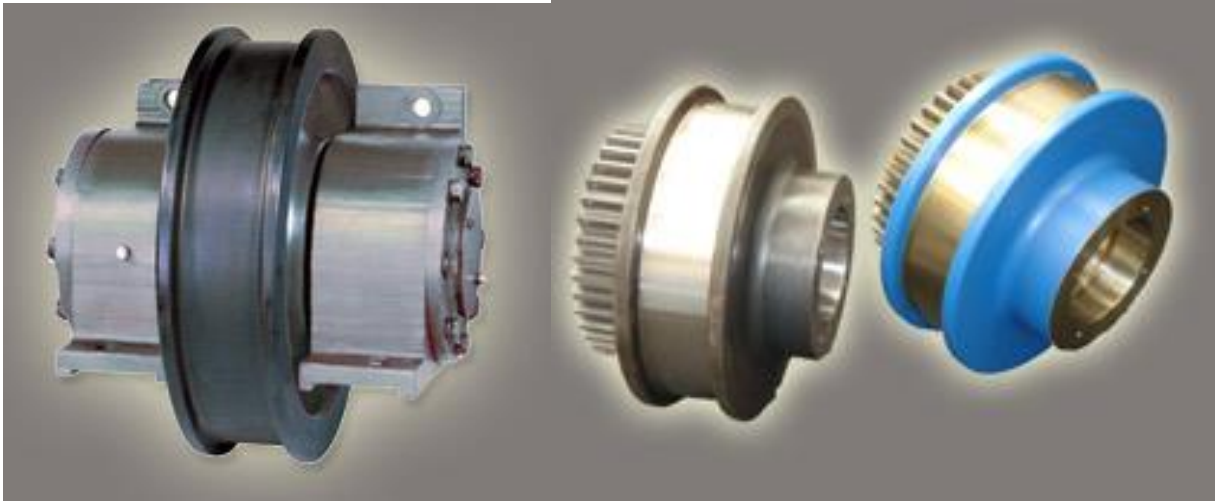
In accordance with the Association of Iron and Steel Engineering, AIST Technical Report Number 6, an Xtek contour hardened crane wheel, heat treated to a minimum hardness of 58 Rc, will increase the allowable load capability by nearly 40% over a rim toughened wheel operating on the same rail.



And while the surface hardness of a crane wheel is critical in determining the load the wheel is capable of supporting, the depth of that hardness is essential to prevent spalling from developing in the tread area of the wheel. Cracking will develop when the load overcomes the subsurface shear strength in the contact zone through rolling or skidding. As cracks progress, the result is a spall as pictured lower right. With equipment and techniques developed in by our in-house heat treating and metallurgical team, Xtek provides the right combination of material, surface hardness and hardness depth to make your application a success.



Crane Wheel Assemblies



Xtek Engineers can improve the existing design of your crane wheel assemblies by addressing the material, design and heat treatment of each of the components (wheel, shaft, gear, bearing housings, and coupling) if the application is prone to premature failures.

The Xtek crane wheel assembly is designed to replace the original equipment manufactured assembly without modifications to the existing equipment. The assembly contains the Xtek crane wheel with the embedded metallurgical properties that provide a long service life.

Benefits of Xtek Crane Wheel Assemblies:

- **Xtek "Contour Hardened" 58-62 HRC Crane Wheel**
- **40 % additional vertical load capability over softer industrial quality Crane Wheels**
- **3 to 8 times the service life**

The same performance advantages are therefore maintained with increased wear life of both the crane wheel and the existing crane rail, along with improved vertical load carrying capability.

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