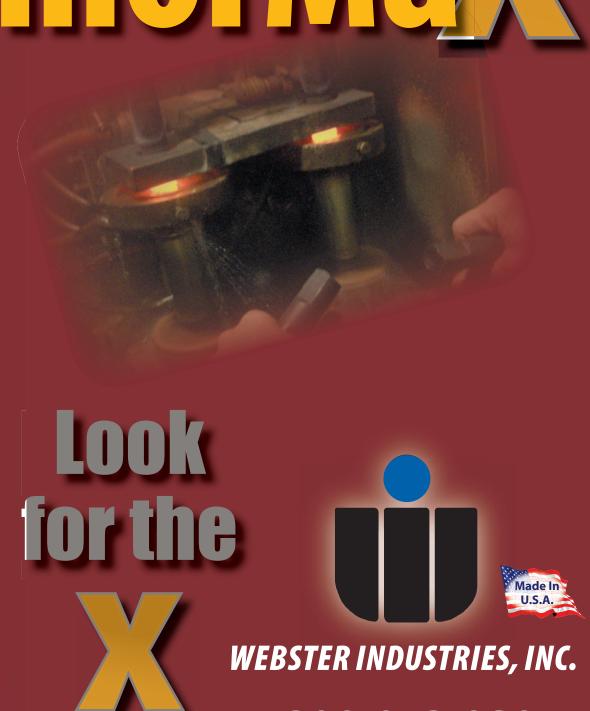
Webster Industries, Inc.





1-800-243-9327 www.websterchain.com

"Increasing Customer **Profitability since 1876"**

Webster's ArmorMax pin provides 360° of circumferentially induction hardened surface.



The Process

First, we take our high alloy Super Duralloy rivet and perform a specialized heat-treating process. This process brings the inner core to a durable yet flexible state. The pin now has the inner strength to resist torsional failures yet the flexibility to respond under shock loads. We then apply the ArmorMaX heat treating process which gives the outer layer the utmost in wear resistance. The ArmorMaX case hardening process leaves residual compressive stresses in the pin surface. The stresses are advantageous in fighting fatigue, which is the most common type of chain failure. This hardening process also helps fight against galling. Galling is the internal joint wear between the barrel I.D. and the pin O.D. which can cause rapid chain elongation. Webster's ArmorMaX Super Duralloy pin is the only chain pin that can provide you with performance through strength **AND** wearability.

While other manufacturers tout induction hardened pins, none are manufactured to the stringent specifications as Webster's ArmorMaX hardened pins.

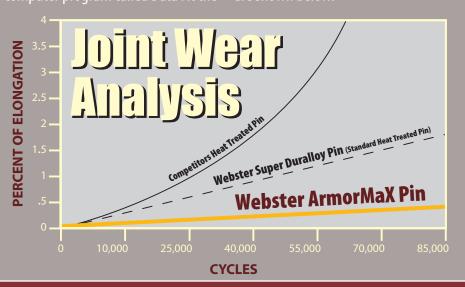
The Application

Especially engineered for high-speed chain applications, Webster's ArmorMaX series chains provide maximum chain life through fatique resistant pins. As processing speeds are increasing daily, we accepted the high-speed challenges and designed a product to combat barrel to pin wear. With our customers in mind, Webster designed a low cost feature that allows chain speeds **AND** chain life to be maximized. Previously as speeds increased, chain life decreased – not with Webster ArmorMaX series chains. The combination of strength and wearability is the mark of a Webster made chain.

Six pitch strands of three different versions of WH132 were sent to an independent laboratory for comparative wear testing. One strand was a competitor's standard heat treated chain, another was our standard heat treated chain (WH132) and the last had our ArmorMaX pin (WHX132). As the vertical cylinder exerted a chain pull of 15,000 pounds, the horizontal cylinders stroked the chain joints through an arc of 40° simulating a 9-tooth sprocket. Each sample was cycled 20,000 times which is roughly three months' operation for a chain running 100 FPM on a conveyor with 100'-0' centers. At each 1,000

were measured for wear. Then using a computer program called Data Fit the

cycles the pin diameters and barrel ID's wear was projected to 80,000 cycles or about one year's operation. The results are shown below.





WEBSTER INDUSTRIES, INC.



ISO 9001:2000

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