

EXTREME PERFORMANCE

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The XP Hammer, a newly-launched bi-metallic hammer from Wear-Concepts of the US, has dramatically improved the service life of hammer crusher sets, in some cases by three or more times the life-span of non-bi-metallic hammers.

Every maintenance manager's goal is to find products that provide longer life, decrease downtime and increase productivity. The XP Hammer™, an extreme performance bi-metallic answer to longer life and less downtime, is doing just that. Introduced in mid-2004, thousands of XP Hammers have already been sold, and they can be found in crushers currently in operation throughout the US as well as in Europe and China.

XP Hammer characteristics

What gives the XP Hammer the ability to last - in many cases - three or more times longer than ordinary hard-faced manganese hammers? The answer is that XP Hammers are made from a high-chrome wear-resistant cast iron with 15-22% Cr, and the hammer is then factory through-hardened to nearly 62 HRC.

The logical question then becomes 'How does a material with such hardness withstand this type of impact without breaking apart?' The answer lies in the concept of bi-metal. The upper portion of the hammer around the 'eye' is a tough, heat-treated low alloy steel with an HRC somewhere in the 28-32 range. This softer, more ductile material helps absorb some of the impact to the harder area, much like our gums are designed to absorb the impact on our teeth when we chew.



But even more interesting, is that the proprietary method in which these hammers are cast allows the two, very different materials to be accomplished in one pour.

Performance

Bottom-line, these hammers perform, and quite well. In the words of one XP Hammer customer, "We have been working on finding a better hammer or hard-facing material for our hammers over the last seven years. During this time I have tried every new hammer or welding rod and without success. Our hammer life on a 29 pound (13kg) hammer was between 900 and 1300t of raw fire clay. The XP Hammer tripled the tons produced per set. Plus, we no longer have the expense of 252 man hours, 78 pounds (35kg) of chrome carbide welding rod and 390 pounds (176kg) of manganese welding rod to rebuild our old-style hammers every year. We also saved 48 man-hours per year for replacing hammers, which translates to 24 hours increased up time. And the XP Hammer maintained its height until the very end of the campaign, which translates into more uniform finished product sizing."

Conclusion

For most maintenance managers, the idea of obtaining solid performance and less downtime is an idea that will never wear out!

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