

## Superior Wear Resistance with LaserBond Crushalloy™

## Abrasive wear is a common form of material loss for parts in contact with soil, ore, minerals, rocks, slag, and other hard particles. In order to reduce wear and extend wear life, hard, wear-resistant materials are selected for components subject to high abrasion.

To test and predict the wear-life of a material, the test ASTM G65-A "Standard Test Method for Measuring Abrasion Using the Dry Sand/ Rubber Wheel Apparatus" is a commonly accepted industry standard to test for extreme abrasion resistance. In this test a material sample is fixed onto a support and pushed with a load of 130 N against a spinning rubber wheel. In between sample and rubber wheel a sand flux is applied. The sand particles abrade the surface of the sample and remove material, causing wear. After 6000 revolutions of the wheel, the sample mass loss is recorded, and a volume loss is calculated. This allows for comparison of materials with different densities.

The graph below compares the wear resistance of LaserBond's Crushalloy™ with white cast iron, the wear plate material Bisalloy® 500 and the martensitic stainless steel ASI 431. The wear resistance of Crushalloy<sup>™</sup> is 6.3 times higher than Bisalloy<sup>®</sup>, and more than twice as high as a white cast iron.

## **RUBBER WHEEL**







www.laserbond.com