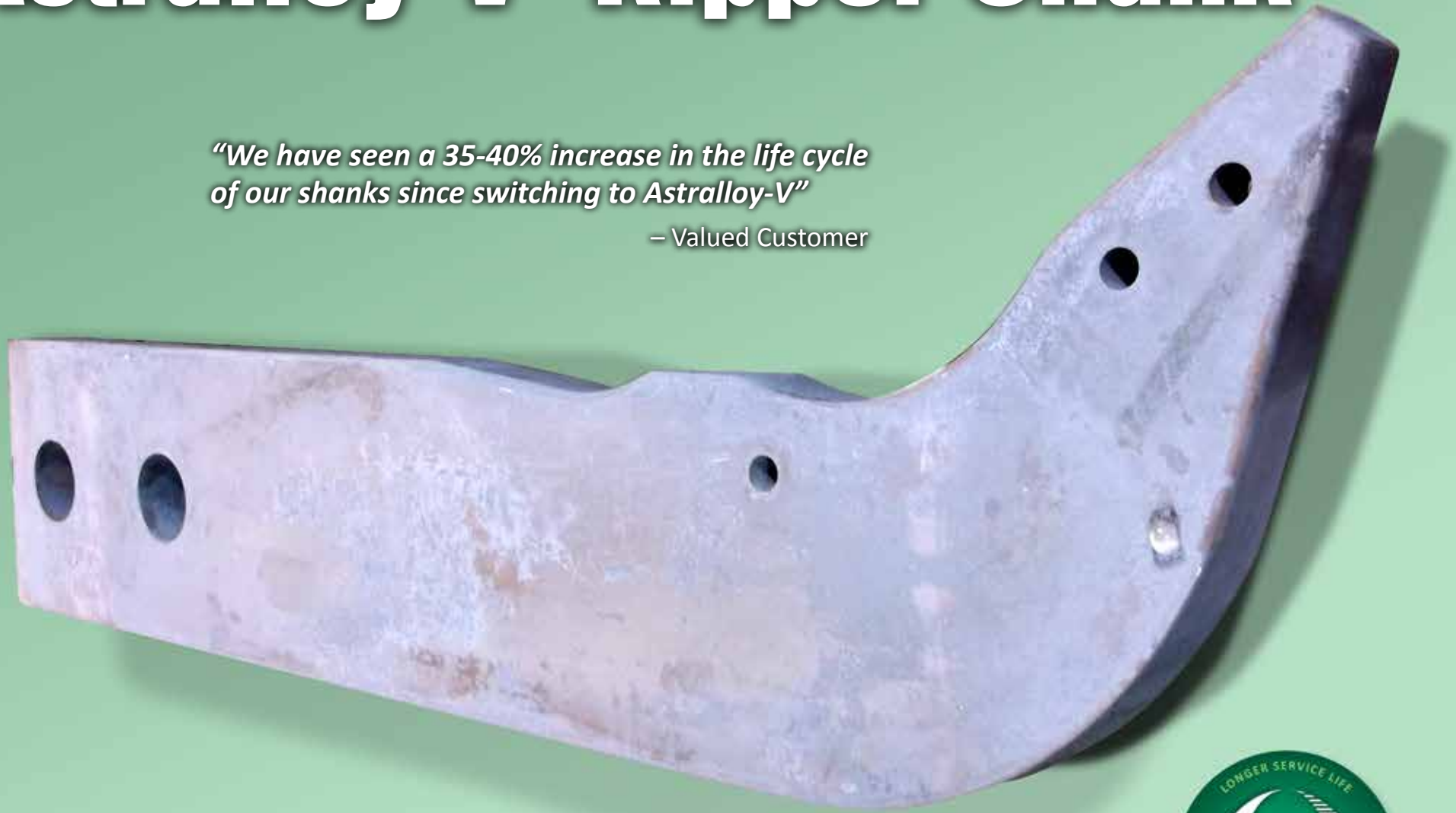
ASTRALLOY SOLUTIONS

Astralloy-V® Ripper Shank

"We have seen a 35-40% increase in the life cycle of our shanks since switching to Astralloy-V"

– Valued Customer



LONGER SERVICE LIFE
Astralloy
a NUCOR company
THROUGH BETTER METALLURGY

www.astralloy.com

Astralloy-V® Ripper Shank

www.astralloy.com

Ripper shanks are cutting tools used to tear through layers of earth or overburden. The majority of the time, ripper shanks are used in tandem with dozers in various configurations. Occasionally, shanks are mounted on other machinery such as dragline buckets or earth movers. Hundreds of factors can impact the life cycle of ripper shanks, so it is important to start with a steel that has the ability to handle the most severe wear applications. Astralloy-V® was specifically engineered for the mining and downhole tooling industries, so it is ideal for these type of jobs.

TECHNICAL SPECIFICATIONS

Astralloy-V® is a unique, deep air-hardened steel that is rich in chemical composition and physical properties. It is through-hardened and unsurpassed in impact and abrasion resistance. With continuous impact and abrasion, Astralloy-V can reach a hardness in excess of 550 BHN without brittleness.

SOLUTION

The Astralloy-V® Ripper Shank will outlast other ripper shanks by at least 25-35%. In cases where "breaking" has occurred, our AV Ripper Shank has lasted three to four times as long as others. The high tensile strength, along with its ultra-fine grain structure, allows for a longer wear cycle. Due to its superior grade steel, the Astralloy AV Ripper Shank allows for less downtime and increased production. In addition, this product is proven to be even more advantageous in regions with extreme climate conditions that are known to cause accelerated wear in steel of lesser quality. Astralloy produces the most durable shanks available in the market today. Regardless of the machinery they are attached to or the type of soil conditions involved, Astralloy shanks will decrease downtime while increasing profits.

Chemical Composition* – % Weight

C	Mn	P	S	Si	Ni	Cr	Mo
.29	1.20	0.015	.010	.40	4.00	2.00	.50

Physical Properties – Typical Values at 68°F

BHN Hardness	Tensile Strength	Yield Strength	Elongation in 2"	Charpy Test Toughness Index
418 – 512	241 ksi	157 ksi	12%	22 ft. lbs. @ RT

Comparative Benefits

Astralloy-V Air Hardened	Quenched and Tempered Wear Steel
1. Hardness combined with toughness	1. Hardness with less toughness
2. Work hardenability up to 550 BHN	2. No work hardening ability
3. Lower coefficient of friction	3. Higher coefficient of friction
4. Excellent cold weather properties	4. Loss of properties at lower temperatures
5. Cold and hot formable and weldable, without loss of properties	5. Loss of properties during heating and welding

Note: The data contained in this document is accurate at time of printing, and intended for use as a general guide.
* Typical maximum values. Mill certifications are available upon request.

D-11 ripper shank for Cloud Peak Energy, Spring Creek Coal

Call Us Today and See How to Increase Production and Reduce Downtime While Using a Ripper Shank.

Toll-free: **866.587.6970** • Sales: **724.230.5100** | **sales@astralloy.com**