

ASTRALLOY SOLUTIONS

# Astralloy-V<sup>®</sup> Shear Blades

*“The Astralloy AV Shear Blades we now use for very severe applications have lasted 2.5 times longer than our previous provider’s blades.”*

– Valued Customer



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# Astralloy-V® Shear Blades

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Astralloy-V® Shear Blades are used in the Metal Recycling Industry. When there is chipping and cracking due to excessive impact and wear, our shear blades have proven to be the ultimate replacement to tool steel. Replacing your existing blades with Astralloy-V shear blades will reduce your down time and extend the blades' wear life. Shear blades may be used in both small and large machinery and can shear both Ferrous and non-Ferrous metals of all types, sizes, grades, and shapes.

## 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 resistance to impact and abrasion. With continuous impact and abrasion, Astralloy-V can reach a hardness in excess of 550 BHN without brittleness.

## SOLUTION

Astralloy-V is specifically engineered for applications such as the Astralloy-V Shear Blades. The chemical composition of Astralloy-V, which work hardens while in service, helps to achieve as much as 2-3 times the wear life of current blades. With the increased life of the blades, you will also see a decrease in the downtime associated with changing and maintaining your equipment. Astralloy-V's unique chemical composition, along with its inherent air hardening process, create a grade that can reach a BHN hardness of up to 550, without showing signs of brittleness. Unlike some other material currently used in blades, the Astralloy-V can be welded and "hard-faced" in the field using normal welding procedures.

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.



Call Us Today & Learn How We Can Optimize Your Blades:

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