vedanta transforming for good | HINDUSTAN ZINC Zinc & Silver of India

VEDAZ

Engineered for **Superior Performance.**



Product Introduction

Hindustan Zinc presents VedAZ - specially engineered Zinc–Aluminium master alloys that bring together "Ancient Wisdom, Modern Metallurgy."

Designed for the galvanizing industry, VedAZ delivers precise chemistry, consistent quality and reliable process performance. Available in 5% and 10% aluminium compositions, it is manufactured using high-quality virgin zinc to enable efficient adjustment of aluminium levels in hot-dip galvanizing baths while maintaining bath chemistry and coating consistency.

Engineered for cleaner and more efficient operations, VedAZ helps reduce dross formation, supports uniform coating quality and enables precise control of aluminium concentration across varying process requirements. Its consistent composition and reliable dissolution make it a dependable solution for galvanizers seeking greater process stability, operational efficiency and superior finished surfaces.

Chemical Specifications

HZAL 5

Component	Composition
Aluminium (Al)	4.7 - 5.3%
Copper (Cu)	0.0300% Max
Magnesium (Mg)	0.0200% Max
Iron (Fe)	0.0200% Max
Lead (Pb)	0.0100% Max
Cadmium (Cd)	0.0030% Max
Tin (Sn)	0.0010% Max
Zinc (Zn)	Balance

HZAL 10

Component	Composition
Aluminium (Al)	9.0 - 11.0%
Copper (Cu)	0.0300% Max
Magnesium (Mg)	0.0200% Max
Iron (Fe)	0.0300% Max
Lead (Pb)	0.0200% Max
Cadmium (Cd)	0.0030% Max
Tin (Sn)	0.0010% Max
Zinc (Zn)	Balance

***Compositions, tolerance can be customized as per customer requirements.*

VEDAZ

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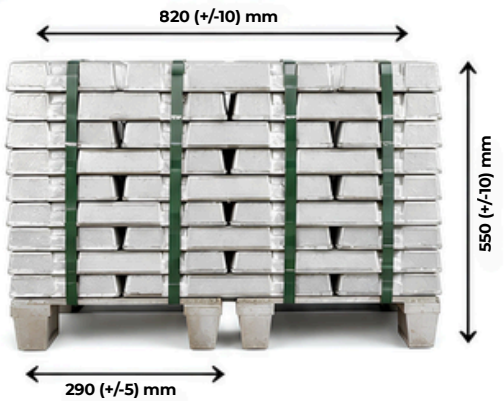
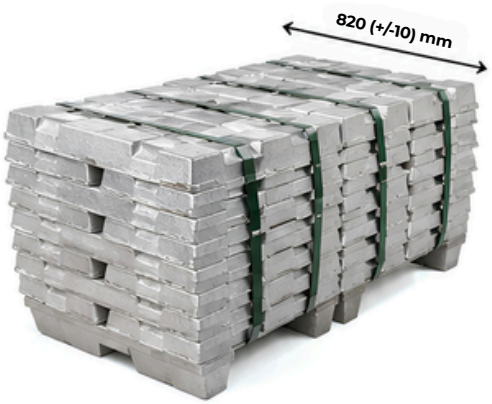
Slab Dimensions and View



Ingot Weight	**25 Kg Each (+/- 0.5 Kg)**
Bundle Weight	**900-1000 (+/- 50 Kg)** **Customized basis on Al%
Bundle Configuration	**4 Ingots/Layer*10 Layer**
Bundle Dimensions	**820 (+/- 10 mm) (L)**
	400 (+/- 10 mm) (W)
	550 (+/- 10 mm) (H)

Bundle Dimensions





BENEFITS	APPLICATION
Accurate bath composition control	Used to precisely adjust Al levels in molten zinc bath for different galvanizing lines
Improved coating quality (smooth, bright finish)	Zn-Al master alloys used to produce uniform, shiny and defect-free coatings
Reduced dross formation	Addition of controlled Al master alloys reduces dross cleaner bath operation and lower zinc loss
Uniform coating thickness	Master alloy additions ensure consistent Zn flow and coating distribution on complex geometries
Higher process efficiency	Faster dissolution compared to pure metals stable and predictable bath chemistry
Reduced zinc consumption & cost	Better drainage and less rework reduce total Zn usage per ton galvanized

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END PRODUCTS AFTER USE OF MASTER ALLOY IN GALVANISATION

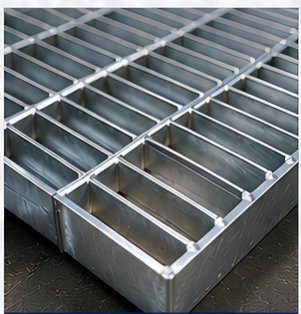
- Bright & Smooth Surface Finish
- Uniform Coating
- Better Corrosion Resistance
- Consistent Quality



END PRODUCTS (After Master Alloy Addition)



Guard Rail



Grating



Hand Rail



Fasteners

COMPARISON

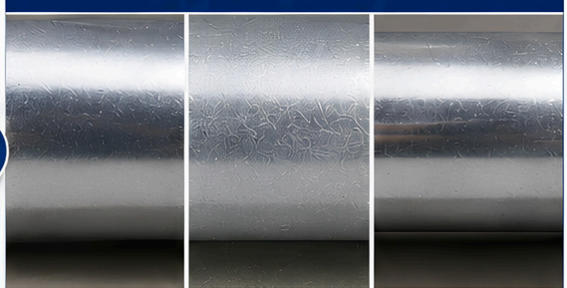
WITHOUT MASTER ALLOY



Dull & Uneven Surface	Uneven Coating	Poor Corrosion Resistance

VS

WITH MASTER ALLOY



Bright & Smooth Surface	Uniform Coating Thickness	Excellent Corrosion Resistance

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REACH COMPLIANT

RoHS COMPLIANT

मानकः पथप्रदर्शकः
Bureau of Indian Standards

CERTIFIED ISO 9001 COMPANY

International Organization for Standardization
ISO 14001

ISO 45001 Occupational Health and Safety
ISO 45001

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VEDAZ

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Advanced toning alloys designed to deliver exceptional performance, consistency, and reliability.

