



## TECHNICAL DATA SHEET (TDS)

### GALVALUME® STEEL COIL (GL / AZ COIL)

**Product Name:** Galvalume Steel Coil (GL Coil)

**Product Type:** 55% Aluminum-Zinc Alloy Coated Steel Coil

**Supplier:** Basekim

**Document Type:** Technical Data Sheet (TDS)

**Revision:** June 2026

## 1. PRODUCT DESCRIPTION

Galvalume Steel Coil (GL Coil) is a continuously hot-dip coated carbon steel product coated with an aluminum-zinc alloy consisting of approximately 55% aluminum, 43.4% zinc, and 1.6% silicon. The coating combines the barrier protection of aluminum with the sacrificial protection of zinc, providing excellent corrosion resistance, heat resistance, and long-term durability.

The product is widely used in roofing, wall cladding, construction, appliances, industrial equipment, and agricultural structures.

## 2. PRODUCT FEATURES

### Excellent Corrosion Resistance

- Typically provides 2–6 times the corrosion resistance of conventional galvanized steel in many environments.

### High Heat Reflectivity

- Reflects solar heat efficiently.
- Suitable for energy-efficient roofing systems.

### Superior Heat Resistance

- Continuous service temperatures up to approximately 315°C.

### Excellent Formability

- Suitable for roll forming, bending, stamping, and drawing operations.



## Long Service Life

- Designed for severe industrial, coastal, and agricultural environments.

## 3. APPLICABLE STANDARDS

Standard	Description
ASTM A792/A792M	Steel Sheet, 55% Aluminum-Zinc Alloy Coated
EN 10346	Continuously Hot-Dip Coated Steel Products
JIS G3321	Hot-Dip 55% Aluminum-Zinc Alloy Coated Steel Sheet
AS 1397	Continuous Hot-Dip Metallic Coated Steel Sheet

## 4. COATING COMPOSITION

Element	Typical Content
Aluminum (Al)	55%
Zinc (Zn)	43.4–43.5%
Silicon (Si)	1.5–1.6%

## 5. AVAILABLE STEEL GRADES

### Commercial Grades

- DX51D+AZ
- DX52D+AZ
- DX53D+AZ
- DX54D+AZ

### Structural Grades

- S220GD+AZ
- S250GD+AZ
- S280GD+AZ
- S320GD+AZ
- S350GD+AZ
- S550GD+AZ



## JIS Grades

- SGLCC
- SGLCD
- SGLC570

## 6. DIMENSIONAL RANGE

### Thickness

Parameter	Range
Thickness	0.12 – 2.00 mm

### Width

Parameter	Range
Width	600 – 1500 mm

### Coil Inner Diameter

Parameter	Typical
ID	508 mm
ID	610 mm

### Coil Weight

Parameter	Typical
Coil Weight	3 – 10 MT

## 7. COATING WEIGHT DESIGNATIONS

Designation	Total Coating Weight
AZ30	30 g/m <sup>2</sup>
AZ50	50 g/m <sup>2</sup>
AZ70	70 g/m <sup>2</sup>
AZ100	100 g/m <sup>2</sup>
AZ150	150 g/m <sup>2</sup>
AZ185	185 g/m <sup>2</sup>

Available coating range: **AZ30–AZ150** (higher coatings available upon request).



## 8. SURFACE FINISH OPTIONS

### Standard Surface Finishes

- Regular Spangle
- Minimized Spangle
- Zero Spangle
- Anti-Fingerprint (AFP)
- Chromated
- Passivated
- Oiled
- Non-Oiled

## 9. TYPICAL MECHANICAL PROPERTIES

### DX51D+AZ

Property	Typical Value
Yield Strength	≥140 MPa
Tensile Strength	270–500 MPa
Elongation	≥22%

### S350GD+AZ

Property	Typical Value
Yield Strength	≥350 MPa
Tensile Strength	≥420 MPa
Elongation	≥16%

### S550GD+AZ

Property	Typical Value
Yield Strength	≥550 MPa
Tensile Strength	≥560 MPa
Elongation	≥3%

Actual values depend on grade and standard.



## 10. PHYSICAL PROPERTIES

Property	Value
Appearance	Metallic Silver Spangled Surface
Density	Approx. 7.85 g/cm <sup>3</sup>
Melting Point (Steel)	1370–1510°C
Water Solubility	Insoluble
Magnetic Properties	Ferromagnetic
Heat Resistance	Up to 315°C Continuous Service

## 11. FABRICATION CHARACTERISTICS

Suitable for:

- Roll Forming
- Press Forming
- Stamping
- Deep Drawing
- Bending
- Shearing
- Laser Cutting
- Plasma Cutting
- Welding

Recommended welding methods:

- MIG
- MAG
- TIG
- Resistance Welding
- Spot Welding



## 12. CORROSION PERFORMANCE

The aluminum-zinc coating protects steel through:

1. Aluminum barrier protection.
2. Zinc sacrificial protection.
3. Formation of stable aluminum oxide layers.

Expected performance is significantly higher than conventional galvanized steel in industrial, marine, and agricultural environments.

## 13. APPLICATIONS

### Construction

- Roofing panels
- Wall cladding
- Sandwich panels
- Steel buildings

### Industrial

- HVAC ducting
- Storage systems
- Cable trays

### Appliances

- Refrigerators
- Washing machines
- Ovens
- Air conditioning equipment

### Agriculture

- Silos
- Livestock buildings
- Greenhouses



## Transportation

- Trailer panels
- Automotive components

## 14. PACKAGING

Standard export packaging includes:

- Waterproof paper
- Plastic film protection
- Steel edge protectors
- Steel strapping
- Moisture barrier wrapping
- Wooden skids (optional)

## 15. STORAGE RECOMMENDATIONS

- Store indoors where possible.
- Avoid standing water and condensation.
- Maintain adequate ventilation.
- Protect coils from mechanical damage.
- Prevent contact with corrosive chemicals.

## 16. QUALITY CONTROL TESTS

Products may be tested for:

- Thickness tolerance
- Width tolerance
- Coating mass
- Surface quality
- Mechanical properties
- Chemical composition
- Adhesion performance



Mill Test Certificates (MTC) available upon request.

## 17. ORDERING INFORMATION

Specify:

- Steel grade
- Thickness
- Width
- Coating designation (AZ30–AZ150)
- Surface treatment
- Coil weight
- Applicable standard
- End-use application

## TYPICAL PRODUCT SUMMARY

Property	Value
Product Type	Galvalume Steel Coil
Coating Composition	55% Al / 43.4% Zn / 1.6% Si
Thickness Range	0.12–2.0 mm
Width Range	600–1500 mm
Coating Weight	AZ30–AZ150 g/m <sup>2</sup>
Coil ID	508 / 610 mm
Standards	ASTM A792, EN 10346, JIS G3321
Surface Options	Regular, Minimized, Zero Spangle, AFP
Main Applications	Roofing, Cladding, Appliances, Construction