

COMPANY INTRODUCTION

"POSCO, one of the global steel powerhouses in the world, refuses to rest on its achievements to date but continues to explore new areas to develop future growth engines.

POSCO has long been looking into the strong potential of light-weight materials and recognized that magnesium would be the next big thing in the mobile device and vehicle material industry, since it is the lightest of the structural metals, excellent in specific strength, damping capacity and electro-magnetic shielding.

POSCO developed proprietary technology to produce high-quality, low-cost magnesium sheet. Starting with its first magnesium coil and sheet plant constructed in 2007 with 3,000 tpy capacity, POSCO has been vigorously seeking increase in production capacity and well positioned to follow its surest path to another success story."

CONTACT INFORMATION

URL	Name	Tel	Position
www.posco.com	Jae-Joong, Kim	+82-61-790-1342	Leader of reserch section
Fax	Phone	City	E-mail
+82-	+82-10-2255-5475	Suncheon-si	jaej.kim@posco.com
Address	5, Haeryongsanda 2-ro, Haeryong-myeon, Suncheon-si, Jeollanam-do, Republic of Korea		

MAIN TOPIC

MATERIAL CATEGORY

- Premium Keton Material
- Super Sapphire Single Crytal Material
- Secondary Battery Material
- Smart Coating Steel Material
- Ultra Light Mg Material
- Smart Membrane Material
- Bio Medical Material
- Nano Carbon Composite Material
- Hyperpure SIC Material
- Flexible Display Material

MAIN TOPIC

#1. Magnesium flat product

AT A GLANCE

- **Business Type**
Steel manufactures
- **Established Year**
1968
- **Total Employee Number**
16,458
- **R&D Employee Number**
512

DEVELOPMENT LEVEL

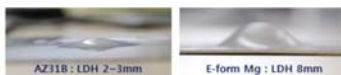
- Lab scale
- Pilot scale
- Mass production

MATERIAL INTRODUCTION

IMAGE



Wide-width Magnesium Coil



Comparison of Formability (AZ31 vs. E-form)



Roof

Luggage Retainer

Application Case

NAME/SPEC.

Typical Mechanical Properties

Alloy	Thick. (mm)	YS (MPa)	TS (MPa)	Elongation (%)	Elctrom. Value (mV)
AZ31	0.4-0.8	190-210	250-260	19	2.5-3.0
	1.0-2.0	170-190	230-250	17	
	2.5-3.0	150-170	210-230	15	
E-form	0.4-0.5	140-150	240-250	15-20	0.0
	1.0-1.4	140-150	240-250	20-25	

Available Dimension

POSCO provides all of the alloy products as coil & sheet.
Available thickness and width of coil and sheet are listed as follows.

[AZ31]		[E-form]	
Thickness (mm-kg / mm)	Width (mm)	Thickness (mm-kg / mm)	Width (mm)
0.4-3.0	700	0.4-3.0	500
0.50-1.00	800	0.8-1.0	500
1.00-1.70	1200	1.0-1.4	1000
1.00-4.00	1300		

* Coil : Min width size : 500mm / Max thickness gauge of coil rolling : 3.0mm
 † Sheet : Min width size : 2100mm

TARGET END-PRODUCTS

Automotive Parts,
Electronic Parts,
Medical Appliances,
Defense Products

Field of Interest

Automobile Manufacturer & Automotive parts Manufacturer