# EG - Mill Specifications

# **Available Sizes and Mechanical Properties**

Class	Pure-Zn	Zn-Fe	Zn-Ni	Bending Test		
			ZII-INI	Bend Angle	Inside Radius	
Class 1	EGSC	EFSC	ENSC			
Class 2	EGSD	EFSD	ENSD		Closing Tightly	
Class 3*	EGSP	EFSP	ENSP			
	EGSN	EFSN	ENSN			
	EGSE	EFSE	ENSE			
Structural Quality*	EG37	-	EN37	180°	2.0 times plate thickness	
High Strength Steel*	EGCHSP60TR	EFCHSP60TR	ENCHSP60TR		1.0 times plate thickness	
	EGCHSP35R	EFCHSP35R	ENCHSP35R			
	EGCHSP40R	EFCHSP40R	ENCHSP40R		Clasia a Tiabala	
	EGCHSP35E	EFCHSP35E	ENCHSP35E		Closing Tightly	
	EGCHSP38E	EFCHSP38E	-			

Prior consultation is recommended for specifications with \* mark

Mechanical Properties			Remarks	Corresponding Standards	
YP (kgf/mm²)	TS (kgf/mm <sup>2</sup> )	EL (%)	Remarks	JIS / KS	ASTM
-	≥28	≥37	Light drawing	SECC	A591-CQ
-	≥28	≥28	Drawing	SECD	A591-DQ
-	≥28	≥40	Deep drawing	-	-
-	≥28	≥40	Deep drawing	SECE (N)	A591-DQSK
-	≥28	≥46	Non-aging extra deep drawing	-	-
(≥28)	≥37	≥20	Structural quality (37kg class)	-	-
≥36	≥60	≥17	Commercial (60kg class)	-	-
≥19	≥35	≥34	Drawing (35kg class)	-	-
≥23	≥40	≥31	Drawing (40kg class)	-	-
≥17	≥35	≥34	Deep drawing (35kg class)	-	-
≥21	≥38	≥33	Deep drawing (38kg class)	-	-

<sup>-</sup>Prior consultation is recommended for values in ( )

<sup>-</sup>Separate consultation is recommended for high strength steel specifications of the corresponding standards

# **KS & JIS Standard**

Zn coating weight for both sides of a sheet or a coil may be the same or different. The standard minimum coating of Zn shall be displayed by the coating weight notation, a combination of the coating weight for each surface-respectively as follows:

### -For sheet

Minimum coating weight of upper surface of a sheet / minimum coating weight of lower surface of a sheet (e.g. E16/E16)

## -For coils

Minimum coating weight of outer surface of a coil/minimum coating weight of inner surface of a coil (e.g. E8/E16)

-In case an indication of differential is made on a sheet or a coil . "D" shall be added next to the mark of minimum coating weight of the surface with the indication. (e.g. E8/E16D)

(Unit: g/cm<sup>2</sup>)

Designation of Zn	Minimum Coating	Weight of Zn (one side)	Standard	Corresponding Zinc Thickness
Coating Weight	Both-sides coating	One-side, differential coating	Coating Weight	(mm) / One side
EB	2.5	-	3	0
E8	8.5	8.0	10	0.001
E16	17.0	16.0	20	0.003
E24	25.5	24.0	30	0.004
E32	34.0	32.0	40	0.005
E40	42.5	40.0	50	0.006

<sup>-</sup>Coating weight notation over  $40~g/m^2$  and minimum coating weight shall be in accordance with the agreement between the manufacturer and the customer

# **ASTM Standard**

Coating Class	Minimum value / Triple spot		Minimum value / Single spot		
	Coating weigh	nt (both sides)	Coating weight (both sides)		
	oz/ft²	g/m²	oz/ft²	g/m²	
Α	-	-	-	-	
В	0.08	24	0.07	22	
С	0.16	48	0.15	45	

# **Thickness Tolerance**

(Unit : mm)

	Thickness tolerance for widths				
Thickness	Under 630	630 and over, under 1,000	1000 and over, under 1,250	1,250 and over, under 1,600	1,600 and over
0.35 and over, under 0.40	±0.04	±0.04	±0.04	-	-
0.40 and over, under 0.60	±0.05	±0.05	±0.05	±0.06	-
0.60 and over, under 0.80	±0.06	±0.06	±0.06	±0.06	±0.07
0.85 and over, under 1.00	±0.06	±0.06	±0.07	±0.08	±0.09
1.00 and over, under 1.25	±0.07	±0.07	±0.08	±0.09	±0.11
1.25 and over, under 1.60	±0.08	±0.09	±0.10	±0.11	±0.13
1.60 and over, under 2.00	±0.10	±0.11	±0.12	±0.13	±0.15
2.00 and over, under 2.30	±0.12	±0.13	±0.14	±0.15	±0.17

<sup>-</sup>A corresponding Zn thickness shall be added to the ordered thickness and this value shall be applied for the thickness tolerance

<sup>-</sup>Coating thickness is calculated with the Zn density of  $7.1\,\mathrm{g/cm^3}$  and by rounding off the fractions to two decimal places in accordance with KS A 0021 (rounding off of numerical values)

<sup>-</sup>The measuring part shall be any point 15mm from the edge