

MILD STEEL Cold Rolled Sheet ZINC ELECTROPLATED

THIS MATERIAL SPECIFICATION CAN ONLY BE USED WHEN THE FINAL PART IS GOING TO HAVE A PAINTED FINISH APPLIED 100% OVER FINISHED PART

Weymouth Reference ID:									
DSM 1.1.14									
Material Name EN:									
EN 10152									
Material Group:									
Metals, Ferrous									
Definition:									
Electroplated coatings are created by applying zinc to steel sheet and strip by an electro-deposition process. This very thin ($\leq 9\text{ }\mu\text{m}$ /per side) ductile coating is a continuous operation during manufacture at the steel mill. Sheet or strip is fed through entry equipment into a series of washes and rinses then into the zinc plating bath. The most common zinc electrolyte-anode arrangement uses lead-silver or soluble anodes of pure zinc. The coating develops as positively charged zinc ions in the solution are electrically reduced to zinc metal and deposited on the positively charged cathode (sheet steel). Then a chemical treatment is applied to inhibit the development of white rust (powdery deposit) & improve paint application.									
Characteristics:									
Zinc offers more corrosion resistance than steel, and more protection than any other substance such as paint or powder-coating. Low-cost combined with ease of application, make zinc an ideal substance for metal protection and galvanization.									
ASMPT Applications									
Suitable for light weight sheet metal fabrications offering non-fingerprint & corrosion resistance for interior applications.									
Note:									
• Toxic gases are released during welding. Respirators/Ventilation systems must be used. • Punched holes & cut edges will create uncoated areas. Therefore, final parts must have a full painted finish.									
Chemical Composition:									
Fe (%) – Min	Fe (%) – Max	C (%) – Min	C (%) – Max	Mn (%) – Min	Mn (%) – Max	P (%) – Min	P (%) – Max	S (%) – Min	S (%) – Max
99	99	0.00	0.12	0.00	0.60	0.00	0.05	0.0	0.05
Properties:									
Density (g/cm3)	Young's modulus (GPA)			Yield Stress YS Min MPa		Tensile Strength TS Min MPA		Elongation A (%)	
7.9	210			140		270		28	
Material Safety Data Sheet:									
 Material Safety Data Sheet For Carb									

Issue	01	02	03	04	05	06	07
Date	25/04/2023						

Approved Standards:				
Material Number	Country	Product	Standard's Name	Edition
1.0330	UK	DC01+ZE	BS EN 10152	2017
	Germany	St12+ZE		
	US	A366		
	Japan	JIS G 3313 SECC		