Technical comparative summary (HDG vs SuperDyma)



	Hot-dip galvanization	Superdyma
Coating Material	Produced by immersing the base metal in a bath of molten zinc at a	Produced by immersing the basemetal in a bath of molten with Zn-11%Al-3%Mg-
	temperature of around 450 °C. The process forms a dull grey surface coating	0.2%Si alloy at a temperature of around 450 °C. The process forms a smooth
	protects the steel underneath from further corrosion .	shiny metallic surface coating protects the steel underneath from further
		corrosion. The addition of Mg proved to reduce the rate of corrosion weight of
		the coating. And the presence of Si is to surprresed the occurrence of white rust.

	Hot-dip galvanization	Superdyma	
Commercial	Customer is paying the cost of extra logistic in transporting the base material	Coating has been done in mill and reduced transportation cost	
	to hot dip factory and to the enduser site.		
		Coating has been done in mill and no chemical treatment and no spent	
	Customer is paying for the chemical treatment process and the expensive	chemicals treatment cost incurred.	
	chemical treatment cost for the spent chemicals in substrate cleaning process.		
		CIBUANA	
Lead Time		Accurate and predictable finished goods lead time.	
	Hot Dip Galvanising Plant face frequent Departemnt of Environment (DOE)	no Steel C	
	inspection and usually lead to unpredictable finished goods lead time.	sumiton	
and adjustion			
uplied by Nipp			
	Salt Spray Test	Salt Spray Test	
	SIRIM Test ReoprtNo: 2018CE0344, 26th February 2018	SIRIM Test ReoprtNo: 2018CE0342, 26th February 2018	
Reference Standard/	E SUPERDATETAL SOL		

Reference Standara/	of Super METAL	
Method of Test	ASTM B117-16: Standard Practice for Operating Salt Spray (Fog) Apparatus	ASTM B117-16: Standard Practice for Operating Salt Spray (Fog) Apparatus
	ASTM D610-08 Standard Rightice for Evaluating Degree of Rusting on Painted	ASTM D610-08 Standard Practice for Evaluating Degree of Rusting on Painted
	Steel Surfaces	Steel Surfaces
Test Condition	Duration of Exposure: 2000 Hour	Duration of Exposure: 2000 Hour
	Temperature of exposure zone: 35°C	Temperature of exposure zone: 35°C
	Salt Solution used: 5% NaCl	Salt Solution used: 5% NaCl
	pH of collected solution : 6.8	pH of collected solution : 6.8
Test Result	Red Rust Evaluation criteria at 2000 hour:	Red Rust Evaluation criteria at 2000 hour:
	Result = 5 (Greater than 1.0% and up to 3.0%)	Result = 10 (Less than or equual to 0.01%)



The corrosion resistance of SuperDyma (assessed by salt-spray tests to determine corrosion rate) is extremely high — about 30 times that of hot-dip Zn-coated sheets and about 5 times that of hot-dip Zn-5%Al alloy-coated sheets.

Technical comparative summary (HDG vs SuperDyma)





chlorine and alkali

to chlorine

Technical comparative summary (HDG vs SuperDyma)



* Surface finishing for SuperDyma is far superior than HDG

