

Reduce Zinc Spray Cost by ZINCAL™ COATING - AN INNOVATION

Preface

Price of zinc metal wire has gone very high during recent years. A new process has been developed at the R&D Lab of MEC which reduces zinc wire consumption per unit area of surface.

The new product & process have been granted PATENT by Controller of Patents & Designs, Govt. of India, New Delhi.

The trade name of new coating is ZINCAL™.

ZINCAL™ Coating System

It uses zinc and aluminium wires with Electric Arc Spray method of coating.

Specifications

Physical Properties	Zinc Spray Coating	ZINCAL™ Coating
Surface Finish	6 - 10 microns	7 - 11 microns
Bond Strength	700-950 psi	900 - 1050 psi
Hardness	60 - 73 R _B	90 - 100 R _B
Composition of coating (by weight with 2 mm wire)	Zn : 99.5%	Zn : 70 - 72% Al : 30 - 26%
Wire Consumption (at 100Amps)	11 Kg/hr	Zn : 5 - 6 Kg/hr Al : 2 - 3 Kg/hr



Cost Advantage

It is proved that ZINCAL™ coating saves use of zinc wire per unit area of surface. The approx. cost reduction is 21% to 25% compared to conventional zinc spray coating.

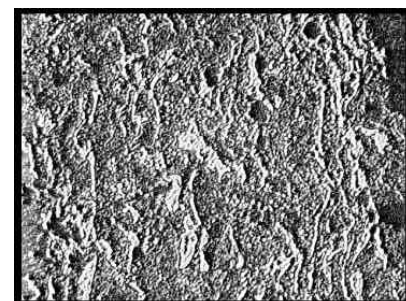
Achieve Higher Corrosion Protection

Results of salt spray test have confirmed longer life of ZINCAL™ coating compared to conventional Zinc Spray Coating.

The ZINCAL™ coating contains two phases, one is zinc rich and the other is aluminium rich. The zinc rich phase offers cathodic protection by its sacrificial action while the aluminium rich phase provides protection by barrier action through formation of aluminium oxide.

Coating can be further sealed by suitable paint for added protection and aesthetic look.

Microstructure of ZINCAL™ Coating



Spray Equipments & Parameters

MEC supply standard ZINCAL™ spray systems and provide optimum spray parameters to obtain high deposit efficiency, minimum spray waste and power consumption. Automated & Robotic systems are also available as per need of customer.

Suggested Applications

Bridges, Dams, TV Towers, Ship, Windmill Structures, Steel Structures, Pipe Lines, Off Shore Oil Rigs etc. where long period corrosion protection is desired.

Technology Transfer

An agreement for transfer of know-how of process and product will be made between MEC and Licensee.

Sample of ZINCAL™ coating on M.S. Sheet

It is available FREE OF COST on request. Please specify thickness of coating and size of sample piece.



METALLIZING EQUIPMENT CO. PVT. LTD.

E-101, M.I.A., Phase-II, Basni, Jodhpur-342005 (India)

Ph. : +91 291 2747601 Fax : 2746359

E-Mail : mecpl@sancharnet.in / mecpl@vsnl.com

Web : www.mecpl.com

Delhi
09312890541
mecply@ndf.vsnl.net.in

Mumbai
022-24934370
mecby@bom5.vsnl.net.in

Bangalore
09343861755
mecpl.bgl@gmail.com

Secunderabad
040-27813760
mecsec@satyam.net.in