



राष्ट्रीय  
धातुकर्म  
प्रयोगशाला

(वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद्)  
जमशेदपुर - 831 007, भारत



National  
Metallurgical  
Laboratory

(Council of Scientific & Industrial Research)  
JAMSHEDPUR - 831 007, INDIA



डा० देवेन्द्र देव नारायण सिंह

DR. D. D. N. SINGH

वरिष्ठ वैज्ञानिक  
SR.SCIENTIST

No.NML/ACC/DDNS/SRMB-06

Date: 30.05.2006

To,  
M/S S.R.M.B. Udyog Ltd, Kolkata

Dear Sir,

In reference to your letter of 10<sup>th</sup> March 2006, we have conducted the corrosion resistance tests of different types of rebars sent to us. The results are summarized as follows:

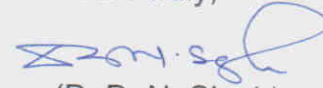
Types of tests	Type of rebars			
	Zinga	HDG	FBEC	CRS
(a) Corrosion rate, $\mu\text{m/yr}$ , (electrochemical polarization resistance technique), ASTM G - 59 (91)	19.6	38.6	34.5	99.6
(b) Pitting resistance tendency, ASTM G - 61(86)				
$E_{\text{pit}}$ , mV (SCE)	- 315	- 750	- 450	- 400
Loop area	x	3.5x	2.5x	5x

Test electrolyte: Simulated concrete pore solution + 3.5 % NaCl

**Findings:** Amongst the tested bars, Zinga coated rebars exhibit superior corrosion resistance than the others.

Thanking you,

Yours truly,

  
(D. D. N. Singh)