

Surface Engineering Solutions

*Thermal Spray Coatings
Dimensional Repair
Weld Hardfacing
Manufacturing of Rolls*



EASTERN METALLIZING CO PVT LIMITED

An ISO 9001:2008 certified organization



Corporate Office: 5B, 5th Floor, Synergy Building, New Town, Rajarhat, Kol- 102, WB; Call: 03365330062
Works: Ramkrishna Bati, Monber, PO: Mrigala, PS: Dankuni, Hooghly - 712311, WB Call: 033-65330063

MESSAGE FROM THE DIRECTORS DESK

Dear Valued Customer / Business Partner

It gives me pleasure to directly address you and your company by means of this introductory brochure of our company

We have been in the business for 6 decades. A young and dynamic organization we are in the business of Surface Engineering via Thermal Spray coatings, Manufacturing of Wear parts, Repair and Refurbishment and Weld repair services


With in-depth knowledge of most of the business processes including Steel, Aluminum, Power, Paper, Chemicals and Wires, our very dedicated sales team with each member specializing in a different sector of the Industrial spectrum, are available 24*7 to cater to your needs offering customized solutions to your wear related problems

Our engineering team is a mix of very experienced Industry veterans as well as young, dynamic qualified graduate engineers, who work relentlessly to assure that each job is handled in its own merit and a unique solution is provided to each wear problem for each customer belonging to different Industries!

Our state of the art coating and application center is equipped with "ROBOTIC" thermal spray coating cells, CNC turning centers, CNC cylindrical grinding along with a wide range of mechanical machinery including Borings, Milling, Conventional Lathes, Surface grinding etc

We are catering to almost 300 big and small Industries and hope to add your esteemed companies name to our very long list of satisfied customers!

We Remain;



Shantanu Newar
Director
Eastern Metallizing Co (p) Limited

ISO 9001:2008 CERTIFIED



Certificate of Registration

This certificate has been awarded to

Eastern Metallizing Co. Pvt. Ltd.

Ramkrishna Bati, Monber, P.O. Mrigala, Dankuni, Hooghly, West Bengal,
712311, India

in recognition of the organization's Quality Management System which complies with

ISO 9001:2008

The scope of activities covered by this certificate is defined below

Thermal Spray Coating and Finishing

Certificate Number:

52474/A/0001/UK/En

Issue No:

2

Date of Issue: (Original)

07 May 2012

Expiry Date:

12 July 2018

Date of Issue:

13 July 2015

Issued by:

On behalf of the Schemes Manager



STRATEGIC ALLIANCES



Shantanu Newar, Director - Eastern Metallizing & Charles M. Kay, VP-Marketing and Board Member, ASB Industries Inc, after signing a 10 year technical collaboration agreement for Thermal spray coatings at ASB Industries Inc, OHIO IN September of 2012



Eastern Metallizing exclusively represents Propart USA as their distributors for OEM replacement pump parts to all process Industries across India including Pulp & Paper, Chemicals, Power as well as various other Engineering & Manufacturing companies

INFRASTRUCTURE & KEY MACHINERY



Plant view



HMT make CNC Cylindrical Grinding Machine



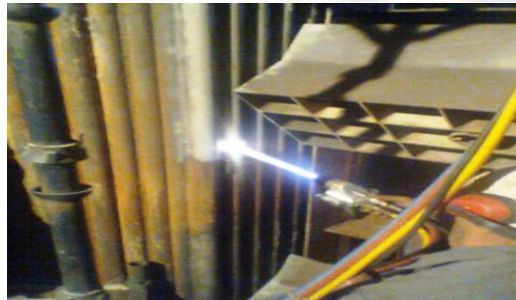
Acoustic spray booth for thermal spray coatings



Horizontal Boring Machine



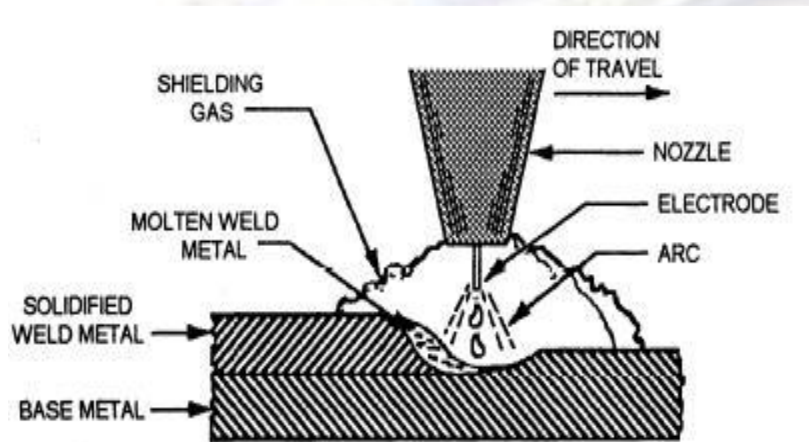
Dimensional Restoration of Bearing Journals



Boiler Tube coating

SURFACE ENGINEERING TECHNOLOGIES

EMC SPIRAL WELDING PROCESS



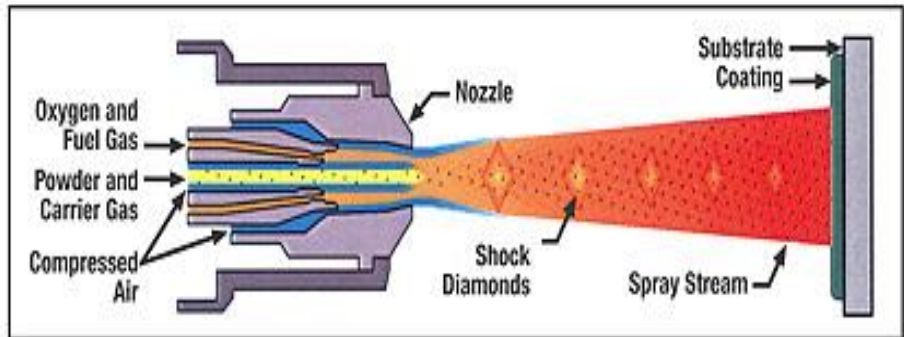
With the "best in class" welding equipments from Finland, synchronized with our in-house 7 axis robot, our welding process for hard facing and reclamation ensures 100% metallurgical bonding with zero micro-structural damage and no distortion.

ADVANTAGES

- **Enhanced repair quality with 100% metallurgical bonding**
- **Zero porosity with capabilities of high deposit thickness**
- **Minimal heat input resulting in shallow depth of heat affected zone**
- **Zero to minimal material distortion**
- **Wide range of deposits possible with similar and dissimilar material repair**
- **High productivity**

EMC HARD FACING - HVOF

High Velocity Oxy-Fuel Process



Our Thermal spray "ROBOTIC" coating cell allows us to impart very hard and precise coatings on cylindrical, flat as well as profiled parts. State of the art machines with PLC controlled powder feeders allows us to control our hard facing and coating parameters to the absolute micron level

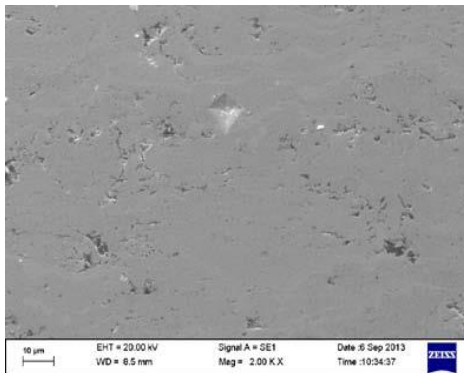


Photo Micrograph of our WC hard facing

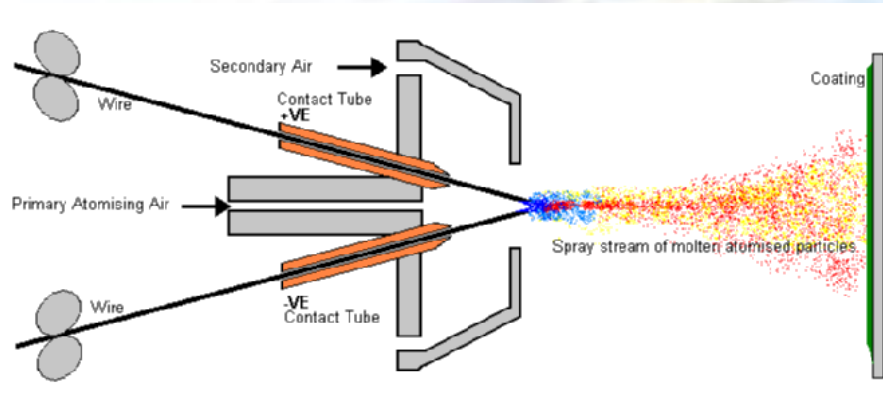


Robotic Application of HVOF Hard Facing

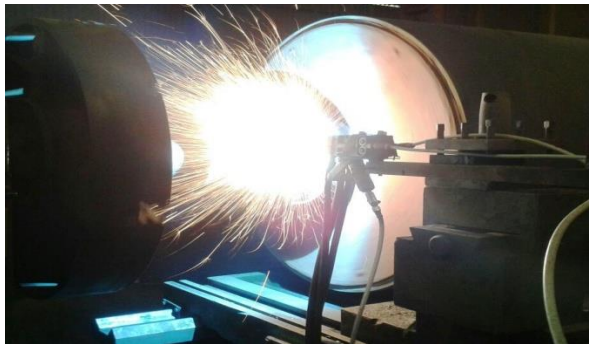
ADVANTAGES

- **Very Hard coatings of up-to 72 HRC with extreme wear resistance**
- **< 1% porosity, with up-to 0.05 microns surface finish after grinding**
- **No distortion of parent material**
- **Capability to coat using varied alloys like Inconels, Hastelloys, CERMETS as well as proprietary alloys sourced from ASB Industries Inc, OHIO**
- **Very High productivity**

EMC REPAIR & REBURBISHMENT SERVICES



We have immense experience in the business of "Dimensional Restoration" and repair. Our repair process uses one or multiple processes to impart the "LOST LIFE" back to the mechanical part to achieve "as good as new" status and put back in operation.



Journal repair of 10 MT roll

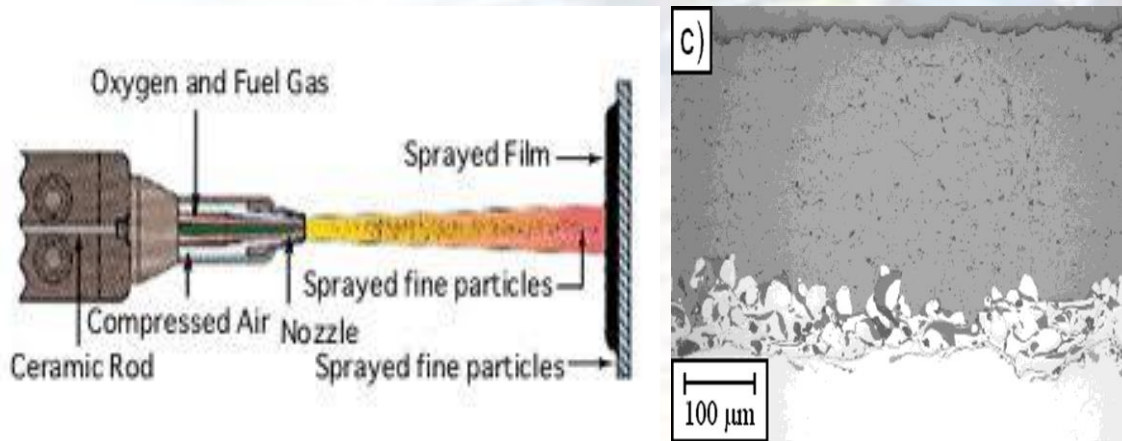


Journal Ground after repair

ADVANTAGES

- **Very thick coatings can be applied to restore new life on worn out components**
- **Dimensions are restored irrespective of its parent material composition**
- **Tailor made coatings are formulated depending upon working environments, bearing fitment process etc**
- **Part rebuilt is ground to mirror finish of <math><0.8</math> microns or lower as required**
- **Dimensions are strictly controlled as per tolerances required**

EMC CERAMIC COATINGS



Cr2O3 Microstructure

Our ceramic coatings are preferred by various leading Industries across businesses for its "metallurgical superiority" over other Ceramic coatings.

Using best quality imported raw materials with state of the art equipments and ancillary support instruments, our ceramic coatings have low porosity, high hardness and advanced surface

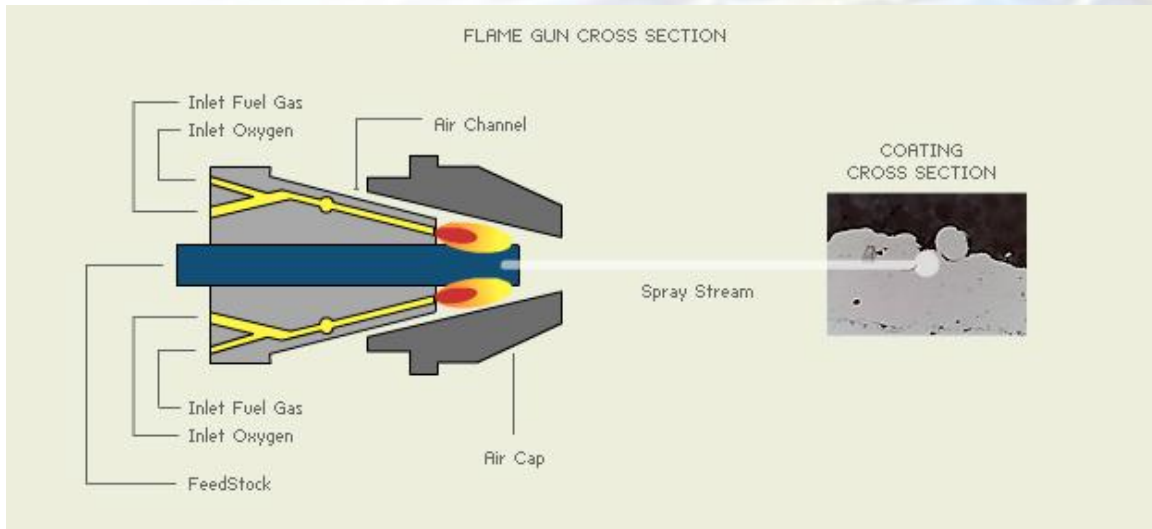


Ceramic Coated Sleeves and Plungers

ADVANTAGES

- **Pure Ceramic coatings are obtained using EMC Ceramic coating process**
- **Very Hard ceramics of 68 HRC are deposited with continued success**
- **Very low porosity with optimized coating properties**
- **Coatings ground to < 0.5 microns surface finish**

EMC NON-FERROUS COATINGS



We have 60+ years in providing best in class, at lowest cost; non-ferrous coatings to customers spread all across the country



Copper



Brass



Bronze



Babbitt

ADVANTAGES

- **Oldest company in India to deposit non-ferrous coatings**
- **State of the art equipments for varied non-ferrous coatings**
- **Huge stock of raw materials to carry out any/all non-ferrous coatings**
- **Capability to apply coatings on very small and very large components**

EMC - MANUFACTURING OF WEAR PARTS

In its 65 years of operations, EMC has harnessed and developed an in-depth knowledge of the processes and functioning of varied Industries and processes, as a result of which, we can manufacture with excellence, a wide range of wear parts used in different and varied Industries

Our strategic alliances with Forging and Fabricating giants enables us to jointly offer a range of high performing, tailor made wear parts to the global Industry



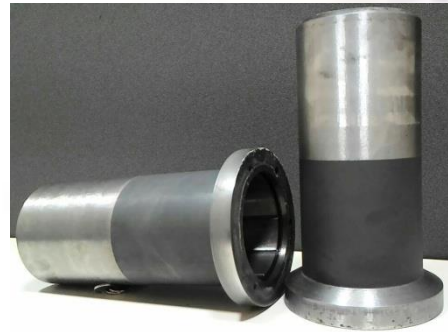
Hard Faced Castings



Engineering components



Tungsten Carbide coated Rolls



Ceramic Coated Pump Sleeves

EMC - PROPRIETARY COATINGS

SINK ROLLS - KARPOT™ Coating System

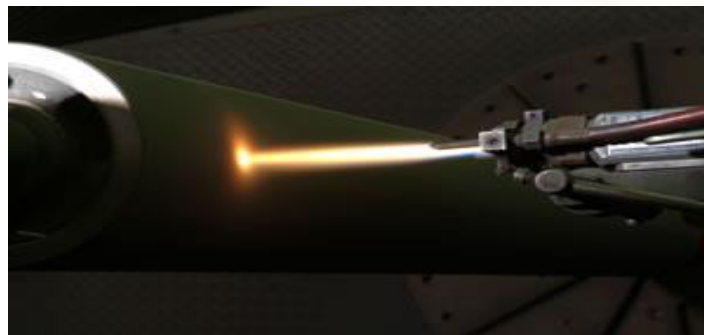


Sink or POT rolls used in Galvanizing lines are subject to extreme levels of corrosion and wear caused by continuous reaction with molten zinc and sheet abrasion.

Our KARPOT™ coating system, sourced exclusively for the Indian market from ASB Industries Inc based in OHIO, enhances the life span of the roll whilst ensuring much better quality galvanized sheets, free from all surface defects.

KARPOT™ coating system is a unique combination of Carbides and Ceramic coating followed by a set procedure of proprietary sealers and heat treatment, to impart unique property of anti-stick with wear, abrasion and temperature resistant to the roll

Furnace Rolls - KARGEN™ Coating



Furnace or Hearth rolls used in Horizontal / vertical annealing furnaces of Cold rolling mills for Carbon steel and Stainless Steel are subject to a continuous high working temperature of 1150 deg C - 1300 deg C. This environment leads to malfunctioning of these rolls causing them to bend or develop "PIN HOLES" on their surface, causing damage to the sheet passing over it

Our KARGEN™ coating, developed by ASB Industries Inc in OHIO, is a complex coating system of high temperature resistant CERMET (CERAMIC-METALLIC ALLOYS) followed by a series of sealing and heat treatment procedures, which imparts excellent high temperature resistance as well as wear and abrasion resistance, whilst maintaining a hardness of 42 HRC in its working environment!

References in India include JNDAL STAINLESS LIMITED - JAJPUR, BHUSHAN STEEL SAHIBABAD etc

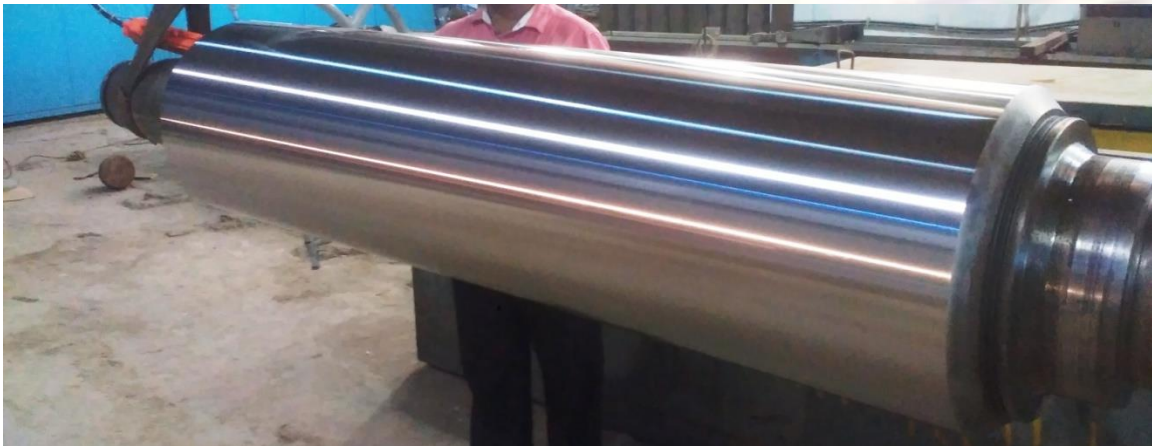
GRINDING & FINISHING

Coatings perform to its optimum only when duly machined, ground and super-finished

We have in-house arrangements of the following processes to machine / grind finish all coatings successfully

- CNC Cylindrical Diamond Grinding
- Diamond / Ceramic belt grinding
- Specialist tooling / machining using Diamond / Ti-N / CBN tools

The above helps us in grinding and finishing the hardest of coatings like Tungsten Carbide to a surface profile of as low as 0.4 – 0.1 microns



GROUND ROLL AFTER COATING. GROUND ON OUR CNC CYLINDRICAL GRINDING MACHINE

TESTING & NDT FACILITIES



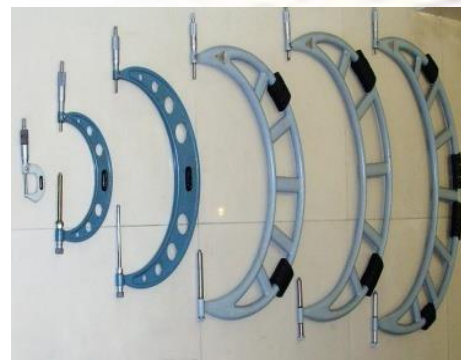
Surface Roughness Tester



Coating Thickness Gauge



Laser Temperature Meter



Micrometers: 50 mm - 1000 mm



Portable Hardness Tester



Ultrasonic Tester

MACHINERY & INFRASTRUCTURE

- Plant Area: 25000 square feet; Under shed: 15000 square feet
- Electric Power: ¼ MVA
- Power Back up: 75 kVA
- 20 meter span, 5 MT EOT crane
- 8000 mm Long, 4000 mm Wide, robotic integrated Thermal spray coating cell
- 6000 mm long robot linear track
- Kuka KR-16 robot
- 6000 mm Long * 4000 mm wide semi automatic Blast Chamber
- Large Vacuum blasting of 10 square meter per hour capacity
- HVOF, Twin Arc, Rod Spray, Wire Spray, Ceramic Powder spray equipments
- Spiral MIG Welding - Kempii make
- 7Kg, 250 CFM, PLC controlled air compressor - 2 Nos.
- HMT Make CNC Cylindrical Grinding Machine - (500 mm Dia * 3500 mm Length)
- WMW make Horizontal Boring machine: 80 mm spindle with DRO
- CNC turning center; 750 mm Dia * 3000 mm Length
- Conventional Lathes of Max 1200 mm Dia * 7000 mm length * 12 MT
- Cincinnati Make Milling machine: 1000 mm bed
- 3000 square feet of most modern office space with VPN connections to corporate office

CUSTOMER TESTIMONIALS

Subject **Re: Performance Certificate for our supplied sleeves**
From Kalipada Jagaddeb <Kalipada.Jagaddeb@itc.in>
To <sales@emcpl.in>
Date 12/01/2015 15:58

Dear M/s Eastern Metallising Company Pvt.Ltd.

It was our pleasure to have an association with your company, that has given us a very delighting experience, in terms of deep engineering understandings of the products that they deliver to us.

We started this with a few critical applications like repairing the suction press roll shells, sleeves for our refiners; to name a few and to extend our satisfaction we have got products & services that we can say best in the country.

To be specific the ceramic coated sleeves have given us an extended life both in terms of abrasion & wear. Our mill being in Speciality Paper business uses a lot of fillers, chemicals & abrasive materials like TiO₂.

The ceramic coated sleeves, had played a very important roll, in enhancing our maintenance interval, and also, helps in having uniform refiner disc wear out.

Earlier, due to wear out of ordinary SS sleeves the refiner discs movement was getting restricted at the gland portion & this was causing uneven disc wear.

Added to these aforesaid issues getting addressed, we are also getting other benefits like;

- Improved fiber/filler loss
- Less manpower deployment to change gland packing

Considering all these benefits, we would like to continue our procurement of ceramic coated sleeves from EMCPL, & also extend theirs' services to other applications as well.

Regards.

K Jagaddeb
Dy. Manager (Mech)
ITC Ltd.
PSPD
Unit:Tribeni

CUSTOMER TESTIMONIALS



RP - Sanjiv Goenka
Group
Growing Legacies



Date: 21.10.2011

TO WHOM IT MAY CONCERN

This is to certify that M/s Eastern Metallizing Co (p) Limited, 2, India Exchange Place, 1st Floor, Kolkata – 700001, was assigned the job of Cr3C2NiCr coating using HVOF technology on boiler tube burner panel area in our Boiler Number 3 for approximately 9 square meters, on experimental basis, during annual shutdown of the unit in February 2011 vide our order ref: BBGS/MMD/ORD/8219 dated 27.01.2011. We hereby confirm that the job was completed successfully by the party within the time span allotted (job started on 23rd of February 2011 and completed on the 25th of February).

Till the date of issuance of this letter, the performance of the coating has been satisfactor

PULOK DUTTA
Manager – Mech. Mtc.

CUSTOMER TESTIMONIALS



THE WEST BENGAL POWER DEVELOPMENT CORPORATION LTD.
(A Government of West Bengal Undertaking)
KOLAGHAT THERMAL POWER STATION
P.O. : MECHEDA, DIST. : PURBA MEDINIPUR, PIN-721 137

Date: 11/05/12

To Whom It May Concern:

This is to certify that M/s. Eastern Metallizing Co. (P) Ltd., 2, India Exchange Place, 1st Floor, Kolkata- 700001, was assigned the job of Coating via HVOF technology on our four numbers of Boiler Tubes, vide our P.O. No.28988, Date- 23rd April 2012. We here by confirm that the job was completed successfully by the party within the time span allotted.

Till the date of issuance of this letter, the performance of the coating has been satisfactory.

L. K. Mehal
11.05.12
L. K. Mehal
Sr. Manager
Boiler Maintenance-II
K. T. P. W. B. P. D. C. L.

Fax : 231280 □ Telephone Nos. : GM 231110 □ DGM (Maint) : 231261 □ DGM (Opm.) : 231254
□ DGM (U) : 231255 □ SM (F & A) : 231280 □ SM (P & A) : 231604 STD CODE : 03228
E-mail : kgp_ktspdco@sancharnet.in & ktspdco@cal.vsnl.net.in

SAVE ENERGY FOR BENEFIT OF SELF AND NATION

CUSTOMER TESTIMONIALS



नेशनल प्रोजेक्ट्स कन्स्ट्रक्शन कारपोरेशन लिमिटेड

(भारत सरकार का उद्म)

National Projects Construction Corporation Limited

(A Government of India Enterprise)

टेलीफोन : 253361
STD Code : 03485

युनिट पता :

फरक्का बैरिज गेट रिपेयर वर्क्स युनिट

पो. : फरक्का बैरिज

जिला : मुर्शिदाबाद, (W.B.)

पिन : 742212

Unit Address :

Farakka barrage

Gate Repair Works Unit,

P.O. - Farakka Barrage,

Dist. - Murshidabad (W.B.)

Pin - 742 212

संदर्भ संख्या / Ref. No. 129104/070

दिनांक / Date : 07.05.2004.

FAX No. : 033-2221-4164

TO WHOM IT MAY CONCERN

This is to certify that EASTERN METALLIZING CO. PVT. LTD.,
2, India Exchange Place, Kolkata - 700 001 has completed the work
of painting of Farakka Barrage Main Gates including sand blasting
a tune of Rs. 33,32,930/- (Rupees Thirty three lakhs thirty two
thousand nine hundred thirty) only against Work Order No.166/11/3315
dated 14.10.1999 and Metallizing works of Gate No. 1, 2 & 3 a tune
of Rs. 13,28,767/- (Rupees Thirteen lakhs twenty eight thousand seven
sixty seven) only against Work Order No. 169/08/228 dated 09.08.2003
and amendment No. 529117/351 dated 11/14.11.2003. Their performance
in execution of the above job was good.

This is being issued as per their FAX Message dated 06.05.2004.

(S. K. DAS)

UNIT OFFICER.

UNIT OFFICER

NPCC LIMITED

FBGRW UNIT/ FARAKKA (W.B.)

E. Z. Off. : 3A Dr. S. N. Roy Road, Kolkata - 700 029, Ph. : 2466-4454, 2466-7371, Fax : 24635138

पञ्जी का राजा हाउस 30-31, नेहरु प्लेस, नई दिल्ली 110019, टेलिफोन : 26485763, 26438306, फैक्स 011-26466695 नार नमंत्रकः
Regd. off. : Raja House, 30-31 Nehru Place, New Delhi : 110019. Tele : 26485763, 26438306, Fax : 011-26466695 Cable 'NAPROCON'

CUSTOMER TESTIMONIALS



TELEX: 06276 225
TELEGRAM
TATH-MAHARAS
JAMSHEDPUR

THE TATA IRON AND STEEL COMPANY LIMITED

TUBES DIVISION

WORKS: POST BOX NO 81, JAMSHEDPUR 831001, BIHAR

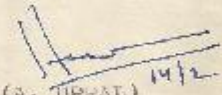
TELEPHONE:
28151 (5 LINES)
23161 (5 LINES)
23191 (5 LINES)

CPS/P.60

14th February 1989

TO WHOM IT CONCERN

This is to certify that M/s Eastern Metallizing Co. Pvt.Ltd., 2 India Exchange Plz.co, Calcutta-1 have successfully metalized 19' long and 20" dia. ram for our Accumulator. These rams are working successfully for the last 2 years.


(A. UPPAL) 14/2
DIVISIONAL MANAGER (P.E.)

CUSTOMER TESTIMONIALS



TEXMACO LIMITED

AGARPARA WORKS
KOLKATA-700 056


12th May, 2004

TO WHOM IT MAY CONCERN

This is to certify that M/s. Eastern Metallizing Company Private Limited., having its registered office at 2, India Exchange Place, Kolkata - 1 has satisfactorily completed Quartz Grit blasting, Metallizing and Painting works on Penstocks, stop Logs, Radial Gates, Radial Arms, Skin Plates, Horizontal and Vertical Girders, Trash Racks, Yoke girders, Anchor Girders etc. for our Tala, Chamera, Vinshnuprayag, Teesta, Parbati and Purulia Hydel Projects.

The job was awarded to the party under a single order of Rs.1,10,09,000/- (One core ten lacs nine thousand only) which were successfully completed by them in one single financial year of 2003-2004.

Their performance in all the above jobs was satisfactory.


(Sanjiv Sinha)
DGM (MM)

CONTACT US

Works

Ramkrishna Bati, Monber, P.O.: Mrigala, P.S.: Dankuni, Hoogly-712311, West Bengal
Ph: 033-65330063 Email: technical@emcpl.in

Registered & Head Office

5B 5th Floor, Synergy Building, Thakdari Road, New Town, Rajarhat, Kolkata - 700102, West Bengal, India. Ph: + 91 33 65 33 00 62

Emails

Sales Enquiry: sales@emcpl.in
Regional office (east): jamshedpur@emcpl.in
Technical query: technical@emcpl.in
Plant Head: kunal@emcpl.in

Website

www.emcpl.in

1st Point Contact

Mr. Singh @ 9831583086