## **GERMAGLAD<sup>®</sup> LT**

### PERFORMANCE AT THE SPEED OF LIGHT

#### METALLURGICAL CLADDING SERVICES FOR STEEL PIPES (ID and OD), PLATES, BARS & SHEET PRODUCTS

CERMACLAD<sup>™</sup> LT low-thickness, cost-effective Aluminum and Stainless Steel cladding provides a true metallurgical bond on metal substrates at thicknesses between 0.1-1mm, at a very high production rate.

#### Benefits

- > Extended Life (75-200 years maintenance free life)
- > Environmentally friendly alternatives to
  - Cadmium and Chromate primers
  - VOC containing Polymer overlays
- Low thickness
- > Smooth, Porosity free
- > Corrosion Resistant
- > True Metallurgical Bond
- > Very High Production rate
- Resistant to higher temperatures than conventional coatings systems or FBE
- Passive Cathodic protection

#### **Current Status**

- Developed Coatings have survived 1000+ ASTM hours of Salt Fog Corrosion Test
- > Tests indicates true metallurgical bond
- > Able to control the phase and microstructure
- > Evaluating Aluminum coatings for Pipe OD applications

#### About Us

MesoCoat provides wear and corrosion solutions using innovative surface engineering technologies, and is fast becoming a world leader in metal asset protection and repair through their breakthrough 'high speed' metal cladding process (CermaClad<sup>™</sup>), 'low cost' nanocomposite cladding materials (CermaClad<sup>™</sup>), and 'life extending' nanocomposite coating materials (PcomP<sup>™</sup>).



#### **Applications**

- ► Rebar
- Bridges
- ➤ Infrastructure
- Construction
- ► Pipeline OD
- Ship Construction



#### **Contact Us**

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# PERFORMANCE AT THE SPEED OF LIGHT

METALLURGICAL CLADDING SERVICES FOR STEEL PIPES (ID and OD), PLATES, BARS & SHEET PRODUCTS

CERMACLAD<sup>™</sup> Claddings protect large-area, metal structures and components from the environment, reducing life-cycle cost and extending the life of large capital assets.

#### Value

Metallurgically bonded coatings and claddings at lower cost than weld overlay.

#### Performance

Advanced nanocomposite metals and cermets for improved corrosion resistance, durability, and wear performance.

#### Delivery

25-180X faster than weld/laser cladding, coverage of 75-580 sq.ft./ hour with a single system and Matches line speed of steel mills.

#### **CERMACLAD™** Value Proposition

#### **Faster Application rate**

 25-180 times faster than conventional laser/weld cladding processes

#### **True Metallurgical Bond**

► Bond strength > 75,000 psi

#### Low heat input to the substrate

- > Small heat affected zone
- > Strength retention of Substrate

#### **Better Cladding**

- Smooth, pinhole free
- ► Low dilution
- > No decarburization

#### **Cladding Solutions for:**

#### ➤ Oil and Gas

- ► Infrastructure
- > Mining and Mineral Processing
- > Chemical and Petrochemical
- > Energy (Clean Coal, Hydro, Nuclear)
- > Desalination
- > Pulp and Paper
- ≻ Marine



CERMACLAD™ Lamp Beam Width: 200 – 300 mm Transition Speed: 10 – 50 mm/sec Clad Area: 7.5 – 54 m²/hour

Laser Cladding Head Beam Width: 5 – 7 mm Transition Speed: 20 – 70 mm/sec



MesoCoat's Vision is to be the global technology leader providing transformational surface engineering solutions.

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