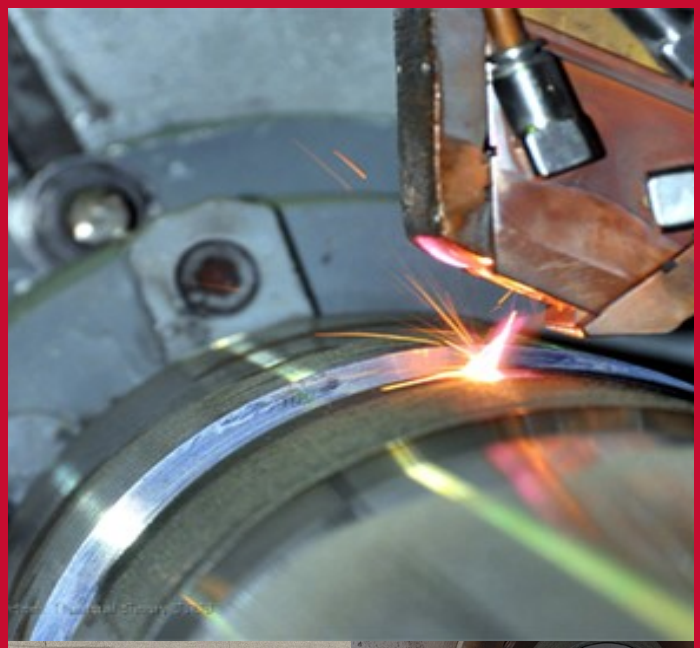
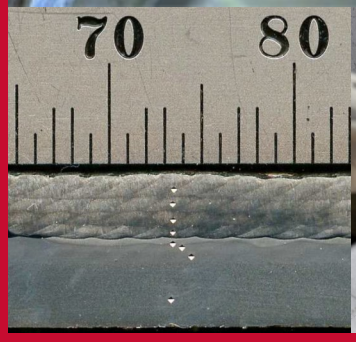
CURTISS-WRIGHT

Laser Cladding Services





LASER WELD CLADDING

ADVANTAGES:

Metallurgical Bond

Low Heat Input & Distortion

Low Dilution

Low Penetration

Small Heat Affected Zone

Curtiss-Wright's FW Gartner Thermal Spray facility has a long and successful history of providing laser welded hard facing & corrosion resistant overlay solutions to extend the service life of new and refurbished components operating in severe service applications.

WELDMENT CAPACITY:

Min. Inside Diameter: 4 inches As-Welded

Max. Outside Diameter: 10 feet

Max. Weight: 10,000 LBS

For further information or to request a quote please give us a call 713-225-0010, send us an email info@fwgts.com or visit us at our Houston, TX facility.

Laser Cladding is a fusion welding process that uses a focused beam of light to create a weld pool into which filler metal is added. Often the filler metal is in a powder form and an inert gas is generally used to prevent oxidation of the molten puddle. The result is a high quality weld deposit for various hard facing

FW Gartner Thermal Spraying

● **info@fwgts.com** ● **www.fwgts.com**

● **Toll Tree 888-439-4872** ● **Phone 713-225-0010**

● 25 Southbelt Industrial Dr, Houston, TX 77047

● ISO 9001:2008 Certified

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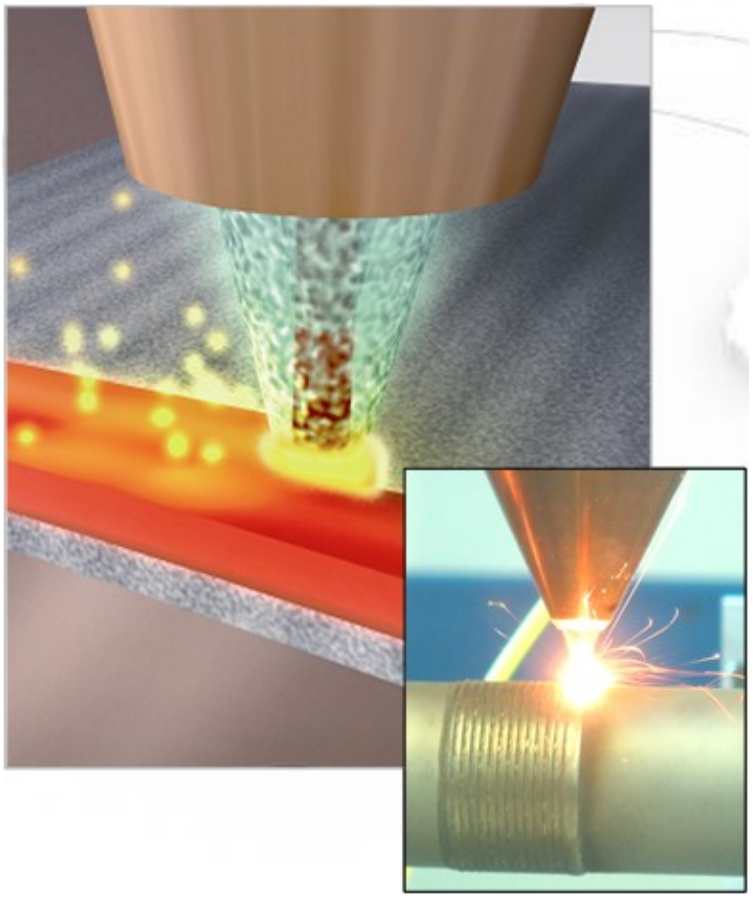
When Should Laser Cladding Be Used?

Laser Cladding should be used when high performance is needed. The Laser Cladding process creates a metallurgical bond between the overlay deposit and substrate. Also, the weld is made with considerably less heat input as compared to traditional arc welding processes. The result is a welded bond with a minimal heat affected zone, low distortion, low dilution, & low penetration. Often components that would be ruined by traditional arc welding's high heat input can be clad with the low heat input of a laser weld.



What Types of Applications Will Benefit From Laser Cladding?

Many industries such as mining, oil & gas, petrochemical, & power generation benefit by extending the service life of new or refurbished components with laser weld cladding.

What Metals Can Be Laser Clad?

A wide variety of base & filler metals combinations can be laser clad. Some popular types of filler metals used with laser cladding are Cobalt Based, Nickle Based, Martensitic Steel, Austenitic Stainless Steel, Martensitic Stainless Steel, and tungsten carbide in a nickel matrix. The type of surfacing metal to be used for a given application is determined by many factors, such as service conditions, ease of welding, ease of machining & grinding, and economical factors. Contact FW Gartner for a quote and our team of experts will be glad to assist you.

Equipment Summary

- 4kW disc laser on seven axis robot with two axis weld positioner & tailstock.
- 4kW disc laser on six axis robot with two axis weld positioner.
- 4kW direct diode laser on six axis robot with two axis positioner.

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