Get more with laser cladding

With Praxair Surface Technologies, you get more protection from corrosion—and less chance for forced outages.
Get more than just an overlay.

Laser cladding delivers purer chemistry with a thinner, smoother overlay than traditional welding, giving you confidence that you’ll be running maintenance-free for longer.

FAQs:

**Q:** What’s the biggest difference in the application of laser cladding vs. traditional welding?

**A:** Unlike traditional welding, laser cladding has no mechanical impact on melt, so there is a very low dilution (4–8%) of the deposited alloy. Additionally, traditional welding, because of how it’s applied, generates intense heat that can distort the substrate. Laser cladding, however, has a low thermal input that helps reduce substrate distortion.

**Q:** What are the advantages of laser cladding?

**A:** The smooth surface of laser-clad coatings means there are no weld ripples. Traditional welding, like Metal Inert Gas (MIG) or Tungsten Inert Gas (TIG), can leave ripples in the surface of the coating that are stress risers and may cause circumferential cracking.
Get more experience

Our laser cladding services have coated over 500,000 ft\(^2\) since 1996 without any measurable loss (UT) or visual inspection failures.

Q: Since laser cladding produces a thinner overlay, does that mean there is less protection?

A: No. Laser cladding’s thickness delivers a purer chemistry and better physical properties than traditional welding—which results in more chrome and less iron. Laser-clad overlays are metallurgically bonded and virtually impenetrable.
What does it mean to get more with Praxair?
We go beyond the surface for individualized answers to your toughest problems.

At Praxair Surface Technologies we understand that your customers’ requirements demand more. That’s why we’re dedicated to helping you deliver more product life, more ways to reduce operating costs, more ways to improve performance and more risk mitigation. Partner with us and you get more than protective overlays—you get complete access to our exclusive network of resources.

>Serving the industry since 1996
- Over 500,000 ft² installed
- R & S stamp certified

>Common overlay materials
- Stainless steels
  - Alloy type 309L, 312
- Nickel-based alloys
  - Alloy type 625, 622, 52

>Part handling capacity
- Panel widths up to 6 ft.
- Panel lengths up to 40 ft.
- Weights up to 20,000 lbs.

For more information, contact us at:
Telephone: +1.724.598.1300
Fax: +1.724.658.1774
www.praxairsurfacetechnologies.com
info@praxair.com