

# Enhance or repair, anytime, anywhere.

## Selective plating for turbomachinery with the SIFCO Process®

Turbomachinery is a significant investment, and needs to be protected from wear and corrosion. But, when traditional plating can involve huge costs and downtime, how can you enhance your machinery quicker and more conveniently?

### The danger of downtime

Corrosion – the long-term enemy of industrial machinery. Wear and corrosion are inevitable in any application, but they can have a huge impact on operating costs and productivity. It all comes down to unplanned maintenance. Having machinery out of action for any time is undesirable, but suffering downtime beyond forecasts can be crippling.



### The problem of protection

Plating is an obvious answer to preventing corrosion-based downtime, but tank plating – the industry's most common technique – can involve the disassembly and relocation of equipment, leading to even longer periods of downtime, especially in turbomachinery. Meanwhile, high-velocity oxygen fuel (HVOF) – a thermal spray system – can damage the substrate through the plating process itself, weakening the overall component. However, a smarter technique – selective plating – can bypass this, reducing downtime and extending maintenance intervals by selectively plating worn and corroded compressor housing, shafts and stages using the SIFCO Process®.

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## How the SIFCO Process® can help

The SIFCO Process® is a unique, portable selective brush plating method used to enhance, repair and refurbish localized areas on turbine components. As the world's foremost selective plating technique, the SIFCO Process® can play a vital role in turbomachinery, extending life and reducing maintenance needs by applying a range of materials exactly where and when they're needed – and delivering time and cost savings through a range of benefits, including:

- **Portability**  
Field technicians can treat turbomachinery in situ, meaning no disassembly or transportation.
- **Flexibility**  
Both in flexible application for selected components, and a diverse range of deposits and applications.
- **Speed**  
Selective plating is faster and more cost-effective than traditional techniques.
- **Continuity**  
Reduced maintenance, downtime and disruption are the core source of selective plating savings.
- **Compliance**  
The SIFCO® Process meets critical specifications, including AMS 2451 and Mil-Std 2197.
- **Surface enhancement**  
Improving hardness and resistance of compressor housings, shafts and interference fits.
- **Corrosion protection**  
Corrosion-resistant coatings, such as nickel, can be applied without disassembly.
- **Dimensional restoration**  
Worn surfaces can be restored to original dimensions – effectively salvaging the parts.
- **Lowering electrical contact resistance**  
Plating switch and bus bar contact areas improves electrical properties.
- **Pre-braze**  
Turbine components and more can be rapidly plated to provide proper wetting of surfaces pre-braze.

**The SIFCO Process® saves engineers and technicians thousands of dollars every year by cutting downtime, turnaround time and investment in new equipment. To discover how it can do the same for you, visit [www.sifcoasc.com/turbomachinery](http://www.sifcoasc.com/turbomachinery), or contact us at [info@sifcoasc.com](mailto:info@sifcoasc.com) or 800-765-4131.**